

The Liver “ THE MASTER ORGAN”

Weighing about four pounds, the liver is the largest gland of the body and the only internal organ that will regenerate itself if part of it is damaged. Up to 75 percent of the liver can be removed in patients without any underlying liver disease--- 60 percent can be removed. It takes four to six weeks for the liver to grow back to its original size. If cared for properly, it will function more than adequately for decades.

Alcohol is one of the toxins that the liver doesn't handle as well as others. The liver cannot regenerate after being severely damaged by alcohol. The liver has many functions, perhaps the most important of which is the secretion of bile. This fluid is stored in the gallbladder and released as needed for digestion. Bile is necessary for the digestion of fats; it breaks fat down into small globules. Bile also assists in the absorption of the fat soluble vitamins (A, D, E and K) and helps to assimilate calcium. In addition, bile converts beta-carotene into vitamins A. It promotes intestinal peristalsis as well, which helps prevent constipation.

After nutrients have been absorbed into the bloodstream through the intestinal wall, they are transported by way of the hepatic portal system to the liver. In the liver, nutrients such as iron and vitamins A, B12 and D are extracted from the bloodstream and stored for use. These stored substances are utilized for everyday activities and in times of physical stress. The liver plays an important role in fat metabolism; in the synthesis of fatty acids from amino acids and sugars; in the production of lipoproteins, cholesterol and phospholipids; and in the oxidation of fat to produce energy. **Meaning the Liver plays a very important role and the weightgain and weightloss procedure !**

The liver creates a substance called glucose tolerance factor (GTF) from chromium and glutathione. GTF acts with insulin to regulate blood sugar levels. Sugars not required for immediate energy production are converted into glycogen in the liver; the glycogen is stored in the liver and the muscles, and is converted back into sugar when needed for energy. **Excess food is converted to fat in the liver, and the fat is then transported to the fatty tissues of the body for storage.**

In addition to its important functions in digestion and energy production, the liver act as a detoxifier. Protein digestion and bacterial fermentation of food in the intestines produce ammonia as a by-product; this ammonia is detoxified by the liver. The liver combines toxic substances (including metabolic waste products, insecticide residues, drugs, alcohol and other harmful chemicals) with substances that are less toxic. These substances are then excreted via the kidneys and bowels. Thus, in order for the liver to function properly, you must also have proper kidney and bowel function.

Finally, the liver is responsible for regulating thyroid function by converting thyroxine (T4), a thyroid hormone, into its more active form, triiodothyronine (T3). Inadequate conversion of T4 into T3 by the liver may lead to hypothyroidism.

The liver also breaks down hormones like adrenaline, aldosterone, estrogen and insulin after they have performed their needed functions.

A healthy Liver can be controlled with proper diet and weight management.

Visit : www.romanofoundation.com or give us a call at 622-7550 or 221-0687 . Nutritional Specialist can help you understand how your diet should be.
