

Naturopath in Owen Sound

Naturopath in Owen Sound - The body's organ called the kidney has numerous functions and plays an essential role in the urinary system. The functions of the kidney includes the maintaining of the acid-base balance, helping to serve the homeostatic functions of electrolyte regulation and maintaining the salt and water balance that helps in the regulation of the blood pressure. The kidneys serve the body by getting rid of wastes and rerouting them to the urinary bladder. The kidneys act essentially as a natural filter of the blood.

The kidney would help to excrete wastes when producing urine. These wastes can consist of urea and ammonium from the body. In addition, kidney's are responsible for reabsorbing amino acids, glucose and water. The kidneys produce various hormones as well such as: erythropoietin, calcitriol and the enzyme called rennin.

The kidneys can be located at the back of the abdominal cavity within the retro peritoneum. The blood comes into the kidneys from the paired renal arteries and flow out into the paired renal veins. Each kidney then excretes urine into a ureter. This is a tube-like paired structure which releases into the urinary bladder.

Nephrology is the medical field concerned with kidney diseases. Renal physiology describes the study of kidney function. People with kidney disease often show characteristic clinical features such as chronic kidney disease, renal cysts, nephritic and nephritic syndromes, urinary tract obstruction, acute kidney injury and nephrolithiasis.

There are even different kidney cancers which exist. Renal cell carcinoma is the most common adult renal cancer. Numerous renal conditions, cysts and cancer can be managed with removal of the kidney, also known as nephrectomy. Kidney dialysis and kidney transplantation are some treatment options when renal function, which is measured by glomerular filtration rate is persistently poor.

Kidney stones can be a pain and a nuisance even if they are not really harmful. A sound wave treatment can break up the stones into smaller pieces so they can be passed through the urinary tract. Sharp pain within the lateral and median portions of the lower back is amongst the main signs.

Renal Physiology

The kidney is an essential feature of homeostasis within the body. It is responsible for regulating electrolyte concentrations, acid-base balances, blood pressure regulation and extracellular fluid volume. The kidney works both along with different organs and alone in order to achieve these essential jobs. The kidneys work closely together with the endocrine system and numerous endocrine hormones coordinate these functions like: angiotensin II, aldosterone, rennin and others.

Nearly all of the functions that the kidney carries out is accomplished by rather simple mechanisms of filtration, secretion and reabsorption, that takes place in the nephron of the kidney. Filtration would typically occur in the renal corpuscle. This is the method wherein big cells and proteins are filtered from the blood to make an ultra-filtrate. This particular substance ultimately becomes urine. The kidney produces approximately 180 litres of filtrate on a daily basis. They reabsorb a large percentage of the filtrate and generate approximately just 2 litres of urine a day. Reabsorption is the word for the transportation of molecules from this ultra-filtrate into the blood. Conversely, secretion is the reverse method, wherein molecules are transported in the opposite direction, from the blood into the urine.

Waste Excretion

The kidneys are responsible for emitting a lot of wastes from the body that are produced by metabolism. These nitrogenous wastes consist of urea from protein catabolism and uric acid from nucleic acid metabolism.