



# Medical gallery of Blausen Medical 2014

Correspondence: [info@blausen.com](mailto:info@blausen.com)

## Abstract

This is a gallery of images contributed to Wikimedia projects by [Blausen Medical](#) by 2014.

## Contents

|                                 |    |
|---------------------------------|----|
| Abstract .....                  | 1  |
| Cardiology .....                | 2  |
| Cardiac anatomy .....           | 2  |
| Cardiac diseases .....          | 5  |
| Cardiac interventions .....     | 8  |
| Other circulatory .....         | 13 |
| Gastrointestinal .....          | 22 |
| Neurology .....                 | 28 |
| Vertebral .....                 | 38 |
| Obstetrics and gynecology ..... | 42 |
| Dermatology .....               | 47 |
| Endocrine .....                 | 52 |
| Respiratory .....               | 55 |
| Diseases .....                  | 58 |
| Other anatomy .....             | 61 |
| Cell biology .....              | 70 |
| Biochemistry .....              | 75 |
| Interventions .....             | 78 |

---

Staff of Blausen Medical

\*Author correspondence: [info@blausen.com](mailto:info@blausen.com)

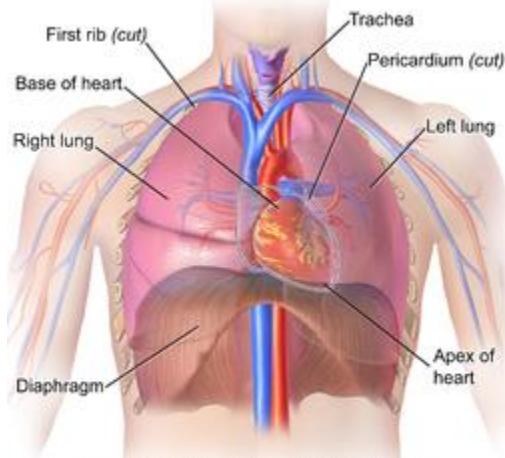
Licensed under: [CC-BY-SA](#)

Received 05-08-2014; accepted 29-08-2014



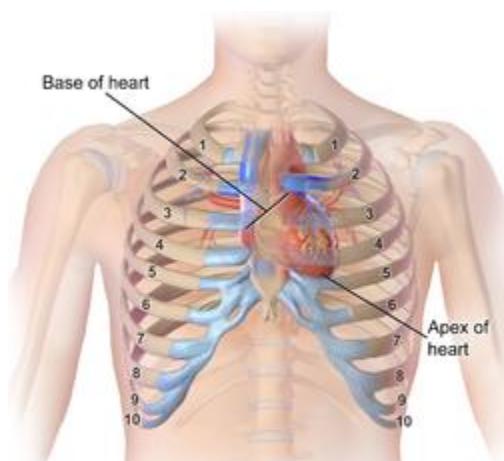
# Cardiology

## Cardiac anatomy

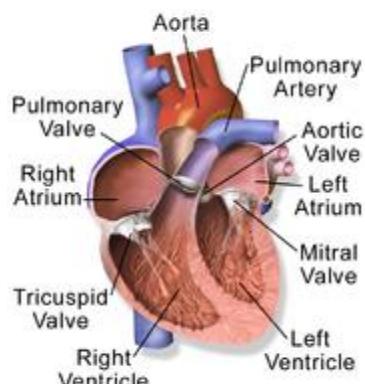


Heart valves.

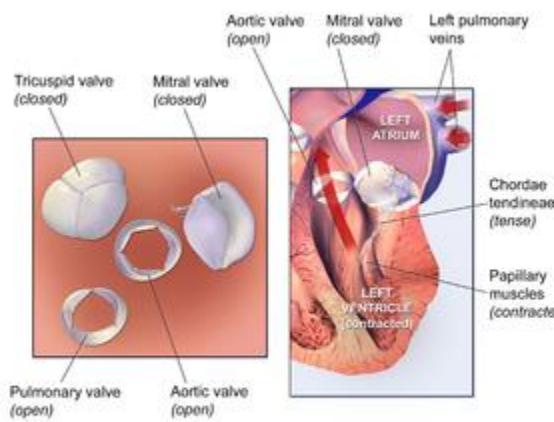
Thoracic cavity.



Heart location

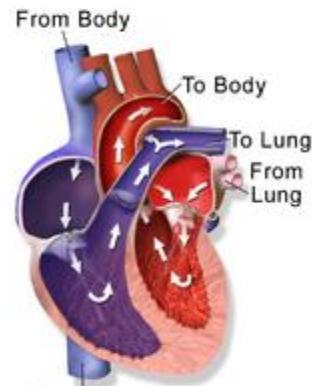


Heart anatomy



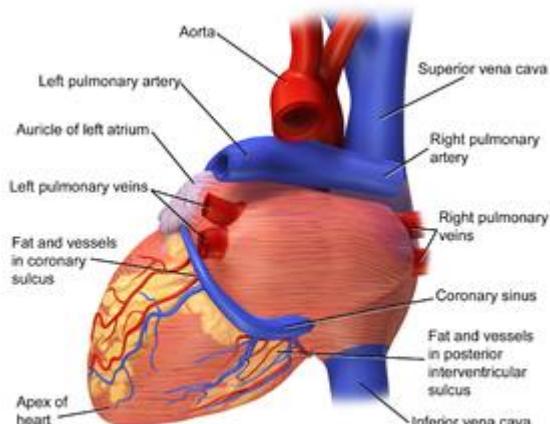
**Valves of the Heart (Ventricles Contracting)**

Heart valves during contraction of the ventricles.



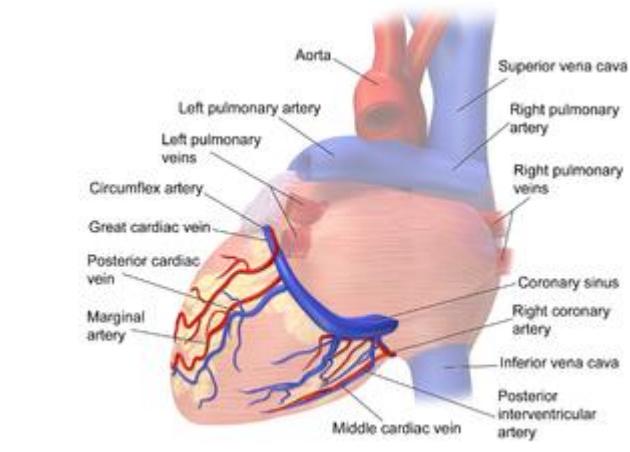
**Normal Blood Flow**

Circulatory system through the heart.



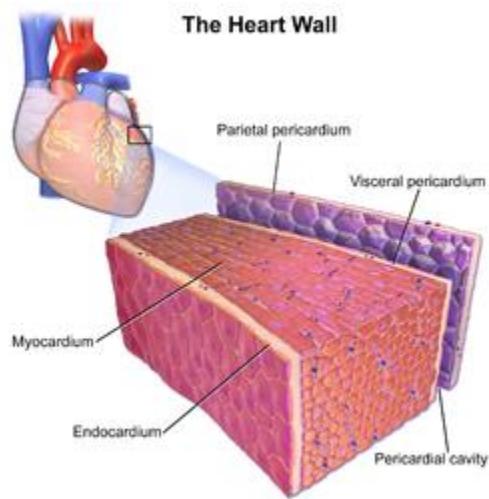
**Superficial Heart Anatomy (Posterior)**

Posterior view of the heart



**Coronary Circulation (Posterior)**

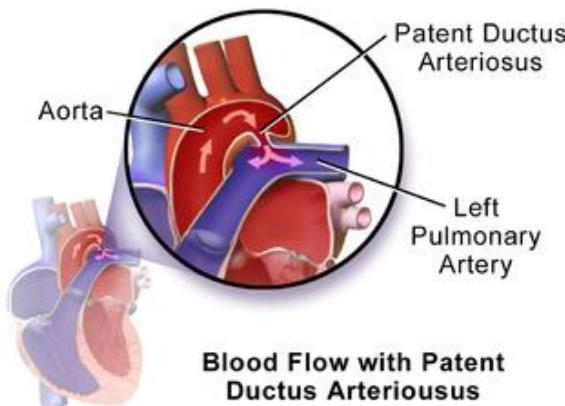
Posterior view of coronary circulation.



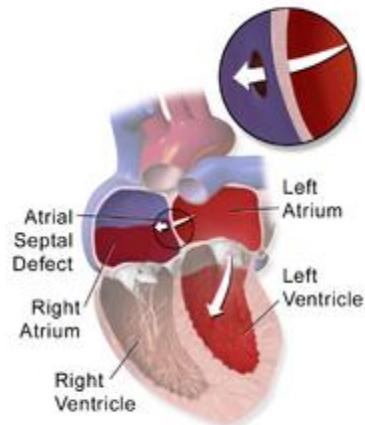
Layers of the walls of the heart.



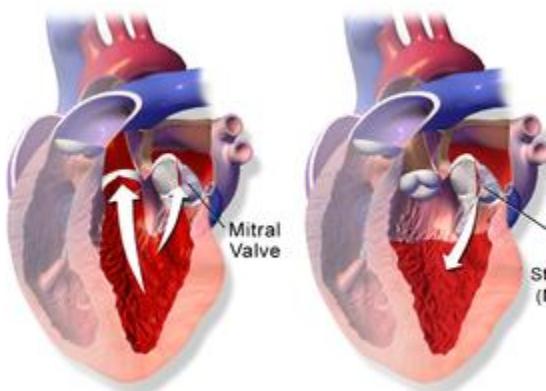
## Cardiac diseases



Patent ductus arteriosus.



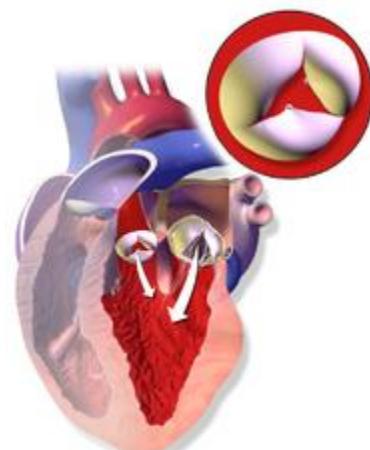
Atrial septal defect.



Mitral Valve Regurgitation

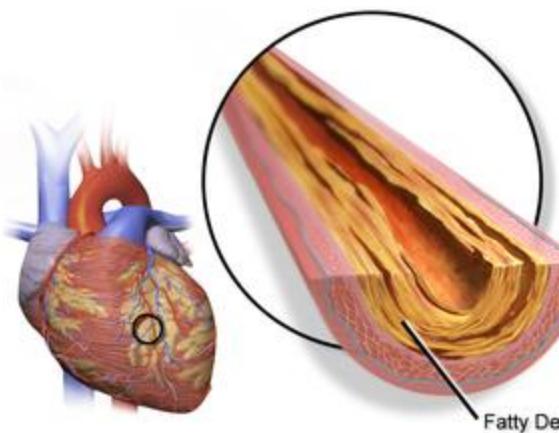
Mitral Valve Stenosis

Mitral valve regurgitation and stenosis.

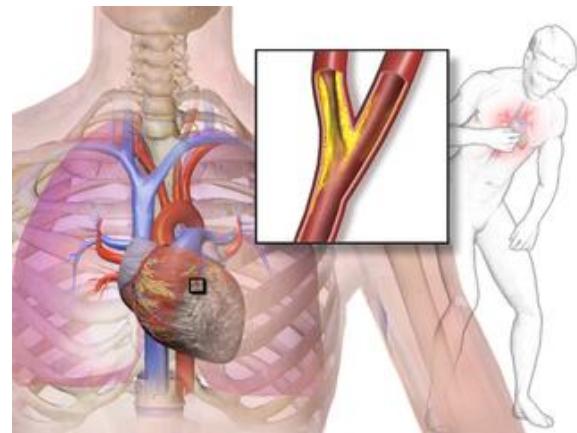


**Aortic Regurgitation**

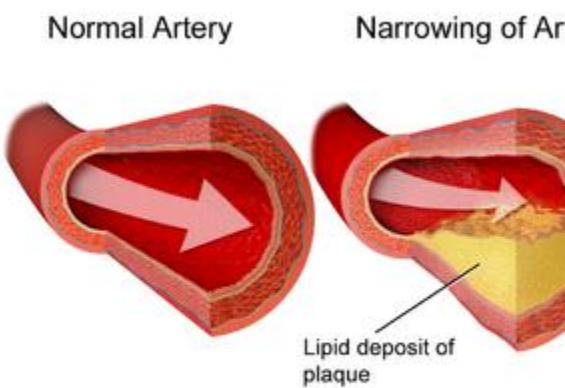
Aortic valve regurgitation



Atherosclerotic plaque of a coronary artery.

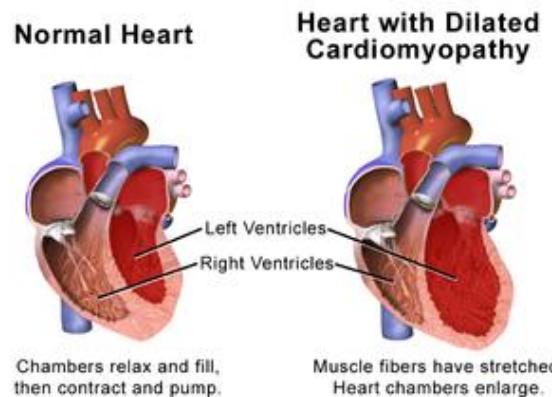


Angina pectoris.

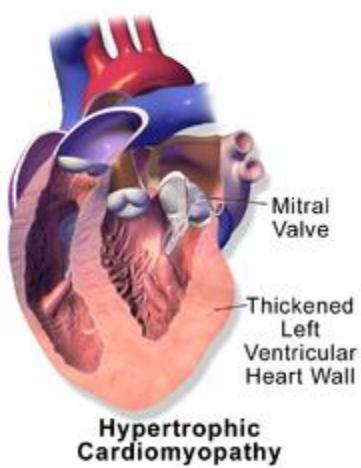


### Coronary Artery Disease

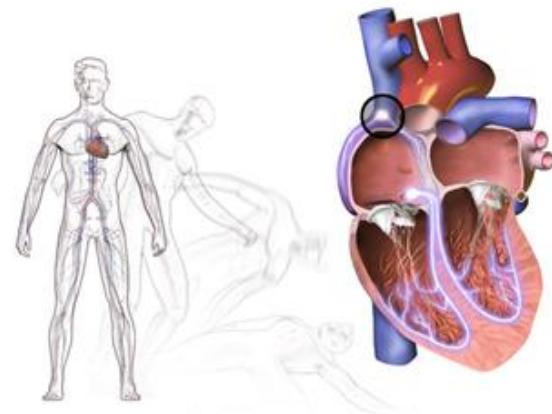
Coronary artery disease.



Normal heart versus one with dilated cardiomyopathy



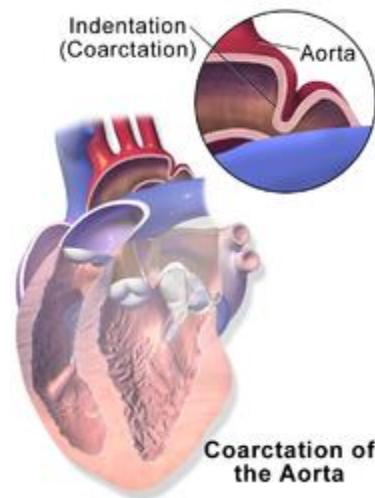
Hypertrophic cardiomyopathy.



Fainting from bradycardia.



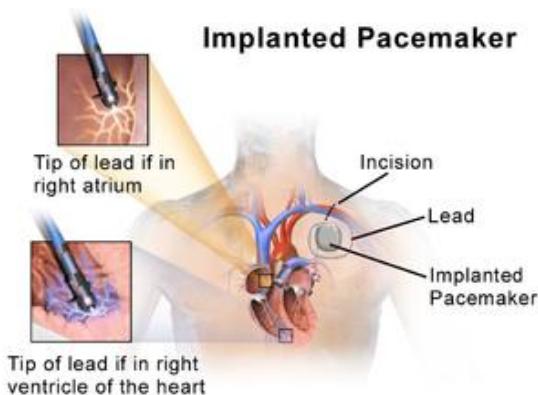
Hemopericardium



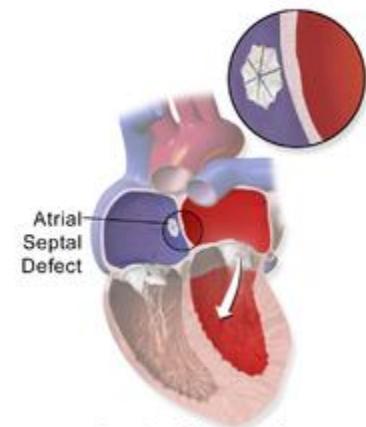
Coarctation of the aorta.



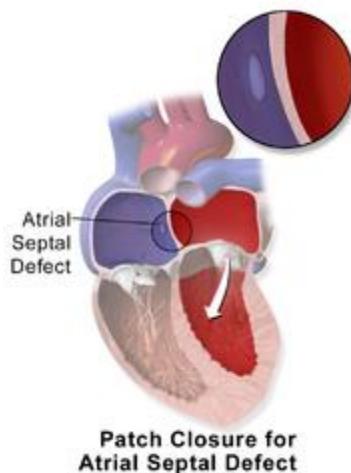
## Cardiac interventions



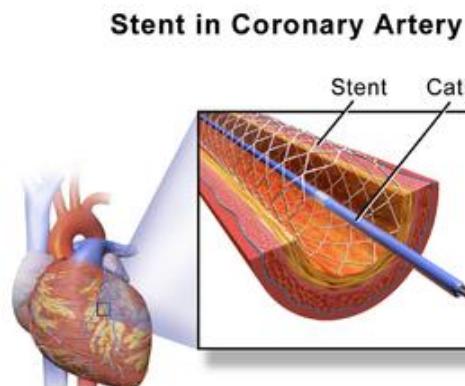
Placement of a pacemaker.



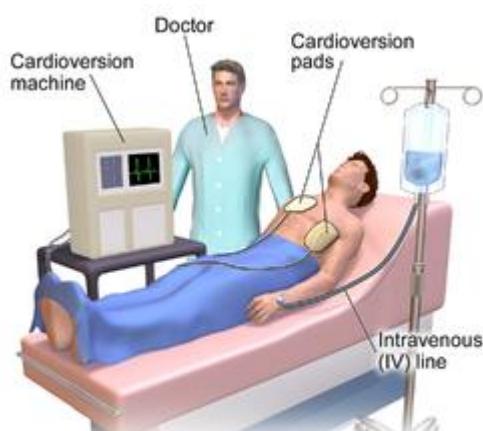
Correction of an atrial septal defect using a percutaneous device.



Correction of an atrial septal defect using a patch.

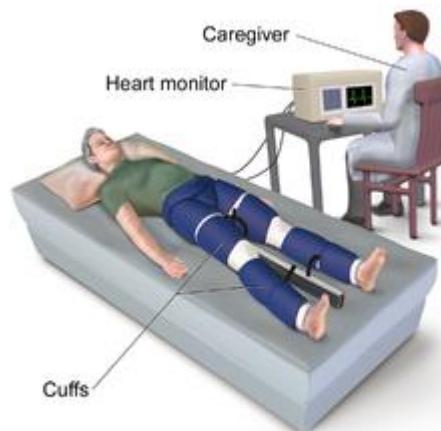


A coronary stent placed by percutaneous coronary intervention.



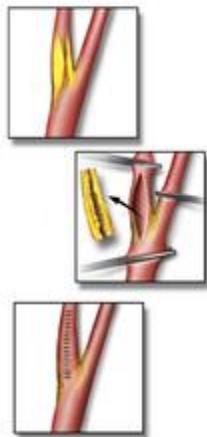
**Cardioversion**

The setting of cardioversion

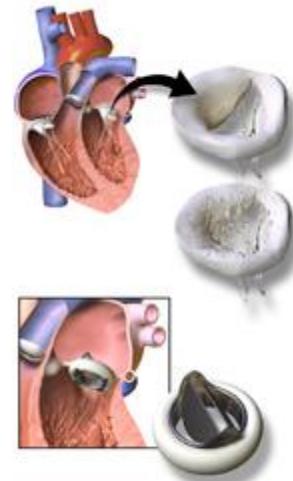


**Cardiac Enhanced External Counterpulsation**

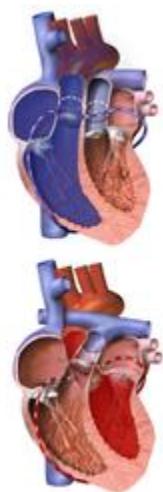
Enhanced external counterpulsation.



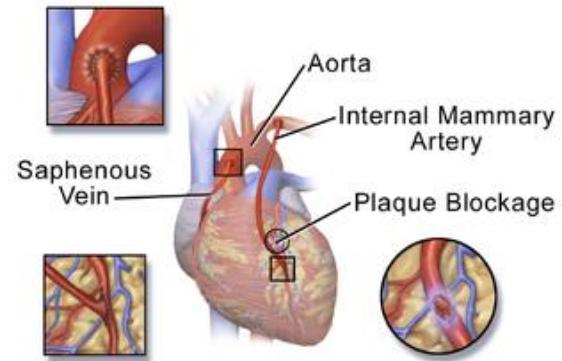
**Endarterectomy.**



**Artificial heart valve of St. Francis model**

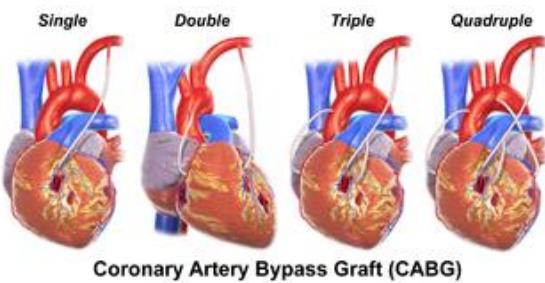


Arterial switch procedure to correct dextro-Transposition of the great arteries.

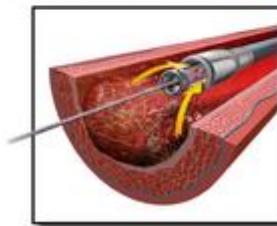


### Coronary Artery Bypass Surgery

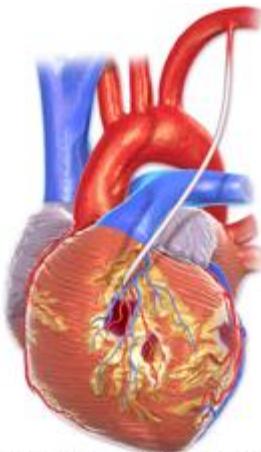
Coronary artery bypass surgery.



Coronary artery bypass surgery types.

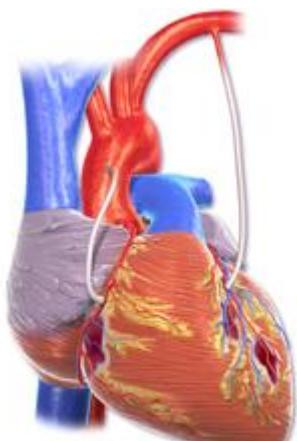


Coronary thrombectomy by AngioJet technique.



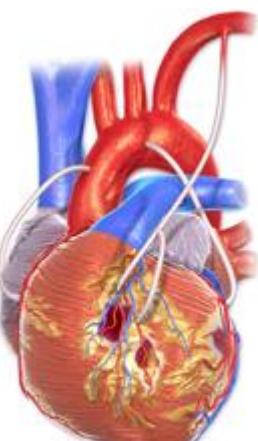
Coronary Artery Bypass Graft (CABG)  
Single Bypass

Single coronary artery bypass.



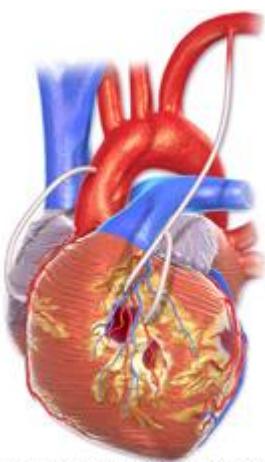
Coronary Artery Bypass Graft (CABG)  
Double Bypass

Double coronary artery bypass.



Coronary Artery Bypass Graft (CABG)  
Quadruple Bypass

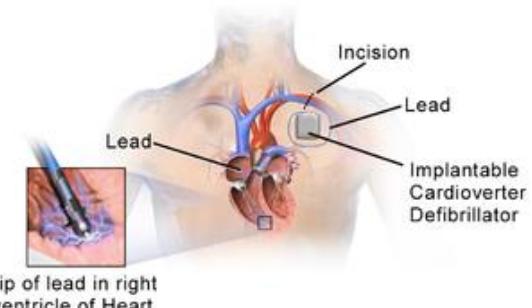
Quadruple coronary artery bypass.



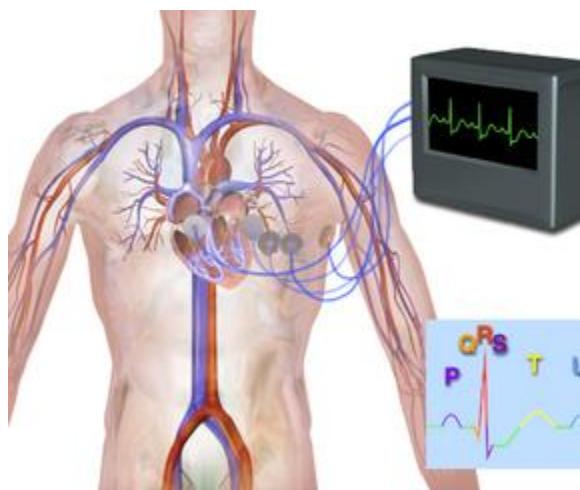
Coronary Artery Bypass Graft (CABG)  
Triple Bypass

Triple coronary artery bypass.

### Implantable Cardioverter Defibrillator



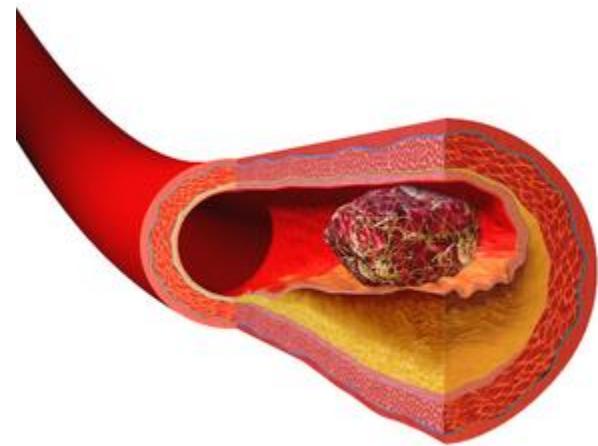
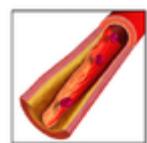
Implantable cardioverter-defibrillator.



Electrocardiography.

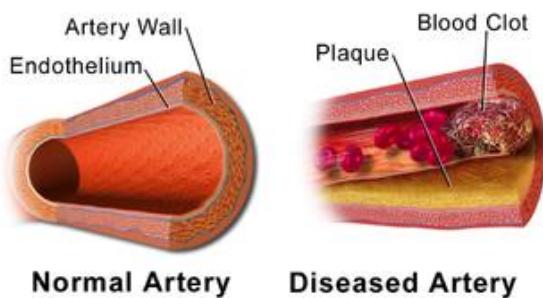


## Other circulatory

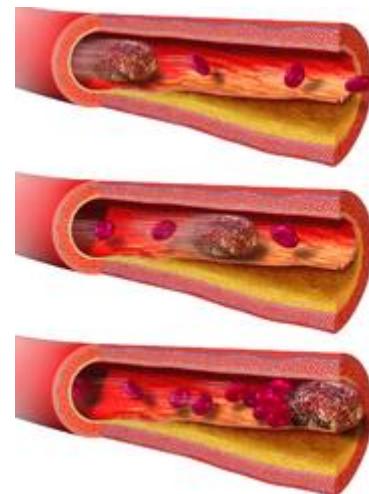


Blood clot.

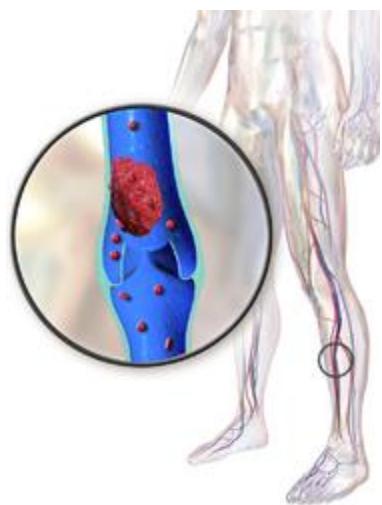
Peripheral artery disease.



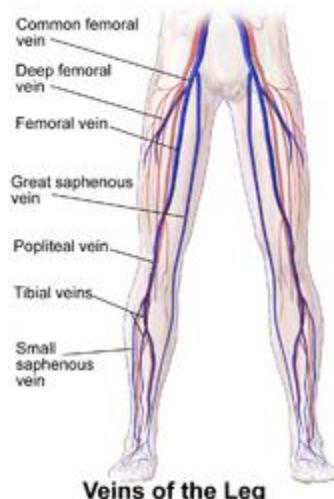
Normal artery vs. one  
with atherosclerotic plaque and blood clot.



Blood clot motion.



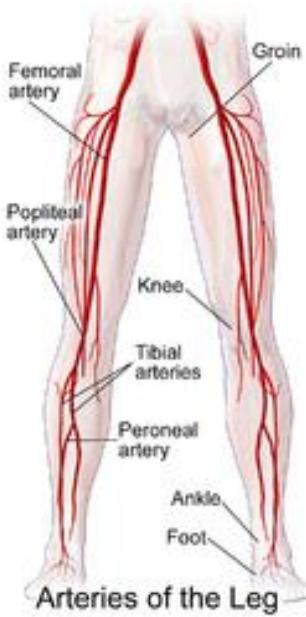
Deep vein thrombosis.



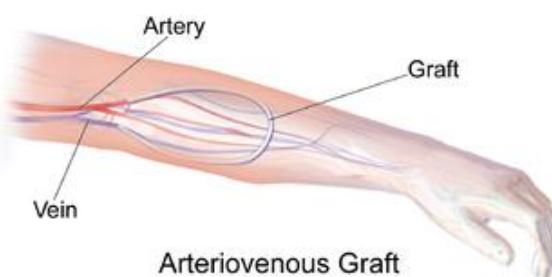
Veins of the leg.



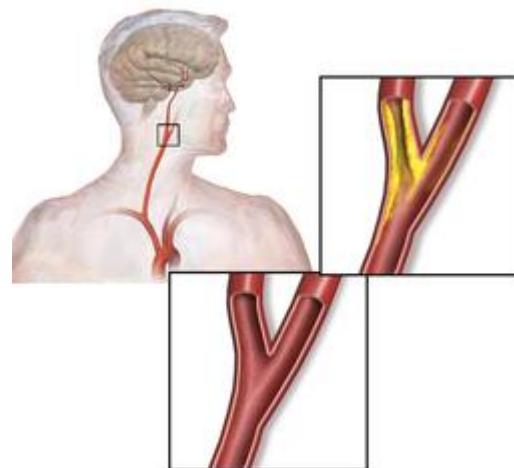
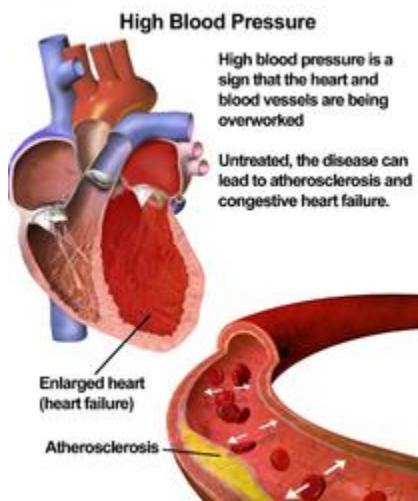
Arteriovenous fistula.



Arteries of the leg.

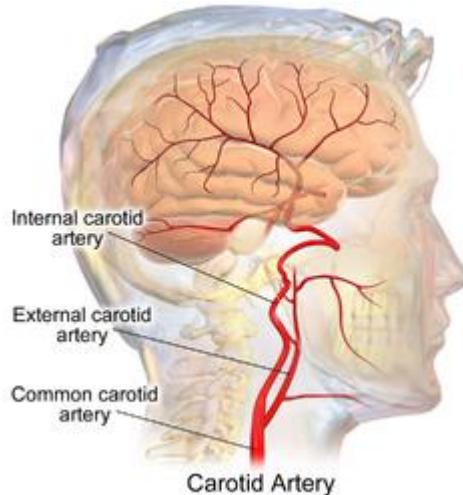


Arteriovenous graft for hemodialysis.



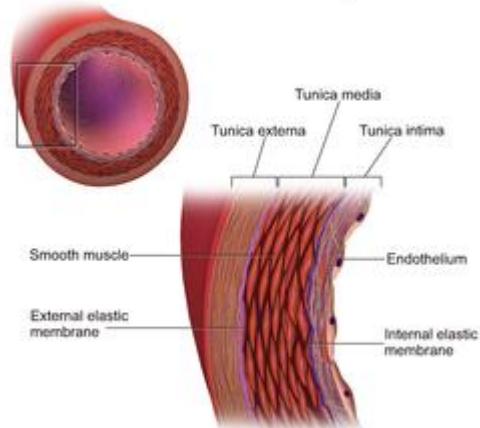
Hypertension.

Carotid artery stenosis.

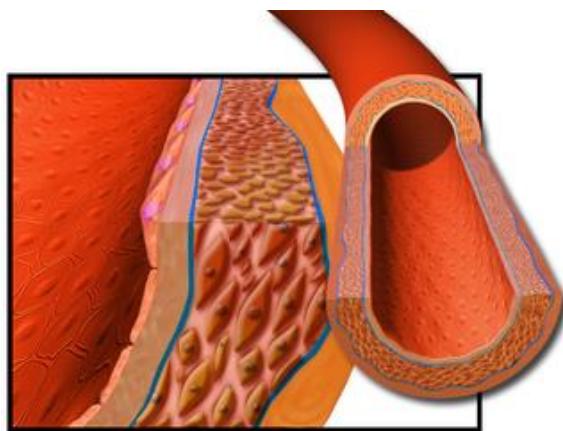


Carotid arteries.

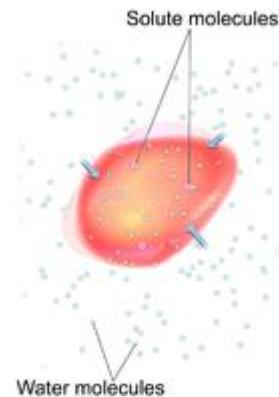
#### The Structure of an Artery Wall



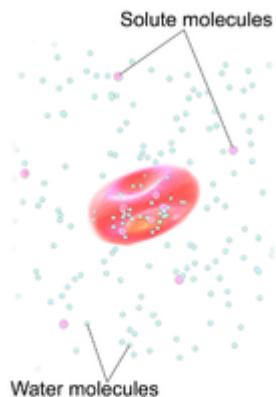
Arterial wall.



Artery.

**Hypotonic Solution**  
(Osmotic Flow into Cell)

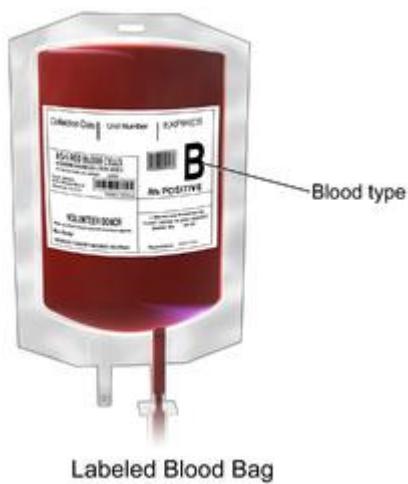
A red blood cell in a hypotonic solution.

**Isotonic Solution**  
(No Osmotic Flow)

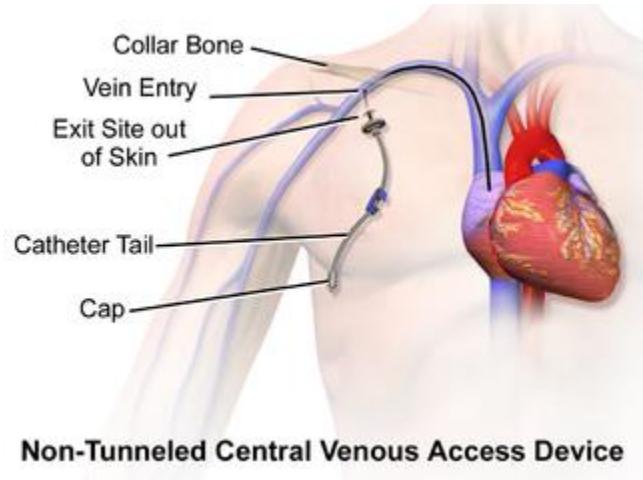
A red blood cell in an isotonic solution.

**Hypertonic Solution**  
(Osmotic Flow out of Cell)

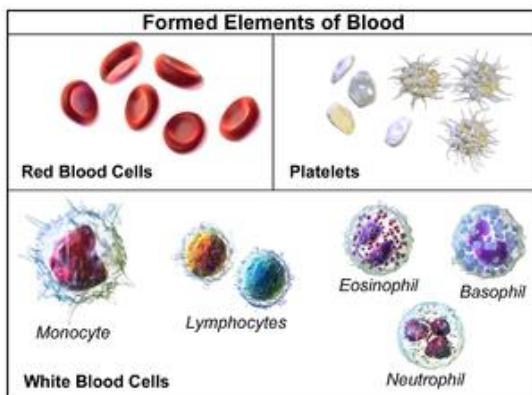
A red blood cell in a hypertonic solution.



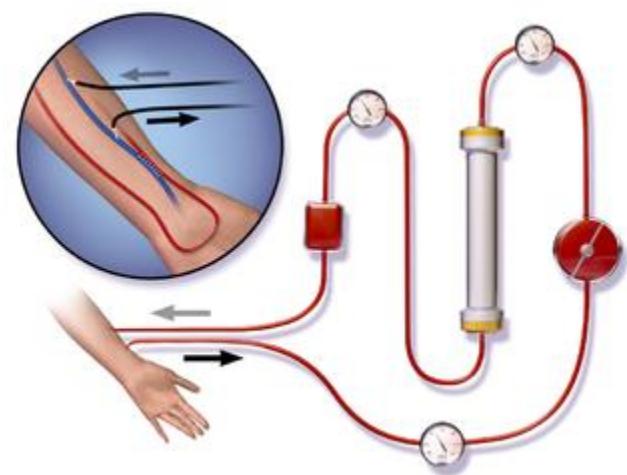
Bag of packed red blood cells.



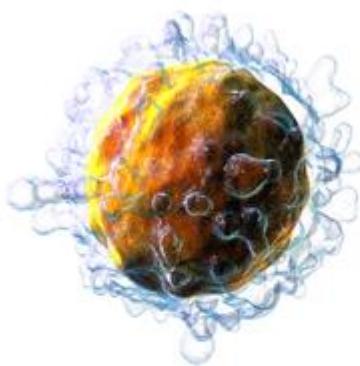
Non-tunneled central venous catheter.



Cell types of blood.

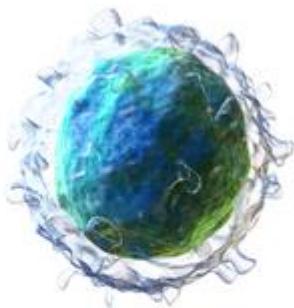


Hemodialysis.



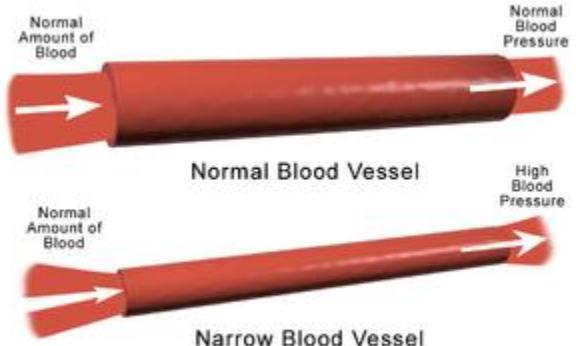
**Lymphocyte**  
*T cell*

T cell.



**Lymphocyte**  
*B cell*

B cell.



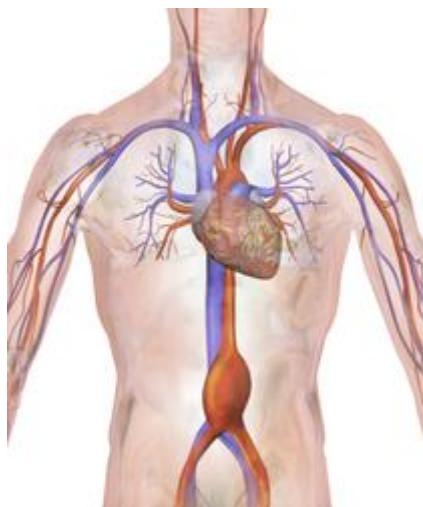
## Blood Pressure Blood Flow

Blood pressure flow.



**Blood Transfusion**

Blood transfusion

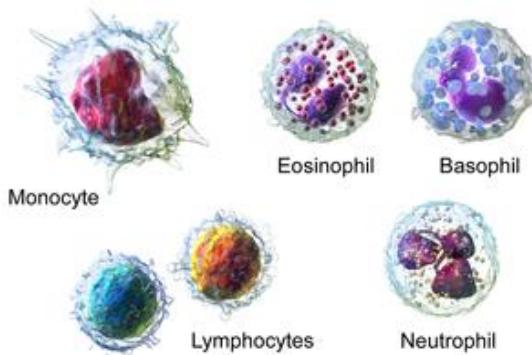


Abdominal aortic aneurysm.



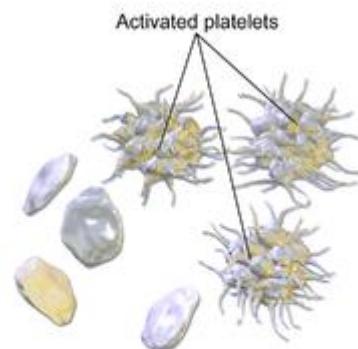
Red Blood Cells

Red blood cells.



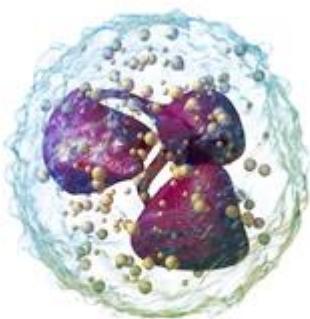
White Blood Cells

White blood cells.



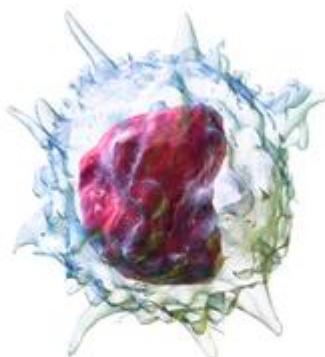
Platelets

Platelets.

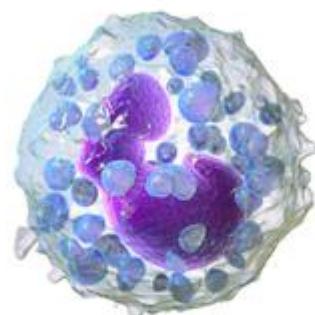
**Neutrophil****Eosinophil**

Neutrophil granulocyte.

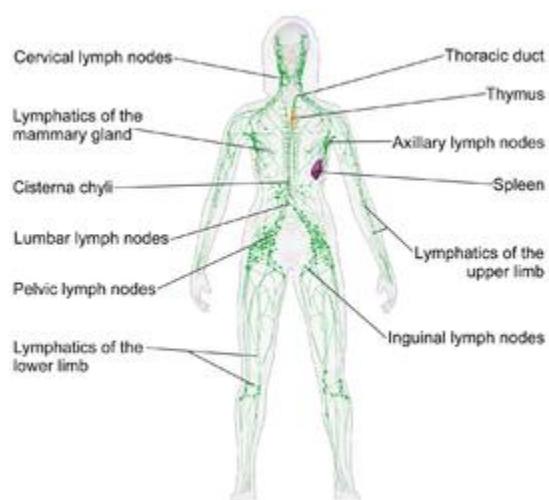
Eosinophil granulocyte.

**Monocyte**

Monocyte.

**Basophil**

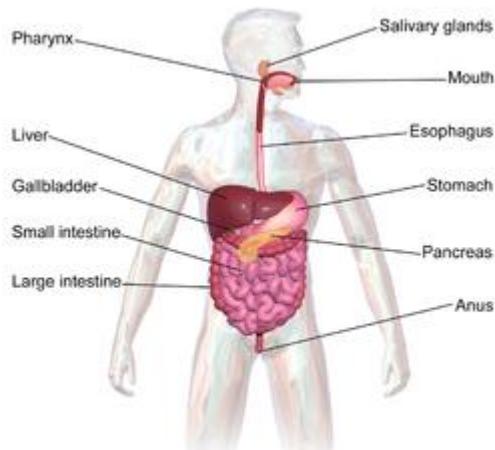
Basophil granulocyte.



Lymphatic system.

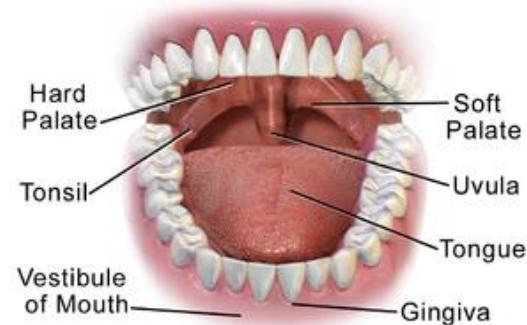


## Gastrointestinal



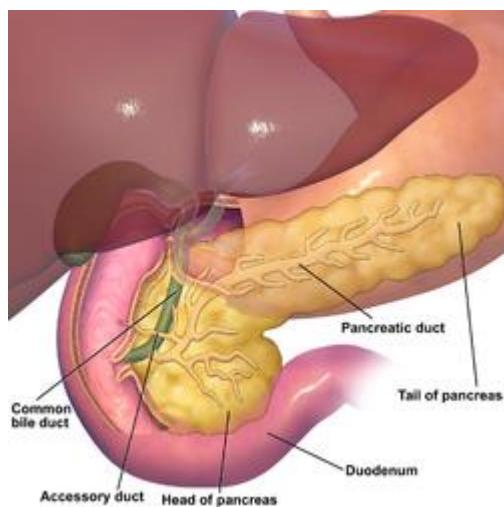
**The Components of the Digestive System**

Digestive system.

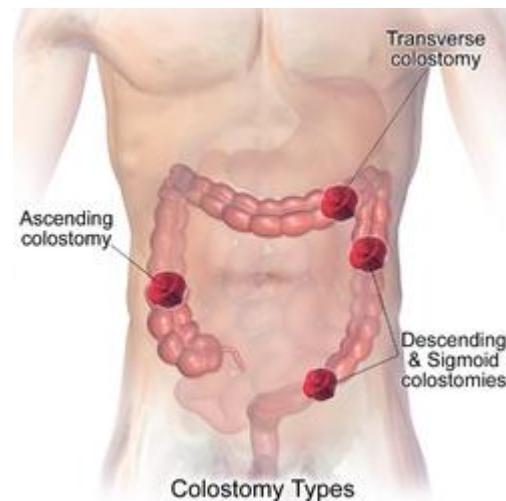


## Mouth

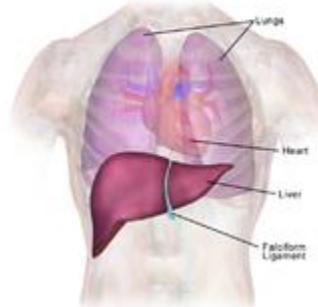
Anatomy of the mouth.



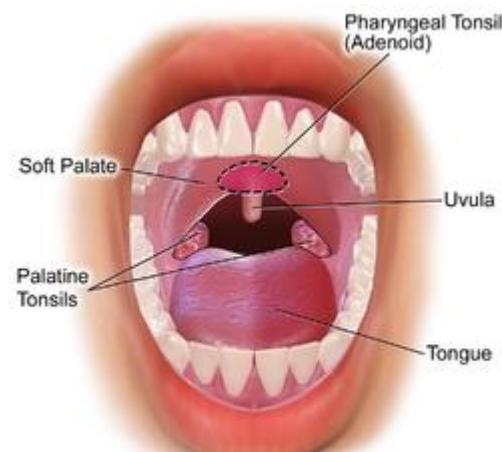
Anatomy of the pancreas.



Types of colostomy.



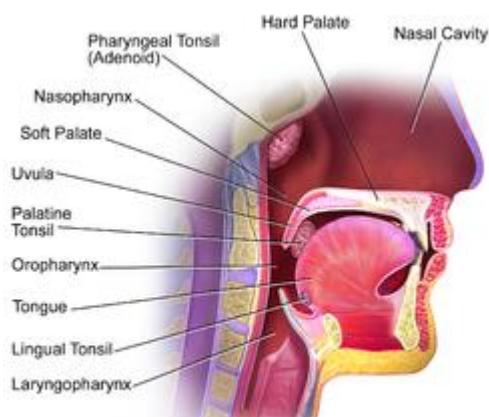
Placement of the Liver



Tonsils

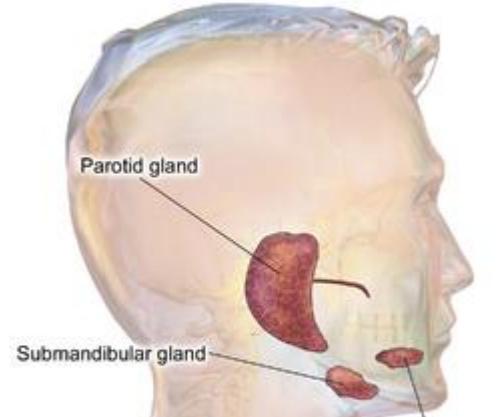
Location of the liver.

Tonsils and adenoid.



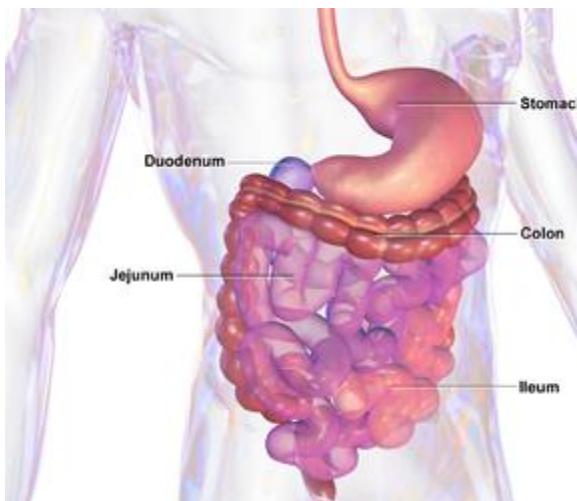
Tonsils and Throat

Throat.

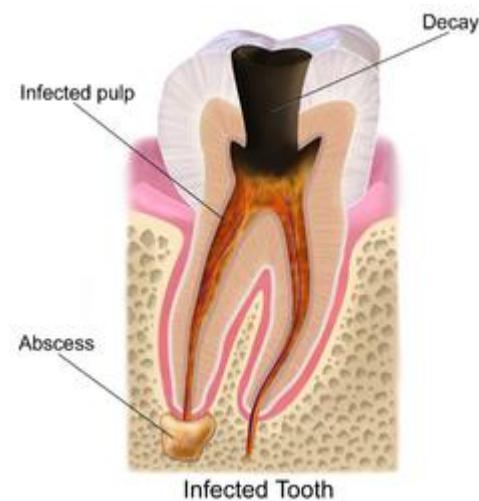


Salivary Glands

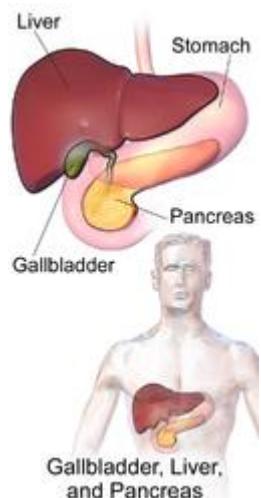
Salivary glands.



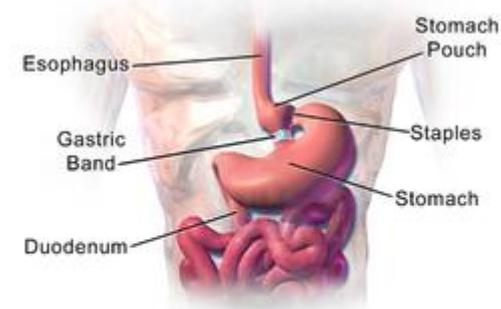
Gastrointestinal system.



Tooth decay.

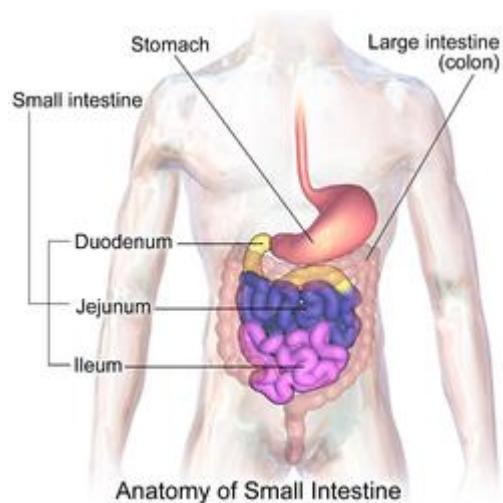


Gallbladder, liver and pancreas

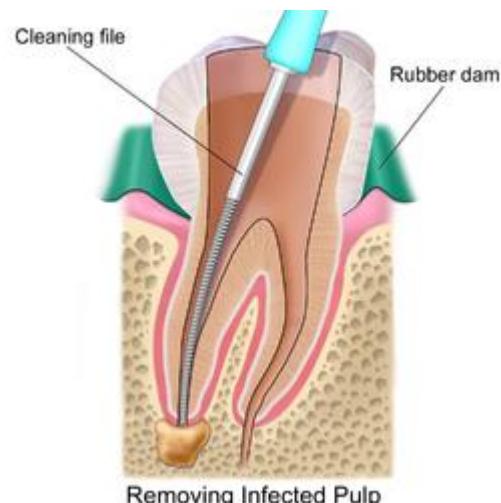


**Vertical Banded Gastroplasty**

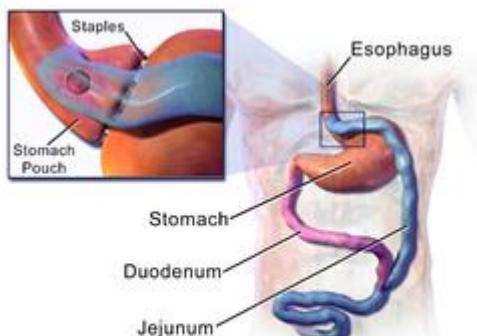
Vertical banded gastroplasty surgery.



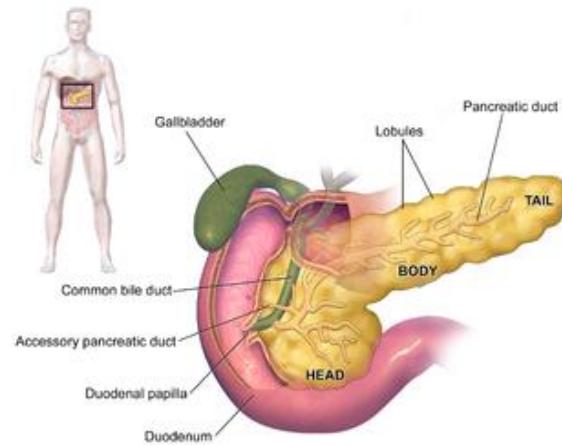
Small intestine anatomy

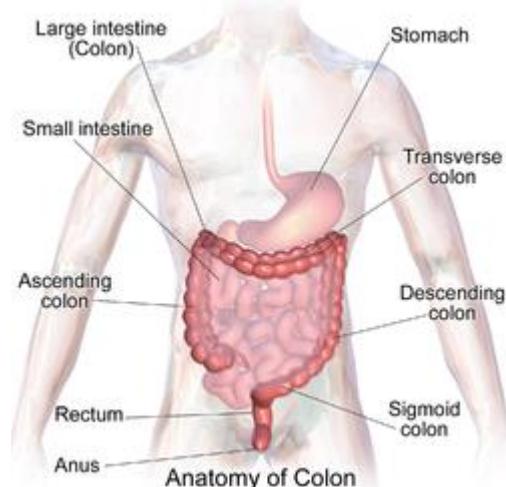
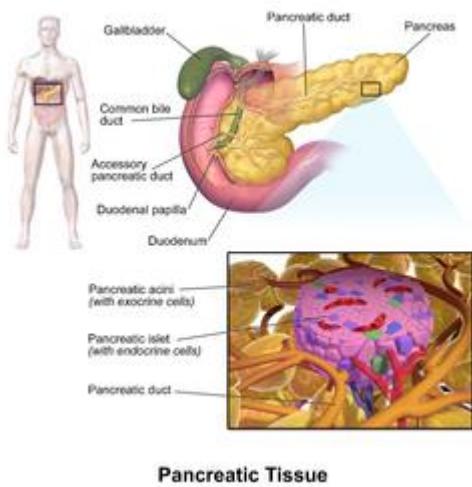


Endodontic therapy of a root canal.



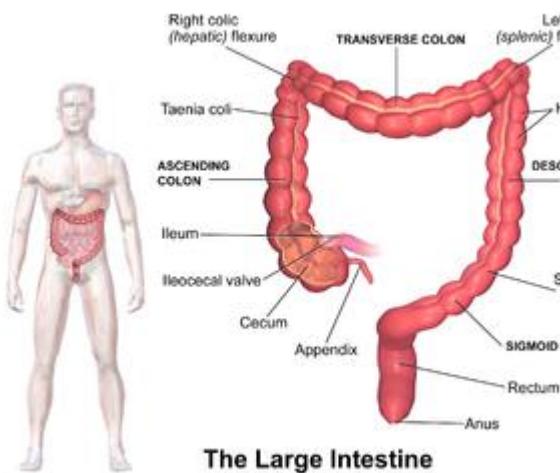
Roux-en-Y anastomosis.



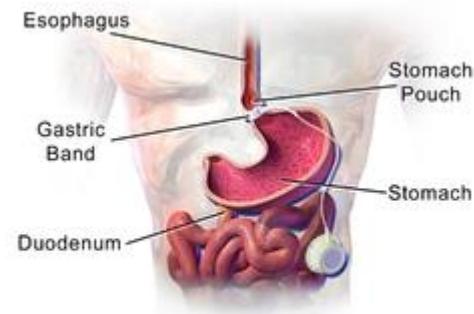


Pancreatic tissue

Large intestine.

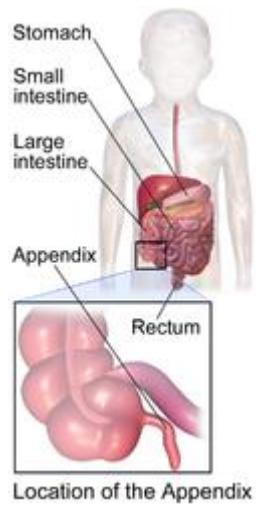


Large intestine.

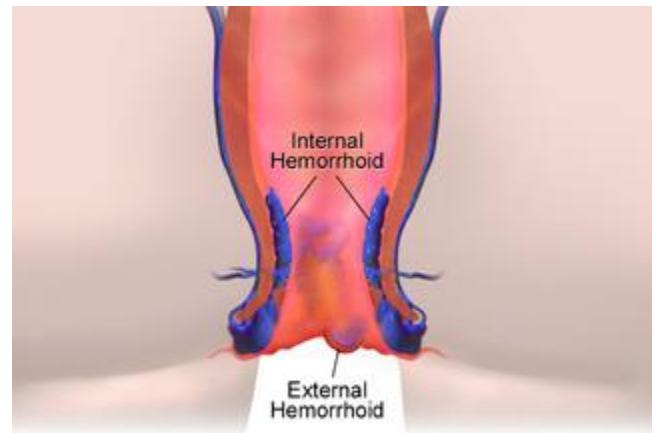


**Adjustable Gastric Banding**

Adjustable gastric banding



Appendix in a child.



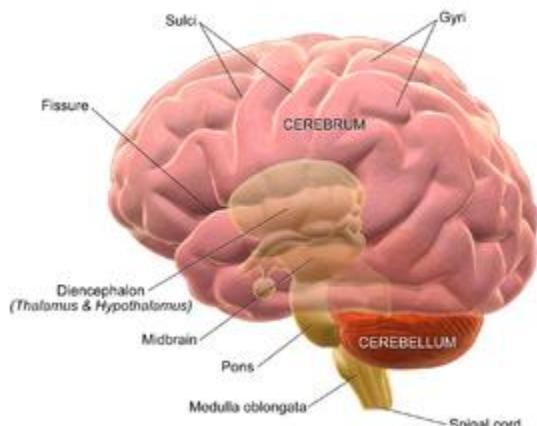
Anus With Hemorrhoids

Hemorrhoids.



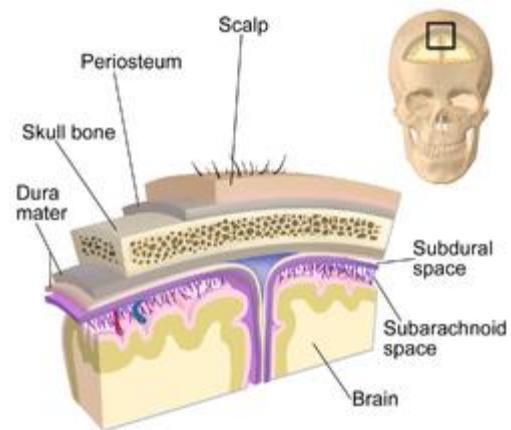
# Neurology

## An Introduction to Brain Structures

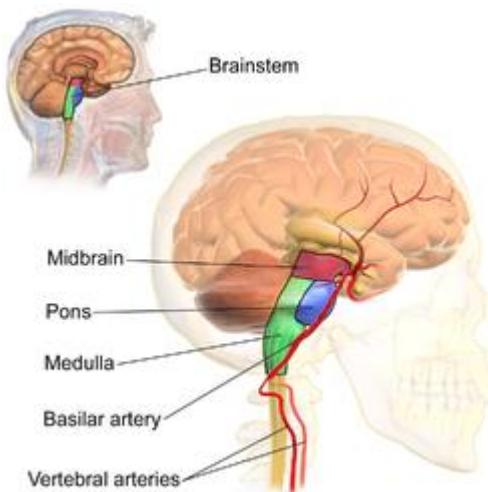


Brain structures.

Brain stem anatomy.



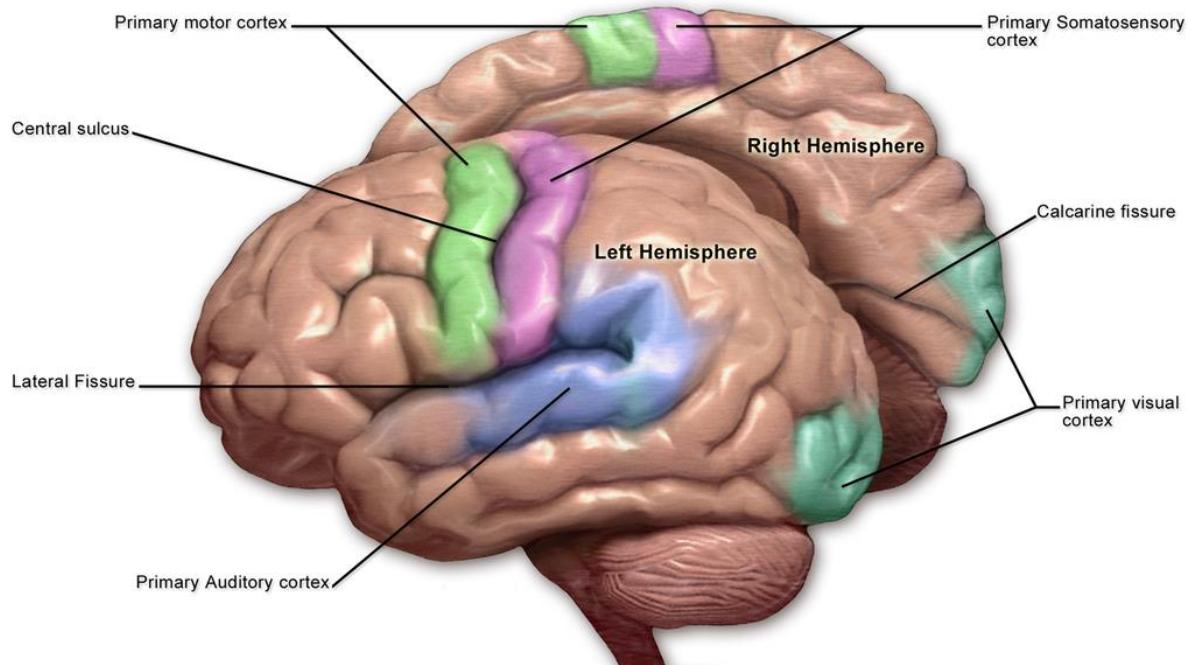
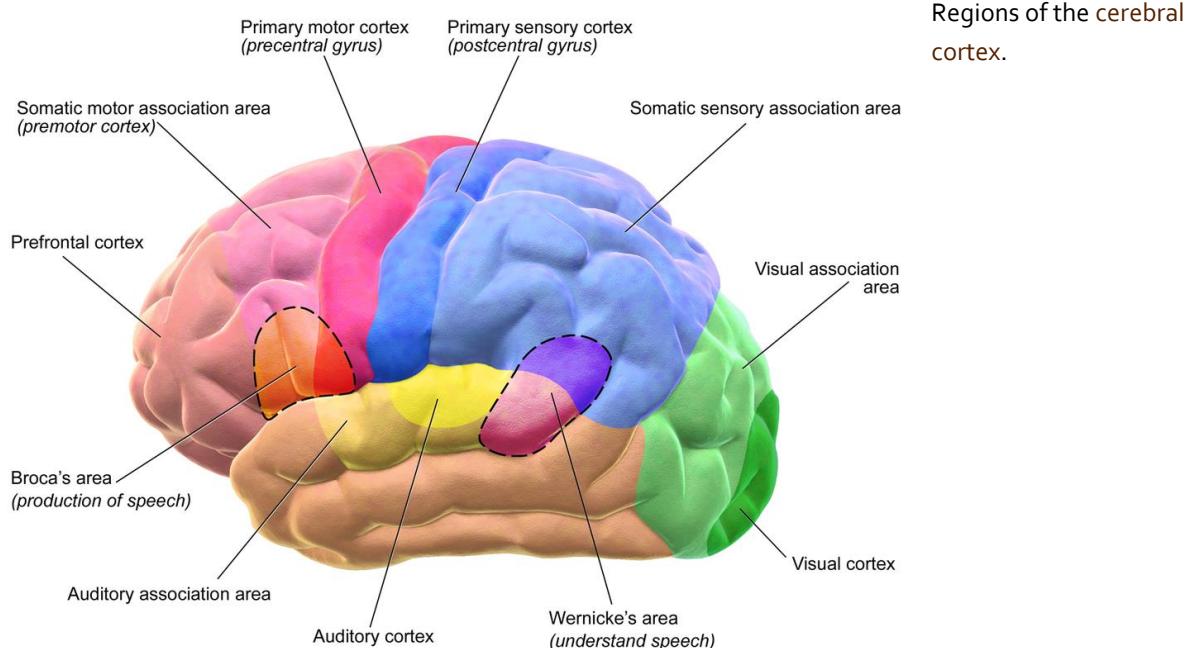
Layers covering the Brain



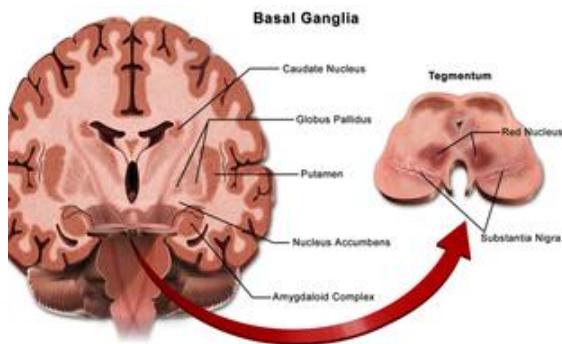
Layers of the scalp.



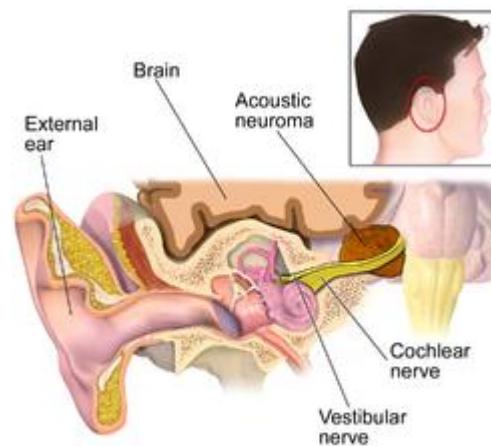
## Motor and Sensory Regions of the Cerebral Cortex



Primary motor, somatosensory, auditory and visual cortex.

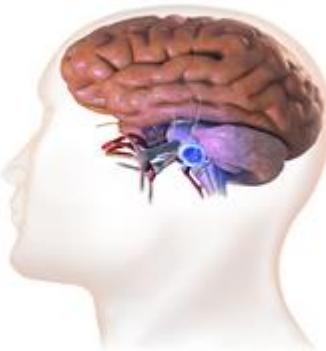


Basal ganglia.



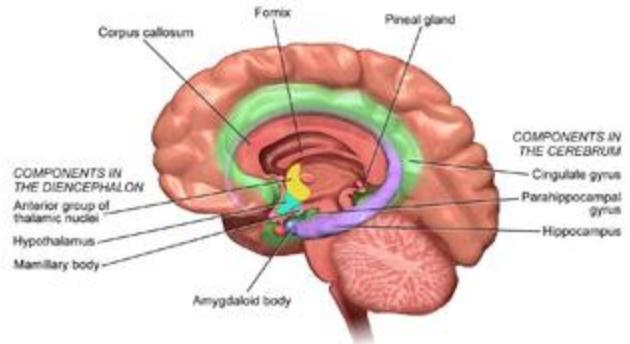
Acoustic neuroma.

Acoustic neuroma.

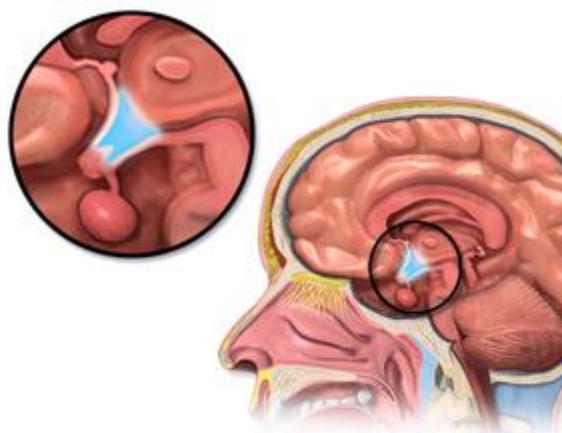


Acoustic neuroma.

## The Limbic System

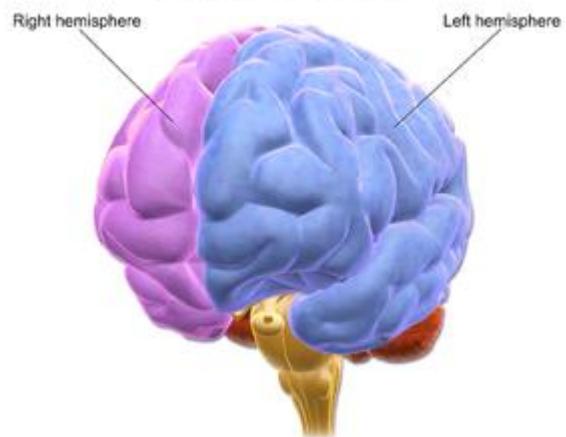


Limbic system.



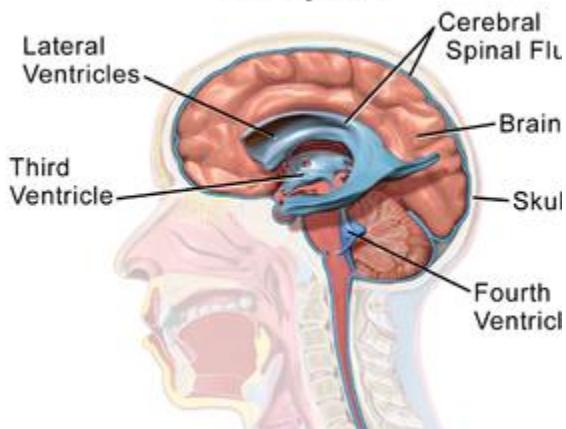
Hypothalamus location.

### Cerebral Hemispheres

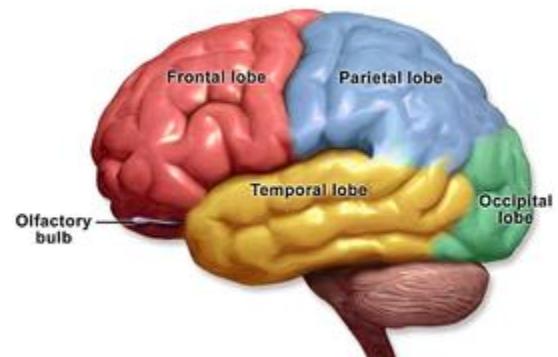


Cerebral hemispheres

### CSF System

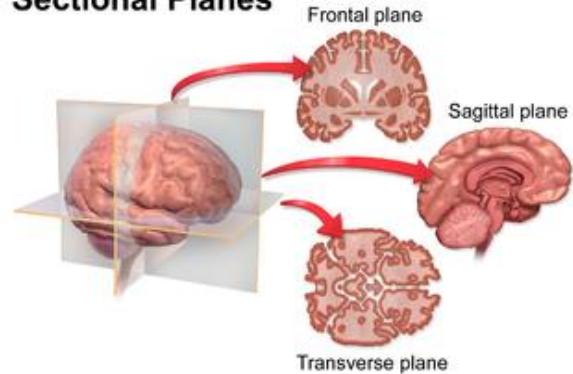


Ventricular system.

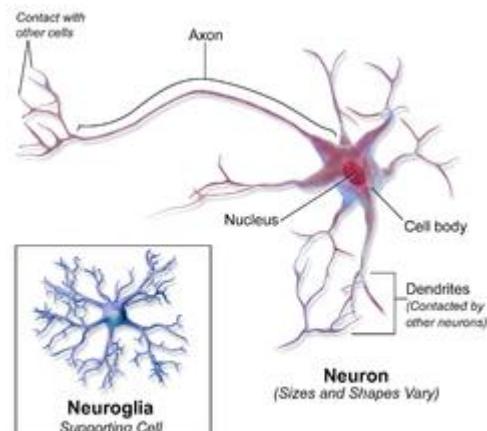


Brain lobes.

### Sectional Planes



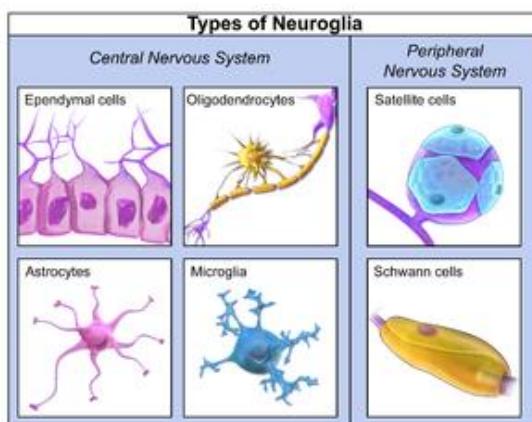
Anatomical planes of the brain.



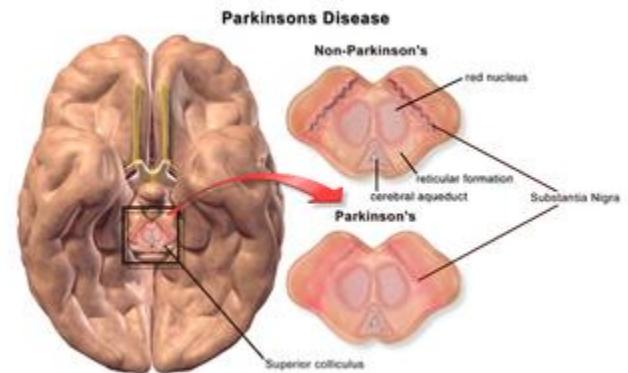
**Neural Tissue**

Nervous tissue.

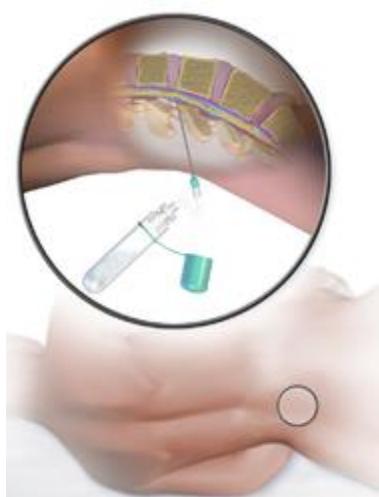
Dura mater of the spine.



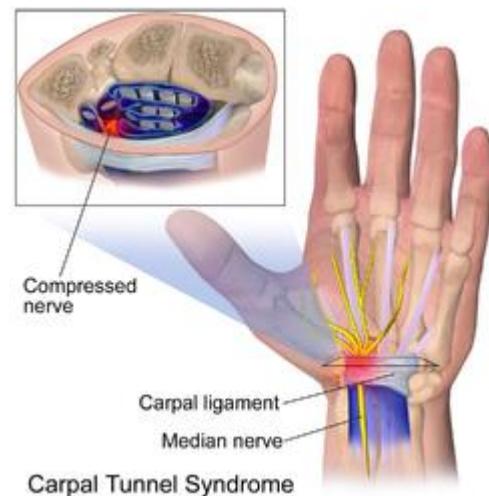
Types of neuroglia cells.



Parkinson's disease.



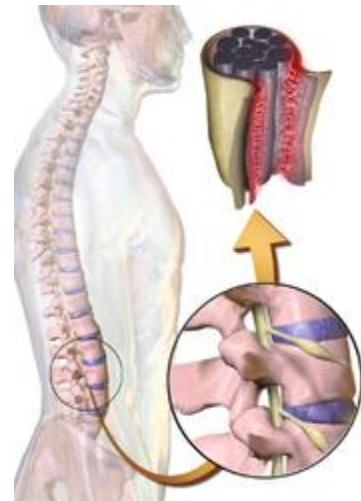
Lumbar puncture.



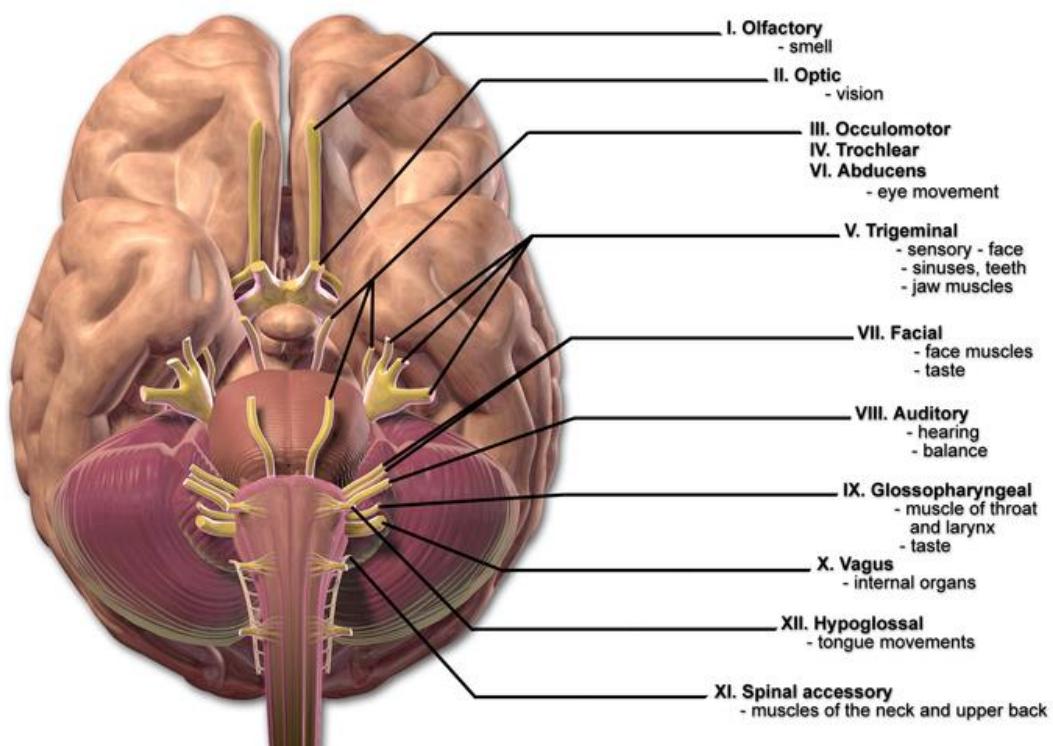
Carpal tunnel syndrome.



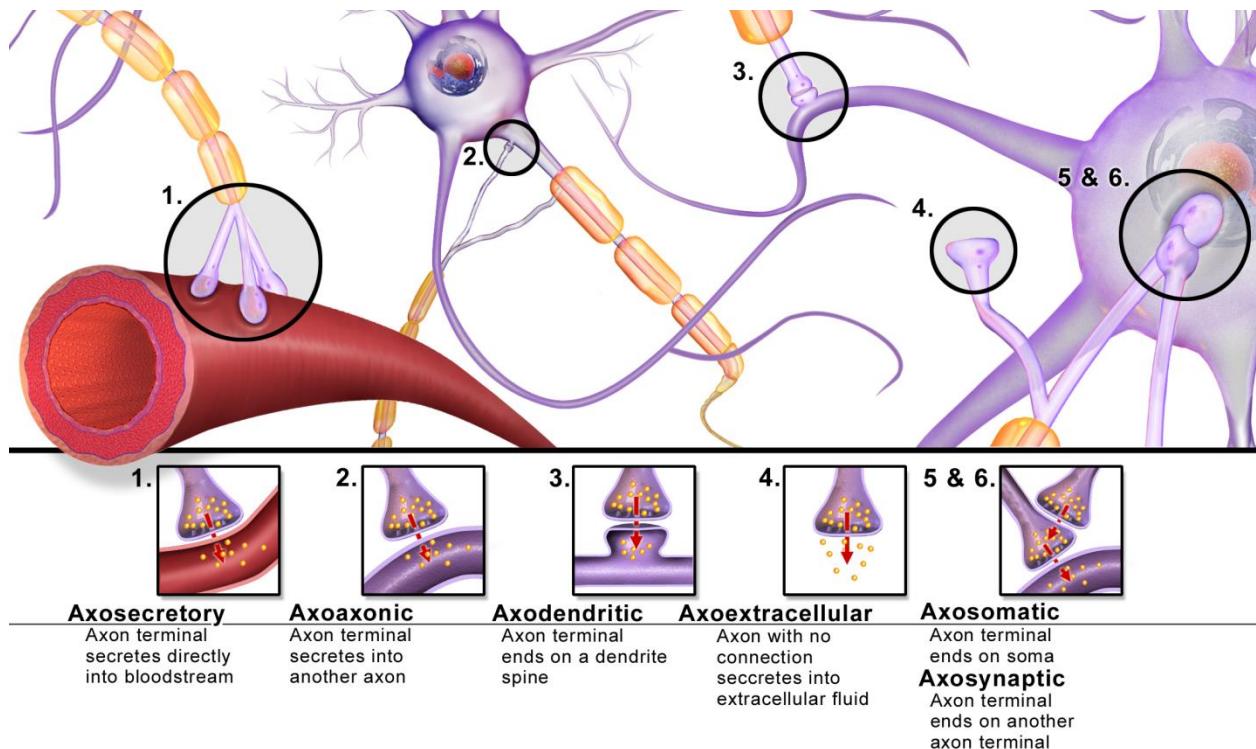
Spinal stenosis.



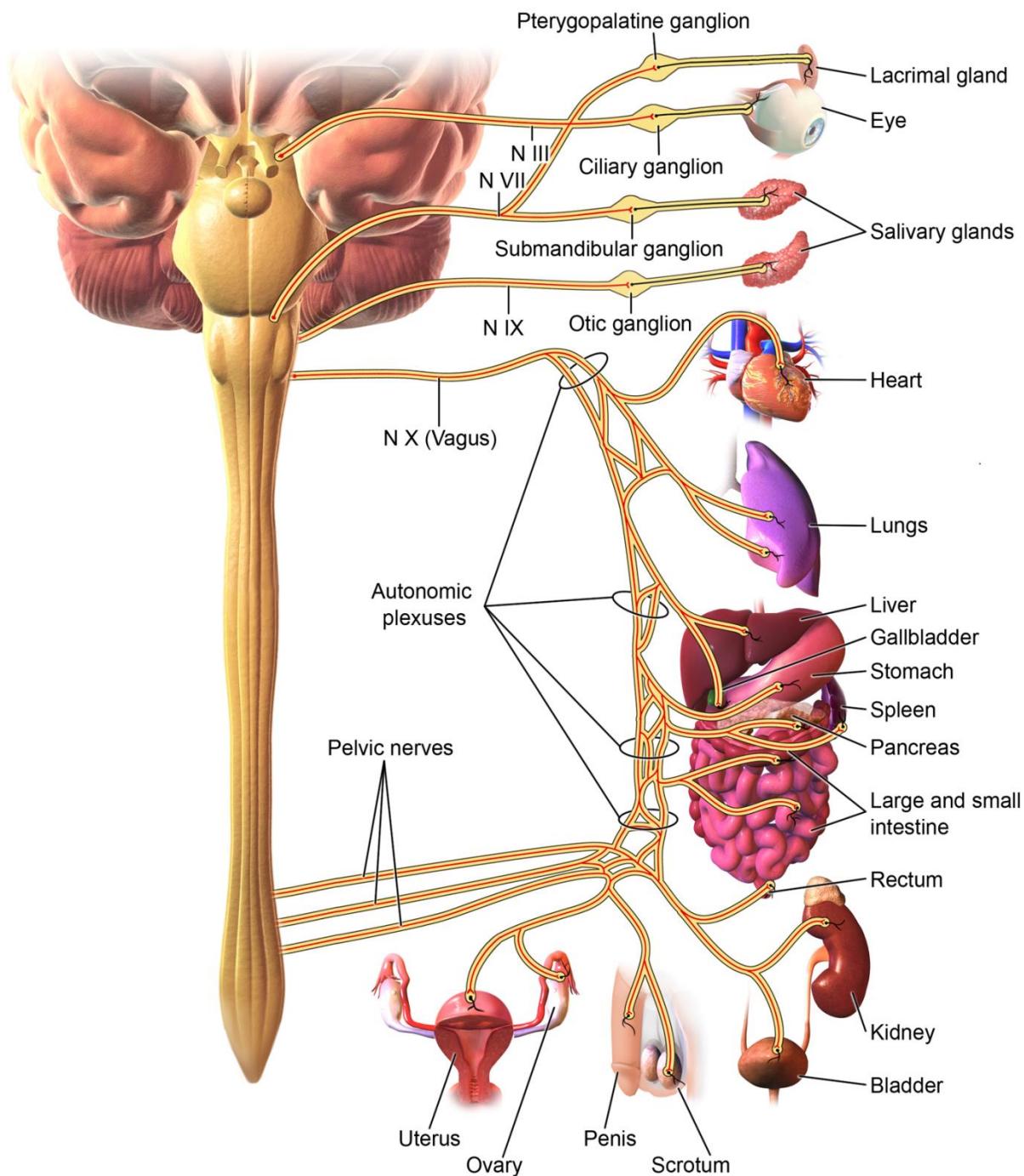
Arachnoiditis.



Cranial nerves.

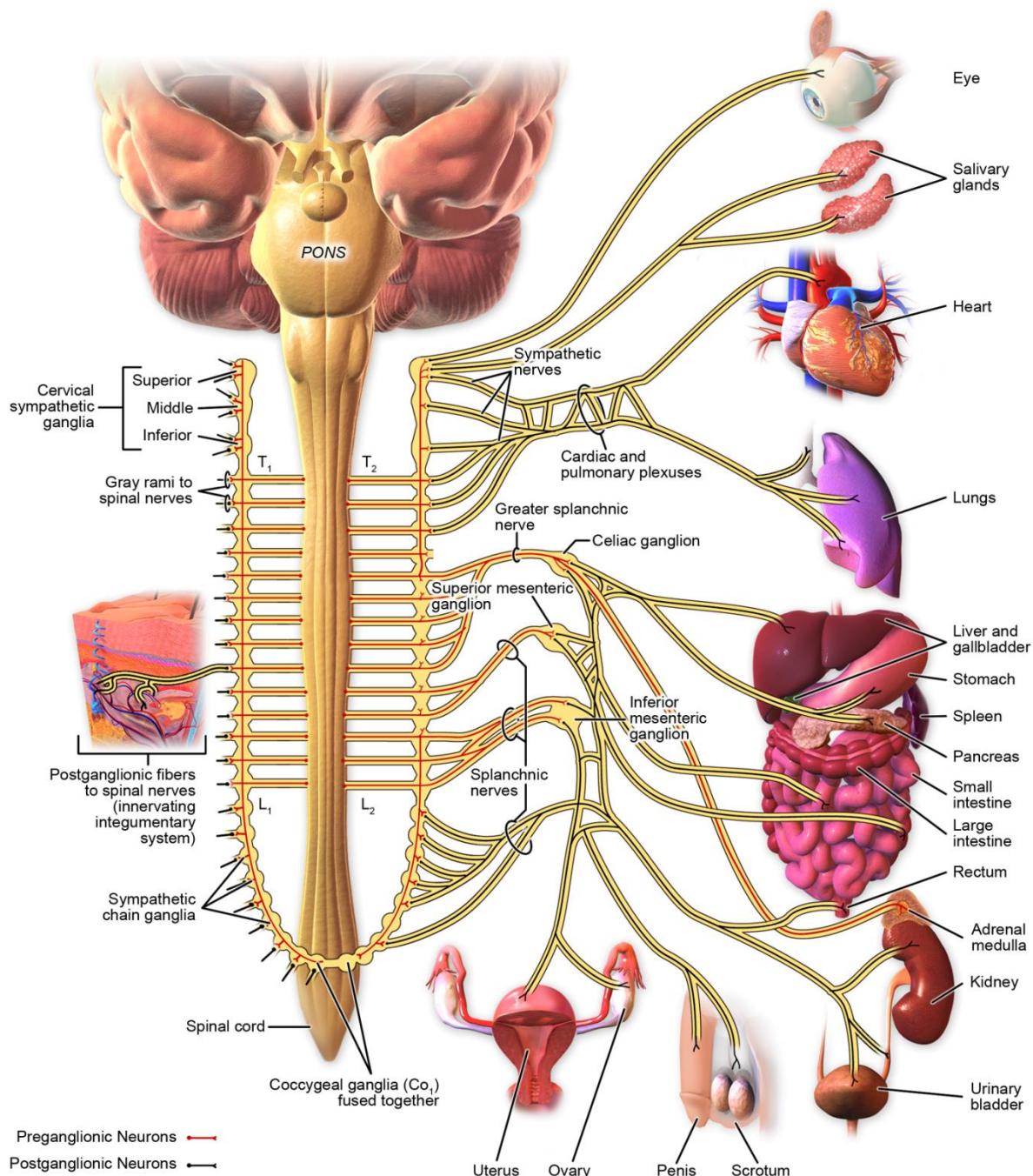


Synapse types.



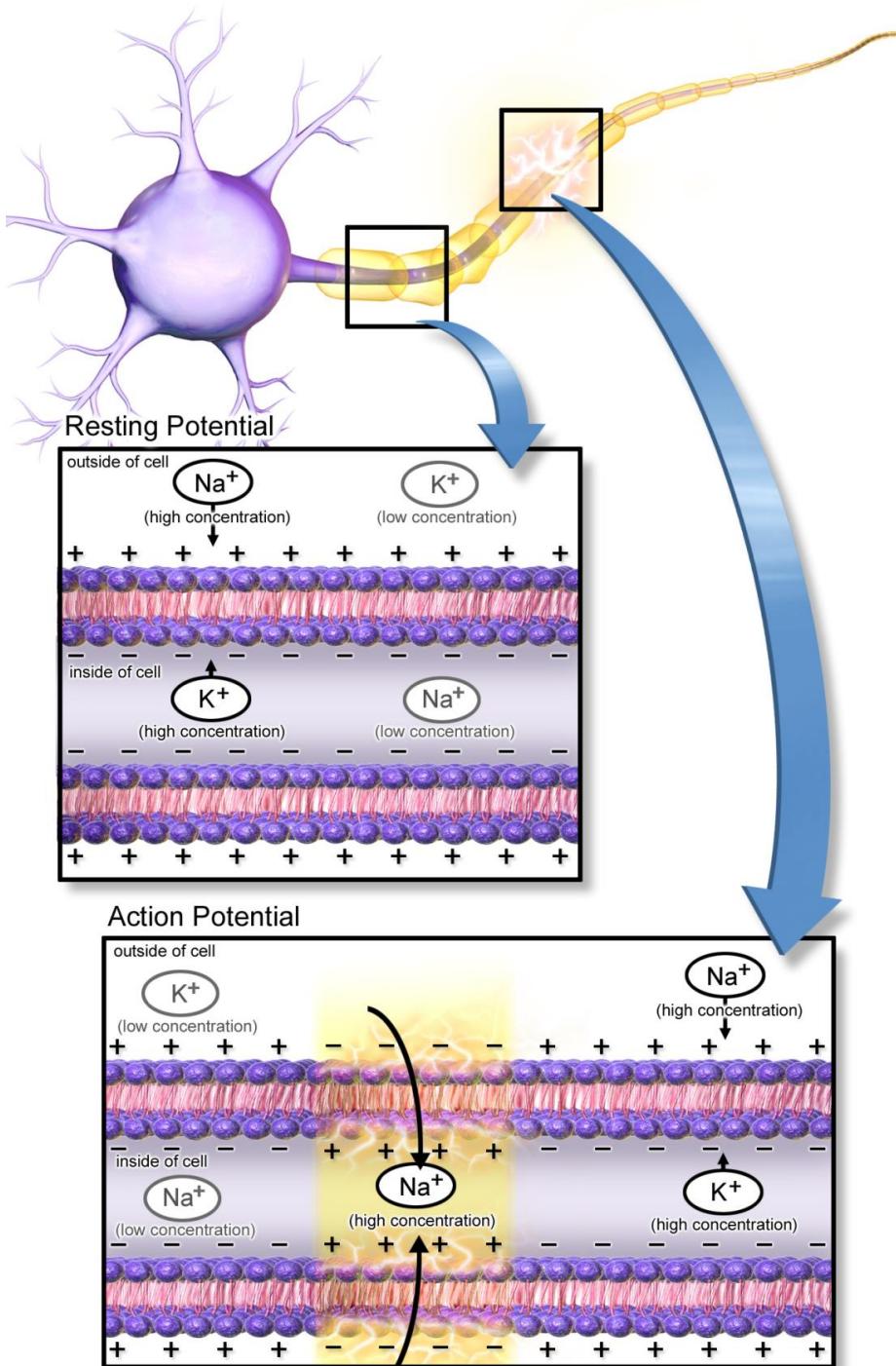
# Parasympathetic Innervation

Innervation of the **parasympathetic system**.



## Sympathetic Innervation

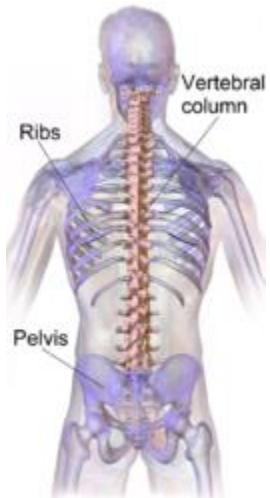
Innervation of the sympathetic system.



Action potential.



## Vertebral



Normal vertebral column.



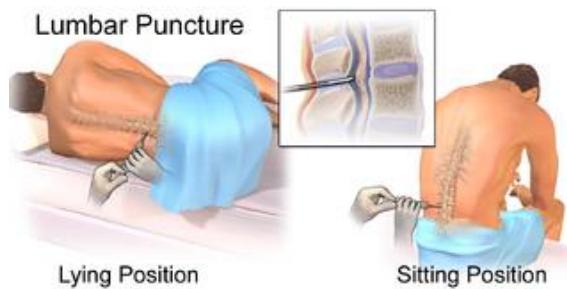
Cervical spine.



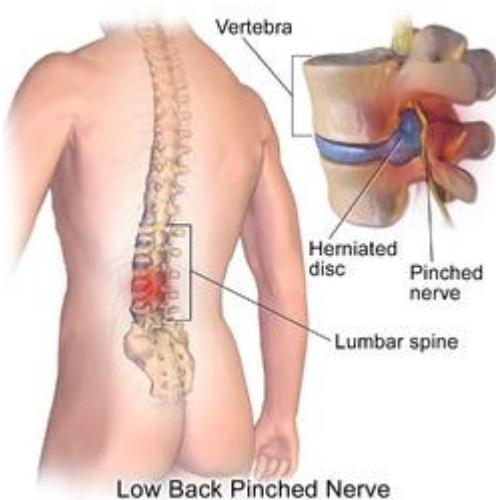
Facet joints.



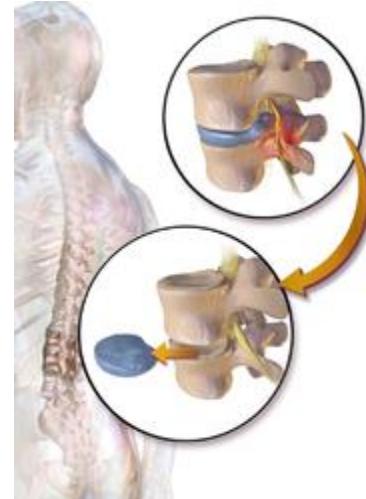
Lumbar spine.



Lumbar puncture.



Lumbar disc herniation



Discectomy.



Compression fracture.



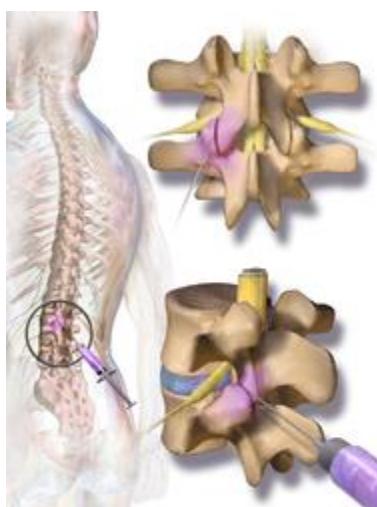
Harrington rods



Ankylosing spondylitis.



Epidural steroid injection.



Facet joint injection.



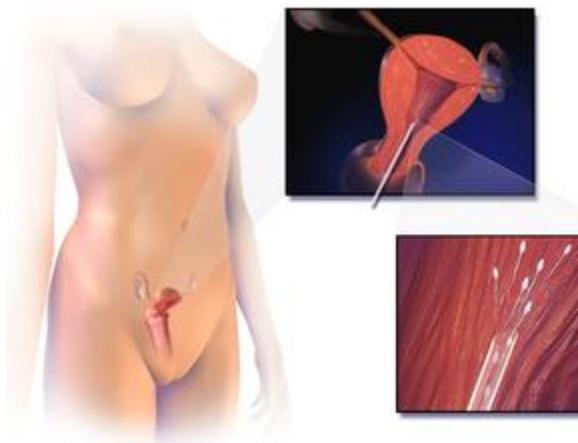
Spinal disc herniation.



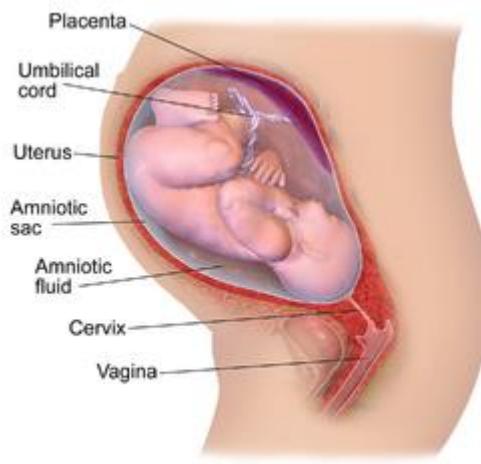
Scoliosis.



## Obstetrics and gynecology

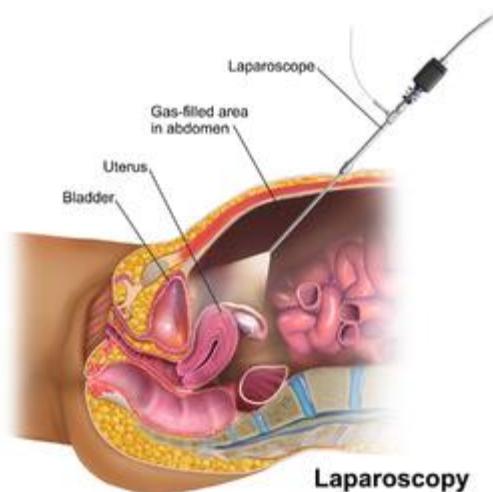


Artificial insemination.

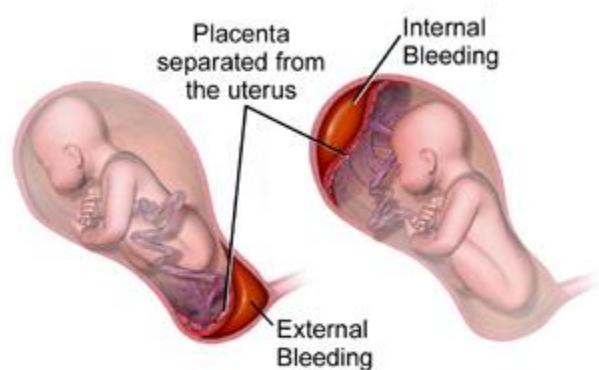


Pregnancy

Pregnancy.

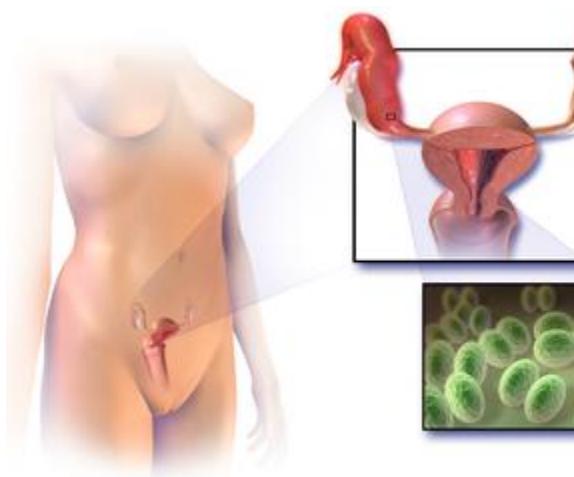


Laparoscopy.

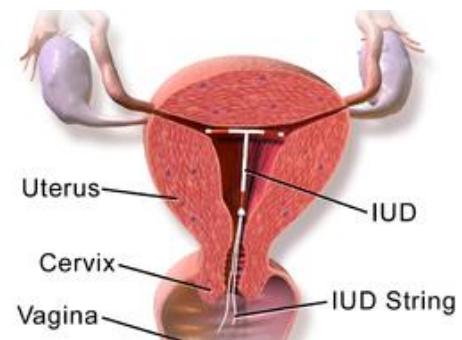


**Abruptio Placenta (Placental Abruption)**

Placental abruption.

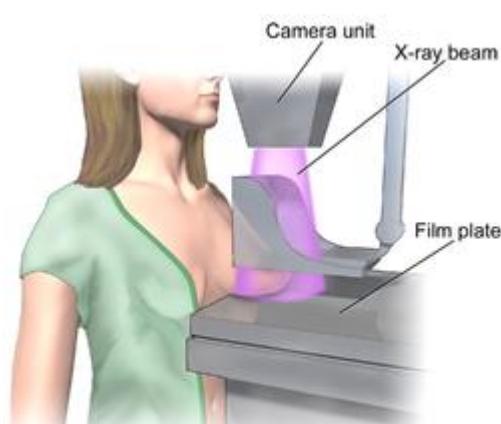


Pelvic inflammatory disease.



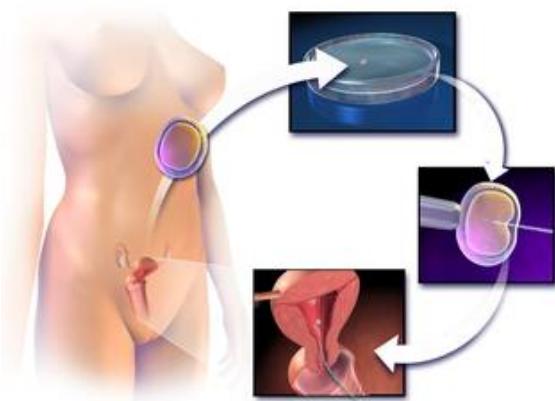
### Intrauterine Device (IUD)

Intrauterine device.

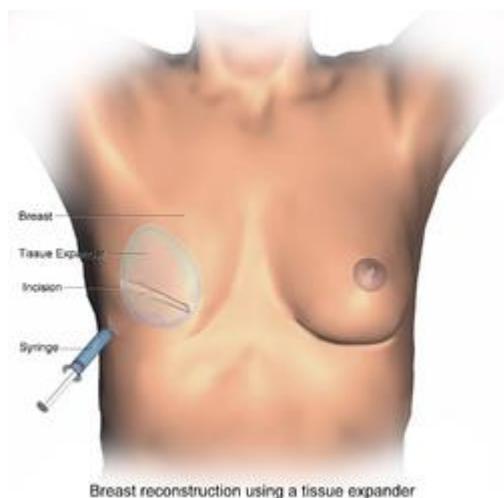


Mammogram

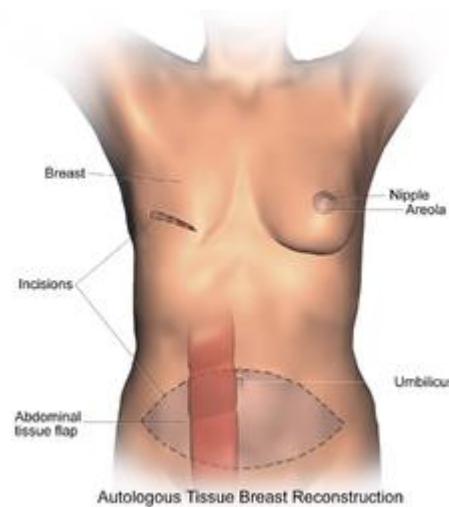
Mammography.



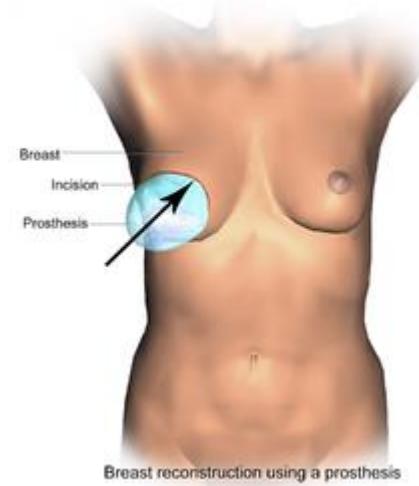
In vitro fertilization (IVF) with intracytoplasmic sperm injection (ICSI).



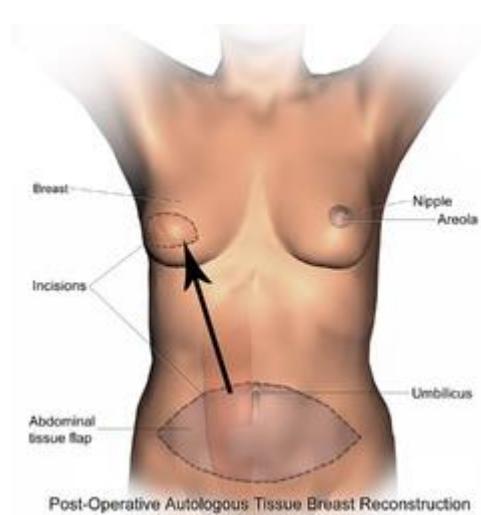
Breast reconstruction using a tissue expander.



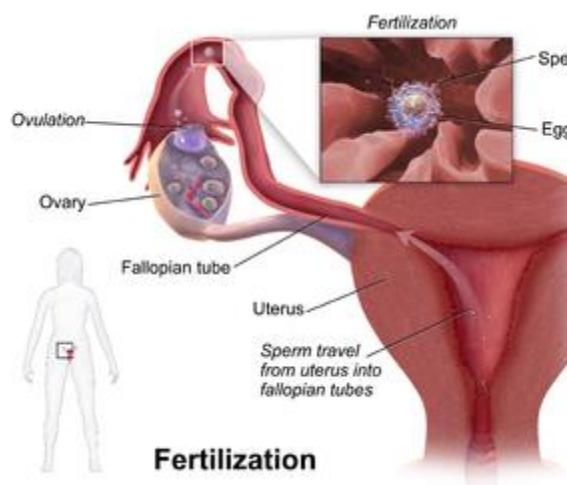
Breast reconstruction using autologous tissue (TRAM).



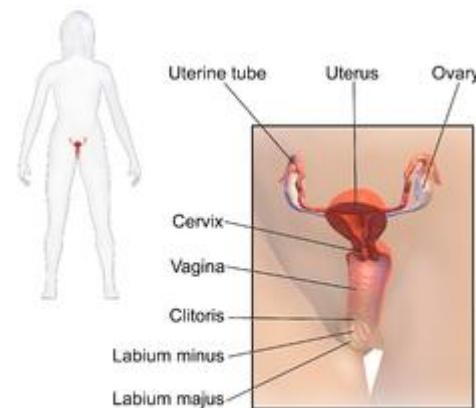
Breast reconstruction using a prosthesis.



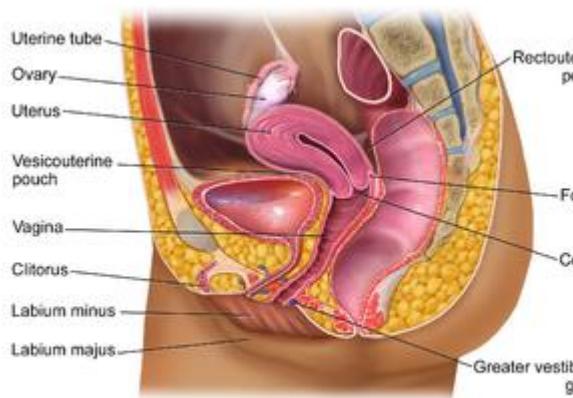
Post-operative state after breast reconstruction using autologous tissue (TRAM).



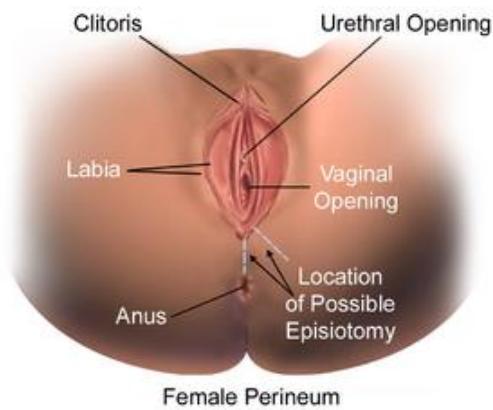
Fertilization.



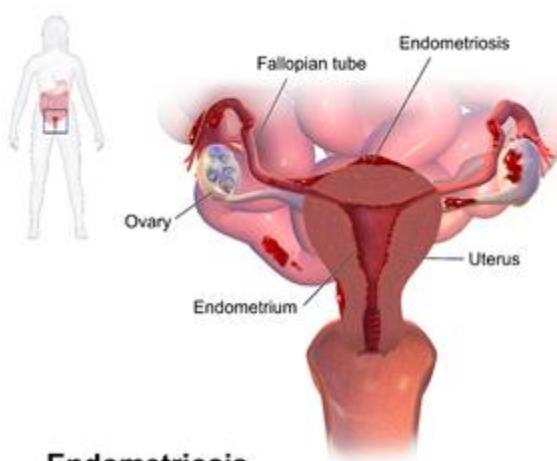
Female reproductive system.

**The Female Reproductive System**

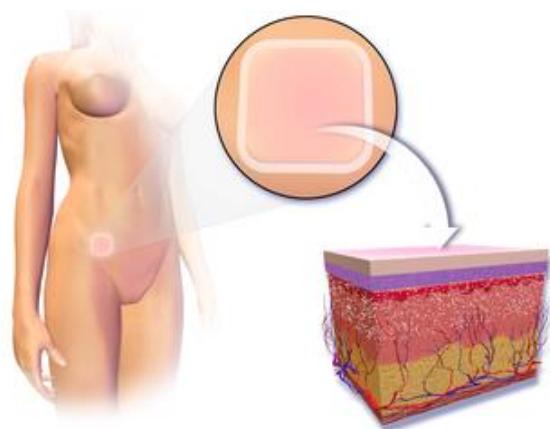
Female reproductive system.



Episiotomy.

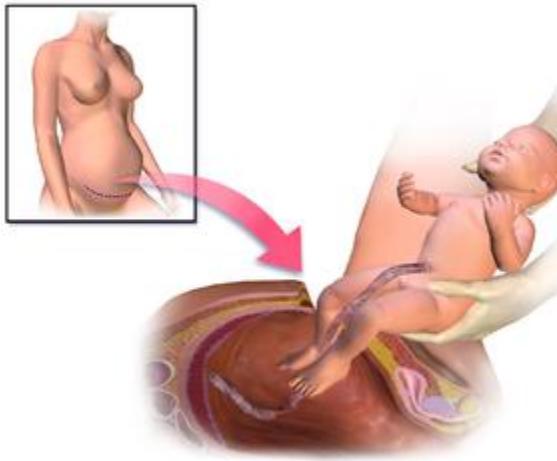


**Endometriosis**



Contraceptive patch.

Endometriosis.



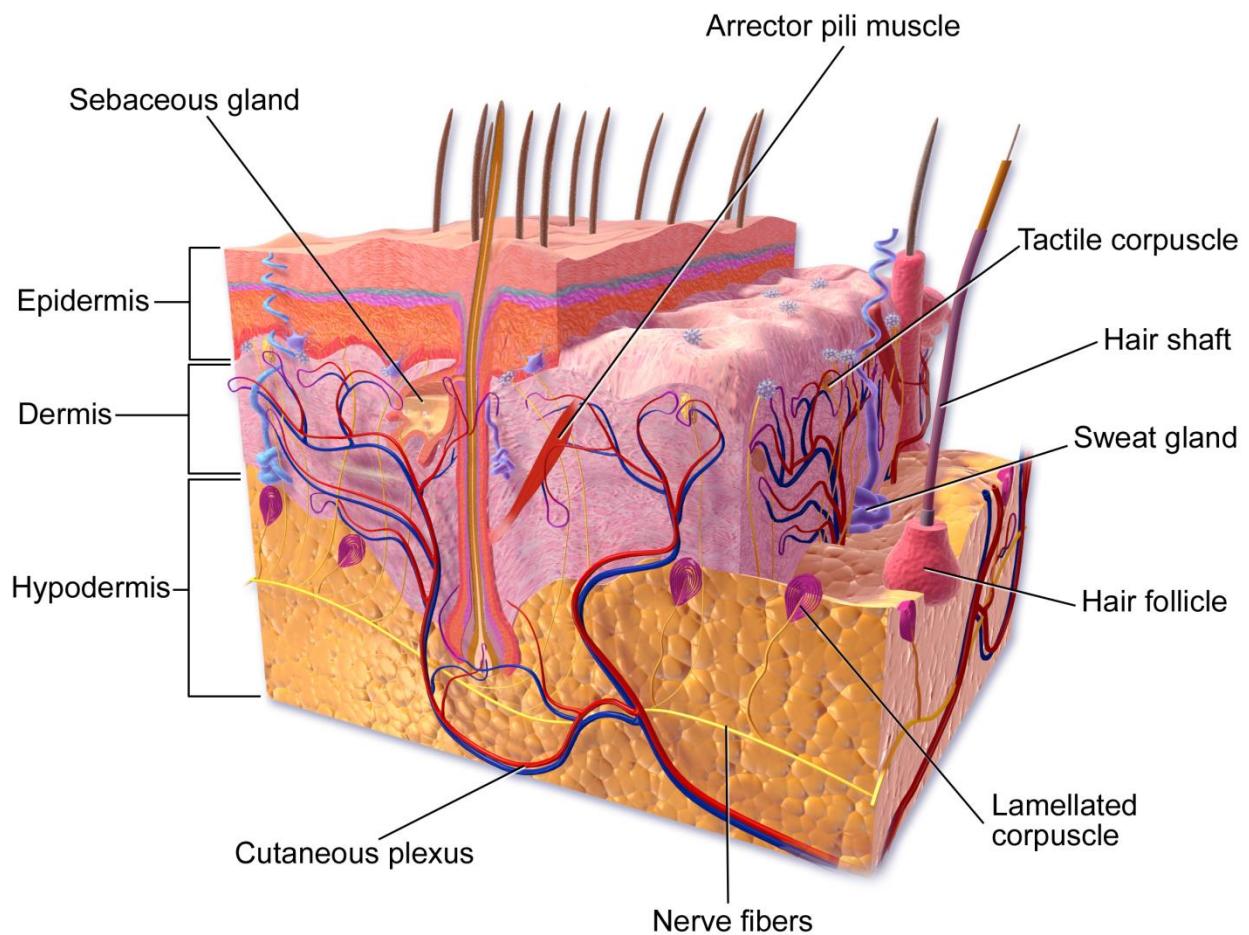
Caesarean section.



Correct latch-on in breastfeeding.

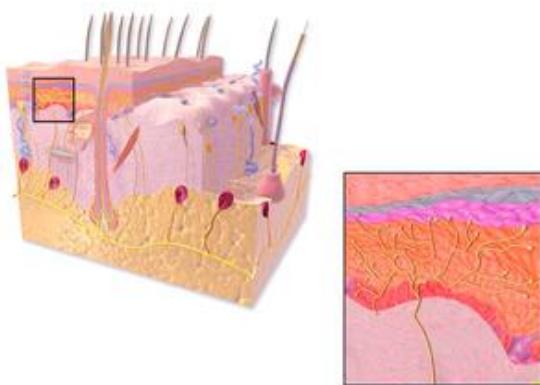


## Dermatology



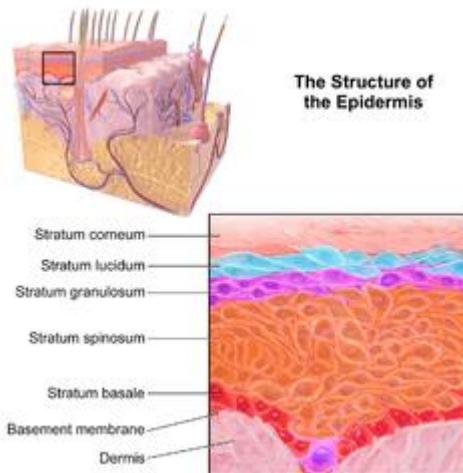
## The Components of the Integumentary System

Anatomy of the skin.

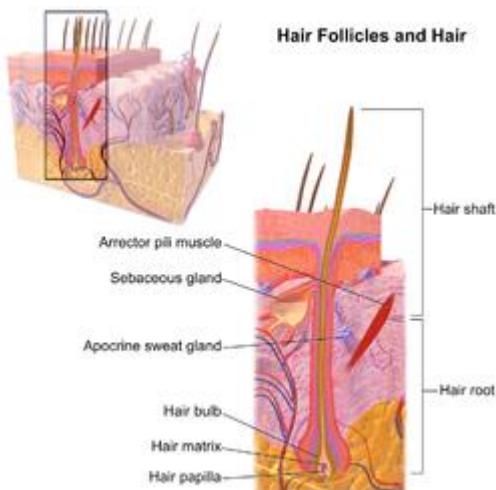


**Free Nerve Endings**

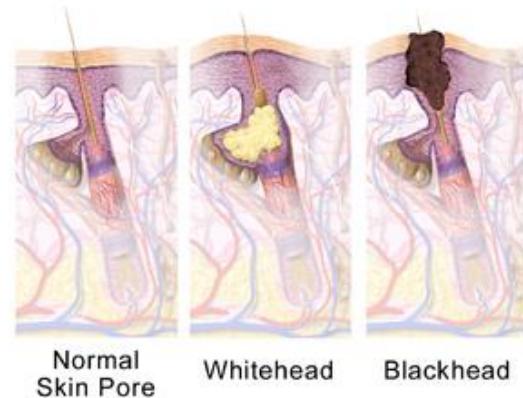
Free nerve endings of the skin.



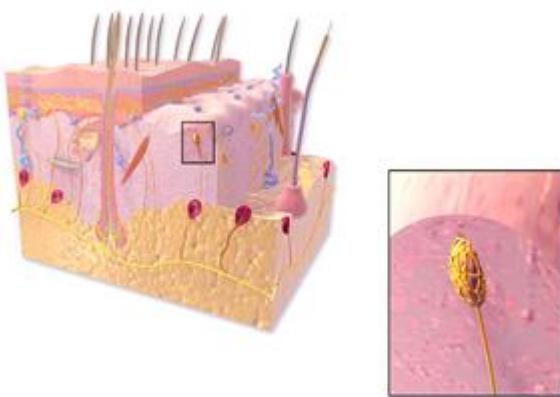
**Epidermis.**



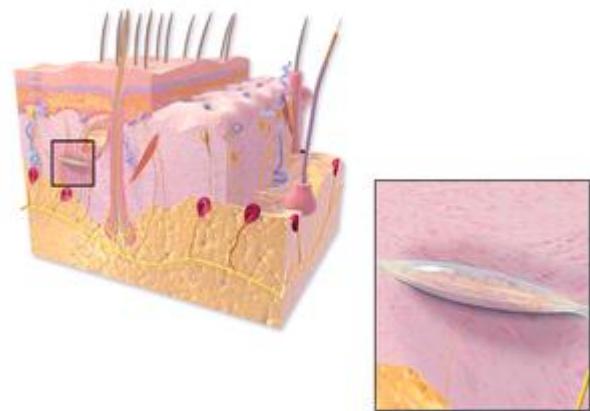
Hair follicle.



**Sebaceous gland states.**



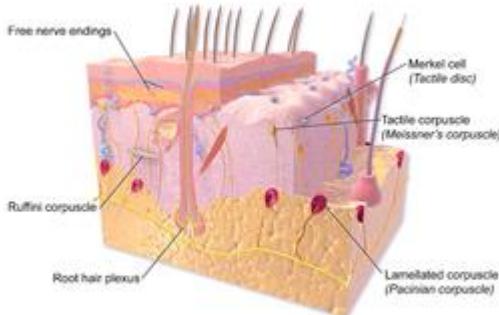
**Tactile Corpuscle**  
(*Meissner's Corpuscle*)



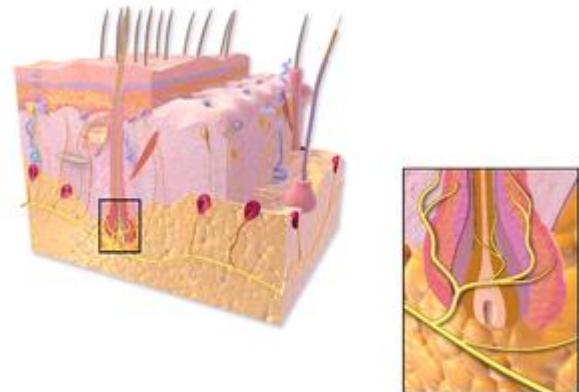
**Ruffini Corpuscle**

Tactile corpuscle.

Ruffini corpuscle.



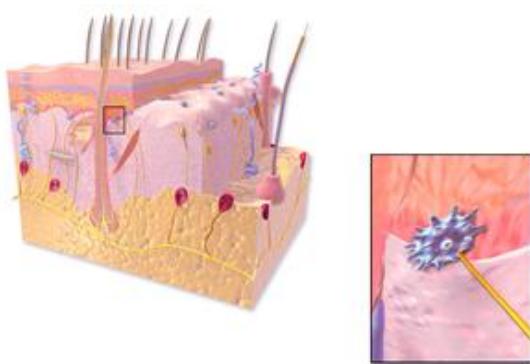
**Tactile Receptors in the Skin**



**Root Hair Plexus**

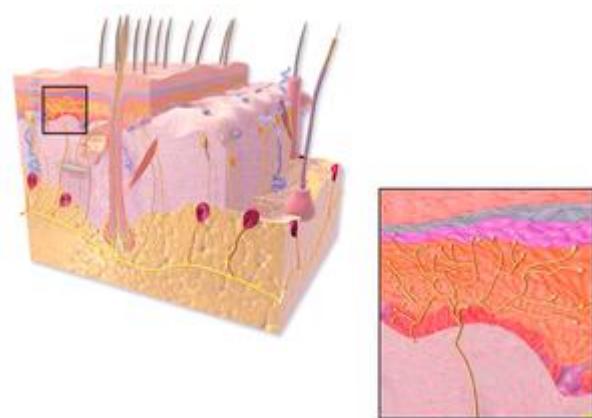
Tactile mechanoreceptors of the skin.

Hair plexus.



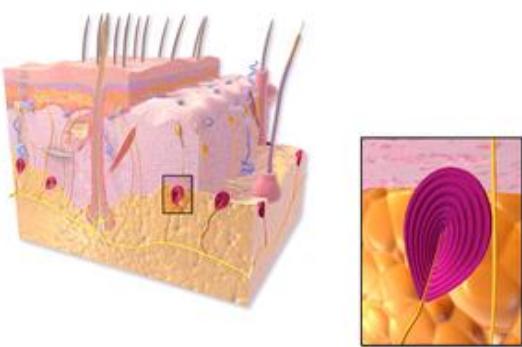
**Merkel Cell**  
*(Tactile Disc)*

Merkel cell.



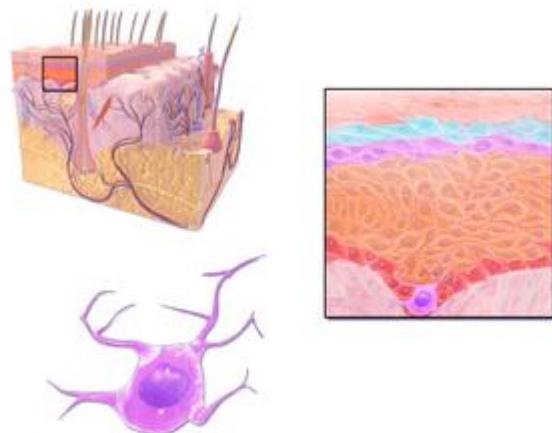
**Free Nerve Endings**

Free nerve endings.



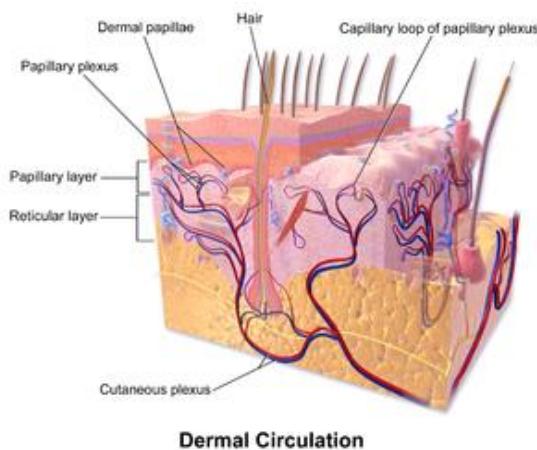
**Lamellated Corpuscle**  
*(Pacinian Corpuscle)*

Lamellar corpuscle.

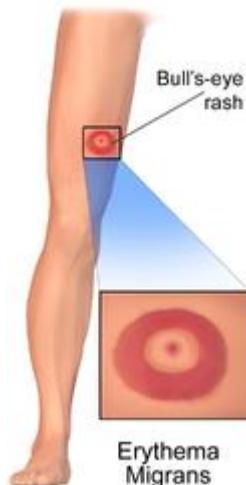


**Melanocyte**

Location of the melanocyte.



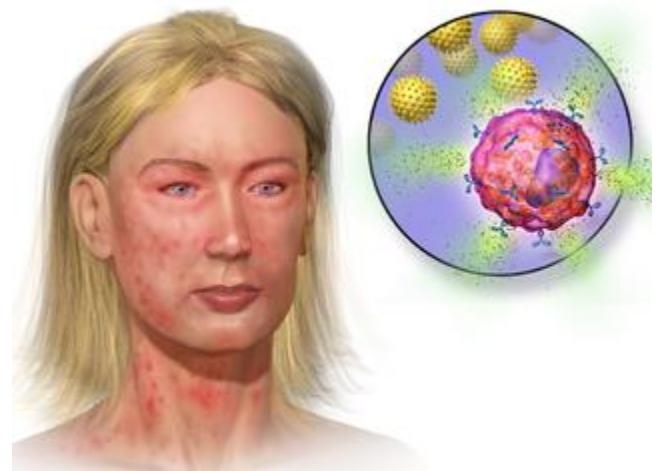
Blood supply of the dermis.



Rash of Lyme disease.

| Classification of Epithelium |                     |                     |
|------------------------------|---------------------|---------------------|
| Simple Squamous              | Simple Cuboidal     | Simple Columnar     |
| Stratified Squamous          | Stratified Cuboidal | Stratified Columnar |

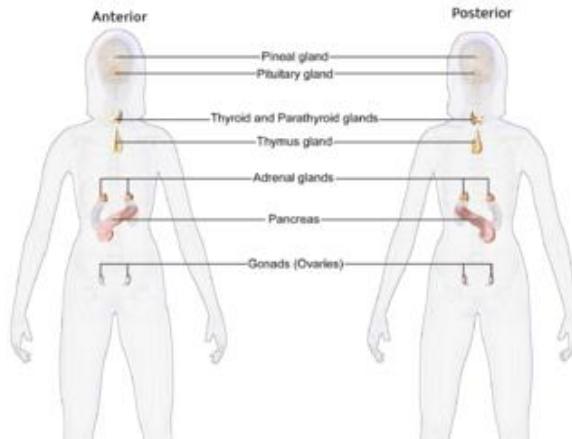
Epithelium classification.



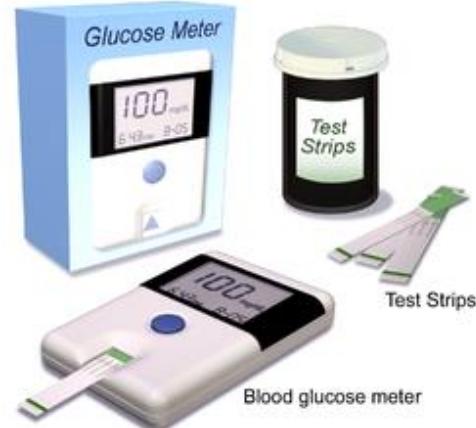
Anaphylaxis.



## Endocrine

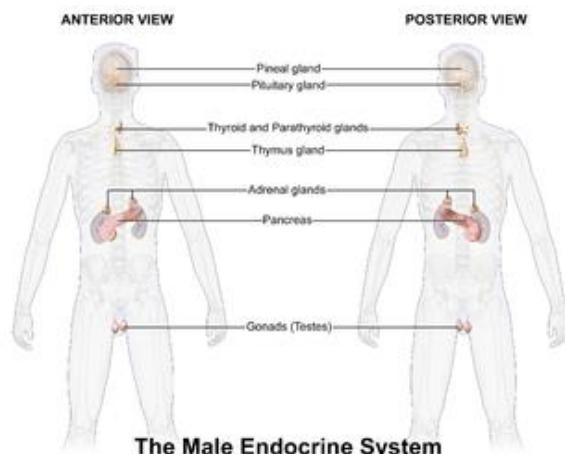


Endocrine system in the female.



Blood Glucose Meter and Test Strips

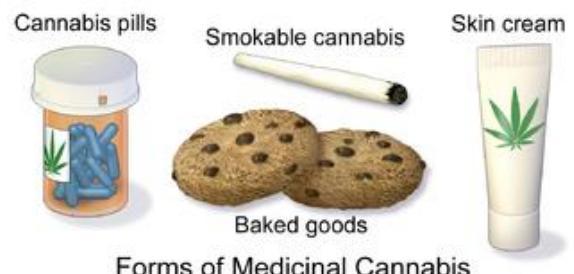
Blood glucose meter.



Endocrine system in the male



Usage of a blood glucose meter

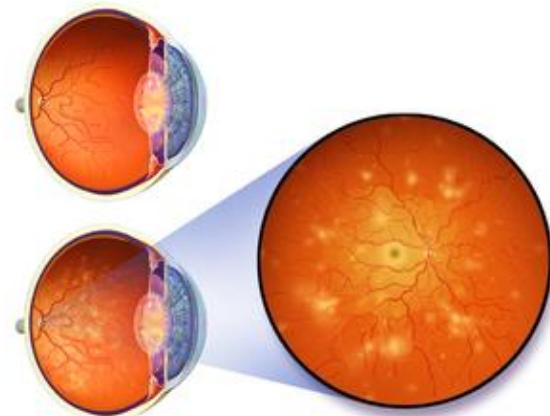


Forms of Medicinal Cannabis

Forms of medical cannabis.



Insulin pen and syringe.

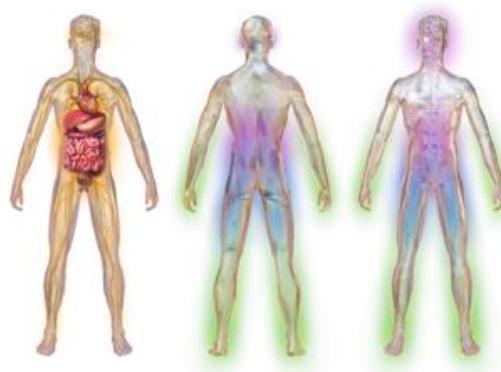


Diabetic retinopathy.

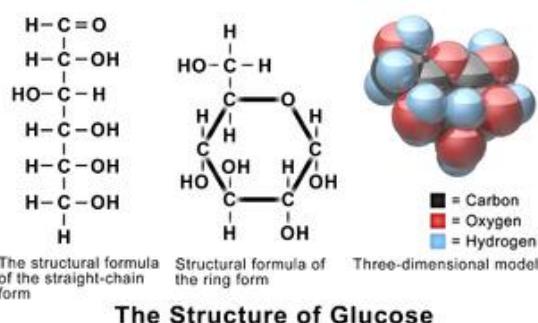


Priming an Insulin Pen

Priming an insulin pen.

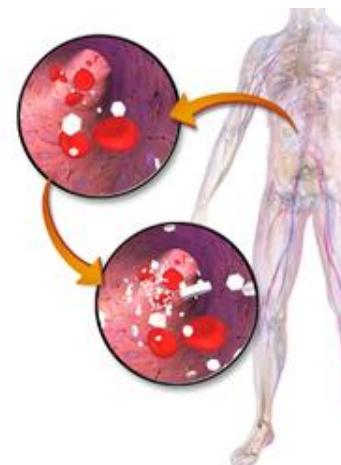


Diabetic neuropathy.

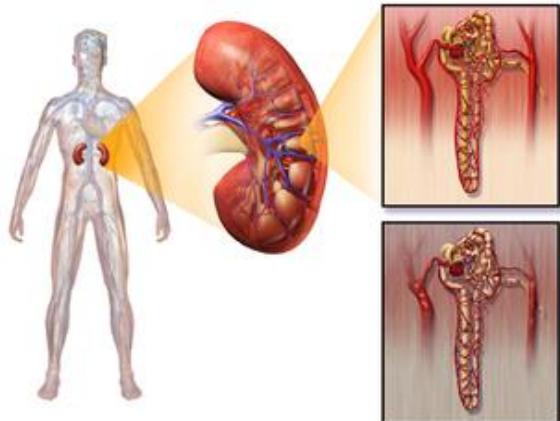


**The Structure of Glucose**

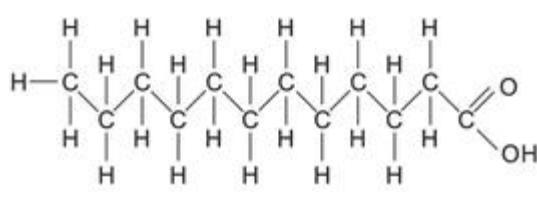
Glucose.



Hyperglycemia.



Diabetic nephropathy.



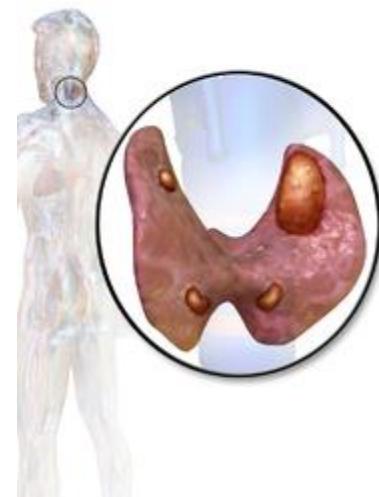
Lauric acid ( $\text{C}_{12}\text{H}_{24}\text{O}_2$ )

## Fatty Acids

Lauric acid, a fatty acid.



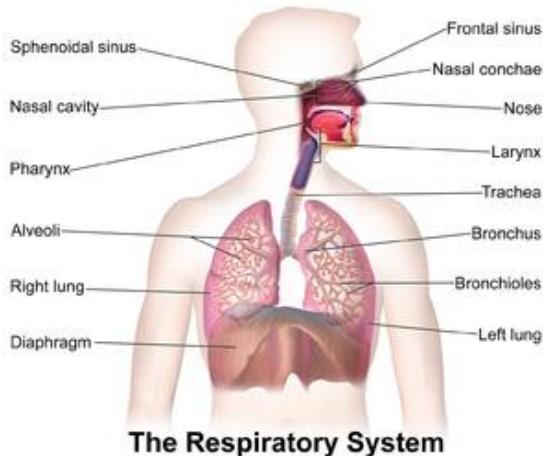
Goiter.



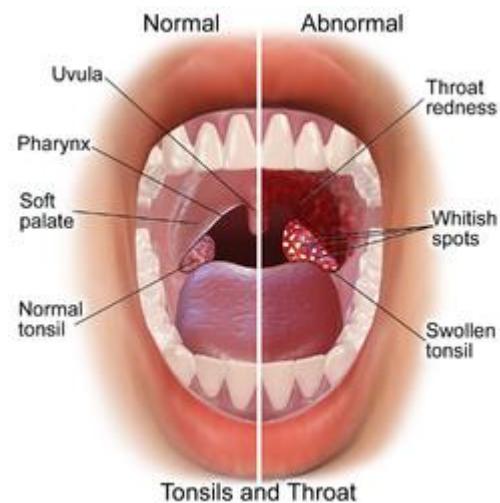
Parathyroid adenoma.



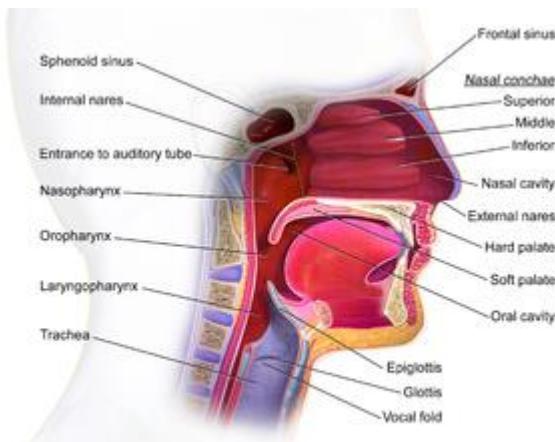
## Respiratory



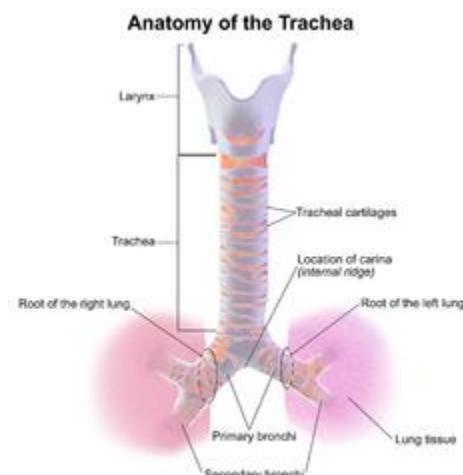
Respiratory system.



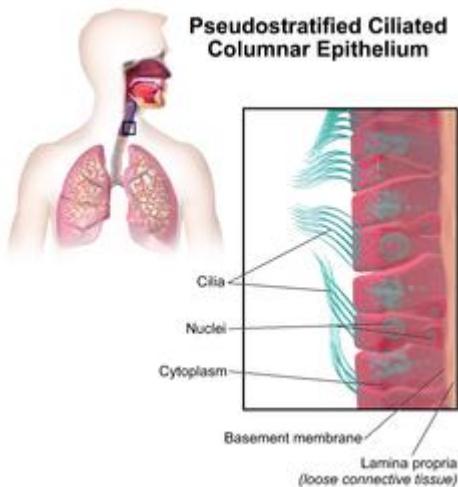
Anatomy of the tonsils and throat.



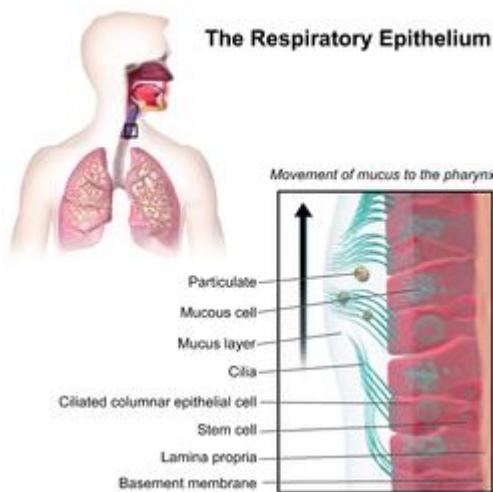
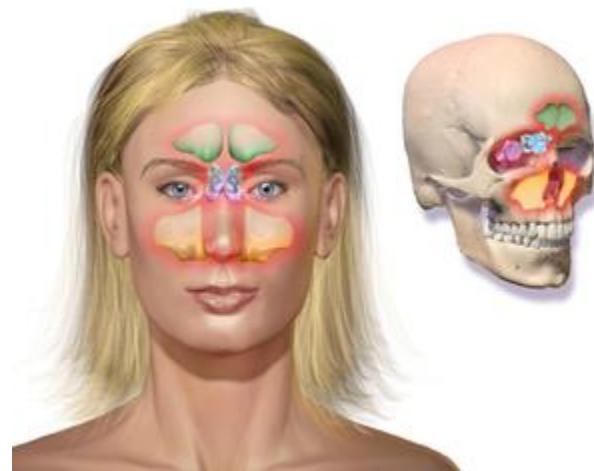
Upper respiratory tract.



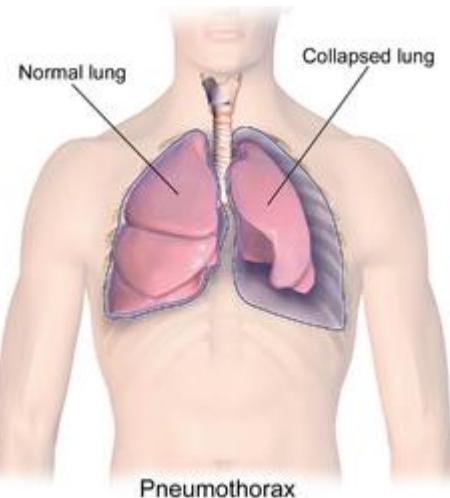
Anatomy of the trachea.



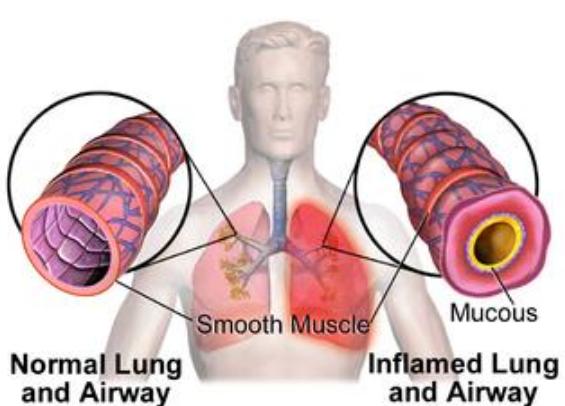
Pseudostratified columnar epithelium in the respiratory tract.



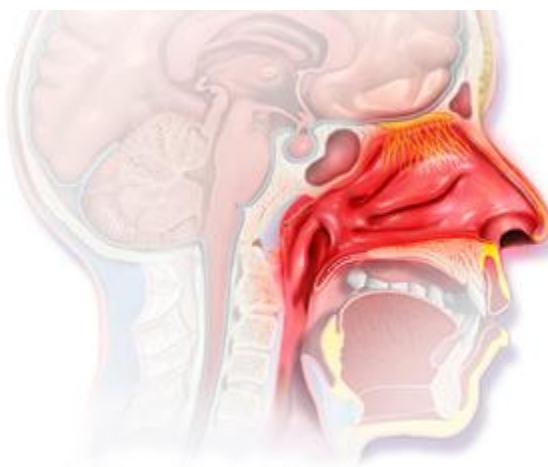
Respiratory epithelium.



Pneumothorax.



Normal airway versus airway  
with bronchoconstriction



Allergic rhinitis.



## Diseases

Diseases not primarily belong in any of sections above.



Blue baby syndrome.



Allergic contact dermatitis

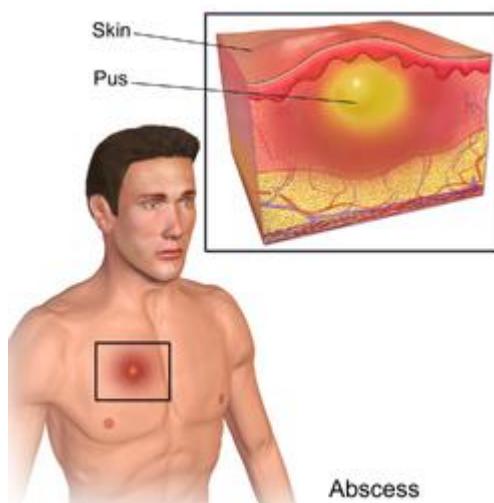


Angioedema.

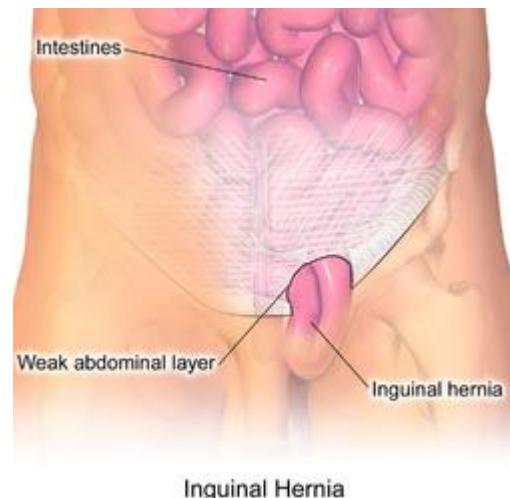


Allergic conjunctivitis.

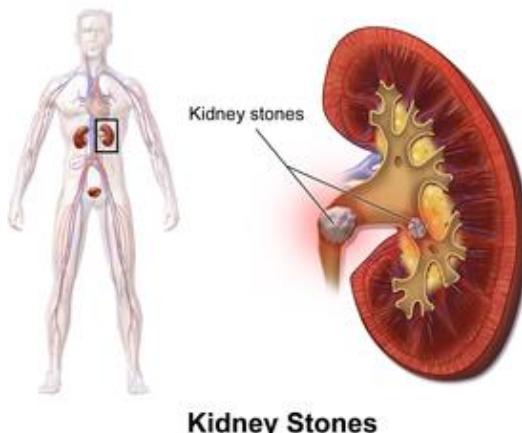




An abscess in the dermis.



Inguinal hernia.



Kidney stones.



Part of a regular cell showing chromosome 18, 19, 20, and 21 pairs



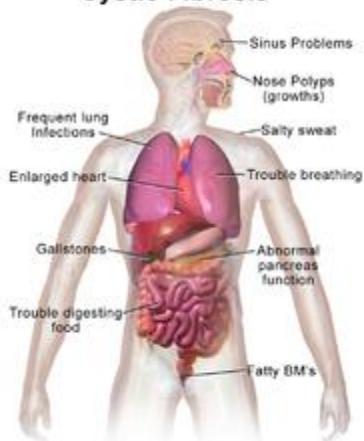
Part of a Down Syndrome child's cell showing chromosome 21 pair with 1 extra chromosome

## Down Syndrome

Karyotype in Down syndrome.



### Health Problems with Cystic Fibrosis



Cystic fibrosis.



Bunion

Bunion.



Osteoporosis.



Male

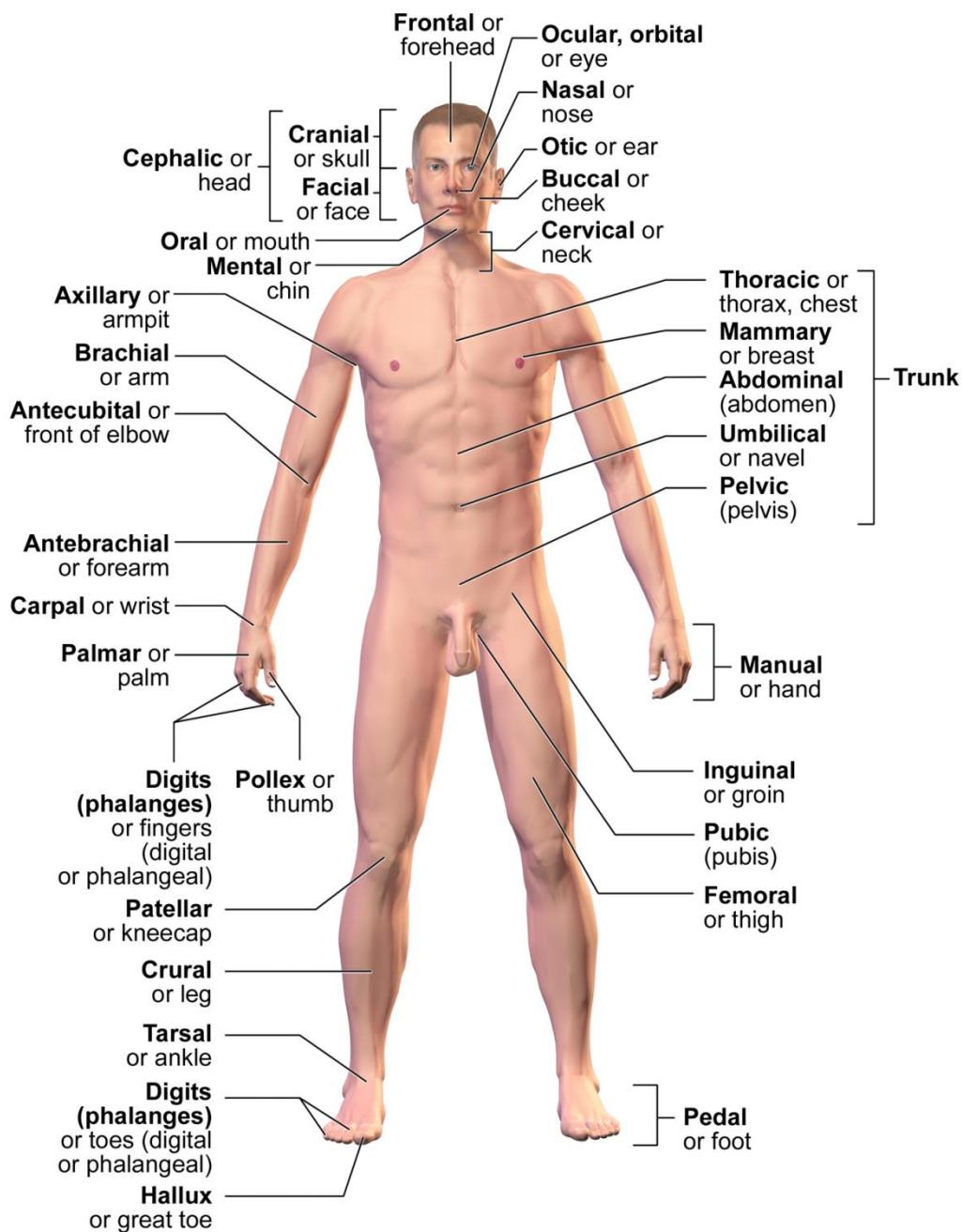
Female

Deer Ticks

Deer ticks

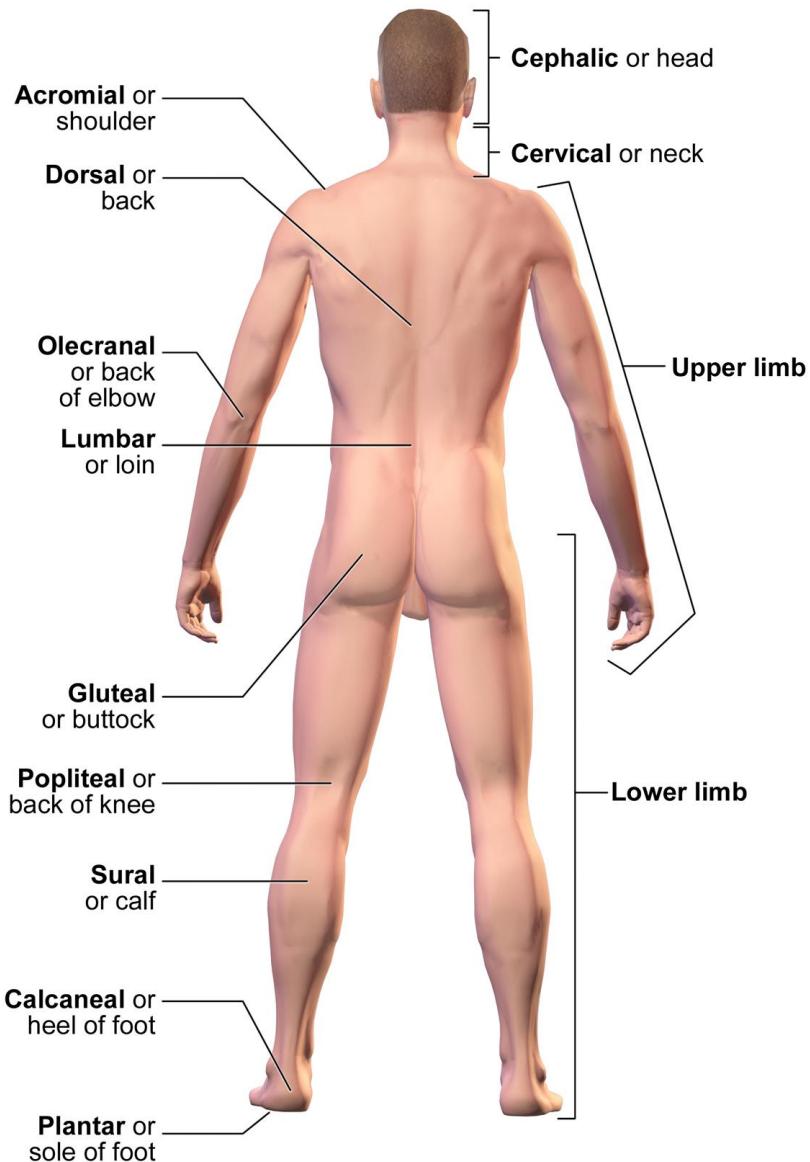


## Other anatomy



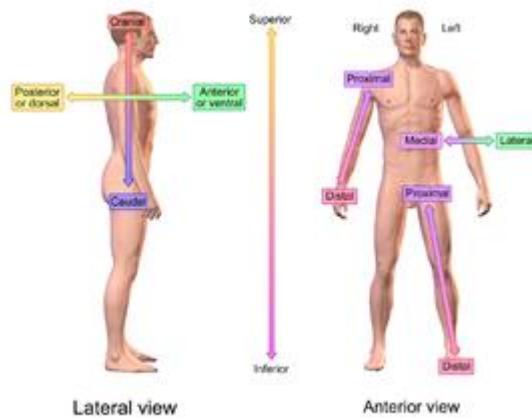
# Anatomical Landmarks (Anterior View)

Landmarks of **surface anatomy**, anterior view.



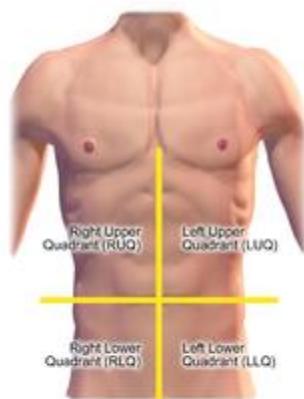
# Anatomical Landmarks (Posterior View)

Landmarks of **surface anatomy**, posterior view.



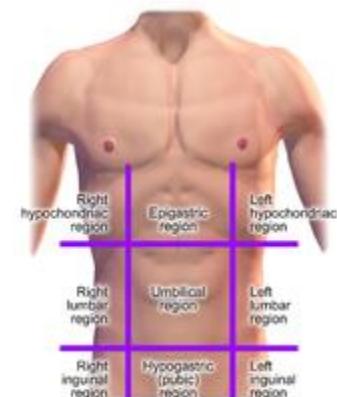
### Directional References

Anatomical terms of location.



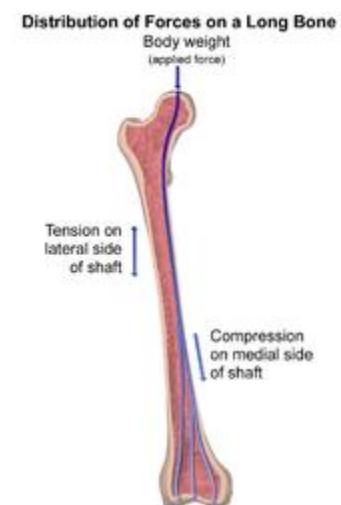
**Abdominopelvic Quadrants**

Abdominal quadrants



**Abdominopelvic Regions**

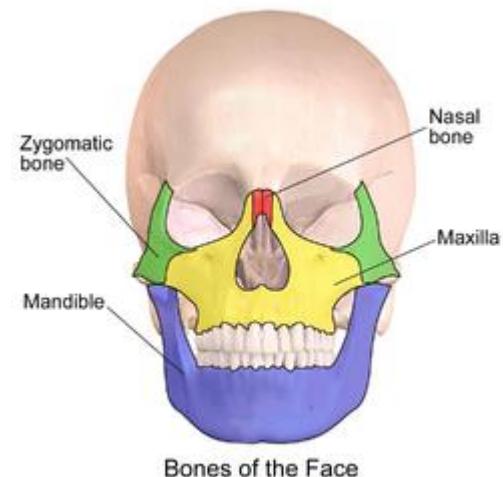
9-region scheme of the abdomen.



Distribution forces of the femur.



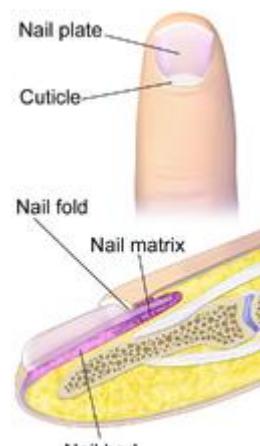
Skeletal anatomys of the hand.



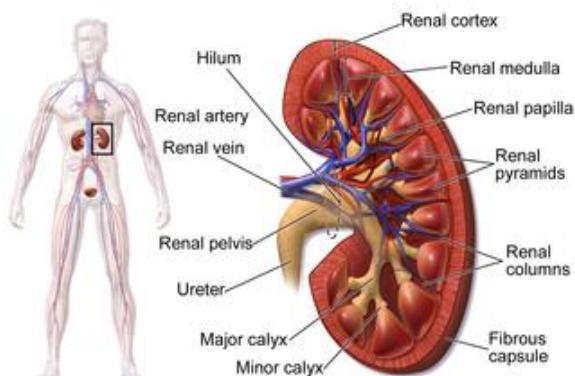
Facial bones



Skeletal anatomys of the foot.



Nail.

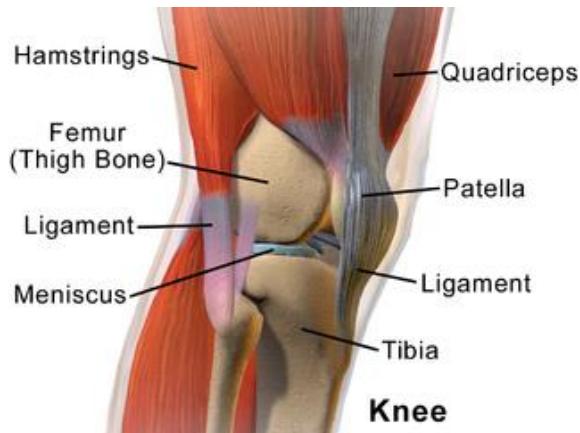


**Kidney Anatomy**

Kidney anatomy.



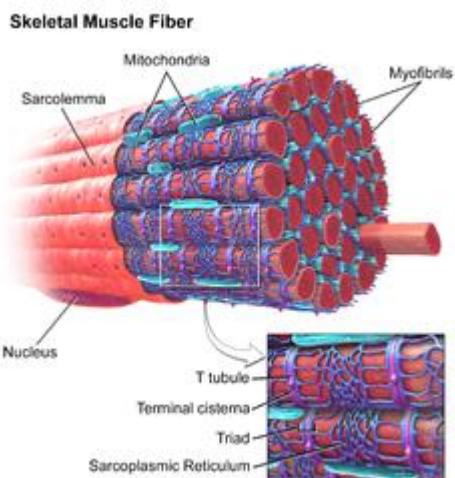
Anatomy of the knee, viewed from front.



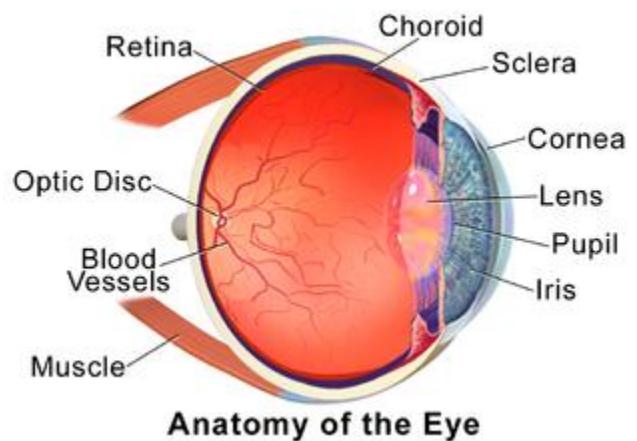
Anatomy of the knee, viewed from the side.



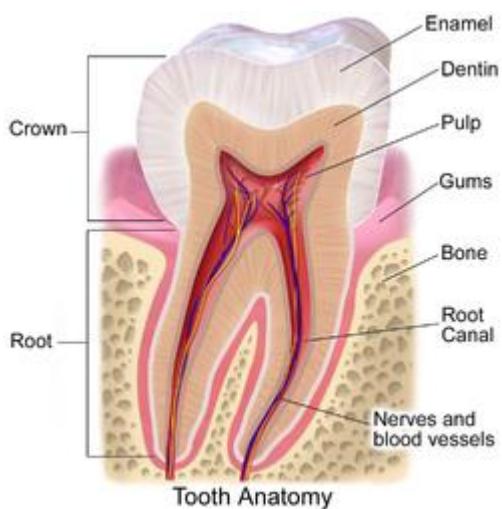
Bones of the leg.



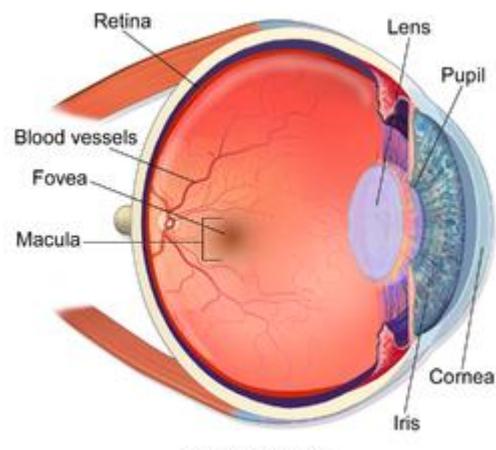
Skeletal muscle.



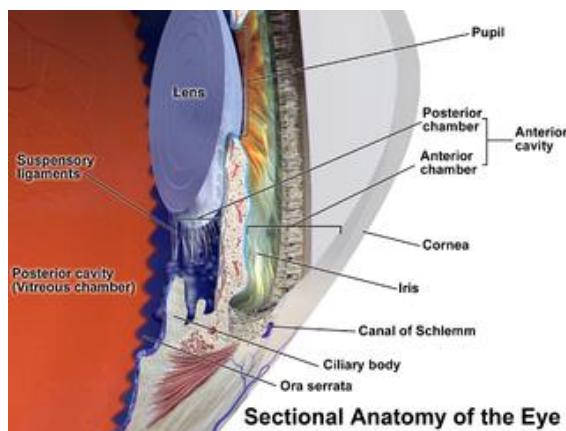
Eye.



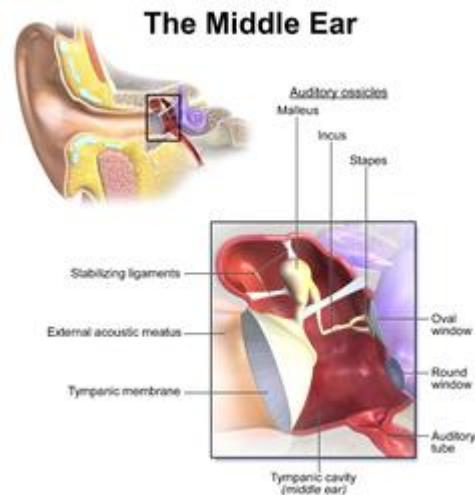
Tooth anatomy



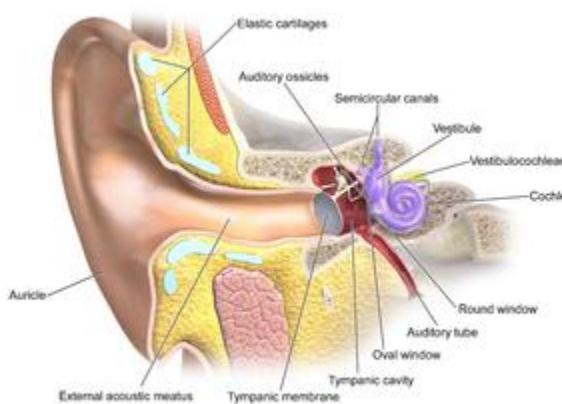
Eye.



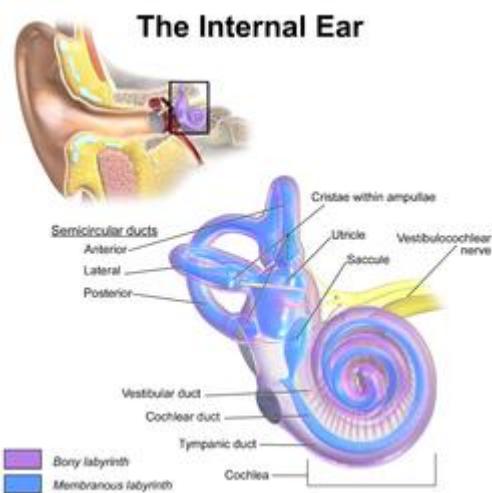
Anterior eye.



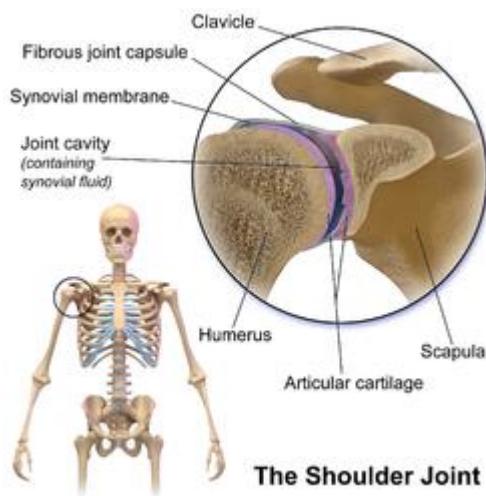
Middle ear.



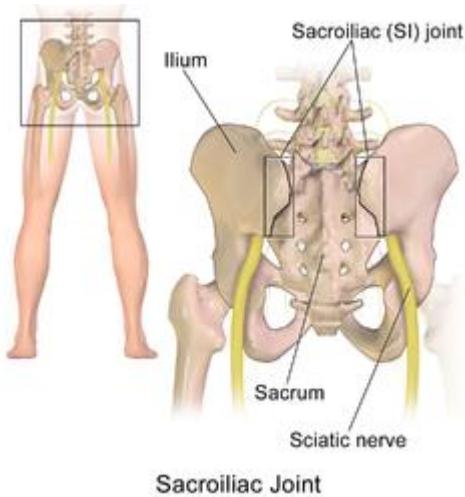
Ear.



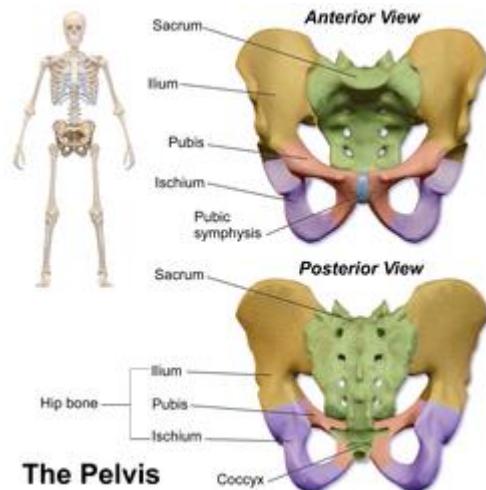
Inner ear.



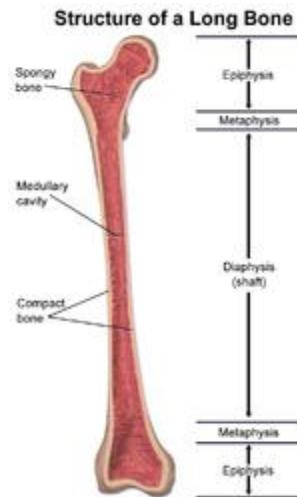
Shoulder joint.



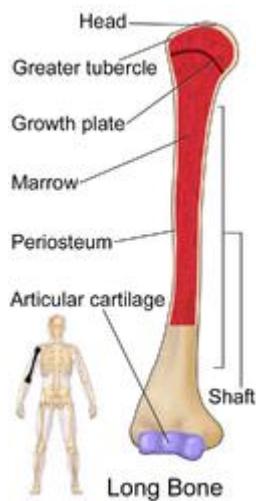
Sacroiliac joint.



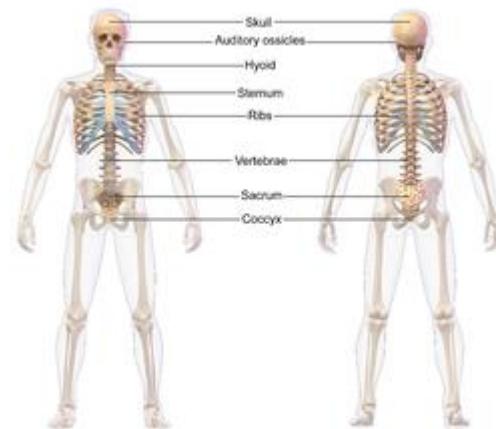
Pelvis.



Anatomy of a long bone.

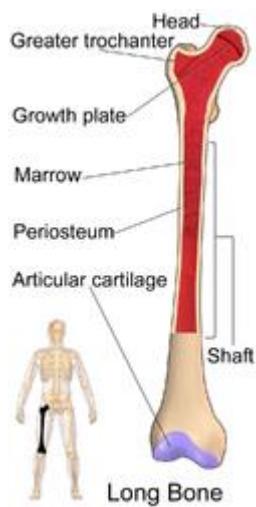


Humerus.

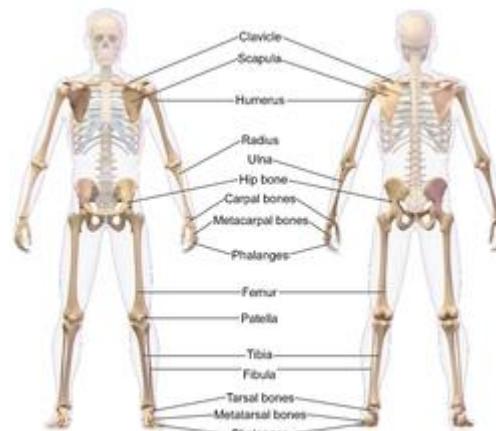


The Axial Skeleton

Axial skeleton.



Femur.

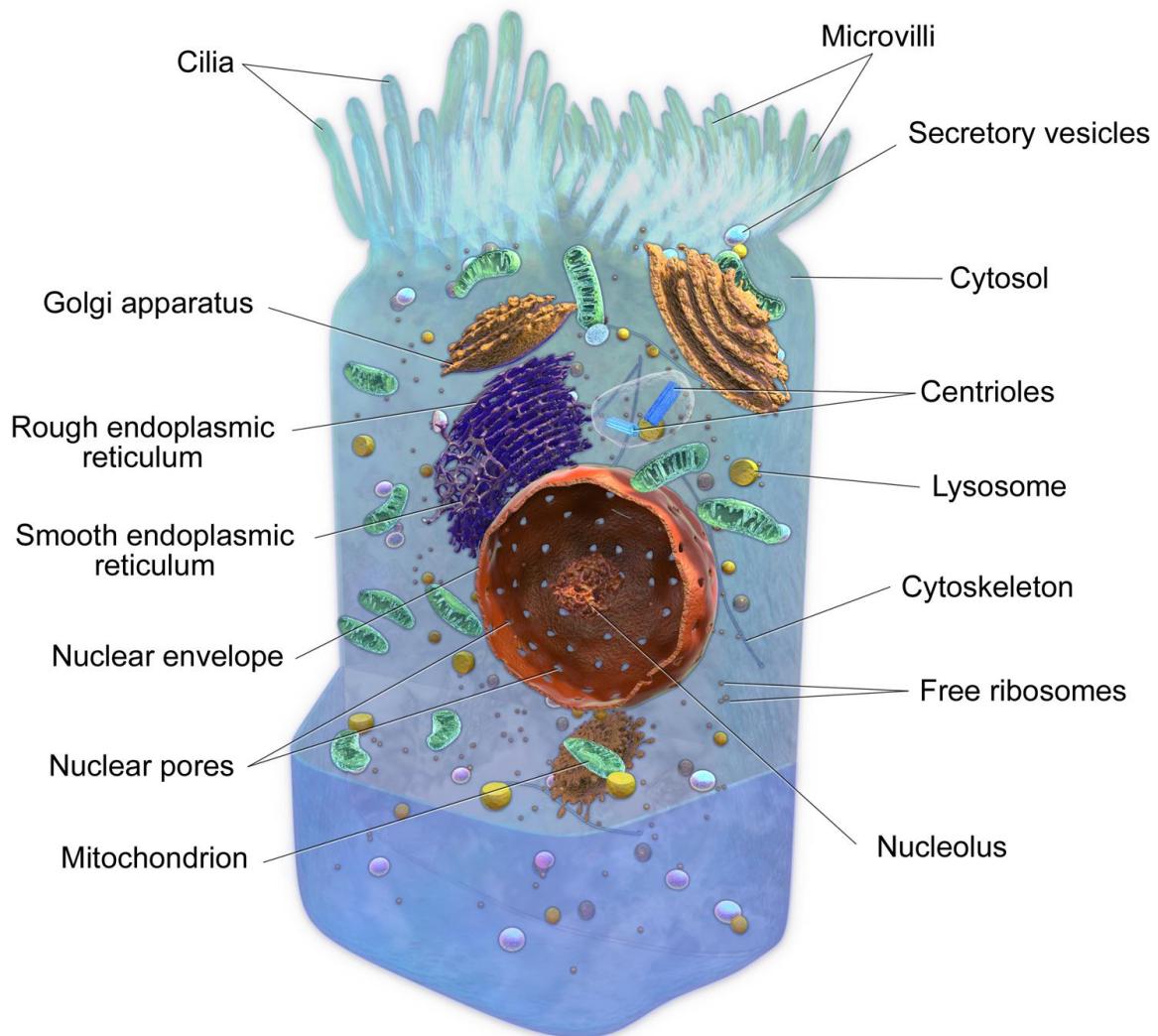


The Appendicular Skeleton

Appendicular skeleton.

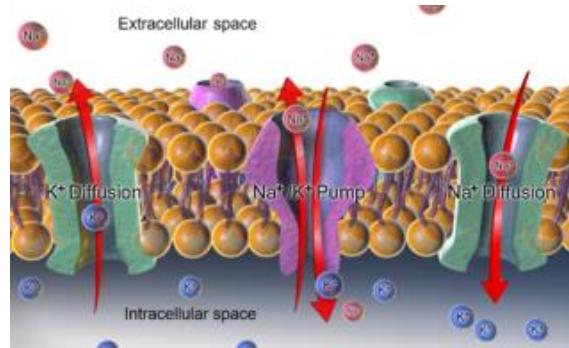


## Cell biology

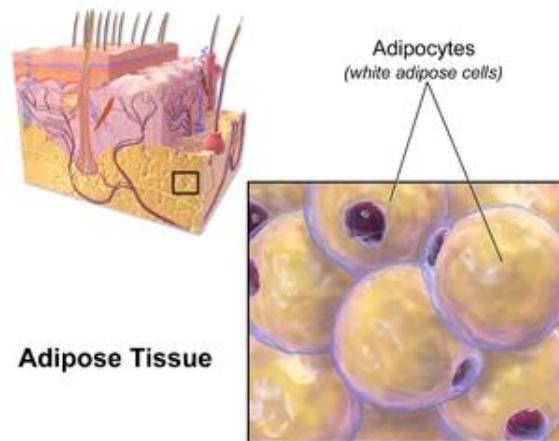


# Anatomy of a Cell

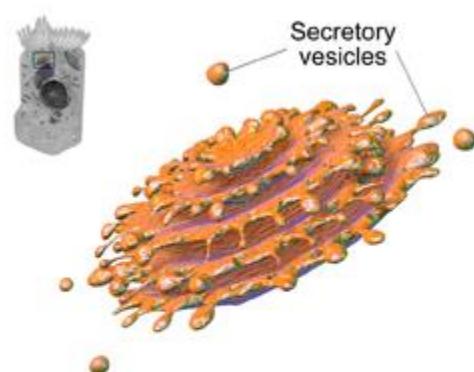
Cell anatomy



Sodium-potassium pump and resting potential,

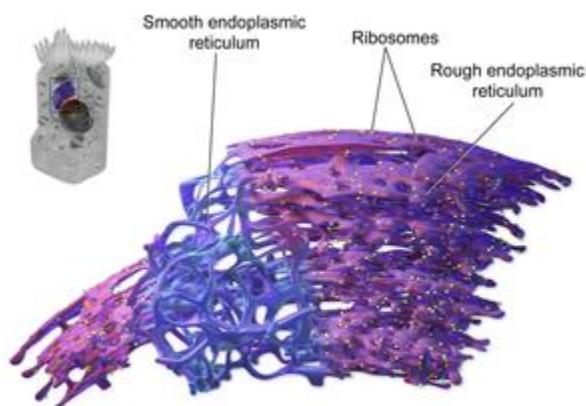


Adipose tissue.



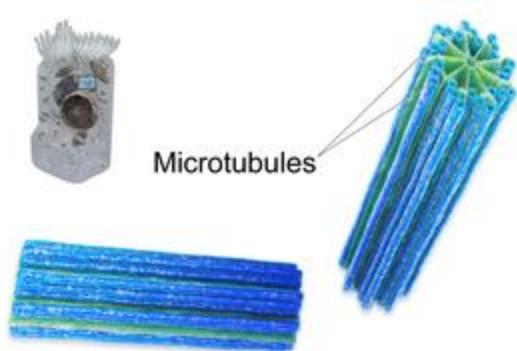
## Golgi Apparatus

Golgi apparatus.



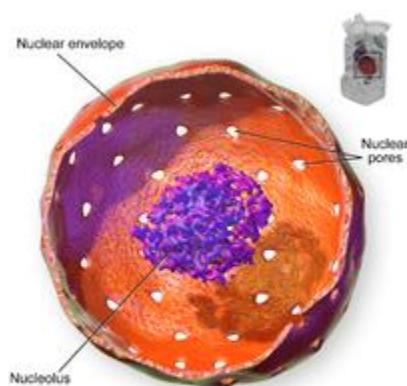
## Endoplasmic Reticulum

Endoplasmic reticulum.



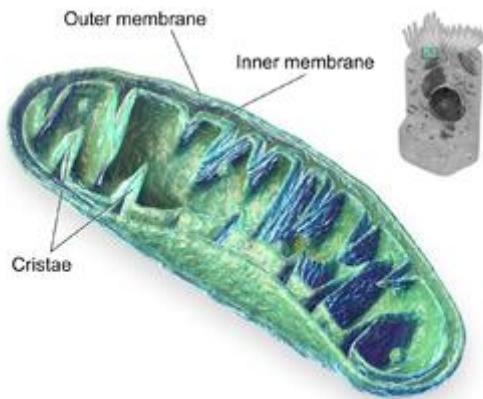
## Centrioles

Centrioles.



## Nucleus

Cell nucleus.

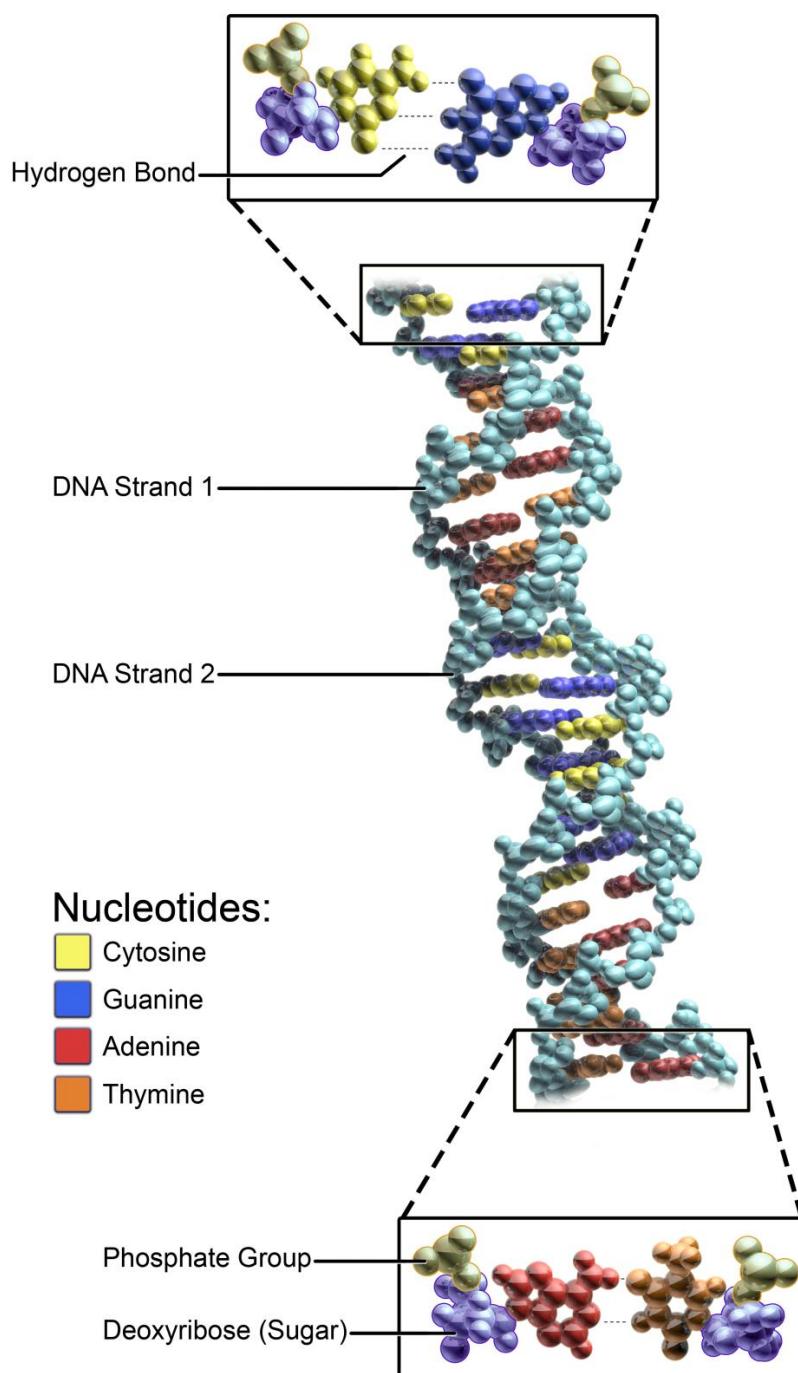


## Mitochondria

Mitochondria.

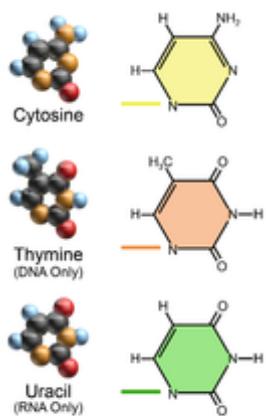


## Biochemistry



# DNA Molecule

DNA molecule.



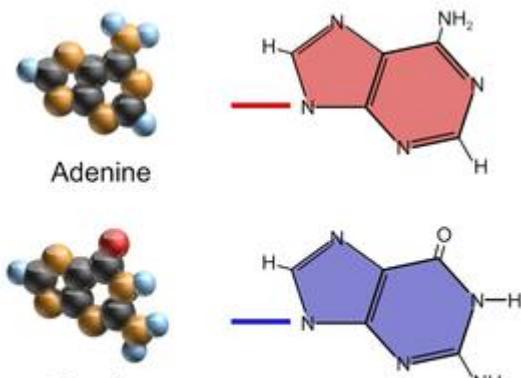
## Pyrimidines

Pyrimidine-derived nucleobases.



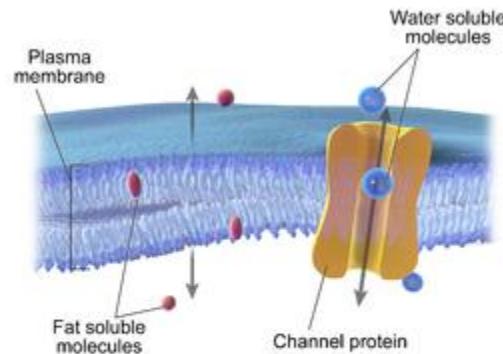
**DNA Molecule**

DNA molecule.



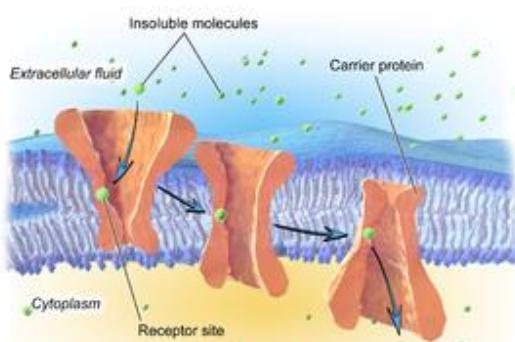
## Purines

Purine-derived nucleobases.



**Diffusion Across the Plasma Membrane**

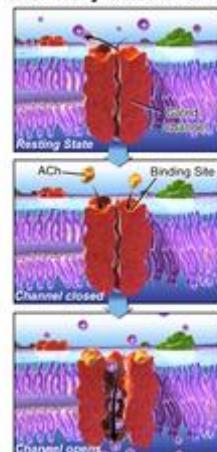
Passive transport by diffusion across a cell membrane.



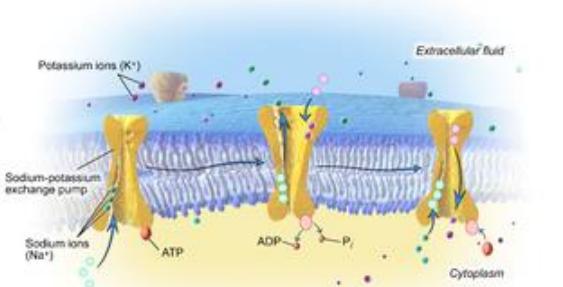
## Facilitated Diffusion

Facilitated diffusion.

### Chemically Gated Channel

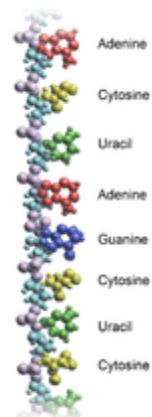


Ligand-gated ion channel.



## The Sodium-Potassium Exchange Pump

Sodium-potassium pump.



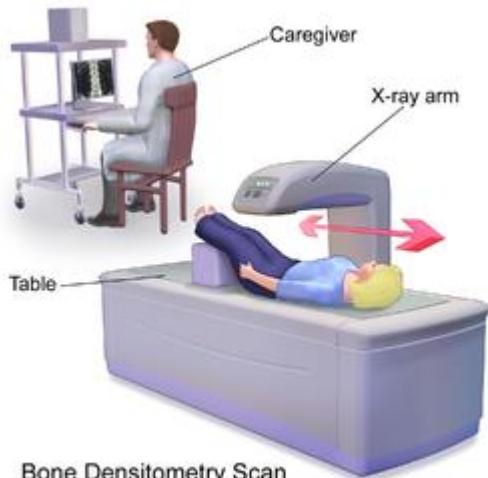
## RNA Molecule

RNA molecule.



## Interventions

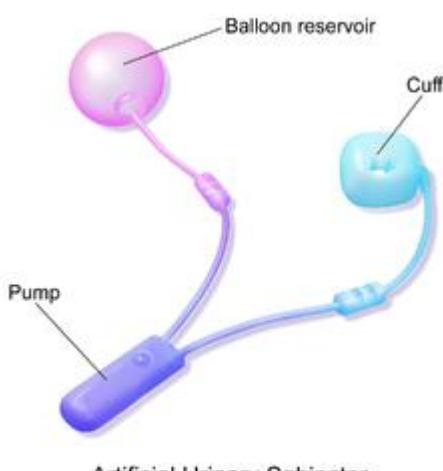
Treatments, diagnostic tools and other interventions not already primarily belong to any of the sections above.



Bone densitometry scan.



Ankle stirrup splint.



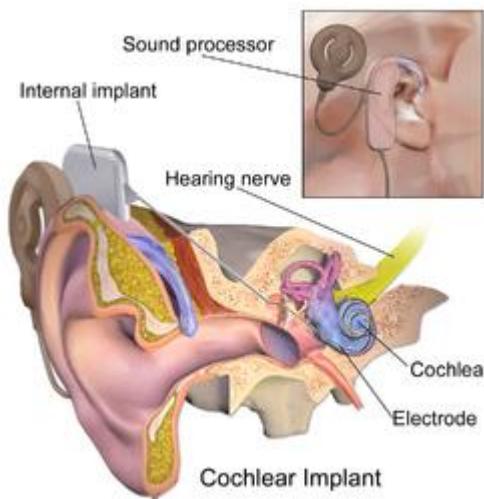
Artificial urinary sphincter.



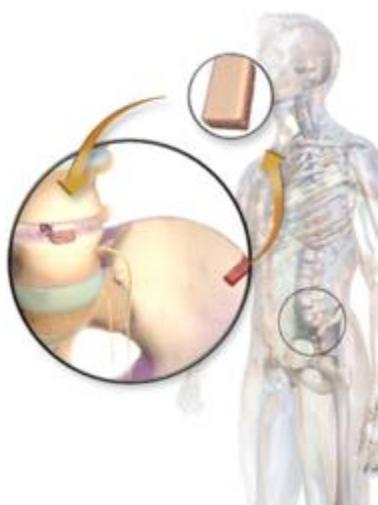
Abdominal paracentesis.



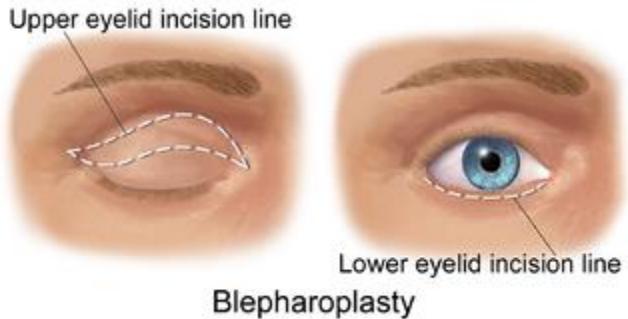
Stapled hemorrhoidopexy.



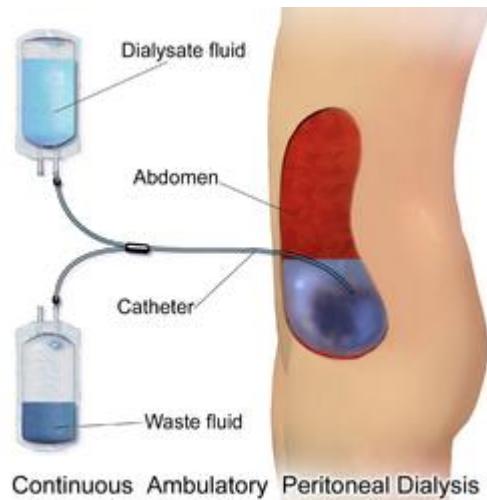
Cochlear implant.



Bone grafting using an autograft.



Blepharoplasty.



Continuous ambulatory peritoneal dialysis.