

Anatomical Models

ERLER ZMMER

SKELETON OVERVIEW

ERLER ZIMMER Skeletono since 1950

Casts of real human skeletons in highest quality and attention to detail.

All bones are individually crafted and carefully assembled.

Easy to assemble. All individual parts are pre-assembled.

S.5

	Oscar Ref.no. 2960	Milli Ref.no. 3001	Hugo Ref.no. 3014	Otta Ref.no. 3004
rigid spine				S
flexible spine				
muscle marking				
Joint ligaments at shoulder, elbow, hip & knee				Ø
Herniated Disc				
Spinal Nerves				
three part Skull				
detachable arms				
detachable legs				
detachable feet				
sliding joints shoulder				
sliding joints hip				
leg separates at knee				
movable scapula				S
Roller stand				
Size incl. Stand (cm)	178	178	178	178
weight appr. (kg)	9	9	9	10

S.F

S.7

10

S.8



ERLER-ZIMMER SKELETONS

All Erler-Zimmer skeletons are castings of natural skeletons of highest quality and authenticity. The models in resistant synthetic material show all the anatomical details, structures, fissures, foramina and processes. All bones are manufactured individually and have been carefully assembled. Hands and feet are mounted flexibly on wire. Arms, legs and the skull can be removed easily and partially disassembled. The 5-leg castor-mounted stand provides the model with a consistently good support and allows simple transport from one room to another.

All human Skeleton models: Height: 1,78 m

Natural movement of the joints

Unlike the skeletons with metal joints Erler-Zimmer Skeletons are able to move the joints freely, the joint surfaces slide on each other and do not stick out like the joints in other skeletons do. This allows to demonstrate not only turning movements, but all possible joint movements. The quick fasteners allow to remove and reassemble the joint connections in seconds. This makes removing or assembling the limbs a childs play.

Idealized Skull

ERLER ZIMMER

The three part skull was digitalized and modified to correspond with the standard anatomy. The size corresponds to European standard size, all important structures, fissures, foramen and processes are represented. The skull can be dismantled into base, lower jaw and skull cap. The skullcap is adjusted to the base with metal pins and held with magnets. Due to this technology no pin can break and there will be no gap between skull cap and base. This distinguishes the skull from most competitors skulls. There are no hooks that could break or deform.

44415



ERLER-ZIMMER THERAPY SKELETONS

In order to do justice to the increasing requirements of therapeutic training, the EZ-therapy skeletons offer a fully mobile vertebral column. Mounted on a highly robust and simultaneously optimally flexible metal spiral hose, this vertebral column can be simply set in any position. In addition to normal postures, malpositions and malpostures can be demonstrated very impressively. Owing to the special flexible intervertebral discs, the vertebral column can not only be flexed but also rotated itself. These intervertebral discs behave like natural discs when flexing the vertebral column, i.e. they can be compressed or expanded. Consequently, the vertebral column can be flexed in an anatomically correct manner, without a cleft arising between intervertebral disc and vertebra. The spinal cord and spinal nerves derived from it provide an additional important demonstration option.

134

Erler-Zimmer Skeletons with marking of muscle insertions and origins

The models Arnold, Bert, Peter, Max, Daniel and Fred have muscle markings. On the right body side of the skeleton the muscle origins (red) and insertions (blue) are marked. The markings are developed together with the teachers of a physiotherapy academy and comply with the special needs of physiotherapists. The didactical order of the key card fits the didactical order of the physiotherapy education. Suitable books are mentioned in the key card.

Perfect for Physiotherapy and students!

133

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133



Human Skeleton Model

BEST

Hugo This therapy skeleton with a movable vertebral column is ideal for anyone who not only wants to learn anatomy, but also wishes as a therapist to understand or explain the connections between movements, postures and

malpositions. Ref.no. 3014 Details:

Human Skeleton Model

Arnold

This anatomical skeleton model does not only show all bony structures in high detail, but also has marking of muscle attachments and origins on the right body half. It is perfect to learn the three dimensional function of the human musculature.

Ref.no. 3008 Details:



Human Skeleton Model

eter

This therapy skeleton combines the movable spine and the marking of muscle attachments and origins in one model. The perfect choice for anyone who wants to understand the locomotor system.



ARTICULAR LIGAMENTS

Flexible articular ligaments in the knee, hip, elbow and shoulder allow demonstration of movements and explanation of function. The most important ligaments in each case are represented.

Human Skeleton Model

1 oni

with movable spine and ligaments. This therapy skeleton has a movable spine and additionally articular ligaments of elbow, shoulder, hip and knee. Thje perfect model for patient education.



Human Skeleton Model



with articular ligaments. Anatomical skeleton model with representation of the articular ligaments of elbow, shoulder, hip and knee. All bony details and structures are shown in detail.

Ref.no. 3004 Details:





Human Skeleton Model



with movable spine and ligaments.

Anatomical Skeleton Model with articular ligaments in elbow, shoulder, hip and knee as well as marking of the muscle origin and insertion. All bony structures and details are represented in detail. A perfect model for education and patient education.

Ref.no. 3010

Accessories for skeleton models:

Foot, mounted on rubber

You may have the right foot of the skeleton models mounted on rubber band to allow demonstration of the rolling movement.

Ref.no. 3018R



Human Skeleton Model

ax

with movable spine, muscle markings and ligaments. This top model of our skeleton series combines all features in one skeleton and leaves nothing to be desired. The spine is fully movable, the articular ligaments of elbow, shoulder, hip and knee are represented, and the origin and attachments of muscles are marked. With this model you are well equipped for all tasks during education or on your job.

Ref.no. 3016 Details:

Dust cover for Skeleton

This rugged cover is made of plastic fabric and protects your skeleton model from dust and hides it at the same time. The cover is simply pulled over the skeleton without any zipper or other element that could break.

Ref.no. 3099 Details:

Fetal Skeleton, 30th week

An excellent detailed human fetal skeleton. The average body length measurements suggest an age of 8.5 to 9 months, but developmental osteologic features are most suggestive of 7 to 7.5 months.







The 14 to 16-month-old child skeleton demonstrates the unfused epiphyses of the long bones, and the cartilaginous margins of many of the bones at this age of development.

Ref.no. 2870



Child Skeleton, 5 year old

Our 5-year-old skeleton is produced from the skeleton of an average 5-year-old. The reproduction of this skeleton includes all of the primary and secondary centers of ossification which demonstrate sufficient morphological detail to be isolated, recognized, and identified out of anatomical context.

Ref.no. 2800 Details:

194 cm

M



Adolescent Skeleton

1 appr. 40 cm

The developing skeleton is very different from adult skeletons -- the numerous ossification centers and growth plates can dramatically change the appearance of individual bones.



154 cm

MINIATURE - SKELETONS

Erler-Zimmer Miniature-Skeletons are complex reproductions of our life-size skeleton models and are always a good choice in case there is not enough space or if there are other reasons not to buy a life size one. The reproductions are about ½ life size and are as movable as the life-size counterparts. This series also offers a variety of features to allow everyone to find the suitable model.

Miniature-Skeleton



The standard skeleton of the miniature-skeleton series. The spine is nonmovable, the limbs can be moved and taken off like the three part skull.

184 cm

Ref.no. 3030 Details: All skeletons are detachable from the stand.

TL

1 80 cm

BEST

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Miniature-Skeleton

This reasonable priced skeleton offers everything a student, or a beginner will need. Skull, arms and legs are removable, the skeleton can be taken off the stand.



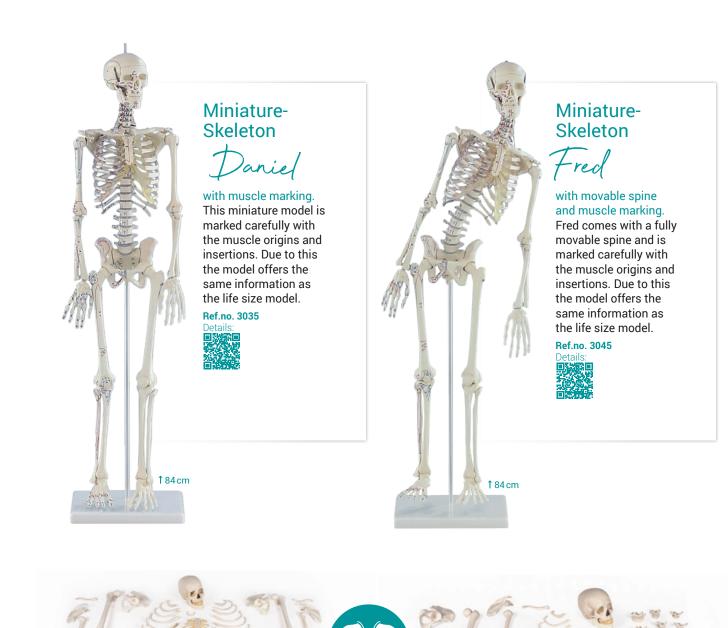
Miniature-Skeleton

with movable spine.

This miniature-skeleton has a spine, that can be moved easily in any desired position. The three part skull and the limbs can be removed.



184 cm



Skeleton, unassembled

All bones of the human skeleton loosely in a storage box. One of the hands and one of the feet is mounted on wire, the other is supplied loosely in a bag. No construction kit, not suitable for self-assembly!



Bonecollection

Ref.no. 3020

Half skeleton, unassembled

All bones of a human skeleton loosely as a set. Twin bones are in the box only once (e.g. only right ribs.). The hand and foot are mounted on wire.

Ref.no. 3024

Individual bone components

Do you require only certain bone components? Using the following order numbers, you can compose your own individual bone collection. Ref.no. 3050 foot bones, unmounted Ref.no. 3051 tibia Ref.no. 3052 fibula Ref.no. 3053 patella (kneecap) Ref.no. 3054 femur Ref.no. 3055 half pelvis Ref.no. 3060 sacrum with coccyx Ref.no. 3062 vertebra, individual (state C1 to L5) Ref.no. 3085 clavicle (collar bone)

Ref.no. 3070 ribs (12 items, one side) Ref.no. 3071 sternum Ref.no. 3080 hand bones, unmounted Ref.no. 3081 ulna Ref.no. 3082 radius Ref.no. 3083 humerus (upper arm) Ref.no. 3084 scapula (shoulder blade)



PELVIS

Pelvis with sacrum f/m

Pelvis of a female adult.

Ref.no. 4054 Details:

Detail





Pelvis with sacrum and 2 lumbar vertebrae f/m

Adult female pelvis. Wings of ilium, sacrum and flexibly mounted L5 and L4. Ref.no. 4058 Adult male pelvis. Wings of ilium, sacrum and flexibly mounted L5 and L4. **Bef.no. 4056** 0

0



Pelvis with sacrum, 2 lumbar vertebrae and femoral stumps f/m

Adult female pelvis. The vertebrae are mobile mounted and the femoral stumps are movable and removable.

Ref.no. 4059

Adult male pelvis. The vertebrae are mobile mounted and the femoral stumps are movable and removable.





Pelvis with sacrum and 2 lumbar vertebrae, flexible

Adult female pelvis. The pelvis can be disassembled easily. It is mounted with rubber bands to allow an exceptional range of movement. With flexible L5 and L4.



Pelvis with sacrum, flexible

Adult female pelvis. The pelvis can be disassembled fast and easily. It is completely mounted with rubber bands to allow an exceptional range of movement.

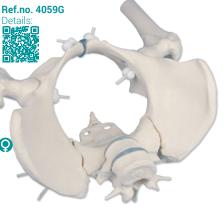


flexible

Ref.no. 4054G Details:

Pelvis with sacrum, 2 lumbar vertebrae and femoral stumps, flexible

Adult female pelvis The pelvis can be disassembled fast and easily. It is completely mounted with rubber bands to allow an exceptional range of movement. With flexibly mounted L5 and L4. The femoral stumps are movable and removable.





Pelvis of a 5 year old child

Size approx 10 x 15 cm.

Ref.no. 4051

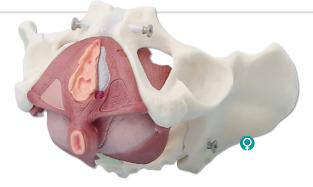




Ligamented female pelvis

Female Pelvis model with ligaments. Life size. Ref.no. 4070L

Details:



Female pelvis with pelvic floor musculature

With 4-part collapsible pelvic floor Ref.no. 4070 Details:



Pelvis with Ligaments, Nerves and Pelvic Floor

Female pelvis with Ligaments, Nerves and Pelvic Floor. Ref.no. 4070B

Details:

Q



Male Pelvis with pelvic floor muscles

The muscle layers in this model are in two parts. Ref.no. 4070M Details:

Female pelvic floor model, 12 parts

This new model of a female pelvis with pelvic floor musculature represents the pelvic floor in its layers. The muscles are fixed with pins, allowing to remove them for demonstration of the layers.

Ref.no. 4075 Details:



185 cm



A life size vertebral column consisting of the occipital plate; cervical, thoracic and lumbar vertebrae; sacrum; coccyx; and complete pelvis as well as movable femur stumps.Features include representations of the vertebral arteries, spinal nerve branches, and a prolapsed L3-L4 intervertebral disc. Perfect for patient education. Flexibly mounted. Mounted on a stand for hanging.

Ref.no. A251 Details:



9-2

175cm

Classic Spine

A life size vertebral column consisting of the occipital plate; cervical, thoracic and lumbar vertebrae; sacrum; coccyx; and complete pelvis. Features include representations of the vertebral arteries, spinal nerve branches, and a prolapsed L3-L4 intervertebral disc. Perfect for patient education. Flexibly mounted. Mounted on a stand for hanging.

> Ref.no. A250 Details:

ERLER-ZIMMER VERTEBRAL COLUMNS

have flexible intervertebral discs which compress on one side and expand on the other during flexion. True to life, as in human. The elastic intervertebral discs prevent an unnatural cleft from occurring between vertebra and intervertebral disc when the vertebral column is flexed. All bone components are cast from a natural vertebral column and show all the structures, fissures, foramina and processes with anatomical accuracy. In addition to this exact reproduction of the individual vertebrae, particular importance has been attached to mobility. Via the use of an unbreakable, mobile metal hose, the vertebral column has lasting flexibility and is still as movable as on the first day, even after years of intensive use.

Our most frequently sold model for training, further instruction, patient information and demonstration. Particularly suitable for manual therapy.

This model is capable of showing its superiority particularly in the demonstration of lordoses, kyphoses and scolioses in addition to in manual medicine.

Letible vertebra/ columna

Flexible intervertebral discs, emerging spinal nerves and the natural mobility provide a very good display of the interplay of the intervertebral disc, vertebra and nerves. The iliosacral joint is movable and the pelvis can be removed.

Owing to the elegant table stand, it is possible to leave the vertebral column in all natural positions for demonstration purposes. The optional stand is easy to fit and remove via a simple push-fit connector. The stand is easily portable and only 6 cm high.

> Recommended by lecturers and course leaders!





Highest quality natural casting of a human vertebral column with removable pelvis. The model is mounted on a flexible metal spiral hose, which renders the vertebral column robust and simultaneously highly mobile. The perfect model for anyone who wants to work intensive with the spine for years. The robust classic intervertebral discs show a lateral prolapse between L2 and L3. The spinal nerves and vertebral artery are also represented. Without stand.

Ref.no. 4024 Details:

Professional Spine for intensive use, with classic intervertebral discs, Version with femur stumps

Highest quality natural casting of a human vertebral column with removable pelvis. The model is mounted on a flexible metal spiral hose, which renders the vertebral column robust and simultaneously highly mobile. The perfect model for anyone who wants to work intensive with the spine for years. The robust classic intervertebral discs show a lateral prolapse between L2 and L3. The spinal nerves and vertebral artery are also represented. With removable and articulating femur stumps. Without stand.

Ref.no. 4033-1

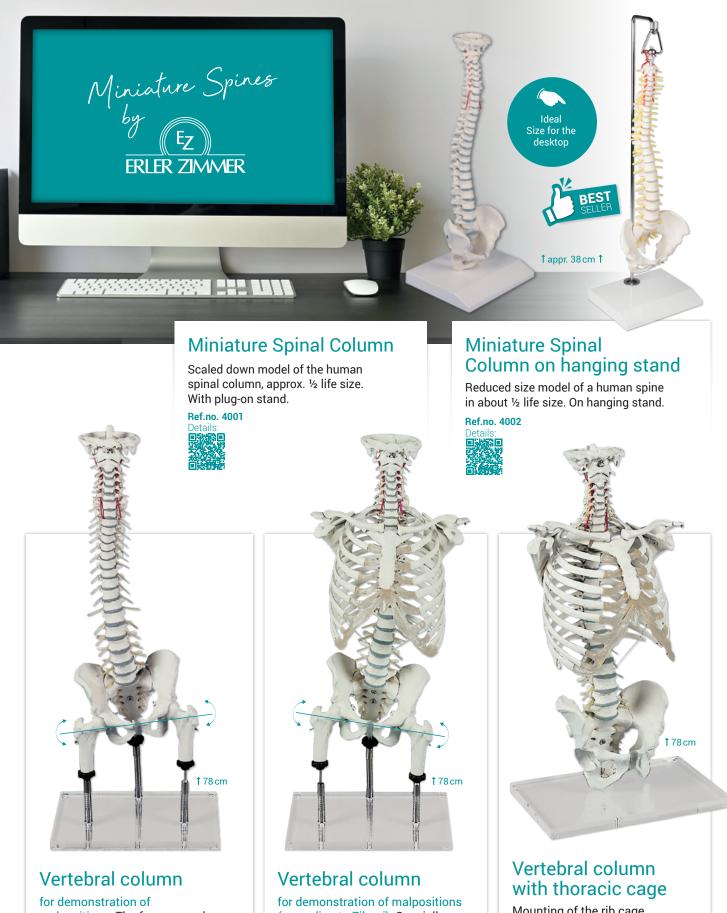


Stand for Erler-Zimmer Spines

With this elegant table stand, it is possible to leave the vertebral column in all natural positions for demonstration purposes. The stand is easy to fit and remove via a simple push-fit connector. The stand is easily portable and only 6 cm high.

Ref.no. 4099

Detailed article information at: www.erler-zimmer.de



malpositions. The femurs can be
raised and lowered respectively
and unilateral shortening of
the leg and the resulting pelvic
inclination can be simulated.(a

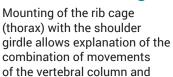
Ref.no. 4017 Details:



for demonstration of malpositions (according to Zilgrei). Specially developed for Zilgrei training, but also suitable for physiotherapy, massage and music teaching institutions and for orthopaedics.

Ref.no. 4018 Details:

Details:



of the vertebral column and thoracic cage during breathing. Ref.no. 4020



LUMBAR SPINE



Lumbar vertebral column

With dorsolateral prolapse. With stand. Ref.no. 4036 Details:



with pelvis

With dorsolateral prolapse. With stand.

Ref.no. 4040 Details:

Lumbar vertebral column with pelvis and femur stumps

With dorsolateral prolapse. With stand.

Ref.no. 4045 Details:

Lumbar spine with pelvis and femoral stumps

for demonstration of malpositions. With flexible stand, allowing demonstration of malpositions e.g. one-sided shortening of the leg.

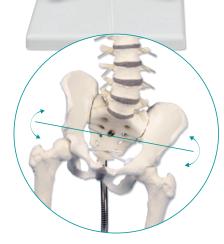
Ref.no. 4045G Details:

Pelvis, lumbar spine and lumbar mucles

Model showing superficial, deeper and deep musculature of the lumbar spine.

Ref.no. 4050 Details:

With spinal cord and nerves



Cervical vertebral column

C1 to C7 and a segment of the skull are flexibly mounted. With stand.



Cervical spine with neck musculature

This cervical spine shows deeper muscle layers. On base.

Ref.no. 4034 Detail



schematic

Schematic representation of the head joints demonstrating the movements in the atlantooccipital articulation and atlantoaxial articulation.

Ref.no. 4079 Details



2x enlarged

With this unique model in double life size all movements in the atlantooccipital and atlantoaxial articulation can be demonstrated admirably. With stand.

Ref.no. 4083





natural size

With this unique model in life size all movements in the atlanto-occipital and atlantoaxial articulation can be demonstrated admirably. With stand.

Ref.no. 4080



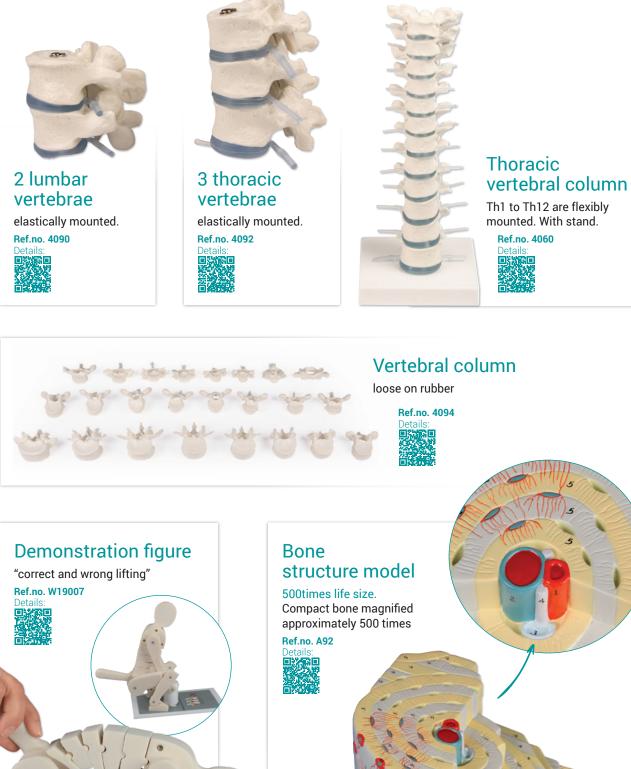
Vertebra collection, 8 vertebrae

2 lumbar vertebrae, 2 thoracic vertebrae, 2 cervical vertebrae as well as atlas and axis. On stand, mounted with intervertebral discs.

> Ref.no. 4097 Details

Without stand. Loose on Rubber. Ref.no. 4098 Details







Healthy / osteoporotic bone structure comparison model

This model shows healthy structure on one side and osteoporotic changes on the other side. Ref.no. 4062 Details:





Osteoporosis Femur

This model shows the difference between a normal and osteoporotic femur.





Osteoporosis vertebrae model, 3 vertebrae

This model consists of three medially cut lumbar vertebrae with intervertebral discs.

Ref.no. 4078 Details:

Osteoporosis vertebra, 2 times life size

This model of a human lumbar vertebra shows healthy bone structure on one side and osteoporotic changes on the other side.

Ref.no. 4068 Details:



Herniated disc simulator

Ref.no. 4400 Details:

EXCLUSIVELY

This model of two lumbar vertebrae in about double life size has the opportunity to demonstrate a lateral intervertebral disc hernia. If the two vertebrae are pressed together, the inner core of the disc will be protruding to the outside, forming a hernia.

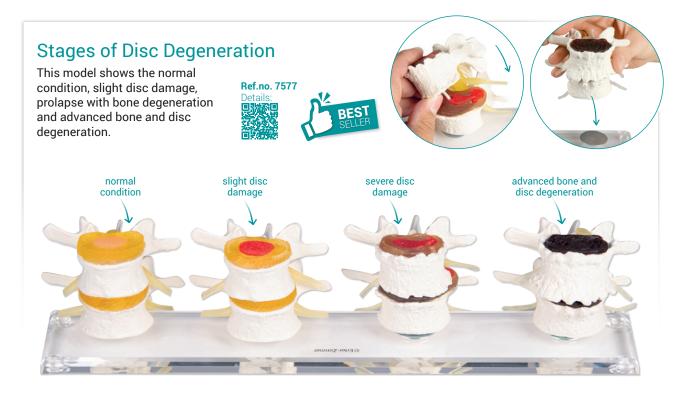
> / Perfect for patient education

BEST



This model shows one normal intervertebral disc, one intervertebral disc with a lateral prolapse and one intervertebral disc with a medial prolapse. With stand.

Ref.no. 4047 Details:



SKULL MODELS



No plastic pins that could break No disturbing

hooks



Skull model, 3 parts

Developing this lifelike reproduction of a human skull we have used the latest technology to digitalize a real human skull and idealized it under the aspects of medical education. This means the skull was adjusted to be anatomically ideal, all anatomical details and structures are present and correspond to anatomical teaching.

- The three part model consists of skull base, skull cap and lower jaw.
- The teeth correspond with real dentition concerning position and embrasure. The lower jaw is movably mounted and can be removed.
- The skull cap is aligned with the skull base using metal pins and held by strong magnets.
- Due to this there is no need for disturbing hooks, no plastic pins that could break and no risk of having a gap between skull cap and skull base. This distinguishes the model from competitor's skulls with plastic pins and disturbing metal hooks.

The model corresponds with an average European adult concerning size and proportions.

Ref.no. 4500 Details:



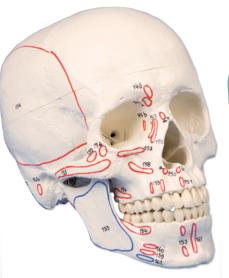
Due to modern production technologies and high production volume this very successful model can be offered at a very reasonable price, so everyone can afford this extraordinary model.



Skull model numbered

3-part. With numbered bones and structures. With nomenclature.





Skull model with muscle marking

3-part. With marking of muscle insertions and origins. With nomenclature.

Ref.no. 4509



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Skull model didactical painted

3-part. With didactical painting of individual bones on one side of the skull.

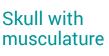
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Skull with masticatory muscles

3-part. The masticatory muscles are represented in the form of elastic bands. It is possible to demonstrate the function of the masticatory muscles with closure of the mandible, induction of opening of the mandible and lateral and forward displacement of the mandible.

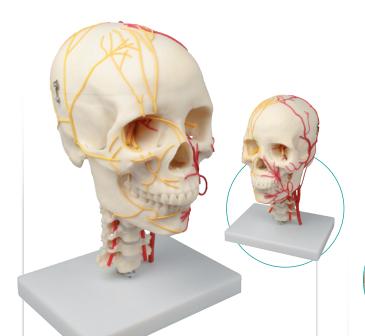




Human skull with the most important head muscles on one half.

Ref.no. 4514 Details:





All teetherson

Neurovascular Skull

The arteries are shown on one side and nerves on the other. Removing the vault exposes the main nerves and arteries inside the skull. The 12 cranial nerves and their branches are also shown.

Ref.no. 4516



Dental skull, 4 parts

Complete dentition of 31 individual teeth with full roots. You may pull teeth of maxillae and mandible for individual demonstration and place them back into the socket, only the ones behind the bone flap are fixed. The bony flap on one side of mandible can be opened to show nerve canal, bony structure, roots of teeth and an impacted third molar.

Ref.no. 4513



Miniature skull, 3 part

Miniature of a natural skull in about half life size. With movable mandible and removable skull cap. On removable stand.



Skull model, 3-part with spine skull stand

3-part skull 4500 on stand in the shape of a flexible spine. The spine shows vertebrae C1 to Th3. The spine is movable, the skull can be removed.

Ref.no. 4533



This skull model is a natural cast of a real human skull and shows all anatomical structures in highest detail. It was developed for students of anatomy, medicine, surgery, otorhinolaryngology, ophthalmology and dentistry.

The skull is complexly cut and joined together with metal and magnetic connections. The model can be disassembled into 14 parts and joins together without clips or similar only by magnets. Vascular courses are marked in colour in the skull, in the jaw, vessels and nerve courses are reproduced. In the right lower jaw the teeth are cut, which makes the skull even more interesting.

Ref.no. 4800



14 parts

Luxury Demonstration Child Skull for advanced studies

This skull model is a cast of a real human child skull specimen (age appr. 3 years) and shows all anatomical structures in great detail. The skull is cut complexly and joined together with metal and magnetic connections.

The upper jaw and the lower jaw show the structures of the teeth, the roots, the bony edge of the alveolar process as well as dental nerves and vessels. The maxillary sinus can be opened by removing a flap. The teeth, including the permanent teeth that are still embedded in the bone, can be made accessible by removing a bone flap.



The following bones are represented:

- ✓ Parietal bone left and right
- Occipital bone
- ✓ Temporal bone left and right
- ✓ Sphenoid bone
- ✓ Frontal bone
- ✓ Ethmoid bone
- ✓ Vomer
- ✓ Palatine bone, left and right
- ✓ Inferior nasal concha left and right
- Maxilla with teeth, left and right
- ✓ Lacrimal bone left and right
- ✓ Nasal bone left and right
- Zygomatic bone left and right
- Mandible with teeth

Anatomical version

This fascinating model of an average European adult skull can be disassembled into 22 single bones. During development of this model we have digitalized a real human skull with latest technology and idealized it, meaning it was adjusted to the standard anatomy. This distinguishes it remarkably from

almost all competitor's products. Amongst these some are too small, others show improper detail.

Stable parts with convenient magnet connections

make handling of the product a child's play. The detailed bones do not need any complicated pins to be stuck into holes, they almost slide into position, guided by realistic bone sutures and held by strong magnets. Using this technology we have almost completely avoided the use of connection pins like in other model because these are not durable and tend to break.

Supplied with users guide in English and German as well as a CD with Key card document in Latin, German, English, French, Spanish, Portuguese, Italian, Polish, Russian, Arabic, Korean and Japanese.

Model in natural bone color. Ref.no. 4701



Because of the excellent anatomy and ease of usage this model is the perfect tool for osteopaths.



for these skulls can be found on page 60

Didactical version

This version is perfect for visual distinction of the single bones. The bones are produced in different colors, commonly used in anatomy, geminate bones do have identical color. Ref.no. 4708



Customers reply about this product:

"Thank you for sending this skull so quick. First experiences are completely positive. The magnetic connections are surprisingly stable, all bones are like they are shown in anatomical books with amazing details, and the materials on DVD are also very good. The included replacement for the small bones is an excellent and foresightful service." MTRA school of the University Hospital of Tuebingen



UNIQUE IN THE WORLD

BF

Assembled Human Medical Study Skull

This premier anatomy skull is a composite of 22 separate cranial bones and 32 separate teeth. It is articulated bone by bone from the completely disarticulated version and is cradled on a stand with both parietal bones separated, thereby giving access to the interior of the cranium. The 32 separate teeth may be removed individually. This skull of a probable young adult female is finely detailed, showing all the foramina, canals, sutures and minute details of a real skull. Case and Stand Included.



Disassembled Human Medical Study Skull

The Museum-quality casting procedures preserve minute surface detail with the appearance and texture of real bone. There are no casting "flash lines" that can obscure detail. The skull is much more durable and will withstand much more handling than real bone. All foramina have been rendered patent, allowing even small branches of nerves and small blood vessels to be traced through this skull. Comes in a premium custom case, lined with foam for protection and archival durability.





Scaphocephalic Skull

An excellent example of a condition in which the skull is abnormally long and narrow, as a result of premature closure of the sagittal suture, with heavy centers of ossification in the line of the suture.

> Ref.no. 4778 Details:

Disarticulated Human Fetal Skull Full Term

It was possible to reproduce every bone, small and large, in precise detail. A perfect specimen for study in forensic anthropology, physical anthropology and anatomy.

Ref.no. 4728 Details:

supplied with storage box



Adult skull. male

First class actual cast of a male human adult in extraordinary high detail. Due to the very special production technology even smallest details are reproduced and the model looks and feels almost like a real human skull.

Ref.no. 4710 Details







Fitting brains for the skulls 4710 and 4715 can be found on page 61

Adult skull, female

First class actual cast of a female human adult in extraordinary high detail. Due to the very special production technology even smallest details are reproduced and the model looks and feels almost like a real human skull.

Ref.no. 4715





Adolescent skull

female. First class actual cast of a female human adolescent in extraordinary high detail. Due to the very special production technology even smallest details are reproduced and the model looks and feels almost like a real human skull. Two part model.





13 year old

This skull offers an excellent example of an adolescent. With the exception of the wisdom teeth, all permanent teeth are fully erupted, and no deciduous dentition remains.





12 year old

First class actual cast of a female human adolescent in extraordinary high detail. Two part model.

Ref.no. 4725



9 year old

First class actual cast of a 9 year old child in extraordinary high detail.



5 year old

First class actual cast of a 5 year old child in extraordinary high detail.



Detailed article information at: www.erler-zimmer.de



4 year old

First class actual cast of a 4 year old child in extraordinary high detail.

Ref.no. 4774 Details:



3 year old

First class actual cast of a 3 year old child in extraordinary high detail. This skull also shows numerous Wormian (sutural) bones.

Ref.no. 4776 Details:



Contraction of the second seco

1¹/₂ year old

First class actual cast of a 1 1/2 year old child in extraordinary high detail.

Ref.no. 4775 Details:



15 months old

First class actual cast of a 15 months old child in extraordinary high detail.





14 months old

First class actual cast of a 14 months old child in extraordinary high detail.





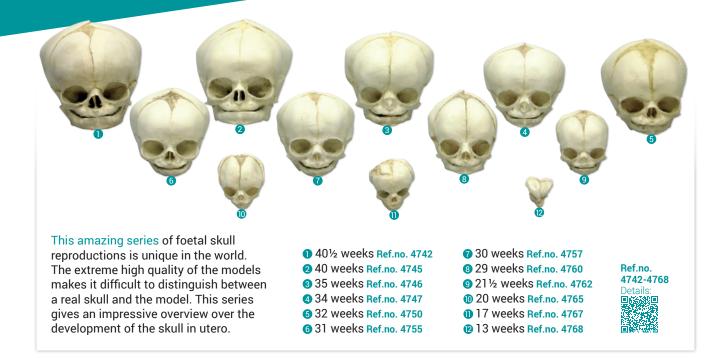
1 year old

First class actual cast of a 1 year old child in extraordinary high detail and calvarian cut.

Ref.no. 4770 Details:



FETAL HUMAN SKULL



40th week with Calvarium Cut

We are excited to offer what is, perhaps, the only fetal skull with the calvarium cut. The detail present in this skull, including the ossicles, all calvarial sutures, and fontanelles, will guarantee its value as a teaching tool both for the educator and practitioner.

Ref.no. 4727 Details:



30th week Fetus skull

This model represents a human foetal skull in the 30th week of pregnancy.

Ref.no. 4519 Details:



38th week Didactic Foetal Skull

A very realistic model of a 38week foetal skull manufactured from our unique bone-like material. The main bones of the skull coloured for easy identification. Supplied with key card.

Ref.no. 4518 Details:





HAND

Skeleton of hand

All hand bones are individually mobile mounted on wire.





Because of the lose mounting on nylon wire all bones can be separated and studied individually.

Ref.no. 6004 etail



Skeleton of the hand with bone numbering

All hand bones are individually mobile-mounted on wire. With numbering. With nomenclature.

Ref.no. 6002 Details



Handskeleton

Natural, non-movable one-piece casting of a human hand. On stand.

Ref.no. 6040 Details

Hand with lower arm

All hand bones are individually mobilemounted on wire. With radius and ulna. Moveable.

Ref.no. 6008

Hand with ligaments of the wrist

Hand and lower arm with representation of the wrist ligaments.



Ref.no. 6010

Human Magnetic Hand, Right

All but the medial/ distal phalanges are magnetic assembled and completely separable. Base included.

Ref.no. 6005 Details





Hand with Tendons, Nerves and Carpal Tunnel

Hand with start of lower arm, with Tendons, Carpal Tunnel and Nerves.



7 parts

Ref.no. 6011 Details:

Hand anatomy structure model

Shows all important structures like muscles, tendons, ligaments, bones and nerves. The model is not dissectible and can be removed from the stand.

Ref.no. M260 Details:

Layer model of the hand

The superficial layers can be removed one by one and reveal the structures beneath. Muscles, blood vessels, nerves, tendons, ligaments and bones are shown in detail.

Ref.no. M161 Details:

NEW

Vascular Hand

Life size model of the hand with all major veins and arteries depicted. On stand. Ref.no. 6081



Skeleton of arm with shoulder girdle

True to life casting of a skeleton of the human arm. The rolling movements of the bones of the lower arm (pronation and supination) and movements of the hand joint can be demonstrated. The hand is mobilemounted on wire.

Ref.no. 6016



Skeleton of arm

Model as 6016, but without shoulder girdle.

With vessels

and numbering

Ref.no. 6012 (not pictured) Details:

Sliding Joints in the shoulder

Allow all natural movements in the joint.

Skeleton of arm with shoulder girdle and muscle marking

True to life casting of a skeleton of the human arm. The rolling movements of the bones of the lower arm (pronation and supination) and movements of the hand joint can be demonstrated. The hand is mobile-mounted on wire. Including marking of muscle origins and insertion points.

Ref.no. 6021



Skeleton of arm with muscle marking

Model as 6021, but without shoulder girdle

Ref.no. 6020 (not pictured)

Skeleton of arm with vessels

Natural casting of a human arm with representation of the blood vessels. The brachial, radial and ulnar arteries with their corresponding veins and root arteries are shown.

The complete dorsal and palmar circulatory system of the hand is represented. Emphasis has been placed on the correct size ratio between the individual vessels in order to facilitate study of the vascular system of the arm. On stand.

> Ref.no. 6080 Details:

Skeleton of leg with half pelvis

Natural casting of a human leg. Can be dismantled into femur, tibia, fibula and foot. With removable half pelvis.



Sliding joints

in shoulder, hip and ankle allow all natural movements.

Skeleton of leg

Natural casting of a human leg. Can be dismantled into femur, tibia, fibula and foot. Without removable half pelvis.

> Ref.no. 6062 (not pictured) Details:

Skeleton of leg

with half pelvis and movable foot.

Natural casting of a human leg. Can be dismantled into femur, tibia, fibula and foot. With removable half pelvis. With a foot mounted on rubber band to allow demonstration of the rolling movement.

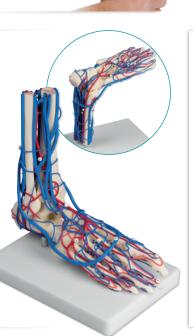
Ref.no. 6069 Details:

Vascular Foot

Life size model of the right foot with all major veins and arteries depicted. The circulatory system is shown on both dorsal and plantar surfaces. Foot can be removed and placed on the stand upside down to facilitate viewing of the plantar surface. Mounted on a stand.

Ref.no. 6082





Skeleton of leg with half pelvis and muscle marking

Natural casting of a human leg. Can be dismantled into femur, tibia, fibula and foot. With removable half pelvis. With marking of the muscle origins and insertion points.

Ref.no. 6070 Details:



Skeleton of leg with muscle marking

Natural casting of a human leg. Can be dismantled into femur, tibia, fibula and foot. Without removable half pelvis. With marking of the muscle origins and insertion points.

Ref.no. 6071 (not pictured)

Skeleton of leg

with half pelvis and flexible foot, with muscle marking. Natural casting of a human leg. Can be dismantled into femur, tibia, fibula and foot. With removable half pelvis. With marking of the muscle origins and insertion points. With a foot mounted on rubber band to allow demonstration of the

rolling movement. Ref.no. 6072 Details:



Neuro Foot

Life size model of the right foot with all major nerves depicted, shown on both dorsal and plantar surfaces. Foot can be removed and placed on the stand upside down to facilitate viewing of the plantar surface. Mounted on a stand with keycard.

Ref.no. M28 Details: Detailed article information at: www.erler-zimmer.de

FOOT SKELETONS



Skeleton of foot

Natural casting of a human foot. All bones flexible mounted on wire.

Skeleton of foot

with tibia and

Ref.no. 6050 Details:



Skeleton of foot

numbered. Natural casting of a human foot. All bones flexible mounted on wire. With bone numbering.

Ref.no. 6051 Details:



Foot, block model,

Natural one-piece casting of a human

foot. Representation of all structures

and anatomical details. With tibia and

immovable

This foot skeleton is very handy for those who want to study single bones in detail. Because of the lose mounting on nylon wire all bones can be separated and studied individually. Nevertheless they always stay in correct anatomical position within the foot.

Ref.no. 6061 Details: 回蹤認回



bones in nounting on separated vertheless apatomical bones in fibula insertion Natural casting of a human foot flexible mounted on wire. With tibia and fibula

> Ref.no. 6053 Details:

insertion.



Skeleton of foot with tibia and fibula insertion

numbered. Natural casting of a human foot flexible mounted on wire. With tibia and fibula insertion. With bone numbering.

Ref.no. 6054 Details:

Skeleton of foot with tibia and fibula insertion

movable mounting. True to life casting of a human foot with tibia and fibular insertion. The foot is movable mounted on rubber and the rolling motion can therefore be demonstrated admirably.

RFS

Ref.no. 6056

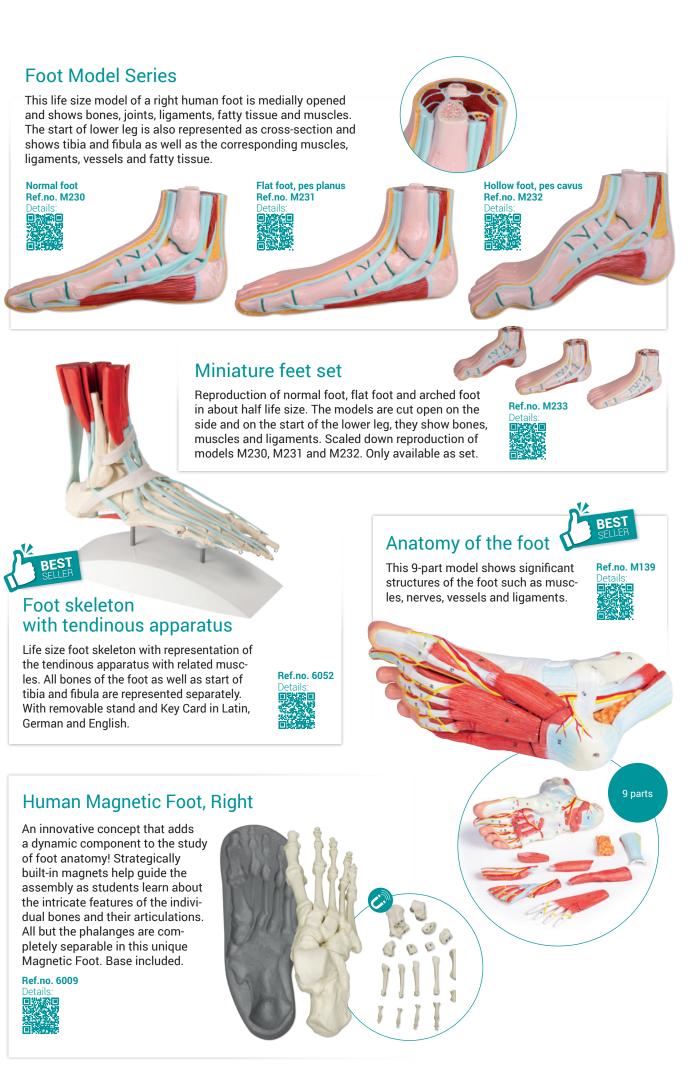
)etail

movable and numbered With bone numbering and nomenclature. Ref.no. 6057

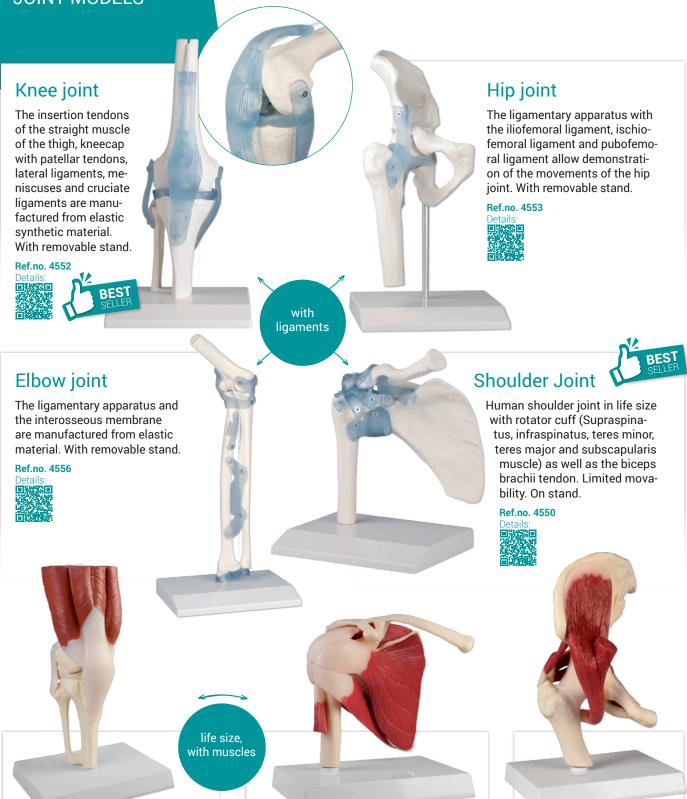


fibula insertion.





JOINT MODELS



Knee Joint

Human knee joint in life size with all important muscles and ligaments (collateral ligaments, meniscus, crucial ligaments, patellar tendon). Not movable. On stand.

Ref.no. 4662 Details:



Shoulder Joint

Human shoulder joint in life size with rotator cuff (Supraspinatus, infraspinatus, teres minor, teres major and subscapularis muscle) as well as the biceps brachii tendon. Limited movability. On stand.

Ref.no. 4661 Details:

Hip Joint

Human hip joint in life size with all important muscles and ligaments. Limited movability. On stand.

Ref.no. 4663 Details:

Miniature joints with cross section

These joint models in about ½ life size show the structures of the joint as well as the major ligaments. The inner structures can be explained with the cross section mounted on the base of the model.



Longitudinal section-model knee

Frontal longitudinal section of the human knee joint.



Model of Shoulder

with Deep Muscles. This model illustrates in great details the muscles, ligament and bones of the shoulder. Life size model in on piece.





Knee model with endoprosthesis

This life size knee model is made of transparent plastic and shows graphically the position and function of a knee endoprosthesis.

Ref.no. 4449 Details:



Detailed article information at: www.erler-zimmer.de

IMPLANT MODELS

All models are movable and can be removed from the stand!

Knee-Implant-Model

This impressive model shows three scaled down knee models. In addition to the healthy knee this model shows a diseased knee as well as a knee with knee implant. All models are movable, upper and lower leg can be separated. Supplied on Plexiglas stand.



BEST

Hip-Implant-Model

This impressive model shows three scaled down hip models. In addition to the healthy hip this model shows a diseased hip as well as a knee with hip implant. All models are movable, pelvis and femur can be separated, the implant can be removed from the femur. Supplied on plexiglass stand.

Ref.no. 1115 Details:

Hip joint with resurfacing implant

This hip joint in life size shows a "Birmingham Hip". The implants can be removed to allow the doctor to explain the function to the patient. The model can easily be removed from the stand and disassembled. Comes on Plexiglass stand.

Ref.no. 1118 Details: 27-part, dual sex

88 cm 1

16-part, dual sex

43 cm 1



BES

Torso with open back

inter-changable

genital organs

A complete life size torso with open back, composed of 27 parts that provide the most important organs and anatomical structures in the human body. The head is sectioned to expose the skull, brain, mouth and throat region as well as the eye. In addition, the neck is dissected to expose larynx, thyroid and cervical vessels. The thorax and abdomen are completely open; all inter-

nal organs can be removed and are partly dismantlable. Separate male and female urogenital systems fit interchangeably into the main portion of the torso. The open back exposes muscular layers

and the vertebral column, the spinal nerves as well as a removable vertebra with spinal cord. Supplied with CD human torso guide.

Ref.no. B235

Miniature Torso

> Reproduction of a human torso in about half life size. Perfect for use as desktop model or for studying the basic anatomy. Size 43 cm. The model is supplied on base with manual.

> > Ref.no. B223

Standard Torso

This sexless lifesize torso with 12 parts. Structures are numbered and identified on the accompanying Torso Guide. The head is removable and divided into two parts. The thorax and abdomen are completely open, affording an unrestricted view of the internal organs and structures. Mounted on base.

Ref.no. B109 12 parts, sexless torso 86 cm 1

MUSCULATURE

HIIIIII

Muscular figure

This 1/2 life size high quality model represents a replica of the complete human muscular and organs anatomy. It illustrates with excellent detail the superficial and deeper muscles, tendons, ligaments, vessels and body structures. The internal organs are removable for closer examination to study the relationships among all the body structures.

Ref.no. B160



30 parts

Muscular figure 62 cm 1

1/3 life size. This muscular figure has extraordinary fine structures and a very detailed painting. On one side it shows the superficial musculature, on the other side the deep muscles. Both arms are detachable. Important superficial vessels are also represented.

Ref.no. B90 Details:

32 parts

Muscular figure

This 32 part muscular figure is about 140 cm high and includes a 6part muscular arm and a 8part muscular leq. The removable parts include skull cap, brain (3 parts), lung halves, 2part heart, trachea, oesophagus, liver with gallbladder, duodenum with pancreas and spleen and the intestines. All structures are numbered and referenced on the supplied key

Ref.no. B190 Details:



NEW

1140 cm

Arm Muscles

This life size model shows the musculature of the human arm in detail. It shows superficial and deep muscle structures, vessels, nerves and ligaments. The model shows hand, lower and upper arm as well as shoulder girdle. Single muscles can be removed for closer study. Supplied with stand and manual.

> Ref.no. M211 Details



Leg muscles

Ref.no. M220 Details

This life size model shows the musculature of the human leg in detail. It shows superficial and deep muscle structures, vessels, nerves and ligaments. The model shows foot, lower and upper leg as well as a half pelvis. Single muscles can be removed for closer study.

7 parts



Back **Muscle Model**

27 cm 1

Soft and flexible, the superficial and intermediate muscle layers are removable and expose the deep muscles, making the understanding of anatomical relationships an easy, interactive experience. Two pull-out cards give

4 parts

information on the muscles.

Ref.no. M290



13 parts

Arteries

of head

This model

branches.

Mounted

on base.

Details

Ref.no. C130

shows the pa-

thway of the left

external carotid

artery, including col-

lateral and terminal

Head and Neck

Representation of a head, medially divided. The skin and facial muscles of the right outer half are removed to show the deeper structures. Eyeball, bone cover over the sinus maxillaries and right tongue half are removable.

Half

head

life size. Life

size model

shows the

right half of

the human

sectioned

along the

plane. Moun-

ted on base.

Ref.no. C314

NEW

sagittal

head and neck,



5 parts

Head Model

Life size model of a human head in 4 parts. The left side of the face is dissected in sagittal and horizontal section, showing many features of the skull and brain, as well as the oronasal cavity.

Ref.no. C250



Nerves of head

This model shows the trigeminal nerve and its branches. Mounted on base.

Detail



1

This model shows the pathway of the left internal jugular vein in the cervical and head region, including the tributary venous branches. Mounted on base.



Anatomy of the Neck

This life size model is a ventral view of the human neck, showing excellent details of the main muscles, vascular structures, nerves and glands. Mounted on board.

Ref.no. C329 Detail



4 parts

Ref.no. C131





Frontal and median section of the head

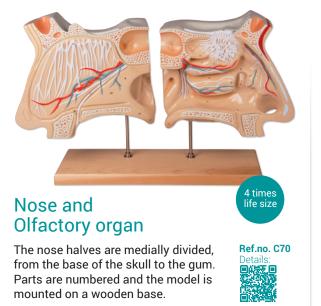
Representation of the superficial and deep structures of the head. The comparison between both sections provides understanding of the anatomical relations of the head. Mounted on board.



Median section of the head

Representation of the superficial and the internal structures of the head. This relief model shows all structures of the human head in life size. Mounted on board.

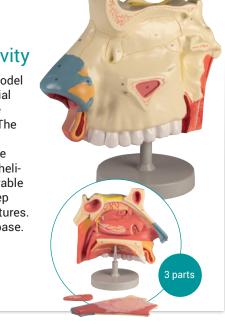
Ref.no. C212 Details:

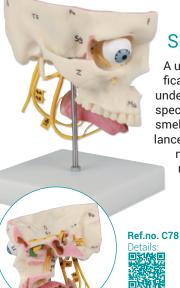


Nasal cavity

3x life size; model shows a medial section of the nasal cavity. The nasal septum and part of the olfactory epithelium are removable to expose deep internal structures. Mounted on base.

Ref.no. C182 Details:





Special Senses

A unique model specifically designed to aid understanding of the five special senses – sight, smell, taste, hearing, balance – with their related nerves. The trigeminal nerve is flexible to allow exposure of the underlying petrosal nerve. Component bones are identified. With 18 minute lecture on Audio-CD and key card.



Transparent model nose

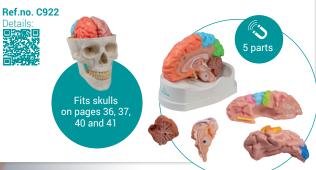
Using this transparent model, it is possible to understand at a glance and explain simply the complex structure of the nasal cavities. The three-part model can be taken apart (two halves and a dividing plate).

Ref.no. LM05 Details:

REST

Functional and regional brain model

This life-size brain model shows the major anatomical landmarks and cortical areas of the brain in carefully painted color. The right half is painted to show the four lobes of the brain. The left half comes apart in four pieces. It is painted to show 5 cortical areas of the brain.



Regional brain half

This life-size brain model shows the major anatomical landmarks of the brain in carefully painted color. It is painted to show the four lobes of the brain.

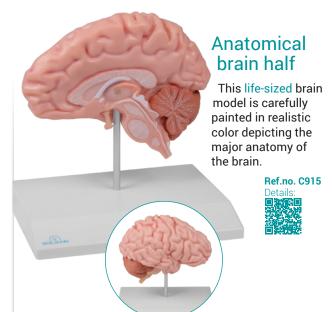
Ref.no. C921

Anatomical brain model

This life-sized brain model is carefully painted in realistic color depicting the major anatomy of the brain. The left half comes apart in four pieces.

Ref.no. C918 Details:







Falx cerebri model

This model shows the falx cerebri of the brain. It includes the ostia of bridging veins, lacuna with arachnoid granulations, the superior and inferior sagittal sinus, and the straight sinus. It fits with brain models C922 and C918.

Ref.no. C925

Details:

Human Brain Multiple Frontal Sections

Ref.no. C720

The Human Brain in Multiple Frontal (Coronal) Sections offers an innovative way to study the structure of the brain. Because of the three-dimensional characteristics of the adult brain, the appearance of gross neuronal structures differs depending on the plane of section. Discreet built-in magnets and push-fit mating surfaces make it easy to fit and hold sections of the brain firmly together.

Human Brain

actual cast. This Human Brain is molded and cast from an actual specimen. The left and right hemispheres are separated, allowing for an interior view of the corpus callosum and cingulate gyrus, as well as the hypothalamus, pons,

Ref.no. C710

Fits into our male skull model 4710





Fits into our female skull model 4715



actual cast. This Human Brain is molded and cast from an actual specimen. The left and right hemispheres are separated, allowing for an interior view of the corpus callosum and cingulate gyrus, as well as the hypothalamus, pons, and cerebellum.

Ref.no. C715



9 parts

Brain model with arteries

Life size model of a human brain, can be divided in the medial plane along the longitudinal fissure. It consists of 9 parts. It shows also the arterial blood supply and the important anatomical structures in great detail. On base tray.





Neuro-Anatomical Brain

This 2 times lifesize brain is medially divided and dissectible into 4 parts. The model enables you to clearly see the motor, sensor, and functional centres which are shown in different colors. With stand.

Ref.no. C75



parts 2-times life siz

Regional Brain

The following lobes and regions of this 2-times life-size brain are represented in different colors and labeled in English: Frontal lobe, parietal lobe, occipital lobe, temporal lobe, motor cortex, somatosensory cortex, limbic cortex, cerebellum, brain stem. With stand.

Ref.no. R10122

Base of Head

Life-size base of the human head, featuring a detailed brain, complete with arterial blood vessels, including the basilar artery and Circle of Willis, cranial nerves, and dissectible brain stem. The entire brain can be lifted from the cranial vault and separated in seven parts. With key card (English).

Ref.no. C320

parts



Neurovascular skull with brain

8 parts

This skull shows the main skull nerves and arteries. The brain has 8 parts.

Cerebrospinal Fluid Circulation

Enlarged, detailed model of a section through the right half of the brain showing the cut pia mater, arachnoid and dura mater. The model has the cerebrospinal fluid areas clearly indentified and the direction of flow indicated by arrows. On stand.

Ref.no. C76

Brain Section

Ref.no. 4610 etail

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. One surface is on the median line, including a section of the falx cerebri. A sagittal cut on the reverse exposes the lateral ventricle. With key card (English). On stand.

Ref.no. C77





Brain ventricle

Life size model of the human lateral ventricles, cerebral aqueduct, as well as the 3rd and 4th ventricle. With removable stand.

Ref.no. C263

Details:

Neuron model

with stages of multiple sclerosis.

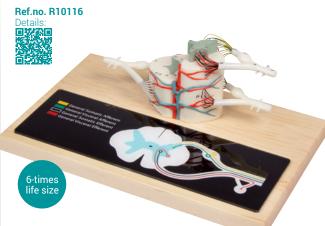
multiple sclerosis. This unique model shows an enlarged human neuron. The axon shows a healthy myelin sheath and three stages of myelin sheaths affected by multiple sclerosis. On base.





Spinal Cord

This model shows a segment of the upper thoracic spinal cord, laterally and longitudinally divided showing spinal nerve roots. On base.



Vertebra with spinal cord section

Individual cervical vertebra with cross sectional representation of the spinal cord. White and grey spinal cord substance and the spinal nerves shown. On baseboard.

Ref.no. 4067

(SUL)







1/2 life-size

Nervous system

This approximately half life-size relief model shows a general view of the peripheral and central human nervous system: the head is open to remove a brain half with cerebellum; the pathway of the main nerves is well illustrated in relation to the skeleton.

Ref.no. C240 Details:



Detailed article information at: www.erler-zimmer.de



Skin block model

This model of a human skin in about 50 times life size shows 3 dimensional the different skin layers and anatomical structures. In addition to nerves

addition to nerves and blood vessels the model shows sweat glands, sebaceous glands, hair follicles, erector muscles, Pacinian corpuscles and much more.

Ref.no. J213

Skin-hair-nail desktop model

With this model it is easy to compare the structures of hairy and hairless skin: sensitive corpuscles, blood vessels, sweat gland, nerves, hair and hair root. Additionally, a nail cross section model shows nail bed, nail plate and nail root. An enlarged hair root completes the model.



White Skin Cancer Trainer



enlarged. This enlarged trainer shows a normal mole, basal cell carcinoma (basalioma), squamous cell carcinoma (spinalioma), and malignant melanoma. Variations of how the different types of skin cancer may appear are shown.

Ref.no. R11012 Details:

Nail model

This approximately 5 times enlarged model of the terminal part of a typical digit with its associated bone structure shows three sectional views of the nail root and bed, germinative region and bone. On base.

Ref.no. J60



5 times full size

Tongue and tongue tissue

This item shows the anatomy of the lifesize tongue, including the palatin and lingual tonsils, epiglottis and muscles. The model also includes a detailed 20X life-size enlargement of the tongue tissue to show its histology: taste buds, lingual and mucous glands, crypt and muscles are well represented. On base.



Eye model

Complex hand painted reproduction of a human eye in about 4 times life size. The model includes two halves of sclera with retina and eye muscle attachments as well as vitreous humour, lens, cornea and iris. The model has 6 parts in total. With stand.

Ref.no. F210 Details:

REST

6 parts 4-times life size

Eye Model

Model can be divided horizontally to show internal details. Cornea, iris, lens and vitreous body can be removed. Muscular attachments on the sclera and part of the choroid are also represented. On stand.

> 5 parts 6-times

life size

Ref.no. F220 Details:

Eyeball with Functional Lens

6 parts

6-times life size

Featured on the exterior of the cornea are the large lacrimal gland, muscle attachments, optic nerve, and blood vessels. To study interior features, the iris/cornea unit can be removed as can the functional lucite lens which magnifies, and forms inverted images. Removing the transparent vitreous

body exposes the choroid coat and retina complete with the blind spot and yellow spot containing the fovea. Rods, cones, and other retinal microstructures are detailed in a highly magnified diagrammatic cross section. On base.



Eye in orbit with eyelid

shows the anatomy of the human eye. The orbit can be opened into 3 parts to reveal the internal structures such as eyelid with lacrimal gland, muscles (4 parts), cornea, iris, lens and vitreous body (3 parts). On base.

Ref.no. F160 Details:

Eye half, enlarged

3 parts

Cross section through the eyeball. The following anatomy is shown: Choroid, Retina, Macula, Optic disc, Optic nerve, central retinal artery and vein, retinal blood vessels, superior and inferior rectus muscle, ora serrata, lens, iris, cornea and sclera.



EAR

Ear Model

This model shows the details of the external, middle and inner ear in three times life size. The eardrum with malleus, incus and stapes can be removed. Additional removable part is the cochlea and labyrinth with vestibular and cochlear nerves, one half of the cochlea can be removed. Mounted on baseboard.

> 4 parts 3-times life size



Ear Model

This slightly enlarged model of a human ear with detailed reproduction of all anatomical details shows the auditory canal, the tymphanic membrane, malleus, incus, stapes and cochlea. Surrounding bony

structures are visible as well as muscular and cartilaginous tissues. A perfect model for desktop use.





Auditory Ossicles

Hammer (malleus), anvil (incus) and stirrup (stapes) in three times life size.



Labyrinth with Ossicles and Tympanic Membrane

The model shows instructive the organs of the middle and inner

Ref.no. E210

ear. The bony and membranous labyrinths are shown and the cochlea can be opened. On stand.



Transparent Ear model

This excellent model shows the outer and inner structure of the ear from the outer ear to the eardrum. The flexible material allows to use this model also as training aid for audiphone insertion.

Ref.no. LM02 Details:



Ear ossicles set

Ref.no. E338

The middle ear is composed of three tiny bones: the malleus (or hammer), incus (or anvil), and stapes (or stirrup). These bones carry and increase the amplitude of sound from the eardrum to the inner ear. They are found in the tympanic cavity of the temporal bone. When assembled to reflect their formation, they are small enough to fit on a fingernail. Ossicles are shipped embedded in a custom made foam insert inside a clear plastic petri dish. Ossicles can be removed easily.

Ref.no. E300 Details:

TEETH

1,5-times life size with matching Toothbrush!

Oral hygiene model

A 1.5x life size model that is useful for teaching the correct way to brush teeth. A giant toothbrush is included. Mounted on base.

Ref.no. D217



Dental caries model

Lower molar with caries, pulpitis and apical infection as well as dental tartar and gingivitis.

> 10-times life size

Ref.no. D214



Detai



Oral hygiene model

A 3x life size model that is useful for teaching the correct way to brush teeth. A giant toothbrush is included. Mounted on base.

> 3-times life size

Ref.no. D216 Detail

Dental model

Representation of a right lower jaw with tooth 3 to 7 with diseases and treatment solutions. It shows discolouration, caries, apical infection, dental tartar, periodontosis, devital teeth (3&5). The following treatment solutions are shown in the model: veneer, bonding porcelain crown, root pin construction, full ceramic and gold inlay.

4-times life size Ref.no. D250 Details

NEW

Permanent **Teeth Model**

This life size model shows the upper and lower jaw of an adult. The lower jaw is movable to reproduce the natural chew. The model exposes the complete set of permanent teeth with roots and nerve fibres. Mounted on stand.

Ref.no. V181



Deciduous **Teeth Model**

This life size model shows the upper and lower jaw of a 5 year old child. The lower jaw is movable to reproduce the natural chew. The model exposes the arrangement of the young teeth. Mounted on stand.

Ref.no. V182 Details

Detailed article information at: www.erler-zimmer.de

67

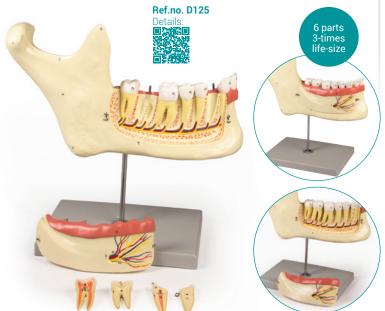
Upper & Lower Jaw Model

Enlarged 2.5 times. Mandible shows all teeth and anatomical features, glands, arteries, veins and nerves. The canine tooth is bisected to show the internal structure of a normal tooth. The maxilla shows all teeth, the maxillary nerve and its distribution to the teeth; also the maxillary sinus and its relationship to the nerves. Complete on stand with



Lower jaw

This 3x life size model is divisible into 6 parts to show all the characteristics of an adult half mandible. A portion of the jaw can be removed to show the roots of the teeth and the internal structure of the bone. Canine and molar teeth can be removed and bisected longitudinally to observe the tooth roots, pulp and nerves. Mounted on stand.



Dental Morphology Series

Removable lateral incisor, canine, first premolar, bridge made of artificial first molar with gold coloured crown, and second molar. On transparent, jaw-shaped stand.

Ref.no. R10125

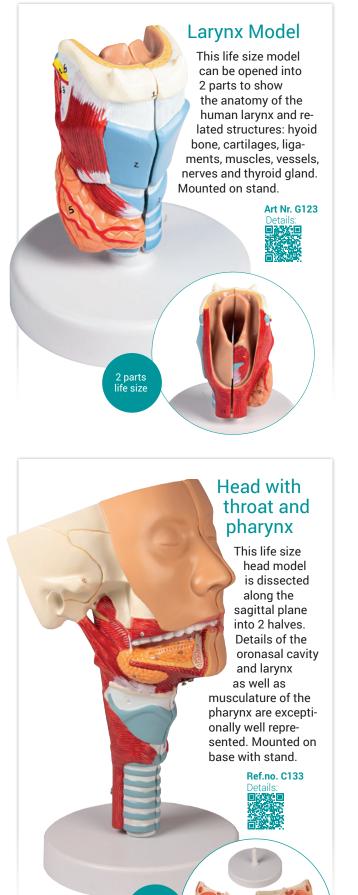
7 parts 10-times life-size

Transparent laryngopharynx model

This is a transparent model that reproduces the laryngopharynx three-dimensionally, from the oropharynx to the hypopharynx. The model can be split on the midline. The epiglottis, pyriform sinus, and glottis are faithfully reproduced, and the depth of the pyriform sinus and laryngeal vestibule can be understood. The complex 3-dimensional structure of the laryngopharynx can be intuitively grasped through visualization. The flow of food can also be seen from the outside.

Ref.no. LM104





life size

Larynx Model

This 5-part model is sectioned longitudinally to reveal intimate details of internal structures, including the hyoid bone, cartilages, ligaments, muscles, vessels, nerves and thyroid gland. Mounted on stand.

Ref.no. G121

5 parts 2-times life-size

4-times life size

Functional larynx

Enlarged Model of a human larynx with hyoid bone. It shows cartilaginous structures on the right side, the left side shows musculature. Movable mounted are vocal cords, arytenoid cartilages and epiglottis to demonstrate their functions. Mounted on stand.

Ref.no. G120 Details:

69

RESPIRATORY ORGANS



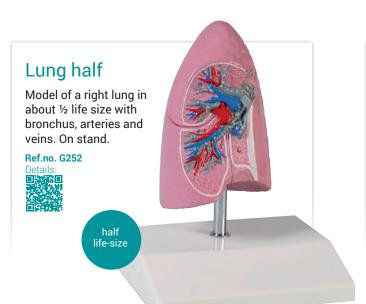


Lungs, Heart and Larynx

A life size reproduction of the complete human respiratory system. It is composed of 7 parts showing the larynx (dissected along the sagittal plane); the lungs (dissected along the frontal plane); and a twopart heart. Mounted on base.

Ref.no. G115





Human respiratory system

Representation of the human respiratory system in about half life size. Lungs, trachea and upper respiratory tract are shown in detail. The model comes on a removable stand.

Ref.no. G216 Details:



Lung half

Model of a right lung in about life size with bronchus, arteries and veins. On stand.

Ref.no. G253 Details:

life-size

Lung lobule

This model shows an approximately 20 times enlargement of a section through the lungs. A bronchus, bronchioles and alveoli are shown with the accompanying pulmonary and bronchial blood vessels. With key card.

Ref.no. G420 Details:



Bronchioles

A model of the terminal bronchiole system of the lungs. Greatly enlarged and manufactured in rigid unbreakable material.



Lung cancer comparison model

These lung models give viewers a shocking, graphic view of the damage smoking causes. The healthy lung is pink and free of abnormalities. In contrast, the diseased lung is black, has a large greyish-white cancerous mass, and is covered with spongy bubbles caused by emphysema. Sure to make a lasting impression.







Lung cancer model

This impressive model shows the left lung half of a smoker. The model can be opened and shows a greyish-white, fibrous-feeling cancer. A model for real dramatically demonstration!





2 part life-size

Heart model

The front heart wall can be removed to show the inner structures in detail. All important structures are present such as ventricles, atriums, aortic, mitral, pulmonary and tricuspid valves. Heart muscle, fatty tissue, arteries and veins are painted in detail; the structures are shown on the educational card (German/English). On stand.

2 part

BES

life-size

Ref.no. G310 Details:



Heart model with conducting system

The front heart wall can be removed to show the inner structures in detail. All important structures are present such

as ventricles, atriums, aortic, mitral, pulmonary and tricuspid valves. Heart muscle, fatty tissue, arteries and veins are painted in detail, the conducting system is marked in color. On stand.

Ref.no. G207 Details:

Heart with bypass

This life-size two-part model provides an extremely detailed illustration of the anatomy of the human heart with three coronary bypasses. The anterior wall can be detached to expose the inner chamber and valves. Mounted on stand.

2 part

. life-size

Ref.no. G205 Details:



Human heart

The 2x life size model describes all the main structures of the human heart in great detail. The right part is detachable to expose the inner chambers and valves. The left auricle and ventricle wall can be removed to show the atrium, the mitral valve, the ventricle and papillary muscles.

Ref.no. G112



4 parts 2-life size



This world-wide unique model is based on CT scan data of a healthy, adult male and is anatomically correct inside and outside. The heart is made of soft and lifelike material. It is pre-cut at different positions to allow easy access to the internal structures. The perfect model for Ref.no. G500

anatomical studies and for explaining the function of the heart.



flexible Heart-models

Heart model, flexible, didactical version

This world-wide unique model is based on CT scan data of a healthy, adult male and is anatomically correct inside and outside. The heart is made of soft and lifelike material and translucent. It is precut at different positions to allow easy access to the internal structures. The perfect model for anatomical studies and for explaining the function of the heart.

Ref.no. G510



The 2x life size model describes all the main structures of the human heart in great detail. The right part is detachable to expose the inner chambers and valves. The left auricle and ventricle wall can be removed to show the atrium, the mitral valve, the ventricle and papillary muscles. Additionally this model shows bypass to the right coronay artery as well as bypass to the left interventricular artery and to the ramus circumflexus.

Ref.no. G206 Detail

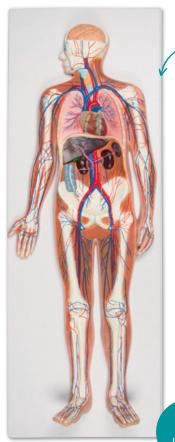
parts -time life-size

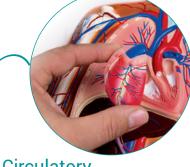
Giant heart model

This model in tripple life size is perfect for classroom education. It is sectioned along the anterior plane to show internal structures, including the cardiac valves and the comparative morphology of the right and left ventricles. On base.

Ref.no. G254 Details

2 part 3-time life size





Circulatory system, relief model

The model pictures clearly the lung circulation, the heart with its chambers, artriums and valves, the large vessels and the blood supply to the extremities. Of course liver, kidneys, spleen and a part of the intestines are shown. The front wall of the heart can be removed. To locate the vessels the model shows the skeleton, allowing to understand the three-dimensional paths of the vessels. On base board, also suitable for hanging.





Foetal circulation

An one piece, half schematic model of the foetal heart, lungs, liver placenta and cord, aorta and vena cava. Marked to show the circulation and direction of flow of the blood.





Placental Circulation

A natural-size model, showing all the structures of the placenta. The cotyledons on the maternal surface are shown, with the amnion and chorion membranes on the foetal surface. The umbilical vessels can be seen Ref.no. G20

through the membrane of the cord. A section into the placenta exposes more structures. With key.



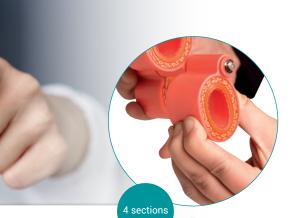


Mediastinum

This life size model is composed of 5 parts, including a 2-part heart. The sternum and thymus are removable to reveal the pericardial sac and the major pulmonary and systematic vessels.

The trachea and esophagus are shown the inferior thoracic aperture is delimitated from the diaphragm musculature. Mounted on base.





Arteriosclerosis Model

Cross section of an artery showing 4 different stages of arteriosclerosis. The model demonstrates the narrowing of the artery due to buildup of fatty deposits (cholesterol) and formation of plaque. The Artery model is simulated with the softness of the real artery. Starting with the normal artery which is done in soft material, up to the blockage which is done in hard material. The stages are mounted rotatable. The model is movable and cannot be dismantled.

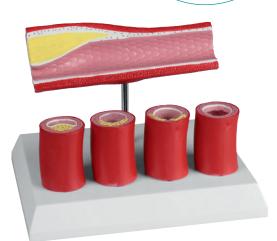
Ref.no. G265 Details:



Artery model

Longitudinal section of an artery with constriction caused by plaque adsorption and a blockage caused by a thrombus.





Artery with 4 artery sections

Longitudinal section of an artery with constriction caused by plaque adsorption. Four cross sections on the base show step-by-step build-up of plaque at the artery wall.





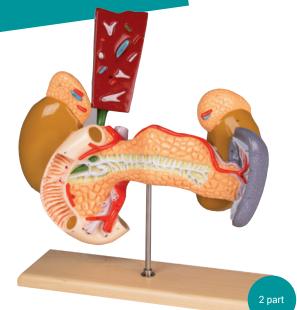
Enlarged 2000 times, this model shows the various types of blood cells, including red blood cells; white blood cells (lymphocytes, monocytes, neutrophils, eosinophils and basophils);

and blood platelets. On baseboard.





ORGANS



Internal Organs

The organs are shown partially opened, and the gall bladder is removable with part of the liver. It depicts Pancreas, Duodenum, Gall bladder, Spleen, Kidneys, Adrenal glands and Blood vessels. Mounted on wooden stand.

Ref.no. W42509



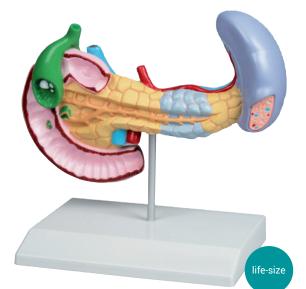


Pancreas and duodenum

This life size model is an accurate representation of the pancreas and duodenum. The pancreas is open to show the entire pancreatic duct. The duodenum is partially dissected to expose its internal structure. Mounted on stand.

Ref.no. K222

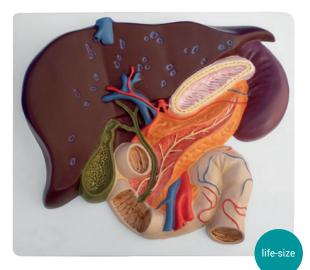




Diseases of Pancreas, Spleen and Gall bladder

This full size model shows pancreatic cancer, the gallbladder with stones, a ruptured spleen and duodenum with an ulcer.

Ref.no. K295 Details:



Liver with gall bladder, pancreas and duodenum

This life size model shows a section of the liver with gall bladder, pancreas and duodenum; includes hepatic and pancreatic ducts. Mounted on board.

Ref.no. K440





Human liver

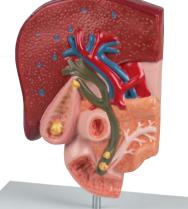
This model shows a liver that is dissected to expose the internal distribution of arteries and veins, the portal vein and the bile duct. Mounted on stand.

Ref.no. K108 Details:

Gallstone Model

This half natural size model shows the anatomy of the biliary system and its surroundings in great detail. Both the tissue changes caused by chronic inflammation and acute inflammation (cholecystitis) are represented in the gallbladder wall. Gallstones are shown in the typical places. Mounted on base.







Liver model with gallbladder

This realistic model reproduces a liver with the gall bladder. The hilus vessels are shown as well as the extrahepatic ducts and the main ligaments. Mounted on removable stand.



Liver Lobule

This greatly enlarged model shows the fine detail of a single liver lobule, which is sectioned and shown in relationship to portions of surrounding lobules. The fine colouring distinguishes the portal veins and vessels, venous sinusoids and central veins with sections through the bile canaliculi. With key.







Human digestive system

The oral cavity, the pharynx and the first part of the esophagus are dissected along the medial sagittal plane. The liver is shown together with the gall bladder and is removable. The removable pancreas and duodenum are dissected. The stomach is removable and can be dismantled into two parts, the duodenum, caecum, part of the small intestine, large intestine and the rectum are open. On board.

Ref.no. K221



2 part life-size

Stomach

This life size model is dissected along the medial plane and can be opened to show the internal structure of the stomach, including the cardia, the mucosa and the pylorus. The model also shows the blood vessels. Mounted on stand.

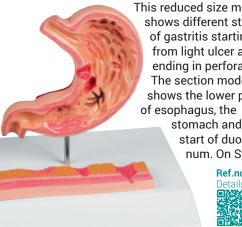
Ref.no. K215

Oesophagus Diseases

This life-size model shows a frontal section of the lower part of the oesophagus and the upper part of the stomach. The most common diseases are depicted. Mounted on base.

Ref.no. K218

Stomach with Ulcers



This reduced size model shows different stages of gastritis starting from light ulcer and ending in perforation. The section model shows the lower part stomach and the start of duodenum. On Stand.

Ref.no. K217

NEW

Stomach model with gastric band

This stomach model in life size shows the function of a gastric band. The model can be taken apart into two halves to show the inner structures. On removable stand.

> Ref.no. K82 Details

Stomach wall

This one-piece model, 150x life size, is an important tool to study the stomach. All the different layers from the epithelium to the serous coat are represented with great accuracy and detail. The principal structures, including different cellular types, capillary and lymphatic vessels are numbered. Mounted on base.

Ref.no. K180



This greatly enlarged 2-part model of a villus from the small intestine shows detail from a transverse and longitudinal section. On base, with key card.

> Ref.no. K490 Details:

Colon model with diseases

Reduced size model of a human colon showing ileum, caecum, ascending

colon, transverse colon, descending colon, sigmoid colon and rectum. The following diseases are depicted:

appendicitis, Crohn's disease, irritable bowel syndrome, ulcerative colitis, pseudomembranous colitis, diverticulosis, diverticulitis, carcinoma and colorectal polyps. On stand.



Haemorrhoids model

This model in twice life size shows a frontal section through the rectum. Additionally a smaller section

2-times life size

can be found on the base as relief. The model shows outer haemorrhoids as well as inner haemorrhoids stage I and II. The additional relief model shows haemorrhoids stage III and IV. Also the anatomical structures of rectum, sphincter and venous plexus are represented.

> Ref.no. K227 Details:

2 parts enlarge

Intestinal Villi

This 100 times life-size model consists of one entire villus, one longitudinally sectioned villus showing the arterioles and venules and one cross-sectioned villus to show the lymphatic vessels. Also includes a longitudinal section of Lieberkühn's crypt.

100-times life size

KIDNEY

Kidney Section with Renal Nephron and Renal Corpuscle

This 3 models consists of a frontal section of the kidney, enlarged 3 times, illustrates adrenal gland, cortex, medulla, pyramids with papillae, renal pelvis and blood vesselsas well as a nephron enlarged 120 times,

shows renal tubules, a collecting tube system and Henle's loop and as third model a Malpighian corpuscle with the Bowman's capsule, 700 times life size.



Kidney Stone Model

This model is designed to inform patients about urinary stones (urolithiasis) and kidney stones (nephrolithiasis). A right kidney in natural size is opened to show the internal structures. The renal pelvis, the renal calices and the ureter are opened to show concretions and stones in the typical locations. Mounted on base. With Key Card.

> Ref.no. K229 Details:

Kidney with Adrenal Gland

This 2-part model shows the human kidney in about double life size. It shows internal structures including cortex, medulla, pyramids, calyces, renal pelvis, ureter and origins of the renal artery and vein. The front of the model is removable for inner examination. Mounted on stand. With Key Card.



Kidn Show of rer la, ren renal and au cation

Kidney model

This model of a human kidney in almost life size shows hand painted details of renal pelvis, renal medulla, renal calyx, renal cortex, renal artery and vein, ureter and adrenal gland. With educational card and stand.

Ref.no. K212

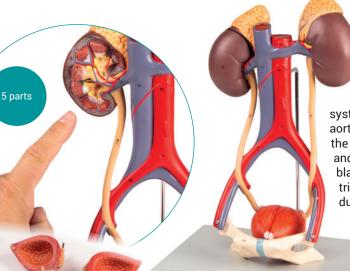


Kidney model This model of a human kid-

> 2-times life size

ney in about 2 times life size shows hand painted details of renal pelvis, renal medulla, renal calyx, renal cortex, renal artery and vein, ureter and adrenal gland. With educational card and stand.





Urinary System

This life size 5-part model represents the major components of the urinary system, plus the vena cava and abdominal aorta; the right kidney is dissected to show the cortex, medulla, pyramids, calyces, pelvis and origins of the renal artery and vein. The bladder can be opened to reveal the mucosa, trigone, urethra, seminal vesicles, ejaculatory ducts and vas deferens. Mounted on base.

Ref.no. K132



Female bladder

This model of a female bladder in about life size shows all anatomical structures as cross section. Bladder, urethra and sphincter are clearly visible. Perfect as patient education tool for pelvic floor training.



Diseases of bladder and prostate

This life-size model is sectioned along the frontal plane and shows, five different pathologies of the male urinary bladder in the typical location: cystitis, bladder stones, benign prostatic hypertrophy (BPH), diverticulum, as well as bladder tumour at three different stages. Mounted on stand.



Prostate Model

This model shows very impressive the changes of the prostate caused by BPH. One side of the model shows a healthy prostate with bladder and the other half has a diseased prostate with narrowing of the urethra and residual urine. On removable stand. Ref.no. 1261







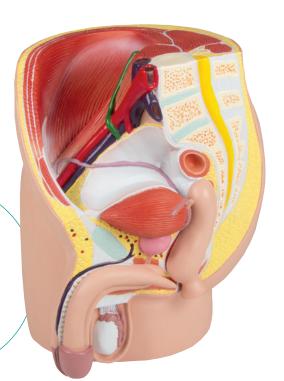
Male Pelvis

This life size model is median sagittal sectioned and shows the male pelvis in 4 parts. Additional to muscles and vessels of the abdomen it depicts particularly the urogenital organs. Removable are one half of the cavernous body, one half of the bladder with prostate and one half of bowel with rectum.





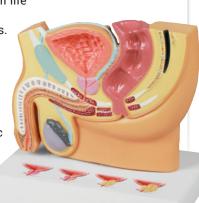


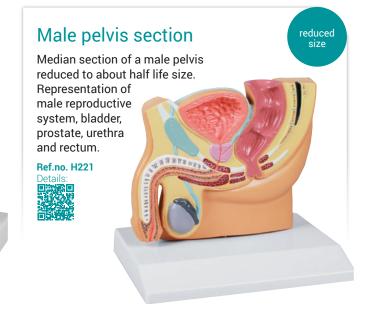


Male Pelvis section with PBH

This model in about half life size schows a sagittal section of a male pelvis. The base shows four cross sections of the prostate gland. One cross section shows a helathy prostate, the others show three stages of Benign Prostatic Hyperplasia (BPH).







Orchidometer, plastic

Orchidometer for diagnosis of testicle volume. Consists of prepubertal testicles (1 to 3ml) in yellow, pubertal testicles (4 to 12ml) in orange and adult testicles (15 to 25ml) in red. Strong plastic material, hygienic, on rope.

Ref.no. OM20 Details: BELLER

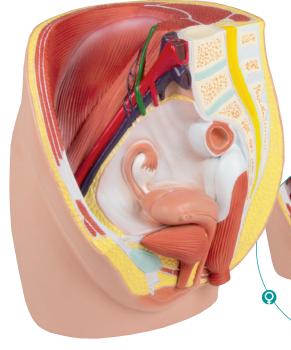
Male genital organs

This life size 4 part model is dissected through the median sagittal plane and provides excellent views of external and internal structures. The removable parts include two halves of the penis, showing medial and transverse sections, and two halves of the male reproductive system with excellent

4 parts

detailing of internal structures.



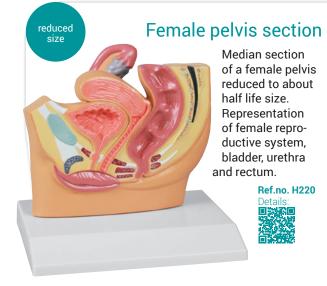


Female Pelvis

This life size model is median sagittal sectioned and shows the female pelvis in 3 parts. Additional to muscles and vessels of

the abdomen it depicts particularly the urogenital organs. Removable are one half of the uterus, vagina and bladder as well as one half of bowel with rectum.





Uterus model

Life size model of a healthy uterus. Anatomy is shown in detail. Cervix, endocervical canal, uterine cavity are sectioned to show endometrium and myomterium. Also one fallopian tube and one ovary are opened, follicles

life-size

and ookinesis can be seen. For IUD demonstration. IUD not included. On removable stand.

Ref.no. L261 Details:

Female genital organs

This life size model, composed of 4 parts, is a detailed representation of the female reproductive system as viewed through a median sagittal dissection. Removable parts include a 2-part uterus and two halves of the female reproductive apparatus with details of the internal structure.



S Uterus with diseases

Life size model of an uterus with multiple diseases. It shows endometriosis, cysts, adhesions, fibroma, cervical carcinoma, sarcoma, adenomyosis, polyps and salpingitis. Of course normal anatomy is also represented. It shows vagina,

cervix, endometrium, myometrium, endocervical canal, uterine cavity, fallopian tube, ovary, fimbria, follicles and mesosalpinx. An educational card locates the diseases and anatomy. On removable stand.

Ref.no. L262 Details:



life-size

PREGNANCY



Periodic changes of female hormones

and internal layer of uterus. This model shows the relationship between female hormone levels and changes in the uterine lining throughout

the menstrual cycle. Mounted on board.





Ovary structure

This model shows the anatomy of the human fallopian tube and ovary. The follicles are shown at different stages of maturation, from the primary

follicle to the corpus albicans. A primary follicle is cross-sectioned, to illustrate the inner structure. The oocyte, zona pellucida and granulosa cells.





Fetal development



This model shows the process of fetal development from the unfertilized ovum to the 9th month of gestation. The model consists of 5 parts, mounted on a board that corresponds to the following developmental stages: ovulation; fertilization; zygote formation: and uterine implantation. Detail The fetus is also shown at 2 weeks, 8 weeks, 12 weeks and 9 months of development. Mounted on board.



This series was developed in cooperation with a German midwifery school and is composed of 8 life-size models and one enlarged model. It illustrates the human development from the 4th week to the 24th week.





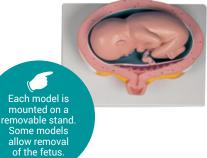


All the main anatomical structures of the uterus and embryo/fetus are well represented and explained on the manual. The models show:

- 🗸 Embryo, 4 weeks, enlarged
- Embryo in uterus, 4 weeks
- Embryo in uterus, 8 weeks
- ✓ Fetus in uterus, 12 weeks
- 🗸 Fetus in uterus, 16 weeks

2 part life-size

- Fetus in uterus, transverse presentation, 24 weeks
- Twins in uterus, 2 separate placentas, 16 weeks
- 🗸 Twins in uterus, 1 common placenta, 16 weeks









4 Weeks. This model, about 40 time life size, shows structural details of a human embryo at 4 weeks of development.



Pregnancy Pelvis with Fetus

in the 32nd week of pregnancy. This life size model depicts the female human pelvis in median section with a fetus in the 32nd week of pregnancy. The fetus is in the normal presentation and position. The model depicts graphically the position and relation of fetus and inner organs during normal pregnancy. The fetus is detachable for closer examination. Mounted on base.



Female pelvis with fetus doll

With foetus doll, umbilical cord, and placenta. Natural casting of a female pelvis with life-size foetus doll made of cloth (plastic head). Comes in carrying bag.

Ref.no. 4071 Details

Fetus doll with placenta Ref.no. 4071-1 etail

Fetus doll without Placenta Ref.no. 4071-2



Model of Placenta & Umbilical Cord

The amniotic membrane allows you to show the fetal model inside the sac. The snap-on umbilical cord clearly shows the vein and arteries and a convenient drawstring closes the sac. Both amniotic and chorionic membranes are detailed

accurately in two colors. Fits to model R10070.

Ref.no. R10071 Detail



Fetus doll

Simulating an average full-term fetus, made of soft and durable cloth (head plastic). The body is flexible to show all presentations and positions. Fits into pelvis R10072.

Ref.no. R10070



Miniature birth

demonstration set. In carrying bag.



Cloth Pelvis

Made of flexible cloth, this pelvic model shows how the different pelvic shapes affect pregnancy, labour and birth. Fits to Model R10070.

Ref.no. R10072

Details

Bony pelvises and pelvic floor muscles can be found on page 23

Pelvis for demonstration of birth canal

With this model birth canal and the passage of the fetal head through the female pelvis during labour can be clearly demonstrated. The pelvic skeleton consists of flexible hip bones with movably mounted symphysis, sacrum Ref.no. L230 with flexible coccyx and 2 lumbar vertebrae. The foetal skull is mounted with a flexible spiral rod on the base and can be moved freely.

CHINESE ACUPUNCTURE



Chinese acupuncture figure

Original Chinese acupuncture figure with marking of the acupuncture points according to traditional Chinese teaching. Suitable for insertion of needles. Including instructions in Chinese and English.



Chinese acupuncture figure

This male model shows meridians and acupuncture points on one side, on the other side musculature and superficial nerves are represented. On base.

Chinese acupuncture figure



with marking of the acupuncture points according to traditional Chinese teaching. Highly economically priced model. Suitable for insertion of needles. Including instructions in Chinese and English.

Male 26 cm Ref.no. 2044 ətail

Acupuncture ear, 22 cm

Enlarged representation of a human ear with marking of the acupuncture points according to traditional Ref.no. 2062 Chinese teaching. Suitable for insertion of needles. Including instructions in Chinese and English.

Acupuncture ears

Left and right acupuncture ear without marking of the acupuncture Ref.no. 2064 points according to TCM. Suitable for insertion of

needles.

Chinese acupuncture set

This model set consists of: acupuncture figure, male, height 48 cm, acupuncture head, acupuncture hand, acupuncture foot and an acupuncture ear. With marking of the acupuncture points according to TCM. All parts suitable for insertion of needles. Including instructions in Chinese and English. Particularly economically priced in the set.

Acupuncture head oder foot according to traditional Chinese teaching. Including instructions in Chinese and English.

acupuncture head acupuncture foot



Detail











Acupuncture figure with representation of the acupuncture points, musculature and internal organs.







Acupuncture pig

Size: 13 cm Ref.no. 2054 Details:







Size: 15 cm Ref.no. 2056 Details:

