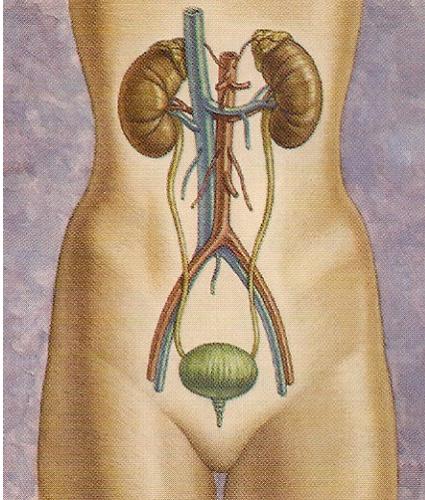


## BODY SYSTEM 6

## URINARY



The transports system for fluid waste, called urine, is comprised of two kidneys with adrenals, each with ureters connecting to the bladder, which is connected to the urethra (longer in men, shorter in women), leading to the outside of the body. The kidneys are responsible for filtering blood and pH balancing all body fluids, regulating fluid consistency volume, and pressure, and removing toxins and body fluid excesses.

Kidneys primarily regulate blood volume using fluid salts, called electrolytical minerals and water excretion. An imbalance of these factors will result in high blood pressure, a kidney condition, and adrenal imbalance will cause low blood pressure.

Every minute one-fourth of the blood in the body enters the kidneys, which is composed of about 2 million *nephrons*, acting as microscopic filters. These govern nutrient absorption and toxin elimination from the blood, especially the removal of uric acid.

All nutrients are delivered to each body system through blood fluids and the kidneys determine if and how all bacteria, virus, and fungus travel throughout the body. Kidneys and Adrenals become overworked if the liver is unable to detoxify food particle nutrients and will show stress by manifesting acidic conditions as rashes, acne, toxemia (especially during pregnancy), gout, arthritis, headaches, and nausea.

The hormone producing aspect of kidneys is the adrenals, a co-gland which sits like a hat on top of the kidneys. Adrenals make hormones such as *adrenalin*, which provides physical strength and endurance, *rennin*, which governs blood pressure, *erythroprotein*, which stimulates red blood cell production, and *prostaglandin*, which dilates blood vessels causing pressure changes and also helps the urine-making process.

Prostaglandin, not limited to just kidneys, serves the purpose elsewhere in causing muscles to contract or relax, collecting abnormal fluid, and causing fevers and pain sensation in inflamed areas.

The bladder is a holding sac for urine located in the pelvis. Made up of three layers the bladder consists of involuntary muscles that expand, contract and empty. When empty the bladder is the size of a prune, and when full it can expand to hold from a pint up to 1/2 gallon of urine, which then sends a signal to the brain telling you to urinate.

Urine is sterile and is made-up of 96% water and 4% urea, salt, sugar, proteins, fats, vitamins,

and bile pigments. Coloring is ideally clear with a slight yellow tinge, which changes with hydration levels, dietary intake, and levels of health. Urine has an ammonia-like odor that results primarily from the nitrogen wastes it contains, resulting in healthier individuals having clearer and less odorous urine than one who is detoxifying or is suffering from toxicity and ill health.

Two of the main factors in kidney/urinary health are water and minerals. Consuming a majority of juices, coffee, sodas, teas, and sports drinks rather than water stresses kidney function. Imbibing in enriched, refined and processed foods depletes minerals and causes imbalances in blood acids, electrolytes, and pressure. Kidneys are designed to use a balance of major and trace minerals, such as the perfect ratio found in Real Salt™, to excrete excess potassium and store sodium, which is used to make digestive biles and a host of other products for systems functions. Inorganic sodium, found in table salt, processed and convenience foods, and most preserved foods is a major contributor to acid excess, high blood pressure, and organ damage due to bacterial invasion.

This delicate chemical balancing act and elimination system can be kept highly effective and functional, and damages can be repaired with the assistance of herbs and fresh whole foods:

#### Kidneys/Adrenals

**Herbs:** Sarsaparilla, Relations-Yumeni, Kidenys/Adrenals, B-Complex/Potassium, Hawthorn Berry, Nettles-Iron & Calcium, and Chard-Zinc

**Foods:** papaya, Real Salt™, and avocados

#### Bladder

**Herbs:** Kava-Kava, Grass-C, Peppermint, and Red Raspberry Leaf

**Foods:** Roma tomato, pineapple, and extra virgin olive oil