

ESRD from A to Z

A dictionary for dialysis and
transplant patients

**Created by the Southeastern Kidney Council
Consumer Committee**

A glossary of terms often used when talking about dialysis,
transplantation, and End Stage Renal Disease.



***The mission of the Southeastern Kidney Council is to improve the
lives of patients with or at risk for End Stage Renal Disease by
promoting and advancing quality of care.***



This dictionary was developed by the Consumer Committee of the Southeastern Kidney Council, ESRD Network 6. It is designed to be used by people who have ESRD, their families and friends. We hope this dictionary will help you better understand words associated with the disease and increase communication with your health care team.

The words are listed in alphabetical order. Words that appear in ***bold italic*** are defined elsewhere in the dictionary.

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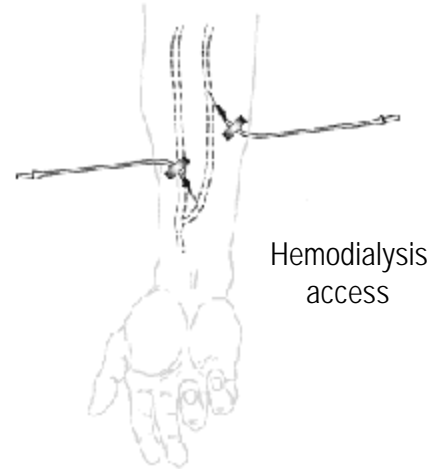


A

Access

A means to reach the bloodstream. In **hemodialysis, fistulas, grafts, catheters, and subcutaneous vascular access** are used.

Access to the **peritoneal cavity** for **peritoneal dialysis** is through a **peritoneal catheter**.



Access Aneurysm

A thinned, bulging, pulsating area on the **fistula** or **graft**. Aneurysms can be caused by repeated puncture of an **access** in one spot. This trauma weakens the **access** wall and could cause it to rupture.

Acute Renal Failure

A condition in which the **kidneys** suddenly stop working. In many cases, **kidneys** can recover.

Acute Tubular Necrosis (ATN)

Reversible **kidney** damage resulting in delayed **kidney** function.

Adequacy

The amount of dialysis to prevent **uremic** symptoms. In **hemodialysis**, this is measured by **Kt/V** and **URR**. In **peritoneal dialysis**, this is measured by **Kt/V** and **Creatinine Clearance**.

Advanced Directives

Written documents to record a patient's wishes regarding his or her medical treatment, in case that patient is unable to make their choices known later.

A

Albumin

One of a class of proteins in the blood. A reduced level of albumin may be a sign of inadequate protein intake in the diet.

Allograft

An organ or tissue *transplant* from one human to another.

American Association of Kidney Patients (AAKP)

An organization composed primarily of patients on *dialysis*, *transplant* recipients and family members. AAKP is a non-profit association which strives to meet the needs of all *kidney* patients through educational programs, patient advocacy and the promotion of *rehabilitation*.

American Kidney Fund (AKF)

A national non-profit organization that provides direct financial assistance to those who suffer from *kidney* disease.

Anemia

A common condition in patients with kidney disease which there are not enough red blood cells in the blood to carry oxygen. Anemia is often referred to as “low blood” and causes weakness and fatigue.

Angioplasty

The inflation of a balloon inside a narrowing blood vessel. The inflation of the balloon makes the vessel opening bigger and allows for more blood flow.

Antibiotic

A medication used to kill bacteria that may be causing an infection in the body.

A

Antibody

A protein in the body that helps fight disease.

Anticoagulant

A substance that is given to prevent clotting of the blood (example: *Heparin*).

Antigen

A substance in the body that stimulates the production of *antibodies*.

Antihypertensive

A medication that reduces high *blood pressure (hypertension)*.

Anuria

A condition in which a person stops making *urine*.

Arterial Line

The tube carrying blood from the body into the *artificial kidney (dialyzer)*.

Arteriogram, Renal

An X-ray test involving injection of dye into the main *artery* supplying the *kidney*, used to determine if the blood vessels to the *kidney* are normal.



A

Arteriovenous Fistula

Surgical connection of an **artery** directly to a **vein**, usually in the forearm, created in patients who will need **hemodialysis**. The **AV fistula** causes the **vein** to grow thicker, allowing the repeated needle insertions required for **hemodialysis**

Artery

A blood vessel that carries blood away from the heart and to the body.

Artificial kidney

Another name for a **dialyzer**.

Ascites

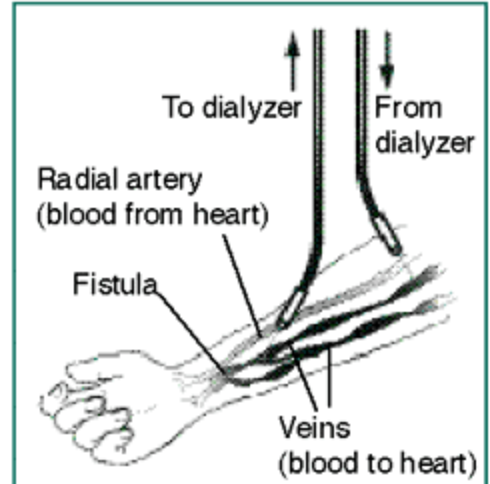
Fluid which is retained in the abdominal cavity.

Autoimmune Disease

A disorder in which the tissues and organs of the body are attacked by their own **immune system**.

AV Fistula

See **Arteriovenous Fistula**.



Arteriovenous Fistula



B

Bacteria

"Germs" too small to see with the naked eye that can produce diseases or infections.

Bath

Another name for **dialysate fluid**, which is a clean salt-containing solution. Inside the dialyzer waste products will flow from the blood into the **dialysate** and are then washed away.

Bilateral nephrectomy

The removal of both **kidneys**.

Biopsy

The process of surgically removing tissue from living patients for diagnostic examination.

Bladder

The part of the urinary tract that receives **urine** from the **kidneys** and stores it until urination.

Blood Flow Rate (BFR) or QB

The amount of blood passing through the **artificial kidney (dialyzer)** each minute. This is determined by the speed at which the **blood pump** is set.

Blood Glucose Meter

A machine that helps test how much **glucose** (sugar) is in the blood. A specially coated strip containing a fresh drop of blood is inserted in a machine, which then calculates the level of **glucose** in the blood sample and displays a result.



B

Blood Leak

The **dialyzer** fibers or **membrane** develop a small break or tear allowing blood to leak into the **dialysate**.

Blood Pressure

Pressure of the blood flowing through the blood vessels. Stated as a **systolic** number over a **diastolic** number.



Blood Pump

A pump that is used to bring blood from the patient and push it through the **artificial kidney** or **dialyzer** and back to the body.

Blood Sugar

See **Glucose**.

Blood Urea Nitrogen (BUN)

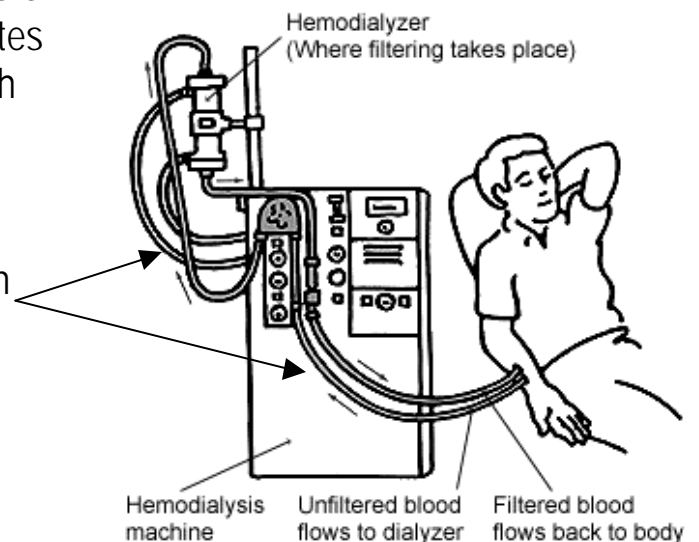
A waste product, or toxin, that appears in the blood as protein from food is digested. **BUN** levels are a measure of how well the **kidneys** are functioning as well as **adequacy** of **dialysis** and nutritional status. A high **BUN** indicates that the **kidneys** are not removing enough waste.

Bloodlines

The **arterial line** and **venous line** used in **hemodialysis**.

Bright's Disease

See **Glomerulonephritis**.



B

Bruit

The sound of blood moving through a *fistula* or *graft* that indicates that the *access* is working. Bruits can also be heard from an artery and may indicate a blockage.

C

Cadaver Donor

A person who has just died that has agreed, before their death, to offer an organ, tissue or blood for *transplantation*.

Calcium

A mineral that the body needs for strong bones and teeth. A combination of too much phosphorus and too little calcium causes weak, brittle bones.

Cannulation

The process of inserting a needle into the *graft* or *fistula*.

CAPD

See *Continuous Ambulatory Peritoneal Dialysis*.

Catheter

A tube inserted through the skin into a blood vessel or body cavity to draw out blood or body fluids, or to put in fluid. In *peritoneal dialysis*, a *catheter* is used to instill *dialysis* solution into the abdominal cavity and drain it out again. In *hemodialysis*, a catheter in a *vein* can be used to create a temporary or longer-term *dialysis access*.



Hemodialysis catheter

CCPD

See *Continuous Cycling Peritoneal Dialysis*.

C

Centers for Medicare & Medicaid Services (CMS)

(formerly know as HCFA – Health Care Financing Administration)

The department of the federal government that oversees the **Medicare** and **Medicaid** programs.

Central Venous Stenosis

Narrowing of the central **veins** in the body that can make the arm on the that side unsuitable for a **vascular access**.

Chronic Renal Failure (CRF)

Slow and progressive loss of **kidney** function over several years, often resulting in **End Stage Renal Disease**.

Clotting time

The time it takes for the blood to form a clot.

CMS

See **Centers for Medicare & Medicaid Services**.

Complaint and Grievance Procedure

A process for a concerned person to request an investigation into an allegation involving a facility, physician, or other provider. The **dialysis** facility and the **ESRD Network** both have such a procedure.

Conductivity

The measure of ions in a solution. A conductivity meter measures the chemical composition of **dialysate** by measuring the **dialysate's** ability to conduct an electrical current. If the conductivity of **dialysate** is not correct an alarm will go off, and the **dialysate** is bypassed to the drain. This means the dialysate will not come in contact with the patient's blood.



C

Conductivity Alarm

The **conductivity** alarm indicates an inappropriate mixture of water and **dialysate** concentrate. See **Conductivity**.

Congestive Heart Failure (CHF)

A condition in which the weakened heart does not pump blood effectively. This results in the body retaining excess fluid. The fluid collects in the lungs making breathing difficult. In a dialysis patient, treatment may include removal of excess body fluid during **dialysis**.

Continuous Ambulatory Peritoneal Dialysis (CAPD)

A type of **dialysis** where the patient's **peritoneal membrane** is used as the **dialyzer**. The patient dialyzes at home, using special supplies, but without the need for a machine. When you are on CAPD, you change the fluid in your peritoneal cavity by doing what is called "an **exchange**". This can be performed in any clean and convenient place - at home, at work, at school or on vacation. The **exchanges** use gravity to drain the used fluid out of the **peritoneal cavity** and to replace it with fresh fluid. Most **CAPD** patients need to do about 3 to 5 exchanges a day. (See **Peritoneal Dialysis**)

Continuous Cycling Peritoneal Dialysis (CCPD)

A type of **dialysis** where the patient dialyzes at home and uses a machine which automatically delivers cycles of dialysis **exchanges**. A typical CCPD schedule involves three to five **exchanges** during the night while the person sleeps. One or more additional **exchanges** may also be performed during the daytime. (See **Peritoneal Dialysis**)



C

Creatinine

A waste product released from the muscles of the body. Creatinine is normally removed from the blood by the ***kidneys***.

Creatinine Clearance

A test that measures how well the ***kidneys*** remove ***creatinine*** from the blood. A decreased creatinine clearance reading means decreased function of the ***kidneys***.

Cross-Matching

A test used to establish blood compatibility before transfusion. Before a ***transplant***, the ***donor's*** blood is tested with the recipient's blood to see whether they are compatible.



D

Declotting

The removal of a blood clot so fluid can flow through a blood vessel or tube, such as a *dialysis access*.

Department of Health and Human Services (DHHS)

DHHS administers many programs at the Federal level dealing with the health and welfare of the citizens of the United States. It is the “parent” of the *Centers for Medicare & Medicaid Services (CMS)*.

Diabetes Mellitus

A disease that occurs when a person has high *blood sugar*.

Diabetic Nephropathy

Kidney disease caused by *diabetes*.

Diabetic Neuropathy

Damage of nerves by *diabetes*.

Diabetic Retinopathy

An eye disease caused by *diabetes* that may result in reduced vision or blindness.

Dialysate/Dialysate fluid

Also called *bath*. The solution used to remove excess fluids and waste products from the blood.

Dialysate Flow Rate (DFR) or QD

The rate at which *dialysate fluid* moves through the *dialyzer*.



D

Dialysis

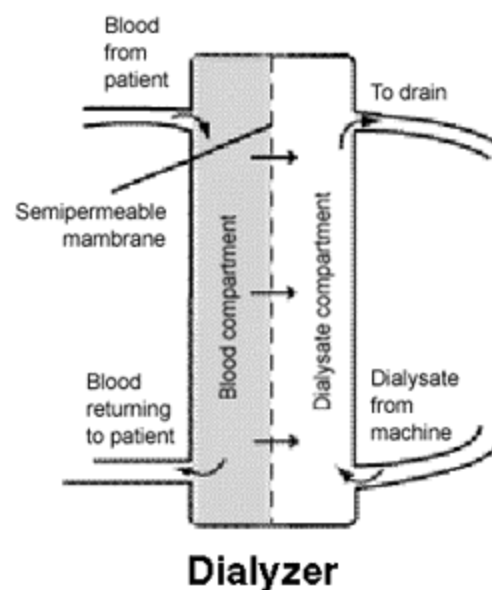
The process of cleaning wastes from the blood artificially. This job is normally done by the **kidneys**. If the **kidneys** fail, the blood must be cleaned artificially with special equipment. The two major forms of **dialysis** are **hemodialysis** and **peritoneal dialysis**.

Dialysis Technician

An individual who provides **dialysis** care under the supervision of a registered nurse or a physician. Also called a **Patient Care Technician (PCT)**.

Dialyzer (artificial kidney)

An artificial kidney used with the **hemodialysis** machine. The **dialyzer** has two sections separated by a **membrane**. One section holds **dialysate fluid** and the other holds the patient's blood. Waste products and fluid travel from the blood in to the **dialysate fluid**, across the **dialyzer membrane**, and are disposed of.



Diastolic

The bottom **blood pressure** number (or second number) which measures the force of the heart muscle at rest, when it expands and fills with blood.

Dietitian

An expert in nutrition who helps people with special health needs plan the kinds and amount of foods to eat. Also called a **nutritionist**.



D

Disequilibrium Syndrome

The term used to describe a condition which may result from *dialysis* therapy, most commonly in patients new to dialysis. Some symptoms may be headache, cramps, nausea, or vomiting.

Donor

A person who offers blood, tissue, or an organ for *transplantation*.

Dry Pack

A *dialyzer* that has not been pre-processed for first use of *hemodialysis*.

Dry Weight (ideal weight) (target weight)

The weight at which all excess fluids have been removed.

Durable Medical Equipment (DME)

Items commonly covered under the *Medicare* program such as oxygen equipment, wheelchairs, and other medically necessary equipment prescribed by a physician for a patient's in-home use.

Dwell Time

In *peritoneal dialysis*, the amount of time that *dialysate* fluid remains in the patient's abdominal cavity during an *exchange*.



E

Edema

Swelling caused by too much fluid in the body.

Electrolytes

Salts in the body fluids including **sodium**, **potassium**, magnesium, and chloride. The kidneys control the amount of these electrolytes in the body. When the **kidneys** fail, electrolytes get out of balance, causing potentially serious health problems. **Dialysis** can help correct this problem.

End Stage Renal Disease (ESRD)

Any irreversible **kidney** disease that requires **dialysis** therapy or **kidney transplant** in order to live. The term “end-stage” means that the **renal** disease is permanent and irreversible, and not that the person’s condition is terminal.

Erythropoietin

A hormone which stimulates the body to produce red blood cells. It is normally produced in the **kidney**, but with renal failure the body cannot produce this hormone, resulting in **anemia**.

Equipment Technician

An individual who performs the required tasks for the maintenance, monitoring, and repair of **dialysis** machines, **reuse** processing and water treatment systems and equipment at the **dialysis** facility.

ESRD

See **End Stage Renal Disease**.



E

ESRD Networks

The **ESRD** Networks were established by the U.S. Government in 1978 to oversee **dialysis** and **transplant** facilities and ensure that patients receive high quality care. The Networks collect data, oversee quality improvement activities, encourage rehabilitation, establish a grievance procedure for patients, and provide resource materials to **ESRD** staff and patients.

Exchange

In **peritoneal dialysis**, the draining of used **dialysate fluid** solution from the abdomen, followed by refilling with a fresh bag of solution.

Exit Site

The site at which the **catheter** exits the body.

F

Femoral Catheter

A temporary *catheter* placed in the femoral *vein* in the groin.

Ferritin

The amount of stored iron in the body.

First-Use Syndrome

Symptoms that may occur after starting *hemodialysis* with a *dry pack* or *dialyzer* that has not been pre-processed for first use of *hemodialysis*. Symptoms may include chest pain, back pain, nervousness, and itching.

Fistula

See *Arteriovenous Fistula*.

Fistulogram

A special procedure performed in the Radiology Department of a hospital. With the use of X-ray dye, the blood flow through a *fistula* will be evaluated. The procedure can detect problems such as a clot or narrowing. Early detection and treatment of problems with a *fistula* can improve its performance and limit future complications.

Flu

See *Influenza*.

Fluid Overload

Excess *sodium* (salt) and fluid retained in the body between *dialysis* treatments; may cause shortness of breath and swelling.



F

Fluid Restriction

The amount of fluid a patient is allowed to drink in a 24-hour period to avoid adding extra weight that would cause fluid overload and undue stress to the heart.

Folic Acid

A vitamin necessary for red blood cell production.

G

Glomeruli

Plural of *glomerulus*.

Glomerulonephritis

Also called *Bright's Disease* or *Nephritis*. It is an inflammation of the *glomeruli*. It usually affects both *kidneys* and generally first occurs in early childhood. Recovery from the acute form may take one year. Those with the chronic form suffer low, progressive damage which may ultimately lead to *ESRD*.

Glomerulus

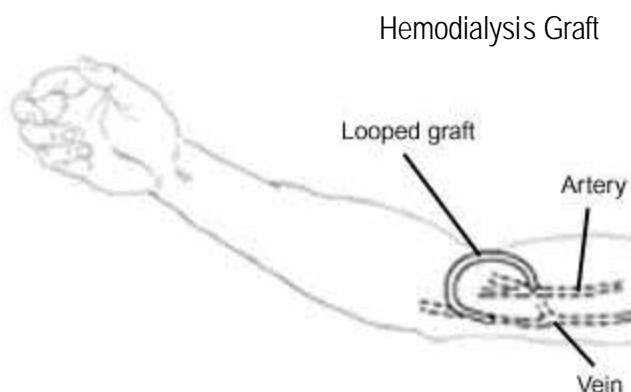
A tiny set of looping blood vessels in the *kidney* where the blood is filtered.

Glucose

A type of sugar found in the body. Also called *blood sugar*.

Graft

In *hemodialysis*, a *vascular access* surgically created using a synthetic tube to connect an *artery* to a *vein*. In *transplantation*, a *graft* is the *transplanted* organ or tissue.



Guaic Cards

Cards used to test for hidden blood in the stool.



H

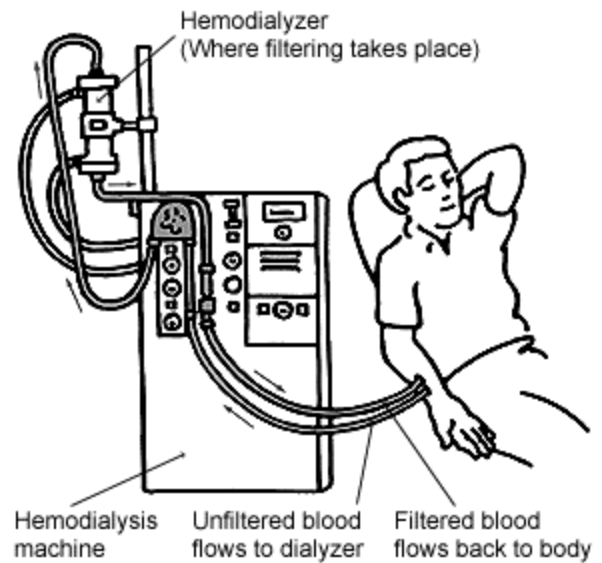
Hematocrit

A measure that tells how many red blood cells are present in a blood sample. Low hematocrit suggests **anemia** or increased blood loss.



Hemodialysis

The use of a machine to clean wastes from the blood after the **kidneys** have failed. The blood is circulated through tubes to a **dialyzer**, which removes wastes and extra fluid. The cleaned blood then flows through another set of tubes back into the body.



Hemoglobin

The substance in red blood cells that carries oxygen around the body. Low hemoglobin suggests **anemia** or increased blood loss.

Heparin

A medication that prevents the blood from clotting too quickly.

Hepatitis

Inflammation of the liver.



H

Hepatitis B Antigen Test

A test which determines the presence of an **antigen** associated with the circulation of the **Hepatitis B** virus in the blood.

Hereditary

A disease, trait, or condition that is passed on in a family (blood relatives).

High Blood Pressure

See **Hypertension**.

Human Insulin

Insulin that is chemically the same as **insulin** that a person's body produces naturally.

Hyperglycemia

Too high a level of **glucose** (sugar) in the blood; a sign that diabetes is out of control.

Hyperkalemia

A high level of **potassium** in the blood; can cause irregular heartbeat and cardiac arrest if severe.

Hypertension

High **blood pressure**, which can be worsened by too much fluid in the blood vessels or **fluid overload**.

Hypoglycemia

Low **blood sugar**.

Hypotension

Low **blood pressure**.



Ideal Weight

See *Dry Weight*.

Immune System

The body's system for protecting itself from viruses and **bacteria** or any "foreign" substance.

Immunosuppressant

A drug given to suppress the natural responses of the body's immune system. Immunosuppressants are given to patients to prevent the body's immune system from fighting and rejecting the **transplanted** organ. Also given to patients with **autoimmune diseases**.

Implantable Port

See *Subcutaneous Vascular Access*.

Infiltration

The leakage of a substance into body tissues. In **hemodialysis** patients, infiltration of blood into the tissues surrounding the **access** can occur if the needle punctures the back of the vessel wall or is partially dislodged from the access.



Influenza (flu)

A contagious disease that is caused by the influenza virus. It attacks the respiratory track (nose, throat, and lungs). The flu is different from a cold. It usually comes on suddenly and may include symptoms such as fever, headache, tiredness, dry cough, sore throat, body aches, and nasal congestion. The influenza vaccine is recommended every Fall for all people age 50 and over, for people of all ages who have chronic diseases, or for anyone of any age who wants to reduce the risk of contracting the "flu". A flu shot can be given at any time during the autumn or winter but is most effective when it is given from early October to mid-November, before the flu season begins.

Insulin

A hormone that controls the body's use of **glucose** (sugar). When the body cannot make enough **insulin** or is resistant to its own **insulin**, the person with **diabetes** may have to inject **insulin**.

Internal Jugular Catheter (IJ)

A temporary dialysis **catheter** that is placed in the internal jugular vein of the neck.

Intravenous (IV)

Within a **vein**.

Iron Deficiency

Lack of enough available iron to make red blood cells.

K

Kidney Failure

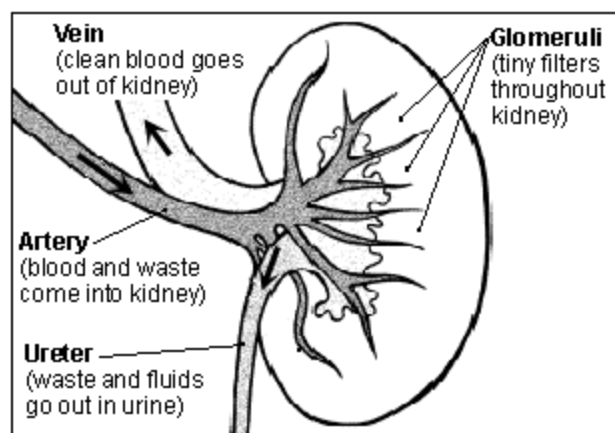
The loss of *kidney* function. (See also *End Stage Renal Disease*)

Kidney Transplantation

The replacement of a diseased *kidney* with a healthy one.

Kidneys

The two bean-shaped organs located on either side of the spine, just above the waist. They rid the body of waste materials and maintain fluid balance through the making of *urine*.



Kt/V

A measurement of how much *urea* is being removed from the blood during *dialysis*. The measurement takes into account the efficiency of the *dialyzer*, the treatment time, and the total amount of *urea* in the body.



L

Lipid

A term for fat. The body stores fat as energy for future use just like a car that has a reserve fuel tank. When the body needs energy, it can break down the lipids into fatty acids and burn them like **glucose** (sugar).

Living Related Donor (LRD)

A living family member that donates an organ.

Living Unrelated Donor (LUD)

A living person, not a family member, who donates an organ.

M

Medicaid

A state and federally funded program that helps pay for medical bills. A person's income must be below a certain level to receive Medicaid. Benefits vary from state to state.

Medicare

A federally funded program that helps pay for medical bills. ***The Centers for Medicare & Medicaid Services (CMS)*** administers this program.

Membrane

A thin sheet or layer of tissue that lines a cavity or separates two parts of the body. A membrane can act as a filter, allowing some particles to pass from one part of the body to another while keeping others where they are. The artificial membrane in a ***dialyzer*** filters waste products from the blood.

Modality

Methods of treatment for ***kidney*** failure. Modality types for ***End Stage Renal Disease*** include ***transplant, peritoneal dialysis,*** and ***hemodialysis.***



N

National Kidney Foundation (NKF)

A voluntary health organization which seeks to prevent **kidney** and urinary tract diseases, improve the health and well-being of individuals and families affected by these diseases, and increase the availability of all organs for **transplantation**.

Needle Gauge

Refers to the size of the needle. The larger the number, the smaller the size of the needle.



Negative Pressure

The method of removing extra water and salt from the blood by creating pressure inside the blood compartment of the **dialyzer**, allowing the process of **ultrafiltration** to take place.

Nephrectomy

Surgical removal of a **kidney**.

Nephritis

See **Glomerulonephritis**.

Nephrolithiasis

Kidney stones.

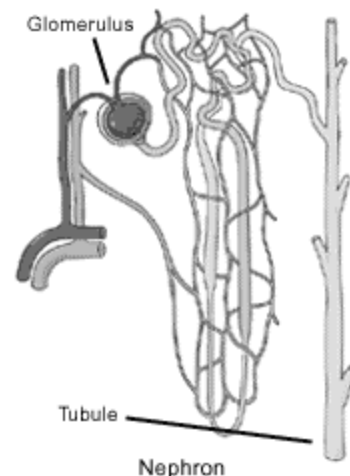
Nephrologist

A medical doctor who treats patients with **kidney** problems or **hypertension**.

N

Nephron

A tiny part of the **kidneys**. Each **kidney** is made up of about 1 million nephrons, which are the working units of the **kidneys**, removing wastes and extra fluids from the blood.



Nephrosis

A condition in which there is a large and abnormal leakage of protein into the **urine**.

Nocturnal Home Hemodialysis (NHD)

Hemodialysis done at night while a person sleeps.

The patient sleeps through the treatment and disconnects in the morning. The patient typically dialyzes 6 nights a week and usually for a minimum of 7 hours each night.

Nocturnal Intermittent Peritoneal Dialysis (NIPD)

A type of **dialysis** where the patient generally dialyzes at home and uses an automated **peritoneal** cyclor for delivering **dialysis** exchanges. NIPD differs from **CCPD** in that the patient does not perform any exchanges during the day.

Non-Insulin Dependent Diabetes Mellitus (NIDDM)

Diabetes mellitus that does not require the use of **insulin** injections; it may be controlled by diet and medications. (See **Type II Diabetes Mellitus**)

Nuclear Scan of the Kidneys

A test of the structure, blood flow, and function of the **kidneys**. The doctor injects a solution into an arm **vein** and uses a radiation detector to monitor its progress through the **kidneys**.

N

Nutritionist
See *Dietitian*.

O

Occlude

Obstructed or blocked flow in a blood vessel, **graft**, or **catheter**.

Occupational Therapist

A person trained to help patients to improve the use of fine motor skills. (i.e., finger and hand movement).

Organ Donation

The act of giving one's organs to someone else.

Organ Procurement

The process of acquiring donor organs such as **kidneys** in the **ESRD** program. **UNOS** directs the collection and placement of donor kidneys.

Organ Procurement Organizations (OPO)

An organization that coordinates activities related to **organ procurement**. OPO activities include: evaluating potential donors, discussing donation with surviving family members, arranging for the surgical removal and transport of donated organs, and educating the public about the need for donations.

Osmosis

Passing of fluid through a **semipermeable membrane** from a solution with a low **solute** concentration to a solution with a higher **solute** concentration until there is an equal concentration of fluid on both sides of the **membrane**.

Osteodystrophy

Bone disease.



P

Palpate

To examine by touching.

Parathyroid Glands

Glands producing parathyroid hormone which regulates *calcium* metabolism.

Parathyroidectomy

The procedure of surgically removing the *parathyroid glands*.

Patent

Unblocked flow of blood in a blood vessel, *graft*, or *catheter*.

Patient Care Technician (PCT)

See *dialysis technician*.

Perfusion Machine

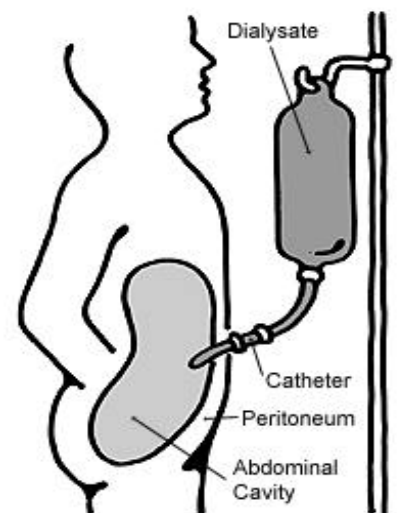
A machine that keeps a donor *kidney* in the best possible condition outside the body until such time as it can be *transplanted* into a recipient.

Peritoneal Cavity

The space inside the abdomen but outside the internal organs.

Peritoneal Dialysis

A treatment for *kidney* failure in which *dialysate* is put into the *peritoneal cavity*. The *dialysate* causes waste and excess water to be drawn across the peritoneal membrane into the cavity. When the process is complete, the fluid is drained off and replaced.



P

Peritoneum

The *membrane* lining the *peritoneal cavity*.

Peritonitis

Infection in the *peritoneal cavity* usually treated with antibiotics.

Phosphate Binders

Phosphate binders help to pass excess phosphate out of the body in the stool, reducing the amount of phosphate that gets into the blood. These medicines "bind" the phosphate in the digestive tract by combining with it to form a compound that isn't absorbed into the blood.

Phosphorus

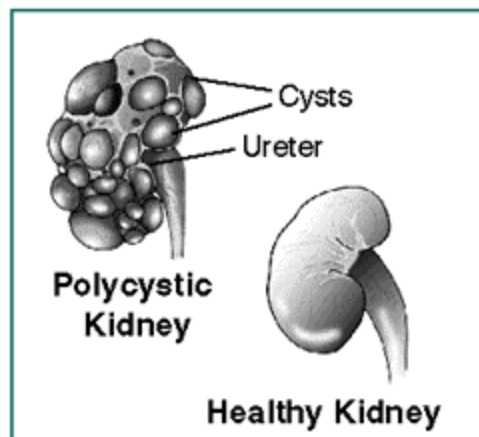
A mineral necessary for bone strength. A combination of too much phosphorus and too little *calcium* causes weak, brittle bones.

Polycystic Kidney Disease

An inherited disorder characterized by many grape-like clusters of fluid-filled cysts that make both *kidneys* larger over time. These cysts take over and destroy working *kidney* tissue.

Potassium

An essential chemical salt in the body that regulates heart and muscle movement. High or low levels in the blood may cause muscle weakness and cause the heart to stop.



P

Priming

Filling and rinsing the **bloodlines** and the **dialyzer** with a solution of **saline**.

Proteinuria

The presence of protein in the **urine**. This indicates that the **kidneys** are not working properly.

Pyelonephritis

An infectious swelling of the tissue of the **kidneys**, which at the onset may not interfere with **kidney** function, but if left untreated, may lead to **kidney** failure.



Q

QB

See *Blood Flow Rate*.

QD

See *Dialysate Flow Rate*

R

Rehabilitation

A return to stable health, a positive outlook, and enjoyable activities that make people feel better physically and mentally. A successful **rehabilitation** program uses medical treatment, counseling, education, diet, and exercise.

Rejection

When the body does not accept a **transplanted organ**.

Renal

Having to do with, or referring to, the **kidneys**.

Renin

A hormone produced by the **kidney** which helps regulate the volume of fluid in the body and **blood pressure**.

Reuse

The process of cleaning and sterilizing **dialyzers** to use again. Strict reuse regulations have been established by the Federal Government to insure patient safety and quality of treatment. A **dialyzer** is reused only by the same patient.

Reuse Technician

An individual who performs the procedures necessary to clean and properly prepare **dialyzers** to be used again.

Rinseback

The process of using **saline** to flush the patient's blood back into the body from the dialysis tubing after **dialysis**.



S

Saline

A salt solution containing **sodium** and chloride.

Self-dialysis

Dialysis performed with little or no staff assistance (except in emergency situations) by an **ESRD** patient who has completed an appropriate course of training.

Semipermeable Membrane

A material through which only certain particles may pass, and to which other particles cannot pass.

Staff-assisted dialysis

Dialysis performed by the staff of the renal **dialysis** center or facility.

Sepsis

An infection in the blood caused by **bacteria**.

Shunt

Another word for **fistula** or **graft**.

Sodium

One of the major chemical salts of the body. Found and taken into the body most commonly as table salt. When excess amounts cannot be excreted from the body by the **kidneys**, **edema** and **high blood pressure** may result. The intake of this salt must be controlled by diet in patients with most types of **renal** failure.



S

Sodium Modeling

Sodium modeling means to adjust the concentration of **sodium** in the **dialysate** to fit the individual patient, according to the doctors orders. Sodium modeling may make the **dialysis** treatment more comfortable by reducing some symptoms such as cramping. It may also reduce drops in the **blood pressure**.

Solute

A substance dissolved in another substance (i.e., salt water).

Steal Syndrome

Occurs when a **fistula** or **graft** "steals" too much blood away from the distal (farthest from center of body) part of the arm, usually the hand.

Stenosis

The narrowing (getting smaller) of a blood vessel which can lead to clotting of the vessel.

Sterile

Being completely free from all germs.

Subclavian/Subclavian Vein

Means "beneath the clavicle." The clavicle is the collarbone, a bone in the shoulder. The subclavian **vein** is the large **vein** behind the collarbone which is sometimes used for **hemodialysis**.

Subclavian Catheter

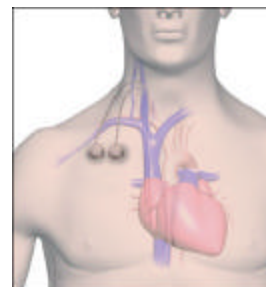
A catheter placed in the **subclavian vein**.



S

Subcutaneous Vascular Access (LifeSite®)

A small metallic device or devices placed under the skin, usually in the upper chest area, to deliver **hemodialysis**. These devices are connected to two hollow, flexible **catheters** that are in turn connected to large **veins** in the central venous system. The entire system is completely under the skin.



Suture

The material used to surgically close a wound or join tissues.

Systolic

The top **blood pressure** number which measures the force of contraction of the heart muscle as blood is pumped out of the heart chambers.

T

Target Weight

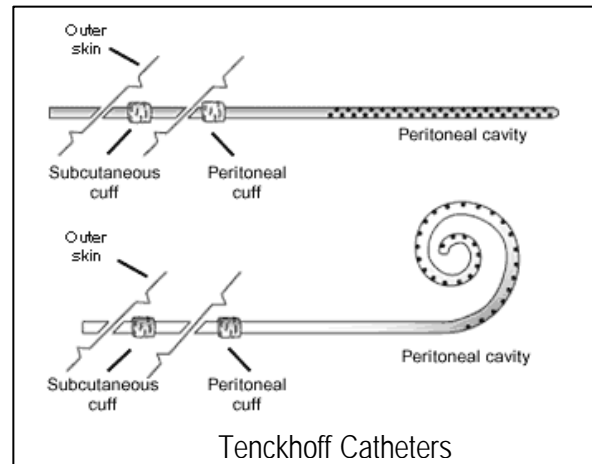
See *Dry Weight*.

Tenckhoff catheter

A type of *catheter* used in *peritoneal dialysis*.

Thrill

The buzzing sensation that can be felt by touching a *fistula* or *graft*. This indicates that the *access* is working.



Thrombus

A clot formed in a blood vessel.

Tissue Typing

A laboratory test done on your blood to find the degree of matching between a potential donated *kidney* and the patient waiting for *transplant*.

Toxins

Waste products that accumulate in the blood of *ESRD* patients that are usually harmful to the body.

Transfer Set

The section of tubing attached immediately to a *peritoneal catheter*.

T

Transient Patients

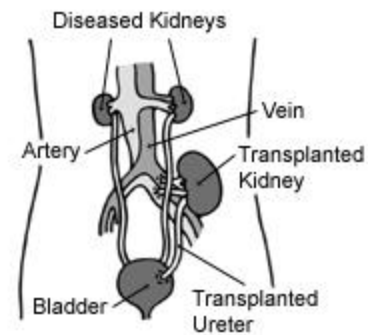
Patients receiving treatments at a facility and who are not a part of a facility's regular caseload (i.e. traveling patients).

Transplant

The replacement of a diseased organ with a healthy one.

Transplant Coordinator

The nurse who works with the *transplant surgeon* and the *dialysis* team to coordinate testing before *transplant* and to coordinate the patient's care after *transplant*.



Transplant Surgeon

The doctor responsible for placing the *transplanted kidney*.

Trendelenburg position

A body position in which the head is placed at 45 degrees with the legs up (feet above the head). This position helps when a person has *hypotension*.

Tunneled Cuffed Catheter

A *dialysis catheter* that is inserted into a blood vessel through a tunnel created under the patient's skin. Inside the tunnel tract, surrounding tissue grows into an attached cuff to help stabilize the *catheter* and provide a physical barrier to *bacteria*.

Twenty-Four Hour Urine Collection

The volume of the total amount of a person's *urine* for a 24-hour period.

T

Type I Diabetes Mellitus

This type of *diabetes*, usually occurs at a young age and results from a lack of *insulin* production by the body and requires insulin therapy.

Type II Diabetes Mellitus

Non-*Insulin* dependent *diabetes*. Usually occurring in adults. See *Non-Insulin Dependent Diabetes*.

U

Ultrafiltration

The process of removing excess water from the blood during *dialysis*.

Ultrasound

A technique that bounces safe, painless sound waves off of organs to create an image of their structure.



United Network for Organ Sharing (UNOS)

A nonprofit charitable organization that maintains the nation's organ *transplant* waiting list under contract with the Health Resources and Services Administration of the U.S. Department of Health and Human Services.

United States Renal Data System (USRDS)

A national data system which collects, analyzes, and distributes information about *End Stage Renal Disease (ESRD)* in the United States. The USRDS is funded directly by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) in conjunction with the *Centers for Medicare & Medicaid Services (CMS)*.

Urea

A waste product found in the blood and caused by the normal breakdown of protein in the body. *Urea* is normally removed from the blood by the *kidneys* and then excreted in the *urine*.

Uremia or Uremic Syndrome

Changes in the body caused by the build-up of waste products in the blood when the *kidneys* fail to function.

Ureter

One of the two tubes that carry *urine* from the *kidney* to the *bladder*.



U

Urethra

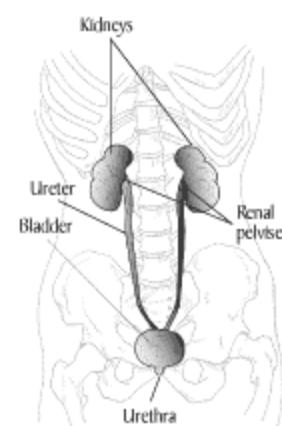
The tube that carries **urine** from the **bladder** to the outside of the body.

Urinalysis

A test of a **urine** sample that can reveal many problems of the urinary system and other body systems.

Urinary Tract

The system that takes wastes from the blood and carries them out of the body in the form of **urine**. The urinary tract includes the **kidneys**, renal pelvises, **ureters**, **bladder**, and **urethra**.



Urinate

To release **urine** from the **bladder** to the outside.

Urine

Liquid waste product filtered from the blood by the **kidneys**, stored in the **bladder**, and expelled from the body through the **urethra** by the act of voiding or **urinating**.

Urologist

A surgical doctor that treats diseases of the **urinary tract** and urogenital system.

URR (Urea Reduction Ratio)

A blood test that compares the amount of **blood urea nitrogen (BUN)** before and after **dialysis** to measure the effectiveness of the **dialysis** prescription.

V

Vascular Access

See *Access*.

Vasculitis

Inflammation of the blood vessel walls.

Vein

A blood vessel that carries blood toward the heart.

Venous Line

The tube carrying the blood back into the body from the artificial *kidney* machine.

Vital Signs

Blood pressure, temperature, pulse, and respiratory rate.

Vocational Rehabilitation (VR)

The process of facilitating an individual in the choice of, or return to, a suitable vocation. When necessary, assisting the patient to obtain training for such a vocation. Vocational rehabilitation can also mean preparing an individual regardless of age, or physical condition to cope emotionally, psychologically, and physically with changing circumstances in life, including remaining at school, work, or a work equivalent (homemaker).

Void

To *urinate* or empty the *bladder*.

