

**MEDICAL** 

3bscientific.com

#### **Building knowledge through**

# **EDUCATION**

Medical education strives to empower students with the knowledge necessary to provide patients with the best care possible. At 3B Scientific, we are passionate about combining years of research and professional experience to enable educators in the field of medical science. We believe that robust products of the highest quality are necessary in a field where those learning will one day be performing on human lives.

3B Scientific provides durable models with extreme fidelity, simulators that recreate life-like scenarios, and the support of an informed team of specialists. These resources are guaranteed to make the teaching aspect of a classroom easier for any educator, and the learning experience more exciting and hands-on for the student.

This catalogue will give you an overview about the following solution oriented product segments for medical education:

#### Human anatomy models

To make hands-on education easier, many models are now provided with strong magnetic connections. Find out more about the manufacturing process of the models on page 5.

#### Healthcare education

High quality and functional products to educate about common health risks and diseases. Ideal for educating patients and for student training.

#### Workshop bones

3B ORTHObones provide realistic mechanical characteristics at a very economic price point. Please see pages 102 – 105 for a list of all available bones and training blocks.

#### Medical simulation

The focus of medical simulation is the training of skills necessary to perform on human lives. With the epidural and spinal injection simulator, shown on page 154, both Hanging Drop and Loss-of-Resistance can be trained under realistic circumstances.

Please visit 3bscientific.com to download product manuals (many with learning cards) and to see a list of consumables and replacement parts as well as additional images. For any questions, please contact our Customer Service Team at any time through the contact form on the website or during regular hours via the telephone.

A le Sont Miles Sprott

Vice President







# **CONTENTS**

Human Anatomy	4 – 87
Skeleton and Bone Models	6 – 17
Hand and Foot Models	18 – 23
Vertebrae and Spine Models	24 – 33
Skull Models	34 – 39
Musculature, Torso and Skin Models	40 – 53
Head, Brain and Nervous System Models	54 – 61
Eye, Ear and Dentition Models	62 – 69
Heart and Lung Models	70 – 77
Digestive and Urinary Models	78 – 83
Pelvis Models	84 – 87
Health Education	88 – 101
ORTHObones	102 – 105
Medical Simulation	106 – 209
Basic and Advanced Life Support Training	106 – 141
Patient Care Training	142 – 151
Interactive Medical Education / Sectra Table	152 – 153
Clinical and Nursing Skill Training, Adult	154 – 191
Laparoscopy Training	174 – 180
Clinical and Nursing Skill Training, Pediatric	192 – 197
Obstetrics and Gynecology	198 – 209
Charts	210 – 213





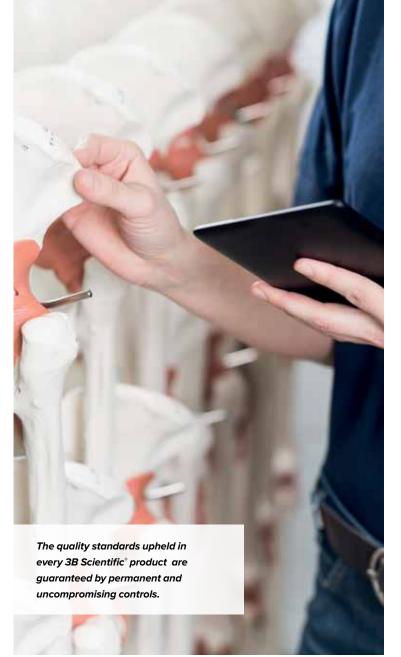




# **HUMAN ANATOMY**

3B Scientific has been setting quality standards in manufacturing didactic material for medical education since 1948.

Today, the brand is represented in over 120 countries worldwide with local offices in Germany, Hungary, USA, Japan, France, China, Italy, Spain, United Kingdom, Russia, Brazil, Thailand, South Korea and Turkey.





3B Scientific® offers you the highest level of service and product quality that you can always depend on. The production of our 3B Scientific® anatomy models, simulators and trainers is backed by the newest findings in medical sciences and educational techniques.

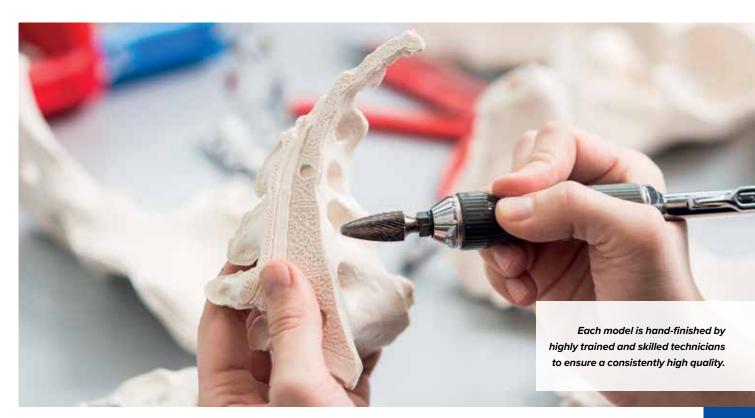
#### A wide selection of products is available to fit your exact needs:

- All life-size skeletons and some soft tissue models are cast from real specimens
- Made from extremely durable materials for everyday use
- Designed and developed in Germany by medical professionals

Precise anatomical details are hand painted to show intricate structures such as muscle and nerve fibres. These allow for easy identification in our detailed product manuals and learning cards whilst encouraging effective teaching and interactive study.

Only non-toxic material is used to create models for everyday, hands-on education. The casting process, from real specimens, guarantees realistic anatomical features and life-like textures. Our production processes ensure that our exacting standards are always maintained for every single bone, skeleton, model and simulator. This is backed by the 3B Scientific\* warranty.

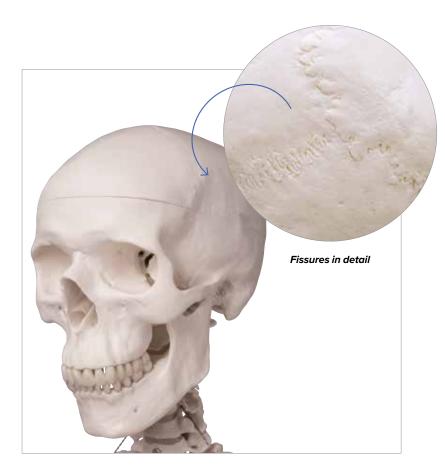
3B Scientific is a member of the Worlddidac Quality Charter and its quality management is certified according to the standards of DIN EN ISO 9001.







# High quality human skeleton models, cast from real specimens



#### Stan the Classic Skeleton

The Classic Skeleton Model Stan has been the standard of quality in hospitals, schools, universities, and laboratories for over 50 years. Stan is the most affordable full-size skeleton of this quality available anywhere, ideal for active use in teaching and demonstrations. This human skeleton model is easy to handle, anatomically correct (cast from real specimen) and economically priced.

# All 3B Scientific\* human skeleton models offer highest quality in workmanship and materials!

- Life-size and realistic weight
- Top quality cast from real specimens
- Extremely accurate in every detail, final assembly carried out by hand
- Made from a durable, unbreakable synthetic material
- 3 part assembled skull
- Limbs can be removed quickly and easily
- Movable joints for demonstration purposes
- On a stable metal stand with 5 wheels for secure transfer from room to room
- Transparent dust cover included
- Developed in Germany

#### Stan on Pelvic Mounted Roller Stand

176.5 cm; 9.57 kg

M-1013853

#### Stan on Hanging Stand (Hanging Stand shown on page 11)

192.5 cm; 8.77 kg

M-1013857

#### Recommended: Heavy Duty Protective Cover, Black (not shown)

Protect your investment with our heavy-duty protective cover. Suitable for all 3B Scientific\* full-size skeletons.



# Demonstrate the structural interaction between muscles and bones with Max



#### Max the Classic Muscle Skeleton

This skeleton contains all the standard benefits of a 3B Scientific\* Skeleton **plus painted muscles**, to demonstrate the structural interaction between bones and muscles. It depicts over 600 structures of medical/anatomical significance including muscle origins (red) and insertions (blue) on the left side as well as hand numbered bones, fissures and foramina on the right side.

#### Max got muscle!

#### All features exclusive to Max at a glance:

- $\bullet$  Shows the structural interaction between bones and muscles
- Depicts over 600 structures of medical significance
- Muscle origins in red and insertions in blue
- Hand numbered muscles, bones, fissures and foramina for easy identification

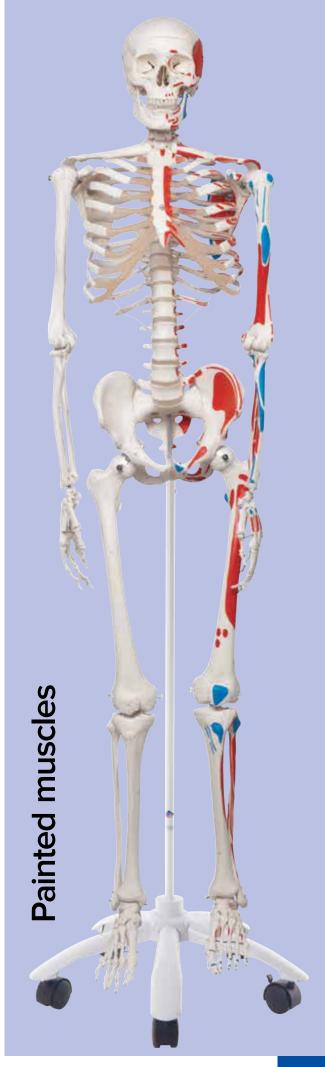
#### Max on Pelvic Mounted Roller Stand

176.5 cm; 9.57 kg

M-1013858

#### Max on Hanging Stand (Hanging Stand shown on page 11)

192.5 cm; 8.77 kg





#### Leo the Classic Ligament Skeleton

This skeleton contains all the standard benefits of a 3B Scientific\* Skeleton **plus ligaments** to represent the structural interaction between bones and ligaments. His elastic ligaments on the major appendicular joints (shoulder, elbow, hip, and knee) are mounted on the right side.

#### Leo is all about ligaments!

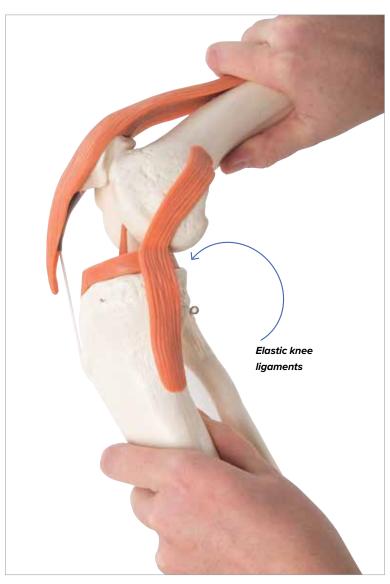
#### All features exclusive to Leo at a glance:

- Structural representation of interaction between bones and ligaments
- All ligaments are elastic to show movement

#### Leo on Pelvic Mounted Roller Stand

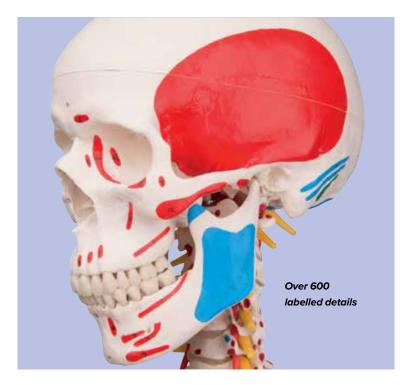
176.5 cm; 10 kg

M-1013860





Demonstrate the interaction between bones and ligaments and realistic movement with Leo





# Sam is your all-purpose teaching tool for any level of student or patient education

#### Sam the Super Skeleton Does it All!

This skeleton contains all the standard benefits of a 3B Scientific\* Skeleton plus a bendable vertebral column, ligaments, painted muscles and over 600 labelled and identified structures. Sam's fully flexible vertebral column allows you to demonstrate all natural postures, including the movements of the skull and head joints. The unique combination of a flexible vertebral column, muscle origins and insertions, numbered bones, flexible joint ligaments, and a disc prolapsed between the 3rd and 4th lumbar vertebrae allow you to display over 600 structures of medical/anatomical interest with this top of the line model. Comes complete with an identification guide.

#### Sam the Super Skeleton does it all:

- Over 600 hand-numbered, labelled details, includes detailed guide for easy identification
- $\bullet$  Hand-painted muscle origins and insertions
- Flexible spine and ligaments for natural postures (can be removed from stand)
- Slipped disc between the 3rd and 4th lumbar vertebrae
- $\bullet$  Protruding spinal nerves and vertebral arteries
- Full flexibility of limbs on left side, right side has full flexibility of knee and hip with limited flexibility of elbow and shoulder

#### Sam on Pelvic Mounted Roller Stand

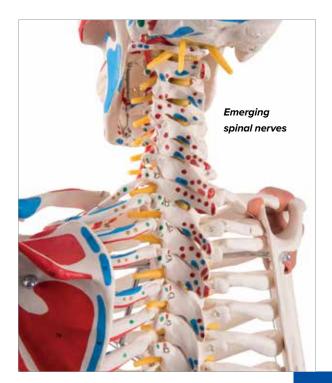
176.5 cm; 10 kg

M-1013867

Sam on Hanging Stand (Hanging Stand shown on page 11)

192.5; 10 kg









# Demonstrate natural movement and realistic joint mechanisms with Phil

#### Phil the Physiological Skeleton

Phil is unique in his near **life-like realisation of the joint mechanisms**. He allows you to demonstrate the inward and outward rotation of the arms and legs and the extension and flexion of the knee and elbow joints. The **flexible spine allows for natural movement** (lateral inclination, movement and extension, rotation). The bones of the hands are wire mounted to demonstrate their natural positions. The foot bones are mounted flexibly to enable movability. The shoulder blades rotate along when the arms are raised. Even the restricted mobility of the iliosacral joint and the sacrococcygeal joint can be demonstrated.

#### Phil moves! This skeleton has all the features of the Standard Classic Skeleton Model Stan, plus:

- The flexible spine allows for natural movement
- Near life-like realisation of the joint mechanisms

#### **Phil on Hanging Stand**

192.5 cm; 9.6 kg

M-1013875



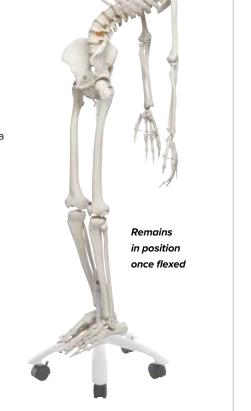
#### Demonstrate movement and fix any posture for detailed explanations with Fred

#### Fred the Flexible Skeleton

Fred's spine can be bent to mimic any natural human movement. Once flexed, it remains fixed in position to demonstrate correct and incorrect posture or various pathological conditions. In addition, all skull movements can be demonstrated. Spinal nerve exits and vertebral arteries are shown as well as a dorso-lateral disc prolapse between the 3rd and 4th lumbar vertebrae. Fred has all the standard benefits of a 3B Scientific® Skeleton.

# Fred on Pelvic Mounted Roller Stand

176.5 cm; 9.6 kg **M-1013873** 





# Demonstrate life-like movement unseen in any other skeleton model with Frank

#### Frank the Functional Skeleton

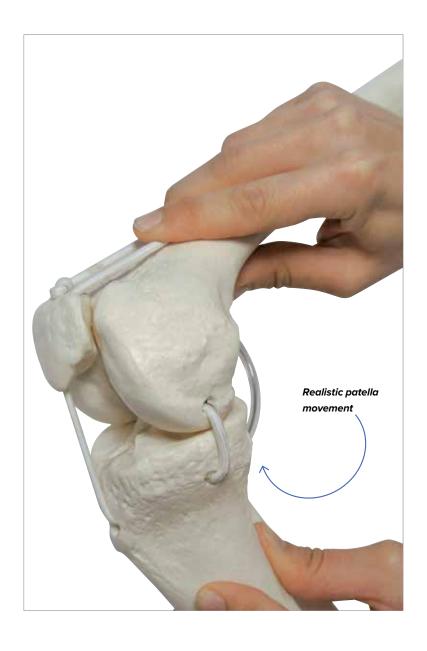
This unique functional Skeleton comes on a hanging stand and **features a flexible assembly of all joints, allowing you to perform the individual movements in a nearly life-like way.** You can even demonstrate the complex motions of the upper extremity. The shoulder blades rotate along when the arms are raised. Graphically demonstrate the position of the radial and ulnar bones during inward and outward rotation of the lower arm. The flexible spine allows for natural movement (lateral inclination, flexion and extension, rotation). Even the restricted mobility of the iliosacral joint and the sacrococcygeal joint can be demonstrated.

# Frank's moves are truly unique. This skeleton contains all the features of the Standard Classic Skeleton Stan, plus:

- The flexible assembly of all joints lets you perform life-like movement
- Complex motions of upper extremities can be demonstrated

#### Frank on Hanging Stand

192.5 cm; 9.6 kg





# **SKELETON COMPARISON GUIDE**

# Use this comparison guide to find the perfect skeleton model to fit your requirements!

Model	Stan	Stan	Max	Мах	Leo	Sam	Sam	Fred	Phil	Frank
Item No.	M-1013853	M-1013857	M-1013858	M-1013859	M-1013860	M-1013867	M-1013872	M-1013873	M-1013875	M-1013880
Features	_	•	•	_	_	_	_	•	•	•
Top quality natural casting	•	•	•	•	•	•	•	•	•	•
Durable, unbreakable synthetic material	•	•	•	•	•	•	•	•	•	•
Assembly done by hand	•	•	•	•	•	•	•	•	•	•
Life size	•	•	•	•	•	•	•	•	•	•
Close to the actual weight of approx. 200 bones	•	•	•	•	•	•	•	•	•	•
3 part skull that can be taken apart	•		•		•	•		•		
Transparent dust cover included	•	•	•	•	•	•	•	•	•	•
Metal stand with 5 wheels	•	•	•	•	•	•	•	•	•	•
Metal hanging stand with 5 wheels		•		•			•		•	•
Rotating ulna and radius	•	•	•	•	•	•	•	•	•	•
Soft intervertebral discs	•	•	•	•	•	•	•	•	•	•
Flexible spine						•	•	•	•	•
Muscle insertions and origins, hand-painted			•	•		•	•			
Numbered bones, fissures, foramina & processes			•	•		•	•			
L3-L4 slipped disc						•	•	•		
Flexible ligaments					•	•	•			
Spinal nerves and vessels						•	•	•		
Flexible assembly of all large joints									•	•
Almost natural movement of the hip									•	•
Flexible assembly of the xiphoid process									•	•
Natural movement of the shoulder & shoulder blades										•
Natural movement of the knee cap										•
Flexible assembly of the foot bones									•	



# Mini Skeletons: Incredible detail and fully articulating joints!

#### **Shorty the Mini Skeleton**

Top of the range miniature human skeleton models.

- 3-part removable skull (skullcap, base of skull, mandible)
- Removable arms and legs
- Specially mounted hip joints to demonstrate natural rotation of the hips
- Made from durable, unbreakable plastic, hand assembled
- Can be taken off of the base when required

#### A. Shorty the Mini Skeleton, Pelvic Mounted

88 cm, 1.5 kg

M-1000039

#### Shorty the Mini Skeleton, Hanging Stand (not shown)

On hanging stand that can be placed on the floor or hung on the wall. 94 cm; 1.7 kg

M-1000040

#### **B. Shorty with Painted Muscles, Pelvic Mounted**

**Muscle** origins (red) and insertions (blue) on the left half.

M-1000044

#### Shorty with Painted Muscles, Hanging Stand (not shown)

On hanging stand that can be placed on the floor or hung on the wall. 94 cm; 1.7 kg

M-1000045

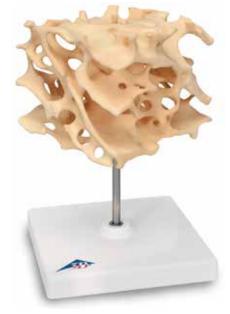


#### **Cancellous Bone**

The model shows the spongy bone inside the bone. Its filigree architecture is determined by influences such as pressure, bending and torsion. Using innovative micro CT technology, we have managed to reconstruct an exact 3-dimensional copy of a piece of cancellous bone from an original and enlarge it 100 times.

17 x 17 x 23 cm; 0.29 kg

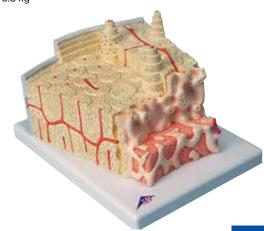
M-1009698

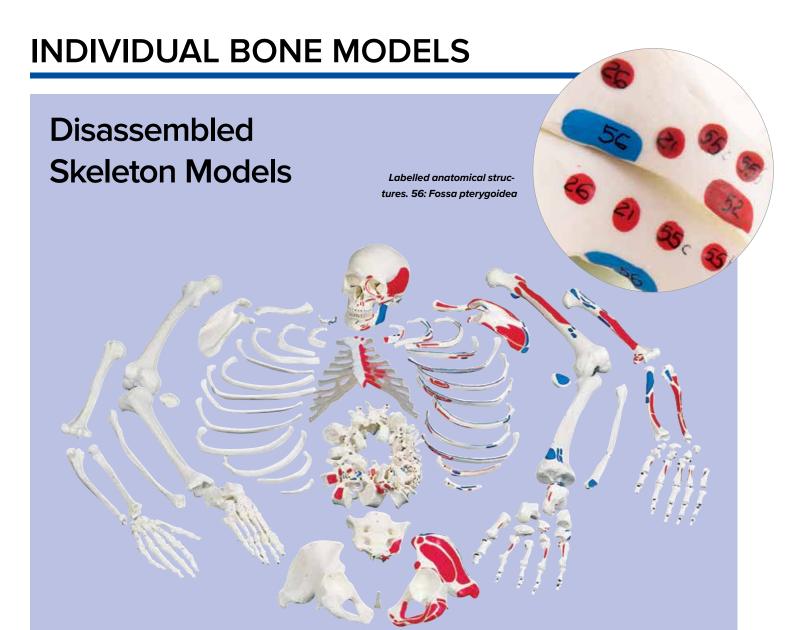


#### MICROanatomy™ Bone Structure Model, enlarged 80 times

This model depicts a section of lamellar bone, showing the typical structure of tubular bone. Planes are shown in cross and longitudinal section through all levels of the bone and bone marrow. Typical elements are easily identified and help in understanding the structure and function of the Haversian systems. This representation graphically illustrates the individual bone components including spongy and compact substance, endosteum, cortical substance, osteocytes, Volkmann and Haversian canals.

26 x 19 x 14.5 cm; 0.8 kg





#### Disarticulated Full Skeleton, Numbered with Muscle Origins and Insertions

This disarticulated 3B Scientific® Skeleton is hand-painted and numbered to show muscle origins in red and muscle insertions in blue on the left side. The disarticulated skeleton's bones and bony structures such as fissures, foramina and processes are hand-numbered on the right side. The skull is detachable into 3 parts for detailed anatomical study. Consists of 179 pieces.

48,5 x 27 x 42,5 cm; 6 kg

#### M-1000026

- One hand and foot on wire
- Vertebral column strung on thin, nylon wire
- Multilingual product manual to identify over 600 numbered anatomical structures
- Supplied in a sturdy partitioned cardboard storage box

This high quality skeleton replica is great for any in depth study of the human skeleton and scientific anatomy studies.

#### Disarticulated Full Skeleton, Wire Mounted Hand/Foot (not shown)

One hand and foot on wire, the others loosely articulated. Supplied in a sturdy partitioned storage box.

48.5 x 27 x 42.5 cm; 4.8 kg

M-1000025

#### Disarticulated Half Skeleton, with Loose Hand/Foot (not shown)

Complete with 3-part skull, sternum, hyoid and spinal column.

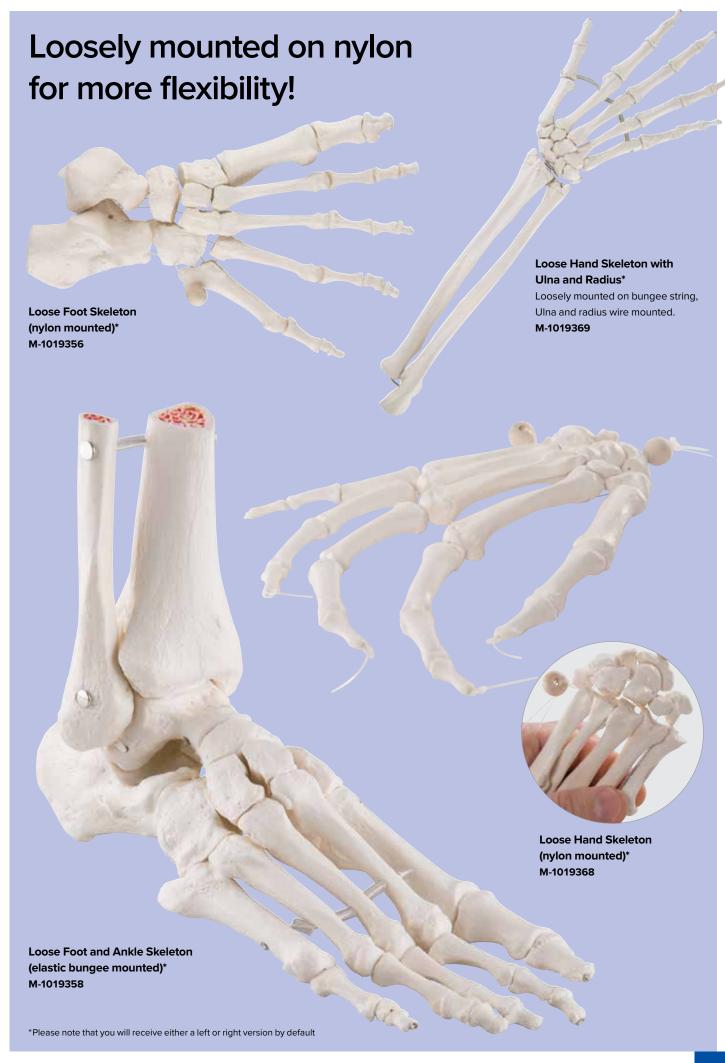
48.5 x 27 x 42.5 cm; 4 kg

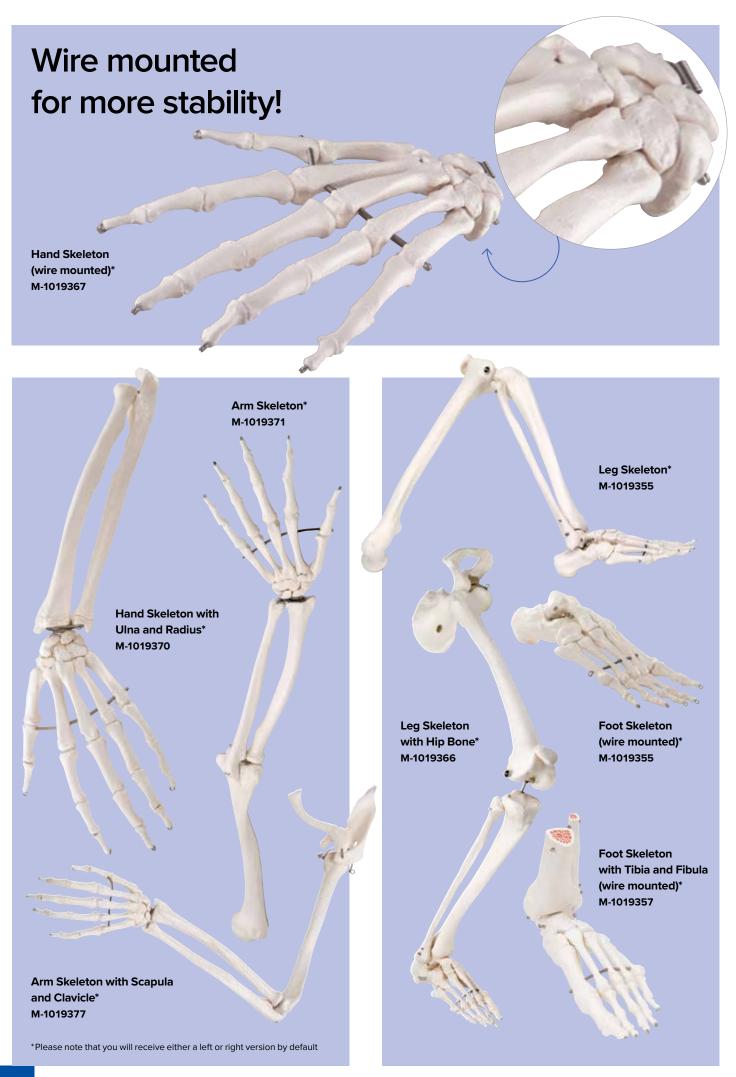
M-1000024

#### Disarticulated Half Skeleton, with Wire Mounted Hand/Foot (not shown)

Complete with 3-part skull, sternum, hyoid and spinal column.

49 x 43 x 26.5 cm; 4 kg





A. Ulna\* M-1019373

B. Radius\* M-1019374

C. Humerus\* M-1019372

D. Fibula\* M-1019364

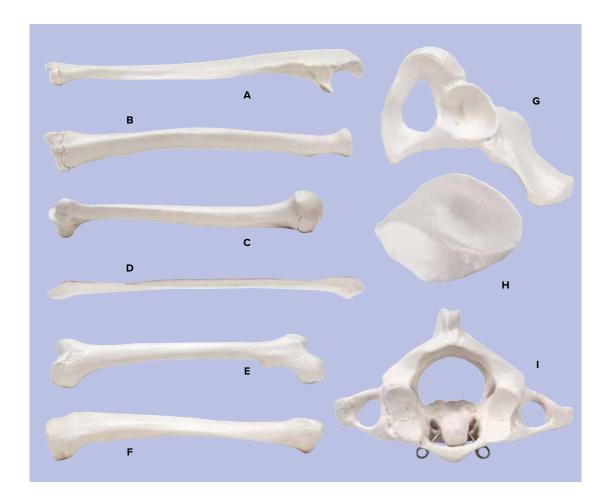
E. Femur\* M-1019360

F. Tibia\* M-1019363

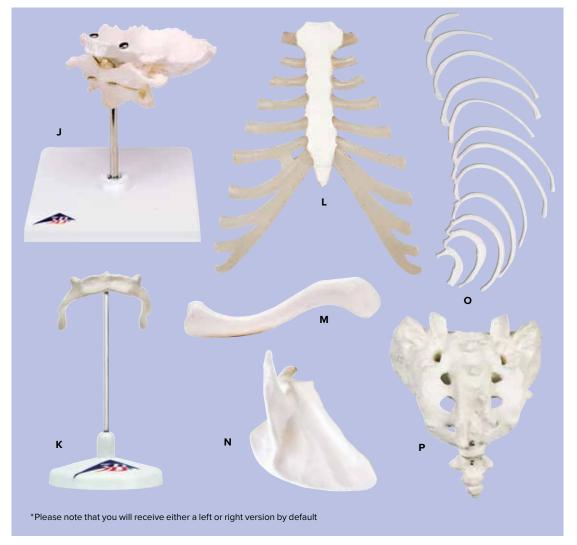
G. Hip Bone\* M-1019365

H. Patella\* M-1019362

I. Atlas and Axis, wire mounted M-1000140



# Individual bone models



# J. Atlas and Axis, with occipital plate

Wire mounted together on removable stand.

M-1000142

#### K. Hyoid Bone

Mounted on stand.

M-1000143

# L. Sternum with Rib Cartilage

Replica human sternum with rib cartilage.

M-1000136

M. Clavicle\* M-1019376

N. Scapula\* M-1019375

#### O. Ribs\*

12 individual ribs of one side, unmounted.

M-1000137

#### P. Sacrum and Coccyx

Assembled

# HAND AND FOOT MODELS





#### Hand Skeleton Model with Ligaments and Carpal Tunnel, 3-part

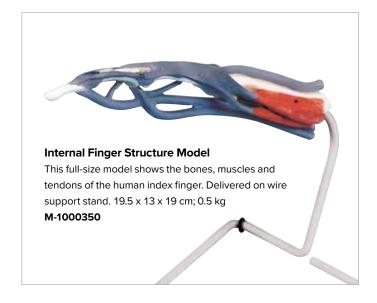
This 3 part hand skeleton model shows the **anatomical detail of the ligaments and tendons** found in the hand, wrist, and lower forearm. The interosseous membrane between the radius and ulna is shown along with the bones of the hand.

#### Removable parts:

- $\bullet$  Palmar side of the hand: flexor retinaculum
- Structures of the carpal tunnel: flexor retinaculum, median nerve, and tendons

 $30 \times 14 \times 10 \text{ cm}$ ; 0.3 kg

#### M-1000357



# Hand Skeleton Model with Elastic Ligaments

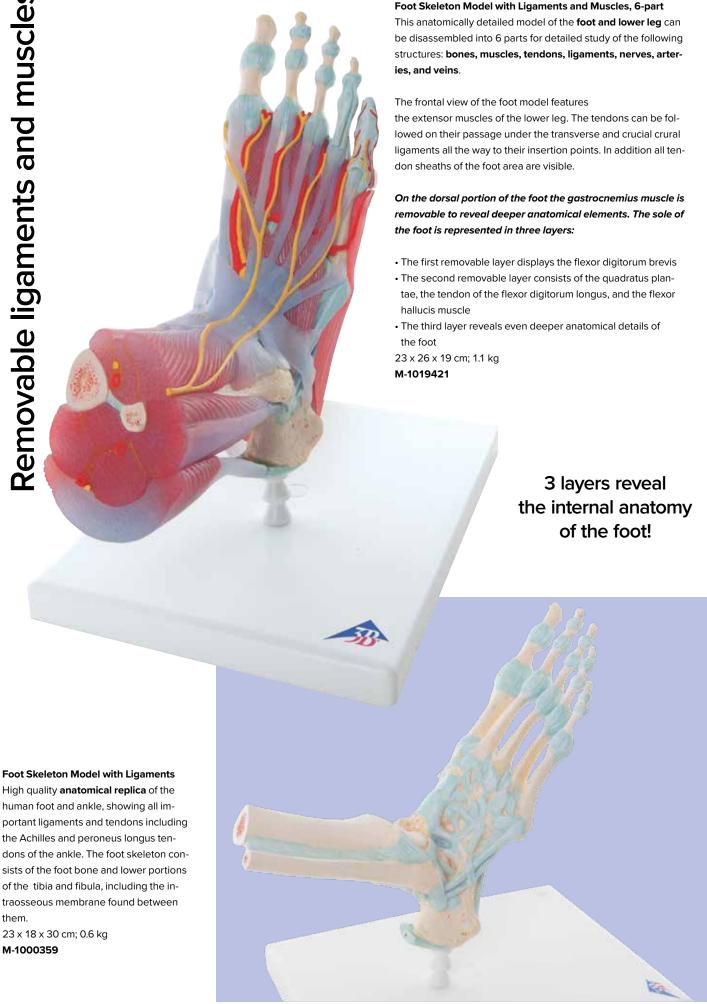
This single-part model shows the anatomy of the ligaments in the hand in detail. The elastic ligaments allow for the demonstration of the flexibility of wrist and fingers. The carpals (ossa carpi), the metacarpals (ossa metacarpi) and finger bones (ossa digitorum manus) are shown as osseous structures. In the distal area of the forearm, the radius and the ulna are represented.

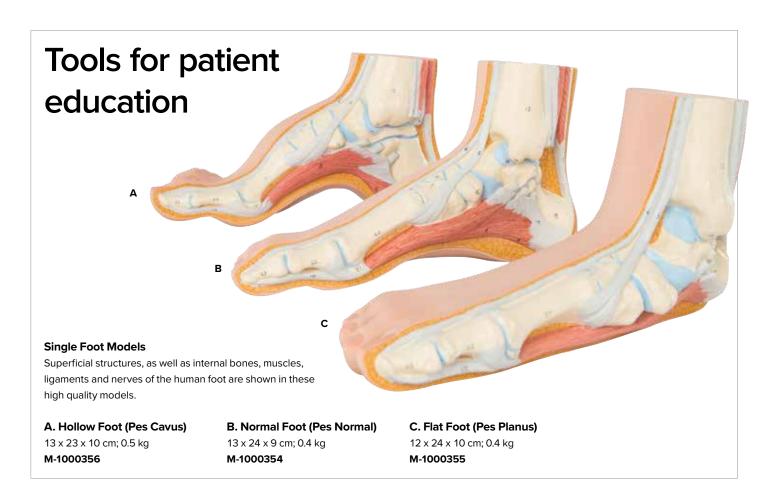
14 x 10 x 28 cm; 0.24 kg











# Miniature models for your desk!



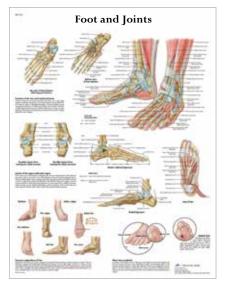
#### MED*art*™ Foot Series – Normal, Hollow and Flat Feet

Simply irresistible, these miniature models show the superficial structures and, at the interior side, the bones, muscles and tendons in their correct anatomical position.

 $6 \times 12 \times 4.5 \text{ cm}$ ; 0.1 kg, set of 3

M-1000371

#### Add a chart as a constant visual education tool! More options on pg. 210 or visit 3bscientific.com



Foot and Ankle Anatomy Chart Laminated. 50 x 67 cm M-1001490



**Hand and Wrist Anatomy Chart** Laminated. 50 x 67 cm **M-1001484** 



You might also be interested in the Diabetes Foot Models on page 101

# **JOINT MODELS**



The 3B Scientific® Joint and Muscle Series: Handson education at all levels!

- Life-size joint and muscle models manufactured to precise anatomical correctness
- Highly realistic colouring of bone and muscles
- Muscular origins and insertions are raised and colour-coded
- Removable parts for the study of the deeper anatomy
- High quality, non-hazardous material for long lasting models





Being part of the high quality series of deluxe joint models, the knee joint model is extremely durable and made of non-hazardous material.

The 12 parts can quickly be removed for easy demonstrations both in medical training and patient education. The muscles and muscle portions can be taken off for detailed study of the deeper anatomical layers. Colour-coded and raised areas indicate the muscle origin and insertion points on the femur, tibia, and fibula. Additionally, the model shows parts of the fibular and tibial collateral ligaments.

33 x 17 x 17 cm; 0.9 kg

M-1000178

# Ideal for student and patient education!



# Elbow Joint with Removable Muscles, 8-part

Right elbow of a male with individual muscles plus muscular origins and insertions on the humerus, radius, and ulna. The muscles can easily be attached to and removed from the corresponding areas of origin and insertion.  $25 \times 41 \times 25 \text{ cm}$ 

M-1000179



#### Hip Joint with Removable Muscles, 7-part

The model shows the right hip joint of an adult male with the **individual muscles as well as** the muscle origins and insertions on the femur and the hip bone. The hip muscles have been mounted on their corresponding regions of origin and insertion and are removable. The relationship of the muscular system and skeletal system are represented clearly with this human hip joint model.

 $18 \times 32 \times 18 \text{ cm}$ ; 1.9 kg

M-1000177



#### Shoulder Joint with Rotator Cuff, 5-part

This model comprises the upper half of the humerus, the clavicle and the shoulder blade. The muscles of the rotator cuff (subscapularis muscle, supraspinatus muscle, infraspinatus muscle, teres minor muscle) are displayed. By removing the four individual muscles, all movements of the shoulder joint can be performed:

- Abduction
- Inward rotation
- Adduction Outward rotation 18 x 18 x 24 cm; 0.85 kg

## **Demonstrate movement!**

#### **Deluxe Functional Joint Models**

You can use these high-quality, functional joint models to demonstrate physiological movements. Thanks to the attached ligaments you can perform the following movements: abduction, anteversion, retroversion, internal and external rotation. The colour of the natural-cast bones is extremely realistic thanks to a special colouring process. The cartilage on the joint surfaces is marked in blue. All Deluxe Functional joint models are mounted on a base for easy display.

A. Functional Shoulder

22 cm; 0.41 kg

M-1000160

**B.** Functional Hip

32 cm; 0.56 kg

M-1000162

C. Functional Knee

32 cm; 0.55 kg

M-1000164

**D. Functional Elbow** 

33 cm; 0.285 kg

M-1000166

# Femoral Fracture and Hip Osteoarthritis

At half natural-size, this model shows the right hip joint of an elderly person. Shown are the **femoral fractures that occur most commonly** as well as typical wear and tear and osteoarthritis of the hip joint. Additionally, a frontal section through the femoral neck is shown in relief on the base.

14 x 10 x 22 cm; 0.3 kg

M-1000175

# Sectional Knee Joint Model, 3-part

Demonstrate disorders of the knee joint with this full size model. Shows a healthy right knee joint with parts of femur, tibia and fibula, as well as the ligament system and the patella with parts of the femoral tendon. Can be disassembled to reveal internal structures. Mounted on base. 12 x 12 x 24 cm, 0.5 kg

M-1000180



#### **Classic Flexible Joint Models**

The classic series of high quality, life-size, functional joint models features the same look and size as the deluxe models but without the natural bone colouring process and the blue paint representing cartilage.

E. Flexible Shoulder

16 x 12 x 20 cm

M-1000159

F. Flexible Hip

17 x 12 x 33 cm **M-1000161** 

G. Flexible Knee

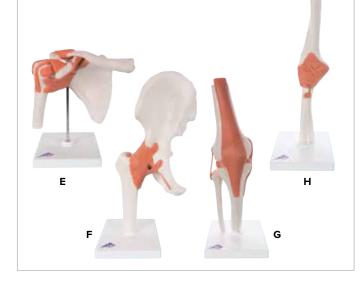
12 x 12 x 34 cm

M-1000163

H. Flexible Elbow

12 x 12 x 39 cm

M-1000165



#### **Mini Joint Series with Cross-Section**

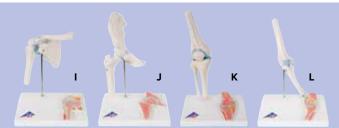
The mini joint series has been reduced to half the natural size while keeping all of the functionality. A joint cross-section has been added to the base to give an inside view.

**I. Mini Shoulder J. Mini Hip** 12 x 14 x 16 cm 16 x 12 x 20

M-1000172

**J. Mini Hip** 16 x 12 x 20 cm **M-1000168** 

**K. Mini Knee** 10 x 14 x 24 cm **M-1000170**  **L. Mini Elbow** 16 x 12 x 20 cm **M-1000174** 



## **VERTEBRAE MODELS**



#### 3B Scientific® vertebrae models are:

- Cast from real specimens
- Anatomically correct with lots of detail
- Made of extremely durable material



#### 5-Stages of Vertebral Degeneration

The model **illustrates degenerative changes** to the vertebral bodies and intervertebral discs of the lumbar spine in various degrees. Based on the original cast of a human lumbar spine, even **finest bone structures** are accurately depicted. From top to bottom, the model shows the stages of degeneration starting with the healthy Lumbar vertebra (L1), stages of prolapsed discs, all the way to strong degenerative changes and bony constriction in L5. The model **can be disassembled** easily into vertebrae and intervertebral discs. Supplied on base.

22 cm; 0.5 kg

M-1000158

#### **Magnetic Osteoporosis Model**

Impressive didactic model for **comparing osteoporotic and normal thoracic vertebrae**. Shows reproductions of osteoporotic 11th and 12th thoracic vertebrae with narrower intervertebral disc located on the left of the stand. Two corresponding healthy vertebrae with intervertebral disc are provided on the right side. The upper vertebra is divided in the middle and can easily be opened thanks to magentic connections to show the cut surfaces to **demonstrate sintering and osteophytes**. A detailed illustration on the base depicts two 3D micro CT images obtained from **biopsies of both a healthy and an osteoporotic bone**.

14 x 9 x 10 cm; 0.2 kg

M-1000182



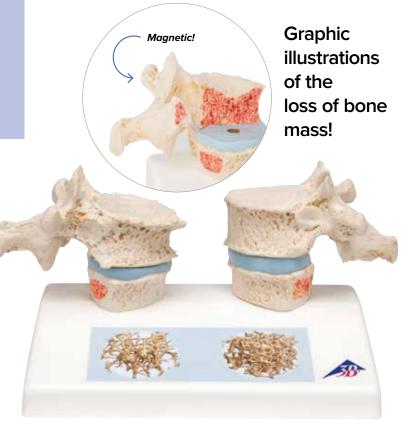
#### 4-Stage Degenerative Lumbar Set

These life-size models show 4 stages of lumbar degeneration of L4 and L5:

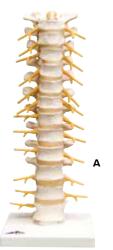
- 1. Normal disc and bone
- 2. Facet Syndrome and a herniated disc
- 3. Thinning disc and the beginning of bone spurring
- 4. Seriously degenerated disc with bone fusing

Mounted on wooden base. 8.5 cm; 0.5 kg





# Prolapsed Lumbar Section The lumbar model includes a prolapsed intervertebral disc between the 3rd and 4th lumbar vertebrae. On removable stand. 34 cm; 0.55 kg M-1000150

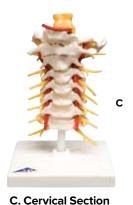


# A. Thoracic Section Consisting of the 12 thoracic vertebrae with discs, thoracic nerves and spinal cord. Flexibly mounted on stand. 32 cm; 0.5 kg M-1000145



High quality model of the 5 lumbar vertebrae with discs, sacrum with flap, coccyx, spinal nerves and spinal cord.

On removable stand.



Real life replica consisting of occipital plate, the 7 vertebrae with discs, cervical nerves, vertebral arteries and spinal cord. Flexibly mounted on stand. 19 cm; 0.3 kg

M-1000144

#### Lumbar Spinal Column with Prolapsed Intervertebral Disc

Natural casts of L4 and L5 lumbar vertebrae with paired spinal nerves, spinal cord and two interchangeable intervertebral discs. The discs illustrate either **central or dorso-lateral prolapse**. Dissects into 5 parts. On removable stand. 13 cm; 0.27 kg

M-1000149



#### **6 Mounted Vertebrae**

34 cm; 0.6 kg

M-1000146

Consists of atlas, axis, cervical vertebra, two thoracic vertebrae with intervertebral discs and one lumbar vertebra.

On stand, removable.

M-1000147

# 5 Mounted Vertebrae (not shown)

Consisting of atlas, axis, cervical, thoracic and lumbar vertebra.

Loosely threaded on nylon.

M-1000148





# 2 Lumbar Vertebrae with Prolapsed Disc

M-1000152

2 Lumbar Vertebrae with Prolapsed Disc cast from real specimen. Flexibly mounted with spinal nerves and spinal cord. 9 x 11 x 9 cm; 0.15 kg



#### 3 Lumbar Vertebrae

Anatomically correct to the last detail. Flexibly mounted with spinal nerves and spinal cord. 11 cm; 0.15 kg

M-1000151



#### **Anatomical Lifting Manikin**

This functional figure provides a graphic demonstration of how the human spinal column reacts when heavy objects are lifted correctly and incorrectly. If the correct posture is used, the spine is undistorted. Incorrect posture exhibits obvious stress and distortion to the lumbar spine. Anatomical illustrations of the spine are featured on the base. Includes booklet with background information.

28 x 21 x 21.5 cm; 1.4 kg

# BONElike<sup>™</sup> MODELS



#### Set of 24 BONElike Vertebrae Models

This set is a worldwide unique original **anatomical replica of human vertebrae** with the most precise illustration of even the **finest anatomical structures**, exhibiting excellent quality. The vertebrae set includes the 7 cervical,

12 thoracic and 5 lumbar vertebrae.

- Made of 3B BONE*like*" material, feels and looks like real bones
- Realistic weight
- Excellent as a substitute for real bones for medical teaching purposes and patient consultation
- Each vertebra is labeled for identification purposes
- Supplied in transport and storage case with individual compartments for all 24 vertebrae
   M-1000156

An excellent way to study the detail of the anatomy of the human spine!

#### What is BONElike<sup>™</sup>?

3B Scientific® BONE*like*® material **looks and feels like real bone**. Each bone is a unique original cast of natural human bone with realistic weight, feel and appearance.

- Represents even the even the finest anatomical structures with realistic texture, colour, and the porous characteristics of real human bone
- Makes an excellent alternative to real bone
- Great for use in medical teaching settings and in patient education

#### **BONE***like* Vertebrae Sets

These realistic, high quality casts of original bones show even the finest anatomical structures in great detail. Supplied on a base.  $30 \times 21 \times 6$  cm; 0,2 kg

A. BONE*like* Cervical Vertebrae – Set of 7 M-1000021

B. BONE*like* Lumbar Vertebrae – Set of 5 M-1000155



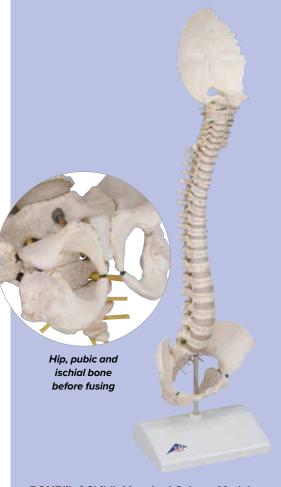


#### BONElike Vertebral Column Model

This anatomical replica of the human spine is a flexible, mounted, true-to-life model of the human vertebral column in excellent BONElike™ quality. The spine is an original reproduction of all anatomical details with realistic weight. It consists of the male pelvis and occipital bone. Occipital bone and atlas can be detached individually from the spine for detailed study. Stand is sold separately, please see M-1000132 on page 32 to add to your order.

85 cm; 1.5 kg

M-1000157



#### BONElike Child's Vertebral Column Model

This true-to-life anatomical replica of the vertebral column of a child around 5 years of age is especially interesting for those working in the areas of anatomy, paediatrics, orthopaedics and paediatric radiology. The unique material of the spine model makes it almost visually indistinguishable from a real vertebral column.

#### It is particularly useful in studying the phases of bone growth:

- Vertebrae partially incomplete development of vertebral bodies and vertebral arches
- Sacrum as yet incomplete fusion of individual sacral vertebrae. This commences at around the age of 15
- Pelvis still open Y cartilage as main growth plate of the acetabulum. The hip, pubic and ischial bone parts are not yet connected (didactically fixed with brackets in the model). These fuse around the age of 14-16

M-1000118

BONElike" Models | **HUMAN ANATOMY** 

# SPINAL COLUMN MODELS

# Flexible positioning

#### Flexible Spine with Soft Intervertebral Discs

This high quality spine model shows how the discs deform during normal and abnormal positioning, It is a valuable tool to demonstrate pathological conditions such as scoliosis, lordosis, kyphosis, or subluxations. Herniation of the vertebral column can also be demonstrated with compression. The model comes complete with spinal cord and spinal nerves. The special mounting allows a clear view during demonstration and display of the spine. Delivered on removable stand.

26 x 25 x 90 cm; 3 kg

M-1008545



#### Choose the right model for your individual needs

→ Complete comparison guide for all spine models on page 32

# **Classic Spines**

Fully flexible spine models for hands-on demonstrations!

All models of the classic series are of the highest quality, made of an extremely durable material for everyday use. They are anatomically correct and precisely detailed, and show even the finest structures. Flexibly mounted for more realistic demonstrations.



#### Other features of all spines in the Classic Series include:

- Full pelvis and occipital plate
- Fully flexible mounting
- · L3-L4 disc prolapsed
- Spinal nerve exits
- Cervical vertebral artery



#### **Classic Flexible Spine**

Affordable spine model, extremely popular in medical education.



#### Classic Flexible Spine Model with Femur Heads\*

Same features as the Classic Flexible Spine, plus the femur heads.

• Male pelvis with femur heads 83 cm; 2.1 kg

# **Didactic Spines**



Coloured for simplified education – visible even from a distance in the classroom!

#### **Didactic Spine Model**

The 5 different sections of the spinal column are differentiated by colour on these models:

- 7 cervical vertebrae
- 12 thoracic vertebrae
- 5 lumbar vertebrae
- Sacrum
- Coccyx

Didactic colours help to easily follow explanation about the human spine, even from a distance. They are extremely durable models of high quality.

#### Other great features of all spines in the Didactic Series include:

- Full pelvis and occipital plate
- Fully flexible mounting throughout spine
- L3-L4 disc prolapsed on spine
- Spinal nerve exits
- Cervical vertebral artery
- · Didactic colouring
- Male pelvis



#### **Didactic Flexible Spine Model with Femur Heads\***

• Male pelvis with femur heads 82 cm; 2.1 kg

M-1000129

#### **Didactic Flexible Spine** Model (not shown)\*

 Male pelvis 74 cm; 1.9 kg

M-1000128



\*Stands sold separately. Please see page 32 for details.





**Painted** muscle origins



#### Classic Flexible Spine Model with Femur Heads and Painted Muscles\*

Didactic benefit: muscle origins (red) and insertions (blue) are hand-painted on left innominate, femur and vertebrae. Otherwise same features as the Classic Flexible Spine.

- Male pelvis
- Painted muscle origins and insertions on left innominate, femur and vertebrae

83 cm; 2.1 kg

# **Advanced Spines**



For advanced studies, includes a sacral opening and an exposed brain stem

In addition to all features of the Classic Series, the Deluxe Series has a sacral opening and exposed brain stem for advanced studies of the anatomy of the human spine.

#### Other features of all spines in the Deluxe Series include:

- Sacral opening and exposed brain stem
- Extremely durable material for everyday use
- Full pelvis and occipital plate
- Fully flexible mounting throughout spine
- · L3-L4 disc prolapsed on spinal column
- Spinal nerve exits
- Cervical vertebral artery
- Male pelvis



#### **Deluxe Flexible Spine Model with** Femur Heads\*

• Male pelvis with femur heads

83 cm; 2.1 kg

M-1000126

#### Deluxe Flexible Spine Model (not shown)\*

· Male pelvis

74 cm; 1.8 kg

M-1000125





#### **Deluxe Flexible Spine Model with Femur Heads** and Painted Muscles\*

- · Male pelvis with femur heads
- · Hand-painted muscle origins and insertions on left innominate, femur and vertebrae

M-1000127







Special mounting with flexible core adds stability for active hands-on use!

The spine models in the Highly Flexible Series are specially mounted on a flexible core, adding extra stability. This makes them ideal for active, hands-on use and demonstrations of movement, great for medical and patient education. These spines are extremely durable.

#### More features of spines in the Highly Flexible Series include:

- · Complete pelvis and occipital plate
- Full flexible mounting throughout spine with added core for more stability
- · L3-L4 disc prolapsed on spinal column
- Spinal nerve exits
- · Cervical vertebral artery
- Male pelvis





#### **Highly Flexible Spine Model** with Femur Heads\*

• Male pelvis with femur heads 83 cm; 2.3 kg

M-1000131

#### **Highly Flexible Spine Model** (not shown)\*

• Male pelvis 74 cm; 1.4 kg

# Classic Spine with Ribcage

Demonstrate the connection and interaction of the spine with individual ribs!

# Classic Flexible Spine Model with Ribs and Femur Heads\*

Flexible spine model with ribs show the interaction of individual ribs with the spine and associated structures.

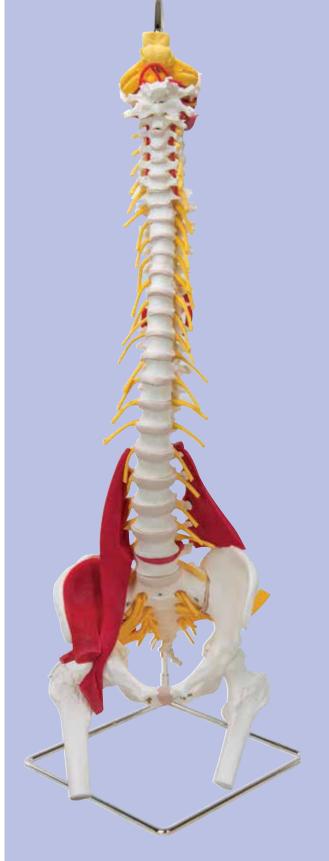
#### This model includes the following features:

- Movable mounted femur heads
- Complete ribcage with individual mounted ribs
- Full pelvis and occipital plate
- Fully flexible mounting
- L3-L4 disc prolapsed
- Spinal nerve exits
- Cervical vertebral artery
- Male pelvis

#### 83 cm; 3 kg **M-1000120**



\*Stands sold separately. Please see page 32 for details.



# Easily demonstrate the relationship between bones and muscles

#### **Muscled Spine Model**

This Muscled Spine Model was designed by internationally acclaimed anatomy sculptor John Mitchell. Use it to quickly and easily demonstrate the relationship between bones and muscles in the spine. The muscles are made of soft polyurethane rubber and are attached with a sturdy elastic cord to the spine with anatomically correct positioning. Stand shown sold separately, please see page 32.



# SPINE COMPARISON GUIDE

#### Choose the right model for your specific individual requirements:

	F	LEXIBLE SPINE	≣S		CLASSIC	DIDACTIC SPINES			
Item No.	M-1008545	M-1000130	M-1000131	M-1000123	M-1000124	M-1000121	M-1000122	M-1000128	M-1000129
	•	•							
Top quality natural casts	•	•	•	•	•	•	•	•	•
Assembled by hand	•	•	•	•	•	•	•	•	•
Durable, unbreakable plastic	•	•	•	•	•	•	•	•	•
Natural size	•	•	•	•	•	•	•	•	•
Soft intervertebral discs	•	•	•	•	•	•	•	•	•
L3-L4 prolapsed disc		•	•	•	•	•	•	•	•
Highly bendable	•	•	•						
Flexible	•	•	•	•	•	•	•	•	•
Muscle insertions and origins, hand-painted				•					
Spinal nerves and vessels	•	•	•	•	•	•	•	•	•
Realistic movement of the hip			•	•			•		•
Male pelvis	•	•	•	•		•	•	•	•
Female pelvis					•				
With Ribcage									
With Femur Heads			•	•			•		•
3B BONE <i>lik</i> e™									

# **Miniature Models:**

Anatomically correct and flexible at a fraction of the size.

Perfect for your desk or as a gift!

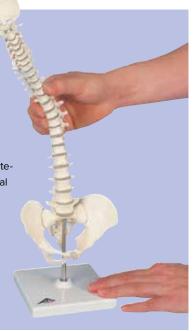
#### Mini Human Spinal Column

The miniature model includes occipital plate of the skull, intervertebral discs, and pelvis. It is mounted flexibly to demonstrate natural movements and pathological changes.

Delivered without stand. 40 cm

M-1000042

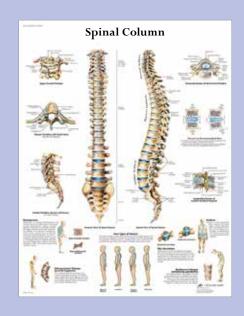
Delivered with stand. 44 cm M-1000043



#### Multifunctional Stand for Spinal Columns, 3 part

The stand can be placed on the floor or desk, or mounted on a wall. Measures 86 cm tall on a 24 cm square base. 0.75 kg

ADVANCED SPINES		CLASSIC SPINES WITH RIBCAGE	MUSCLED SPINE	BONE <i>like</i> ™ SPINES		MINIATURE SPINES		
M-1000126	M-1000127	M-1000125	M-1000120	M-1018411	M-1018411 M-1000118 M-1000157		M-1013853	M-1013857
•					•	V	•	•
•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•		
•	•	•	•	•	•	•	•	•
•	•	•	•	•				
•	•	•	•	•		•	•	•
	•							
•	•	•	•	•			•	•
•	•		•					
•	•	•	•	•		•	•	•
			•					
•	•		•	•				
					•			



#### **Spinal Column Chart**

The anatomy of the human spine is illustrated beautifully in this informative poster. The spinal column is depicted in detail and common pathologies are outlined, including osteoporosis, scoliosis, and disc herniation.

Laminated, 50 x 67 cm **M-1001480** 

Please go online to 3bscientific.com to browse the large selection of medical charts, or see pages 210-213.

# **SKULL MODELS**

# Classic Skull Series



All 3B Scientific® human skull models have been cast from real specimens, guaranteeing life-like detail and anatomical precision. You will see even the finest structures in these durable models made for everyday use!

- · Anatomical detail and precision
- · Realistically cast dentition
- · Durable, non-toxic material
- · Manufactured for everyday use



**W**: Magnetic connections for easy, hands-on demonstrations

#### Other features of all skull models of the classic series include:

- Highly accurate representation of the fissures, foramina, processes, sutures etc.
- Mandible is mounted on a spring to easily demonstrate natural movement
- · High quality original human skull cast
- · Handmade from hard, unbreakable plastic

#### Classic Skull, 3-part

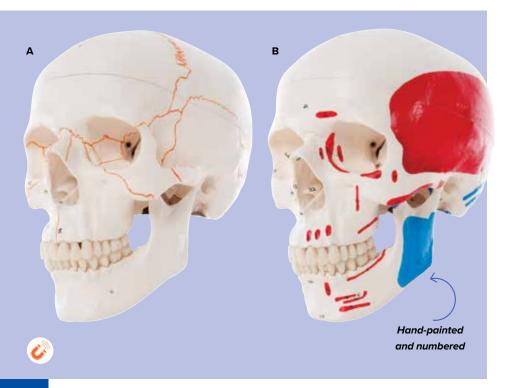
The 3-part standard version skull is an excellent choice for basic anatomical studies or an attractive medical gift. It can be disassembled easily into the skull cap, the base of skull and the mandible.

20 x 13.5 x 15.5 cm; 0.6 kg

M-1000046



# Life-like detail!



#### A. Classic Skull with Numbered Details, 3-part

In addition to the features of the classic skull, this version comes with hand-painted, numbered details: the different bones and features like the suture lines of the bony plates are highlighted for ease in identifying all important anatomical structures. This skull comes complete with a guide naming all numbered parts.

20 x 13.5 x 15.5 cm; 0.7 kg

M-1000052

#### B. Classic Skull with Painted Muscle, 3-part

In addition to all features of the classic skull, this version is didactically hand-painted to show the insertions and origins of the muscles on the left side of the skull. The cranial bones and structures are numbered on the right side. Altogether, over 140 anatomical details can be identified utilising this top quality model. The jaw hinges with a spring to simulate realistic movement. The detail and precision make it a great anatomy teaching tool! 20 x 13.4 x 15 cm; 0.7 kg

#### Classic Skull with Opened Lower Jaw, 3-part

In addition to all features of the classic skull, this version includes an opened lower skull, making it perfect for teaching dental anatomy.

It is highly detailed, and the opened part shows the dental roots with vessels and nerves. The cranial bones, bone components, fissures, foramina and other structures are numbered

for educational purposes. The cranial sutures are shown in colour, as are the meningeal vessels and venous sinuses. Over 100 features are identified in the accompanying product guide.

20 x 13.5 x 15.5 cm; 0.7 kg

M-1000053



#### To see additional images and to zoom in on details, visit 3bscientific.com!



#### Classic TMJ Skull with Masticatory Muscles, 2-part

Ideally suited for patient education, allied health instruction, anatomy studies, and as a medical-legal visual aid. In addition to all features of the classic skull model, this version includes the masticatory muscles (masseter, temporal, medial and lateral pterygoid muscles). They are made of durable, elastic bands for functional demonstrations of movement of the jaw: jaw occlusion, the initial stage of jaw opening, and the movements of the mandible to the side and front. This makes the skull a valuable tool for demonstrations about temporomandibular joint disorders both for patients and students. The skullcap is removable and the model is cast from an original specimen, guaranteeing highly accurate anatomical representations. 20 x 13.5 x 15.5 cm; 0.7 kg

M-1000056

#### Classic Skull with 5-part Brain

Save when you purchase the set: classic skull with brain model! The classic brain model can also be purchased separately and fits in most skull models. This value set pairs it with the classic skull, making it a great teaching tool for demonstrating the positioning of the brain inside the skull. The 5-part brain is midsagitally divided and is cast from an original specimen for anatomical accuracy and detail.

## The left side of the brain can be disassembled into the following

- Frontal and parietal lobe
- · Encephalic trunk
- · Temporal and occipital lobe
- Cerebellum

Both the skull and the brain are made of extremely durable, nontoxic material for the everyday hands-on use! 20 x 13.5 x 15.5 cm; 1.1 kg



#### Classic Skull, Painted, with Opened Lower Jaw, 3-part

This deluxe version of the classic skull series combines the different features all in one! It is an extensive educational tool concerning the anatomy of the skull and includes the following features:

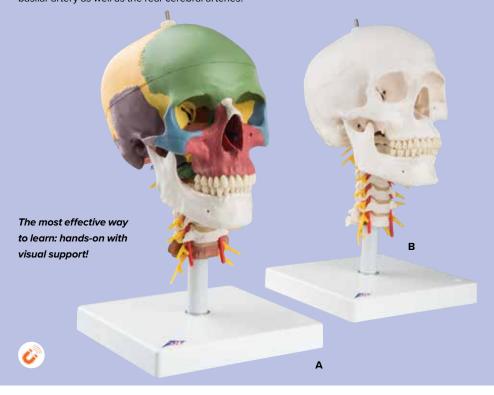
- · Hand-painted muscle origins and insertions
- · Opened lower jaw exposing dental roots, vessels and nerves
- · Numbered parts for easy identification
- Highlighted suture lines of bony plates
- · 3-part skull can easily be disassembled
- · High quality, durable material for everyday use
- Movable lower jaw

20 x 13.5 x 15.5 cm; 0.7 kg M-1000054



#### A. Didactic Human Skull Model on Cervical Spine, 4 part

This didactic skull model utilises 19 distinctive colours to represent the shapes and relationships of the various bone plates of the skull. The colour differentiation is a valuable tool for educational purposes, making the parts easy to identify even from the distance in a classroom. Having been cast from an original human skull, this model shows an absolute accurate representation of the fissures, foramina, processes and sutures. In addition, it is flexibly mounted on the cervical spine (C1, C2 and C7 are coloured) to better show their relation. To complete this demonstration, the didactic model also exhibits the hindbrain, spinal cord, spinal nerves of the cervical spine, vertebral arteries, basilar artery as well as the rear cerebral arteries.



# The skull model has been manufactured to the highest quality standards:

- Anatomically precise cast from original human skull
- Handmade from extremely durable, non-toxic plastic
- Highly accurate representation of the fissures, foramina, processes, and sutures
- Magnetic connections: can easily be disassembled into skull cap, base of skull and mandible

Mounted on stand. 17.5 x 17.5 x 30 cm; 0.6 kg **M-1000048** 

# B. Human Skull Model on Cervical Spine, 4 part

This skull model is flexible mounted on the cervical spine and includes all the features of the Didactic Human Skull Model on Cervical Spine, but instead of the didactically coloured parts, it is naturally coloured in bone like shades.

Mounted on stand. 20 x 13.5 x 15.5 cm; 0.6 kg **M-1000047** 

#### C. Beauchene Adult Human Skull Model - Didactically Coloured, 22 part

The human skull consists of many individual bones that gradually grow together as the development proceeds. This human skull kit is a natural cast that makes the complex anatomical structures of the skull easy to understand. The 22 parts can easily be disassembled. Sturdy connectors assure all parts hold together safely while assembled.



# The 22 bones are depicted in 9 different didactic colours so that the individual skull bones are easy to distinguish:

- Parietal bone (left and right)
- Occipital bone
- Frontal bone
- Temporal bone (left and right)
- Sphenoid bone
- Ethmoid bone
- Vomer bone
- Zygomatic bone (left and right)
- Upper jaw (maxilla) with teeth (left and right)
- Palatine bone (left and right)
- Nasal concha (left and right)
- Lacrimal bone (left and right)
- Nasal bone (left and right)
- Lower jaw (mandible) with teeth
   21 x 14 x 16 cm; 0.7 kg

M-1000069

#### D. Beauchene Adult Human Skull Model – Bone Coloured, 22 part

This version of the 22-part Beauchene skull has the same features as the didactic version, but is coloured like natural bone.

21 x 14 x 16 cm; 0.7 kg

#### **Deluxe Human Demonstration Dental Skull Model, 10 part**

Exceptional quality and anatomical detail!

The skullcap is removable and the base of the skull is mid-sagitally divided. The anatomy of the human skull is easy to learn and teach using this model.

# The model features the following details fitted with flaps that can be opened to view internal structures:

- Frontal sinus, perpendicular lamina and vomer can be opened to view the lateral nose wall and sphenoidal sinus
- Left side temporal bone can be removed and folded up in the area of the tympanic membrane
- Maxilla and mandible of the skull are opened to reveal the alveolar nerves
- Right side the temporal bone is opened to reveal the sigmoid sinus, the facial nerve canal and the semicircular ducts
- Right side flap at maxillary sinus and the right half of the mandible, so that the dental roots of the premolars and molars of the lower law can also be viewed.

lower jaw can also be viewed

The natural occlusion and the individual removal and replacement of each tooth also make this skull especially interesting for dentists. This is a spectacular model whether you use it as a dental skull or for other purposes.  $28 \times 22.5 \times 18.5$  cm; 1.5 kg

M-1000059



#### **Skull with Facial Muscles**

Easily demonstrate causes of temporo-mandibular disorders and other dysfunctional disturbances of the masticatory muscles with this high quality skull model. It is anatomically precise and manufactured specifically to withstand wear and tear from educational use.

The right half features the face and mastication muscles. They can easily be **differentiated by colour**. Cranium and m. masseter are easily detachable to reveal the structures underneath.

The left side shows hand-painted muscle origins and insertions to **further clarify the structural interaction** of muscles and skull bones. The jaw is movable and due to the flexible musculature the **rudimentary chewing motion can be demonstrated**. Made in Germany and cast from an original human skull, using our highest quality material.

18 x 18 x 25 cm; 1.08 kg

M-1013283

### Speciality demonstration skull models!



#### Neurovascular Skull Model

This life size human adult skull comes on seven cervical vertebrae and is mounted on a sturdy stand. It is a valuable tool to **demonstrate the anatomy and positioning of the arteries and the nerves on the skull**. The skull cap is removable and reveals the main nerves and arteries on the floor of the cranium. With this skull, you can demonstrate the 12 cranial nerves (and their branches) that arise directly from the brain and pass through separate apertures in the skull.  $17 \times 16 \times 30$  cm; 1.3 kg **M-1005108** 



#### BONElike<sup>™</sup> skull models: unrivaled realism and detail!



Models made of 3B BONE/like<sup>™</sup> are natural reproductions showing even the finest anatomical structures, looking and feeling like real bone.

#### BONElike Half Transparent Human Skull Model, 7-part

This worldwide unique and high quality didactic skull is a great tool to understand the anatomy of all structures inside the skull.

The possibility to transfer the visible parts in the transparent half to the bony half give this skull an additional didactic value:

- Transparent side helps understand the internal anatomy of the skull
- Sinuses and arteries are marked in colour for easy identification
- Can easily be disassembled into 7 parts for close up study
- BONElike<sup>™</sup> material looks and feels real

Through the transparent right half of the skull, you can easily locate the paranasal and the cranial sinuses, as well as the neck and face arter-

ies, as all of these are colour-coded. Through the skullcap, the position of the brain and the course of the sinuses can be visualised. The periodontal pockets and tooth roots can be viewed through the transparent side of the jaw, which is mounted flexibly to demonstrate the masticator movements of the human skull.

The skull is mounted on a cervical spine and can be disassembled into both halves of the skull-cap, the left half of the base of skull, the nasal septum, the complete mandible and a brain half.  $18 \times 18 \times 34$  cm; 0.86 kg

M-1000064





#### BONE*like* Half transparent Human Skull Model, 8-part

A unique way to study the internal and external anatomy of the skull. One half of this skull is transparent and the other is bony. It offers a topographic comparison of structures that are not visible in other skull models. The teeth can be taken out and the outer masticatory muscles are represented on the bony half. Can be disassembled into both halves of the skullcap and base of skull, the nasal septum, the complete mandible and both masticator muscles.

16 x 14 x 20.5 cm; 0.54 kg

M-1000063

#### BONElike Human Bony Skull Model, 6-part

An outstanding skull for studies of the bony structure and complex anatomy of the human skull. This version shows a complete skull in median-sagittal section.

#### It can be disassembled into two halves consisting of:

the calvarium and the base of the skull
 the nasal septum and complete mandible
 a demonstration of masticatory motion, the mandible is mounted flexibly.

16 x 13.5 x 20.5 cm; 0.5 kg



#### Microcephalic Skull

This one-part microcephalic skull has an alveolar abscess of the right maxilla with the canine tooth suspended in the abscess. The molars exhibit severe attrition. This human microcephalic skull model is a natural cast and includes 27 teeth. 23 x 16.5 x 17 cm; 0.8 kg **M-1000065** 



# Skull with Cleft Jaw and Palate

This skull model depicts a male with a severe malformation of the left skull half with a cleft jaw and palate. The one-part skull has 29 teeth and is natural cast. 28 x 23 x 19.5 cm; 0.8 kg M-1000067



#### Foetal Skull Model

Natural cast of a foetal head in the 30th week of pregnancy showing the characteristics of prenatal development. The fontanelles, which become bone over time, are clearly visible on the skull. Sutures will form along the bony plates helping fuse the skull as the individual ages. Delivered on stand.

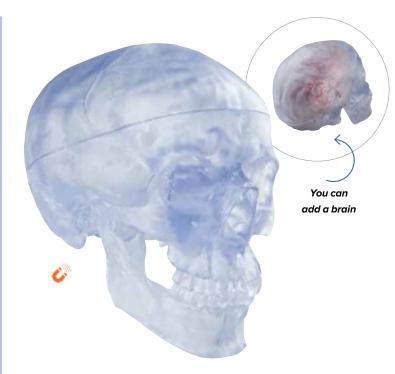
18.5 x 14.5 x 14 cm; 0.2 kg

M-1000058

#### Foetal Skull, without stand (not shown)

14 x 9 x 9 cm; 0.15 kg

M-1000057



#### Transparent Classic Human Skull Model, 3 part

A great addition to any educational collection! Use this unique transparent replica of the human skull to study internal structures!

- High-quality original casts
- Skull is handmade of hard, unbreakable plastic
- Highly accurate representation of the fissures, foramina, processes, sutures
- Can be disassembled into Skull Cap, Base of Skull and Mandible

A 5-part classic brain can be inserted into the skull. See page 57 for details.  $20\times13.5\times15.5~\text{cm};\,0.6~\text{kg}$ 

M-1000051



#### Glow in the Dark Skull Model

This skull model is an illuminating example of human anatomy. As you have come to expect from 3B Scientific\*, all anatomical details are not only true but glow in the dark as well! Great as a gift for those students or friends needing a flash of inspiration.

20 x 13.5 x 15.5 cm; 0.6 kg

M-1000050

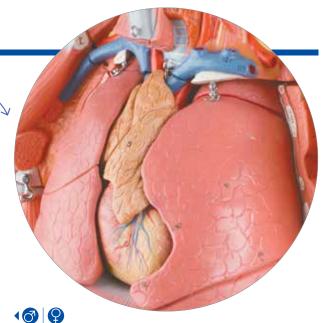


#### Mini Human Skull Model, 3 part

The mini skull is a great three part anatomical model. It precisely depicts the anatomical structures of the human skull in a manner that is true to detail and can be disassembled into skullcap, base of skull and mandible. A great gift for anyone working in the medical field.  $10 \times 8 \times 8$  cm; 0.1 kg

# **MUSCULATURE**





#### 3/4 Life-Size Dual Sex Muscle Figure, 45-part

This muscle figure is the finest teaching tool available! Standing over 4 1/2 feet tall, this 3/4 life-size human replica depicts deep and superficial musculature in amazing detail and realisitic colour in addition to the body's major nerves, vessels, tissues and organs in exquisite detail. The internal organs are removable (45 parts in total) to reveal the fundamental interrelationships of human morphology.

This dual sex muscle figure has interchangeable genital inserts and a female mammary gland as well as a detailed multilingual product manual identifying over 600 hand-numbered structures, explained in the included guide. Hand-painted and mounted on a stable metal stand.

#### Includes the following features:

- 5 arm/ shoulder muscles
- 8 leg/ hip muscles
- 2-part removable heart
- 5-part head with removable brain
- 2-part removable lungs
- · 2-part stomach
- Removable 4-part male and 2-part female genital inserts
- · Detachable arms, leg, head, and abdominal wall for detailed study

Hands-on anatomy education at its best: Easily remove the calvarium to view the 3-part removable brain. Look beneath the liver to reveal the gallbladder and bile duct. Peer inside the appendix, stomach lungs, heart or kidney. Remove and view the details of 13 different muscles of the arms and legs.

138 x 50 x 32 cm; 12.4 kg

M-1013881

#### 3/4 Life-Size Female Muscle Figure, 23-part (not shown)

This Female Muscle Figure provides the same quality characteristics as the dual sex model above but is delivered without internal organs, brain, and male genitalia providing for unobstructed study of the human musculature. The female muscle figure includes the

#### following features:

- 5 arm/shoulder muscles
- 8 leg/hip muscles
- Detachable arms, leg, head and abdominal wall for detailed

138 x 45 x 32 cm; 11.2 kg



#### Life-size Male Muscle Figure, 37-part

This life-size human muscular model shows the deep and superficial musculature of the entire body in great detail. The extraordinary accuracy of the human muscular system makes this masterpiece a unique tool for instructions even in large lecture halls.

It is manufactured to precise anatomical detail, is made from a durable, non-toxic plastic and painted in didactic colours. Comes on a sturdy base, slightly raised for better visibility.

#### The following parts can be removed for close up study:

- Skull cap
- 6-part brain
- Eyeball
- Breast and abdominal wall
- Both arms
- 2-part larynx
- 2 lungs
- 2-part heart

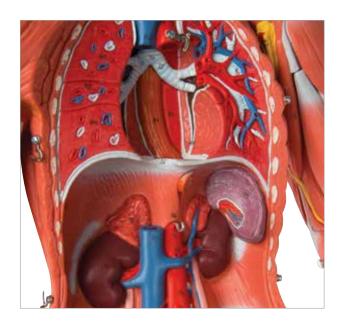
180 x 110 x 50 cm; 53 kg

- Diaphragm
- 2-part stomach
- Liver with gall bladder
- Kidney
- Whole intestine system
- Bladder half
- 2-part penis
- 10 muscles









## A space saving alternative with amazing detail at half life-size!





#### 1/2 Life-Size Complete Dual Sex Muscle Figure, 33-part

This convenient and complete human musculature model is the perfect choice for thorough demonstrations of human musculature and internal organs where space is a concern. Exquisitely hand-detailed and complete with 33 removable parts, this human muscular figure represents the finest quality at an affordable price. Painted by hand in realistic colours, this human anatomy model comes complete with stand and detailed multilingual product manual.

#### Includes the following removable parts:

- 5 arm/shoulder muscles
- 8 leg/hip muscles
- 2-part heart
- 2-part brain • 2 lungs
- 2-part male and 2-part female genital inserts
- 2-part intestine system
- Detachable breast/belly covering and arms for detailed study
- Almost 400 hand-numbered structures identified in the manual 84 x 30 x 30 cm; 4.95 kg

#### M-1000210



#### 1/2 Life-Size Complete Female Muscle Figure, 21-part (not shown)

Offering the same exceptional value as the dual sex version above, this version is delivered without internal organs, brain and male genitalia.

84 x 30 x 30 cm; 4.1 kg





#### Life-Size Dual Sex Human Figure, 39-part

This life-size, dual sex model facilitates an understanding of human anatomy like no other human anatomy model in the world! One half exposes the musculature, while the other shows the skin for a more realistic effect that puts the human touch back in. The figure can be disassembled easily to show the inner structures and organs in amazing detail.

#### Altogether, 39 component parts can be removed:

- · 2-part head
- · Brain half
- M. Sternocleidomastoid
- M. Deltoideus
- M. Biceps brachii
- M. Triceps brachii
- M. Palmaris longus with m. Flexor carpi radialis
- M. Brachioradialis with m. Extensor carpi radialis
- Skin of the left arm
- Muscled leg, upper part
- Muscled leg, lower part
- · Skin of the left leg
- Abdominal cover
- Mammary gland
- 2 removable lungs
- 2-part removable heart

174 cm; 40.7 kg

#### M-1000209

- Removable Liver
- 2-part removable stomach
- · Removable kidney half
- 4-part removable intestines
- 3-part female genital insert with embryo
- 4-part male genital
- M. Satorius
- M. Gluteus maximus
- M. Rectus femoris
- M. Gastrocnemius
- M. Biceps femoris cap. L. with m. semitendinosus
- · Comes with wooden roller base and includes free anatomy software!
- Caucasian appearance



Life-Size Dual Sex Asian Human Figure, 39-part (not shown) Same features as M-1000209 above, but with Asian appearance. 174 cm; 40.7 kg

M-1000208







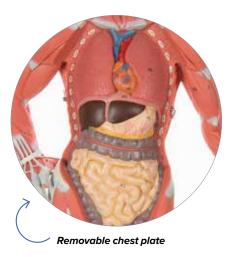
#### 1/3 Life-Size Muscle Figure, 2-part

The 1/3 life-size mini muscle figure shows all the superficial musculature of the human form. It is accurately reproduced and detailed in life-like colors. The chest plate is removable from the muscular figure to reveal the internal organs and the right side contains a female mammary gland.

Over 125 hand-numbered and identified structures of the human anatomy on this muscular figure. Mini muscular figure delivered on base.

57 x 25 x 18 cm; 2.1 kg

M-1000212





On wheels, easy to move

39 amazingly

detailed components,

plus free software!





#### Life-Size Lower Muscle Leg with Detachable Knee, 3-part

The muscled leg is a life-size replica of the lower leg, ankle, and foot. The muscle leg model is supported on a removable base for  $% \left\{ 1\right\} =\left\{ 1\right\} =\left\{$ easy viewing of this amazing joint.

#### Features of the lower muscular leg:

- Detachable knee cross section to expose the articular surfaces
- Detachable gastrocnemius muscle Supplied on a detachable base. 58 cm; 2.6 kg

M-1000353

#### Life-Size Deluxe Muscle Leg, 7-part

Extremely detailed model, shows even the finest structures. This life-size muscular leg model can be disassembled into upper and lower leg.

#### The following muscles can be detached from the leg:

- · Long head of biceps femoris muscle with semitendinous muscle
- Sartorius muscle
- Gluteus maximus muscle
- Rectus femoris muscle
- Gastrocnemius muscle

This high quality muscular leg model is supplied on base. 100 cm; 7 kg

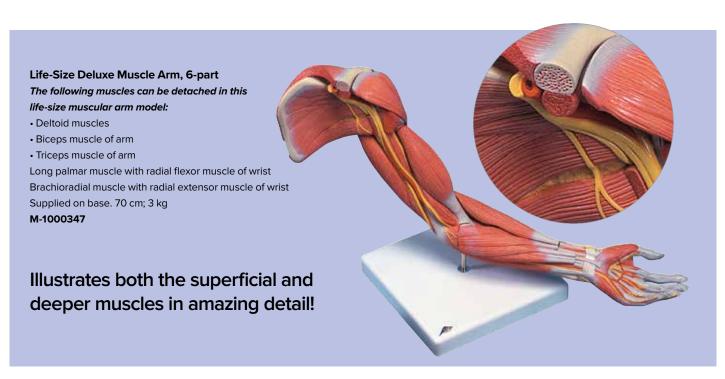
M-1000352

#### 3/4 Life-Size Muscle Leg, 9-part

The muscular leg model illustrates both the superficial and deeper muscles, eight of which are removable. Tendons, vessels, nerves and bone components of the left leg and foot are shown in great detail in the the muscular leg. All parts of muscular leg are numbered for easy identification.

Delivered on removable stand. 77 x 26 x 26 cm; 4 kg



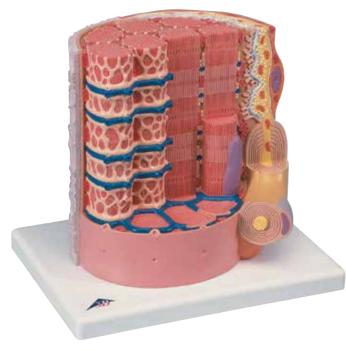


# 3/4 Life-Size Muscle Arm, 6-part

This ¾ life-size muscled arm model illustrates both the superficial and deeper muscles, five of which are removable. Tendons, vessels, nerves and bone components of the left arm and shoulder are shown in great detail on this high quality muscle model. Over 70 numbered parts for easy identification, named in the accompanying product manual. Delivered on removable stand. 60 x 18 x 18 cm; 1.9 kg







# 3B MICROanatomy Muscle Fibre 10,000 times magnified

Illustrates a section of a skeletal muscle Fibre and its neuromuscular end plate. The muscle Fibre is the basic element of the diagonally striped skeletal muscle. This high quality muscle Fibre replica brings a hands-on understanding of the human muscle to any classroom.

23.5 x 26 x 18.5 cm; 1.1 kg

M-1000213

#### 3B MUSCLEtrainer

Includes 248 high quality digital images, 241 muscles and more than 200 associated anatomical structures. Languages: English, French, Spanish, Portuguese, German, (Latin).

Please see 3bscientific.com for system requirements.



# TORSO MODELS



Manufactured to precise anatomical detail: authentic 3B Scientific® torso models

Quality and value at great prices! 3B Scientific® torso models are manufactured from an extremely durable, non-toxic material specially made for everyday, hands-on use. They are hand-painted by skilled craftsmen, assuring realistic colours and a great level of detail.

- · Non-toxic, extremely durable material for hands-on demonstrations
- Hand-painted to show every detail in realistic colours
- · Anatomical precision for medical education on every level
- · Large selection of different features to meet your specific needs

Choose from a variety of torsos with different features depending on your needs: male, female or dual sex, different ethnicities, focusing on varying aspects of anatomy. Please visit 3bscientific.com for additional images and to zoom in on more detail.

#### Life-Size Muscle Torso, 27-part

This life-size muscle torso shows the deep and superficial muscles in great anatomical detail. Its anatomical precision and realism make it an outstanding tool for demonstration even in large lecture halls.

For detailed study and to reveal inner structures, the following pieces can be removed easily:

- Skull cap
- 2 lungs
- 6-part brain
- 2-part heart
- Eyeball with optic nerve
- Diaphragm • 2-part stomach
- Chest/abdominal wall
- · Half urinary bladder
- · Liver with gallbladder • 2-part larynx

4 muscles

with appendix

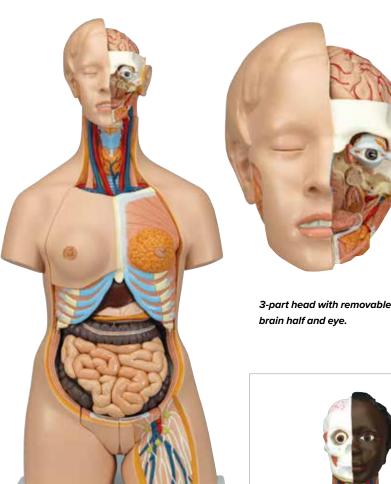
· Front half of kidney

• Complete intestinal tract

Delivered on sturdy base. 95 x 60 x 35 cm; 14 kg



# Detailed, inside and out!



#### **Dual Sex Torso, 24-part**

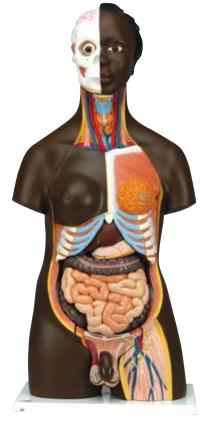
This life-size human torso model offers impressive detail with 24 removable parts. Use it to answer all questions regarding internal human anatomy. Manufactured for everyday use, extremely durable material for a long lasting demonstration model.

#### For close-up study the following parts and organs can be removed:

- 3-part head
- 2-part stomach
- 4-part intestinal tract
- · Female chest wall
- 2 lungs
- · 2-part heart
- · Liver with gall gallbladder
- Front half of kidney
- 4-part male genital insert
- 3-part female genital insert with foetus

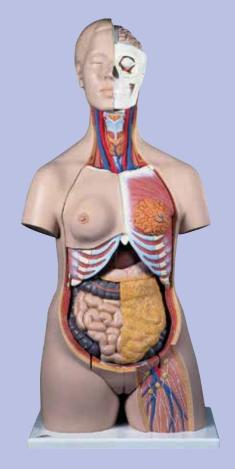
Hand painted in realistic colours, delivered complete with the 3B Scientific® Guide to the Human Torso and mounted on sturdy base. Caucasian appearance, 87 x 38 x 25 cm; 7.5 kg

M-1000196



#### **Dual Sex African Torso, 24-part**

This life-size, deluxe human torso model comes with all features of the Dual Sex Torso, 24-part (M-1000196) but with African appearance. 87 x 38 x 25 cm; 7.5 kg M-1000202



#### **Dual Sex Torso, 20-part**

Detailed demonstration model for human anatomy focussing on inner organs. All parts are easy to remove and the torso can be switched from male to female with no hassle!

#### This life-size, high quality human torso contains these removable parts and organs:

- 2-part head
- 2-part intestinal tract
- Female chest wall • 2 lungs
- Front half of kidney

- 2-part heart
- 4-part male genital
- Stomach
- insert • 3-part female genital
- · Liver with gallbladder
- insert with foetus

All organs are hand painted for a quality product with realistic colours. Delivered on sturdy base and complete with the 3B Scientific® Guide to the

Human Torso.

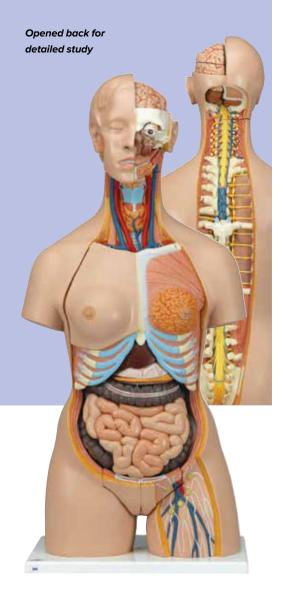
87 x 38 x 25 cm; 7.3 kg Caucasian appearance, 20-part

M-1000197

#### Asian appearance, 18-part

Delivered with 1-part head and without female chest wall.





#### **Dual Sex Torso with Opened Back, 28-part**

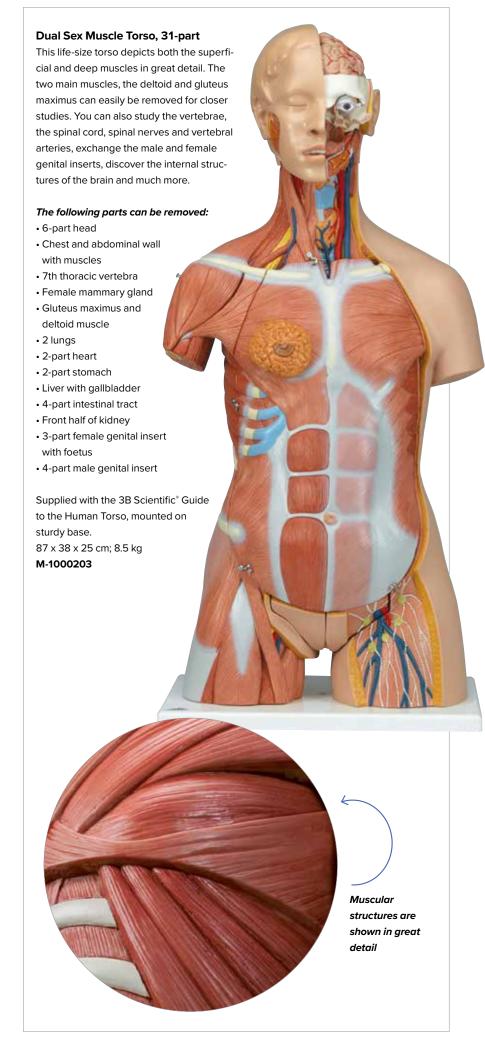
This life-size human torso model comes complete with removable male and female genital inserts, opened neck and back section to study vertebrae, intervertebral discs, spinal cord, spinal nerves, vertebral arteries, and a deluxe head with a 4-part brain.

# The following parts and organs can be removed for detailed study:

- 7th thoracic vertebra
- Female chest wall
- 6-part head (incl. 4-part brain)
- Female breast covering
- 2 lungs
- 2-part heart
- 2-part stomach
- Liver with gallbladder
- 4-part intestinal tract
- Front half of kidney
- 4-part male genital insert
- 3-part female genital insert with foetus

Comes complete with the 3B Scientific® Guide to the Human Torso, delivered on sturdy base.

 $87 \times 38 \times 25 \text{ cm}$ ; 7.6 kg



# Life-size Torso

#### **Dual Sex Torso with Muscle Arm, 33-part**

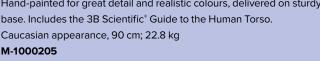
A worldwide unique feature of this life-size torso is the **removable** 6-part muscle arm. This top of the line model fully represents the anatomy of the complete human upper body. Its great detail makes it especially suitable for the high standards of medical education. The right half shows the skin, the left half the superficial and deeper muscles with nerves, vessels and bony structures. The versatility of this aesthetically designed model is rounded off by the exact representation of the internal organs.

#### The following parts can easily be removed for closer study:

- 2-part head
- Brain half
- Sternocleidomastoideus muscle
- 6-part muscle arm (removable Muscles: deltoid, biceps brachii, triceps brachii, palmaris longus with flexor carpi radialis, brachioradialis with extensor carpi radialist)
- Upper leg stump
- Chest/abdominal wall with detachable mammary gland

- Torso body
- 2 lungs
- 2-part heart
- · Liver with gallbladder
- 2-part stomach
- · Kidney half
- · 4-part intestinal tract
- 3-part female genital insert with foetus
- 4-part male genital insert

Hand-painted for great detail and realistic colours, delivered on sturdy



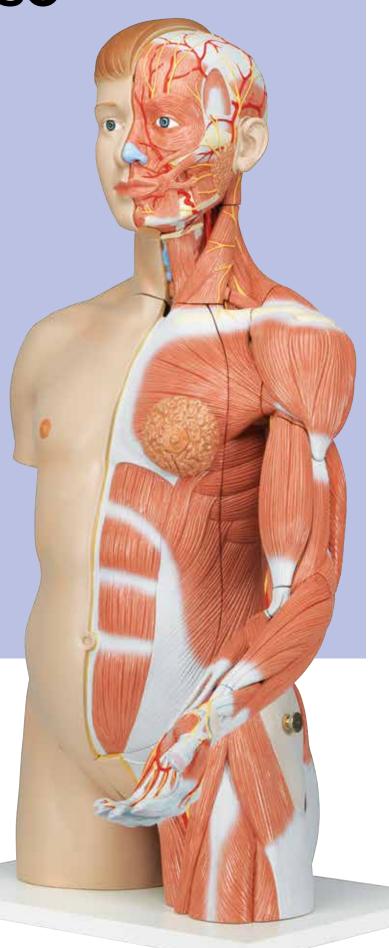


#### Asian Dual Sex Torso with muscular arm, 33-part

This life-size human torso models comes with all features of the M-1000205 Dual Sex Torso with Muscle Arm (see right), but in Asian

appearance.

90 cm; 22.8 kg M-1000204



# Classic Gender Neutral Torso, 12-part

This **gender neutral, life-size torso** is hand-painted, true to detail, and made of high-quality plastic.

# The following components are removable and reveal the inner anatomy:

- 2-part head
- 2-part removable heart
- 2 lungs
- Stomach
- · Liver with gallbladder
- · 2-part intestinal tract
- Front half of kidney

Includes 3B Scientific® Guide to the Human Torso, mounted on sturdy base. 87 x 38 x 25 cm; 4.6 kg

M-1000186



Parts can easily be removed for detailed study

#### Classic Gender Neutral Torso, 14-part

This 14 part **anatomically correct** human torso model is an educational tool of true quality. The gender neutral torso is hand-painted in true to life detail and made of high-quality plastic for hands-on education. It is mounted on a sturdy base so students can safely disassemble it.

#### The following parts can be removed:

- 3-part head
- 5 partifica
- 2 lungs
- 2-part heart
- Stomach
- Liver with gallbladder
- 2-part intestinal tract
- Front half of kidney
- Front half of urinary bladder

Includes 3B Scientific $^{\circ}$  Guide to the Human Torso. 87 x 38 x 25 cm; 5.9 kg

M-1000190



#### **Classic Gender Neutral Torso, 16-part**

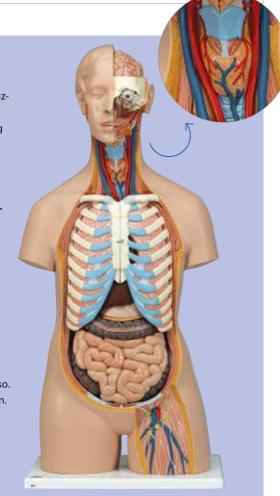
This life-size human torso model comes with 16 removable parts, each hand-painted for amazingly realistic details.

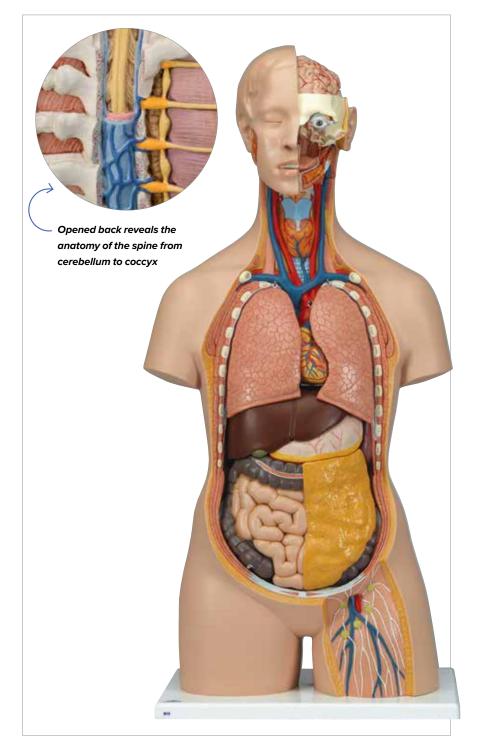
- Hand-painted for realistic colours and amazing detail
- Made of durable, high quality plastic
- 16 removable parts for closer study

# The torso model contains the following removable parts:

- 3-part head
- 2 lungs with sternum and rib attachments
- 2-part heart
- Stomach
- Liver with gallbladder
- 4-part intestinal tract
- · Front half of kidney
- Front half of urinary bladder

Includes 3B Scientific $^{\circ}$  Guide to the Human Torso. Mounted on sturdy base for hands-on education. 87 x 38 x 25 cm; 6.8 kg





#### Classic Gender Neutral Torso with Opened Neck and Back, 18-part

This human gender neutral torso model has the unique feature of an **open neck and back** section going from the cerebellum to the coccyx (see image on page 48). Vertebrae, intervertebral discs, spinal cord, spinal nerves, vertebral arteries, and many other features are represented in detail in this hand-painted and highly detailed model.

#### Includes the following removable parts and organs:

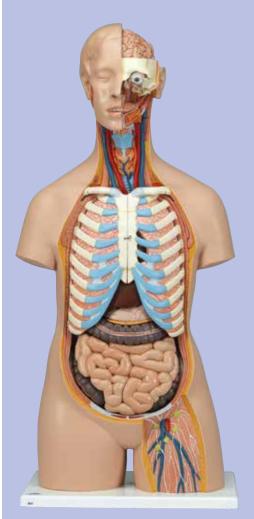
- 7th thoracic vertebra removable
- 6-part head
- 2 lungs
- 2-part heart
- Stomach

- · Liver with gallbladder
- 2-part intestinal tract
- Front half of kidney
- Front half of urinary bladder

Includes 3B Scientific® Guide to the Human Torso. Mounted on sturdy base for hands-on education

87 x 38 x 25 cm; 5.8 kg

M-1000193



# Classic Gender Neutral Torso with Open Back, 21-part

This top of the line gender neutral torso comes with additional removable parts and an opened back section going from the cerebellum to the coccyx. Vertebrae, intervertebral discs, spinal cord, spinal nerves, vertebral arteries, and many other features are represented in detail is this detailed replica of the human anatomy. It is mounted on a sturdy base for safe anatomical demonstrations.

# The following parts and organs can easily be removed:

- 7th thoracic vertebra removable
- 6-part head
- 2-part stomach
- Lungs
- 2-part heart
- Liver with gallbladder
- 4-part intestinal tract
- Kidney half
- Bladder half
- Open back
- Brain

Includes 3B Scientific $^{\circ}$  Guide to the Human Torso. 87 x 38 x 25 cm; 6.5 kg

You will find a learning card for every disc inside the product manual.

#### MRI Torso, 15 Transverse Sections

This unique MRI torso is horizontally sectioned into 15 slices, giving a distinctive view of human anatomy.

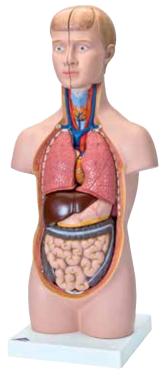
The topographical relationships of the torso are represented as coloured reliefs on the individual sectional planes.

For a closer study of the internal anatomy of the torso, each disc can be shifted horizontally and rotated around its sagittal axis. Each disc within the MRI torso can be individually removed.

The results are a brand new understanding of human anatomy that is both interesting and engaging for students. This MRI torso is a great addition to any medical classroom! 130 x 40 x 35 cm; 19 kg

M-1001237





# Looking for a smaller alternative for your desk?

#### Mini-Torso, 12-part

At approximately half life-size, this mini human torso model still shows great detail!

# The following parts can be removed:

- 2-head halves
- Brain half
- 2 lungs
- 2-part heart
- Stomach
- · Liver with gallbladder
- · 2-part intestinal tract

If you want quality on a budget this mini torso model is for you! All parts are numbered and identified on the included product manual.

54 x 24 x 18 cm; 1.89 kg

M-1000195

#### 3B Scientific® Torso Guide (not shown)

Already included with most torso model purchases.

- Brilliantly coloured pictures of each part of the torso, explaining even the smallest structures
- Includes teaching tips to create even more interesting lessons
- Complete in 7 different languages (Latin, English, German, Spanish, Portuguese, French, Japanese)
- Includes CD-ROM in pdf-format to assist in creating tests or preparing lessons

#### M-1000183

#### 3B Scientific® Torso-Classroom Set (not shown)

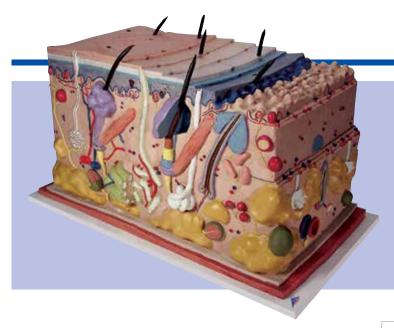
Includes 33 brilliant overhead-foils with coloured pictures of each part of the torso.

#### M-1000184

#### Heavy Duty Protective Cover for Torsos (not shown)

Protect your investment with this heavy duty protective cover for your torso models. Suitable for all full-size torsos. Zippered with reinforced easy-carry handle. Black.

# **SKIN MODELS**



#### Skin Model, 70 times full-size

This distinctive model shows a section of human skin in three dimensional form. Individual skin layers are differentiated and important structures such as hair, sebaceous and sweat glands, receptors, nerves, erector pili muscles and vessels are shown in great detail.

Mounted on baseboard. 44 x 24 x 23 cm; 3.6 kg

M-1000291

#### 3 models in 1!



#### Skin Model, 3-part

The skin is shown 80 times magnified, so even the smallest structures can be seen in detail. It can be taken apart easily thanks to magnetic connections for better demonstration, and represents the three most important sections of skin:

- Palm of the hand
- · Back of the hand
- Scalp

34 x 39 x 15.5 cm; 2.05 kg

M-1000294

#### Skin, Hair and Nail Microscopic Structures

This model shows the microscopic structure of the skin in great detail. Both hairless and hairy skin structure are shown as well as the different cell layers of the skin, embedded sweat glands, touch receptors, blood vessels, nerves, erector pili muscle, and a hair follicle. Additionally, it includes a section of nail depicting the nail plate, bed, and root, as well as a representation of a hair root with all of its cellular layers.

10 x 12.5 x 14 cm; 0.35 kg

M-1000292



#### Skin Section, 70 times Life-Size

This relief model shows a section through the three layers of the hair-covered skin of the head:

- · Sweat glands
- Vessels
- Receptors
- Nerves

· Representation of hair follicles with sebaceous glands

Delivered on base. 10.2 x 13.0 x 2.0 in; 1 kg

M-1000289

#### Skin Cancer Model

In the top view of the skin cancer model, the individual stages of externally visible skin changes are shown, allowing for an assessment according to the ABCDE criteria. The sides of the skin cancer model show the

various levels of invasion into the skin layers according to Clark (I-V) and the tumour thickness according to Breslow (in mm). Five original colour illustrations on the base of the skin cancer model show various types of malignant melanomas. Comes mounted on a base.

 $14 \times 10 \times 11.5$  cm; 0.2 kg

M-1000293

#### Skin Section, 40 times full-size

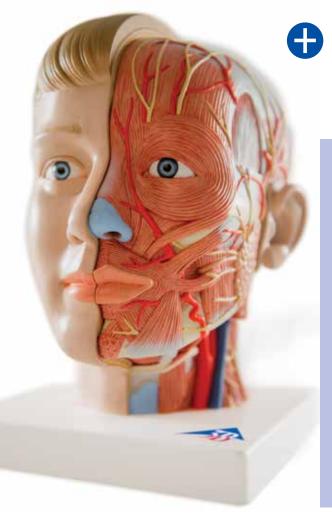
The two halves of this relief model show the three layers of hairy and hairless skin in order to make the differences clear.

Detailed with hair follicles, sebaceous glands, sweat glands, receptor, nerves, erector pili muscles and vessels. Delivered on base. 24 x 15 x 3.5 cm; 0.2 kg





# **HEAD AND BRAIN MODELS**



#### You can depend on 3B Scientific® anatomical models:

- Extremely durable thanks to high quality material
- Non-toxic for everyday, hands-on use
- Carefully cast and hand-painted by skilled craftsmen
- Manufactured to precise anatomical details



#### Head with Neck, 4-part

This life-size and detailed head model is midsagittally sectioned, and while the right size shows a realistic looking face, the left side reveals the muscles, nerves, vessels, and bony structures of the head. For in depth study, the model contains a removable brain half. The neck detachable and sectioned both horizontally and diagonally. Caucasian appearance, supplied on baseboard. 26 cm; 2.2 kg

M-1000216

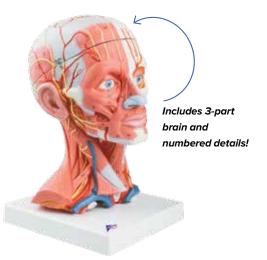
#### Asian Head with Neck, 4-part

Same features and details like the M-1000216 but with Asian appearance.

Supplied on baseboard. 26 cm; 2.2 kg

M-1000215





#### Head and Neck Musculature, 5-part

This model shows a realistic representation of the superficial musculature and deep muscles, nerves and vessels of a human head and neck in life-size. It can easily be disassembled into skull cap and 3-part brain. Anatomical details are painted on the model for easy identification with the help of the product manual.

On base. 36 x 18 x 18 cm; 1.8 kg

M-1000214



#### Half Head with Musculature

This high quality model represents the outer, superficial and the internal (median section) structures of head and neck. The half head with musculature is delivered on removable stand for easy display in a classroom or doctor's office. Presents the important anatomical structures.

22 x 18 x 46 cm; 1.1 kg



#### A. Median Section of the Head

Relief median section of the head shows all relevant structures of the human head in great detail. Delivered on a baseboard. 26 x 33 x 5 cm; 1 kg

M-1000219

#### **B. Head Section Model**

Frontal section through the human paranasal sinuses covered with mucous membrane. Signs of sinusitis (paranasal sinus inflammation) on the right, with normal ventilation of the left side. Delivered on baseboard.

41 x 31 x 5 cm; 1.45 kg

M-1012789

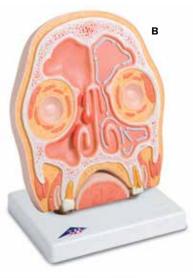
#### C. Median and Frontal Section of the Head

The 2 relief models show the median and frontal section of the head. The two views of this high quality model show all important anatomical structures of the head in full detail. They include cross sections of the brain, spinal cord, and sinuses of the human head. Delivered on baseboard.

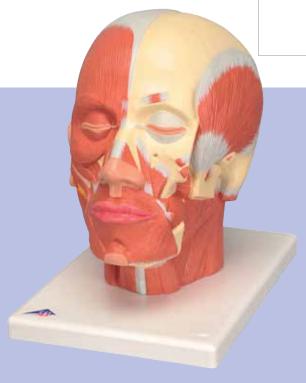
41 x 31 x 5 cm; 1.45 kg

M-1000220









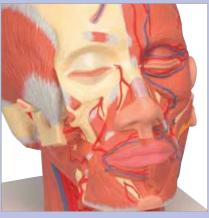
#### **Head Musculature**

This head model represents the superficial musculature of head and neck, showing:

- Parotid gland
- Submandibular gland
- Deep musculature
- · Lower jaw partially exposed

Mounted on base. 24 x 18 x 24 cm; 1.2 kg

M-1001239







#### **Head Musculature with Blood** Vessels

In addition to the features of the classic head musculature model, this version also shows the blood vessels on the head. Mounted on base. 24 x 18 x 24 cm; 1.2 kg

M-1001240

#### **Head Musculature with Nerves**

In addition to the classic head musculature model, this version also shows the nerves on the head. Mounted on base.

24 x 18 x 24 cm; 1.2 kg

#### A. Brain with Arteries on Base of Head, 8-part

This deluxe brain comes with an opened head to allow detailed study of the brain's position in the skull. The head is horizontally divided above the skull base. The brain is divided medially, with a removable basilar artery.

#### Both halves can be divided into:

- Frontal parietal lobes
- Temporal with occipital lobes
- Half of brain stem
- Half of cerebellum

On base.

15 x 15 x 23 cm; 1.6 kg

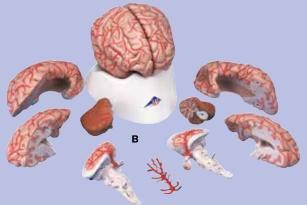
M-1017869

#### B. Brain with Arteries, 9-part

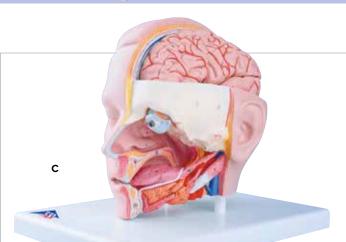
This brain model is a great tool for education on the human nervous system and anatomy of the brain. Delivered on a removable base for easy display in the classroom.

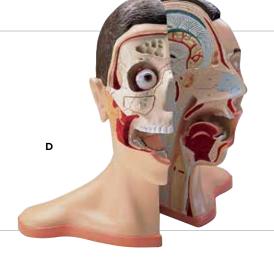
15 x 14 x 16 cm; 0.9 kg

M-1017868



Great tools for education on the human nervous system and anatomy of the brain!





Skull base with additional details

#### C. Head Model, 6-part

# This head model meets the highest standard requirements of medical education!

It is life-size, comes with 6 removable parts and is mounted on a base. Included is a removable 4-part brain half with arteries. The eyeball with optic nerve is also removable for detailed study. One side exposes the nose, mouth cavity, pharynx, occiput, and skull base.

19 x 23 x 22 cm; 1 kg

M-1000217

#### D. Head and Neck, 5-part

This model shows a medially divided representation of the head. The skin and facial muscles of the right outer half are removed to show the deeper structures. The eyeball, the bone cover over the sinus maxillaries and the right tongue half are removable for detailed study. The parts are differentiated in colour.

38 x 36 x 25 cm; 3 kg



#### Classic Brain, 5-part

This midsagittally sectioned model is an original anatomical cast of a real human brain.

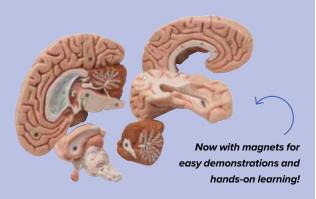
#### The components of the brain's left half are:

- Frontal and parietal lobe
- Encephalic trunk
- Temporal and occipital lobe
- Cerebellum

The classic brain is a a great tool for education on the human nervous system and the anatomy of the brain. It will fit inside the skull models M-1000046, M-1000050, M-1000051, M-1000052, M-1000053, M-1000054, M-1000055, M-1000056 from page 34. Delivered on removable stand.

13 x 14 x 17.5 cm; 0.9 kg

M-1000226



#### Brain Model, 4-part

This 4-part brain is medially divided. All structures of the brain are

hand-painted, numbered and identified in a product manual.

#### The brain's right half can be disassembled into:

- Frontal with parietal lobes
- · Brain stem with temporal and occipital lobes
- · Half of cerebellum

This brain is a great educational tool for the human nervous system and anatomy of the brain. This brain is delivered on a removable base. 14 x 14 x 17.5 cm; 0.9 kg

M-1000224





#### 3B Scientific® brain models have been cast from real specimens and accurately represent even the finest structural details.

- Magnetic connections for easy demonstrations
- · Highest quality material for long lasting
- Hand-painted and manufactured to precise anatomical detail

To see additional images and to zoom in on details, please visit 3bscientific.com.

#### Introductory **Brain Model, 2-part**

This basic brain is medially divided, anatomically accurate, and life-size! The structures of the brain are shown in one colour, providing an introduction to the human nervous system and anatomy of the brain. Structures of the brain are not labelled or numbered. This introductory brain is delivered on removable base. 15 x 14 x 17.5 cm; 0.7 kg

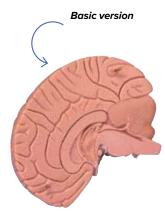


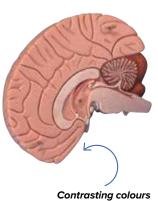
#### **Brain Model, 2-part**

Contrasting colours are used to indicate various anatomic structures in this medially divided human brain, making this high quality model perfect for beginning anatomy studies of the human brain.

On removable base.  $15 \times 14 \times 17.5$  cm; 0.7 kg

M-1000222









Brain Model, 8-part

A very detailed model of the human brain which is medially divided.

#### Both halves of this brain can be disassembled into:

- Frontal with parietal lobes
- · Half of brain stem
- Temporal with occipital lobes
- Half of cerebellum

This brain is a great educational tool for teaching and learning about the human nervous system and anatomy of the brain. Delivered on a removable. 14 x 14 x 17.5 cm; 0.9 kg M-1000225



#### Neuro-Anatomical Brain, 8-part

This deluxe brain is medially divided. On the right half of this brain, you will find a systematically coloured grouping and representation of the cerebral lobe.

#### The left half of the brain shows:

- Pre- and post-central region
- Broca and Wernicke areas
- · Heschl's gyrus
- Brain nerves
- Ventricles

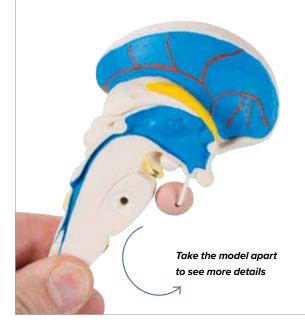
# Both halves of this brain can easily be disassembled into:

- Frontal with parietal lobes
- Temporal with occipital lobes
- Half of brain stem
- · Half of cerebellum

Delivered on a removable base.

 $14 \times 14 \times 17.5 \text{ cm}$ ; 0.95 kg

#### M-1000228



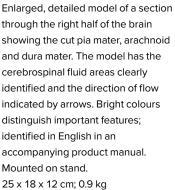


#### **Brain Section Model**

An enlarged and very detailed section through the right half of the brain, including a portion of the skull. The pia mater has been removed. This model is double sided and finely coloured. One surface is on the median line, including a section of the falx cerebri. A sagittal cut on the reverse side exposes the lateral ventricle. There are 49 references on the model, identified in English on an accompanying product manual. Mounted on a stand.  $25 \times 18 \times 12$  cm; 0.9 kg

M-1005113

## Cerebrospinal Fluid Circulation



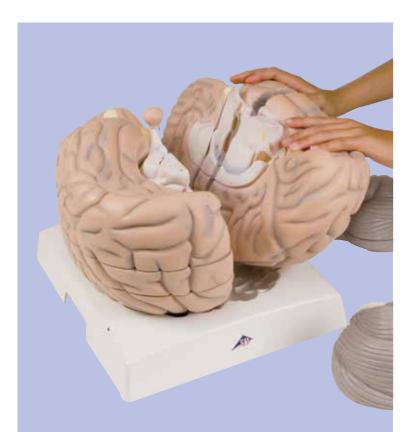
M-1005114



#### Brain Ventricle

This model shows both side ventricles of the brain, the 3rd and 4th ventricle and the Aquaeductus cerebri (Sylvius). The brain ventricles are life-size. This brain ventricle model is delivered on stand.





# True hands-on education with this oversized brain model!

#### Giant Brain, 2.5 times full-size, 14-part

At 2.5 times life-size this comprehensive brain model is a very useful teaching aid, especially **for large groups of students**. All structures of the brain and the ventricles are visible through median, frontal, and horizontal divisions. Delivered with a removable base.

- Unbreakable Natural cast made from durable vinyl
- Fourteen removable segments secured with pins
- Ideal for 3D study of brain structures
- $\bullet$  Includes removable base and detailed product manual 34 x 30 x 37 cm; 5.6 kg

M-1001261



#### Giant Functional-Centre Brain, 4-part

This popular brain model reproduces the **brain of a right-handed person**. It employs contrasting colours and handpainted captions to identify motor and sensory functional centres. In addition to focussing on the intellectual role of the dominant left brain, and the creative role of the right, the model **highlights the emotional**, **sexual**, **memory**, **and learning functions** of the limbic system.



- Distinguishment of sensory regions and centers receptive to 20 specific body regions
- Distinguishment of motor centers controlling 19 body regions
- More than 120 hand-numbered features identified in accompanying manual

Delivered on base.  $23 \times 20 \times 30$  cm; 2.38 kg

#### M-1005555

#### **Rat Brain Comparative Anatomy**

Enlarged roughly six times, and medially sectioned, the rat brain model can be disassembled into two halves. The right half of the **colour-coded model** shows the structures of the cerebrum, cerebellum, and brainstem. The left half is mostly transparent to reveal the left lateral ventricle and hippocampus in the median section. For comparison, a natural cast of a rat brain and a didactic, small-scale illustration of a human brain in median section are shown on the base.

Each has the same colour coding used for the various regions.

14 x 10 x 16 cm; 0.24 kg



# **NERVOUS SYSTEM**

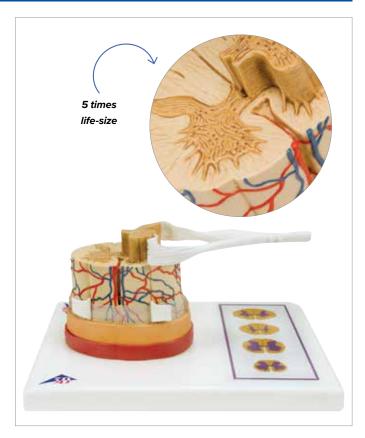


#### Nervous System, 1/2 life size

An excellent model to study the structure of the human nervous system. This 3D relief model shows schematic representation of the central and peripheral nervous system, numbered and identified in the accompanying manual.

Delivered on baseboard. 80 x 33 x 6 cm; 3.5 kg

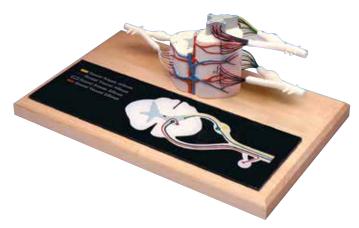
M-1000231



#### Spinal Cord Model, 5 times Life-Size

The model illustrates the composition of the spinal cord with nerve endings. For easier study, the model is 5 times life-size. The spinal cord is formed by a central channel surrounded by "grey matter" with an outer layer of "white matter". The base of the model features illustrations of the various cross-sections of the spinal cord through the white and grey matter at the neck, torso and lumbar and sacral regions. Supplied on a base.  $26 \times 19 \times 13$  cm; 0.4 kg

M-1000238



#### **Spinal Cord Model**

This spinal cord model shows a segment of the upper thoracic spinal cord and is laterally and longitudinally divided showing spinal nerve roots. It is approximately 6 times life size and comes on a baseboard.

35.5 x 27 x 27 cm, 0.75 kg

#### **Physiology of Nerves Series**

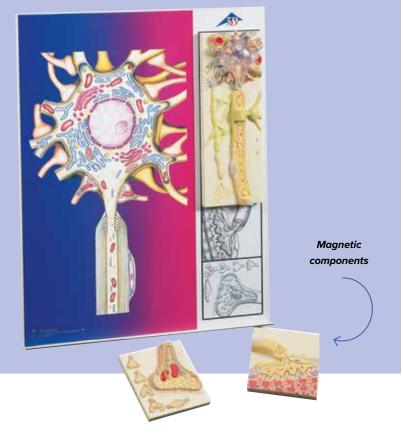
Unique five model series for education about the human nervous system. Interchangeable sections can be assembled to illustrate the features of typical neurons found in vertebrates. All sections depict the neural components in vivid colours and attach magnetically to the illustrated metal base.

#### The set contains the following sections, which are also available individually:

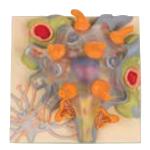
- Neuron Cell Body
- Myelin Sheaths of the CNS
- Schwann Cells of the PNS
- Motor End Plate
- Synapse

68 x 51 x 3 cm; 4,2 kg

M-1000232



# Individual sections:



#### **Neuron Cell Body**

Typical neuron body with cell organelles. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000233



#### Myelin Sheaths of the CNS

Glial cells which build the insulating layer around the axons of the central nervous system. 12.2 x 11.7 x 3.6 cm; 0.2 kg

M-1000234



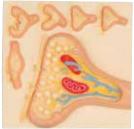
#### Schwann Cells of the PNS

Schwann cell with sectioned core. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000235



#### **Motor End Plate**

Depicts the neuromuscular junction with striated muscle fibre. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000236



#### **Synapse**

Features the endoplasmic reticulum, mitochondria and the membranes of the synaptic gap. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000237

#### **Motor Neuron Diorama**

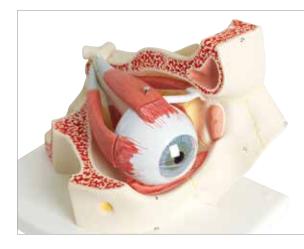
This colour-coded, 3D reproduction shows a motor nerve cell situated within a milieu of interacting neurons and a skeletal muscle fibre. The membranous envelope is cut away from the neuron to expose the cytological ultrastructure, organelles, and inclusions within the cell body. A section of the axon lifts off to let you view the tightly wound layers of the enveloping myelin sheath and neurolemma, as well as the Schwann cell which formed them. Via a cutaway view, you can observe synaptic vesicles, carrying neurotransmitters, about to stimulate the muscle fibre to action.

Mounted on a wooden base. 43 x 20 x 28 cm; 3 kg M-1005553

Magnified over 2,500 times!



# **EYE MODELS**



#### Eye in Orbit, 3 times life-size, 7-part

This large anatomical human eye model shows the optic nerve in its natural position in the bony orbit of the eye (floor and medial wall).

#### For closer study, it can be disassembled into:

- Includes the extraocular muscles
- Vitreous humour
- Both halves of the choroid with iris and retina
- Bony orbit

• Eye lens

18 x 26 x 19 cm; 1.1 kg

M-1000258

#### A. Eye, 3 times life-size, 6-part

Can be disassembled into the following parts:

- Both halves of the sclera with cornea and eye muscle attachments
- Both halves of the choroid with iris and retina
- Eye lens
- Vitreous humour

 $9 \times 9 \times 15$  cm; 0.1 kg

M-1000259



# B. Eye,5 times life-size, 6-part

This advanced eye model comes on a base, the following parts are removable:

- Upper half of the sclera with cornea and eye muscle attachments
- Both halves of the choroid with iris and retina
- Lens
- Vitreous humour13 x 14 x 21 cm; 0.6 kg

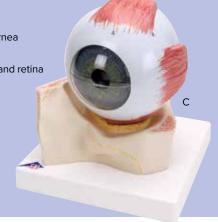
M-1000255



# C. Eye in Orbit,5 times life-size, 7-part

- Upper half of the sclera with cornea and eye muscle attachments
- Both halves of choroid with iris and retina
- Lens
- Vitreous humour
- Shown in bony orbit 18 x 18 x 20 cm; 1 kg

M-1000256



#### Eye with Eyelid, 5 times life-size, 8-part

This larger than life eye model is great for studying the anatomy of the human eye!

#### Features:

- Upper half of the sclera with cornea and eye muscle attachments
- Both halves of choroid with iris and retina
- Eye lens

20 x 18 x 21 cm; 1.2 kg

M-1000257

- Vitreous humour
- Eyelid
- Lachrymal system
- Anatomical features around the eyeball

#### 3B MICROanatomy™ Eye

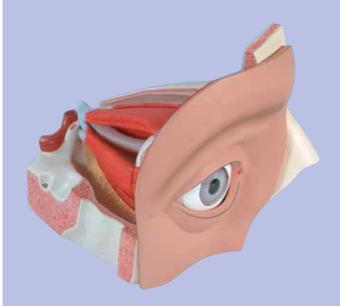
The model illustrates the microscopic structure of the retina with choroid and sclera:

- Left block: 850-times enlarged view of retina including supplying vascular layer and parts of the sclera
- Right block: 3800-times enlarged view of photoreceptors and cells of the pigmented layer

25 x 23 x 18.5 cm; 1.2 kg







#### Eye with Partial Face, 5 times life-size, 12 part

This 3B Scientific eye model shows the eyeball with optic nerve in its natural position in the bony orbit (floor and medial wall).

Additionally, this eye model shows the relation between eye, bones, muscles, and outer structures of the eye.

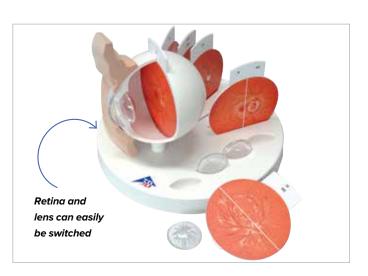
#### Dissects into:

- Two halves of the sclera
- Optic nerve
- M. rectus superior
- M. rectus lateralis
- Cornea half

33 x 30 x 38 cm; 4.9 kg

M-1001264

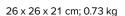
- Eye lens
- Lachrymal system
- Vitreous humour
- Tear gland
- Associated structures



#### Pathological Eye, 5 times life-size

The easy to use switchable and didactically simplified representations of the retina and lens make it possible to clearly explain the typical changes that occur in a healthy eye due to the following diseases:

- Subcapsular cataract
- Cortical cataract
- Nuclear cataract
- Diabetic retinopathy
- Hypertensive retinopathy
- Papillary changes of glaucoma
- Age-related macular degeneration
  - Papilloedema
  - Central retinal arterial occlusion
  - Central retinal venous occlusion
  - Rhegmatogenous retinal detachment



M-1017230



#### **Functional Eye**

With this functional eye model, the functions of the human eye can be taught very effectively. By moving the retina, the shape of the eye can be changed. The lens and ciliary body are made of silicone to allow the change of form and thickness of the lens. Pictures can be projected onto the retina for demonstration purposes.

45 x 30 cm; 2 kg. Includes detailed instruction manual.

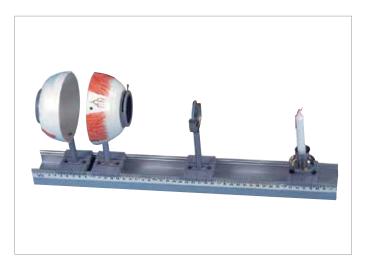
#### M-1005046

#### Budget Functional Eye – small version (not shown)

Smaller version of the Functional Eye for those looking for the same level of detail on a budget. Includes all features of the Functional Eye on a smaller scale.

32 x 18 cm; 0.5 kg

M-1005047



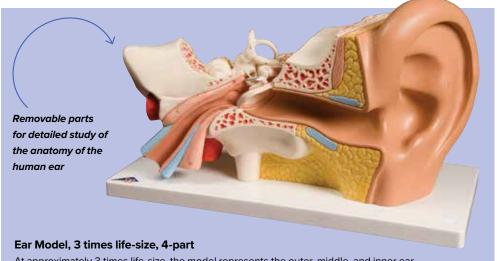
#### Physical Eye Model

Use to demonstrate the optical functions of the eye, e.g. representation of an object on the retina, accommodation, short-sightedness and far-sightedness.

- Half eyeball with adjustable iris diaphragm, lens holder and 2 convex lenses (f = 65 mm and 80 mm), on a rod
- Half eyeball with retina (transparent screen), on a rod
- Lens holder with one concave and one convex corrective lens, on a rod
- Candle holder with 2 candles, on a rod
- Aluminium rail, 50 cm long, with 4 clamp slides
- Includes case

49 x 5.5 x 18 cm; 2 kg

# **EAR & NOSE MODELS**



At approximately 3 times life-size, the model represents the outer, middle, and inner ear.

Removable eardrum with hammer, anvil, and stirrup, as well as 2-part labyrinth with cochlea, and auditory/ balance nerve. On base.

34 x 16 x 19 cm; 1.25 kg

M-1000250



#### Desktop Ear Model, 1.5 times life-size

Specifically designed for those on a budget, the model shows the outer, middle, and inner ear with no compromise in quality. On base.

14 x 10 x 14.7 cm; 0.35 kg

M-1000252



#### Ear Model, 5 times life-size, 3-part

This version is a whopping 5 times life-size for easy viewing from anywhere in the classroom! It represents the outer, middle, and inner ear. Removable auditory ossicles, labyrinth with cochlea, and vestibulocochlear nerve. Delivered on base. 25 x 41 x 25 cm; 3 kg

M-1008553

#### Ear Model, 3 times life-size, 6-part

This high quality human ear model represents outer, middle and inner ear. Ear has removable eardrum with hammer, anvil and stirrup as well as 2-part labyrinth with cochlea and auditory/balance nerve for detailed study of the anatomy of the human ear. Additionally the human ear includes the detail of two removable bone sections to close the middle and inner ear. On base.

 $34 \times 16 \times 19 \text{ cm}$ ; 1.55 kg

M-1000251



# Easy viewing from anywhere in the classroom!

#### World's Largest Ear Model, 15 times life-size, 3-part

The giant ear model is suitable for museums and special collections as well as large lecture halls and conferences. Representation of outer, middle and inner ear. The auditory ossicles and the labyrinth with cochlea and vestibulocochlear nerve can be removed and studied in detail. On base.

130 x 120 x 60 cm; 72 kg





#### **Organ of Corti**

The model shows a three dimensional section through the organ of Corti, the site of the sense of hearing in the inner ear in humans. Special attention has been given to the detailed representation of the individual cellular components and membranes. The overview model in the foreground also shows the exact location of the organ in the cochlea.

M-1010005





#### Ossicle Model - 20 times life-size

The three smallest bones that are joined to each other in the human body are located in the middle ear and are referred to as the auditory ossicles: malleus (hammer), incus (anvil) and stapes (stirrup). Using a micro CT technique, an original cast was used to build this 20 times life-size model.

17 x 12 x 21 cm; 0.29 kg

M-1012786

#### Ossicle Model, 20 times life-size BONElike" (not shown)

In BONElike<sup>™</sup> quality. 17 x 12 x 21 cm; 0.39 kg

M-1009697

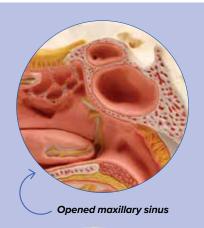


#### **Functional Ear Model**

This highly detailed model shows how the tympanic membrane, ossicles, the complex internal ear with the cochlea, and the oscillations of the Basilar hearing membrane operate and interact. The enclosed mirror enables operation of the model while studying various ear-functions from different angles. Includes a color explanatory chart.

1 kg

M-1005052





#### Nose Model with Paranasal Sinuses, 5-part

The upper right half of the face is enlarged 1.5 times to illustrate the structure of the nose with paranasal sinuses.

#### The following structures are differentiated by colour and visible through the transparent removable skin:

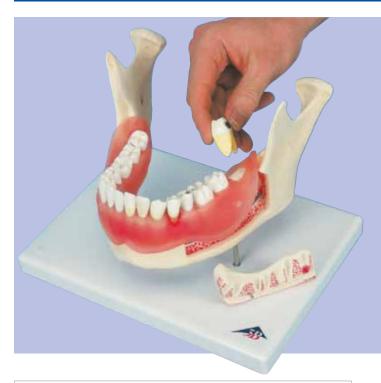
- · Outer nasal cartilages
- Nasal, maxillary, frontal, and sphenoidal sinuses
- Opened maxillary sinus when the zygomatic arch is removed

## The following structures are shown in median

- Nasal cavity, lined with mucosa, with the (removable) nasal conchae
- Arteries of the mucous membrane
- Olfactory nerves
- Innervation of the lateral wall of the nasal cavity, the nasal conchae and the palate

26 x 19 x 24 cm; 0.8 kg

# **DENTITION MODELS**



# Dental Disease, magnified 2 times, 21-parts Magnified for easier demonstrations!

The model is based on a lower jaw with soft gums and 16 removable teeth. One half shows eight healthy teeth and healthy gums for comparison.

#### The other half shows the following dental diseases:

- Dental plaque
- Dental calculus (tartar)
- Periodontitis
- Inflammation of the root
- Fissure, approximal and smooth surface cavities

One part of the front bone section can be removed from the dental disease model to view the roots, vessels and nerves. Two molars are sectioned along the length to show the inside of the tooth. Delivered on a base.

17.5 x 26 x 18.5 cm; 0.6 kg

M-1000016

Teach proper cleaning techniques using the giant toothbrush included with this model.



# Jaw-shaped stand

#### Giant Dental Care Model, 3 times life-size

Teach proper teeth cleaning techniques with this giant dental care model! At 3 times life-size, it shows the upper and lower half of an adult's dentition. A flexible joint between the jaws allows easy movement. 35.5 cm toothbrush included.

18 x 23 x 12 cm; 1.5 kg

M-1000246

#### Dental Morphology Series, 10 times life-size,

#### 7-part - English

At ten times life-size, this dental morphology series has removable lateral incisor, canine, first premolar, a bridge made of artificial first molar with gold coloured crown and second molar. All relevant dental morphology structures are labeled. Dental morphology on transparent, jaw-shaped stand. Key card included.

 $70 \times 25.5 \times 15$  cm; 2.1 kg

# A. Advanced Half Lower Jaw with 8 diseased teeth, 19-part

These diseased teeth show various stages of cavities from a small and easy-to treat example on an incisor, through to an advanced degradation of a molar, showing the exposed root. The front section of the bone and all the teeth are removable from the half lower jaw, one incisor is longitudinally sectioned. Nerves, blood vessels, the sublingual and submandibular glands are shown.  $22 \times 32 \times 9$  cm; 1.1 kg

M-1001250

# B. Half Lower Jaw, 3 times life-size, 6-part

The model represents half of the left lower jaw of a young person. One section of bone is removable from the half lower jaw to expose the tooth roots, spongiosa, vessels and nerves. The canine and first molar are removable from the half lower jaw and are longitudinally sectioned.  $35 \times 18 \times 36 \text{ cm}$ ; 1.2 kg

M-1000249

#### C. Dentition Development

Cast from natural specimens, these four upper and lower jaw halves show four different stages of development:

- Newborn
- Approx. 5-year old child
- Approx. 9-year old child
- Young adult

 $33 \times 10 \times 20 \text{ cm}$ ; 0.5 kg

M-1000248

#### **D. Adult Dentures**

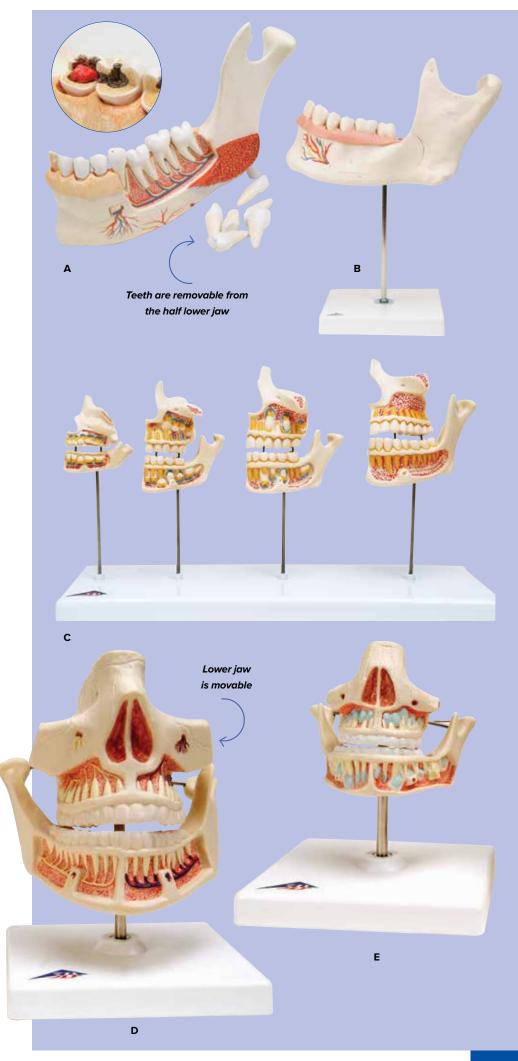
Tooth roots, spongiosa, vessels, and nerves are exposed for detailed study. The lower jaw is movable. On base.

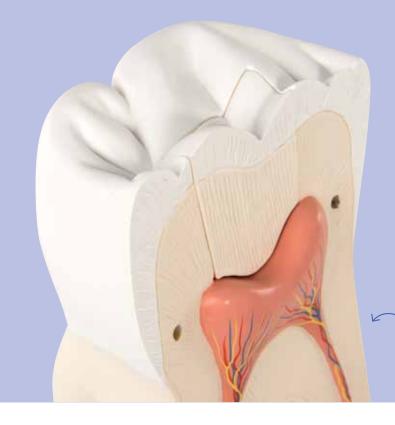
16 x 12 x 13 cm; 0.9 kg

M-1001247

#### E. Milk Dentures

Upper and lower jaw are opened to show the arrangement of the remaining teeth. On base.  $13 \times 12 \times 13$  cm; 0.6 kg





#### Giant Molar with Dental Cavities, 15 times life-size, 5 part

This giant molar model depicts an upper triple-root molar and separates into 5 parts. The molar features a longitudinal section through the crown, two roots and the pulp cavity. The giant molar contains removable pulp and three tooth inserts with different stages of advanced cavities. Delivered on stand. 24 x 12 x 13 cm; 1.5 kg M-1013215



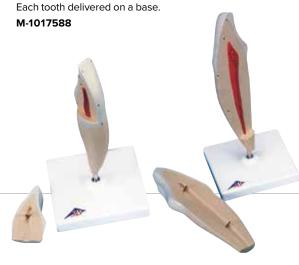
Details the internal aspects of the molar

#### **Classic Tooth Models**

This classic tooth series shows **5** representative types of adult dentition individually mounted on removable stands:

- 2-part lower incisor with longitudinal section
- 2-part lower canine with longitudinal section
- Lower single-root pre-molar
- 2-part lower twin-root molar with longitudinal section showing caries attack
- 3-part upper triple-root molar with longitudinal section and caries insert

The series ranges from 23-29 cm high.



Lower Incisor, 2-part M-1000240

Lower Canine, 2-part M-1000241



Lower Single-Root Pre-Molar M-1000242

# Each tooth model in this set is also available individually



Lower Twin-Root Molar, 2-part M-1000243

Upper Triple-Root Molar, 3-part M-1017580



Highly detailed model showing the various papillae of the tongue and taste buds

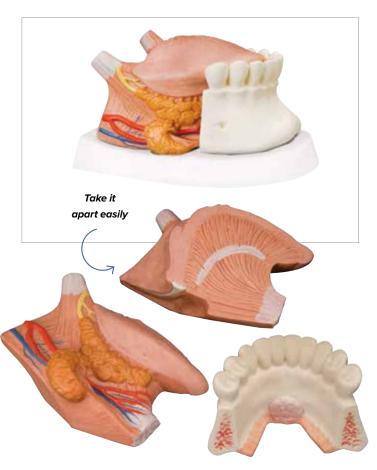


#### 3B MICROanatomy Tongue

This highly detailed model comprises a macroscopic view of the tongue (dorsal view) and microscopic views of the various papillae of the tongue (10-20x life-size) and of a taste bud (approx. 450x life-size. All views are mounted on a base that also features an overview of the sensory and sensitive innervations of the tongue.

14.5 x 32.5 x 20 cm; 0.8 kg

M-1000247



#### Tongue Model, 2.5 times life-size, 4-part

This model shows the lower jaw up to the second molar, the tongue with mouth floor musculature in median section and the right sublingual and submandibular gland. On removable base.  $23 \times 17 \times 16$  cm; 0.8 kg

M-1002502

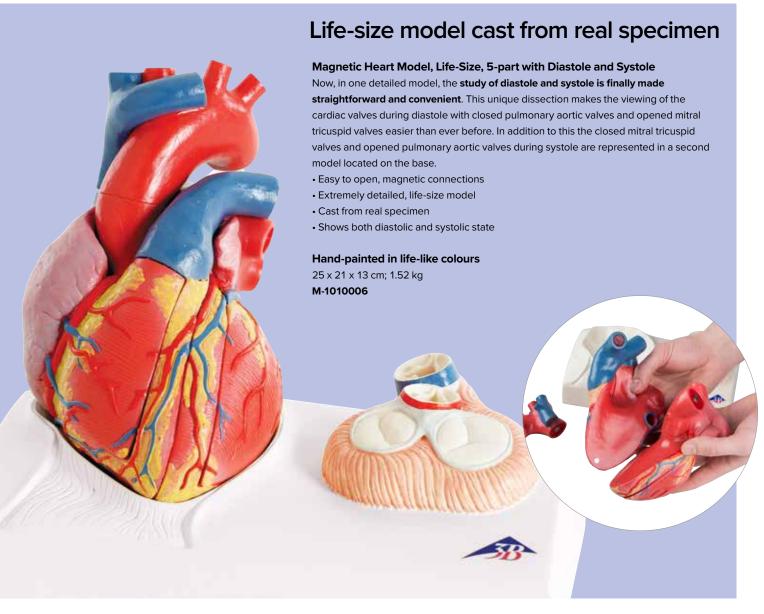


#### Skull Model with Teeth for Extraction, 4-part

The anatomical human skull is a great tool for students. The teeth of the upper and lower jaw can be extracted from the skull and replaced individually with their fully formed roots. A bone flap on the right mandible of the skull can be opened to view the dental roots, spongiosa, nerve canal and an impacted wisdom tooth.

- Features individual teeth with roots
- Practise extraction time and again
- Naturally articulating jaw 22 x 13.5 x 17 cm; 0.8 kg

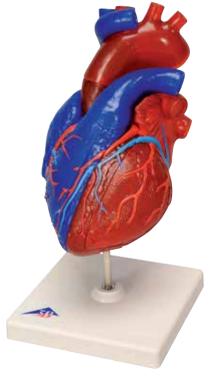
# **HEART MODELS**



#### Didactically Painted Heart Model, Life-Size, 5-part

Invest in quality with this uniquely sectioned 5-part heart model by 3B Scientific\*. Cast from a real human heart and didactically prepared to facilitate a better understanding of the anatomy and blood flow of the heart. It shows the cardiac valves during diastole and on the base the valves are shown in systole. A dissection through the median plane makes an easy demonstration possible. Its attention to detail and high quality craftsmanship makes it definitely the top of the line heart model.

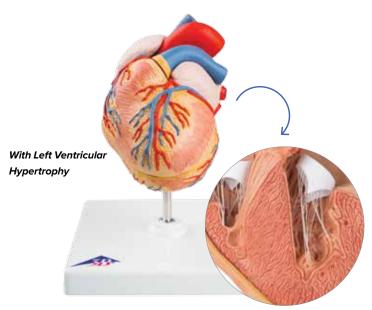
13 x 19 cm; 0.6 kg





#### **Classic Heart Model Series**

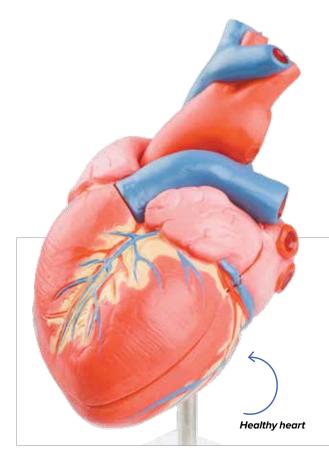
- Removable parts for closer study
- Ideal for student and patient education
- Durable & virtually unbreakable material

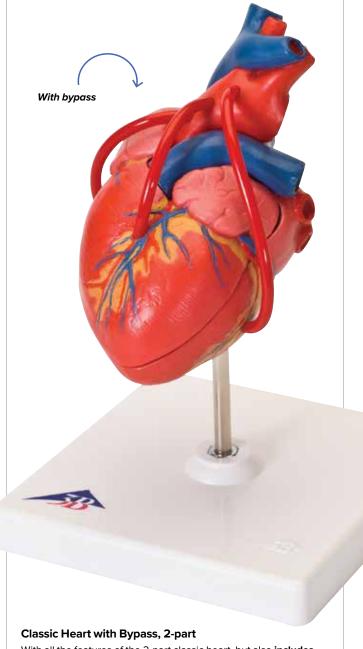


Classic Heart with Left Ventricular Hypertrophy (LVH), 2-part In addition to all the features of the 2-part classic heart, this unique model shows the long-term effects of increased heart activity due to high blood pressure. The muscular wall of the left heart ventricle is considerably thickened and the tip of the heart is visibly rounded off. The front heart wall is detachable to reveal the chambers and valves inside. On removable stand.

12 x 12 x 14 cm; 0.45 kg

M-1000261





With all the features of the 2-part classic heart, but also **includes venal bypasses** to the right coronary artery, to the ramus interventricularis anterior, and also to the ramus circumflexus of the left coronary artery, which are shown in colour. This model is a great aid in explaining coronary heart disease.

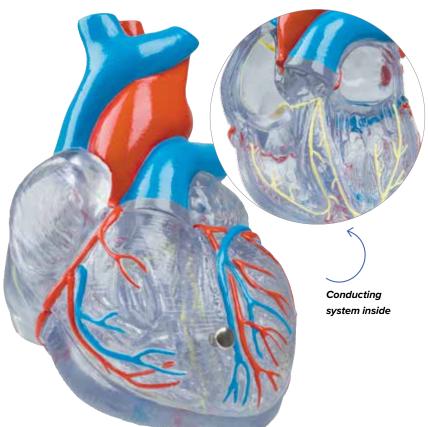
On removable stand. 19 x 12 x 12 cm; 0.35 kg

M-1017837

#### Classic Heart, 2-part

The 2-part classic heart is highly detailed and at a price you will love. Just slightly smaller than life-size with exquisite detail throughout including ventricles, atria, valves, veins, and the aorta. The front heart wall is detachable to reveal the chambers and valves inside. On removable stand.

19 x 12 x 12 cm; 0.3 kg



#### Classic Heart with Conducting System, 2-part

This unique transparent model shows the anatomy of the heart complete with its **conducting system represented in colour**. The front heart wall is removable and the entire heart can be removed from the stand.

19 x 12 x 12 cm; 0.2 kg

M-1000266

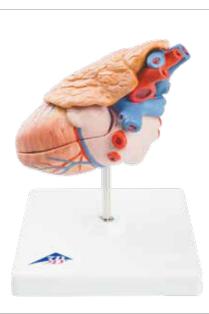
#### Heart with Bypass, 2 times Life-Size, 4-part

This **2 times life-size** heart is great for large lecture halls or classrooms. The front heart wall can be removed to view the inner chambers. In addition, this model shows a **venous bypass** to the ramus postero-lateralis of the right coronary artery, to the ramus interventricularis ant. of the left coronary artery with branching to the ramus diagonalis as well as a bypass to the ramus circumflexus of the left coronary artery.

On removable stand.

32 x 18 x 18 cm; 1.1 kg

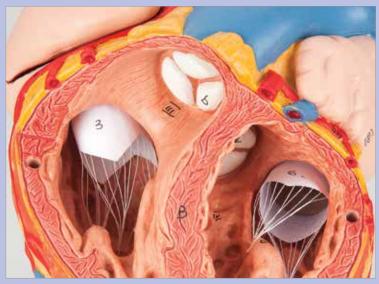
M-1000263



#### Classic Heart with Thymus, 3-part

In addition to the features of the 2-part classic heart, this model also shows the location and relative size of the **thymus**.  $20 \times 12 \times 12$  cm; 0.3 kg



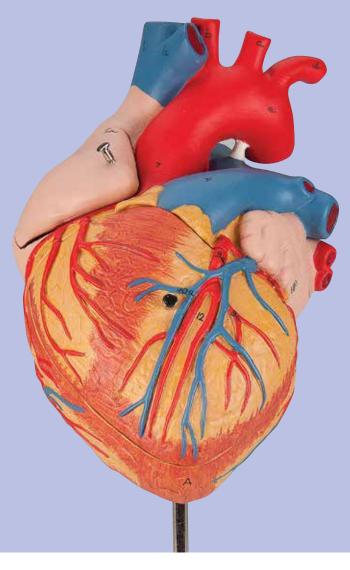


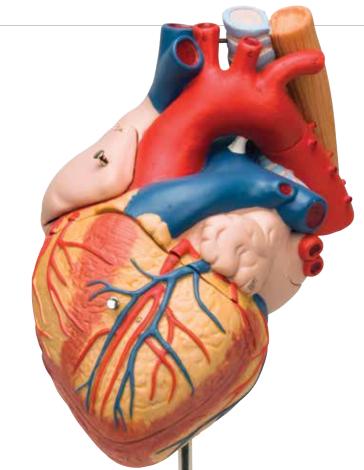
# Easy identification of all anatomical structures in the human heart

#### Heart, 2-times Life-Size, 4 part

This 2 times life-size heart model allows very easy identification of all structures and is a perfect aid for lessons in big classrooms or lecture halls. The anatomy of the human heart is shown in great detail with ventricles, atria, valves, veins, and the aorta. The front heart wall can be removed to reveal the chambers and valves inside. Comes with a removable base and a multilingual product manual.  $32 \times 18 \times 18 \text{ cm}$ ; 1.3 kg

M-1000268



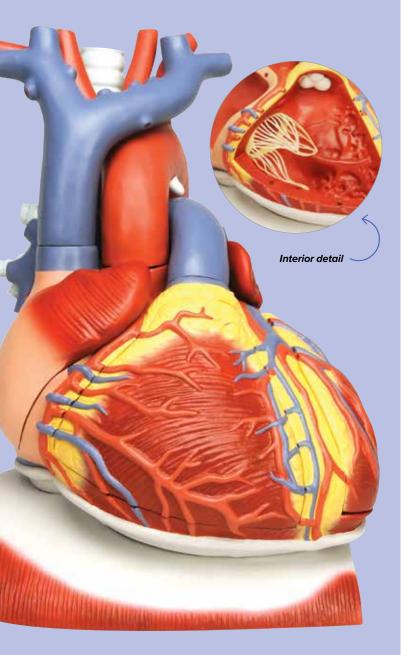


#### Heart with Oesophagus and Trachea, 2 times Life-Size, 5-part

This 2-times life-size heart model allows a very easy identification of all structures in the human heart. The atrium walls and the front heart wall are removable to reveal the inside. Additionally, the upper section of the oesophagus, the upper bronchi and the ascending aorta and the front heart wall and the atrium walls can be removed. Hand-painted in life-like colours! On removable stand.

32 x 18 x 18 cm; 1.3 kg

# Removable parts for detailed study!



#### Heart on Diaphragm, 3 times Life-Size, 10-part

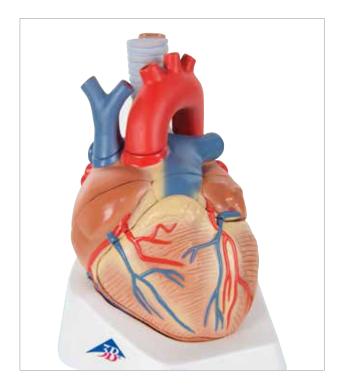
This unique model depicts the structures of the heart while detailing how the heart relates to the thoracic diaphragm at 3 times life-size. Easily **show how** the diaphragm separates the thoracic cavity from the abdominal cavity.

#### The following parts of the heart can be removed for detailed study:

- Oesophagus
- Aorta Pulmonary artery stem
- Trachea
- Both atrium walls
- Superior vena cava
- Both ventricle walls

Non-removable base, includes multilingual product manual.  $41 \times 33 \times 28$  cm; 3.6 kg

M-1008547



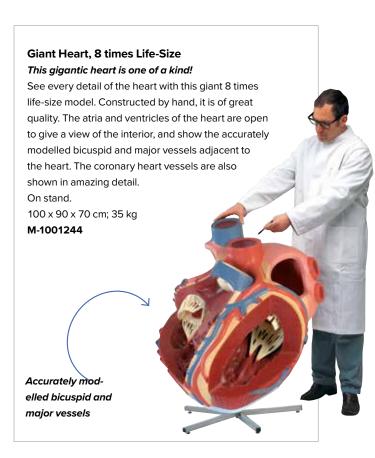
#### Heart, 7-part

This high quality model clearly shows over **30** different anatomical regions in the heart. Comes with product manual for easy identification of anatomical features. The model is horizontally sectioned at the level of the valve plane.

#### The following parts can be removed for detailed study:

- Oesophagus
- Aorta
- Trachea
- Front heart wall
- Superior vena cava
- Upper half of the heart

On base.  $20 \times 15 \times 17 \text{ cm}$ ; 1.1 kg



# 3B MICRO*anatomy*\* Artery and Vein, 14 times Life-Size

This model, enlarged 14 times, shows a mediusized muscular artery with two adjacent veins from the antebrachial area with adjoining fat tissue and muscle.

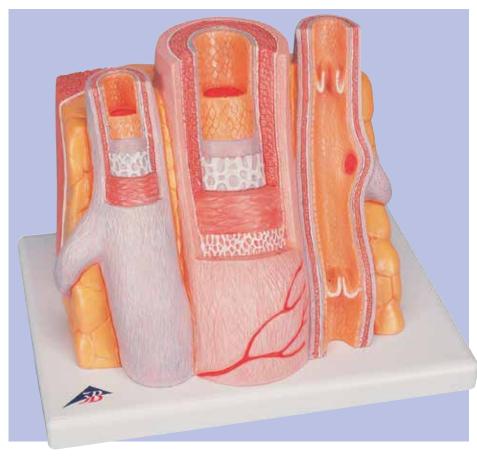
- Illustrates reciprocal anatomical relationship of artery and vein and basic functional techniques of venous valves
- Left vein and middle artery are fenestrated in upper anterior segment, revealing various layers of wall structure in cross and longitudinal section and top view
- Right vein is opened throughout in anterior segment, revealing orifice of a feeder vein and two venous valves formed by a duplication of the tunica intima

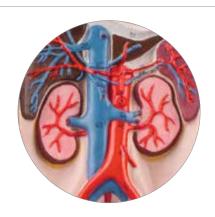
On the back of the model, a relief of two veins illustrates the functional aspect of the venous valves. Supplied on base.

26 x 19 x 18.5 cm; 0.9 kg

M-1000279

# Accurate teaching aids of the circulatory system





#### Circulatory System, ½ Life-Size

This 1/2 life-size relief model of the human circulatory system details the following anatomical structures:

- The arterial/venous system
- Heart
- Lung
- Liver
- Spleen
- Kidneys
- Partial skeleton

A colourful and anatomically accurate teaching aid of the human circulatory system. Delivered on baseboard for easy display in a classroom or doctor's office.  $80 \times 30 \times 6$  cm; 3.6 kg

M-1000276





Arteriosclerosis Model, with Cross Section of Artery, 2-part With the help of this artery model doctors can explain changes in the blood vessels due to arteriosclerosis. A horizontally dissected artery fork is depicted with arteriosclerotic changes in four different stages, from slightly sedimented to a completely clogged blood vessel. On stand.

14 x 10 x 7 cm; 0.2 kg

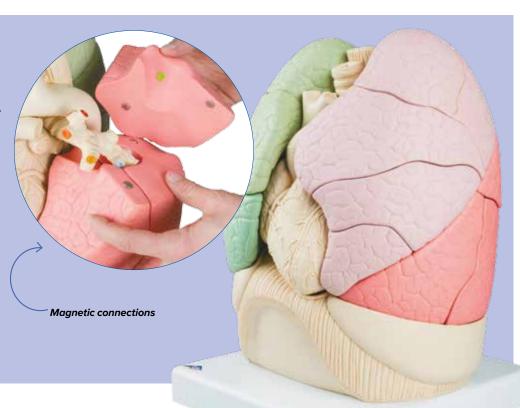
# **LUNG & LARYNX MODELS**

#### Segmented Lung, 20-part

This high quality lung model is detachable into two lobes and single segments. The segments are colour-coded and their position can be easily identified in the bronchial tree. The bronchial tree contains the lobar bronchi and segmental bronchi. All segments are connected by magnets which allow a safe and easy handling.

25 x 25 x 35 cm; 4.1 kg

M-1008494





#### Lung Model with Larynx, 5-part

This high quality lung model comes on a baseboard and can be disassembled into 5 parts, lung and heart are removable.  $12 \times 28 \times 37$  cm; 1.25 kg

M-1001243

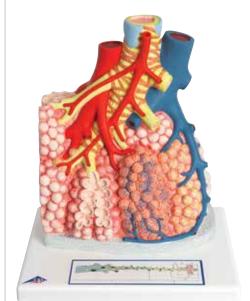


#### Lung Model with larynx, 7-part

The lung model with larynx comes on a baseboard for easy display. It is of highest quality, and contains the following removable parts.

31 x 41 x 12 cm; 2.2 kg

M-1000270



**Pulmonary Lobule with Surrounding** 

The model shows an external pulmonary lobule at **130 times life-size**. A graphic image on the stand of the model shows the structure of the airway in the lungs up to the alve-

**Blood Vessels** 

M-1008493

olus. 26 x 33 x 19 cm; 1.35 kg

#### **COPD Model**

COPD Shows changes to the bronchial tissue from normal to permanent damage and after administration of medication.

15 x 11 x 8 cm; 0.18 kg



#### **CT Bronchial Tree with Larynx and Transparent Lungs**

This unique model was created on the basis of computer tomography data of a human male. The larynx is detachable at the level of the second tracheal cartilage and divisible in the median plane. The epiglottis is mounted flexibly. The various segmental bronchi are made of elastic material and depicted in various transparent colours so that they are easier to distinguish visually. The transparent lungs are detachable.

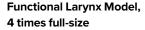
22 x 18 x 37 cm; 1.23 kg

**CT Bronchial Tree** without Lungs (not shown)

22 x 18 x 37 cm; 0.43 kg

M-1000274

M-1000275



Functional replica of the human larynx, hyoid bone and epiglottis. The right half of the larynx model shows cartilaginous structures, the left half the musculature. Vocal cords, arytenoid cartilage and epiglottis are movable from the functional larynx. On base.

41 x 18 x 18 cm; 1.6 kg

M-1005528















#### Larynx Model, 2 times life-size, 2-part

This detailed larynx model is divided into two halves. It is medially sectioned and shows:

- Larynx
- · Hyoid bone
- Windpipe
- Ligaments
- Muscles
- Vessels
- Nerves
- Thyroid gland 14 x 14 x 28 cm; 0.8 kg

M-1013870

#### Larynx Model, 2 times life-size, 7-part This medially sectioned model shows:

- Larynx
- · Hyoid bone
- Windpipe
- Ligaments
- Muscles
- Vessels
- Nerves
- Thyroid gland

Thyroid cartilage, 2 muscles and 2 thyroid gland halves are removable from larynx. On stand.

12 x 12 x 23 cm; 0.8 kg

M-1000272

#### Functional Larynx Model, 2.5 times full-size

The epiglottis, vocal cords and arytenoid cartilage are movable in the functional larynx. Additionally the following structures of the human larynx are represented:

- Hyoid bone
- Cricoid cartilage
- Thyroid cartilage
- Thyroid
- Parathyroid glands 9 x 9 x 14 cm; 0.15 kg

M-1000273

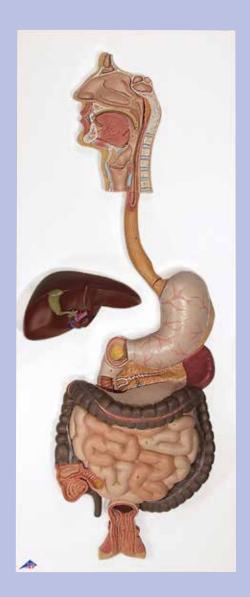
## 3 times full-size The functional model is a great

tool for speech therapy! This functional larynx depicts the epiglottis, vocal cords and aryte-

noid cartilage. These parts are movable for demonstration purposes.

32 x 13 x 15 cm; 0.8 kg

# **DIGESTIVE SYSTEM MODELS**



#### Digestive System, 3-part

This **life-size** model demonstrates the entire digestive system in graphic relief.

#### The following parts are shown, painted in realistic colours:

• Nose

- Liver with gallbladder
- Mouth cavity and Pharynx
- Pancreas
- Oesophagus
- Spleen
- GI tract

The duodenum, caecum and rectum of the digestive system are opened. The transverse colon and front stomach wall are removable from the digestive system for detailed study of the anatomy. The liver, stomach, and transverse colon are removable. Mounted on baseboard.

81 x 33 x 10 cm; 4.4 kg

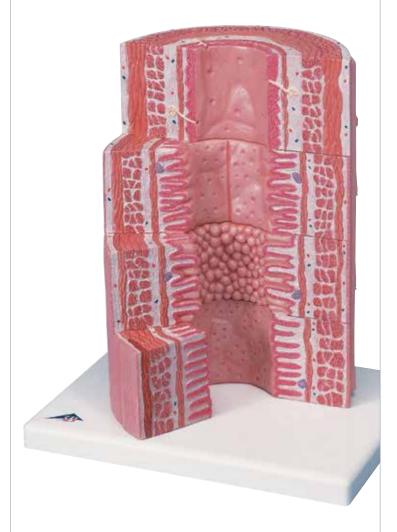
M-1000307

#### Digestive System, 2-part (not shown)

Same features as the 3-part model, but without the removable stomach half.

M-1000306

# Highly magnified views

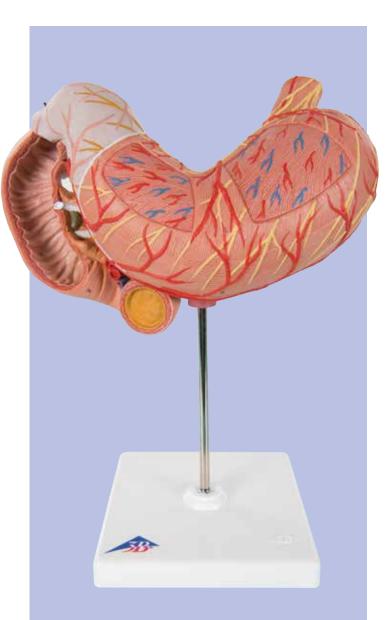


#### 3B MICROanatomy Digestive System – 20 times magnified

This model illustrates the structure of the fine tissues of four characteristic sections of the digestive system 20 times magnified:

- Oesophagus
- Stomach
- Small intestine
- Large intestine

The front of the model, from top to bottom, shows a magnified view, in histological section, of the individual sections of the digestive system and their fine tissue structures. The back of the model has highly magnified views of didactically interesting areas of each section shown on the front.  $29.5 \times 26 \times 18.5$  cm; 1.5 kg



#### Stomach, 3-part

Shows the layers of the stomach wall from cardia to pylorus. The front stomach half and the opened duodenum with pancreas are removable.

#### Shown are:

- The lower oesophagus
- Vessels
- Duodenum
- Pancreas
- Nerves

Delivered on removable stand.

25 x 22 x 12 cm; 0.8 kg

M-1000303

#### Stomach, 2-part (not shown)

Like the one above but the Duodenum and Pancreas are not present. The front half of the stomach is removable for detailed study.

#### Shown are:

- The lower oesophagus
- Vessels
- Nerves

Delivered on stand.

25 x 22 x 12 cm; 0.6 kg

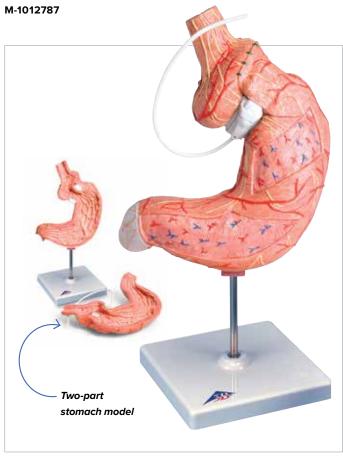
M-1000302

#### **Gastric Band Model**

#### An impressive tool for patient education!

This model was developed based on the two-part stomach model with the addition of an SAGB Quick Close® gastric band. A gastric band is inserted surgically to treat morbid obesity if conservative treatments are unsuccessful. This model is highly suitable as a tool for explaining the device to patients.

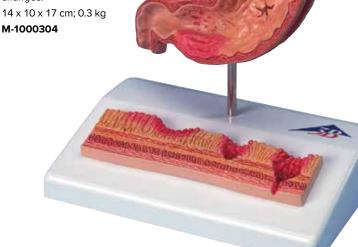
3 x 3 x 4 cm; 0.5 kg

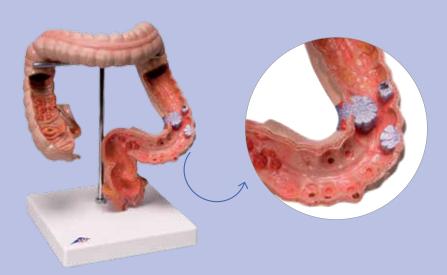


#### Stomach with Ulcers

The ½ life-size stomach pathology model demonstrates various stages of gastritis from a light gastric ulcer to a perforation. Correspondingly, the base shows an enlarged stomach wall to further demonstrate these changes.

14 x 10 x 17 cm; 0.3 kg



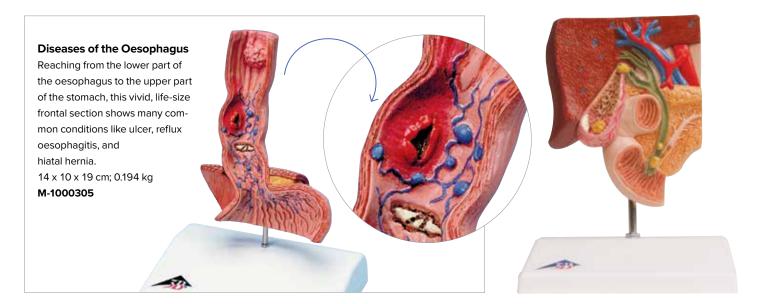


#### Intestinal diseases

This model shows the usual benign and malignant changes in the colon and rectum. These include diverticula, polyps, haemorrhoids, fistulae, fissures, chronic inflammatory diseases (Crohn's disease and ulcerative colitis), as well as intestinal cancer in various stages.

21 x 17 x 27 cm; 0.957 kg

M-1008496



#### **Haemorrhoid Model**

The model is a life-size frontal section of the rectum as well as a smaller relief on a pedestal. In addition to the anatomical structures of the rectum (sphincter, mucous membrane, venous plexus), the model shows internal haemorrhoids during stage I and II as well as external haemorrhoids. The relief exhibit shows haemorrhoids during stage III and IV.

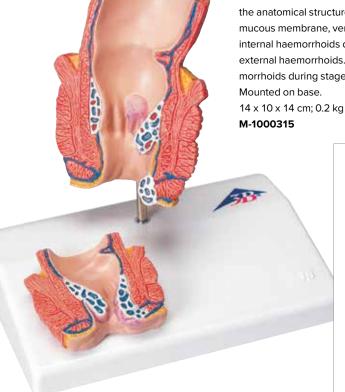
#### **Gallstone Model**

The anatomy of the biliary system and its surroundings are shown at 1/2 natural size in this graphic model for education. Both acute inflammation and the tissue changes caused by chronic inflammation can be identified in the gallbladder wall.

Mounted on base.

14 x 10 x 19 cm; 0.2 kg

M-1000314



# Magnified 100 times!

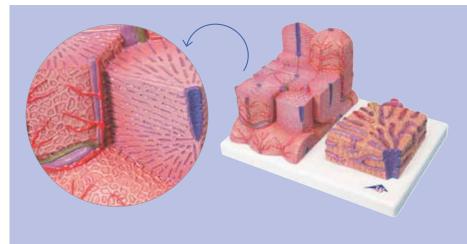
#### Intestinal Villi, 100 times life-size

This intestinal villi model consists of one entire villus, one longitudinally sectioned villus showing the arterioles and venules, and one sectioned villus to show the lymphatic vessels. Also includes a longitudinal section of Lieberkühn's crypt.

On base. 43 x 28 x 10 cm



# **DIGESTIVE & URINARY SYSTEM MODELS**

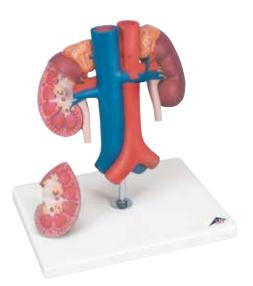


#### 3B MICROanatomy Liver

This 2-part model shows a highly magnified view of a section of the liver. It illustrates the **functional and structural components** with two different enlargements. The left part shows a section of the liver that comprises several liver lobules. The right part of the model is a highly magnified view of the sectioned liver lobule on the left.

15 x 26 x 18.5 cm; 0.7 kg

M-1000312



# Kidneys with Pear Organs of the Unner

#### Kidneys with Vessels – 2-part

Life-size model presenting the kidneys with suprarenal glands, the outgoing ureters, the renal vessels, and the large vessels situated close to the kidneys. The front half of the right kidney can be removed to reveal the renal pelvis, the renal calices, the renal cortex, and the renal medulla. Comes on stand.

21 x 18 x 28 cm; 1 kg

M-1000308

#### Rear Organs of the Upper Abdomen

Representing the duodenum, which is partially opened, along with opened gallbladder and bile ducts. The model also includes the pancreas, revealing large ducts, the spleen, and the surrounding vessels, all in natural size.

Comes on stand.

23 x 12 x 20 cm; 0.55 kg

M-1000309

#### Kidneys with Rear Organs of the Upper Abdomen – 3-part

This model combines the rear organs of the upper abdomen and the kidneys with vessels in one. The upper abdominal organs are attached in their natural positions and are removable from the kidneys.

Comes on stand.

24 x 18 x 29 cm; 1.4 kg

M-1000310

# Liver with Gallbladder

This realistic model shows the anatomy of the liver and gallbladder.

#### It shows:

- 4 lobes with gallbladder
- Extrahepatic ducts
- Hilus vessels
  On removable stand.

18 x 18 x 12 cm; 0.5 kg

M-1014209

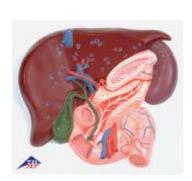


#### Liver with Gallbladder, Pancreas and Duodenum

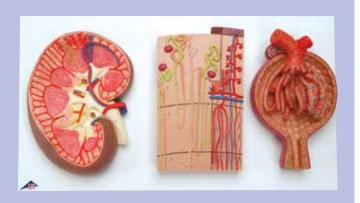
- Ducts
- Gallbladder
- Pancreas
- Duodenum
- Vessels
- Extrahepatic ducts with gallbladder
- Main pancreatic duct and their orifices

Delivered on baseboard.

4 x 20 x 18 cm; 0.8 kg



# **URINARY SYSTEM MODELS**



#### Kidney Section, Nephrons, Blood Vessels and Renal Corpuscle

These 3 kidney models create a complete series to study the anatomy of the kidney and the different structures of the kidney in great detail.

#### Together the human kidney models show:

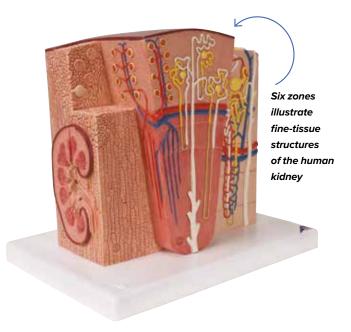
- A longitudinal section of the right kidney, 3 times life-size
- A kidney nephron depicting a section through renal cortex and medulla. Nephron features the renal corpuscles with proximal and distal convoluted tubules, loops of Henle, collecting tubules and blood vessels, 120 times full-size
- The third kidney section shows an opened Malpighian corpuscle with glomerulus and Bowman's capsule, 700 times life-size of the human kidney

Mounted on one baseboard. 29 x 52 x 9 cm; 2.8 kg

M-1000299

#### Individual models:

Kidney M-1000296
Nephrons and Blood Vessels M-1000297
Malpighian Corpuscle of Kidney M-1000298



#### 3B MICROanatomy Kidney

This extremely detailed model shows the functional units of the kidney greatly magnified.

#### Six model zones illustrate the following fine-tissue structures:

- · Longitudinal section of a kidney
- · Section of renal cortex and renal medulla of the kidney
- Wedge-shaped section of a kidney lobe with a diagrammatic depiction of three nephrons with varying lengths of loop of Henle and diagrammatic depiction of the vascular supply
- Diagrammatic illustration of a kidney nephron with a short of loop of Henle and didactic/diagrammatic illustration of the vascular supply
- Diagrammatic illustration of an opened kidney renal corpuscle with nephron and light-microscopic transverse sections of the proximal, attenuated and distal segments of a renal tubule
- $\bullet$  Diagrammatic/didactic illustration of an opened kidney renal corpuscle Mounted on a base. 23.5 x 25.5 x 19 cm; 1.3 kg

M-1000301

#### A. Kidney Stone Model

A great tool to inform patients about kidney stones and urinary stones. The model shows an opened right kidney in natural size. The renal calices, the renal pelvis, and the ureter are opened as well enabling concretions or stones to be identified in typical positions.  $14 \times 10 \times 16.5$  cm; 0.18 kg

M-1000316

#### C. Kidney with Adrenal Gland, 2-part

The front half of the kidney is removable to enable demonstration of cortex medulla and vessels. The renal pelvis of the kidney is also displayed. 20 important structures are included in the anatomy key.

- Kidney with adrenal gland
- Renal and adrenal vessels of the kidney
- Upper portion of ureter for the human kidney
   On stand.

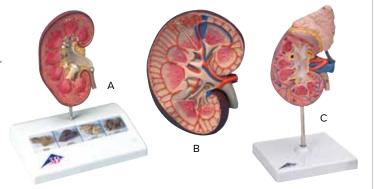
8.5 x 19 x 26 cm; 0.9 kg

M-1014211

#### B. Basic Kidney Section, 3 times full-size

This colourful and anatomically accurate model depicts a longitudinal section of the human right kidney. All important structures of the human kidney are shown. No baseboard included.

20 x 12 x 12 cm; 0.3 kg





#### Urinary System - Male - 3/4 life-size

This urinary system model shows the structures of the retroperitoneal cavity in high detail.

# The right kidney of the model is opened, other details represented are:

- Inferior vena cava
- Urinary bladder
- Renal veins
- Prostate
- Aorta with its
- Adrenal gland
- branches
- Rectum
- Iliacal vesselsUreter
- Musculature

Urinary system model is not delivered on base.  $10 \times 18 \times 26$  cm; 1 kg

M-1008551



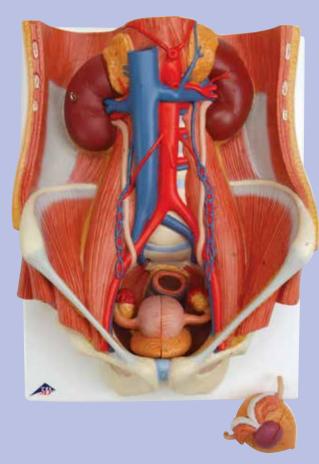
#### Prostate Model, 1/2 life-size

This prostate model provides a cross section of the male genital organs showing a healthy prostate with bladder, urethra, testicle, symphysis and rectum. The narrowing of the urethra due to the change of the prostate is made clear via the 4 cross sectional views on the base of the prostate model.

13.5 x 10 x 14 cm; 0.24 kg

M-1000319

Parts are numbered on the Dual Sex Urinary System



#### **Dual Sex Urinary System, 6-part**

**All-in-one model** of the human urinary system. One front half kidney is removable; easy to change male insert (bladder and prostate, front and rear half) and female insert (bladder, womb and ovaries, 2 lateral halves).

#### For detailed study, the following is shown:

- Structures of retroperitoneal cavity
- Large and small pelvis with bones and muscles
- Inferior vena cava

- Aorta with its branches including iliac vessels
- Upper urinary tract
- Rectum
- Kidney with adrenal gland

On baseboard. 41 x 31 x 15 cm; 2.3 kg

M-1000317

# The Urinary Tract

#### The Urinary Tract Chart – Anatomy and Physiology

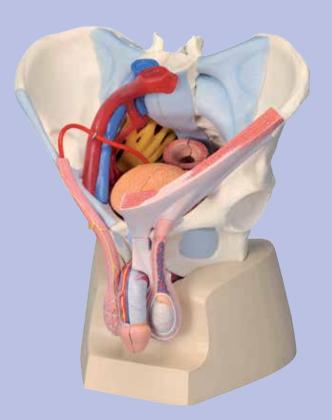
This colourful poster illustrates the physiology and anatomy of the urinary tract system, making it a great educational tool! The microanatomy of the renal corpuscle, cortex and medulla are included.

50 x 67 cm; 0.15 kg

M-1001562

More charts available online at 3bscientific.com

# **MALE PELVIS & PELVIC SKELETON MODELS**



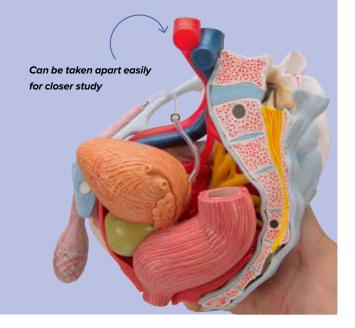
# Male pelvis with ligaments, vessels, nerves, pelvic floor and organs, 7-part

Extensive educational tool for a better understanding of the comprehensive anatomy of the male pelvis. For close up study, the pelvis can be split into two halves and the following parts can be removed: Left half of the fifth lumbar vertebra, rectum, bladder, prostate and penis.

- Includes bones, ligaments, vessels, nerves, pelvic floor muscles, and external sex organs
- $\bullet$  All structures are anatomically accurate in every detail
- Can easily be taken apart using magnetic connections
- Extremely durable material, comes on sturdy base

21 x 28 x 31 cm; 3.12 kg

M-1013282





#### ...

#### Male pelvis with ligaments, 2-part

This 2-part model is a natural cast of a male, bone pelvis. It shows the following structures in great detail: both hip bones, pubic symphysis, sacrum and coccyx, and the fifth lumbar vertebra with intervertebral disc. Part of the cauda equina is visible in the vertebral canal.

A median section has been placed through the fifth lumbar vertebra, the sacrum and the coccyx, so that the pelvis, which is connected by practical magnets, can be split easily into two halves.

Additionally, the model shows the following pelvis ligaments: Lig. inguinale, Lig. sacrotuberale, Lig. sacrospinale, Ligg. sacroiliaca anteriora, Lig. iliolumbale, Lig. Longitudinale anterius, Lig. Supraspinale, Lig. sacroiliacum interosseum, Lig. sacroiliacum posterius, Lig. sacrococcygeum laterale, Lig. sacrococcygeum posterius superficiale et profundum, Membrana obturatoria and Lig. lacunare.

19 x 28 x 24.5 cm; 1.66 kg

M-1013281





#### Male Pelvis, 3-part

Like M-1013281 but without the ligaments.

The left half of the fifth lumbar vertebra is held together by magnets and can also be removed.

19 x 28 x 24.5 cm; 1.35 kg



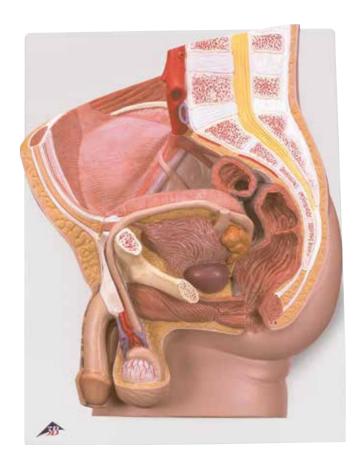
#### Life-size Male Pelvis, 2-part

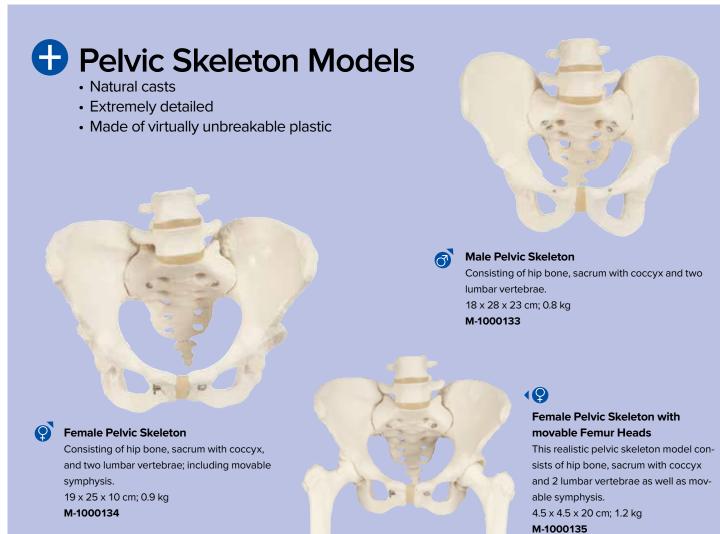
The male pelvis anatomy model is shown in median section. One half of male genital organs with bladder, shown at the normal position in the male pelvis. The rectum is removable for a more detailed study of the male pelvic anatomy. Delivered on baseboard offering the possibility to be mounted to the wall.

41 x 31 x 17 cm; 2.5 kg

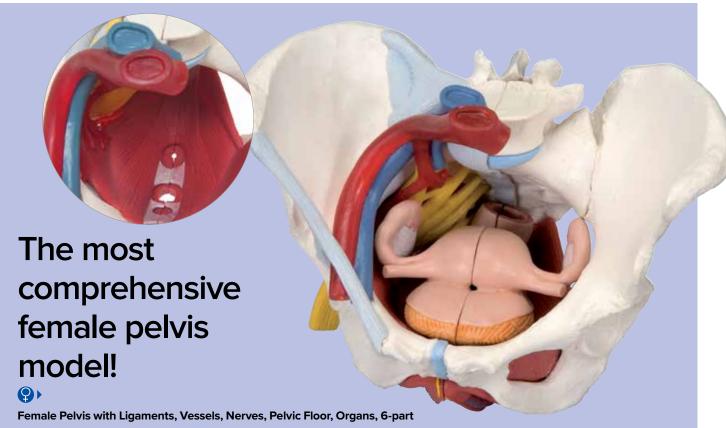
M-1000282

# Find many more products available online at 3bscientific.com





# **FEMALE PELVIS MODELS**



This original cast of a female pelvis shows the topography of bones, ligaments, vessels, nerves, pelvic muscles and female genital organs in life-size. For close up study, the following parts can be removed and disassembled into two halves: rectum, uterus with fallopian tubes, ovaries and vagina. The pelvic floor includes partially removable external anal sphincter, external urethral sphincter, deep and superficial transverse perineal and bulbospongiosus. The pelvis can be disassembled though a midsagittal section (fifth lumbar vertebra, sacrum and coccyx) to reveal a part of the cauda equina in the vertebral canal.

19 x 27 x 19 cm; 1.6 kg

- Magnetic connections for fast demonstrations
- Study of complex anatomical areas made easy

M-1000288





# Female Pelvis with Ligaments, Muscles and Organs, 4-part

This life-size model of a female pelvis represents detailed information about the topography of bones, ligaments, pelvic floor muscles and female pelvic organs.

The right half shows the bones with pelvic ligaments and left half of the pelvis contains the muscles of the pelvic floor. A partially removable bulbospongiosus demonstrates the vestibular bulb and Bartholin gland. The removable, midsagitally sectioned female pelvic organs (urinary bladder, vagina, uterus and rectum) demonstrate the relationship to the muscles of the pelvic floor within its openings for urethra, vagina and rectum.

19 x 27 x 19 cm; 1.3 kg

# Moulded from durable and soft vinyl



Female Pelvis Skeleton with Genital Organs, 3-part

This model is especially suitable for **studying the position of female genital organs in the pelvis**. It consists of a natural cast female pelvis with a movable symphysis, hip bone, sacrum, coccyx, 4th and 5th lumbar vertebrae, and a female genital insert with rectum. The bladder and a portion of the uterus with one fallopian tube and ovary can be removed. The soft tissues are moulded from durable, soft vinyl. Delivered on base.

 $33 \times 26 \times 18 \text{ cm}$ ; 2 kg

M-1000335





#### **Q**

#### Female Pelvis with Ligaments, 3-part

This life-size model represents an original cast of a bony female pelvis with ligaments and shows all the details of the hip bones, the pubic symphysis, the sacrum and the coccyx, and the fifth lumbar vertebra with intervertebral disc.

The right half of the model **shows all major pelvic ligaments**: Inguinal, sacrotuberous, sacrospinous, anterior sacro iliac, iliolumbar, anterior longitudinal, interosseous sacroiliac, posterior sacro iliac and obturator membrane.

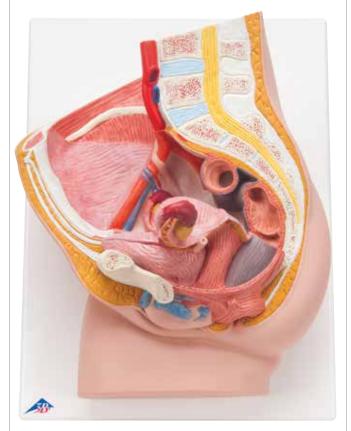
A midsagittal section through the fifth lumbar vertebra, sacrum and coccyx, allow both halves of the pelvis to be disassembled revealing a part of the cauda equina in the vertebral canal. The left half of the fifth lumbar vertebra is removable.

19 x 27 x 19 cm; 1 kg

M-1000286



# Ideal for the classroom or doctor's office

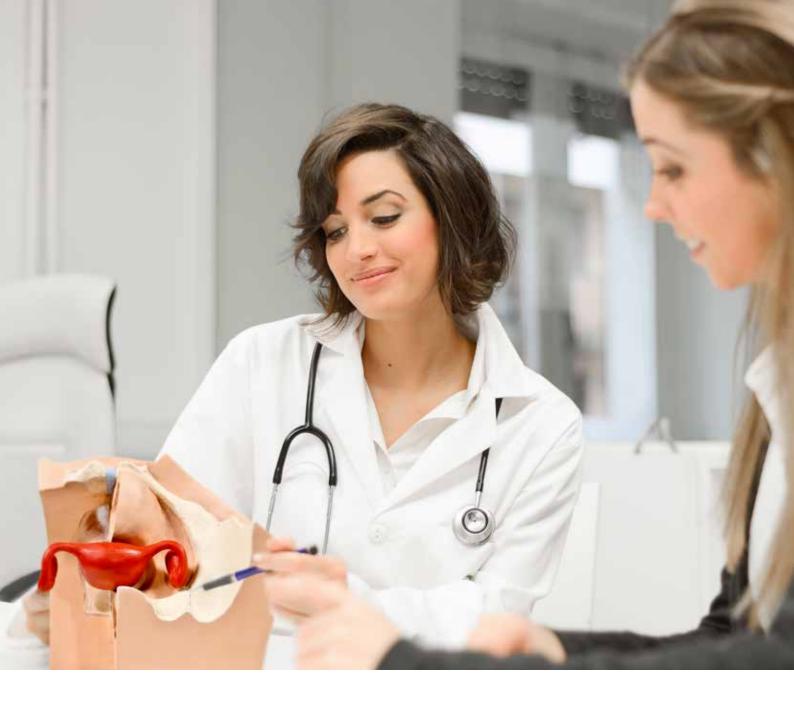




#### Female Pelvis, 2-part

This female pelvis is in median section. It shows one half of the female genital organs with bladder and removable rectum. The female pelvis is delivered on baseboard offering the possibility to be mounted to the wall for easy display in the classroom or doctor's office.

41 x 31 x 17 cm; 2.5 kg



# HEALTH EDUCATION

High quality and functional products to educate about common health risks and diseases. Ideal for educating patients and for student training.

# **WOMEN'S HEALTH**

#### **Wearable Breast Self Examination Model**

Demonstrate realistic self-examination with this natural casting of a female upper body with C cup breasts. It can easily be worn, in order to better train and practise breast self-examination.

- Made of 3B Scientific® SKINlike® high-quality silicone for a realistic feel
- Breast examination is possible in both upright and lying positions
- Benign and malignant tumours in different stages of development create an understanding of what to feel for

*Includes:* Multilingual product manual, "Female Breast" chart M-1001576, talcum powder, harness, and stand.

Model with aluminium carrying case Model without case

M-1000342 M-1000343





#### **Model of Female Breast**

This model is an extremely valuable tool to demonstrate the differences between healthy and unhealthy breast tissue. Shown are a lactating right breast and a non-lactating left breast. Both parts of the model have a sagittal cut showing the tissue of the breast gland as well as the deeper-lying anatomical structures such as the muscles, ribs, costal pleura, pulmonary pleura and lungs. A breast gland inflammation (mastitis) is represented on the right breast and various other diseases on the left breast including a benign tumour, two malignant tumours, and two cysts.

The models are fixed together via magnets for easy demonstrations.

 $36.5 \times 23 \times 20 \text{ cm}$ ; 1.4 kg

M-1008497

#### Breast Self Examination Model, 3 Single Breasts on Base

Very realistic natural casting of three different female breasts in C and D cups, to train and practise breast examination. Supplied with base and talcum powder.

- Made of 3B  $\textbf{SKIN} \textit{like}^*$  high-quality silicone for a realistic feel
- Benign and malignant tumours in different stages of development are featured in two breasts

 $\bullet$  The third breast is healthy for comparison

Set of Three, 52 x 24.5 x 9.5 cm; 2.3 kg M-1000344

Single Breast with Benign Tumour M-1000345



# **CONTRACEPTIVE EDUCATION**



#### **Model for Gynaecological Patient Education**

Ideal for demonstration purposes and for practising insertion of female barrier contraceptive devices, including the femidom, cervical cap, vaginal ring, diaphragm and IUD. It is possible to insert various types of pessaries such as ring, bowl or cube which are used in the event of a prolapse or incontinence. Transparent part allows for clear inside view.

26 x 19 x 22 cm; 1.5 kg

M-1013705

Optional Kits:

Contraception Kit M-1017130
Pessary Kit M-1017131

#### **Family Planning Educator**

Desktop simulator for training and demonstration of proper introduction and removal of a diaphragm, IUD or sponge contraception devices. This trainer demonstrates both normal and abnormal uterine positions and is ideal for training Bi-manual examination techniques.

#### The family planning educator is supplied with:

- One anteverted uterus with clear upper half to illustrate correct position of IUD
- One uterus to illustrate normal anteversion and retroversion
- Cervix with patent os attaches to uterus suspended within pelvic cavity
- Soft plastic stomach cover

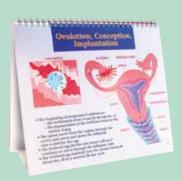
Carrying bag included, 25.4 x 25.4 x 25.4 cm; 2.3 kg

#### M-1005784











#### I.U.D Trainer

The hand-held trainer is a suitable aid for understanding correct positioning of I.U.D. (Intrauterine Device) in the uterus. Made of durable plastic, the trainer features a transparent cover which allows easy visualisation of insertion and placement of I.U.D. I.U.D. not included.

6 x 40 x 45 cm

M-1005766

# Why PAP Tests Can Save Your Life, Easel Display

Easy-to-understand text combined with six handpainted, realistic cervix models make teaching the importance of regular PAP tests easy. This 3D display is perfect for one-on-one presentations. Comes with a protective felt cover. 23 x 30.5 cm

M-1018296

#### **Understanding Birth Control**

A great tool for healthcare providers or educators, this flip chart discusses male and female reproductive anatomy, menstruation, conception, and the most current methods of contraception. Provides student information on one side and a teaching script on the other. 21 panels.

35.5 x 30.5 cm

M-1018279

#### Woman's Monthly Carousel Chart

Ideal visual aid for a complex process, this chart explains a 28-day menstrual cycle. Discusses function of hormones, changes in the uterine lining, the development and release of the ovum, body temperature, and more.

 $84 \times 40.5 \text{ cm}$ 



#### The Consequences of STDS 3D Display

This 3D display shows how organs and body parts can be affected by sexually transmitted diseases. The durable carrying case and easy set-up make this display ideal for clinics and sex education programs.

71 x 69 cm opened.

M-1018280

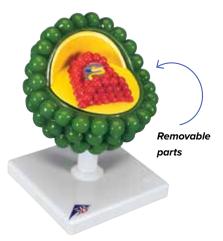


#### The Consequences of HIV/AIDS 3D Display

This 3D display helps viewers to understand what HIV/AIDS can do to the body. Contained within a convenient carrying case for storage or transport.

 $7.5 \times 7.5 \times 19.5$  cm; 0.34 kg; opened.

M-1018281



**Human Immunodeficiency** 

This model has been enlarged millions of

nucleus which contains the viral hereditary

times to show the outer lipid membrane with protein structures and the internal

matter (RNA). Remove the nucleus and you'll find space to place a targetted mes-

sage regarding measures to take in protecting against HIV. Mounted on base.

Virus (HIV) model

 $18 \times 13 \times 13 \text{ cm}$ ; 0.70 kg

M-1000336

#### **Condom Training Set**

This economy set has 20 styrofoam penis models and provides a means of practising the correct use of condoms, even in large groups. The reusable models can be fixed to the desk with adhesive tape. Delivered without condoms.

14.5 cm

M-1005115



#### **Condom Training Kit**

Use this model to quickly teach how to use a condom safely. The  $\,$ anatomical structures and its firmness are realistic, so that training to put on and remove a condom happens in a realistic way. Supplied with 12 lubricated training condoms and a carrying bag.  $7,5 \times 7,5 \times 19,5 \text{ cm}; 0,35 \text{ kg}$ 

Light skin tone M-1000340 Dark skin tone M-1000341



#### **Condom Training Model**

Demonstrate the proper use of condoms by using this realistic model. Includes 12 condoms, syringe, and artificial semen to simulate ejaculation. Mounted on a stand with suction cups and delivered with carrying bag.  $35.5 \times 15 \times 16.5 \text{ cm}$ ; 2.30 kg

M-1005560

**Optional Equipment:** 

**UV-Fluorescent Artificial Semen** 

M-1005561



This model shows the labia and vagina up to the cervix and is designed to demonstrate and teach the insertion of a female condom. Condoms not included. 12 cm; 0.15 kg

M-1000338 Dark skin tone Light skin tone M-1000339



#### **Female Pelvis Contraceptive Model**

This model, made from soft **BIOlike**" material, provides a cross-section of a female pelvis for demonstrating proper contraceptive insertion. The side cutout lets viewers see and understand contraceptive placement and removal. Contraceptives not included.

15 x 8 x 9 cm

M-1017935





#### **Female Condom Model**

Represents an anteverted uterus in a simulated pelvic cavity with soft vulva and vagina and a soft plastic stomach cover. A perfect tool to demonstrate the use of a female condom, contraceptive sponge and cervical cap. Supplied with carrying bag.

17.5 x 24 x 14 cm

# **PREGNANCY & BIRTH**



#### Stages of Fertilisation of the Embryo- 2 times Life-Size

This model illustrates schematically how the ovum matures, how ovulation and fertilisation occur and how the fertilised ovum develops to the stage where it embeds itself in the womb wall to begin the growth into an embryo.

The various stages are shown in larger-than-life model form in an ovary, fallopian tube and womb. An even more enlarged illustration of each is also printed on the base.  $35 \times 21 \times 20$  cm; 1.20 kg

M-1000320



Easy to understand model for patient education!

More educational charts available at 3bscientific.com!

#### **Visual Anatomy Oversized Wall Charts**

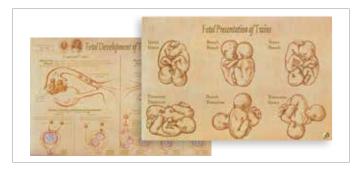
Available with and without wooden mounting rods,  $84\,x$  118 cm.

#### Menstrual Cycle & Ovum Implantation

With mounting: M-1001220 Without mounting: M-4006559

**Embryology I** 

With mounting: M-1001222
Without mounting: M-4006560



#### Foetal Development & Presentation of Twins Chart

Laminated. 89 x 58.5 cm.

M-1018282

#### Human Embryo Model – 25 times Life-Size

This human embryo model shows the anatomy of an embryo at approximately 4 weeks old. At 25 times life-size this human embryo is great for studying human development. This high quality model is affordable without sacrificing any anatomical detail.

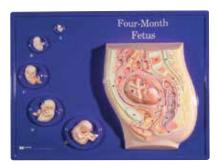
 $12 \times 12 \times 23$  cm; 0.30 kg

M-1014207



Numbered details!

#### Reproductive System Model Sets



#### **Four Month Foetus**

Realistic life-sized models of the embryo/ foetus at 6, 8, 10,12, and 14 weeks are sequenced next to the 16 week foetus within a model of the womb.

M-1018404

More available:

M-1005481 **Menstrual Cycle Birth** M-1018406 Meiosis M-1005485 Mitosis M-1005484 M-1018403 Cell to Embryo **Four Month Foetus** M-1018404 **Full Term Foetus** M-1018405 Female Reproductive System M-1005483 Male Reproductive System M-1005482



#### **All 9 Activity Sets**

Significant savings when you purchase the complete set of nine activities.



#### **Deluxe Pregnancy Series, 8 Models**

Study human development from the 4th week through the 7th month. Our most popular series includes eight models to show the complete stages of development. All embryo or foetus models are shown in different typical positions in the uterus and each is mounted separately on an individual stand. The five later stages of development allow the foetus to be removed.

M-1000321

#### Deluxe Pregnancy Series and Embryo Model (see page 92)

Includes all models above plus the model of an embryo of approx. 4 weeks old, at  $25\,\mathrm{times}$  life-size.

M-1014208

#### This Complete Deluxe Pregnancy Series Includes:

1st Month Embryo	M-1000322
2nd Month Embryo	M-1000323
3rd Month Embryo	M-1000324
4th Month Foetus (Transverse Lie)	M-1000325
5th Month Foetus (Breech Position)	M-1000326
5th Month Foetus (Transverse Lie)	M-1000327
• 5th Month Twin Foetuses (Normal Position)	M-1000328
7th Month Foetus	M-1000329

#### Basic Pregnancy Series – 5 Models

This series consists of five models to show the most important stages of development. Stages included: 1st month, 2nd month, 3rd month, 5th month, 7th month. The 5th and 7th month stages have detachable foetuses. All models are mounted together on a base.

13 x 41 x 31 cm; 2.10 kg

M-1000331

#### **Birthing Process, 5 stages**

Anatomical representation of human birth. 5 stages of the birthing process, mounted individually on bases.

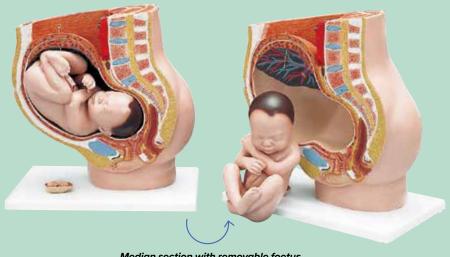
- Foetus in womb, cervix closed; 2-part
- Foetus in womb, cervix open
- Foetus in womb, start of head passage
- Foetus in womb and pelvis, finish of head passage
- Placenta in womb

 $17 \times 28 \times 46 \text{ cm}$ ; 8.62 kg





# Realistic and high quality



Median section with removable foetus

#### Pregnancy Pelvis, 3-part

This anatomy model is a representation of a median section through the female pelvis at 40 weeks pregnant with a removable foetus. Study or demonstrate the normal position of baby before birth with this model plus the human reproductive and urinary systems. A uterus with embryo in 3rd month of pregnancy is mounted on base for added detail and comparison. The realistic and high quality female pelvis includes the female genital organs and other important anatomical details.

38 x 25 x 40 cm; 3.80 kg

M-1000333



#### **Labour Stages Model**

At  $\frac{1}{2}$  the size of M-1001258, these models are an anatomically detailed representation of human birth. The birth models are supplied on one baseboard, included stages:

- · Foetus in womb, cervix closed
- Foetus in womb, cervix open
- · Foetus in womb, start of head passage
- · Foetus in womb and pelvis, finish of head passage
- Placenta in the womb

40 x 31 x 13 cm; 1.36 kg

M-1001259

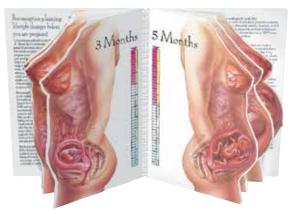


#### **Childbirth Demonstration Pelvis**

This model demonstrates the progress of a full-term foetal head through the pelvis during birth. The simulator consists of a female pelvic skeleton with a movable symphysis, hip bone, sacrum, coccyx, and 2 lumbar vertebrae. It is articulated to accommodate passage of a foetal skull which is mounted on an omni-positioning flexible gooseneck support. Delivered on baseboard.

33 x 26 x 18 cm; 1.81 kg

M-1000334



#### "With Child" Display

This life-size, standing childbirth display with overlapping images shows the childbearing cycle from preconception planning through six-weeks postpartum. 45.5 x 61 cm

M-1018275

More charts for patient education also online at 3bscientific.com:

#### Pregnancy Chart (not shown)

The poster presents different types of information about pregnancy from foetal development to pregnancy hormones.  $51 \times 66$  cm; printed on premium glossy paper.

M-4006703

#### Childbirth Chart (not shown)

The stages of childbirth are discussed as well as the anatomical details of human labour. 51 x 66 cm; printed on premium glossy paper.

# PARENT EDUCATION

#### The original manikin that simulates a baby's varying needs!



#### Ready-or-Not Tot® Manikins

The perfect tool to educate soon-to-be parents and to demonstrate the reality of parenthood. Ready-or-Not Tot\* manikins use set programs, and the response can easily be tracked using the template provided.

- Three different tending programs typical of most babies
- Tots cry, coo, and burp in response to appropriate care
- Programs are 48 hours in length and run continuously with 25-27 tending occurrences

Comes complete with one set of student keys, one set of teacher keys, reproducible parental consent form/permission slip, reproducible student response sheet, teacher correction template, nappy, and instructions. Anatomically correct newborn-size, representing a baby of a teen mum  $-2.49 \, \mathrm{kg}$ , 51 cm long.

 White Male
 M-1017931
 Black Male
 M-1018137

 White Female
 M-1017932
 Black Female
 M-1018138



#### Shaken Baby Syndrome Demonstration Model

An infant's vulnerability to **Shaken Baby Syndrome (SBS)** is powerfully demonstrated with this model. Helps teach prevention of SBS, which can have devastating consequences including permanent brain damage, blindness, and death. It also emphasises the importance of supporting an infant's neck.

SBS tear pad also available. 48.5 cm long. **M-1017928** 

#### **Baby Care Models**

Ideal model for training the main principles of baby care at school and in preparation courses for young parents. It allows dressing, undressing, washing, changing nappies, and many other procedures. Care babies are realistically newborn sized and can be dressed in ordinary baby clothes. The doll has movable joints and its eyes are slightly opened.

Black Baby
Male M-1005092
Female M-1005093

Asian Baby Male M-100

Male M-1005090 Female M-1005091



White Baby
Male M-1005088
Female M-1005089

#### **Progression of Baby Bottle Tooth Decay Display**

This model serves as a graphic reminder to parents of the damaging tooth decay that can occur if a baby or young child is put to bed with a bottle of juice, breastmilk, formula, or any other liquid containing sugar. Mounted on plastic base.

 $26.5 \times 9 \times 9 \text{ cm}$ 

M-1018298





#### **Baby Bottle Tooth Decay Model**

Cast from a child's mouth, this hinged model shows that the sugars that coat a baby's mouth while sleeping with a bottle can cause dental disease. Model measures  $5.5 \times 4.5 \times 5$  cm.

Comes with a co-ordinating tear pad. The  $21.5 \times 28$  cm tear pad is English on one side and Spanish on the other and has 100 sheets per pad.

## **MEN'S HEALTH**



#### **Testicle Self-Exam Model**

By using 3B Scientific\* SKINlike\* high-quality silicone, learning and practising self-examination of the testicles becomes even more realistic. The scrotum contains two movable testicles, the epididymi, and the spermatic cords for palpation. Two pathological findings can be felt in the left testicle. Supplied with detailed instructions for self-examination and a carrying bag.  $9 \times 8 \times 4$  cm; 0.19 kg

M-1000346



#### **Testicle Self Examination Model**

Self-examination of the testicles is just as important as self-examination of the female breasts for early detection of tumours. Providing exceptional realism, this simulator features soft, thin outer skin with delicate underlying structures and four embedded, simulated tumours. Ideal for teaching proper palpation techniques. To maintain the life-like feeling of the skin, baby powder (included) should be applied from time to time.

M-1005640



#### Teen BSE/TSE Training Set

This kit contains a teen BSE model and a TSE model to teach teens the importance of the early detection of cancer. Teen BSE model contains lumps in a variety of sizes. TSE model contains two lumps in each testicle. Each model is made of soft, durable BIOlike\* synthetic tissue and comes with slipcover and carrying case.

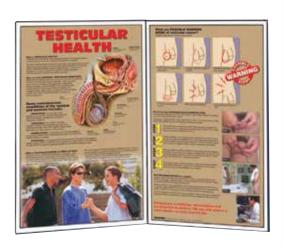
26 x 23 x 18.5 cm

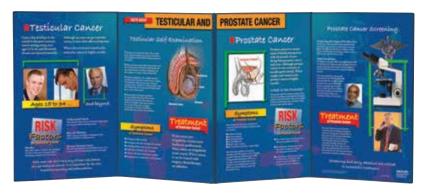
Beige Skintone M-1017933 Brown Skintone M-1017934



Offering detailed information in an easy-to-follow format, this two-panel display is ideal for teaching young men about a variety of testicular conditions. Covers noncancerous conditions, possible warning signs of testicular cancer, and instructions for self-examination.  $30.5 \times 43 \text{ cm}$ 

M-1018412





#### **Facts About Testicular and Prostate Cancer Display**

This folding display explores testicular and prostate cancer by identifying the risk factors, symptoms, and treatment of each condition. Emphasises the importance of testicular self-examination and prostate cancer screening.



# Realistic replica!

#### Male Pelvis Section, 1/2 Life-Size

This cross section of the male genital organs shows all structures in detail. It is a great replica of the anatomy of the male pelvis.  $13.5 \times 10 \times 14$  cm; 0.24 kg

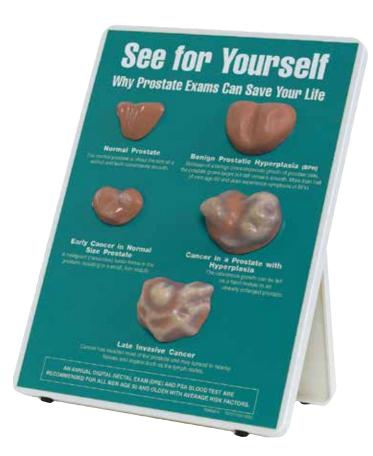
M-1000283

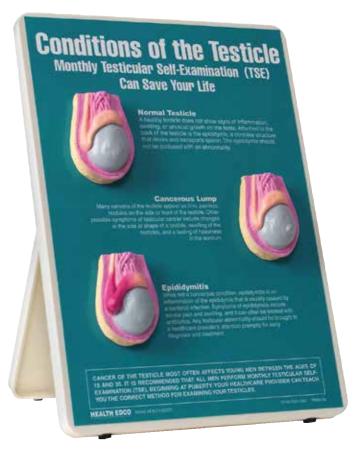
#### Why Prostate Exams Can Save Your Life, Easel Display

Handpainted to simulate the appearance of actual tissue, these five 3D prostate models represent a normal prostate, benign prostatic hyperplasia, early cancer, cancer in a hyperplastic prostate, and late invasive cancer. Comes with protective felt cover.

23 x 30.5 cm

M-1018294





#### Conditions of the Testicle, Easel Display

Emphasising the importance of monthly testicular self-examination, this 3D, handpainted easel display depicts the anatomy of a normal testicle, a testicle with a cancerous lump, and a testicle with an inflamed epididymis. Comes with protective felt cover.

23 x 30.5 cm

# **NUTRITION**

#### Complete MyPlate Kit

This kit combines five plates, the display rack, and the food kit for your complete MyPlate educational teaching kit. The 42-piece food kit includes grains, protein, fruit and vegetables Life/form\* food replicas. With the included durable plastic plates featuring the USDA healthy eating graphic, you can easily explain the principles of well balanced meals. Your students and patients can fill the plate and learn what to do differently.

M-1018318

# Impressive, hands-on educational tool!

#### **MyPlate Cling Place Mats**

These plastic place mats, which are also food clings, are an engaging nutrition teaching tool. Participants can easily create many suggested meals using these guidelines. Set of five place mats with easy cling and peel material.

48.5 x 28 cm

M-1018317



# More MyPlate products for healthy eating featuring the USDA healthy eating graphic:

#### MyPlate CD-ROM PowerPoint®

Viewers learn an easy way to eat healthily at every meal and the answer is right on their plate. Includes one 30 slide express presentation, one more in depth 50 slide full presentation and printable speaker's notes and handouts.

M-1018320

#### MyPlate Plate

Also available individually! Made of FDA approved ABS plastic safe for food use. Dishwasher safe, not recommended for microwave oven. Outside diameter 27.5 cm.

M-1018316

#### MyPlate Tear Pads, Large

The tear pad front shows the MyPlate image with appropriate food choices in each spot on the plate, while the back has simple fill-in-the-blank questions to use as a study guide or reminder for those learning good nutrition. Pad of 50 sheets, each 43 x 28 cm, can be used as place mats as well.

M-1018322

### MyPlate Tear Pad with Food Group Tips,

The tear pad front shows the MyPlate image while the back gives tips for eating wisely in all five food groups. A simple concise tool to use in nutrition education and send home with each participant. Pad of 50 sheets, each  $21.5 \times 28$  cm.

M-1018321

#### **MyPlate Poster with Key Phrases**

Unique MyPlate poster shows 13 key phrases providing clear messages about what to eat and how using the MyPlate technique will make you healthier. 18 x 24 in. Laminated.

M-1018319

#### Vat of Fat

Explaining how calorie intake translates into weight gain is simplified with this graphic and informative display. The plastic jar contains approx. 0.45 kg of gooey simulated fat, which represents the



amount of weight a person could gain in one week by consuming an extra 500 calories each day.

12.5 x 16.5 cm

M-1018309



#### **Healthy Eating Out Flip Chart**

By outlining ways to make healthy choices from restaurant menus, this flip chart helps to solve the "eating-out dilemma". Features presenter's notes on reverse panels. 6 panels.  $30.5 \times 43.5 \text{ cm}$ 

# **HEALTHY LIFESTYLE**

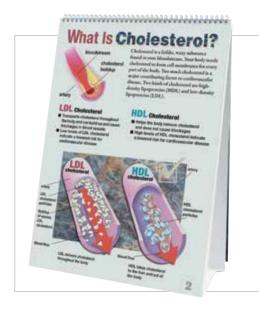
# Clear Artery An amount of the control of the contro

#### **Death of An Artery Easel Display**

These handpainted, cross-sectional, 3D models of arteries show patients and students the various stages of plaque build up. The interior size of each vessel diminishes, making it easy to explain a process that can eventually result in death. Comes with protective felt cover.

23 x 30.5 cm

M-1018290



#### **Cholesterol Flip Chart**

Many people do not know what steps they can take to maintain healthy cholesterol levels. This flip chart explains the facts about "good" and "bad" cholesterol and the health risks associated with high cholesterol levels. Features presenter's notes on reverse panels. Flip chart is 6 panels.

30.5 x 43.5 cm

M-1018306

# Why Blood Pressure Checks Can Save Your Life Easel Display

Patients and students learn the importance of blood pressure checks when they see these handpainted, 3D models of arteries and this cross section of the brain. Demonstrates the way high blood pressure can silently lead to heart attacks or strokes. Comes with protective felt cover.

23 x 30.5 cm

M-1018289





#### **Occluded Artery Model**

The potentially deadly effects of high cholesterol are demonstrated with this persuasive model. The tube represents an artery constricted by plaque, which forms on artery walls when there is excess cholesterol in the blood. When the model is turned over, the blood in the artery slows or stops completely.

7 x 17.5 cm

M-1018304

# **Blood viscosity samples**



#### Blood Cholesterol & Triglycerides Packet

The need for a healthy diet is emphasised by the four blood viscosity samples in this pack. The samples show the exaggerated differences seen when analysing blood serum for lipid and glucose concentrations.

# Life-size 3D displays!



#### Consequences of High Blood Pressure, 3D Display

Life-size, 3D, hand-painted models illustrate the various organs that can be affected by high blood pressure. Great for health fairs and health education promotions. Contained in a convenient, sturdy wooden carrying case.

71 x 68.5 cm (opened).

M-1018277



#### Consequences of An Inactive Lifestyle, 3D Display

This 3D display graphically shows many of the negative health consequences of an inactive lifestyle. Each permanently mounted, handpainted model has a brief description of the consequences it represents. Display is contained within its own sturdy carrying case.

71 x 68.5 cm (opened).

M-1018300

#### Can be wall mounted or displayed on a table



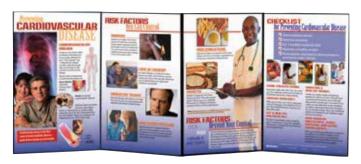
#### Benefits of Physical Activity, 3D Display

The four swiveling panels show rewards of an active lifestyle on one side (strong muscles, healthy arteries, healthy joints, and reduced body fat) contrasted with consequences of a sedentary lifestyle on the other side (muscle loss, diseased arteries, osteoarthritis, and increased body fat).

Can be mounted on a wall.

67.5 x 33 x 13.5 cm

M-1018301



#### Preventing Cardiovascular Disease, Folding Display

With practical information and vivid illustrations, this display explains cardiovascular disease and identifies risk factors, including those that can be controlled through lifestyle changes and medication.

147.5 x 57 cm (opened).

M-1018305



#### **Exercise Facts, Folding Display**

A combination of colourful art and clear explanations about the advantages of aerobic exercise and strength training make this folding display an ideal teaching tool. Also included are ways to work exercise into daily life, a discussion of exercise benefits for all ages, and information on exercise safety.

147.5 x 57 cm (opened).

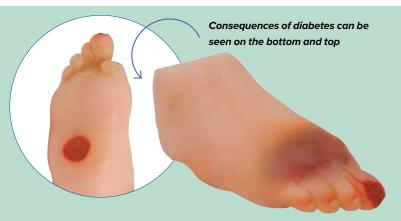
## **DIABETES**



#### **Diabetic Foot Model**

M-1017936

This life-size diabetic foot model can be used for both patient education and student training. Made from life-like BIOlike" material, the model contains three ulcers in various stages of development as well as the features commonly associated with diabetes. Comes with carrying case and instruction card. 9 x 24 x 10 cm



#### **Severe Diabetic Foot Model**

This life-size, BIO*like*\* replica complements the original Diabetic Foot Model by showing additional, more severe consequences of diabetes, including an amputated toe, Charcot foot deformity, and severe infection and gangrene. Comes with a carrying case and instruction card.

9.5 x 23 x 11.5 cm

M-1017937

#### **Injection Belly**

This soft stomach replica is an invaluable tool for teaching patients how to properly insert and rotate the infusion set for insulin pumps, as well as giving self-injections. The trainer has life-like skin with what



feels like real stomach tissue underneath. There is a soft plastic backing to keep needles from going through and holes to allow the material to breathe and dry, should you choose to inject water.

#### M-1013056



#### **Diabetic Injection Practice Kit**

Made from realistic BIO*like*" material, these teaching models facilitate technique practice on both an injection skin and a finger stick apparatus. The skin model may be strapped to the user's arm or leg to simulate a needle injection site and the finger stick model may be held by the attached grip for lancet practice. Both can be punctured repeatedly. Comes with powder and carrying case. Skin model is 15.5 x 11.5 x 4 cm; and finger stick model is 2.5 x 11.5 x 2.5 cm.

Beige M-1018139 Brown M-1018140

#### What You Need to Know About Diabetes, Folding Display

With information about risk factors, symptoms, and complications of diabetes, this folding display is a valuable resource for health educators. Explains the different types of diabetes and describes how the disease can be treated.  $58 \times 22.5$  in (opened).

M-1018308



#### **Diabetic Injection Pad**

This pad looks and feels like human skin and is ideal for diabetic instruction and injection practise. May be worn on the body (stomach, thigh, upper arm) to allow patients to inject fluid into the pad to practise giving themselves injections. Pad is thick enough to accept all insulin needles. For safety purposes, the pad has a hard plastic backing to prevent the needle from poking through and into the wearer's skin.

16 x 10.5 x 1 cm

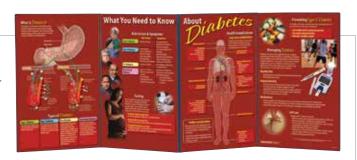
M-1013057



#### **Diabetes Flip Chart**

Explains type 1, type 2, and gestational diabetes as well as the risk factors and warning signs of each one. Information on pre-diabetes, testing, complications resulting from diabetes, and managing diabetes is also included. Features presenter's notes on reverse panels. Flip Chart is 6 panels.

30.5 x 43 cm





# 3B ORTHObones

- High quality, economical workshop bones
- Biomechanically accurate
- Anatomically realistic surfaces
- Ready for imaging procedures without pre-processing
- Short delivery times

# 3B ORTHObones STANDARD LINE



#### 3B ORTHObones Standard Line

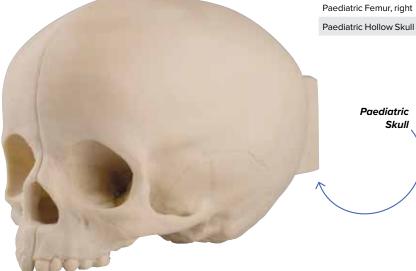
- Economically priced, hands-on workshop bones
- Biomechanical characteristics of human bone are realistically simulated
- Train surgical manipulations on anatomically correct workshop bones



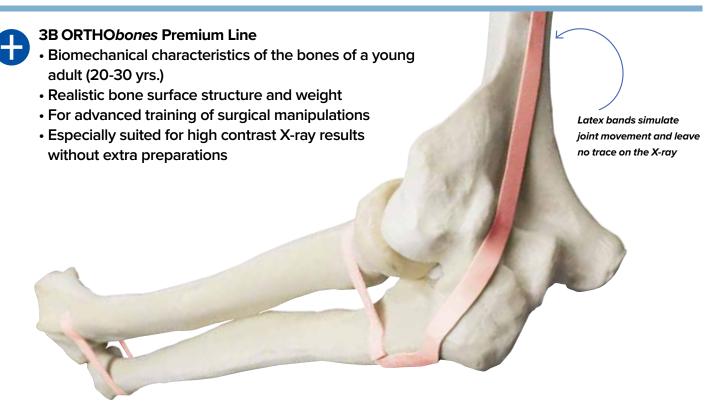


The multilayered construction simulates the hard cortical and the softer cancellous bone. Mechanical manipulations (i.e. with screws, plates, or implants) can be practised on these highly realistic workshop bones.

3B ORTHObones Standard Line	Item No.
Humerus, right	M-1019604
Humerus, left	M-1019609
Elbow, right	M-1019616
Elbow, left	M-1019617
Radius, right	M-1019605
Radius, left	M-1019610
Ulna, right	M-1019606
Ulna, left	M-1019611
Hand	M-1019618
Hand with Wrist	M-1019619
Femur, right	M-1019601
Femur, left	M-1019607
Knee, left	M-1019621
Knee, right	M-1019622
Tibia, right	M-1019602
Tibia, left	M-1019608
Foot with Hammer Toes	M-1019620
Male Half Pelvis, right	M-1019603
Male Half Pelvis, left	M-1019612
Full Pelvis with Sacrum	M-1019613
Cervical Vertebrae	M-1019614
Thoracic Vertebrae	M-1019615
Lumbar Spine	M-1019700
Lumbar Spine with Sacrum	M-1019701
Femur Teen, right	M-1019702
Paediatric Tibia, right	M-1019703
Paediatric Femur, right	M-1019704
Paediatric Hollow Skull with Support Block	M-1019705



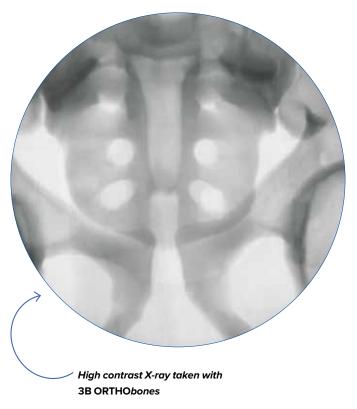
# 3B ORTHObones PREMIUM LINE



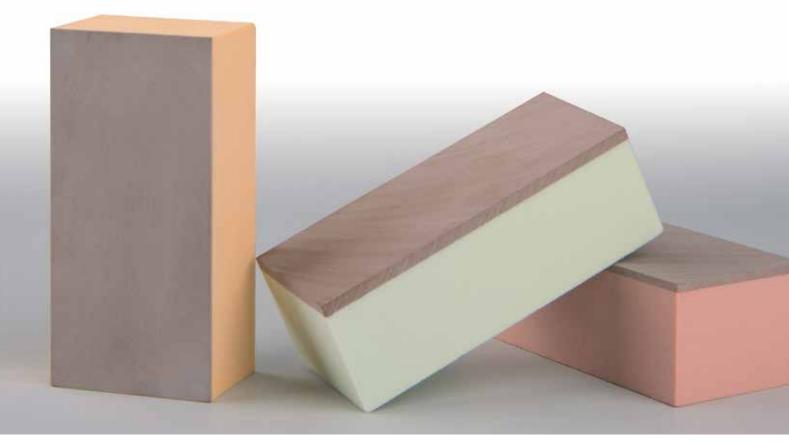
ORTHObones Premium Line	Item No.
Humerus, right	M-1005121
Humerus, left	M-1016670
Elbow, Ulna, Radius, Humerus, flexibly mounted	M-1018335
Radius, right	M-1005122
Radius, left	M-1016671
Ulna, right	M-1005123
Ulna, left	M-1016672
Hand	M-1018336
Hand with Forearm, left	M-1018337
Male Half Pelvis, right	M-1005119
Male Half Pelvis, left	M-1016702
Full Pelvis with Femurs	M-1018342
Right Pelvis with Femur	M-1018344
Left Pelvis with Femur	M-1018343
Full Pelvis with Sacrum	M-1018096
Sacrum	M-1005120
Femur, right	M-1005117
Femur, left	M-1016668
Knee, right	M-1018341
Knee, left	M-1018340
Tibia, right	M-1005118
Tibia, left	M-1016669
Foot with Hammer Toes, Bunions and Heel	M-1018339
Mandible with Teeth	M-1005116
Edentulous Mandible with Gum	M-1018330
Scapula, right	M-1018517
Scapula, left	M-1017629

#### Elbow, Ulna, radius, humerus, flexibly mounted

Flexibly mounted elbow, comprised of the humerus, ulna, and radius. Thanks to latex bands, the joint is flexible and can be moved. Latex band is glued so it does not interfere with imaging procedures.



# **3B BIOMECHANICAL TEST BLOCKS**





3B Biomechanical Test Blocks	Bone density	Cortical Thickness	Item No.
Test Block	10 PCF	CP1	M-1019708
Test Block	10 PCF	CP2	M-1019875
Test Block	10 PCF	CP3	M-1019876
Test Block	15 PCF	CP1	M-1019707
Test Block	15 PCF	CP2	M-1019877
Test Block	15 PCF	CP3	M-1019878
Test Block	20 PCF	CP1	M-1019706
Test Block	20 PCF	CP2	M-1019879
Test Block	20 PCF	CP3	M-1019880
Test Block	30 PCF	CP1	M-1019881
Test Block	30 PCF	CP2	M-1019882
Test Block	30 PCF	CP3	M-1019883



#### **3B Biomechanical Test Blocks**

- Use to test implants and devices
- Train the evaluation of bone density
- Simulate different sets of characteristics,
   i.e. bone density and cortical thickness

#### Bone density: 10 – 30 PCF (Pounds per Cubic Foot)

The solid rigid polyurethane foam is available in 4 different densities: 10, 15, 20 and 30 PCF.

#### Cortical thickness: 1 - 3 mm

The cortical shell is simulated by a dense plate on top of each block. Its density is 30 PCF and three different thicknesses (1, 2 or 3 mm) are available for each foam density option.

#### Dimensions:

CP1: 1 mm cortical thickness:  $9.5 \times 4.5 \times 3.1$  cm CP2: 2 mm cortical thickness:  $9.5 \times 4.5 \times 3.2$  cm CP3: 3 mm cortical thickness:  $9.5 \times 4.5 \times 3.3$  cm



# MEDICAL SIMULATION

Reliable equipment for basic, intermediate and advanced medical skill training

# **BASIC LIFE SUPPORT**







No tools are necessary thanks to strong magnetic connections.





Add the intubation head and also train advanced life saving techniques with  $\mathsf{CPR}\textit{Lilly}\mathsf{PRO}^{\mathsf{M}}$ .

M-1019711



#### Your advantages of training with CPRLillyPRO™:

- Easy to use with magnetic connections no extra tools necessary
- Very hygienic thanks to the separate air chamber system
- Extremely durable material suited for large training settings
- Fast cleaning process for efficient time management
- Includes tablet and software for measuring training success with PDF view

#### Qualified CPR Training with CPRLillyPRO™

CPRLillyPRO™ – The best choice for your professional CPR training courses. All relevant parameters can be monitored comfortably and easily via the tablet provided. Trainers and trainees will very quickly attain the chosen training target via the direct feedback feature. The face masks can be changed, and are easy to clean. The software can control the carotid pulse and the eye movements.  $\text{CPRLillyPRO}^{\text{\tiny{M}}}$  can react by opening the eyes when spoken to by the trainee.

The correct head tilt, individual carotid pulse, and the moveable jaw to demonstrate the jaw thrust manoeuvre, provide realistic scenarios. CPR training with the CPR*Lilly*PRO™ complies with the latest AHA and ERC guidelines.

#### Displayed training parameters:

- Compression depth
- Compression frequency
- · Hand position
- Head tilt
- Respiration volume/speed (combined)
- Respiration pressure

Comes with carrying bag. 78 x 39 x 26 cm, 9 kg

Light Skin M-1017773
Dark Skin M-1017775



#### **CPR***Lilly*™

 $\mathsf{CPR}\mathit{Lilly}^{\bowtie}$  – the basic version for all CPR training courses. This training manikin is hygienic, and will operate economically for a long time thanks to the use of disposable airbags and the separate air chamber system. The face masks can be changed, and are easy to clean.

The carotid pulse and the eye movements can be controlled separately by hand. When the correct compression depth is reached, a tone will sound.  $\mathsf{CPRLilly}^{\mathsf{IM}}$  can react by opening the eyes, this is controlled manually. The correct head tilt, individual carotid pulse, and the moveable jaw to demonstrate the jaw thrust manoeuvre, provide realistic scenarios.  $\mathsf{CPR}$  training with the  $\mathsf{CPRLilly}^{\mathsf{IM}}$  complies with the latest AHA and ERC guidelines.

Comes with carrying bag.  $78 \times 39 \times 26 \text{ cm}$ , 8 kg

Light Skin M-1017772
Dark Skin M-1017774

The  $CPRLilly^m$  training manikin series also includes extremely affordable replacement parts to keep the long-term running costs low.

		Replacement parts	Item No.
a good		Upper face mask light (1x)	M-1017737
		Upper face mask dark (1x)	M-1017764
<b>←</b>		Resuscitator	M-1013678
		Lower face mask with teeth light (5x)	M-1017738
		Lower face mask with teeth dark (5x)	M-1017765
		Throat bag (pack of 50)	M-1017739
(may )	<del>\</del>	Throat bag (pack of 100)	M-1017743
		Bag clip	M-1017748
		Carry bag	M-1017744
		Disinfectant	M-1013579
	<b>—</b>	Lower jaw	M-1017749
		Torso skin light	M-1017747
		Torso skin dark	M-1017766
		Eyes light (pair)	M-1017758
	<	Eyes dark (pair)	M-1017767
		Tracksuit top	M-1017746
		Squeeze ball (light blue)	M-1017750
		Squeeze ball (white)	M-1017751
0000	<del></del>	Eye rings (pair), light	M-1017759
		Eye rings (pair), dark	M-1017778





- Anatomically correct for realistic training
- · Hygienic to use with low priced disposable airways
- Head is easy to tilt to prepare for mouth-to-mouth or mouth-to-nose resuscitation
- Thorax raises as the lungs are ventilated
- Developed and manufactured in Germany

# Basic Life Support Manikin BASICBilly™

BASIC*Billy*™ was developed utilising the results of extensive studies focussing on the depth and force of compression during cardiopulmonary resuscitation (CPR). The  $\mathsf{BASIC}\textit{Billy}^{\mathsf{IM}}$  CPR Manikin fulfills the latest guidelines from the AHA (American Heart Association) and ERC (European Resuscitation Council) on CPR and was designed with optimal force and compression values in mind.



BASICBilly™ is actually two manikins in one as it can be used as either an adult or a child (approx. 12 yrs.) CPR trainer. Just use the easy and interchangeable springs located in the back of the trainer to give the realistic depth feedback of either the adult (5cm) or child (4.5cm).

# Included:

- 1 BLS simulator (torso) with spring for cardiac massage of adults
- 1 additional spring for cardiac massage of children (approximate age of 12)
- 5 lung bags, adult
- 5 lung bags, child
- 2 telescopic guides
- 1 additional face mask and inner head for hygienic artificial respiration
- 1 disinfectant solution
- 1 carrying bag

60.5 x 35.5 x 19 cm, 2.36 kg

Light Skin M-1012793 Dark Skin M-1017679



Easy to switch between adult and child CPR setup



Replacement parts	Item No.
Lung Bags, Adult (pack of 25)	M-1013573
Lung Bags, Adult (pack of 75)	M-1017695
Lung Bags, Child (pack of 25)	M-1013576
Lung Bags, Child (pack of 75)	M-1017696
Spring 340N (red), Adult	M-1013577
Telescopic guide adult	M-1017699
Spring 280N (green), Child	M-1013578
Telescopic guide child	M-1017700
Resuscitator with 1 disposable face mask	M-1013678
Disposable Face Mask	M-1013677
Disinfectant – 40 gr. bags	M-1013579
Face skins, light	M-1013582
Face skins, dark	M-1018573
Set jaw insert + Lung bag socket	M-1017698
Thorax skin, light	M-1013587
Thorax skin, dark	M-1018564
Carrying bag with combined training mat	M-1018565



# CPR SimonBLS Full Body Simulator with OMNI® Code Blue® Pack

Quality CPR simulator designed to operate for years! Strong, sturdy construction with full-size, realistic landmarks and one piece disposable airways. Prewired for CPRLink $^{\text{\tiny{M}}}$  for a first class BLS program.

- Disposable airways to practise hygienic mouth-to-mouth ventilation
- Fully articulating head, neck, and jaw permitting head/tilt, chin lift, jaw thrust, and neck extension into the "sniffing" position
- · Airway blocked when head is forward
- Easily accessible chest cavity with ribcage, lungs, and heart for realism and practice of the Heimlich manoeuvre
- Realistic chest rise during ventilation
- Carotid, femoral arterial pulse sites
- Femoral venous site · Intramuscular (IM) Injection Sites on the deltoids, quadriceps and left gluteus medius
- · Jointed elbows, wrists, knees and ankles
- Eyes open and close; one pupil is dilated
- INCLUDED: Omni® Code Blue® pack monitors and logs the cadence and depth of cardiac compression and airway ventilation

Comes with carrying bag, instruction manual and 10 disposable airways.

#### M-1009220

# CPR Simon BLS Full Body Simulator with Venous Sites (not shown)

This life size adult manikin is designed to provide the fundamentals of CPR instruction as well as numerous patient care exercises. All features of M-1009220 but without the Omni® Code Blue® pack monitor and not prewired for CPRLink™. Comes with instruction manual and carrying bag. **M-1017559** 

# **CPR Simon BLS Torso Simulator (not shown)**

All features of M-1009220 related to the torso, but does not include the Omni® Code Blue® pack.

#### M-1005819

Replacement parts:

Left Arm Assembly M-1020120
Right Arm Assembly M-1020121
Carrying bag M-1020124





# **CPR Susie Advanced Emergency Care**

This life size adult manikin is designed to provide the fundamentals of CPR instruction as well as numerous patient care exercises such as intramuscular and subcutaneous injections, male and female catheterisation, intubation, enema administration, decubitus treatment and palpation of right and left carotids. Other features include:

- Neck brace
- Amputation stump
- Electronic CPR monitor
- Interchangeable male and female breasts (left female breast contains malignancy)
- Interchangeable male organ
- Movable jaw with removable upper and lower dentures
- Oral, nasal, otic, tracheotomy, and gastrostomy openings for instruction in nasogastric lavage and gavage
- Removable internal tanks
- Sculpted stomas for transverse colostomy, ileostomy, and suprapubic stoma, each connected to an internal, removable tank

Comes with instruction manual.





#### Code Blue® I - Multipurpose Simulator with Intubatable Airway

Provides practice in a wide range of CPR and patient care skills like:

- General care
- Breast examination
- Gynaecological examination
- Injection and infusion
- Airway management

Interchangeable external genital organs allow female and male cauterisation interchangeable male and female breasts, left female breast contains malignancy. It has fully movable neck, arms and legs, and the skin of face, vagina and cervix is soft for added realism. With anatomically accurate and intubatable airway.

Supplied with Omni™ Code Blue® Pack, 10 training masks, Code Blue Life Monitoring System, neck brace and carrying bag.

#### M-1017533

# Code Blue® I – Multipurpose Simulator with Non-intubatable Disposable Airway

All features of M-1017533 but airway not intubatable. Supplied with Omni™ Code Blue® Pack, 10 disposable one-piece airways, neck brace, and carrying bag.

#### M-1005782

#### Replacement parts:

10 Airways	M-1005783
Lungs	M-1013603
BP Training Arm	M-1018870
Smash Arm	M-1019645

# **CPR+D Trainer**

## Advanced feedback, reporting and control

Stores the energy generated by chest compressions for power. Without the use of batteries or power cords, the trainer is capable of recording CPR quality and performance metrics, presenting realistic chest rise and palpable pulses after resuscitation, and more. Take your training to more places and reach more people with the convenience of truly tetherless technology.

#### Features:

- Intubatable airway with tongue, vocal cords, and trachea
- $\bullet$  Realistic head tilt/chin lift and jaw thrust
- Realistic chest cavity allows students to experience the correct force needed to perform proper chest compressions
- Anatomically correct landmarks for proper hand placement
- Proper chest compressions
- Defibrillation: Attach real AED pads directly to the conductive skin. Shock the conductive skin. Shock the simulator using your defibrillator just like a real patient. Your AED will display the simulator's ECG.
- Automatic pulses and breathing with realistic chest rise
   Comes with handheld controller with 4.5 m cable, carrying bag and operating guide.

# M-1018867

# CPR Simulator with Defibrillation Features!











#### **Adult CPR Manikin with Memory and Printer**

This full-size manikin allows the practice of adult CPR techniques. The printer unit allows evaluation and the performance of each skill is displayed separately while averages are stored in the memory. Compression and ventilation waveforms are plotted in a time sequence. Averages are shown on the display and printed on paper.

#### Features:

- Palpable anatomical landmarks (xiphoid, navel, nipples and rib cage)
- Enhanced student motivation through use of the optional SkillGuide indicator that allows real-time CPR performance feedback during training
- Adult CPR training with optional child springs
- Fully articulated head, neck and jaw
- · Palpable carotid pulse
- Individual student face masks provide maximum protection against cross contamination

Includes 4 pens, 3 rolls of paper and 6 "D" batteries.

91.5 x 53.5 x 33 cm, 24 kg

# M-1005617

# Replacement parts:

25 Sanitary Face Masks M-1005600 10 Tracheal Airways M-1005601 10 Lower Airways M-1005602 Electronic Monitoring, M-1019633

Memory, and Printer Unit

#### **CPR Torso with Light Controller**

This easy to transport torso allows the practice of adult CPR techniques. Optionally child CPR can also be practised by changing the supplied springs inside the torso. Individual student face masks with a one-way non-rebreathing valve and disposable airways provide maximum protection against cross-contamination. The light controller allows for immediate CPR evaluation.

#### Features:

- Palpable anatomical landmarks (xiphoid, navel, nipples and rib cage)
- Adult CPR training with optional child springs
- Fully articulated head, neck and jaw
- Palpable carotid pulse

48.5 x 30.5 x 80 cm

#### M-1005618

#### Replacement parts:

 25 Sanitary Face Masks
 M-1005600

 10 Tracheal Airways
 M-1005601

 10 Lower Airways
 M-1005602

#### **Adult CPR Manikin with Electronics**

This full-size manikin allows the training of BLS rescue techniques and CPR. The resiliency and weight of the body is very realistic.

165 cm; 17,5 kg

#### Features:

- Natural resistance to chest compression
- Palpable carotid pulse
- Anatomical landmarks such as sternum, ribcage and sub-sternal notch
- Airway ball valve which allows the lungs to inflate only if the head is extended and accurately positioned
- Light controller which confirms correct hand placement, ventilation volume and compression depth

## M-1005738

# Replacement parts:

 10 Mouth/Nose Pieces
 M-1005741

 10 Adult Airway Systems
 M-1005747

 Carrying Bag
 M-1005748





#### **CPR Torso with Electronics**

# This lightweight and easy to transport torso features:

- Airway ball valve which allows the lungs to inflate only if the head is extended and accurately positioned
- Life-like anatomical landmarks such as carotid pulse, sternum, ribcage and sub-sternal notch
- Light controller confirms correct hand placement, ventilation volume and compression
- Easy to replace mouth/nose pieces
- Soft carrying case with kneeling pads 70 cm, 8.4 kg

# M-1005726

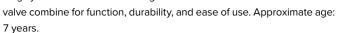
## Replacement parts:

 10 Mouth/Nose Pieces
 M-1005741

 10 Airway Systems
 M-1005742

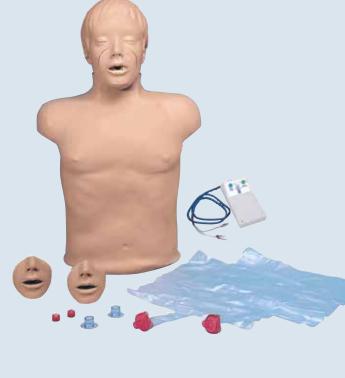
# CPR-Torso Brad™Junior with Electronics and Carry Bag

Brad Jr.'s realistic appearance, accurate anatomical landmarks, and individual-use mouth/nosepieces with disposable airway/ lung system and non-rebreathing



# M-1018850





#### **Brad™ Compact CPR Training Manikin with Electronics**

This economical CPR manikin is constructed of soft, realistic vinyl plastic over polyurethane foam for a "human" feel. Comes with an exterior console box that indicates proper hand position, adequate chest compressions, and adequate air volume.

#### Features include:

- · Long torso for realistic abdominal thrusts
- Realistic head tilt and chin lift for opening airway
- Can easily be manipulated to realistically simulate airway obstruction or choking situations
- User-friendly, low maintenance lung/airway design Includes 3 mouth/nose pieces, 3 disposable lung/airway systems, nylon carry bag and kneeling pads.

# M-1009004

## Replacement parts:

 Rib Cage
 M-1013247

 24 Adult Airway Systems
 M-1005740

 10 Mouth/Nose Pieces
 M-1005741

# Life/form® AED Trainer with Brad™ CPR Manikin

Prepare students for emergency situations with the Life/form® Universal AED Trainer complete with Brad™ the CPR Manikin. Simply push a button to set the sequence of events that will help students learn the appropriate steps to follow in both "shock" and "no shock" situations. The instructor can select from four training scenarios for manual and hands-free training. Train for AHA scenarios with both audio and written prompts in English.

Comes with reusable pads, electrode sets and operating instructions.

Includes Brad™ CPR Manikin with 3 mouth/nose pieces, 3 disposable lung/airway systems, nylon carry bag and kneeling pads.



# **ZOLL AED Trainer Package with CPR Brad™**

This unit allows students to practice realistic device operation using AHA recommended training scenarios. An identical graphical operator interface and complete audio and visual prompts mimic the AED Plus in its look and operation.

Screen messages, audible tones, and voice prompts guide the user through all aspects of the rescue. The convenient handheld remote control for instructor use is pre-programmed with the eight AHA Heartsaver AED training scenarios and offers a manual scenario function, plus attach pads, low battery, and call-for-service simulations.

Powered by six "C" cell batteries (not included) or an AC adaptor. Supplied with training electrode kit, training remote control, AC adapter, handheld cord, operator manual, administration guide.

M-1018859

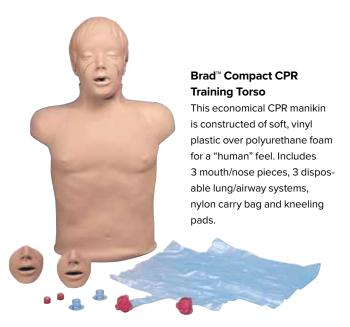


# Full-Body CPR Manikin

This full-body CPR manikin with additional trauma options features lifelike positioning, a carotid pulse, and anatomical landmarks that include the sternum, rib cage, and substernal notch. Caucasian appearance. Add trauma options to the right as needed for additional training features.

ti autita Opti	•
M-1018871	

Trauma Options:	Item No.
Casualty Simulation Kit I	M-1005708
Casualty Simulation Kit III	M-1005710
Trauma Moulage Kit	M-1005712
Replacement Lungs	M-1019296
Rescue CPR Head	M-1020119
IV arm	M-1005749



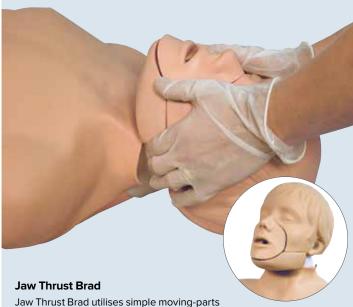
#### Features:

- Longer torso for realistic abdominal thrusts
- Realistic head tilt and chin lift for opening airway
- Easy to manipulate and realistically simulate airway obstruction or choking situations
- $\bullet$  User-friendly, low maintenance lung/airway design 65 x 38 x 22 cm, 5.4 kg

# M-1005753

#### Replacement parts:

Rib Cage M-1013244
24 Adult Airway Systems M-1005740
10 Mouth/Nose Pieces M-1005741



technology for the instruction of the jaw thrust manoeuvre. Unique to the industry is the function of ventilating the patient when the proper manoeuvre is done without tilting the head.

#### Features:

- Moveable jaw
- Individual mouth piece
- Sanitary one-way bag allows multiple users while requiring a single replacement at end of day
- Removable chest plate for adolescent and adult CPR
- Rugged vinyl skin & long-lasting foam filling Includes kneeling pads and carry bag.

71 x 46 x 25 cm

M-1013162

# Life/form® Overweight Fred Manikin

This unique manikin helps to prepare students to respond to a more typical cardiac arrest situation with a victim who is elderly and overweight. The airway can be setup to simulate airway obstruction or choking situations.

# Features:

- Elderly physical appearance
- Large body type with extra "fat" layer
- $\bullet$  Realistic head tilt and  $\operatorname{chin}$  lift for opening the airway
- Palpable and visual anatomical landmarks including the sternum
- Rib cage substernal notch

Included are 3 mouth/nose pieces, 3 disposable lung/airway systems, and a convenient carrying bag.

# M-1005685

# Replacement parts:

Replacement Sternum M-1018479
Replacement Foam M-1018481
Lung/Airway Systems M-1005686
Mouth/Nose Pieces M-1005687





# **Choking Manikins**

Life-size torsos allow practice of abdominal/chest thrust back blow procedures (Heimlich manoeuvre) and mouth sweep for clearing a blocked airway. When correct procedures are performed, the manikins will expel the object causing the obstruction. Made of durable vinyl to create realistic feel. Include anatomical landmarks such as ribcage, xiphoid process and jugular notch. Supplied with choking objects, shirt and soft carrying bag.

Description	Item No.
Obese Mature Choking Manikin	M-1005684
Adult Choking Torso	M-1005724
Adolescent Choking Torso	M-1005750
Child Choking Torso	M-1005751

# **CPR Manikin Adult Torso**

This lightweight and easy to transport torso features:

- Airway ball valve which allows the lungs to inflate only if the head is extended and accurately positioned
- Life-like anatomical landmarks such as carotid pulse, sternum, ribcage and sub-sternal notch
- Easy to replace mouth/nose pieces
- Soft carrying case with kneeling pads

#### M-1005725

Replacement parts:

 10 Mouth/Nose Pieces
 M-1005741

 10 Airway Systems
 M-1005742



# **Act+Fast Rescue Choking Vest**

Invaluable tool for CPR instructors to easily and effectively teach students the correct way to perform the Abdominal Thrust Manoeuvre (Heimlich) without using a manikin. When performed correctly, a foam plug shoots into the air, making teaching easy and learning fun. 10 foam plugs included.

Act+Fast Blue M-1017938

# Act+Fast Red

Features a Back Blow Pad for practising ARC and ERC protocol M-1014589



# **Basic Buddy™ CPR Manikins**

The one-piece, disposable lung/mouth protection system makes this manikin completely sanitary – there is no risk of cross contamination and no need to sanitise the manikins after use! Rugged carrying bags make transporting the lightweight Basic Buddy™ 5 and 10-Packs convenient (manikins fit into bags fully assembled).

# Basic Buddy<sup>™</sup>

1 manikin, 10 lung/mouth protection bags, 1 insertion tool, instruction manual.  $20 \times 37 \times 52$  cm; 2.2 kg

M-1005637

#### Basic Buddy<sup>™</sup> 5-Pack

 $5~\text{manikins},\,50~\text{lung/mouth}$  protection bags, 5~lung insertion tools, 1~carrying bag, instruction manual. 6~kg

M-1005636

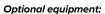
# Basic Buddy™ 10-Pack

10 manikins, 100 lung/mouth protection bags, 2 carrying bags, 10 lung insertion tools, 2 instruction manuals. 12 kg

M-1005635

Replacement parts:

100 ct Lung/Mouth Protection M-1005638 5 Torso Carrying Bag M-1005639



# Life/form® AED Trainer with Basic Buddy™ CPR Manikin

Prepare students for emergency situations! Simply push a button to set the sequence of events that will help students learn the appropriate steps to follow in both "shock" and "no shock" situations. Instructors can select from four training scenarios for manual and hands-free training. Provides both audio and written prompts in English.

M-1018857





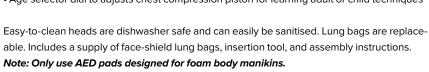


# **CPR Prompt® Training and Practice Manikins**

Low cost, professional quality manikins ideal for group training! Comprehensive design allows for practice of Heimlich manoeuvre, CPR and mouth-to-mouth breathing. Realistic anatomical markings (Adam's apple, carotid arteries, navel, rib cage, chest notch) make it easy to learn correct hand placement for checking pulse, performing chest compressions, and more.

#### Provides valuable student feedback and other important features:

- Head tilt/chin lift required to open airway
- Proper anatomical landmarks
- Audible compression "clicker" to ensure proper technique
- $\bullet \ \text{Age selector dial to adjusts chest compression piston for learning adult or child techniques}\\$

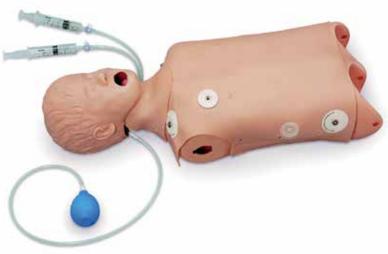


Description		Item No.
Adult/Child Manikin		M-1017939
Adult/Child Manikin, 5-Pack	includes Carrying Case	M-1017940
Infant Manikin		M-1018141
Infant Manikin, 5-Pack	includes Carrying Case	M-1017942
TPAK 700 CPR Prompt® 7-Pack	Includes five adult/child manikins, two infant manikins, 50 adult/child face shield/lung bags, 20 infant face shield/lung bags and nylon carry case	M-1017941



# Realistic training of:

- · Oral, digital, and nasal intubation
- Ventilation
- Suction
- CPR
- Jaw thrust techniques









# Mike and Michelle CPR and Trauma Care Simulator (5 years)

This anatomically accurate representation of a school age child is a perfect training tool for basic life support such as CPR and trauma care.

# Some of the features:

- Fully articulating head and jaw with teeth and tongue
- Individual disposable airways to practise hygienic mouth-to-mouth ventilation
- Airway blocked when head is forward
- Easily accessible chest cavity with moulded rib cage, lungs, and heart
- Realistic chest rise during ventilation
- Carotid, femoral, and brachial arterial pulse sites Comes with T-shirt and shorts, custom nylon carrying bag, and instruction manual.

# M-1017539

# Advanced Child CPR/Airway Management Torso with Defibrillation

This Life/form® advanced airway management trainer with tongue swelling and laryngospasm is perfect for practising skills on paediatric patients and represents the size of an 8-year-old patient. Realistic anatomy and landmarks include teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false and true vocal cords, trachea, lungs, oesophagus, and inflatable stomach bladder to indicate oesophageal insufflation. Practise defibrillation using standard manual, automatic, or semi-automatic external monitor defibrillators. An internal load box absorbs the full strength of every shock to protect students and equipment. It is also possible to monitor the manikin, just like a real patient, and is compatible with all standard brands and types of defibrillators, monitors, and patient simulators. Features 4 ECG sites and 2 defibrillation sites.

#### M-1018864



# **Child CPR Torso**

This economical CPR torso has a single-use airway/ lung/face shield system so you will never have to clean, disinfect, or disassemble it.

### Features include:

- Realistic chest rise
- Anatomical landmarks like sternum, ribcage and substernal notch 3 airway/lung/face shields included.

40 x 18 x 22 cm, 1.7 kg

## M-1005752

# Additional Items Required:

100 Airway/Lung/Face Shield Systems M-1005743
Carrying Bag M-1005744

# **CPR Simulator (Infant)**

This infant manikin features a realistic look and feel (soft facial skin, jointed elbows and knees, realistic hands, feet, fingers and toes) and is an invaluable educational tool for paediatric basic life support as well as patient care:

# Multipurpose features:

- Bag valve mask ventilation
- Intubation
- Tracheotomy
- Ostomy Care
- CPR Feedback
- Injection & Infusion
- Interchangeable Genitalia (catheterisation exercises)
- Intraosseous Access

## M-1014623









# **Pediatric One Year CPR and Trauma Care Simulator**

CPR and trauma care simulator with an automatically accurate representation of a one (1) year-old child. It is a superb training tool for paediatric basic life support. The upper torso of the simulator has life-size lungs, heart and ribcage, moulded in soft vinyl. The anatomy provides a realistic experience when practising cardiopulmonary resuscitation.

# Features:

- $\bullet$  Fully articulating head and jaw with teeth and tongue
- Individual disposable airways
- Airway blocked when head is forward
- Easily accessible chest cavity with molded ribcage, lungs and heart
- Realistic chest rise
- Four arterial pulse points

Comes with exercise suit, custom nylon carrying bag, and instruction manual.

## M-1017541

# **Paediatric CPR Manikins**

Economically priced manikins for teaching CPR. The lightweight, rugged, realistic manikin is foam-filled with no internal parts to break. Completely disposable airway system with a uni-directional valves. Life-like anatomical landmarks such as nipples, xiphoid process and sub-sternal notch.



Easy to change airway system

Description	Size	Item No.
Child Manikin (3 years)	82 x 24 x 15 cm, 4.1 kg	M-1005733
Infant Manikin (6-9 months)	66 x 20 x 20 cm, 2.8 kg	M-1005731
Newborn Manikin	66 x 20 x 20 cm, 2.3 kg	M-1005728



# PREMIE™ Blue Simulator with Smartskin™ Technology

PREMIE $^{\infty}$  Blue is a 28-week premature infant manikin that includes an injection arm as well as an intraosseous leg. Students can intubate and perform BVM and CPR exercises. The skin changes colour in direct response to the treatment, a great way of measuring training success. This is intensified by the possibility to track rates of improvement and deterioration on the monitor.

#### Realistic training of neonatal intensive care:

- Simulate "heelstick" manoeuvre for capillary blood sample
- Oral and nasal Intubation and suction procedures
- Bilateral lung expansion with realistic chest rise
- Distinguishing peripheral and central cyanosis from healthy skin tone
- Feeling pulse umbilicus
- Practise placement of umbilical lines
- Simulate CPR with either two-thumb "encircling" technique or two finger alternate compression method
- Practise delicate intraosseous access
- Practise injection and intravenous techniques



- PREMIE™ Blue neonate
- Omni<sup>™</sup> Controller for managing cyanosis and monitoring CPR
- Omni™ Code Blue® pack
- International power supply 100-240 VAC
- $\bullet \ Connecting \ cables, instruction \ manual, \ carrying \ bag$

## M-1018862







# Newborn CPR and Trauma Care Simulator with Code Blue® Monitor

This manikin is designed to teach the fundamentals of infant CPR and Trauma care. The Omni™ Code Blue® pack monitors and logs the cadence and depth of cardiac compression and airway ventilation. Its features include a fully articulating head and jaw with tongue and SAFE CPR™ individual disposable airways. Comes with instruction manual and carrying bag.

M-1017560



# Newborn CPR and Trauma Care Simulator with Intraosseous and Venous Access

With intraosseous access and femoral venous sites. No Omni $^{\rm IM}$  Code Blue $^{\rm e}$  monitor. Instruction manual and carrying bag included.

# **Comparison Guide**

Item No.	M-1018866	M-1017560	M-1017561	M-1014570
Features	•	_	_	•
CPR	•	•	•	•
Disposable Airway	•	•	•	•
Arterial Pulse Sites	•	•	•	•
Omni™ Code Blue® Pack		•		•
Intraosseous Access			•	•
Femoral Venous Site			•	•



#### **CPR Cathy™ Infant Manikin with Electronics**

The infant manikin can be filled with water to approximate the same weight and "feel" as a real child of corresponding size. Realistic chest rise, and other features like life-like rib cage, sternum, xiphoid process, and suprasternal notch to help train effective compression techniques. The trouble-free electronics housed outside of the manikin can be used to monitor correct performance during CPR training. Sensors activate lights and/or an audio signal to indicate correct lung ventilation, depth of compression, and correct finger or hand placement. Includes carrying bag with 12 disposable lungs.

 $66 \times 20 \times 20 \text{ cm}, 2.7 \text{ kg}$ 

M-1017247



# Sani-Baby CPR Manikin

This economical, baby-size manikin has a disposable, sanitary, single-user lung/airway and face shield system— no cleaning — no disinfecting — no disassembly. Sani-Baby features a realistic face, moulded hair, defined rib cage, and xiphoid process, as well as a realistic chest rise and anatomical landmarks such as sternum, ribcage and sub-sternal notch.  $66 \times 20 \times 20$  cm, 1.1 kg

M-1005745

Replacement Parts:

10 Mouth/Nose Pieces M-1018326 100 Airway/Lung/Face Shield Systems M-1005746 Carrying Bag M-1005744



# The Susie® and Simon® Newborn CPR and Trauma Care Simulator

SUSIE and SIMON Newborn is a life support training simulator that features a fully articulating head and jaw with tongue, and SAFE CPR™ individual dis-



posable airways. Its airway is blocked when the head is forward, and the chest cavity with moulded ribcage, lungs and heart is easily accessible. A realistic chest rise and arterial pulse points make the training even more more effective. Comes with instruction manual and carrying bag.

M-1018866



# Infant Choking Manikin

Train the challenges associated with foreign body obstruction in the young paediatric age group with this 9-month-old baby manikin. By placing the included obstruction in the pharyngeal cavity, you will occlude the throat and initialise the need for protocol manoeuvres to remove the object. When proper hand placement occurs with sufficient force, the object expels from the mouth.

M-1005778

# Pocket Mask (no image)

Soft cushion mask offers a secure seal, while the one-way valve and filter protects rescuers.

M-1018855

# Pocket CPR (no image)

Light, portable device, FDA cleared, teaches the rescuer what to do before initiating and gives feedback during CPR.

M-1018144

# **AED Trainer Plus 2 (no image)**

Pre-configured with 10 training scenarios that simulate realistic sudden cardiac arrest episodes.

# ADVANCED LIFE SUPPORT



# SMART STAT Complete with iPad®

This high end patient simulator takes ALS training into the student's environment. Instructors can evaluate student knowledge, skill levels, and critical thinking abilities by utilising the applications via the included iPad\*: the new interface makes these tasks a lot easier. Responsive controls and dynamic scenarios are easy to manage with PDF formatted reports.

This simulator can function in the lab and in the field for ascertaining diagnostic ability. Student performance records can be transferred to a computer, and chronological scenario event logs can be printed. SMART STAT has an on-board air compressor, includes a free app on the iTunes Store\* ("SMART STAT"), and storage for students' performances.

## SMART STAT Complete comes with:

- Amputated Bleeding Leg
- Intraosseous Leg
- Sim Vitals 5-line Hospital Monitor (simply display all vital parameters on the iPad\* or an external monitor)



#### **Key Training Features:**

- Advanced Airway Management
- ECG
- Pacing Emergent Lung Sounds (anterior and posterior)
- Emergent Heart Sounds
- BP Arm
- Pulse Points
- Bilateral Chest Decompression
- Bilateral Chest Tube Insertion
- Virtual Capnography and Oximetry
- Printable Chronological Student Session Reports & Scenarios

Also comes with an iPad $^\circ$ , USB cable, blood pressure cuff, hard carry case, shorts, and a supply of replacement parts: 10 neck skins, 4 IM injection pads, 6 pneumothorax pads, 3 sets of teeth, and IV vein kit. 140 x 71 x 28 cm, 88 kg

M-1018473



# SMART STAT Basic with iPad®

The basic version of SMART STAT comes without the Sim Vitals 5-line Hospital Monitor, Amputated Bleeding Leg, and I/O Leg.  $140 \times 71 \times 28$  cm, 61 kg

Consumables	Item No.
Amputated Bleeding Leg	M-1018590
Intraosseous Leg Adult	M-1018593
Pneumothorax Pads	M-1018571
IV Replacement Skin	M-1018572
Replacement Vein Set	M-1018573
Injection Site Replacement, Arm	M-1018574
Injection Site Replacement, Thigh	M-1018575
EMS Scenario Package	M-1018578
Nursing Scenario Package	M-1018579

# **Adult ACLS Manikin** with Interactive Arrhythmia Simulator This full body manikin offers a wide range of ACLS training possibilities including arrhythmia recognition and confirmable defibrillation. The interactive ECG Simulator unit allows defibrillator and pacer training directly on the manikin (training without a manikin is also possible). Various ECG rhythms can be generated and displayed on an ECG-monitor (not included) for diagnostic and defibrillation training. All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available. • CPR: A printer unit allows CPR evaluation Airway Management • I.V. and I.M. Injection (at arm)

Defibrillation ChestInteractive ECG-Simulator

LED illuminates for pacer pulse detection, defibrillator discharge detection, adult mode, paediatric mode and low battery warning. Supplied with a storage case.

119 cm, 28 kg

M-1005649

Consumables and Options	Item No.
Adaptor with Control Training Cables	M-1017990
Blood Pressure Cuff	M-1019717
Blood Pressure Electronic Box	M-1019718
Stomach	M-1005608
Artificial Blood, 1 litre	M-1005611
Injectable Training Arm: Replacement Skin and Vein Kit	M-1005647
Venous Blood – Gallon	M-1005691
Fluid Supply Stand	M-1005692

# **Deluxe CRiSis<sup>™</sup> Torso Manikin**

This easy to transport torso allows training of the following ACLS procedures:

- CPR: Palpable and visual landmarks, fully articulated head, neck and jaw
- Airway Management: Cricoid cartilage allows for practice of Sellick manoeuvre, separate left and right lungs for auscultation, suctioning capabilities, and oral, nasal and digital intubation capabilities
- Defibrillation Chest: Internal load box absorbs full strength of every shock, manual, semi-automatic, automatic defibrillation, monitor manikin like a real patient
- Interactive ECG-Simulator: The external unit allows defibrillator and pacer training directly on the manikin.
   All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available.

Battery saver feature powers-off simulator automatically when not in use.  $10.5 \ kg$ 

M-1005650



Consumables and Options	Item No.
Blood Pressure Electronic Box	M-1019718
IV Arm	M-1019767
Complete Compression Unit	M-1019771
CPR Light Controller	M-1019779
Complete Crisis Update Package	M-1019784
Zoll Training Cables with Adaptors	M-1019785
Crisis Manikin Auscultation Kit	M-1019786
Electronic Monitoring, Memory, and Printer Unit	M-1019633
Interactive ECG Simulator	M-1005666

# More available online!







#### **Truman Trauma**

The Truman Trauma System offers an anatomically correct simulated human torso designed for practice of several surgical procedures together with the renowned AirSim head for training the full range of airway management and resuscitation skills. The Truman Trauma System also allows the use of replaceable tissue sets that allow each learner a life-like & unique surgical experience.

79 x 45 x 28 cm, 14 kg

#### M-1017521



- Chest tube insertion
- $\bullet \ {\sf Needle\ Decompression\ of\ tension\ pneumothorax}$
- Cardio Pulmonary Resuscitation
- Needle and Surgical Cricothyroidotomy
- Airway Management Skills including OP and NP airway tube insertion, tracheal intubation, bag valve mask techniques, supraglottic airway insertion and ventilation
- Percutaneous Tracheostomy
- Identification of tracheal deviation and jugular vein distension

Consumables	Item No.
Needle Decompression Inserts	M-1017611
Overlay Neck Skin	M-1017613
Chest Drain inserts three layer (set)	M-1017608
Chest Drain inserts one layer (set)	M-1019395
Lubricant	M-1017615



#### Life/form® Deluxe Child CRiSis® Manikin with ECG Simulator

This full body manikin of a 5-year old child offers a wide range of ACLS training, including:

- CPR
- Airway Management
- I.V. Injection (at arm)
- Blood Pressure Measurement
- Intraosseous Infusion
- Femoral Access
- · Defibrillation Chest

The interactive ECG Simulator unit allows defibrillator and pacer training directly on the manikin. Various ECG rhythms can be generated and displayed on an ECG-monitor (not included) for diagnostic and defibrillation training. All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available. 119 cm, 12 kg

## M-1005624

Consumables and Options	Item No.
Blood Pressure Cuff	M-1019717
Blood Pressure Electronic Box	M-1019718
Advanced Child Airway Management Trainer, Head Only	M-1019787
IV Ar Child- 5 years old	M-1019790
Blood Pressure Ar 5 years old	M-1019791
Intraosseous Infusion/Femoral Access Leg- 5 years old	M-1019792
Artificial Blood, 1 litre	M-1017611
Life/form® Injectable Training Arm Replacement Skin and Vein Kit	M-1005654
Interactive ECG Simulator	M-1005666

# More consumables are available online!



# **ECG Training Vest**

The new ECG Training Vest offers an inexpensive way to communicate with a live patient while monitoring. Since the volunteer wears this vest there is no need to use a high fidelity simulator. Vest can be hooked up to the ECG Simulator. Includes the interactive ECG Simulator, contains no electrical energy and is not for defibrillation practice.

30.5 x 30.5 x 22.9 cm; 2.25 kg

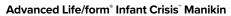
M-1017249

# Deluxe Life/form® Infant Crisis® Manikin with Interactive ECG Simulators

Everything you need in one manikin! This dramatic, state-of-the-art training manikin is a complete resuscitation system designed for teaching life-saving techniques for infants. Ideal for paediatric advanced life support, nursing, paramedic, and EMT training at every level. Tactile and visual realism combined to provide students with the most realistic training possible.

Allows practice of 4-lead ECG monitoring, IV therapy, umbilical catheterisation, airway management, intraosseous infusion, and CPR – all in one manikin! Includes Interactive ECG Simulator and a hard carrying/storage case.  $65 \times 44 \times 14$  cm

M-1018146



All features of the Deluxe version but without the ECG Simulator. M-1005658



Consumables and Options	Item No.
PALS Infant Update Kit	M-1019798
Leg Skin Replacement Kit	M-1019799
Intraosseous Leg Replacement Skin (Pkg. of 4) and Bones (Pkg. of 10)	M-1005659
Interactive ECG Simulator	M-1005666
Life/form® Single Intraosseous Infusion Leg	M-1017951
Life/form® Infant IV Leg	M-1017950
Life/form® Infant IV Arm	M-1017949
ECG/Umbilical Cannulation Skin	M-1017952

# Basic Life/form® Infant Crisis Manikin

This dramatic training manikin is ideal for beginning practice and building basic skills before working on the more advanced skills of the Life/form® Infant or Deluxe Infant CRiSis® Manikins. Anatomical landmarks provide key features necessary to learn proper infant handling in emergency situations like airway management and CPR. Can be upgraded by adding the Manikin Modular Components available below.

# M-1017248



Consumables	Features	Item No.
Life/form® Infant IV Arm	Cephalic and basilic vein are accessible, as well as the dorsal venous arch on the hand. Comes with 2 IV bags with clamps, on pint Life/form® blood, and winged infusion set.	M-1017949
Life/form® Infant IV Leg	The greater and less saphenous veins are accessible, as well as the dorsal venous arch on the foot. Comes with 2 IV bags with clamps, 1 pint Life/form® blood, one 3 cc syringe, one 22-gauge needle, and winged infusion set.	M-1017950
Life/form <sup>®</sup> Single Intraosseous Infusion Leg	Comes complete with 10 replaceable bones, 2 sets of replacement skins, a fluid administration kit enabling you to visualise a flashback and infuse fluid into the leg, and intraosseous infusion needle.	M-1017951
ECG/Umbilical Cannulation Skin	Has four sites for ECG monitoring. Comes with 1 pint of Life/form* blood, 1 IV bag with clamp, one 3 cc syringe, 6 umbilicus clamps, and 5 replacement cords.	M-1017952
Infant Airway Management Trainer, Head Only	Comes with a pump spray lubricant.	M-1017953
ECG-Simulator	All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available.	M-1005666

# More available online!



# Life-like Neonatal Patient Care Simulation!

**NENAsim** was created to complement realistic multidisciplinary team or individual baby patient simulation training. NENAsim is a neonatal, high end simulator with unprecedented level of realism and offers an ideal training solution for a wide range of healthcare professionals including patient care, emergency medical intervention and resuscitation training.

The combination of the neonatal simulator and the software make for the perfect training combination. Experiencing the movements with realistic haptic feedback and being able to use varying scenarios with the software allow for a fast and lasting learning effect.

The software provides WI-FI communication between the baby and the monitor (not included). It has a user-friendly touchscreen interface which allows control of the NENAsim baby simulator movements and shows its vital signs. Configurable parameters are displayed on the patient monitor for real-time training interaction.

The NENAsim patient software is a perfect tool for training baby examination. It has the following parameters for setting up various scenarios: blood pressure, heart-rate, ECGs, SpO2, CO2, ABP, CVP, PAP, PCWP, NIBP, TOF and many more. The trainer can choose from one of the 5 available standard scenarios or build their own. New parameters can be added at any time in order to alter the existing scenarios. Individual as well as team trainings with different language options are possible. Trainees learn from monitoring the displayed parameters – it enables them to deduct the correlation between the measured values and the clinical picture of the patient, thus helping in recognising and managing paediatric emergencies.

Please scan the code on the right page to see the realism of NENAsim in a video demonstration.

#### Realistic Anatomy

NENAsim has a lifelike appearance and movement of the eyes, head and neck. The silicone skin changes its temperature, whereas no visible artificial joints make its outer appearance even more realistic. Variable breathing patterns as well as torso motion can be controlled via provided software.

#### Airway Management

Paediatric airway management remains the most difficult task that many health-care professionals need to face. Success of any technique or clinical performance depends on constant training which comes from understanding anatomical and paediatric airway facilities. NENAsim allows to perform all aspects of neonatal airway management training and gives trainees the necessary confidence to deal with their little patients in the future.

#### **Breathing**

Newborns and infants might experience breathing difficulties resulting from several different illnesses. NENAsim offers a variety of difficult breathing patterns and complications to help learners tackle these difficult problems in the future. In addition, NENAsim makes the training even more realistic through its vocal sounds: crying, coughing or hiccupping.

#### **CPR**

About one quarter of all neonatal deaths are caused by failing to initiate and sustain breathing at birth. Effective resuscitation can prevent a large proportion of these deaths – NENAsim has been designed to teach the fundamentals of infant CPR and trauma care. Open the airway by tilting NENAsim's head and chin, and begin the resuscitation.

#### **Blood circulation**

Blood pressure, pulse rate and respiratory rate are the routine vital signs measured in neonatal care. NENAsim offers versatile BP and ECG features, all of which can be controlled and displayed on the monitor.

Comes with carrying case and charger. Compatible with both Microsoft Windows and MacOS. Please contact the Customer Service Team for more information or to schedule a demo.

# NENAsim - Neonatal Simulator

55x12x50 cm; 4.6 kg **Light skin:** M-1018875 **Dark skin:** M-1018876







# STAT Baby - Training for Life

STAT Baby brings you an extremely life-like simulator for infant care by utilising new materials for tactile awareness during patient assessment. Developed in conjunction with leading paediatric physician involvement, this baby contains a wide range of skill sets in a simple format that is very affordable. The infant is sized to a 9-month-old.



# Features:

- IO leg
- Peripheral IV (left hand and foot)
- IM left deltoid and thigh and SC injection sites
- PICC line
- ET tube insertion
- Laryngeal spasm
- Tongue edema
- LMA insertion
- Trach care

- NG tube placement with fluid reservoir
- Feeding tube care
- Rectal medication
- Pulses (6 pulse locations 2 brachial, 2 femoral, 2 carotid)
- Defib (shock level 2-4 joules per kg)
- Foley cath insertion (female manikin)
- Pneumothorax

Comes with IV vein kit (1 arm and 1 leg), leg skin (1), arm skin (1), IO leg bones (12), pneumothorax sites (4), injection site (2), Picc line site (1), reservoir bag (4), defibrillator adaptors, ECG interactive simulator, and simulated blood powder (1). 6.8 kg M-1005779



# PEDI® Blue Neonatal Simulator with SmartSkin® Technology

A spectacular newborn simulator which changes colour based upon an initial pre-selected condition and measures the effectiveness of airway ventilation and chest compression. In addition, the simulator has all the conventional features found in airway management trainers. Can be upgraded with an intraosseous leg and an injection training arm.

# Simulator components included:

- PEDI Blue neonate
- OMNI® Controller for managing cyanosis and monitoring CPR
- OMNI® Code Blue® pack
- International power supply 100-240 VAC
- Connecting cables, instruction manual, carrying bag **M-1013066**





#### Features of the PALS Manikin include:

- Bag valve mask ventilation
- Oral and nasal intubation including Sellick's manoeuvre
- Placing of NG tube
- Three lead ECG monitoring (16 different arrhythmias with adjustable heart rate)
- Palpation of brachial pulse
- External chest compressions
- Movable jaw
- I.V sites in hand and arm for blood sampling or fluid injection
- Intraosseous needle insertion and aspiration of bone marrow in both legs
- Palpation of scalp vein, cranial sutures and fontanelles Soft carry bag included. 57 cm; 3 kg

#### M-1005759

Consumables	Item No.
2 Arm/Hand Skins	M-1005762
4 Leg Skins	M-1005761
Arm/Hand Vein Set	M-1005763
4 Lungs/Stomachs	M-1005764
12 Intraosseous Bones w/ Blood Capsules	M-1005760



# **Newborn PEDI Simulator**

This anatomically accurate newborn simulator features a fully articulating head, neck, and jaw, permitting head tilt/chin lift, jaw thrust and neck extension. Realistic mouth, trachea, bronchi, lungs, and distensible stomach for practising gastric suctioning and feeding exercises. Airway with crico cartilage permits intubation, suctioning, and the Sellick manoeuvre. Realistic internal organs for unparalleled CPR performance.

# This simulator is ideal for training:

- Airway management
- Femoral IV
- Intravenous access
- Umbilical catheterisation'
- IO access

Includes carrying bag and Omni\* Code Blue\* Pack for CPR monitoring.







# **AIRWAY MANAGEMENT**



# **Adult Airway and CPR Trainer**

The perfect trainer for practising fundamental intubation and CPR skills. Features a life-like airway and a durable chest recoil system. IT is OMNI and CPR compatible, thus capable of providing real time CPR quality feedback and reporting.

- Nasal and oral Intubation: ETT, LMA, King LT®
- Gastric distension with oesophageal intubation
- Nasal passage permits placement of NP tube

#### M-1019855





#### Simon® Adult Multipurpose Airway and CPR Trainer

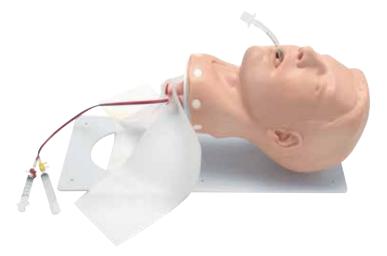
Train participants to recognise laryngospasm and if needed, perform an emergency tracheotomy or cricothyrotomy. To improve CPR training, add the OMNI Code Blue Pack option to view real-time CPR quality feedback via the handheld OMNI controller and PC link software.

- Laryngospasm
- Tracheostomy and cricothyrotomy
- $\bullet$  Nasal and oral Intubation: ETT, LMA, King LT $^{\circ}$
- Gastric distension with oesophageal intubation

# M-1019856

Option:

Omni<sup>®</sup> Code Blue<sup>®</sup> Pack M-1020211



# **Adult Deluxe Airway Management Trainer**

The life-like feel and an anatomy emphasising accurate visualisation features makes this trainer the choice for advanced airway management with the convenience of board mounting. Features include laryngospasm and tongue edema. Both air bags for lungs and stomach are visible for easy determination of successful intubation. All the anatomical landmarks are shown and the vocal cords are highlighted for easy viewing. The upper teeth break out if inappropriate technique is applied during intubations. Board is anchored to surfaces by suction cup feet. Delivery with soft carry bag, lubricant and instructions for use.

#### AirSim Advanced Model

The AirSim Advanced Model features the uniquely constructed AirSim airway, designed to provide true, anatomically correct and visually accurate internal features. The addition of a "real-feel" skin covering provides a more realistic bag mask ventilation training experience.

#### Features:

- Improved neck design allowing for accurate articulation
- · Anatomically accurate nasal passage
- Inflatable tongue to increase difficulty of airway
- $\bullet$  Option to include "breakout teeth" to simulate the effects of bad practise in laryngoscopy 46 x 26 x 33 cm; 3.05 kg

AirSim Advanced
With Bronchial Tree

M-1015527 M-1015530







# AirSim Bronchi Model with Nasal Passage

The AirSim Bronchi is the latest product addition to the AirSim family, providing anatomically correct detail down to the fourth generation bronchi. The AirSim Bronchi provides exceptional detail in both internal and external features; made possible through a combination of cutting edge moulding technology and carefully handcrafted processes.

# The AirSim Bronchi unit will provide a solution to your training needs in:

- Diagnostic bronchoscopy
- Lung isolation techniques using left and right endobronchial tubes and bronchial blockers
- Lung suctioning techniques
   46 x 26 x 33 cm; 3.05 kg

M-1015523



# **AirSim Standard Model**

The AirSim Standard is uniquely constructed to allow realistic feedback during airway management procedures and provides true, anatomically correct and visually accurate internal features. The novel neck construction allows the head to be moved and secured in a number of positions. This ranges from the standard "sniffing" position to more difficult scenarios. The AirSim Standard also features an inflatable tongue with real-life size and texture. There is also an option to include "breakout" teeth to simulate the effects of bad practise in laryngoscopy.

46 x 26 x 33 cm; 3.05 kg

M-1015515

# AirSim Multi Model with Nasal Passage

The AirSim Multi contains the key features of the AirSim Standard
Model with the addition of a nasal
passage and a chin. The AirSim Multi
Model facilitates training on nasal
procedures as well as bag and mask
ventilation techniques. The nasal passage has been developed in a man-



ner similar to the main airway. This gives the same anatomical realism and functionality, important landmarks such as the turbinates are clearly defined. In addition, the material used offers the same tactile feedback which is delivered with the main airway itself.



# "Airway Larry" Torso with **Defibrillation Features, ECG Simulation, and AED Training**

The Life/form® Advanced "Airway Larry" Airway Management Trainer is now even better with chest skin that lets you practise defibrillation using standard manual, automatic, or semi-automatic external monitor defibrillators. An internal load box absorbs the full strength of every shock to protect students and equipment. The included interactive ECG simulator comes with 6 waveforms available for pacing and 17 Adult/Paediatric Rhythms. The included Life/form® Universal AED Trainer can be used to set the sequence of events that will help students learn the appropriate steps to follow in both "shock" and "no shock" situations.

#### M-1018868



**Management Trainer on Baseboard** 

This trainer simulates a non-anaesthetised patient and features anatomical landmarks such as: teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false cords, true vocal cords, trachea, lungs, oesophagus, cricoid cartilage and stomach.

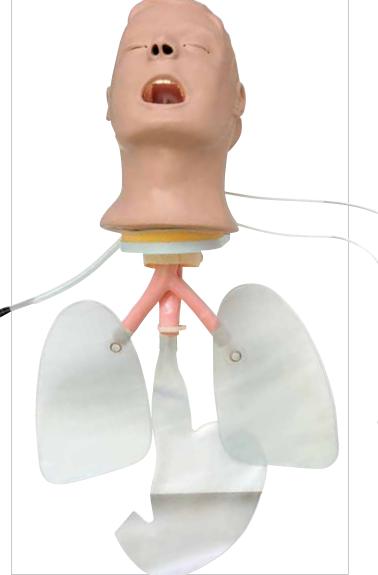
Train the following procedures: Oral, digital, and nasal intubation E.T., E.O.A., P.T.L., L.M.A., E.G.T.A., and Combitube® insertion, Sellick manoeuvre, ventilation, CPR, suction techniques, and proper cuff inflation call all be practised and evaluated.

On baseboard. 63 x 30.5 x 40.6 cm; 15.1 kg

#### M-1005633

# Consumables:

Consumables.	
Mounting Kit for Airway	M-1019812
Larry Management Head	
Lungs	M-1005607
Stomach	M-1005608
Lubricant Spray	M-1005634
Hard Carry Case (for	M-1019811
Airway Trainers with Stand)	
REN Cleaner	M-1005776



# **Advanced Airway Larry Trainer Head on Baseboard**

The Life/form® Advanced Airway Management Trainer Larry offers tongue swelling and laryngospasm in addition to all the features on the standard models. Your students can now be presented with the additional challenges they may face in the real world. The trainer simulates a non anaesthetised patient for practising intubation, ventilation, and suction techniques. Realistic anatomy and landmarks include teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false cords, true vocal cords, trachea, lungs, oesophagus, and stomach. The trainer allows you to practise oral, digital, and nasal intubation, as well as E.T., E.O.A., P.T.L., L.M.A., E.G.T.A., Combitube®, and KING System insertion. On baseboard.



# **Adult Airway Management Trainer**

Detailed anatomy provides a clear picture for intubation training: sculpted alveolar sac, bronchial tree, blood vessel structures of the cross-sectioned and exposed flexible lungs, interior main bronchus and oral/nasal pharyngeal spaces. Combine these with an airway complicated by breakout teeth, tongue edema, and laryngospasm, and this airway trainer really stands out. The stomach swells with oesophageal intubation, or excessive pressure with the BVM during rescue breathing, and it is also has the capability of vomiting. Comes complete with instructions for use, soft carry bag, lubricant, and replaceable lungs and stomach.

32 x 24 x 12 cm; 18.65 kg

M-1005774



# Train the initiation of respiratory care to a critical patient.

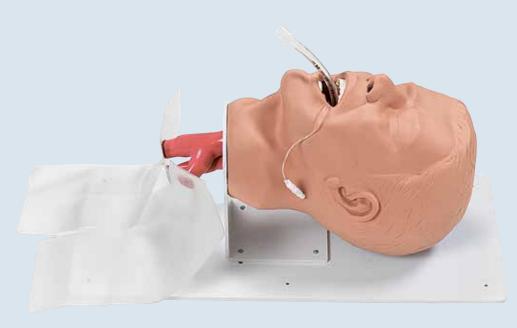
# **Critical Airway Management Trainer**

This advanced intubation head, coupled with the CPR torso, supplies the challenges for initiating respiratory care to the critical patient. By using the features of tongue swelling and laryngospasm the instructor creates a critical airway management problem that requires the student to perform cricothyrotomy. In addition, two external and one internal bleeding wounds demand attention with suctioning and bleeding control.  $68.6 \times 43.2 \times 25.4 \text{ cm}$ 

M-1017955

**Optional Extras and Replacement Parts:** 

Lungs/Stomach – 3 Pack M-1017956 REN Cleaner M-1005776



# Economy Adult Airway Management Trainer

The basic version for training of intubation procedures and skills, including anatomy knowledge and recognition, endotracheal intubation, nasotracheal intubation, use of field emergency airway adjunct tubes like LMAs and Combitube, securing, and suctioning, and maintenance of the installation can all be practised with this unit.







#### **Cricotracheotomy Trainer**

An extremely realistic alternative to using animal tissue or cadavers. The soft tissue has the feel of real skin and the unique trachea make it a very effective teaching and learning tool. Using a simple disposable trachea transforms the trainer into an effective low-cost system.

#### Key Skills:

- Palpation of anatomical landmarks and needle cricothyroidotomy
- Practise surgical cricothyroidotomy with scalpel
- Identification of cricothyroid and thyroid cartilage
- Practise insertion of mini trach devices
- Use Percutaneous Tracheostomy Kit or Seldinger approach
- Asses stylet and obturator placement

45 x 15 x 36 cm

M-1005180

Consumables:

Tracheal Rings M-1005182
Trauma Kit M-1005181



#### **Cricothyrotomy Simulator**

Designed for needle or surgical cricothyrotomy. Landmarks include thyroid cartilage, cricoid cartilage, and cricoid membrane. Inflation of simulated lung verifies correct placement. Adult and 3-year-old tracheas and soft carry bag included. With four overlay skins.

30.5 x 21.6 x 24.1 cm

M-1017948

Consumables:

Overlay Skin M-1019229



#### **Cricothyrotomy Simulator**

The Cricothyrotomy Simulator offers the perfect alternative to cadavers. Palpable landmarks include the cricoid and thyroid cartilage. The prominentia laryngea is prominent on the hyperextended neck. All landmarks are accurately placed and allow for fast action. The "trachea" in this simulator is replaceable as the "airway" passes completely through from top to bottom. This allows checking the stylet and obdurator placement once the "stab" has been made. Complete with a full-size neck, ties can be used to hold the obdurator in a secure position. Comes complete with five replacement skins and five cartilage inserts, REN cleaner, instruction guide, and a durable carrying case.

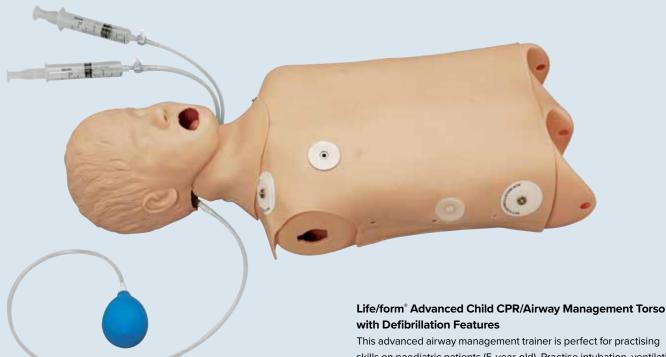
M-1017239



#### **Tracheostomy Care Simulator**

The simulator replicates an adult male containing oral and nasal passages and all appropriate anatomy — pharynx, epiglottis, trachea, oesophagus, stoma, cricoid cartilage, and representative cervical vertebrae. The chest area contains left and right bronchi and the bronchial tree. The oesophagus "dead ends" 2" below the trachea opening. The side of the neck and chest area over the bronchial tree allow viewing of the suction and trachea tube. Viewing window at the bottom of the simulator. Tracheostomy tube is not included.

53 x 28 x 53 cm; 11 kg



# Life/form® Basic Child CPR/Airway Management Torso (not shown)

Ideal for practising intubation, ventilation, suctioning techniques, and CPR. This torso is designed to be the foundation of the Child CRiSis" system. Features like the defibrillation skin can be added, see 3bscientific.com for full list of optional equipment. Includes pump lubricant.

M-1018865

Optional equipment:

**Defibrillation Chest Skin** M-1019789

skills on paediatric patients (5-year-old). Practise intubation, ventilation, suction, CPR, and jaw thrust techniques. Also offers tongue swelling and laryngospasm in addition to all the features on the standard models.

- · Realistic anatomy and landmarks
- Oral, digital, and nasal intubation
- E.T., E.O.A., P.T.L., L.M.A., E.G.T.A., Combitube®, and King System
- Separate lungs for auscultation
- Manual carotid pulse
- Inflatable stomach bladder indicates oesophageal insufflation Practice defibrillation using standard manual, automatic, or semi-automatic external monitor defibrillators. An internal load box absorbs the full strength of every shock to protect students and equipment. M-1018864



# Advanced Child Airway Management Trainer, Head Only

A simulated head of a 5-year-old child featuring realistic size and anatomy. Perfect for practising airway management skills on paediatric patients. Realistic anatomy, tongue edema and laryngospasm features. Separate lungs can be added for auscultation. Practise suctioning and oral, nasal, and intubation techniques. Can be attached to any of the Life/form® Child Airway Management Trainers or Child CRiSis Manikins. Lungs and stomach not included. Pump spray lubricant included. Manual carotid pulse.

M-1019787



# Child Airway Management Trainer Head with Lungs and Stomach

A simulated head of a 5-year-old child featuring realistic size and anatomy. Perfect for practising airway management skills on paediatric patients. Realistic anatomy, practise suctioning and oral, nasal, and intubation techniques. Separate lungs can be added for auscultation. Can be attached to any Life/form® Child Airway Management Trainer or Child CRiSis" Manikin. Pump spray lubricant included. Manual carotid pulse. M-1019788





# Airway Trainer, 1 Year old Child

Skill training designed to present the same challenges experienced by paramedics and physicians in the real world with very young patients.

# Full body manikin features:

- Realistic chest cavity containing realistic organs
- Fully articulating head, neck and jaw permitting head-tilt/chin lift, jaw thrust and neck extension into the sniffing position
- Anatomically accurate mouth, tongue, airway and oesophagus of a 1 year old
- Soft neck with cricocartilage permits classic Sellick manoeuvre
- Realistic chest rise during ventilation
- Realistic trachea, bronchi and lungs. Observable bilateral lung expansion under positive pressure ventilation
- Airway narrows below vocal cords (realistic with "fish-eye" appearance)
- Airway diameter
- Nasal passage permits placement of NP tube Includes carrying bag and instruction manual.

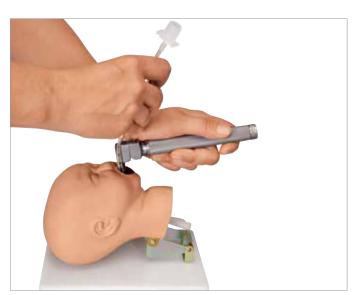
#### M-1018863



## **NG** Tube Insertion Trainer

Use this economical trainer for instruction of nasogastric tube insertion and care. The oesophagus and stomach reside within the head for ease in storing and transporting to various classrooms or lab tables. The head comes mounted on a flat plate to hold it steady. No moving parts and simple construction assure longevity. The only replacement part is the stomach bag. Clean up is easy and quick.  $31 \times 31 \times 23$  cm; 1.4 kg

M-1017250



# **Intubation Head**

This model is especially designed to instruct and practise endotracheal intubation. The accurately modelled life-size head allows the correct depth, angle, and pressure of insertion of a laryngoscope to be taught. Mounted on base. Delivered without laryngoscope. 21 x 16 x 17.5 cm; 0.6 kg



#### **Advanced Infant Intubation Head with Board**

This station trainer incorporates new skin technology. The new material eliminates tearing of the airway, caused by beginning student intubation attempts. Translucent property allows for life-like illumination of the airway and neck as the skill is attempted. Vocal cords are highlighted for easy viewing, the tongue swells, and all the anatomical landmarks are present.  $38.1 \times 25.4 \times 20.3$  cm; 4.08 kg

M-1017236



# Infant Intubation Head

This trainer of an infant allows practice and training of nasal and oral intubation.

#### Features include:

- Inflatable lungs and stomach
- Vocal cords are highlighted in white for easy laryngoscope viewing
- Anatomical landmarks such as uvula, vocal cords, glottis, epiglottis, larynx, arytenoid cartilage, trachea, oesophagus.

Supplied with carrying bag and lubricant.  $30 \times 20 \times 13$  cm; 0.8 kg **M-1017245** 

Consumables:

3 Lungs/Stomachs M-1005758
REN Cleaner M-1005776
Lubricating Gel M-1008575



# AirSim Baby

Features realistic anatomy and a clinical functionality that enables basic and advanced paediatric airway management. AirSim Baby facilitates training in the use of bag/mask ventilation, supraglottic airway insertion and both naso and orotracheal intubation. In addition, it can be used with all current video laryngoscopes. Realistic airway allows for training in all aspects of infant airway management including positive pressure ventilation, insertion of laryngeal masks and endotracheal intubations (nasal and oral).

M-1015536

Train both basic and advanced paediatric airway management.





# **Infant Airway Trainer on Baseboard**

The infant airway management trainer features realistic size and anatomy and is perfect for practising airway management skills on an infant. On baseboard.

# **RESCUE & MOULAGE**





# Can be filled with water or sand to adjust the weight!

# Rescue Randy 9000

Designed to be customised by the user for optimal training use. The manikin is made from rugged polyethylene parts that allow for the addition of varying amounts of weight (maximum weight filled with water 77 kg or sand 113 kg) to each of the pieces. The empty manikin is easily moved and stored when training is completed.

#### Train with Randy 9000 in any environment imaginable!

The range of motion of the joints, including bending at the waist, mimics real life. Randy 9000 is perfect for RIT or Combat Challenge as well as ship-board, heavyweight, horizontal rescues or lightweight packaging exercises like spinal immobilisation. The joint design protects rescuers' fingers. May be used in all weather conditions. Each manikin component is easy to replace.

M-1017945



# I.A.F.F. Rescue Randy Strengthened for Extrication Training

Designed with the help of the International Association of Fire Fighters. Developed for life-like adult or juvenile patient handling, transportation. Includes additionally reinforces frame to increase durability for the forces used in extrication training.

#### Features include:

- Fully articulated for positioning in widely diversified training environments
- Weight distribution according to human weight distribution chart
   1.83 m tall, approx. 84 kg clothing not included.

M-1019955



# TI Rescue Randy Trainer with Thermal Imaging

The thermal imaging capability with TI Rescue Randy Trainer expands options for rescue training. Thermal imaging scanners are now able to see Randy at a distance of over 6 m. Special heaters in the face and hands operate off of standard 110V or

220V power outlets and reach the desired temperature in 15 minutes. You can set the temperature you want on TI Rescue Randy and he will be visible on a scanner for over 45 minutes unplugged. Ideal for rescue training in buildings or search and rescue in the field, Rescue Randy TI will stand out from the background thermal image.

Approx. weight 74 kg.

M-1019954



# Flexible Rescue Randy

Developed especially for the aerospace industry and wing tank fuel cell rescue training, this regular sized Rescue Randy unit can be utilised in any confined space rescue scenario. The waist and head are flexible allowing a wide range of movements. This allows positioning under dashboards and in other extremely tight spots.

M-1017944



# **Bariatric Rescue Suit for use with Rescue Randy**

Developed for training scenarios for the extrication of morbidly obese patients. The Bariatric Suit replicates the weight and the movement in body tissue associated with morbidly obese patients. The weight can be modified up to approx. 200 kg by adding water.. When the exercise is complete, the water can be simply drained away, thus making the manikin more portable. In its dehydrated version, the manikin can be easily transported between locations. Suit is for manikin use only, fits the original Regular Rescue Randy manikin.

# M-1017943

A simple way to upgrade your rescue manikins:

# Weighted Vests (not shown)

Optimise training and increase the complexity of scenarios by adding a weighted vest to rescue manikins.

Approx. weight 74 kg.

9 kg M-1005705 13,5 kg M-1005706 18 kg M-1005707





# **Rescue Manikins**

# Developed for life-like adult or juvenile patient handling, transportation, and extrication training!

These manikins can be safely used in situations too hazardous or uncomfortable for human volunteers. Fully articulated for positioning in widely diversified training environments. The manikins can be seated in an automobile, positioned in a smoke-filled room for fire rescue training, and immobilised on a stretcher for mountain rescue instruction. They are also useful for simulating the removal of victims from utility poles, conduits, mine cave-ins, and tunnels as well as in limitless other training procedures. Made of tough cast vinyl with zinc-plated steel frame for longevity and rugged use. Not fire resistant, not for water rescue.

M-1005704 Rescue Manikin, 1.22 m tall; 7 kg

Rescue Manikin, 1.67 m tall

M-1005700
M-1005701
M-1005702
M-1005703

Rescue Manikin, 1.83 m

M-1005768 65 kg M-1005769 74 kg

Recommended:

1.83 m Carrying Bag M-1005770



#### **CPR Water Rescue Manikins**

Perfect for Coast Guards, Lifeguard Trainers, and Emergency Personnel to train water rescue and retrieval as well as CPR. The manikins have articulated joints and are made of durable plastic and rust-resistant steel. When filled with water the manikins will submerge to the neck, if an additional 2 or 4 kg. (a brick will do) is added, they will sink completely.

Adolescent, 1.22 m tall, 9 kg M-1018325 **Replacement Parts:** 24 Airway Systems M-1005735 10 Mouth/Nose Pieces M-1018326 M-1005767 Adult, 1.64 m, 13 kg

M-1005765 24 Airway Systems 10 Mouth/Nose Pieces M-1005741



**Replacement Parts:** 

# **Pocket CPR**

This FDA cleared device reminds the rescuer what to do before initiating CPR and coaches the rescuer with feedback during CPR.

M-1018144

# **Water Rescue Manikins**

These manikins allow coast guards, lifeguard trainers, and emergency personnel to train water rescue and retrieval. When filled with water the manikins will sink to the bottom.

D. Child Water Rescue Manikin 3 years old. Weight when filled with water: 9 kg M-1005739

E. Infant Water Rescue Manikin 6 – 9 month old. Weight when filled with water: 5.5 kg M-1018327

F. Newborn Water Rescue Manikin Weight when filled with water: 3.2 kg M-1005699



# Comprehensive set for advanced casualty simulation!



#### **Casualty Simulation Kit IV**

This complex casualty simulation kit uses components applied to human and manikin patients for the widest variety of training situations possible. Wounds can be strapped on, stuck on, created from wax, and can bleed to challenge both the volunteer and the professional in areas of burns, lacerations, fractures of arms and legs, and amputations.

# Realistic tools for life-like emergency medical training! Simulated wounds include:

#### Bleeding:

 Jaw wound, abdominal wound with protruding intestines, sucking wound of chest, compound fractures of humerus, femur, and tibia, laceration of the forehead, open amputation, gunshot wound of palm

#### Non-bleeding:

- Assorted stick-on lacerations and open fracture wounds
- Phosphorous burn of the hand, face in shock
- $\bullet$  2nd & 3rd degree burn of the face, chest, back, hand, and forearm Comes complete with extensive makeup accessories and reservoir bags with pump assembly. 61 x 23 x 46 cm, 14.6 kg

#### M-1005711

## Stick-on Wounds (not shown)

12, assorted

M-1019676



# Casualty Simulation Kit I

The most economical way to get started in simulated injuries. Re-useable wounds and refillable accessories let you practise bandaging and splinting techniques repeatedly.

#### Includes:

#### **Bleeding wounds:**

• 1 Compound fracture tibia

## Non-bleeding wounds:

• 12 Assorted stick-on lacerations and open fractures

Comes complete with basic makeup accessories (including acrylic to stimulate glass embedded wounds) for basic injury simulation and reservoir bags with pump assembly.  $33 \times 25.5 \times 13$  cm, 2.3 kg

M-1005708



# Casualty Simulation Kit II

For more complex wounds to test higher levels of skill in bandaging and patient care while keeping initial expenditures low.

#### Includes:

#### **Bleeding wounds:**

- Open amputation, compound fracture of humerus, and compound fracture of tibia
- Sucking wound of chest, gunshot wound of palm

# Non-bleeding wounds:

• 24 Assorted stick-on lacerations and open fractures

Comes complete with makeup accessories (including acrylic to stimulate glass embedded wounds, blood powder for 13.5 litres) for complex injury simulation and reservoir bags with pump assembly.  $25.5 \times 23 \times 46$  cm, 4.1 kg

M-1005709



#### **Casualty Simulation Kit III**

Especially suitable for use in the creation of disaster scenarios where application of makeup on multiple casualties creates the widest range of wounds. Contains speciality wounds associated with gunshots, like perforations, major avulsions, and complex jaw wounds.

#### Includes:

# Bleeding wounds (complete with reservoir bags with pump assembly):

• Compound fractures of humerus and tibia

#### Non-bleeding wounds:

• Assorted stick-on lacerations and open fractures

Comes complete with makeup accessories (including acrylic to stimulate glass embedded wounds, blood powder for 13.5 litres, latex compound, and plastalene modeling paste) for advanced injury simulation and reservoir bags with pump assembly.

41 x 33 x 56 cm, 12.3 kg

#### **Neonatal Wound Kit**

For use on newborn manikins. These wounds represent the major complications associated with critical neonates. Development of each wound coincides with the S.T.A.B.L.E. program, which consists of Sugar, Temperature, Airway, Blood pressure, Lab work, and Emotional Support. Included in the kit are the following anomalies:

- Abdominal Distention, Gross
- Abdominal Distention, Moderate
- Gastroschisis
- Myelomeningocele
- Omphalocele
- Slack Face
- Subgaleal Haemorrhage

Comes in a hard plastic carry case.  $34 \times 23 \times 15$  cm, 2.7 kg.

## M-1017261



# Practise neonatal care with realistic wounds



#### Simulated Burns, Set of 4 Degrees

Use to identify burn severity and type to prepare a treatment plan and to measure performance of burn management. The burns are pliable and can easily be cut into any shape to fit any area on a human patient or patient simulator/ trainer. Pieces are reusable and come ready to wear. Theatrical makeup and simulated blood may be applied to add colour for realism.

Includes four 18 x 25 cm rolls with the degrees listed below.

# M-1018421

# Items also sold separately:

A. 1st degree M-1018422
B. 2nd degree superficial M-1018424
C. 2nd degree deep M-1018423
D. 3rd degree M-1018425





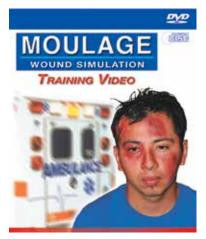






# **DVD: Moulage Instructions for Casualty Simulation Kits**

The moulage instructional DVD has been produced in conjunction with a leading artist using Hollywood-training techniques and years of military experience. Explains the use and application of the Casualty Simulation Kits. **M-1018145** 



Using the instructions from the video, all kinds of casualties can be simulated.

# PATIENT CARE



# 3B Scientific® Patient Care Manikin PRO

- Made of durable, unbreakable, water-resistant plastics
- Flexible, allowing natural movement of the arms, legs, joints and waist
- Lungs, heart, stomach, bladder and intestinal section are removable and fitted with drainage seals for easy cleaning
- Bladder and intestinal section are absolutely watertight and connected to the external genitalia to allow catheterisation

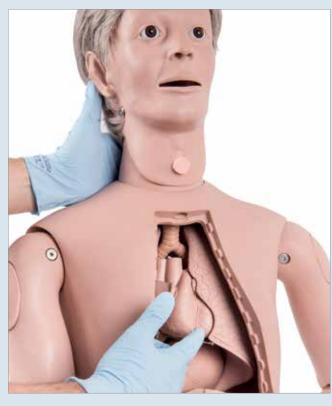
All standard injection sites have special injection pads (6 in all) which allow repeated injections and years of use. Also included is an amputation stump to practise dressing techniques, as well as an intestine tube, catheter, duodenal probe, talcum powder, vaseline and lubricant, and inserts with wound depictions (upper arm and thigh). Meets OBRA requirements.

# Training Features:

- Personal hygiene, cleaning (removable partial prothesis)
- $\bullet \ Lifting, mobilisation \\$
- Bandaging and wound dressing (including stump dressing)
- Irrigations (eye, ear, nose, stomach, intestine, bladder)
- Injections (intramuscular and subcutaneous)
- Naso-gastric lavage and gavage
- Oxygen treatment, artificial respiration
- Tracheotomy care
- · Catheterisation (male and female)
- Ostomy care (colostomy)
- Enema administration

173 cm tall, delivered with assembly tools.





# 3B Scientific® Patient Care Manikin BASIC

The 3B Scientific® Patient Care Manikin is also available in a basic version, offering a variety of training possibilities for geriatric and basic nursing care.

# This basic version allows you to practice:

- Personal hygiene, cleaning (removable partial prothesis)
- Lifting, mobilisation
- Bandaging and wound dressing (including stump dressing)
- Injections (intramuscular and subcutaneous)
- Oxygen treatment, artificial respiration
- Tracheotomy care
- 174 cm, 14.4 kg

# M-1018817

# **Ugrade Kit**

You can easily upgrade the Basic Patient Care Manikin to the PRO version using this kit. It includes the inner organs and allows for training of catheterisation.

#### M-1000504

# **PRO** features:



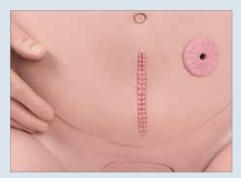
Wound treatment and care (laceration and abrasion)



Hair care (washing, combing, drying)



Simplified assembly



Wound treatment and care (surgical staple seam)



Diabetic foot syndrome

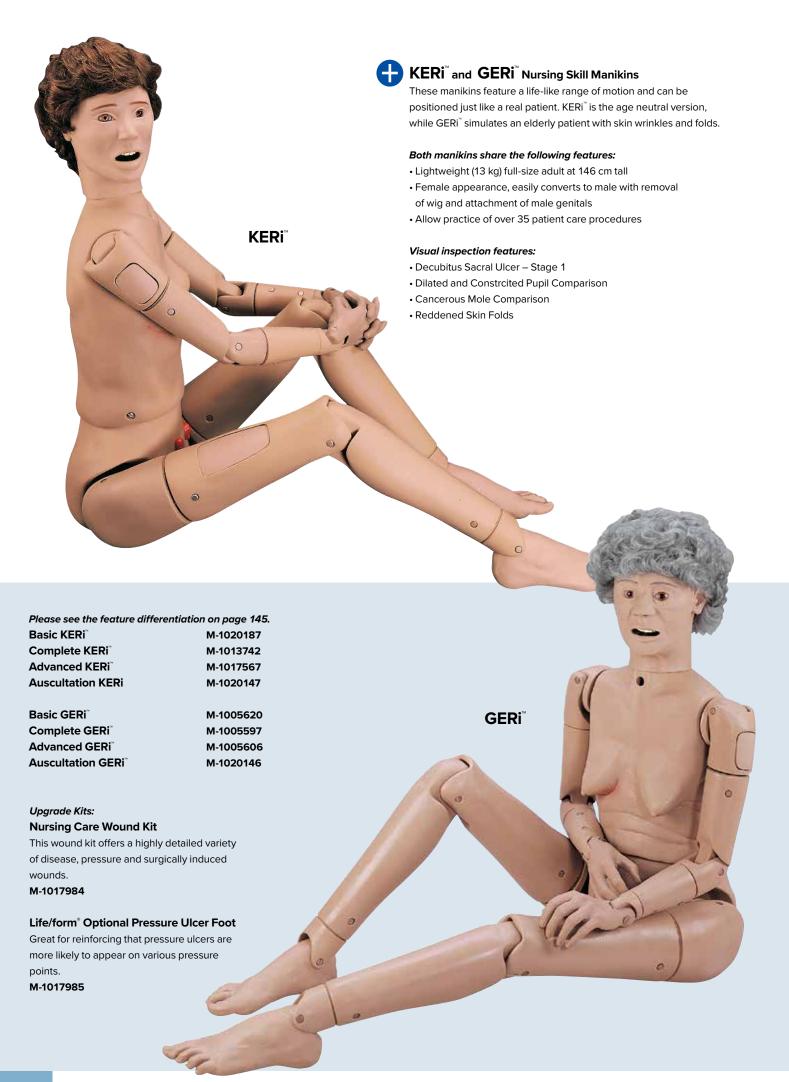


Decubitus evaluation and care (stages 2-4)

BASIC and PRO Replacement Parts		Item No.
Spare amputation stump, right		M-4000133
Spare head, complete		M-1018812
Set of 6 spare injection pads		M-1012754
Spare sealing cap for tracheotomy		M-4000135
Spare chest skin		M-4000122
Spare dental partial prosthesis		M-4000120
Spare forearm with hand	Left Right	M-4000128 M-4000126
Spare thigh	Left Right	M-4000131 M-1018813
Spare upper arm	Left Right	M-4000127 M-4000125
Spare lower leg	Left Right	M-4000132 M-1018814

PRO Replacement Parts	Item No.
Spare female genital insert	M-4000143
Spare male genital insert	M-4000144
Spare lung	M-4000138
Spare heart	M-4000139
Spare bladder	M-4000142
Spare section of intestine	M-4000141
Spare stomach	M-4000140

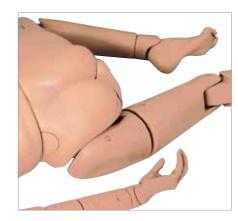
# All parts also fit older models. More available online!



	Basic: KERi <sup>™</sup> M-1020187 GERi <sup>™</sup> M-1005620	Complete: KERi <sup>™</sup> M-1013742 GERi <sup>™</sup> M-1005597	Advanced: KERi <sup>™</sup> M-1017567 GERi <sup>™</sup> M-1005606	Auscultation: KERi™ M-1020147 Geri™ M-1020146
Skin inspection and care	•	•	•	•
Bandaging	•	•	•	•
Washing	•	•	•	•
Denture Placement	•	•	•	•
Hearing aid placement	•	•	•	•
Ear and eye irrigation	•	•	•	•
Ostomy and tracheostomy care	•	•	•	•
Positioning and transfer techniques	•	•	•	•
Pericare	•	•	•	•
Intramascular injections	•	•	•	•
Gastrostomy		•	•	•
Pap smears and douching		•	•	•
Enema administration		•	•	•
Prostate exam		•	•	•
Urinary catheterisation		•	•	•
Nasogastric tube placement		•	•	•
IV insertion			•	•
Blood pressure monitoring			•	•
Rocognition of heart sounds				•
Recognition of lung sounds				•







Options and Consumables:	Item No.
Replacement Head GERi <sup>**</sup>	M-1013811
Replacement Head KERi*	M-1019743
GERi <sup>*</sup> Female Wig	M-1013355
Constricted Pupil	M-1019723
Dilated Pupil	M-1019722
Hearing Aid	M-1019745
Upper Arm	M-1019728
Elbow	M-1019729
Forearm	M-1019730
Right Hand	M-1005669
Left Hand	M-1005668
Complete Right Arm	M-1016665
Complete Left Arm	M-1012736
Right IV Arm	M-1017827
Left Blood Pressure Arm	M-1019741

Options and Consumables:	Item No.
Complete Right Leg	M-1019746
Complete Left Leg	M-1019747
Optional Edema Foot	M-1019744
Ankle	M-1019736
KERi <sup>®</sup> Upper Torso	M-1019737
GERi <sup>*</sup> Upper Torso	M-1005677
Male Genitalia	M-1005674
Female Genitalia	M-1005673
IV Skin & Vein Replacement Kit	M-1019742
Blood Reservoir	M-1019748
Enema Reservoir	M-1019749
Stoma Set	M-1019627
Speaker System	<b>M-1019721</b> (110V) <b>M-1020046</b> (220V)
Hard Carry Case	M-1019725





#### Code Blue® Multipurpose Patient Care and BLS Manikin

Simulator with Non-intubatable Disposable Airway.

#### This adult manikin features training of:

- Oral and denture hygiene
- IM (arm and buttock), IV and subcutaneous injection
- Ostomy care
- Naso-gastric lavage and gavage
- Male and female catheterisation
- Enema administration
- Vaginal douching and pap smear exercises
- Palpable prostate and breast
- Amputation stump
- 2 decubitus ulcers
- Eyes open and close (one pupil is dilated)
- Regular or counter pulsation CPR
- Mouth to mouth resuscitation
- Palpable carotid pulse

CPR Monitor: Displays cadence and depth of compression and ventilation

Omni<sup>\*</sup> Code Blue<sup>\*</sup> Pack included. Also supplied with ten disposable one-piece airways, neck brace, and carrying bag.

M-1005782



## Clinical Chloe Patient Care Simulator with Sculpted Stomas

The basic version for nursing care training allows you to practise:

- General Patient Care
- Injections (IM injection sites in arm, thighs, and buttock)
- Breast Palpation
- Airway
- GYN Training (vaginal douching and pap smear exercises)

#### M-1017542

## Clinical Chloe Advanced Patient Care Simulator In addition to the basic version, the advanced features:

- CPR monitored by included OMNI® Controller
- Injections (advanced training arm and hand for IV, IM, and subcutaneous techniques)
   Carrying bag and instruction manual included.
   Detachable and removable internal tanks,
   latch provides secure seal between ostomies and internal tanks.

#### M-1017574

## Impacts vision, hearing, grip strength, and physical abilities.



#### **New Aged Simulation Suit**

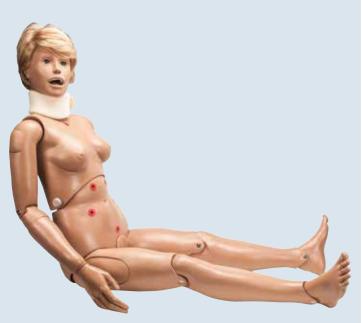
In order to better understand your patients, walk a mile in their shoes.

There is no better way to create empathy than to actually experience the physical challenges aging patients face on a daily basis.

#### Easy to put on and adjust!

The body suit is worn like an overall, the different restrictions can easily be adjusted to change the range of motion, and even simulate hemiparesis.

Size S M-1020111 Size M M-1020112



#### Simple Simon® and Simple Susie®

The Simple Simon\* and Simple Susie\* full-size adult manikin with movable joints and soft fingers and toes are ideal for training of important basic nursing skills such as:

- Hair care and surgical draping
- · Bathing and bandaging
- Oral and dental hygiene (movable jaw with removable dentures)
- Ophthalmic care
- Ear irrigation and application of otic drops
- IM injection (arm and buttock)

The legs can be removed for compact storage. Supplied with neck brace.

Simple Susie<sup>®</sup> M-1005803 Simple Simon<sup>®</sup> (not shown) M-1005807



#### **Enema Administration Simulator**

Each student can realistically practise administering an enema using this life-like model. The upper buttock is flexible so that the trainee must raise the buttock in order to locate and make insertion into the anus. The simulator features a one quart fluid reservoir that is adequate for most demonstration and practice purposes. For large groups, a drain tube is provided so that the fluid can be drained directly into a large container or sink for continuous use. Includes a hard carrying case, enema administration set, and teaching guide.

#### M-1005626

#### Consumables:

Highly-concentrated lubricant M-1005629
Fluid Administration Set M-1013186
REN Cleaner M-1005776



#### Susie Simon® Patient Care Manikin with Ostomy

Full-size dual sex adult manikin with movable joints as well as soft fingers and toes for training of important basic nursing skills such as:

- Removable upper and lower dentures for oral hygiene
- Realistic eyes for opthalmic exercises
- Ear canal or otic drops and irrigation
- $\bullet$  Mouth, nose, and tracheotomy openings for nasogastric lavage and gavage
- Interchangeable genitalia
- $\bullet$  Intramuscular injection site in right and left upper arm and buttock
- Enema administration capability
- Realistic urethral passage and bladder for catheterisation exercises
- $\bullet$  Vaginal douching and pap smear exercises
- $\bullet$  Stomas of a transverse colostomy, ileostomy, and suprapubic stoma
- Bathing and bandaging activity

162.6 x 45.7 cm; 16.5 kg

Consumables and Optional Equipment	Item No.
Arm Injection Site	M-1005786
Buttock Injection Site	M-1005787
lleostomy	M-1012749
Ulcerated Foot	M-1019238
Carrying Bag	M-1005788



#### Seymour II Decubitus Treatment Simulator

Displaying the following pressure ulcers\* (NPUAP 2007 – National Pressure Ulcer Advisory Panel): Stage I, Stage II, Stage III with undermining, tunnelling, subcutaneous fat and slough, deep Stage IV with exposed bones, undermining, tunnelling, subcutaneous fat, eschar and slough. Also shown are a suspected DTI, unstageable full eschar/slough wound, and a dehisced wound. The Stage III and Stage IV are positioned so that a bridging dressing for use with a vacuum assisted closure and negative pressure wound therapy devices can be demonstrated and practised.

M-1009798



#### **Decubitus Foot Treatment Trainer**

The after-effects of a diabetes mellitus can result in defects and pressure points in the area of the foot. In this skill trainer, a gangrenous alteration on the big toe of the right foot has already spread from the back of the foot to the metatarsal. A mal perforans (trophic ulcer) is visible on the sole of the foot (plantar). A grade 3 pressure-ulcer is depicted in the heel area. A complete skin layer is lost and the subcutaneous tissue is damaged up to necrosis. This is recognisable by black colouration in the wound area. Leg not included.

M-1018815



#### **Ostomy Care Simulator**

Reproduction of an abdomen showing the anatomy of both a colostomy and ileostomy to provide life-like functions and appearance. Dilation of the stomas can be demonstrated and practised, along with application of post-operative and permanent ostomy bags. The colostomy can be irrigated. Drainage and excretion at the ileostomy (water) and colostomy (simulated stool) can be pumped by syringes. Delivered with simulated stool and carrying case.

45.5 x 45.5 x 30.5 cm; 11 kg

M-1005591



#### **Decubitus Treatment Simulator**

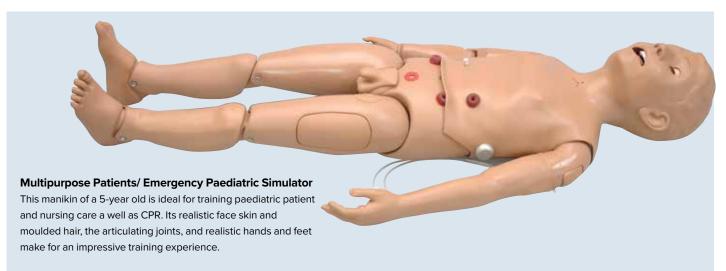
The varying stages of pressure sores on this unique model can be washed, treated with antiseptics or most medicines, and dressed just like real flesh. Made from  $BIOlike^{*}$  synthetic tissue. Comes with carrying case and draping sheet.  $24 \times 37 \times 9$  cm

M-1005569



#### **Ostomy Care Model**

This BIOlike  $\ \$  life-size model contains four stomas that can be lubricated and dilated with an inserted finger. The model may be washed, taped, bandaged, and fitted with ostomy bags. Comes with lubricant, draping sheet, and carrying case. 33 x 46 cm



#### Training Features:

- Ophthalmic procedures
- Realistic chest cavity, with realistic internal organs for unparalleled CPR performance
- · Bathing and bandaging activity
- Place nasal and oral gastric tubes
- Lavage/gavage
- G-tube placement
- Stomas for ileostomy, colostomy, and suprapubic exercises
- Male and female catheterisation
- Enema administration
- Placement of rectal suppositories
- IM injection sites in deltoid and upper thigh

#### **Emergency Care Features**

- · Oral, nasal, and digital intubation
- Place OP/NP tubes
- Right/left mainstem bronchi
- Suctioning
- BVM
- Chest compression/rise
- Intraosseous infusion
- IV arm with variable, palpable pulses Supplied with T-shirt and shorts, soft carrying bag, and instruction manual.

#### M-1017564



#### Mike & Michelle® Infant Patient Care Manikin

Features the same training possibilities as the Mike & Michelle $^{\circ}$  Child Patient Care Manikin, but simulating a **1-year old infant**. Supplied with t-shirt, shorts, neck brace and carrying bag.  $89 \times 38 \times 22.5$  cm

M-1005804

**Optional Part:** 

IV Injection Arm M-1005795 Intraosseous Leg M-1018459





#### Mike & Michelle® Child Patient Care Manikin

This manikin simulates a five-year old child with rotatable arms and legs (jointed elbows and knees) and articulating head. Supplied with T-Shirt, shorts, neck brace and carrying bag. It allows training of basic and advanced paediatric patient care procedures such as:

- Bathing and bandaging
- Ophthalmic exercises
- Oral and dental hygiene (articulating jaw with teeth and tongue)
- Tube feeding and gastric suction
- IM injection (upper thigh and deltoid)
- Tracheotomy care
- Male and female catheterisation
- Enema administration





#### Paediatric Nurse Training Baby, Newborn

Practise paediatric nursing care on a realistic newborn manikin.

This advanced and incredibly realistic manikin with male and female features includes internal organs (heart, lung, intestine system, stomach, and bladder), interchangeable genital organs and fully movable head, arms and legs. It allows the trainees to easily practise basic care like washing, dressing and umbilical care, as well as the following paediatric nursing care options:

Suctioning of Nasopharynx

- Tube Insertion
- Insertion and Care of a Tracheal Cannula
- Intramuscular and Subcutaneous Injections
- Obtaining Urine Specimens with a Urine Collection Bag
- Bladder Catheterisation, male and female
- Taking a Rectal Temperature
- Enema insertion

52 cm; 2.3 kg

M-1000505

#### Consumables:

Injection Pads for Thigh and Buttocks M-4000162







#### Life/form® Micro-Preemie Simulator

This 25-week ELBW (Extremely Low Birth Weight) neonate is the **smallest** and most realistic pre-term infant available. Invaluable for training nurses and parents in care and handling techniques for babies that have had multiple medical interventions; the perfect team training aid for multiples or other high-risk delivery and transport scenarios. The baby can be ventilated and will accept a functional ET tube, NG tube, umbilical catheter, and IV line, as well as a non-functional chest tube and stomas. Detachable neural tube defect and omphalocele. See 3bscientific.com for full description and functionalities.

Light Skin M-1017238
Dark Skin M-1018197



#### Life/form® Special Needs Infant

This newborn-size infant allows health care facilities and medical staff to teach procedures for special needs infants. The simulator was developed for a wide range of training, including beginning nursing students. Procedures that can be practised include:

- Tracheostomy care (lavage and suctioning)
- Gastrostomy cares (lavage and gavage)
- Nasogastric care (placement, lavage, gavage, and suctioning)
- Urethra catheterisation (insertion, placement, and care)
- · Colostomy stoma (basic care purposes only)

Female M-1018099 Male M-1018198







#### Susie® and Simon® Advanced Newborn Patient Care Baby

This manikin simulates a 0-8 week old newborn with rotatable soft arms and legs. It allows training of basic and advanced paediatric patient care procedures such as:  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1}{2}$ 

- $\bullet$  Bathing and bandaging
- $\bullet$  Tube feeding and gastric suction (movable tongue)
- Heel stick and finger prick practice
- Male and female catheterisation
- Enema administration

Supplied with T-Shirt, diaper and carrying bag.

#### M-1005802

#### Optional Part:

#### Intraosseous Leg

The Intraosseous leg simulates that of a newborn. A replaceable tibial bone lies under a smooth outer skin. It includes anatomic landmarks for teaching intraosseous access and infusion. A femoral vein/artery pair is included.

#### M-1018460









#### Male Baby-Care-Model

Very useful for pre-birth courses! This true-to-life model of a newborn male baby is suitable for a variety of different training procedures:

- Changing the baby's nappy
- Feeding and administration of medicine
- Obtaining urine specimens
- Dressing and undressing
- Picking up, carrying, and positioning of a baby (head tilts backwards if the baby is incorrectly held)
- Washing, cleaning of mouth, eyes, ear and nose
- Taking a rectal temperature
- Examination of fontanelles and testicles

52 cm; 2.3 kg

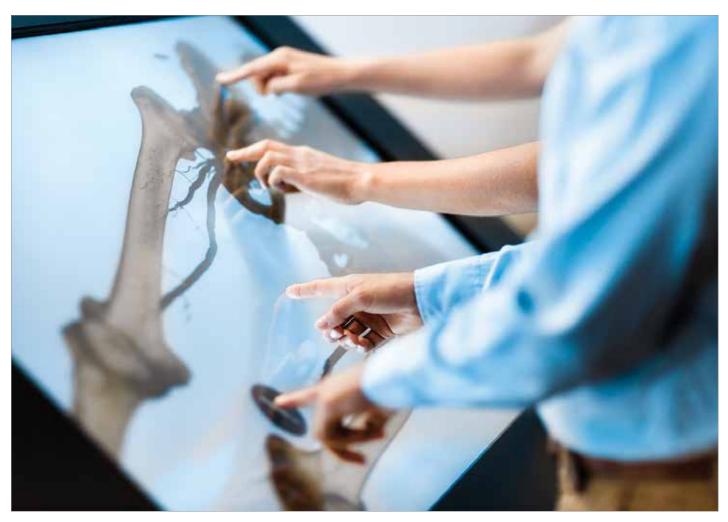
M-1000506



#### Life/form® Infant Ostomy Trainer

Created to educate caregivers and parents on how to give special care to an infant with a stoma. The anatomy of the colostomies were carefully reproduced to provide life-like appearance and functions. A soft, pliable material is used for the stomas in order to achieve the most realistic tactile sensation. The syringes included are used to inject simulated stool through ports to the colostomy sites. Consistency of the simulated stool can be thinned by adding water.

## INTERACTIVE MEDICAL EDUCATION



## SECTRA TABLE: THE INTERACTIVE SOLUTION

The Sectra Table is a 55" multi-touch screen for interactive learning and teaching. It comes with an anatomy atlas and an ever growing library of real patient cases – and you can easily add your own cases and images (DICOM) as well. The offer also includes a workspace for advanced pre-operative planning and organisation of cases as well as access to new data through the Educational Portal.

The Sectra Table is the optimal addition when a cadaver-based dissection course is not available, or when there are too few cadavers available. This way, teaching institutions can increase the exposure to anatomy problem based learning and hands-on practice for all student and allow them to perform the virtual dissection repeatedly, without depleting existing resources.

Philipps-Universität Marburg is the first university in Germany to introduce Sectra Table, adding interactive solutions to lectures, seminars and preparation courses.



#### Improved medical education and clinical training

## **NOW AT YOUR FINGERTIPS**

The Sectra Table is a large interactive screen with an image display system that enables interaction with 3D human body images rendered from CT or MR. Detailed studies of virtual bodies provide medical students with a better understanding of anatomy functions and variations between individuals.

- Virtual dissection with real-life patient cases: visualise skeletal tissue, muscles, organs and soft tissue by virtually slicing, segmenting or peeling off layers of tissue
- Educational Portal connect to share patient cases with other institutions around the world
- 55" multi-touch screen to enhance teaching using interactive natural-size 3D views of real patients' anatomy

M-1019814



Get in touch with the Customer Service Team to find out about the availability in your region and to arrange for a demo.





#### Can be used in a range of medical training programs:

- Radiology Histology
- Orthopaedics Anatomy
- Veterinary medicine
- Sports medicine
- Diagnostic imaging
- Forensic medicine
- Surgery
- · Pre-operative planning



## **SECTRA EDUCATION PORTAL**

## Visualisation and collaboration made easy

Sectra Education Portal allows you to store and share educational cases with your students and medical staff. It also allows data to be shared with other hospitals and universities around the globe. In this way, different departments and institutions can collaborate, which improves the quality of education. Patient data will always be protected and anonymised.

The Sectra Table is built on Sectra PACS, an image management system well established in the radiology market. Over 20 years of experience and more than 1,700 successful installations developed the technology at hand.

More information online at 3bscientific.com/sectra



## **EPIDURAL AND SPINAL INJECTION**



- Hanging drop method: the negative pressure in the fluid filled spinal canal can easily be adjusted
- An epidural catheter can be inserted into the epidural space
- Spinal anaesthesia training with realistic resistance of the dura and arachnoid mater with or without a cannula

#### About the trainer:

- Developed and manufactured in Germany in close co-operation with epidural anaesthesia specialists
- Intuitive to handle, continuously adjustable fluid pressure

- Easy to clean: filled with water (closed system) to simulate spinal fluid
- Sturdy construction, all parts are integrated and latched
- Can also be used in lateral position, suction cups ensure steady positioning on the table

Delivered fully assembled. All usual materials can be used, including disinfectant, plasters and wound dressing. Includes 1 LOR kit and 1 skin pad.  $45 \times 35 \times 24$  cm; 3 kg



Sturdy, non-slip construction, easy to set up

Continuously adjustable fluid pressure system on the backside



#### Low operating costs

With the use of high-quality, hard-wearing materials, only a few parts need to be replaced periodically.

Consumables	Item No.
Replacement LOR kit	M-1017893
Replacement skin	M-1017892
Carrying bag (not included)	M-1018079

#### **Lumbar Puncture Trainer**

The trainer provides realistic tactile feedback combined with a fluid supply and pressure system, allowing the collection of CSF and measurement of opening pressure. Ideal for practising injection of local anaesthesia, aseptic technique, needle insertion between vertebrae, lumbar puncture, and epidural.

#### Features:

- Replaceable spinal cord insert with skin layer, subcutaneous layer, connective tissue, and lumbar vertebrae
- Anatomic features include: iliac crests, lumbar vertebrae L2 L5, ligamentum flavum, epidural space, and dura



- Life-like needle resistance, including pops when needle traverses ligamentum flavum and dura
- Self-healing skin allows 15-25 uses before replacement is necessary
- Simple to fill simulated CSF and set fluid pressure, thereby allowing students to collect CSF and measure CSF opening pressure
- Pressure system with simple push-button operation to increase or decrease pressure with LED indicator
- Practise procedure in the left lateral decubitus or sitting position
- Trainer can be used to simulate aseptic technique and local anesthetic at puncture site



## I.V. INJECTION



#### I.V. Injection Arm

This injection arm, made of 3B Scientific® SKINlike™ silicone allows realistic, hands-on training to develop competence in medical staff. The material used is of the highest quality, stain resistant and easy-to-clean. Changing the skin and tubing system is easy and only takes a few minutes.

#### The simulator is ideal for practising:

- Intravenous injections
- Correct puncture of peripheral veins for blood sampling (basilic vein, cephalic vein, median cubital vein, dorsal venous rete of hand)
- Positioning of a butterfly catheter

Delivered with stand, artificial blood, 2 replacement tubing systems, plastic bottle, syringe and deluxe storage carton.

74 x 19 x 14 cm; 2.8 kg

#### M-1000509

Consumables	Item No.
Spare tube systems, 3 items	M-4000156
Spare skin	M-4000154
Spare arm core (without hand)	M-4000159
Spare skin with hand core	M-1012778

#### **SMASH Advanced Patient Training Arm**

The training arm features an extremely durable design and is made of high quality material. The skin can be pierced in excess of 200 times with a 20 or 22 gauge needle. A micropump has been embedded within the shoulder to generate variable heart rates and pulse strengths for a realistic training experience.

#### The following training possibilities are featured:

- Subcutaneous injection on volar forearm and lateral upper arm
- $\bullet \ Intramuscular \ injection \ on \ upper \ arm$
- Suture and incision on both upper arm and forearm
- Haemodialysis on the forearm
- $\bullet$  IV and blood draw exercises, AV anastomosis, and placement of AV grafts

- Incision and suturing exercise on multilayered inserts (skin, subcutaneous tissue, muscle, radial artery, and radial vein)
- Surgical and arterial & venous stick exercises
- Collapsed or bulging vessels simulated by varying vessel palpability

#### About the trainer:

- Arterial system including the radial and brachial arteries
- Rotating arm allowing dorsal and volar access along the length of the arm
- Easy to replace plug-and-play inserts to allow quick change-out between procedures
- Latex-free

	Consumables	Item No.
	Replacement Veins	M-1013385
*	Replacement Blood	M-1013386



#### **Injection Arm**

This right arm combines all features required for I.V., I.M. and subcutaneous injection and infusion training as well as blood collection exercises:

- I.V. injection in subtle venous network of the arm and hand: cephalic, basilic, antecubital, radial and ulnar veins. A pressure bulb increase or decrease enables venous pressure
- I.M. injection in deltoid area
- Subcutaneous injection on the volar side of the forearm and the lateral side of the arm

Supplied with artificial blood, blood dispensing bag, funnel, talcum powder, replacement skin and veins, base and carrying bag.

76 x 15 x 15 cm

#### M-1005809

Consumables	Item No.
Replacement Veins	M-1013385
Replacement Blood	M-1013386



#### Life/form® Venatech IV Trainer

This IV trainer is easily attached to a person's arm so the student can practise venipuncture techniques without the risks associated with puncturing living tissue. Includes the three main veins used in phlebotomy in correct anatomical position. The trainer also helps students learn basic communication skills such as explaining the procedure to the patient and asking them to close and release their fist.

#### M-1017966

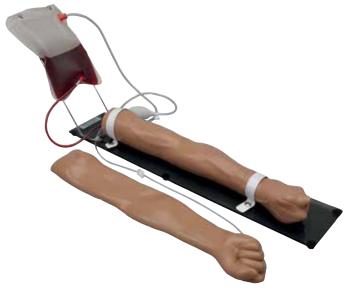


#### **Geriatric IV Arm**

Developed from a live cast, this arm is unique to the industry. Its properties include veins that roll away or disappear as you attempt to catheterise the vessel and the specially developed skin is exceptionally thin. If your students work with the aged, this adjunct to your teaching lab will enable them to better serve this group as they pursue their careers.

91 x 36 x 23 cm; 10 kg

M-1005777



#### **Intravenous Training Arm**

This training arm features a prominent venous network with simulated cephalic, basilic, antecubital, radial, and ulnar veins. The following can be trained:

- Simulation of infusion technique
- Blood collection exercises with simulated blood
- Administration of medication by intravenous bolus
- Simulation of clenched fist or tourniquet position
- Simulation of collapsed veins

A realistic pop appears as the needle enters the vein. Manufactured with resealing veins and outer skin for repeated usage.

Delivery content includes soft carrying bag and set-up kit (simulated blood concentrate, pressure bulb, blood dispensing bag, spare arm skin, funnel, and talcum powder).





#### Life/form® Portable IV Hand and Arm Trainer

The economical Life/form® Portable IV Trainer combines realism and lightweight convenience in a single device. Constructed of soft material with life-like veins that are visible and palpable. Venipuncture can be practised at any of the common sites (antecubital fossa, along the forearm, the back of the hand, and thumb) with the following features:

- Realistically rolls as you palpate the veins
- Characteristic pop can be felt as the needle penetrates the vein
- Realistic flashback can be observed

Ideal for teaching venipuncture techniques including starting IVs and introducing over the Needle IV catheters. Under normal use, hundreds of injections may be performed. The storage box can be converted into a workstation.

Includes: 2 IV bags, packet of blood powder, fluid supply stand, 2 pinch clamps, 3 cc syringe, 12 cc syringe, 12 gauge needle, a winged infusion set, and a plastic clamshell case for storage.

IV Hand IV Arm

Light Skin M-1017958 Light Skin M-1017960

Dark Skin M-1017959 Dark Skin M-1017961

IV Arm & Hand Trainer Light Skin M-1013746

#### I.V. Training Hand

An economic and easy to transport model to train I.V. injection. Made of durable material for repeated use. Features:

- Palpable life-like veins that rollover
- Suitable for blood sampling or fluid injection
- Supplied with carrying tray and artificial blood
   35 x 13 x 5 cm; 0.8 kg

#### M-1005754



Consumables	Item No.
Hand Skin	M-1005755
Arm and Hand Vein Set	M-1005756
Reservoir Blood Bag	M-1005757

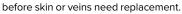
#### **Injection Training Hand**

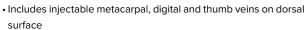
The back of the hand is the most common site for injection training. With this model you can teach the common procedure for IV drips. Comes with blood powder.

M-1017962

#### I.V. Injection Hand

An incredibly realistic hand with extreme attention to detail, right down to the fingerprints. Students have the opportunity to not only practise injection but to develop important manipulation skills provided by the flexion of the wrist. Under normal use hundreds of injections can be performed





- Soft, flexible fingers are separately molded
- Flexible wrist
- Skin rolls when veins are palpated
- Perform hundreds of injections before replacing vein and skins
- $\bullet\, \text{Supplied in storage box}$

Light Skin M-1017963

Dark Skin M-1017964

Consumables	Item No.
Dark Skin and Veins	M-1005665
Light Skin and Veins	M-1005667
Venous Blood (1 litre)	M-1005611
Advanced IV Hand (Light Skin)	M-1017963
Advanced IV Hand (Dark Skin)	M-1017964
Fluid Supply Bag	M-1005693
Fluid Supply Stand	M-1005692
REN Cleaner	M-1005776

## **VENIPUNCTURE**







#### **Advanced Venipuncture and Injection Arm**

This revolutionary training arm provides complete venous access for IV therapy and phlebotomy, plus sites for intramuscular and intradermal injections. An extensive 8-line vascular system allows students to practise venipuncture at all primary and secondary locations, including starting IVs and introducing Over the Needle IV Catheters.

- Realistic skin texture with wrinkles, pores, and visible fingerprints
- Soft and pliable for easy sewing, sutures will not pull out when tightened
- Supplied with three wounds that can be sutured repeatedly Conservatively, hundreds of injections may be performed and over one hundred cuts can be made on the trainer before replacement is needed. Delivered with artificial blood, 3cc syringe, 12 cc syringe, needle, two fluid bags, instruction manual and carrying case.

Light Skin M-1005678

Dark Skin M-1005679

Consumables	Item No.
Venous Blood (1 litre)	M-1005667
Shoulder Injection Pad Replacement	M-1018002
Replacement Vein Manifold	M-1018486
Intradermal Sealant	M-1013686
Light Skin & Vein Replacement Kit	M-1005688
Dark Skin & Vein Replacement Kit	M-1005689
Vein Replacement Kit	M-1005690
Fluid Supply Stand	M-1005692
Fluid Supply Bag	M-1005693
REN Cleaner	M-1005776

#### Advanced Four-Vein Venipuncture Training Aid™

In addition to the pop that is felt with the regular models as the needle enters the vein, the advanced version offers a realistic flashback of simulated blood, confirming the proper needle placement. The model permits the injection of fluids and withdrawal of simulated blood.

Featuring four barely discernable blue veins in 3 different sizes – with the fourth vein deeply placed in a semi-transparent, tissue-like material.

Light Skin M-1017967

Dark Skin M-1017968



#### Two-Vein & Four-Vein Venipuncture Training Aids™

Your patients don't have one size of veins and these models were specifically designed to make accessing more challenging, as this is how technique and confidence are improved. Now made with latex-free Dermalike<sup>™</sup> with 50% less needle drag when accessing the underlying veins and improved tear resistance to permit a greater number of needle sticks.

#### Two-Vein Option

Two barely discernable blue veins of different inside diameters, positioned at the same depth in a semi-transparent, soft tissue-like material.

Light Skin M-1017969 Dark Skin M-1017970

#### Four-Vein Option

Four barely discernable blue veins in three different sizes – with a fourth vein more deeply placed.

Light Skin M-1017971
Dark Skin M-1017972



## I.M. INJECTION

### The perfect volunteers to practise I.M. injections.

#### I.M. Injection Simulators

These high quality simulators are the ideal way to teach proper I.M. injection techniques. Strap it onto the upper leg, upper right arm or the buttocks to locate all necessary intramuscular injection sites. Operates on AA batteries.

- Both audio and visual feedback
- Use for training and performance evaluation
- Includes all important anatomical palpable landmarks
- Life-like silicone skin is extremely durable, can quickly be exchanged
- Robust and easy to clean

A. Upper Arm M-1009840 M-1000511 B. Upper Leg C. Buttock M-1000514

Intramuscular injection can be practised



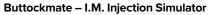


В









This easy to handle simulator can be attached to a person or training manikin. It allows the practice of intra-muscular injections with fluid (water).

#### Audio-visual feedback:

If the injected part is incorrect, a buzzer, which works with a 9 volt battery and a red light, will give a warning sound.

The durable, soft and very realistic skin shows no needle marks even after many exercises.

14 x 34.5 x 49.5 cm

M-1005395



#### Two-in-One I.M. Injection Model of Buttock

This unique model of a human buttock has a special two-in-one function with audio-visual feedback:

- Study the anatomy on the right hand side (bones, ilium crista, greater trochanter, m. gluteus medius, nerves and veins) through the transparent outer structure.
- Transfer this knowledge about the position of nerves, veins etc. to the left hand side to find the correct insertion point and practise I.M. injections with fluid (water).

Correct injections are confirmed by a green light, incorrect by a red light and a buzzer.

38 x 35 x 22 cm; 5 kg



#### I.M. Injection Simulator

The simulator offers both visual and tactile learning for three types of intramuscular injections.

- Identification of proper injection sites and visualisation of underlying structures
- Practise of dorsogluteal, ventrogluteal, and vastus lateralis injections

Comes complete with teaching guide, supply of syringes, and hard carrying case.

56 x 24 x 40.5 cm; 8.5 kg

#### M-1005586

Consumables	Item No.
Replacement Muscle	M-1019801
REN Cleaner	M-1005776



#### **Arterial Puncture Arm**

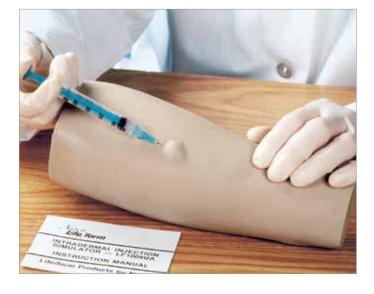
This easy to use training aid is ideal for training and demonstration of proper arterial blood drawing techniques and for monitoring blood gases.

- Puncture locations can be identified
- · Life-like backflow of blood

Delivered with 2 syringes and tubules, artificial arterial blood, 2 replacement arterial sections and carrying case. 71 x 13 x 33 cm  $\,$ 

#### M-1005598

Consumables	Item No.
Replacement Skin with 3 Artery Sections	M-1005605
Venous Blood (1 litre)	M-1005611
Lubricant Kit (pack of 6)	M-1017903
REN Cleaner	M-1005776



#### Life/form® Intradermal Injection Simulator

#### Practise intradermal injections safely and conveniently!

- Life/form® vinyl skin ensures a realistic training experience
- $\bullet$  Features eight sites for practising intracutaneous injections
- Natural cast from wrist to just below elbow
- Skin has realistic feel and appearance

Includes arm section with eight injection sites, sealant, syringe, teaching guide, and storage box.

33 x 28 x 13 cm; 0.9 kg

Consumables	Item No.
Liquid Skin Repair	M-1013686
REN Cleaner	M-1005776

## **BLOOD PRESSURE**



Options	Item No.
Amplifier/Speaker System 110 V	M-1019721
Amplifier/Speaker System 220 V	M-1020046
Electronic Control Unit	M-1019718

#### **Blood Pressure Training System With Omni®**

The Blood Pressure Training System includes a full-size adult left arm that may also be attached to the Code Blue® I Multipurpose Patient Care and BLS Manikin (M-1005782) and Susie Simon® Patient Care Simulator with Ostomy (M-1005785).

It is a versatile training tool developed to assist health professionals teach the processes and skills required to perform blood pressure auscultation procedures and techniques.

- Systolic and diastolic pressures, auscultation gap and pulse rate are adjustable
- $\bullet$  Cuff pressure can be seen on a display

International power supply 100 to 240 VAC. Comes with one Omni $^{\odot}$  controller, soft carrying bag and instruction manual.



## **CLINICAL SKILL TORSOS**



#### **Endotracheal Intubation Simulator**

Endotracheal intubations require highest skills and are accompanied by risks. This intubation simulator provides exceptionally good and realistic intubation training.

- · Acquire both the skill of oral and nasal tracheal intubation
- · Acquire the skill of handling supraglottic airway devices
- Confirm left and right air sound with a stethoscope
- Determine ventilation of one lung

75 x 45 x 24 cm; 6.2 kg

#### M-1005396

Consumables	Item No.
Front Teeth, set of 3	M-1005397
Synthetic Skin for the Body	M-1005399

### More airway products on page 130!

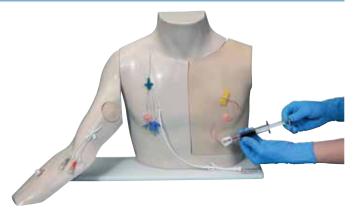


#### **Chest Drain Simulator**

This innovative design not only simulates realistic body tissue but provides an alternative to the use of animal tissue. The design is unique in having a replaceable chest wall with ribs that are encased into the realistic simulated flesh that forms the torso. This fleshy part is replaceable and can used for up to 25 incisions. It is housed in a white plastic torso-shaped box that is firmly secured and has strong sucker-feet to ensure non slip use on smooth table-top surfaces. The torso presents as a patient lying on his back.

## 57 x 37 x 43 cm **M-1005175**

Consumables	Item No.
Chest Wall	M-1005176
Pneumothorax Kit	M-1005177
Pericardiocentesis Kit	M-1005178
Carrying Bag	M-1005179



#### Chester Chest™ with New Advanced Arm

The new, more advanced arm can also be ordered separately to upgrade your Chester Chest™. This simulator makes it possible to learn how to use the following long term vascular accesses perfectly:

- Implanted Port
- Central Venous Catheter (CVC)
- Peripherally Inserted Central Catheter (PICC)

#### M-1009801

Consumables	Item No.
Advanced Arm for Chester Chest ™	M-1005840
Replacement Skin	M-1005841
Reservoir for arm	M-1018084
Practice Port (IVAD)	M-1013202
Simulated Blood for Chest	M-1018085
Simulated Blood for Arm	M-1018084
Soft Carrying Case	M-1005839



#### Life/form® Adult Sternal Intraosseous Infusion Simulator

Designed to demonstrate, simulate, and prepare all levels of health care professionals for use of the sternal intraosseous approach. Incredible realism and accurate landmarks will allow students to simulate this new procedure with skill, confidence, and accuracy. This procedure is a time saving and simple alternative to conventional IV infusion.

The simulator uses a replaceable bone that is designed to be rotated and punctured several times, extending the life of the simulator. The sternum may be filled with simulated blood to better visualise true flashback. Comes with 10 replaceable simulated bones, syringe with tubing, blood mixture and a hard carrying case.

49.5 x 45.7 x 26.7 cm

#### Life/form® Pericardiocentesis Simulator

Designed specifically for **skill training** in pericardiocentesis, chest tube maintenance and the management of prehospital chest trauma.

The simulator has a pressurised tension pneumothorax site and a site for the surgical placement of a functional chest tube. Fluid colour, volume, and viscosity can be controlled by the instructor. Any commercially available closed water seal drainage unit can be used.

Pericardiocentesis may be performed in the left subxiphoid space and in the left fifth intercostal space. Accurate placement of the needle will allow for the withdrawal of fluid from the simulated pericardium.

Includes fluid reservoir bag, foot pump, surgical skin pads, subcutaneous surgical pads, nurse training pads, pneumothorax pads, blood powder, methyl cellulose thickener, simulated pericardium, IV bag, and a hard carry case.

#### M-1018828

Consumables	Item No.
Methyl Cellulose	M-1005697
REN Cleaner	M-1005776



#### Life/Form® Chest Tube Manikin

Comprehensive manikin to teach the theoretical knowledge and the practical skills needed to manage pre-hospital chest trauma as well as ongoing chest tube maintenance:

The right side of the manikin has **two cut-away viewing areas** to provide awareness of the anatomical relationships between the skin surface, musculature, ribs and lungs. The left side has a **pressurised tension pneumothorax** site to relieve air that has accumulated within the pleural space and is restricting lung inflation.

There is also a site where chest tubes may be surgically placed to **treat pleural effusion** by draining fluids from the pleural space. The fluid colour, volume and viscosity is controlled by the instructor.

7.5 kg

#### M-1017946

Consumables	Item No.
Methyl Cellulose	M-1005697
REN Cleaner	M-1005776



#### **Pneumothorax Training Manikin**

Designed for the practice of properly inserting a needle to permit built up air pressure to escape the thorax.

The torso accepts needle thoracotomy in the second intercostal space in the midclavicular line, or the fifth intercostal space in the midaxillary line. Comes complete with replaceable lungs, a rib cage, and a soft, life-like replaceable skin. Unit can be punctured 75 to 100 times before replacement is necessary.





#### **Cricotracheotomy Trainer**

An extremely realistic alternative to using animal tissue or cadavers. The soft tissue has the feel of real skin and the unique trachea make it a very effective teaching and learning tool. Using a simple disposable trachea transforms the trainer into an effective low-cost system.

#### Key Skills:

- Palpation of anatomical landmarks
- · Learn needle cricothyroidotomy
- Practise surgical cricothyroidotomy with scalpel
- · Responsive incision making
- Identification of cricothyroid and thyroid cartilage
- Practise insertion of mini trach devices

45 x 15 x 36 cm

#### M-1005180

Consumables	Item No.
Cricotracheotomy Tracheal Rings	M-1005182
Trauma Kit 2 Tracheas and 4 sheets of skin	M-1005181
Cricotracheotomy Neck Muscle	M-1005183



#### **Cricothyrotomy Simulator**

The perfect alternative to cadavers. Palpable landmarks include the cricoid and thyroid cartilage. The prominentia laryngea is prominent on the hyperextended neck. The trachea in this simulator is replaceable as the airway passes completely through from top to bottom. This allows the placement of the stylet and obturator to be checked once the stab has been made. Complete with a full-size neck, ties can be used to hold the obturator in a secure position.

Comes complete with five replacement skins and five cartilage inserts, REN cleaner, instruction guide, and a durable carrying case

M-1017239

#### **Cricothyrotomy Replacement Kit**

Includes three skins, three adult inserts, and three child inserts.

#### M-1018086

Consumables	Item No.
Adult Cricothyrotomy Cartilage Inserts (Pack of 12)	M-1019220
REN Cleaner	M-1005776



#### **Peter PICC Lines Simulator**

It has become critical in controlling costs to ensure that the competency of all IV staff is assessed, maintained, demonstrated, and improved continually. Vascular access simulators are acknowledged as the most efficient way to teach staff and assess competency. Validate and train the knowledge and skills needed for Peripherally Inserted Central Catheter (PICC) lines with this simulator:

- Model presented in supine position with arm at 90-degree angle to body
- Movable chin simulates occlusion of jugular
- Anatomically correct cephalic, basilic, and median basilic veins, jugular, subclavian, and superior vena cava
- $\bullet$  Palpable ribs allow measurement of proper catheter length externally
- Replaceable arm skin allows visualisation of veins
- Standard IV catheter placement
- Distal tip of catheter viewable in the superior vena cava
- $\bullet \ \ \text{Infusible veins allow realistic blood return in flashback chamber}$

#### **Deluxe Venous Access Device Model**

Reproduction of a male chest mounted on a collapsible easel designed for training in vascular access device maintenance and dressing central venous catheters.

Made of skinned, lightweight urethane foam, this model may be washed with soap and water or with antiseptics.

- Bilateral subclavian venous catheter connections
- Implanted PORT-A-CATH
- Both catheters may be flushed with water
- · Accepts betadine and most other antiseptics
- Replaceable chest module

53 x 38 cm; 4.5 kg

M-1005563



Teach healthcare staff the care and use of two different types of catheters



#### Sclero Pad

Practise injections: the vessels on this pad are heat sensitive and should be injected with hot water. When injected properly, the vessels disappear and reappear in about 30 seconds. Contains 6 vessels of different diameters (0.2 mm, 0.5 mm, 2 mm, 3 mm).

#### M-1019644



#### Heart Catheterisation Simulator

This simulator is ideal for practising central venous catheterisation. All appropriate landmarks are palpable for realistic identification of insertion sites. Remove skin to reveal location of veins, arteries, and other landmarks. Artificial blood flows from needle to provide confirmation of proper needle location. Venous catheters can be snaked into place once the introducer is properly inserted.

Includes fluid supply bags, replaceable skin, tubing sealant, needles, one quart of blood, and teaching guide in a hard carry case. Fluid supply stand not included.

71 x 43 x 25 cm

Consumables	Item No.
Venous Blood (1 litre)	M-1005611
Replacement Skin and Vein Set	M-1005614
Lubricant Kit (pack of 6)	M-1017903
REN Cleaner	M-1005776

## **ULTRASOUND**





#### SONOtrain™ Ultrasound Trainer

- · Easy to use
- Cost effective
- Realistic echogenicity
- Self-sealing for repeated use

# THE ULTRASOUND TRAINING SET FOR MEDICAL SIMULATION

The material of the SONO $train^{\infty}$  trainer simulates the feel of real soft tissue for carrying out palpations and injections and shows realistic texture and echogenicity on ultrasound images. The SONO $train^{\infty}$  trainer is an excellent teaching tool for basic training and for improving dexterity and hand-eye coordination skills.

- Each individual unit is completely self-contained and can be used out of the box
- Units are stackable to save space
- · Replacement blocks and all accessories are available separately
- $\cdot$  The 3B Scientific $^{\odot}$  SONOtrain $^{ imes}$  series has been designed and developed in Germany



#### A. SONO*train*™ Vein Model

Ultrasound block with three blood vessels with diameters of 4, 8 and 15 mm with adjustable fluid flow. Punctures and injections possible, and self-sealing injection channels.

M-1019637

Vein Replacement Block M-1019652

#### B. SONOtrain™ Foreign Body Model

Ultrasound block with 6 different foreign bodies for insertion: Pellets, shard of glass, nail, projectile, loose chippings and splinters of wood can be clearly detected and recognized.

M-1019636

Foreign Body Replacement Block M-1019651

#### C. SONOtrain™ Gallbladder Model

This Ultrasound block, with three gallbladders, each with different pathologies: Gallstones (diameter: 8 and 10 mm), thickened gallbladder wall and biliary sludge deposit. The gallstones and the biliary sludge deposit can move around.

M-1019638

Gallbladder Replacement Block M-1019653

#### D. SONOtrain™ Breast Model with Cysts

Realistic reproduction of a breast made from ultrasound material with two cysts for realistic punctures and aspirations.

M-1019634

Breast with Cysts Replacement Block M-1019649

#### E. SONOtrain™ Breast Model with Tumours

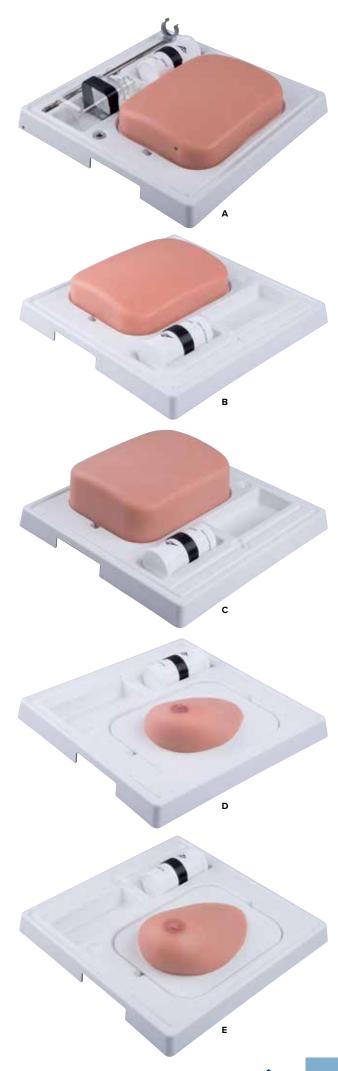
Realistic reproduction of a breast made from ultrasound material with three tumours for realistic punctures and biopsies.

M-1019635

Breast Tumours Replacement Block M-1019650





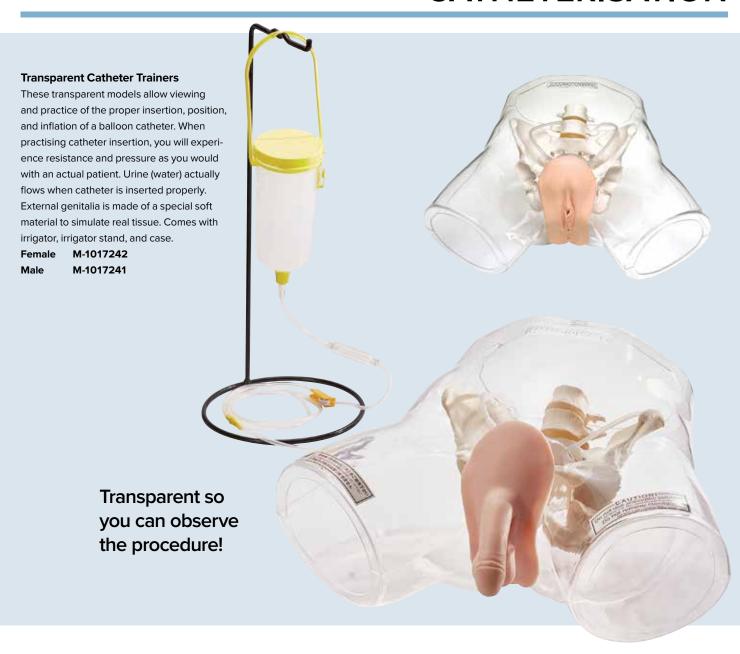




# Realistic echogenicity



## **CATHETERISATION**



#### Male & Female Catheterisation Trainers

Practise male and female urinary catheterisation on these newly designed anatomically correct models. Training is enhanced by a new material that has a realistic feel and flexibility. Both models utilise a 16 FR catheter and can be used to demonstrate balloon inflation procedures. A fluid reservoir allows for urine output upon successful completion of the insertion procedure. Instructors are able to teach sterile technique and insertion and removal of catheter, as well as practise preparing the patient for the procedure.

 Set
 M-1017251

 Male
 M-1017252

 Female
 M-1017253





#### A. Life/form® Female Cath-Ed II Simulator

Provides practise in female catheterisation. Including most of the same features as the Male Cath Ed I Simulator except the vulva has been moulded intact to facilitate identifying the urethra and proper spreading of the labia.

Comes with a hard carrying case, lubricant, catheters, 50 cc bulb, syringe, and instruction manual.

38 x 36 x 20 cm

M-1017982

#### B. Life/form® Male Cath-Ed I Simulator

This unique Life/form® simulator combines visual and tactile learning sensations of catheterisation in one compact unit. The mid-sagittal dissections allow detailed study of the internal anatomy and provide students an opportunity to follow what happens when they catheterise a patient. The removable plastic cover identifies key anatomical structures.

- Normal restrictions at the bulbous urethra and bladder sphincter can be detected and identified
- A Foley catheter can be demonstrated and seen through the viewing port

Includes a hard carrying case, lubricant, one catheter, 50 cc bulb, syringe, and instruction  $\,$  manual. Does not have a functional bladder.  $38\times36\times46$  cm

#### M-1017983

Consumables	Item No.
Foley Catheter Silicone (pack of 10)	M-1019720
Lubricant Kit (pack of 6)	M-1017903





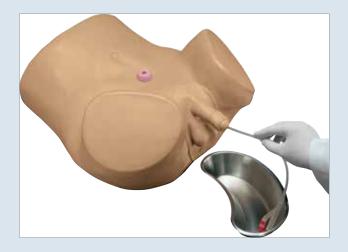
#### **Catheterisation Simulators**

Use these simulators to train the procedure of catheterisation. Their realistic feel and resistance, and the high quality of the material make for a perfect teaching tool. For a better learning effect, artificial urine (water) will flow when the catheter enters the bladder.

Note: Improper use of a Foley can result in damage to the simulator, just as when using a Foley catheter with a real patient.

Male M-1005587 Female M-1005588

Consumables	Item No.
Lubricant Set (pack of 6)	M-1017903
Fluid Administration Set	M-1013186
Foley Urethral Catheters (pack of 10)	M-1019720
REN Cleaner	M-1005776



#### **Advanced Patient Care Catheterisation Simulators**

Considered fundamental in all nursing studies, the delicacy and intricacy of catheterisation mandates training on a simulator to ensure patient comfort and student confidence.

#### Features:

- Normal size prostate gland for palpation during rectal examination
- Internal and external bladder reservoir for standard catheterisation exercises
- Functional suprapubic stoma to practise skin prep, stoma hygiene, and application of disposable and permanent ostomy bags
- Modular urethral valve prevents fluid leakage

Male M-1017545 Female (not shown) M-1017544

## **MALE HEALTH**

#### **Prostate Examination Simulator**

This prostate examination simulator consists of a male abdomen body and 4 different interchangeable prostate glands which can be inserted to allow realistic practise in diagnosis of prostate cancer by rectal examination.

**Stage A Gland:** Benign, slightly enlarged, but otherwise normal prostate gland.

**Stage B Gland:** A discrete, hard nodule is palpable in the upper right quadrant, simulating a beginning stage of carcinoma.

**Stage C Gland:** The spread of carcinoma is demonstrated in this gland.

The small nodule has increased in size and has become an external hard mass on the surface of the gland.

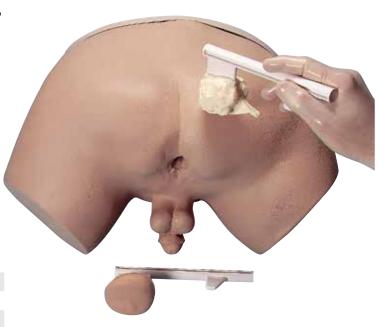
**Stage D Gland:** This gland is totally replaced with carcinoma. The entire gland will feel hard and irregular.

Comes complete with four glands, hard carrying case, lubricant, cleaner, and teaching guide.

54.5 x 38 x 30.5 cm, 11 kg

#### M-1005594

Consumables	Item No.
REN Cleaner	M-1005776
Lubricant Set (pack of 6)	M-1017903





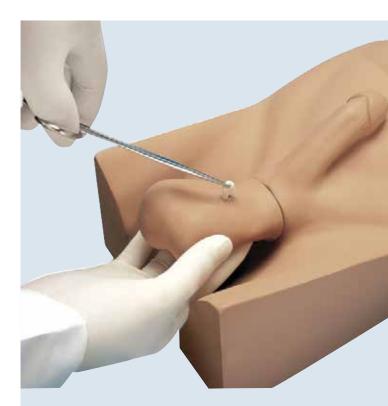
#### **Advanced Patient Care Male Prostate Simulator**

The simulator features four interchangeable modules, each individually mounted on clear plastic cards for easy placement and removal:

- 1. A moderately enlarged benign prostate
- 2. A prostate with two discreet nodules
- 3. A prostate with an easily palpable large mass
- 4. A prostate with malignant invasive cancer

Realistic anal opening permits insertion of a lubricated, gloved finger. Includes instruction manual and soft carrying bag.

#### M-1020127



#### No Scalpel Vasectomy (NSV) Model

A compact simulator developed to assist in learning a new method of vas occlusion. To provide realism, the leg stumps are designed to get in the way of the student as the procedure is mastered.

Includes two removable scrotal skins and two testicles, two long vas assemblies that can be advanced as needed for NSV exercises, and instructions for use.

30.5 x 30.5 x 32 cm, 2.25 kg

## **LAPAROSCOPY**



Excellent training aids to standardise, structure and complement hands-on skills training in surgical residency programs!

#### **Lap-X Series**

Lap-X laparoscopic surgical simulators provide easily accessible minimally invasive surgery simulation training for medical professionals. They are designed for surgical residents, physicians and operating room assistants to train laparoscopic skills in medical schools, universities, hospitals and skills centres.

Lap-X models deliver simulation training for hand-eye co-ordination skills in various surgical specialties such as General Surgery, Gynaecology, Urology, Paediatric Surgery and Gastrointestinal Surgery, and offer the following advantages:

- Intuitive to use: software and hardware are self-explanatory and do not need third-party guidance
- Use real surgical instruments to narrow the gap to reality
- Update their new virtual reality exercises and modules free within license period
- Offer solutions for a wide range of healthcare professionals, from basic to advanced laparoscopic training



Lap-X Expert is the solution for highly realistic and sophisticated simulation of endosurgical interventions, providing realistic training for surgeons and surgical teams. The simulator offers an opportunity to learn and understand basic aspects of working with laparoscopic instruments and trocars as well as develop advanced tactile skills. It helps to maintain and consolidate already existing theoretical knowledge with regard to endosurgical interventions technologies via variety of different modules.

#### Features:

- Simulator for all minimally invasive disciplines, including but not limited to general surgery, gynaecology, urology, gastro-intestinal surgery and paediatric surgery
- Offers an extensive training curriculum with increasing levels of difficulty, allowing the learner to acquire basic laparoscopic skills to advanced laparoscopic procedure proficiency
- Uses unique haptic feedback technology with wireless extractable instruments and a laparoscope, which are interchangeable between three universal trocars
- Offers individual and team training possibilities as well as customisable training courses

M-1020118



Lap-X Expert enables highly realistic skill training for all minimally invasive disciplines.





#### Essential skills:

- Control of camera with different viewing angles (0°, 30°, 45°)
- Instrument co-ordination in space
- Vessel clipping and capturing
- Endoclip applicator handling
- Electrocoagulation operating skills
- Basic and advanced endoscopic scissor handling
- Moving and capturing of pins and objects in space
- Surgical and double knot tying for left/right hand as well as on a thread without a needle
- Drill orientation of a needle in the needle holder
- Z-suturing
- Z-stitch overlaying
- · Mattress suture overlaying
- Needle suturing left/right hand
- Interrupted suturing

#### Delivery content:

- 1 simulator with adjustable display and working height, comes with wheel cart for mobility
- 2 screens mounted on the simulator
- 2 extractable, wireless laparoscopic instrument imitators\*
- 1 extractable endovideocamera imitator\*
- 1 footpedal with 2 switches for cauterisation and coagulation
- 1 software package
- 1 instrument holder
- Administrator mode
- Hardware support and guarantee (1 year)
- Software license and support (1 year)
- \* insertable through any trocar

#### Benefits:

- Large virtual selection of instruments
- · Short video of real-life procedures
- Modules (essential skills, suturing and knot tying, cholecystectomy, gynaecology, appendectomy, hysterectomy and bowel surgery)
- Exercises within the modules

#### **Gynaecological Surgery**

- Total laparoscopic hysterectomy
- Tubal sterilisation
- Ectopic pregnancy
- Prophylactic oophorectomy





Appendectomy

**Bowel Surgery** 

#### Instrument tracking system

Instruments can be inserted and used simultaneously during endosurgical interventions. The simulator's tracking system has been developed in regards to this important feature.

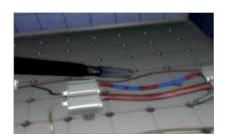
#### Motion tracking of endosurgical instruments imitators

- Simultaneous
- Longitudinal
- Rotation

#### **Endosurgical instruments**

All endosurgical instruments required for different endosurgical intervention performance are featured in the simulator's software. You can choose from:

- · Variety of forceps and scissors
- Clip appliers
- Dissectors
- Bipolar and monopolar instruments



### High accuracy of motion detection!





#### Lap-X Hybrid

Lap-X Hybrid is a unique laparoscopic simulator that combines the functionality of a virtual reality trainer and a box trainer, providing an innovative and powerful tool for all minimally invasive surgeries.

Users can practise with virtual reality mode at different curriculum modules: basic, novice, intermediate and advance, as well as train with procedural modules such as appendectomy, cholecystectomy, nephrectomy and many others. The trainee can switch from virtual reality to box trainer mode anytime. As a box trainer, the Lap-X Hybrid has the possibility of metrics measurement and performance recording. All validated box exercises are compatible with the Lap-X Hybrid, providing the user with haptic feedback training. The instructor has the ability to pre-record the example exercises. The trainee can also record his own performance and submit it to the instructor for online assessment.

#### Training benefits:

- Using more than 40 different exercises divided into 6 modules with increasing difficulty
- Monitoring trainees' progress via online assessment
- Hybrid function: combining virtual reality and box training for better results
- Receiving instant feedback with values such as duration, path lengths or performance report

#### Virtual Reality:

Free software updates during licensed period

#### System specifications:

Two controllers (22 x 15 x 32 cm, 1.6 kg each) HD camera, red light, footpedals Exercise platform  $35 \times 30 \times 5$  cm

M-1020117



## Lap-X Hybrid combines the functionality of a virtual reality trainer and a box trainer

#### Delivery content:

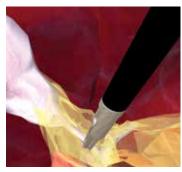
- 2 controllers (left and right)
- 1 endovideocamera imitator
- 1 foot pedal with 3 switches for cauterisation, coagulation, zoom in, zoom out, change of camera angle and start of an exercise recording
- Exercise platform (35 x 30 x 5 cm)
- 1 carrying case
- 1 software package
- Administrator mode
- Hardware support and guarantee (1 year)
- Software license and support (1 year)

#### Benefits:

- Ability to use simulator as a box trainer and as a virtual reality trainer
- Modules (6 curricula for virtual reality exercises, 1 curriculum for box trainer exercises)
- Exercises within the modules
- Instant feedback and scoring evaluation of different parameters
- Possibility to submit video recordings and scores to instructors via internet
- Possibility to review, approve and comment on trainee's video recording via provided website

## In the administrator mode, instructors can:

- Review scores
- Review curricula completion progress of all students
- Review user training information (i.e. total training hours)
- Customise a new curriculum
- Create an exam, a new box trainer exercise, record a standard performance and settle nominal scores for the exercise
- Export data and add E-learning URL
- $\bullet \ \, \text{Set mandatory training for learners}$



Cholecystectomy

Appendectomy

Nephrectomy



#### Lap-X Box

Lap-X Box is the basic version (a traditional box trainer) within the Lap-X simulator series and comes with the hardware needed to perform the following training:

- Moving objects bimanually from one instrument to the other
- Performing tasks under different camera angles via different endoscope insertion points
- Navigating with a 0°, 30° or 60° scope
- Mastering the Fulcrum effect
- Completing tasks with one hand while keeping the instrument in the other hand steady

The hardware comes complete with the recording software package necessary to train various training skills. Instructors can create different exercises and the students performance can be video recorded and evaluated with the following parameters: time, left path length, right path length.

M-1020116





### The most affordable solution for basic laparoscopy skill training!

#### Delivery content:

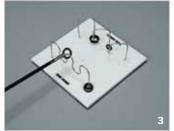
- 2 controllers (left and right)
- 1 foot pedal with 3 switches for cauterisation, coagulation, zoom in, zoom out, cchange of camera angle and start of an exercise recording
- 1 HD camera (1920x1080) with auto focus and low light support, powered by USB (2.0, 3.0)
- 1 tray unit to place different tasks and games for training (see the table on the right)
- B. Braun Aesculap laparoscopic instruments (these instruments can be replaced by any 5 mm or 10 mm instruments)
- $\bullet$  1 carrying case (60 x 55 x 18cm)
- 1 software package
- Administrator mode
- Hardware support and guarantee (1 year)
- Software license and support (1 year)



Hard carrying case for Lap-X Hybrid (M-1020117) and Lap-X Box (M-1020116)









Options to train the hand-eye co-ordination	Item No.
Game #1: Loops and wire	M-1019681
#2: Pea on a Peg	M-1019682
3: Wire Chaser	M-1019683
4: Post and Sleeve	M-1019684
Complete Game Set #1 – #4	M-1019685

## Minimally Invasive Training Systems



Reliable technology housed in a durable construction!

#### **T5 Pelvic Box Series for Laparoscopic Skill Training**

The large pelvic box is the most versatile system that is used from basic skill development to advanced procedure training. It is torso-like in size with 14 ports that are fitted with grommets designed to hold an instrument or trocar.

The T5 Series is a complete portable system that does not require video tower equipment and is easy to set up.

#### Skill training:

- Basic laparoscopic skills
- · Laparoscopic suturing
- Advanced laparoscopic procedures
- FLS® Skills practise
- · Individual or team training
- · Laparoscopic Camera Navigation (LCN)
- · Hands-on skills training
- · Psychomotor skills
- · Hand-eye co-ordination
- Depth perception
- Timed activities

Includes large pelvic box with 14 laparoscopic ports with fitted interchangeable 5 and 10 mm grommets and interior lighting. The SimScope™ simulates a real laparoscope and can be inserted into any of the 14 laparoscopic ports. It zooms and rotates, has a realistic handle and is available in 0° and 30°.





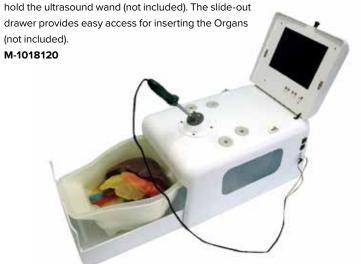
#### **T5 Large with Removable Monitor**

Designed to remove the monitor from the trainer and attach it to the included stand giving user ability to rotate & drape the box for a more real-istic training experience.

Pelvic Box M-1020092

#### **T9 Abdominal and Laparoscopic Ultrasound Trainer**

Designed for Abdominal Intraoperative and Laparoscopic Ultrasound training. The extra large pelvic box has a slideout drawer that houses the Abdominal Intraoperative and Laparoscopic Ultrasound Phantom "IOUS-FAN". The pelvic box has 7 laparoscopic ports that provide training and demonstration flexibility. The ports are fitted with grommets designed to







#### T3 Plus Portable Laparoscopic Skill Training Box

The NEW T3 PLUS is a complete minimally invasive training system that does not require video equipment, is portable and easy to set up. It has a joystick camera that zooms and rotates. The expanded front provides room for a wider selection of skill inserts. The T3 PLUS includes the redesigned pelvic box, SimScope<sup>™</sup> (camera) and 10" monitor. The T3 PLUS provides a versatile one-person laparoscopic skill training workstation.

#### M-1020150

Options	Suitable for	Item No.
Bowel Sections (6" wet)	LT, T3, T5, T12	M-1019686
Bowel Sections (6" dry)	LT, T3, T5, T12	M-1019687
Foam Stomach	LT, T3, T5, T12	M-1019689
Specimen Mounting Pad	LT, T3, T5, T12	M-1019688
Holiotomy <sup>™</sup> Insert	T3, T5	M-1019690
Penrose Drain (pack of 100)	LT, T3, T5, T12	M-1019691
Penrose Drain and Holiotomy <sup>™</sup> holder	LT, T3, T5, T12	M-1019692
Vaginal cuff (2" wet)	LT, T3, T5, T12	M-1019695
Vaginal cuff & ectopic pregnancy holder	LT, T3, T5, T12	M-1019696
Organ Finder	T5, T12	M-1019953
Game #1: Loops and wire	LT, T3, T5, T12	M-1019681
Game #2: Pea on a Peg	LT, T3, T5, T12	M-1019682
Game #3: Wire Chaser	LT, T3, T5, T12	M-1019683
Game #4: Post and Sleeve	LT, T3, T5, T12	M-1019684
Complete Game Set #1 – #4	LT, T3, T5, T12	M-1019685



Penrose Drain and Holiotomy™ holder, M-1019692



Bowel Sections (6" dry), M-1019687



#### Portable LT Lab Tab Trainer™

Technology meets simplicity with the fold-up Lab Tab trainer™ that works with your tablet or smartphone. No electricity required making it easy to practise or demonstrate laparoscopic skills anywhere! Developed in collaboration with Mr. Ali N. Bahsoun from Guy's and St. Thomas' Hospital, London, UK. The Lab Tab trainer™ is ideal for residents to take home and practise. Being our most portable trainer yet, the Lab Tab trainer™, folds up, is small enough to fit into a backpack and simple to set up.

Trainer with Side Ports M-1018108
Trainer with Side Ports Package M-1018113
Trainer Messenger Bag M-1018114



T12 Soft Belly

#### **T12 Laparoscopic Trainer Series**

The belly has nine laparoscopic ports that are fitted with grommets designed to hold an instrument or torcar. It has has a slide-out drawer with interior lighting for easy access to the organ tray. Both versions are delivered with an insufflated belly, Monitor Stand (monitor not included), Advanced 0° Sim-Scope™ (camera is a NTSC signal), and Scope Holder. The Advanced 0° SimScope™ has an excellent resolution. The easy-to-adjust focus is located at the end of the shaft. Diameter measures 9.5 mm, length 220 mm.

T12 M-1018121 T12 Soft Belly M-1020093





#### **Surgery and Laparoscopy Torso**

This trainer is aimed at all levels of surgeons in training. Once set up, the torso can be used to self-educate using the preferred surgical laparoscopic instrumentation for a variety of techniques. The torso has the following features:

- Can insufflate and maintain air tight pressure
- Supports usage of wet tissue or prepared artificial materials
- Can be used for surgical diathermy. There is a fixed metal plate in the base of the unit with a
- connection on the outside to enable earthing
- Can be easily cleaned by flushing out through a large airtight drain plug
- Is lightweight and has a carrying handle

 $75 \times 55 \times 25.5 \text{ cm}$ 

#### M-1005135

Consumables	Item No.
2 Neoprene Sheets	M-1005137
Abdominal Skin w/ Fatty tissue	M-1005138





#### **Laparoscopic Trainer**

The Portable Laparoscopic Trainer is designed to provide low cost assistance in laparoscopic training:

- Supplied with 4mm black Neoprene skin
- Simple to assemble and ready for use in seconds
- Works with wet tissue (eg. Pig liver) or dry (eg. foam)

Consumables	Item No.
2 Neoprene Sheets, black, 4 mm	M-1005141
Pink Skin with Fatty Tissue	M-1005140
Support Sheet for Pink Skin	M-1005142
Transparent Skin for Daylight Use	M-1005143

## **SUTURING**



#### **Lumps and Bumps Box**

A simple and very effective tactile trainer has been developed to make a Lumps and Bumps Box. The trainer is ideal for juniors getting to grips with their sense of touch and to understand the basic art of description about the feeling through gentle palpation. The trainer can be Lab held and placed on a smooth surface where strong sucker feet provide stability while in use. Contains 2 skins and 2 layers of foam, an assortment of shapes compatible with modern teaching for Clinical skills centres. Can be varied and customised to suit individual needs.

#### M-1005164

Consumables	Item No.
2 skins, 2 layers of foam and an assortment of shapes	M-1005165
Lumps	M-1005166



#### Skin Suture Trainer

A great low cost way to practise surgical opening and closing techniques.

#### Features:

- Economical reversible pad
- Designed to make complex incisions such as flap and dog turn suturing more realistic
- $\bullet$  A sub-dermal layer is present to make secure intradermal sutures
- Base has suction feet to enable slip free use 11 x 14 cm

#### M-1005134

#### Consumables

Double-Sided Skin Suture Pad M-1005133



#### **Surgery Skill Trainer**

The Surgery Trainer allows open surgery practise and offers an advanced skills capability for cut and suture practise. The single sided skin pad and a piece of abdominal bowel (which can be anastomosed) are replaceable.

- · Highly portable
- Rubber suction feet secure the base providing easy working conditions
- Washable, durable and all parts are replaceable Sutures and string not provided.

25 x 23 x 9 cm

#### M-1005144

Consumables	Item No.
Two Layered Abdominal Bowel, 3x27 cm	M-1005149
Two Layered Abdominal Bowel, 2 x 9 cm	M-1005146
Single Sided Skin Pad, 11 x 8 x 2 cm	M-1005145
Double-Sided Skin Suture Pad	M-1005133



#### **Suture Practise Trainer**

This is a basic skill trainer which offers a limited facility for knot tying. The foam can be turned over and or replaced.

- Highly portable
- Rubber suction feet secure the base providing easy working conditions
- Washable, durable and all parts replaceable

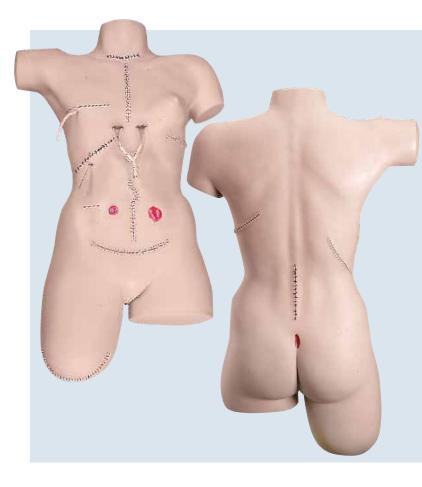
Sutures and string not provided.

#### M-1005147

#### Consumables

Foam Pad M-1005148





#### **Bandaging Simulator with Ostomy**

This simulator consists of a female torso with flexible, life-like skin which realistically responds to adhesives and all types of bandaging procedures. 14 different wounds allow the practice of wound management techniques, cleaning and bandaging techniques just like on a real patient. Wound closures feature surgical staples and sutures which cannot be removed:

- Thyroidectomy
- Mid-sternal split with chest tube drains (surgical staples)
- Mastectomy with simulated drain
- Cholecystectomy with simulated T-tube
- Laparotomy (surgical staples)
- Appendectomy
- Colostomy
- Illeostomy
- Abdominal hysterectomy (surgical staples)
- Thoractomy (surgical staples)
- Nephrectomy (surgical staples)
- Laminectomy
- Sacral decubitus ulcer (stage II)
- Leg amputation stump (surgical staples)

Supplied in a carrying case.  $84 \times 30.5 \times 63.5$  cm, 11 kg **M-1005590** 



#### **Suture and Stapling Practise Trainers**

Made with a soft vinyl skin over a core of stitchable foam to provide a life-like suturing experience. Soft and pliable for easy sewing, the skin is tough enough that sutures will not pull out when tightened. The unit is provided with three wounds. Conservatively, more than one hundred cuts can be made on the trainer and each of these cuts can be sutured several times.

- Realistic skin texture with wrinkles, pores, and visible fingerprints
- $\bullet$  Disposable limbs provide hundreds of suturing experiences before wearing out
- Trainer comes complete with a starter package of sutures, instruction booklet

Practise Arm M-1005585
Practise Leg M-1005683



#### Life/form® Interactive Suture Trainer

The trainer attaches easily to an arm, leg, or hip, allowing practise of suturing techniques in addition to essential communication and patient interaction skills. This convenient, cost-effective kit offers practise at all skill levels, including tying knots, placement of staples, and suturing both superficial and deep wounds.

Wounds automatically open when cut. Includes suture pad, attachable pad base with straps, needle holder, suture scissors, tissue forceps, scalpel, soft carrying case, nylon suture, instrument case and instruction manual.

M-1018196



Train incisions and determining the depth of suturing and the technique to be used. Practise and demonstrate tying knots, stapling and placement of staples, use of surgical glue, suturing deep tissue, and suturing subcutaneous tissue.

Features epidermis, dermis, fascia, fat, and muscle layers. The skin will allow placement and closure of superficial sutures. Includes suture pad, tray to hold pad, durable carrying case, needle holder, suture scissors, tissue forceps, scalpel, nylon suture and small case to hold the instruments.

#### M-1017981

Δ





#### **Suture Pads**

Realistic skin for basic suture training with epidermis, dermis and subcutaneous layer and behaves as real skin when cut and sutured.

#### A. Flat Pad:

15.2 x 15.2 cm

M-1019623

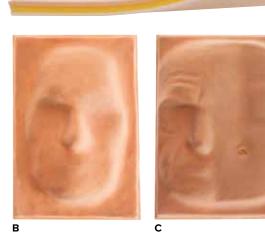
#### B. Garcia Pad:

The Garcia Pad simulates the thickness of facial skin, approximately 2-3 mm thick throughout the pad.

M-1018124

#### C. Dali Pad:

The Dali Pad is half-face and half-abdomen. The skin on the face portion is 2-3 mm thick and the skin on the abdomen portion is 3-4 mm thick.





#### **Breast-Torso Model**

The Breast-Torso Model is designed for body marking and plotting of breast procedures. It can be sutured and includes an epidermis, dermis, and subcutaneous layer. Both basic and advanced suturing procedures and planning of breast surgeries can be performed on this model. 5.9 kg

M-1018132



#### Life/form® First Aid Arm

Students will need to react just as in an actual emergency and select the appropriate method to control bleeding and treat the wound. Synthetic blood can be made to flow from either the cut on the forearm or from the severed thumb, or from both at the same time. The severed thumb allows training in proper care and handling of separated body members.

- You can regulate rate of bleeding and create venous or arterial flow
- Blood returns to collection tray for reuse
- Pressure points function realistically at wrist and upper arm Includes vinyl arm with wound, severed thumb, collection tray, arterial pulse bulb, venous supply bag, one quart of Life/form® blood, teaching guide, and hard carrying case.

#### M-1013748

Consumables	Item No.
Artificial Blood	M-1005611
Venous Blood	M-1005691
Fluid Supply Stand	M-1005692
Fluid Supply Bag	M-1005693



#### **Upper Stump Bandaging Simulator**

The upper torso has two arms – one amputated above the elbow, the other above the wrist. Both arms are slightly extended to facilitate bandaging.

M-1005680

#### **Set of 2 Stump Bandaging Simulators**

Includes upper and lower stump.

M-1005682

#### **Stump Bandaging Simulators**

Practise and demonstrate standard bandaging procedures as well as the attachment of prosthetic devices. Instruction booklet included.



#### **Head Models**

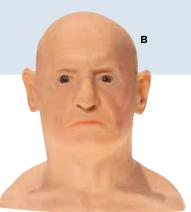
The Cosmo and II Duomo models are ideal for practising advanced flaps and grafts in addition to basic suturing procedures. Additional procedures that can be performed with II Duomo with Tumours and Advanced II Duomo are: Tumour excision and scar revision, wedge resection of ear, pentagonal wedge eyelid and Estlander lip switch flap.

A. Cosmo M-1018126
B. II Duomo M-1018127
C. Advanced II Duomo M-1019654
D. II Duomo with Tumours M-1018128

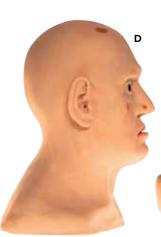
#### **Cosmetic Filler Models**

The skin on the Zsa Zsa model is specially made to allow injections to be performed. Basic to advanced suturing procedures can also be performed on this model. The Diaphanous Zsa Zsa has specially crafted translucent skin which allows for the checking of filler placement.

E. ZSA M-1018130
F. Diaphanous ZSA ZSA Model M-1018131

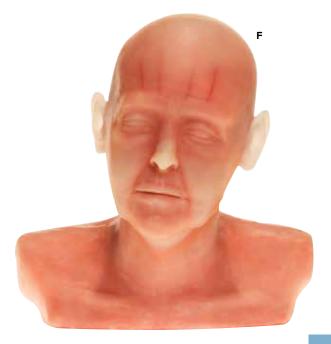






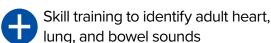






# **AUSCULTATION LEARNING SYSTEMS**









#### SAM BASIC

The SAM BASIC" trainer engages the technology of the SimScope" stethoscope to simulate adult heart, lung, and bowel sounds utilising a large sounds library. Using the provided SimScope" stethoscope, users are able to access a large variety of pathological conditions in order to customise scenarios.

By placing the SimScope" over the anatomically correct locations of SAM BASIC", the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills.

Delivery includes a male manikin, a SimScope", the SimScope" software and site license, a USB cable, 1 SAM t-shirt and a user's manual.

M-1020097

#### SAM BASIC" with WiFi (not shown)

Enables wireless communication between the SimScope and SAM BASIC manikin, allowing users to change sounds remotely or to use in conjunction with a scenario-based simulation.

#### M-1020099

#### **SAM II, the Student Auscultation Manikin**

This Student Auscultation Manikin is a new innovation in teaching and learning heart, breath & bowel sounds. Containing the largest sound library available, SAM II is a portable and easy to use manikin. While SAM II is used in many simulation centers, it is also easily moved into a classroom or auditorium for group instruction. The computer software interface is easily projected into any smart classroom. The software includes phonocardiograms, correct anatomical locations, and written lessons for each sound.

Delivery includes a male manikin, a new DELL laptop computer with SAM II software installed, a digital copy of SAM II's Lesson Guide, and an Operator's Manual. The lesson guide is currently available in English. **M-1020095** 

SAM Storage and Carry Case with wheels and handle (not shown)
M-1020109

#### PAT BASIC

The PAT BASIC trainer engages the technology of the SimScope stethoscope to simulate paediatric heart, lung, and bowel sounds utilising a large sounds library. Using the provided SimScope<sup>™</sup> stethoscope, users are able to access a large variety of pathological conditions in order to customise scenarios.

By placing the SimScope<sup>™</sup> over the anatomically correct locations of PAT BASIC<sup>™</sup>, the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills.

- · Utilises an extensive heart, lung, bowel and bruit sounds library
- Listen at anatomically correct auscultation
- · Customised library available to fit specific scenarios and programs
- · Portable and lightweight
- · Easy to use
- · WiFi upgrade allows for remote selection of sound scenarios

Skill Training for paediatric

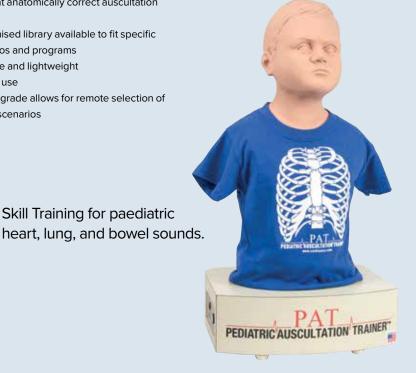
Delivery includes a male manikin, a SimScope", the SimScope software and site license, a USB cable, 1 PAT t-shirt and a user's manual.

#### M-1020098

#### PAT Basic with WiFi (not shown)

Enables wireless communication between the Simscope and PAT BASIC manikin, allowing users to change sounds remotely or to use in conjunction with a scenario-based simulation. M-1020100

#### **PAT Storage and Carry Case with wheels** and handle (not shown) M-1020110





#### CardioSim® VII, portable version Develop your own pre-programmed lectures!

The CardioSim® VII is the only system available that allows an instructor to create custom simulated heart sounds: editing of S1, S2, murmurs, clicks, third and fourth heart sounds, heart rate, etc. allows the instructor to accentuate the particular aspects of the sound that is being studied. CardioSim® comes with hundreds of simulated and live recorded sounds, built-in heart animations, ultrasound live video images, and dissection slides provide and extensive library of information. M-1020108



#### SimScope WiFi The Hybrid Simulator

The new SimScope WiFi" enables wireless communication between the Simscope" and the computer, allowing a seamless selection and change of pathological sounds and conditions of any standardised patient, O.S.C.E. or low-fidelity manikin.

- SimScope Patches are customisable and easily programmable for specific diagnostic
- SimScope" plays the programmed heart, breath and bowel sounds specific to each correct anatomical location enabling a realistic standardised patient encounter. Up to 20 patches may be programmed and simultaneously activated with heart, breath, bowel, and bruit sounds to simulate real time auscultation during a physical exam Delivery includes: SimScope ", SimScope Patches", SimScope Software", and USB cable.

M-1020104

#### **Optional Extras:**

Additional SimScope WiFi stethoscopes SimScope Patch Kit (15)

M-1020105 M-1020103



#### **Adult Heart and Lung Sounds Torso**

Utilising this torso, students will learn to find the correct location where a specific sound can be heard. They will use the anatomical landmarks to orientate themselves, and once the location is found, they will hear the appropriate sound through the stethoscope and/or external speakers.

#### Features:

- Full size adult torso with palpable anatomic landmarks
- · Sensor network hidden beneath the skin
- Hear the appropriate heart or lung sound as bell of stethoscope is moved across the front and back of the torso
- Includes Virtual Stethoscope® with multiple heart and lung sounds
- An external speaker plugs into the Virtual Stethoscope so a classroom can hear what the student hears

Includes instruction manual and carrying bag.

M-1019857

Train the orientation with anatomical landmarks to find correct auscultation locations.

#### Auscultation Trainer and SmartScope

The torso manikin presents itself as a real patient without visible auscultation sites. The student must **palpate to identify correct auscultation locations**, and will hear different heart and lung sounds as the SmartScope is moved to different locations on the manikin.

The instructor selects from a menu of heart and lung conditions by **wire-less remote control**. A diagnosis of the selected condition can be made by comparing the variations in sounds occurring at different sites. Lung sounds can be detected at 5 anterior, 10 posterior, and two midaxillary locations. Students can practise auscultation at six anterior heart sites.

- Invisible Auscultation Sites
- No Internal Speakers
- Completely Wireless
- Palpable Landmarks
- Remote Controlled
- Heart and Lung Sounds Vary at Different Sites
- Hard Storage Case Included

Listen to the sounds either using headphones or the SmartScope or by connecting to an amplifier (optional) or speaker (not included). Range on the unit is up to 100 feet of remote access.

69 x 43 x 28 cm; 12 kg

Trainer M-1005642
Trainer with Amplifier M-1018149
Additional Body M-1005644





# Adult Deluxe Plus CRiSis® Auscultation Manikin with ECG Simulator, SmartScope® and Printer

The manikin presents itself as a real patient without visible auscultation sites. The student must palpate to identify correct auscultation locations, and will hear different heart and lung sounds as the SmartScope is moved to different locations on the manikin.

A diagnosis of the condition selected by the instructor can be made by comparing the variations in sounds occurring at different sites – just like in a real patient! Lung sounds can be detected at seven anterior locations and students can practise auscultation at six anterior heart sites.

Delivery includes Complete CRiSis" Manikin with auscultation sites, one remote control with LCD display, one SmartScope" with single- and dual-user headpieces, hard storage case, ECG Simulator, and electronic monitoring, memory, and printer unit light controller which displays running averages and provides hard copy printout. Requires two AA batteries (included).

M-1015577

Replacement parts and consumables:	Item No.
Artificial Blood, 1 Litre	M-1005611
Skin and Vein Replacement Kit	M-1005647
Replacement Lungs	M-1013325
Lubricant	M-1005634
REN Cleaner	M-1005776
Amplifier/Speaker System 110V	M-1019721
Amplifier/Speaker System 220V	M-1020046
Replacement Blood Pressure Cuff	M-1019717
Physio Control Defibrillation Pad	M-1019781
Physio Control Training Cables	M-1017990
Marquette Electronics Defibrillation Pad	M-1019782
Light Controller	M-1019779
Electronic Monitoring, Memory & Printer Unit	M-1019633
Additional SmartScope <sup>®</sup>	M-1005643
Additional Auscultation Manikin Torso	M-1005644
Replacement Remote Control	M-1017310
Thermal Printer Paper	M-1019780



#### CRiSis<sup>™</sup> Manikin Auscultation Kit

Do you already have a CRiSis" Manikin? Upgrade with heart and lung sounds now! Provides everything needed to add heart and lung sounds to an existing CRiSis" Manikin. Includes upper torso, chest skin, remote, and SmartScope".



#### Arrhythmia, Heart & Breath Sounds TUTOR

Two-in-one TUTOR reproduces digitally stored heart and breath sounds or arrhythmias. This unique TUTOR allows instructors the flexibility to change menus by changing plug-in modules.

There is a volume control and two LEDs that illuminate during systole as well as an illuminated display showing the example currently playing. Sound Menu items are selected from the 16-panel keypad. Rhythms may also be viewed on any monitor or by connection to the Arrhythmia Display Interface.

Includes 2 stethoscopes from Sounders. Up to 50 Sounders can be connected at the rear panel jacks.

Sound menus sold separately, see table.

M-1017976

Recommended Item:

Arrhythmia Display Interface M-1018150

Sound Libraries	Item No.
Basic Heart Sounds	M-1018175
Murmurs	M-1018176
Breath Sounds	M-1018177
Paediatric Breath Sounds	M-1018178
Paediatric Heart	M-1018179
Infant Heart & Breath Sound	M-1018180
Rates and Rhythms	M-1018181
ACLS – Advanced Cardiac Life Support	M-1018182
ACLS II – Advanced Cardiac Life Support	M-1018183
CCU/ICU	M-1018184
CCU/ICU II	M-1018185
CCU/ICU III	M-1018186
Ventricular Waveforms	M-1018187
Acute Myo-Infarcts Massive Anterior	M-1018188
Paced Beats	M-1018189
Paediatric PALS	M-1018190
Mitral Valve Disease	M-1018191
Aortic Regurgitation	M-1018192
Congenital Heart Disease	M-1005891
Cardiomyopathies	M-1018193
Mitral Stenosis Moderately Severe	M-1018194



Choose from the extensive sound library to practise auscultation skills.



#### **Heart & Breath Sounds Simulator**

The portable TUTOR is a hand-held device that generates both heart and breath sounds. By utilising stethoscope Sounders students can auscultate at the same time or connect a speaker to broadcast the actual patient heart and breath sounds. The unit has two lights that illuminate during systole (heart menu) and expiration (breath menu). Includes 2 stethoscope sounders. Sound Menus sold separately, see table.

M-1005884

# Additional Stethoscope Sounders (not shown) M-1005892

Sound Libraries	Item No.
Basic Heart Sounds	M-1005885
Basic Murmurs	M-1005886
Breath Sounds	M-1005887
Paediatric Breath & Heart Sounds	M-1005888
Paediatric Heart Sounds	M-1005889
Infant Heart & Breath Sounds	M-1005890
Bowel Sounds	M-1018195

# **EAR EXAMINATION**

#### **Ear Examination Simulator**

The ear examination simulator consists of a head with 6 interchangeable flexible ears with life-like external and internal structures of the ear. Embedded coloured prints in 5 out of the 6 ears allow the diagnosis of various pathologies. One ear is not coloured, but can be used for earwax removal exercises.

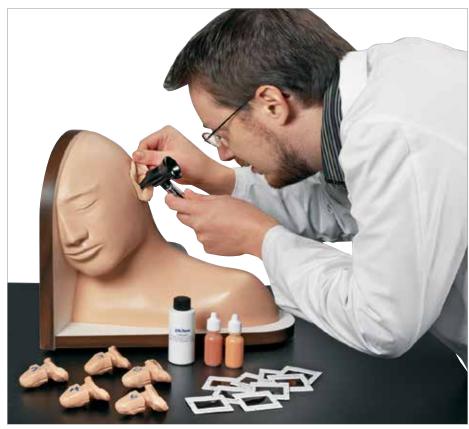
38 x 38 x 26 cm; 7.7 kg

M-1005645

#### **Supplementary Ears**

This set includes 4 ears which allow observation of chronic otitis media with large perforation, attic cholesteatoma, attic cholesteatoma, and atelectatic middle ear otitis and tympanosclerosis.

M-1005646



#### Life/form® Diagnostic and Procedural Ear Trainer

Life-like right and left ears teach diagnostic and procedural techniques and are removable for easy maintenance and storage. For the ultimate in realism, the middle ear can be filled with various fluids. Trainer comes complete with two ears, approximately 100 pre-cut eardrums, specially formulated ear wax, one standard middle ear cartridge with syringe, adjustable stand, and a hard carry case. Otoscope, ventilation tubes, and surgical instruments are not provided. See online for additional product features.

45.7 x 27.9 x 25.4 cm; 5.44 kg

M-1017245



#### Option:

#### Life/form® Pneumatic Otoscopy Kit

This exciting Pneumatic Otoscopy trainer offers an exciting additional feature for the Life/ form® Diagnostic and Procedural Ear Trainer (M-1017245). While pneumatic otoscopy is indispensable for examination of the ear, studies have shown that most are performed incorrectly! Now with the valuable feedback offered by this kit, students, residents, and practising physicians can learn how to generate the correct amount of air pressure needed to perform accurate pneumatic otoscopy to test for tympanic membrane mobility. Kit includes a pneumatic pressure gauge, two pneumatic ears with pressure tubing, and a package of approximately 100 eardrums.

30.5 x 27.9 x 12.7 cm; 1.13 kg **M-1017259** 

# PAEDIATRIC CLINICAL & NURSING SKILLS



#### Life/form® Paediatric Lumbar Puncture Simulator

The Life/form® Paediatric Lumbar Puncture
Simulator represents a 10-12 month old infant
placed in a left lateral decubitus position with
the neck and knees flexed, approximating the
necessary foetal position. The embedded iliac
crest offers exceptional realism, while the
removable spine, spinal canal and skin pad
make training simple and hassle free.

- Perform lumbar puncture in the L3-L4, L4-L5, or L5-S1 spaces Palpate iliac crest and spine to find correct locations
- Fluid flows when needle is inserted correctly.

  9 ka

M-1017244





#### Injection Training Arm, Five Year Old

The Mike\* and Michelle\* Injection Arm and hand simulate that of a 5 year old, with life-like venous structure. The dorsum of the hand has two veins for additional intravenous set-up. Two interchangeable hands are supplied with the simulator.

#### Features:

- Intravenous injections infusion, and blood collection
- $\bullet$  Subcutaneous injections in both flexor and lateral sides of forearm
- Intramuscular injections in deltoid area
- Squeeze bulb simulating either collapsed or distended veins Mounted on smoked Lucite\* base and supplied with blood bag and stand, synthetic blood concentrate, squeeze bulb, and spare arm skin. Soft carrying bag and instruction manual included.



#### Injection Training Arm, One Year Old

#### Simulates the arm of a one year old and features:

- Medial venous structure
- Two veins in dorsum of hand
- Radial and brachial arteries
- Squeeze bulb simulating either collapsed or normal veins
- Easily replaceable skin and veins that withstand multiple needle sticks Mounted on smoked Lucite\* base and supplied with blood bag and stand, synthetic blood concentrate, squeeze bulb, and spare arm skin. Soft carrying bag and instruction manual included.

#### M-1018861



This arm trainer is a valuable tool for practising injections on paediatric patients.



#### Life/form® Paediatric Arm

Providing realistic sensation and response, the life-like vinyl skin rolls when palpated to allow location of the vein. A soft foam is used to simulate the deltoid muscle and allows the student to get the feel of administering intramuscular injections to children. Simulated bone in the shoulder defines and limits the injection area. Water may be used as an injection fluid in the shoulder area.

Includes a Life/form® Arm with white skin, fluid supply bag, 3 cc syringe, one pint Life/form® blood, teaching guide, and hard carrying case.

56 x 28 x 15 cm

M-1017973

Replacement Parts:

Skin & Vein Kit M-1018148
Artificial Blood, 1 Litre M-1005611
REN Cleaner M-1005776



#### Life/form® Difficult Access Infant Skin for IV & IO - Package of 3

The Life/form® Difficult Access Infant IV & IO skin sleeves have been developed to fit over the arms and legs of most infant training products. This soft, lifelike skin is meant to represent a chubbier infant and may be used to prepare for intravenous and intraosseous insertions where the vascular system may be difficult to access.



#### Infant Venous Access Simulator

Now 100% latex-free with redesigned umbilicus and umbilical valve allowing repeated catheterisation with a 5FR umbilical catheter! A unique, anatomically correct female baby developed to teach and practise the vascular accessing of newborns and infants. Barely discernable blue Dermalike™ veins are under the replaceable translucent skin on the head, arms and the right leg. Veins give a realistic pop and flashback when needle is properly placed. The veins presented include the temporal, external jugular, post-auricular, basilic, cephalic, saphenous and popliteal.

Practise accessing, securing, site care, and maintenance for standard IVs and PICC (Peripherally Inserted Central Catheter). Nasal and oral openings allow placement of nasal cannulas, as well as nasogastric, and feeding tubes to teach suctioning, securing, dressing, cleansing, and maintenance.

#### M-1009799

Replacement Items:

Vein Set with M-1009800

**Umbilical Valve** 

Artificial blood, M-1005837

4.5 Litres

Skin and Veins M-1005834

#### Life/form® Paediatric Head

An invaluable tool for demonstrating and practising infusions and injections in the temporal and jugular veins of a newborn to a twelve-monthold infant. Provides realistic sensation and response. The life-like vinyl skin actually rolls as you palpate to allow location of the vein. The synthetic rubber tubing for the veins was carefully selected to provide a life-like simulation of vein size, and feeling of puncture and palpation for practising venipuncture. The temporal vein of the Life/form® Paediatric Head is easily accessible for IV infusions. Practise in the jugular vein is equally realistic. The neck is made of soft, flexible foam to provide a realistic feel of palpation and puncture.

Supplied with head (realistically modelled to represent a six-month-old infant) with skin and veins, fluid supply bag, 2 different gauge winged infusion needles, artificial blood and hard carrying case.

#### M-1005630

Consumables:

Head Skin and Vein Replacement M-1005631
Artificial Blood, 1 Litre M-1005611
REN Cleaner M-1005776



Simulates a twelve month-old infant for realistic training.

# Life/form® Infant Male and Female Catheterisation Trainer

The Infant Male and Female Catheterisation Trainer is an inexpensive 2-in-1 trainer that provides realistic practise of this difficult skills procedure.

- Practise insertion, position, catheter balloon inflation and deflation
- Feel resistance and pressure as with a real patient
- Urine flows when catheter is in proper position
- Practise both male and female infant catheterisation training
- Anatomically realistic with both male and female genitals
- Genitals made of soft, lifelike material
- · Replaceable male and female genitals
- · Lower half of infant only
- Design for use with a standard 8 French latex or silicone intermittent catheter

Includes: infant manikin, one male and one female genital insert, 2 oz. lubricant, infant Foley catheter, and instruction manual.

#### M-1013060

Consumables: Lubricant Kit – 3 Pack M-1009800

REN Cleaner M-1005776





#### **Infant Circumcision Training Kit**

Made with soft, life-like material. The trainers include the foreskin, glans penis, frenulum, meatus, and coronal groove. Practise separating foreskin from the glans, removal of the foreskin, and suturing techniques. The trainers have been designed for clamp methods, dorsal slit, and sleeve circumcisions.

The trainer may also be used to demonstrate the procedure and practise aftercare skills to family members. Since there are different methods of circumcision, the Circumcision Trainer has been designed for Mogen clamp method, Guillotine clamp method, Gomco clamp method, Plastibell method, dorsal slit method, forceps guided method, and sleeve circumcision. The Infant Circumcision Training Kit is a complete kit for all circumcision training needs.

Includes one infant torso, six glans with attached foreskins, instruments (scalpel, 11.5 cm micro-forceps, 15.25 cm precision probe, Iris research scissors, 12.7 cm straight Halstead mosquito forceps, 12.7 cm curved Halstead mosquito forceps, Ethicon suture thread with needle), instrument case, instructions, and soft nylon carrying case.





### Simulates heart, bowel, and lung conditions via wireless remote control.

#### Life/form® Infant Auscultation Trainer

The Life/form® Infant Auscultation Trainer simulates heart, bowel, and lung conditions selected by the instructor via wireless remote control. The student must palpate to identify the correct auscultation sites and will hear different heart, bowel, and lung sounds as the SmartScope® is moved from site to site. The instructor can program the remote control, selecting from two dozen conditions and even switch conditions so students can compare and make a diagnosis.

Includes Infant Auscultation Trainer, Smart-Scope\* remote, and hard carry case. Note: Infant remote and SmartScope\* are not compatible with Adult Auscultation Trainer.

#### M-1017975



#### **Heart Conditions:**

- Aortic Stenosis
- Pulmonary Stenosis
- VSD
- ASD
- S2 Split
- 7-month Heart
- Mitral Regurgitation
- Stills Murmur

- 1-year Heart
- Newborn Heart
- Venous Hum

#### **Bowel Sounds:**

- Borborygmus
- Normal 1 YO
- Normal Newborn
- Normal 2 YO

#### Lung Conditions:

- Asthma
- Pneumonia
- Wheezing
- Newborn Breath
- Rhonchi
- 9-month Breath
- Newborn Stridor
- Stridor
- 9-month Stridor



# Use any stethoscope in the normal auscultation site for paediatric assessment.

#### **Child Heart & Lungs Sound Trainer**

This self-contained heart and lung sound generator delivers site-specific heart and lung sounds typical of a four-year old child. Use any stethoscope in the normal auscultation site for paediatric assessment to listen as ten lung speakers and a heart speaker mimic actual sounds. The unit can be run from either a conventional PC using your mouse and monitor, or through the special handheld remote. An external speaker jack allows you to broadcast sounds to the entire classroom, or you can use it for audible testing of more than one student at a time. Classroom broadcasts of speakers/sounds in specific locations allow students to hear precise sound anomalies encountered when they auscultate the manikin. No programming required. Simply plug in, attach your USB mouse and monitor cable, and point and click your way to student excellence in lung and heart sound knowledge.

#### M-1017237

#### Lung Sounds:

- Asthma
- Bronchial
- Coarse crackles
- Fine crackles
- Normal breath sounds
- Pneumonia, lobar
- Tracheal
- Wheeze
- · Insp. crackles, early
- Stridor

#### **Heart Sounds:**

- · Atrial septal defect
- Congenital aortic stenosis
- Normal paediatric heart sounds
- Patent ductus arteriosis
- Ventricular septal defect
- · S4.11

#### Voice Sounds:

- Cough
- Crying
- Gasp
- Gurgling
- Sneeze 1
- Wheeze
- Rhonchi
- 9-month Breath
- Newborn Stridor
- Stridor
- 9-month Stridor





#### Heart and Lungs Sounds Manikin, 1 Year Old

Learn where the base heart sound may be best heard or where the bell should be placed to hear stress or wheezing in a young child.

Site specificity is obtained through an exciting new wireless technique in which anatomical landmarks on the manikin are used to locate the site where a specific sound should be heard. If correct, the appropriate sound can be heard through the stethoscope and/ or external speakers.

#### Features:

- Fully articulating head, neck and jaw permitting head-tilt/chin lift, jaw thrust and neck extension into the sniffing position
- Anatomically accurate mouth, tongue, airway and oesophagus designed to illustrate the profound differences between intubating an infant, a child or an adult
- Realistic trachea, bronchi and lungs. Observable bilateral lung expansion under positive pressure ventilation

# **OBSTETRICS AND GYNAECOLOGY**



# **SIMone**

Birthing Simulator with NEW Features and 9 New Cases Train realistic and interactive high-stress scenarios for vacuum and forceps delivery:

- Haptic response technology
- · Visual and audio interface
- Full debrief for optimal learning effect

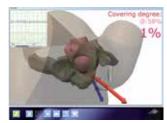
Multi-dimensional learning techniques are combined to assure a maximum effect! The haptic response technology assures realistic training of motoric skills by combining the simulated scenario with high tech sensors: any movement or force that is being used throughout the procedure is measured and direct feedback tells the student the impact it has on the baby.

#### With SIMone, your medical staff can be trained in:

- Correct use of instruments in assisted vaginal delivery
- Defining the position of the foetal head in relation to the maternal pelvis
- Management of birth complications by means of anamnesis, findings and interventions

#### About the birthing simulator

The simulator presents the haptics required in order to perform the instrument assisted delivery in the correct manner: presentation data, placement of the forceps and extraction, taking care



of the head of the infant and the maternal soft tissue. The monitoring software provides information in response to the manipulation of the foetal head in the context of force-feedback. Realistic speed and resistance are simulated during delivery.

#### Designed and manufactured in Germany.









## Simulate high-stress scenarios with the award-winning SIMone<sup>®</sup>!

# SIMone<sup>™</sup>

The SIMone has a patented force feedback mechanism that allows the trainee to confidently learn and develop the skills necessary for performing complicated procedures. SIMone" gives the opportunity to practise an instrumental delivery in a realistic manner – over and over again with little or no setup time! The SIMone™ is designed so that in less than 60 seconds a new birthing scenario can be initiated.

#### SIMone® also trains students in:

- Recognising the right moment to select a vaginal assisted delivery
- Correct handling of medical instruments for delivery
- Assessing position of foetal head in relation to the maternal pelvis
- · Labour management using a partogram
- · Medication administration to achieve progress during delivery
- Interpretting foetal heartbeat and uterine contraction through a CTG
- Interpretting respiratory sounds
- Interpretting the sounds of pain experienced by the mother

#### Accessories included with the simulator:

- 1 Vacuum extractor Menox 60mm
- 1 Vacuum hand pump
- 1 Naegele forceps
- 200 ml lubricant
- · Latex-free disposable gloves, size M/L
- 2 replacement genital inserts
- · Assembly tools
- Extensive operating Manual

#### M-1019599

Consumables	Item No.
Spare genital inserts	M-1008555
Spare foam core	M-1009486
Forceps	M-1012769
Lubricant, 200 ml	M-1009867

# Preeclampsia/HELLP

#### Case 1 Sample

#### Mia:

- 19 years old
- I-Gravida, 0-Para
- 37+5 weeks of pregnancy

#### Lilv:

• 21 years old

Case 2 Sample

- I-Gravida, 0-Para
- 40+1 weeks of pregnancy

#### Emily:

• 18 years old

Case 3 Sample

- I-Gravida, 0-Para
- 38+2 weeks of pregnancy

#### New Features

New

Actions

History

#### Mild preeclampsia

- No contractions
- Blood pressure
- Blood test of the mother
- Urine screening

- Ask the mother
- · Administer misoprotol, prostaglandin or oxytocin
- Administer methyldopa

#### Severe preeclampsia (stage 2 event)

- Irregular labour contractions
- Blood pressure increased
- · Blood test of the mother
- Urine screening
- Administer methyldopa

#### **HELLP** syndrome

- Blood pressure
- · Blood test of the mother
- Perform a caesarean section under general anaesthesia

#### New Interventions and Findings



Temperature Pressure





Values

Amniotic Fluid Quantity



Urine Screening Test



Foetometry



Placenta Examination



Ask the Patient Questions



Send Patient Home

#### **New Medicinal Options**







Anaesthetic









Ringer



Solution



Also exhibits a wide range of other birthing irregularities. Extensive Foetal Heart Rate (FHR) programming ensures a broad exposure to variations in waveforms to test your practitioners' knowledge and team leadership skills in handling patient treatment modalities. The tablet controls the birthing position and rotation of the foetus, descent speed, vaginal bleeding, amniotic fluid, meconium, and the mother's physiological condition in an easy-to-use application. Scenarios are included with the packages and an available library of scenarios makes physiological changes to treatments simple and quick.

#### Easy-to-use tablet controls ALS features:

- Bilateral IV and BP arms
- 5-lead ECG monitoring
- Intubation
- Papillary responses
- 10 active pulse points

#### **Obstetrics features:**

- Manual delivery
- $\bullet$  Baby, placenta, and umbilical cord
- $\bullet\,6\,vaginal\,fluids\,for\,discharge$
- Palpation of foetus and delivery at same time
- 10 scenarios (made up of 36 vignettes)
- Flat-screen monitor
- Laptop monitor
- FHR chart program

Comes complete with adjunct baby for Leopold manoeuvres and birthing baby with placenta, umbilical cord, and first breath action. Accessories included: BP cuff, flat-screen monitor for FHR, tablet and laptop for mother's monitor, pulse oximeter, replacement skin and veins, replacement vagina and cervix, wheeled carry case.









Extensible dilating cervix permits students to conduct vaginal exams and record results



Monitor ventilations and chest compressions with Omni™ Code Blue® pack



Birthing mechanism & birthing baby

#### **NOELLE®** Birthing Simulator with PEDI® Blue Neonate

This comprehensive teaching system combines the best of patient care simulators with the advanced childbirth simulator. It is designed to provide a complete birthing experience before, during and after delivery:

- Intubatable airway with chest rise
- IV arm for meds/fluids
- Practise Leopold Manoeuvres
- Automatic birthing system
- Measure head descent and cervical dilation
- Replaceable dilating cervices
- Practise postpartum suturing on vulval inserts
- New postpartum haemorrhage and palpation module

#### Omni Controller:

Monitor and log ventilations and chest compressions with Omni Code Blue Pack. View feedback on your Omni device or any Windows computer (also available separately, M-1020211)

#### Includes:

- One articulating birthing baby with placenta
- One resuscitation baby with intubatable airway and umbilical catheter site

Comes with four umbilical cords, four dilating cervices, two umbilical clamps, talcum powder, water soluble silicone lubricant, instruction manual and carrying bag. Omni™ Controller, Code Blue® pack: CPR Link software, CPR Link connection cable, CPR module pre installed in simulator.

#### M-1012732



**PEDI**\* Blue Neonate can also be purchased separately, see page 128 M-1013066

# **NOELLE**<sup>®</sup> Birthing Simulator with birthing and resuscitation baby *Includes*:

- One articulating birthing baby with placenta
- $\bullet$  One resuscitation baby with intubatable airway and umbilical catheter site  ${\bf M-1012417}$

#### **NOELLE®** Birthing Simulator with birthing baby

Includes one articulating birthing baby with placenta.



#### Susie® Advanced OB Simulator

This battery powered birthing simulator uses very durable materials and elements for years of usage. It comes with a birthing baby and a newborn.

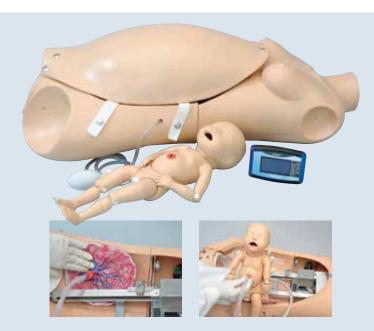
#### Training features:

- Vertex or breech deliveries
- Vacuum augmentation or forceps assisted deliveries
- Replaceable vulval inserts and highly distensible cervices
- Removable abdominal and opaque covers
- Audible maternal heart sounds from 0 to 200 bpm
- Audible newborn heart sounds from 0 to 220 bpm
- · Audible newborn cries, grunting, and stridor
- Foetus with elevating pillow for practising Leopold manoeuvres
- Rectum allows medication

Included: midwifery gown with snaps, two pairs of non-latex gloves, suction bulb, conventional stethoscope, Pinard stethoscope, blood collection stand with squeeze bulb to regulate pressure, simulated blood concentrate, simulated urine concentrate, one non-sterile urinary catheter (not for human use), three distensible cervices, two placentas with removable fragments, silicone lubricant and talcum powder, transportation and storage bag.

#### M-1019303





#### **Maternal and Neonatal Birthing Torso**

This comprehensive teaching system is designed to provide a complete birthing experience before, during and after delivery. Full size upper and lower female torso

- Removable stomach cover
- One articulating birthing baby with umbilical cord and placenta
- Automatic birthing system that rotates the baby as it moves through the birth canal
- Measure head descent and cervical dilation
- Multiple placenta positions
- Replaceable dilating cervices
- Practise postpartum suturing on vulval inserts
- Practise Leopold Manoeuvres

#### **Birth Manipulation Trainer**

A perfect anatomical model and birthing simulator to teach and practise diagnostic and therapeutic manipulation before and during childbirth. This human birth model features a female pelvis with a foam covered belly cavity, removable vulva and a foetus. An anatomical accurate and realistic model of human birth. Delivered on baseboard.

30 x 55 x 55 cm, 6 kg

#### M-1001260





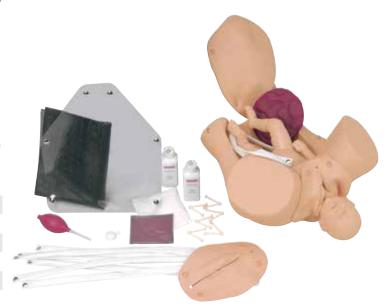
#### **Birthing Simulator**

This life-like birthing simulator gives your trainees practise in normal vaginal delivery as well as birthing procedures for breech and vertex presentation of the foetus. This birthing simulator contains two interchangeable abdominal overlays — one containing an additional foetus in a simulated amniotic fluid sac for practising Leopold's manoeuvre, the other being transparent to allow viewing of the foetal position during labour. Anatomically correct female pelvis with representation of internal landmarks such as spinal column, angled birth canal, ileum, ischium, sacrum, sacro spinous ligaments and greater sciatic notch.

Includes full term foetus with fontanelles and cranial sutures and placenta with six disposable umbilical cords and clamps.

#### M-1000002

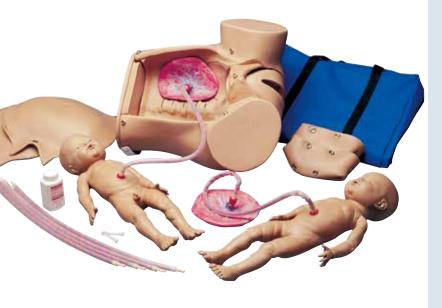
Replacement parts	Item No.
Obstetrical Vulva	M-1005719
Obstetrical Transparent Overlay	M-1005720
Obstetrical Transparent Overlay with foetus	M-1005721
Placenta with umbilical cord	M-1005714

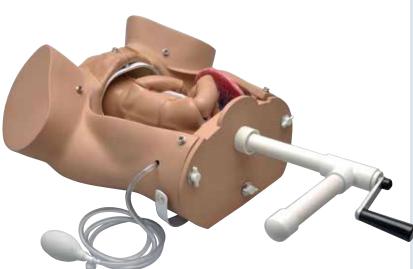


#### **Birthing Simulator with 5 Different Cervices**

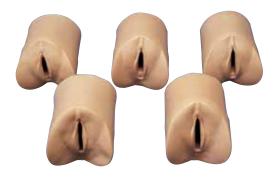
This birthing simulator is a replica of the vagina with its surrounding anatomical structures which can be felt by hand. With 5 different cervices, allowing the student to feel the anatomical changes during birth, and a foetus doll with umbilical cord and placenta for learning and practising obstetrics. This human birth simulator is a great tool for teaching the stages of human labour.











#### **Birthing Simulator**

Features the pelvic cavity with major anatomical landmarks and painted outline of bony pelvis. The birthing simulator allows intra-uterine manipulation and various training possibilities for prenatal, intrapartum, and postpartum skills.

Supplied with 2 stomach covers (skin-tone/transparent), 1 male and 1 female foetus with placenta, 5 umbilical cords, 2 umbilical clamps, talcum powder and carrying bag.

#### M-1005790

Other available add-ons for M-1005790:

Foetus for vacuum delivery M-1005791

Palpation Module for M-1005823

Leopold's Manoeuvres

#### Birthing System for M-1005790:

- Removable end-plate for insertion of birthing mechanism
- Removable cervices automatically dilate as labour progresses
- Advance and rotation of foetus through birth canal
- Crowning of foetal head
- Manipulation of the vulva to pass the forehead, nose, and ears
- Syringe mouth and nose
- Foetal rotation to enable shoulder presentation
- Birthing Foetus

#### M-1013794

#### Suzie® Articulating Foetus for M-1005790:

Representation of a 42 cm foetus with articulating head and neck, shoulders, elbows, hips and knees for more realistic practise of difficult delivery exercises such as Leopold's or Ritgen's manoeuvres.

#### Features:

- Realistic mouth and nostrils for simulated suctioning
- Palpable fontanelles, spine, shoulders, buttocks, elbows, and knees
- Supplied with carrying bag

#### M-1005814

#### Labour Delivery Module for 1005790:

#### Birthing stations illustrated by labour delivery module are:

Station -5: Prior to onset of labour Station -4: Cervix partially effaced

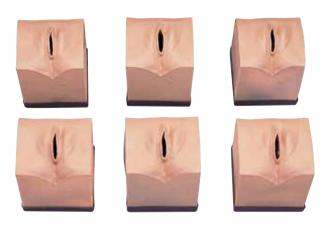
Station -3: Cervix fully effaced

Station 0: Foetal head at plane of ischial spine

Station +2: Cervix nearing full dilation

Station +5: Crowning of foetal head

Supplied with carrying case.



#### **Birthing Station Simulator - Cervical Examination**

This birthing simulator consists of 6 anatomical pelvic blocks which are ideal to teach, demonstrate and practise cervical examination prior to birth. Internal texture, tissue density and correct anatomical size are carefully represented to provide the most realistic female genital condition possible. The following stages of the cervix during birth are represented:

Stage 1 (no dilation, no effacement)

Stage 2 (2 cm dilatation, 50% effacement)

Stage 3 (2 cm dilatation, full effacement)

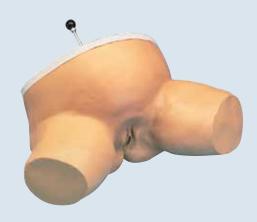
Stage 4 (5 cm dilatation, full effacement)

Stage 5 (7 cm dilatation, full effacement)

Stage 6 (9 cm dilatation, full effacement)

This anatomical model is a great addition to any lesson about the process of birth, including gynaecological training. The birthing simulator is delivered with storage case.

M-1019859



#### **Birthing Station Simulator**

This birthing simulator is especially designed to demonstrate and practise the palpation of the birth canal. It shows the relationship between foetal head and ischial spines of the pelvic bone during birth. A simulated foetal head of the birth simulator can be locked in three different stations to demonstrate its position above, between and below the ischial spines. This anatomical birthing model is a great addition to any lesson about the human birth process. The birthing simulator is delivered with storage case. It is great for any gynaecological and birth training.

M-1005589

#### **Episiotomy Suturing Simulator, Set of 3**

A realistic way for students to learn good surgical techniques without time constraints or concern for patient safety. The life-like texture allows the student to develop a feel for instrument handling, tension on suture, and the right method of tying knots. Simulators can be used by a student in a learning lab with an instructor, or by the student alone in the clinical setting just prior to patient experience.

#### The 3 episiotomy simulators included are:

- Midline
- Left mediolateral
- Right mediolateral

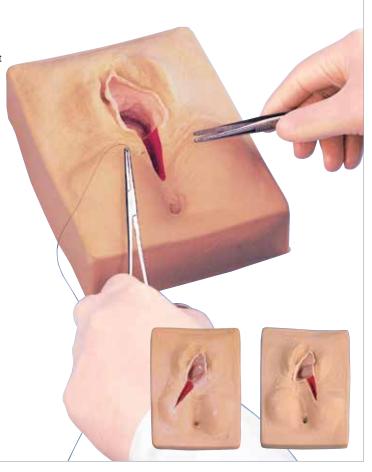
Delivered in a storage case with instruction booklet.

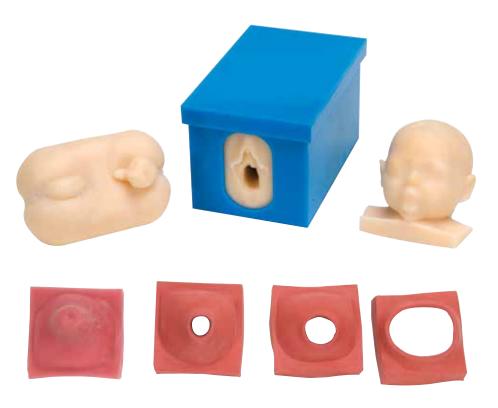
 $20 \times 15 \times 7 \text{ cm}$ ; 1,5 kg

M-1005627

#### Suture Replacement (5 pk)

Includes 4-0 reverse cutting nylon suture.





#### Foetal Monitoring and Labour Progress Model Set

This versatile model provides a life-like simulation for performance of vaginal examinations, application of the foetal spiral electrode and intrauterine pressure catheter, assessing dilation, palpating foetal fontanelles and suture lines, and assessing position of the vertex.

Foetal head, lower uterine segment, and cervix are made from life-like materials. The foetal model is encased in a durable plastic case which allows for easy visualisation of parts. It can also be removed to practise foetal spiral electrode application while visualising the procedure.

Comes with carrying case.

34 x 16 x 29 cm; 4.8 kg

#### M-1005579

Replacement Items	Item No.
Cervix (8 cm)	M-1013601
Cervix (4 cm)	M-1013903
Cervix (2 cm)	M-1014173
Replacement Box	M-1017581



#### **Internal Foetal Monitor Trainer**

This life-like 3D trainer provides realistic simulation for proper insertion of an internal electrode for foetal heart monitoring. Includes the foetal head, lower uterine segment, and cervix made from life-like materials. The foetal model is encased in a durable plastic case which allows for easy visualisation of parts. The foetal head can also be removed to practise foetal spiral electrode application while visualising the procedure.

Also includes one model of cervical dilatation depicting 4 cm of dilatation. All parts are easily removed for washing. Includes lubricant, instructions, and nylon carry case.

14 x 12.7 x 21.6 cm; 3.63 kg

M-1017263



#### **Foetus Model**

This model simulates an average full-term foetus. The human foetus is made of a soft and durable cloth. The body of the foetus model is flexible to show all presentations and positions possible during birth. The amniotic membrane allows you to show the foetal model inside the sack. The snap-on umbilical cord clearly shows the vein and arteries and a convenient drawstring closes the sack. Both amniotic and chorionic membranes are detailed accurately in two colours.

Foetus M-1005571 Placenta & Umbilical Cord M-1005573

#### **Gynaecological Simulator**

This simulator represents a female adult lower body with relevant internal anatomical landmarks and anatomically accurate fimbriae and ovaries. It combines and delivers the ability to demonstrate multiple gynae-cological procedures, practise laparoscopic examination and minilaparotomy, recognition of pathologies and placement of contraceptive devices.

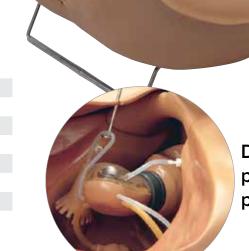
#### Training features:

- Vaginal speculum and bimanual pelvic examination
- Uterine sounding
- Insertion and removal of contraceptive devices such as IUD, 75mm diaphragm or female condom
- Laparoscopic visualisation and occlusion of fallopian tubes
- Minilaparotomy

Includes talcum powder, lubricant and soft nylon carrying bag.  $51 \times 46 \times 25,5$  cm; 8,5 kg

#### M-1005797

Optional Equipment	Item No.
7 Uteri – Normal with External Pathologies	M-1005798
7 Uteri – Normal with Internal Pathologies	M-1005799
Postpartum Uterus, 48 hours	M-1005812
Postpartum Uterus, 10 minutes	M-1017715
2 Early Pregnant Uteri	M-1005813
Normal Cervices	M-1019247



Demonstrate and practise multiple procedures!

#### **Gynaecological Trainer**

A life-like female pelvis for developing diagnostic skills in gynaecological procedures, anatomical instruction, abdominal palpation, and speculum instruction. The trainer allows the comprehensive, stress-free introduction of gynaecological examinations or more advanced tactile comparisons of pelvic pathologic conditions in a classroom setting, easing the way into clinical experience.

Constructed of soft, easily cleaned, vinyl materials that approximate skin texture, provides detailed, life-like anatomical features and references.

- Normal cervix and uterus for IUD insertion and removal
- Normal parous cervix
- Cervix with endocervical polyp
- Cervix with ectropion characteristics
- Cervix with neoplasia (carcinoma)
- Pregnant 10 week uterus
- 2 adnexal masses

Manikin comes with instruction sheet and soft nylon bag.  $30.5 \times 33 \times 33$  cm; 4 kg





#### Advanced Pelvic Examination and Gynaecological Simulator

Now in one completely redesigned unit, the Advanced Pelvic Examination and Gynaecological Simulator is ideal for all aspects of gynaecological education, training, and competency evaluation, including the bimanual exam, speculum exam, and cytology sampling. Students will appreciate the unprecedented realism of its internal and external features; while instructors will love the interchangeable components that make up its unique modular system. You choose the scenarios you want to teach! Components can be combined in a multitude of ways. This simulator allows you the flexibility of customising your scenarios with use of included makeup, blood, and thickener. Additional specialised modules are also available (STD, post-menopause, S.A.N.E., and pre-puberty).

#### Starter unit includes:

- Torso
- Normal genital pad
- Normal pelvic organ block with vagina and rectum
- Abdominal gel pad
- Fabric abdominal pad
- Abdominal overlay skin
- Seven uterus/cervix pieces (normal/normal with discharge option, retroverted/cervicitis, cancer/cancer, transparent IUD, trainer, postmenopause/herpes, fibroids/polyp, early pregnancy)
- Five detachable ovaries (normal polycystic, small cyst, large adnexal mass)
- Bladder insert
- Pelvic organ prolapse insert
- Baby powder
- Injury Shades Makeup Wheel
- Primary Colours Makeup Wheel
- Blood mix
- Methyl cellulose thickener
- Syringe
- Lubricant
- Instruction manual
- Hard carry case

M-1019960



#### Cervical Exam and Pap Smear Test Simulator

The Pap test is the most frequently performed cancer screening test in the world. It is essential for women's healthcare practitioners to achieve competence in this vital but highly sensitive procedure. With the Life/form\* Cervical Exam and Pap Test Trainer, students can practise external and internal examinations, speculum insertion, and cytological sampling techniques on a simulator that is incredibly realistic and easy to use.

Features seven cervical conditions: normal, early pregnancy, polyp, early cancer, late cancer, inflammation and dysplasia.

#### About the simulator:

- $\bullet$  Compact size for easy setup, storage, and transport
- Disassembles completely for easy cleaning
- Extra-soft material and lifelike detail give extremely realistic training experience
- Fraction of the cost of a full-size simulator
- Includes materials for making realistic body fluids and secretions
- Modular design offers quick change-out for different scenarios
- Movable cervix

Includes external genital pad, vagina, seven-piece cervix set in plastic case, support blocks, baby powder, methyl cellulose, blood packet, syringe, lubricant, and instruction manual. Speculum and cytological sampling equipment not included.

#### **Gynaecological Simulator**

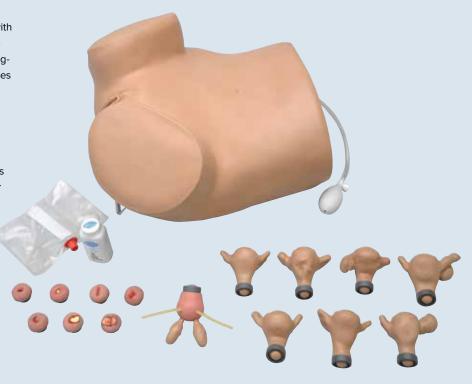
This simulator represents a female adult's lower body with soft outer skin as well as anatomically accurate fimbriae and ovaries. Various pelvic examinations including recognition of pathologies and placing of contraceptive devices can be trained.

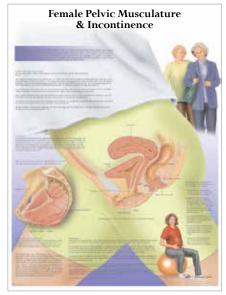
#### Features:

- Vaginal speculum and bimanual pelvic examination
- Uterine sounding
- Insertion and removal of contraceptive devices such as IUD, diaphragm, cervical cap, contraceptive sponge or female condom

The simulator is supplied with normal and abnormal cervices and uteri which can be easily changed.

M-1005789



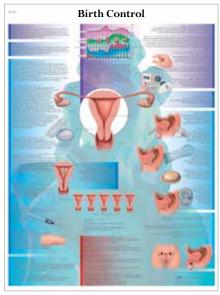


#### **Female Urinary Incontinence Chart**

The affected anatomy of urinary incontinence is illustrated in this poster along with important information about causes, treatments, and prevention. This anatomy poster is a great educational tool for human female urinary incontinence.

Printed on premium glossy (200g) paper. Convenient Poster size 50 x 67 cm.

M-4006702

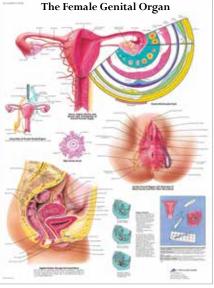


#### **Birth Control Chart**

This high quality colourful anatomical chart presents information about common birth control methods, from natural birth control to surgical methods. Birth control methods that are not reliable are also discussed on this poster.

Printed on premium glossy (200g) paper. Convenient Poster size 50x67cm.

M-4006707



#### The Female Genital Organs Chart

The important anatomical structures are pictured and labelled. The microanatomy of the ovaries and other areas of the female genital organs are also displayed in this poster. furthermore, some methods of contraception are detailed on the chart as well.

Printed on premium glossy (200g) paper. Convenient Poster size 50 x 67 cm.

M-4006701

#### Also available laminated:

The 75 micron lamination ensures the chart does not curl up at the edges and the UV treatment ensures the chart does not get a faded yellow colour over time.

The Female Genital Organs Chart, laminated
Birth Control Chart, laminated
Female Urinary Incontinence Chart, laminated

M-1001568 M-1001580 M-1001570

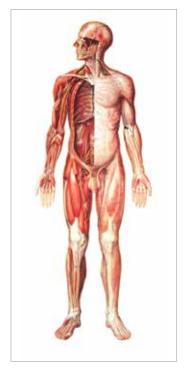


# MEDICAL CHARTS

Anatomical wall charts and posters from 3B Scientific® are ideal for teaching human anatomy and for patient education.

# **WALL CHARTS GUIDE**

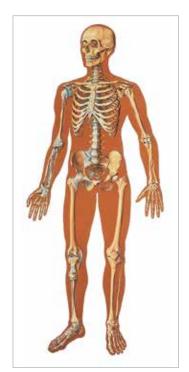
Wall charts are bigger in size, and are available mounted on wooden rods, or unmounted. They are printed on tear-resistant, waterproof paper and measure  $84 \times 200$  cm.



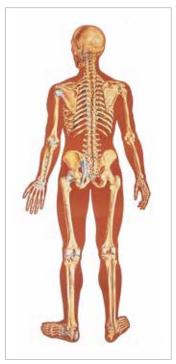
The Nervous System,
Front Side
Mounted M-1001190
Unmounted M-4006539



The Nervous System,
Back Side
Mounted M-1001192
Unmounted M-4006540



Human Skeleton with
Ligaments, Front Side
Mounted M-1001146
Unmounted M-4006512



Human Skeleton with
Ligaments, Back Side
Mounted M-1000012
Unmounted M-4006513

Muscle	Mounted	Unmounted
The Human Musculature, Front	M-1001149	M-4006514
The Human Musculature, Rear	M-1001153	M-4006516
Muscle Tissue	M-1001212	M-4006551
Nervous System		
The Central Nervous System	M-1001185	M-4006536
Skin		
The Skin	M-1001177	M-4006530
Vegetative System		
The Vegetative Nervous System	M-1001218	M-4006556
Endocrine System		
The Endocrine Glands	M-1001200	M-4006545
Heart		
The Anatomy of the Heart I	M-1001214	M-4006552
Gynaecology		
The Menstrual Cycle	M-1001220	M-4006559
Organs		
The Male Pelvic Organs	M-1001173	M-4006527
The Female Pelvic Organs	M-1001175	M-4006528
The Internal organs	M-1001155	M-4006517
The Kidney	M-1001165	M-4006523
The Respiratory Organs	M-1001188	M-4006538
The Speech Organs	M-1001157	M-4006518
The Ear	M-1001161	M-4006520
The Anatomy of the Eye I	M-1001161	M-4006521
Blood		
The Composition of Blood I	M-1001183	M-4006534
Human Blood Circulation	M-1001163 M-1001169	M-4006534 M-4006525
Cell	1001103	000020
Human Cell Structure	M-1001179	M-4006531
Cell Division I, Mitosis	M-1001179 M-1001206	M-4006531 M-4006548
,	M-1001206 M-1001210	M-4006548 M-4006550
Cell Division II, Meiosis	141-1001210	11124000330
Bacteria & Parasites	M 4004404	M 4000544
Bacteria	M-1001194	M-4006541
Intestinal Parasites I	M-1001171	M-4006526
Intestinal Parasites II	M-1001181	M-4006532
Bones		
Bone Structure	M-1001208	M-4006549
Vascular System		
The Vascular System	M-1001151	M-4006515
The Digestive System		
The Digestive System	M-1001196	M-4006542
Dental		
Healthy Denture	M-1001167	M-4006524
Torso		
The Human Torso	M-1001159	M-4006519
Pregnancy & Childbirth		
Position of the Child	M-1001226	M-4006562
The Birth Process	M-1001204	M-4006547
Embryology I	M-1001222	M-4006560
Embryology II	M-1001224	M-4006561

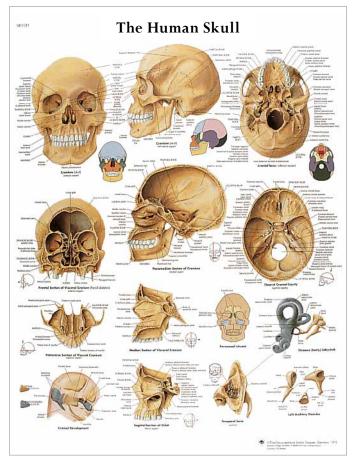
# **CHARTS GUIDE**

#### **3B Scientific® Charts & Posters**

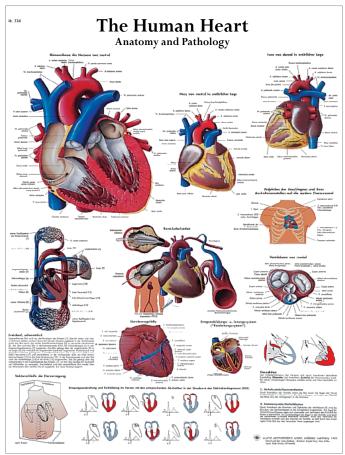
Anatomical wall charts and posters from 3B Scientific® are ideal for teaching human anatomy, patient education and medical studies! All anatomy charts are available in 50 X 67 cm unless otherwise stated. An excellent addition to anatomical models in the classroom or doctors office. Available unlaminated (paper version) or laminated. Posters are available in several languages.

Bones	Laminated	Paper
Human Skeleton	M-1001468	M-4006651
Shoulder and Elbow	M-1001482	M-4006658
Hand and Wrist	M-1001484	M-4006659
Pelvis and Hip	M-1001486	M-4006660
Foot and Ankle	M-1001490	M-4006662
Muscle		
Human Musculature	M-1001470	M-4006652
Pathologies		
Osteoporosis	M-1001472	M-4006653
Arthritis	M-1001474	M-4006654
Sports Injuries	M-1001494	M-4006664
Diseases of the Eye	M-1001498	M-4006666
Rhinitis and Sinusitis	M-1001504	M-4006669
Diseases of the Middle Ear	M-1001506	M-4006670
Respiratory Tract Infections	M-1001508	M-4006671
Skin Cancer	M-1001514	M-4006674
Alcohol Dependence	M-1001620	M-4006727
Nicotine Dependence	M-1001622	M-4006728
Allergies	M-1001596	M-4006715
Decubitus Ulcers	M-1001606	M-4006720
Flu (Influenza)	M-1001608	M-4006721
HIV and AIDS	M-1001610	M-4006722
Pneumonia	M-1001518	M-4006676
Common Cardiac Disorders	M-1001526	M-4006680
Varicose Veins	M-1001534	M-4006684
Diseases of the Digestive System	M-1001548	M-4006691
Colon Cancer	M-1001550	M-4006692
Hepatitis	M-1001552	M-4006693
Diabetes	M-1001554	M-4006694
Cholesterol	M-1001558	M-4006696
Stroke	M-1001590	M-4006712
Alzheimer's Disease	M-1001592	M-4006713
Organs		
Human Eye	M-1001496	M-4006665
Human Ear	M-1001500	M-4006667
The Larynx	M-1001502	M-4006668
The Skin	M-1001512	M-4006673
Lymphatic System	M-1001540	not available
The Liver	M-1001544	M-4006689
The Urinary Tract	M-1001544	M-4006698
Kidney	M-1001562 M-1001564	M-4006699
The Prostate Gland	M-1001564 M-1001566	M-4006099
Human Brain	M-1001566 M-1001584	M-4006700 M-4006709
Huildii Didiii	IVI-1001584	IVI-4006709

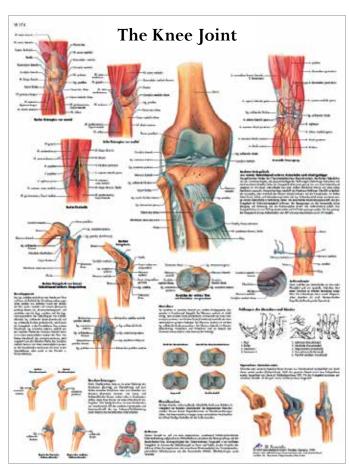
Pregnancy & Childbirth	Laminated	Paper
Pregnancy	M-1001572	M-4006703
Childbirth	M-1001574	M-4006704
Breastfeeding	M-1001578	M-4006706
Birth Control	M-1001580	M-4006707
Gynaecology		
The Female Genital Organs	M-1001568 M-4006701	
The Female Breast	M-1001576	M-4006705
Stomach		
The Gastrointestinal System	M-1001542	M-4006688
The Stomach	M-1001546	M-4006690
Cell Genetics		
Human Metabolic Pathways	M-1001556	M-4006695
Blood Vessel & Nervous System		
The Blood	M-1001538	M-4006686
The Vegetative Nervous System	M-1001582	M-4006708
The Nervous System	M-1001586	M-4006710
Spinal Nerves	M-1001588	M-4006711
Acupuncture		
Foot Reflex Zone Massage	M-1001624	M-4006729
Ear Acupuncture	M-1001628	M-4006731
Body Acupuncture	M-1001626	M-4006730
Dental		
The Teeth	M-1001510	M-4006672
CPR		
Basic Life Support	M-1001616	M-4006725
Lungs		
The Respiratory System	M-1001516	M-4006675



The Human Skull Chart
Laminated M-1001478
Paper M-4006656

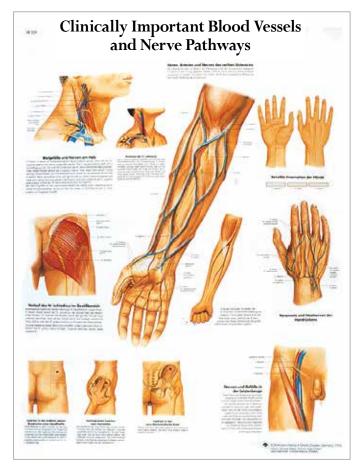


The Human Heart Chart
Laminated M-1001524
Paper M-4006679



The Knee Joint Chart

Laminated M-1001488 Paper M-4006661



Blood Vessels & Nerve Chart
Laminated M-1001530
Paper M-4006682

# INDEX

Human Anatomy	4 – 87	Healthy Lifestyle	99 – 100
Skeleton Models	6 – 17	Diabetes	101
Hand and Foot Models	18 – 23	ORTHObones	102 – 105
Vertebrae Models	24 – 27	Medical Simulation	106 – 209
Spine Models	28 – 33	Basic and Advanced Life support	106 – 129
Skull Models	34 – 39	Airway Management and Rescue	130 – 141
Musculature Models	40 – 45	Patient Care	142 – 151
Torso Models	46 – 52	Interactive Education / Sectra	152 – 153
Skin Models	53	Epidural and Spinal Injections	154 – 155
Head and Brain Models	54 – 59	I.V. Injections	156 – 158
Nervous System	60 – 61	Venipuncture	159
Eye Models	62 – 63	I.M. Injections	160 – 162
Ear Models	63 – 65	Blood Pressure	163
Dentition Models	66 – 69	Clinical Skill Torsos	164 – 167
Heart Models	70 – 75	Ultrasound	168 – 170
Lung Models	76 – 77	Catheterisation	171 – 172
Digestive and Urinary Models	78 – 83	Male Health	173
Pelvis Models	84 – 87	Laparoscopy	174 – 180
Health Education	88 – 101	Suturing and Bandaging	181 – 185
Women's Health	89	Auscultation	186 – 190
Contraceptive Education	90 – 91	Ear Examination	
Pregnancy and Birth	92 – 94	Pediatric Clinical and Nursing Skills	192 – 197
Parent Education	95	Obstetrics and Gynecology	198 – 209
Men's Health	96 – 97	Charts	210 – 213
Nutrition	98		



# Order

Address		Telephone Fax E-Mail Profession		
		In case of que	estions concerning your	order
Product No.	Product Description	Quantity	Unit Price	Total
3B Catalogue	Therapy & Fitness		Free of Charge	
Thank you for ordering 3B Scientific® Products  *All prices are ex works, uninsured, packing in export cartons included. Shipping costs will be calculated separately according to your country and order volume and will be added to the order confirmation for your approval.			Total Order Value	
			VAT Invoice*	
Date, Signature_				



