Naturopath in Kitchener

Naturopath in Kitchener - The organ of the body known as the kidney has various functions and plays an essential part in the urinary system. The functions of the kidney consists of the maintaining of the acid-base balance, helping to serve the homeostatic functions of electrolyte regulation and maintaining the salt and water balance which helps in the regulation of the blood pressure. The kidneys serve the body by eliminating wastes and diverting them to the urinary bladder. The kidneys act essentially as a natural filter of the blood.

The kidney will help to release wastes when producing urine. These wastes can comprise ammonium and urea from the body. Moreover, kidney's are responsible for reabsorbing water, amino acids and glucose. The kidneys produce different hormones also like for example: erythropoietin, calcitriol and the enzyme rennin.

The kidneys are located within the retro peritoneum at the rear of the abdominal cavity. The kidneys receive blood from the paired renal arteries and drain into the paired renal veins. Each kidney then emits urine into a ureter. This is a tube-like paired structure that empties into the urinary bladder.

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

There are even various cancers of the kidney which exist. Renal cell carcinoma is the most common adult renal cancer. Lots of renal conditions, cysts and cancer can be managed with removal of the kidney, also referred to as nephrectomy. Kidney transplantation and kidney dialysis are some treatment alternatives when renal function, that is measured by glomerular filtration rate is always poor.

Kidney stones can be a nuisance and a pain though they are not severely 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 medial and lateral segments of the lower back is one of the main signs.

Renal Physiology

In the body, the kidney is important part of homeostasis. Their responsibilities include the regulation of electrolyte concentrations, balancing acids-bases, regulation of the volume of extracellular fluid and blood pressure regulation. The kidney works both together with other organs and alone to be able to do these vital jobs. The kidneys work directly along with the endocrine system and numerous endocrine hormones coordinate these functions including: rennin, angiotensis II, aldosterone and others.

A huge variety of the kidney's functions are accomplished by the relatively basic mechanisms of reabsorption, filtration and secretion. These functions take place within the kidney nephron. Filtration mostly takes place at the renal corpuscle. This is the method wherein large cells and proteins are filtered from the blood to make an ultra-filtrate. This particular substance ultimately becomes urine. The kidney produces about 180 litres of filtrate eachday. They reabsorb a large percentage of the filtrate and generate approximately only 2 litres of urine on a daily basis. Reabsorption is the word for the transportation of molecules from this ultra-filtrate into the blood. Conversely, secretion is the reverse process, in which molecules are transported in the opposite direction, from the blood into the urine.

Excretion of Wastes
The wastes which are generated by the metabolism are then excreted by the kidneys. The nitrogenous wastes can consist of uric acid from the metabolization of nucleic acid and urea, which is catablized from protein.