



Most people know that the liver acts as a filter and can be badly damaged by too much drinking of alcohol. Other than that they have little knowledge of the importance of the many thousands of vital functions it performs 24 hours each day.

The liver is about the size of a football is the largest solid organ in the body. The liver plays a vital role in regulating life processes. Its primary functions are to refine and detoxify everything you eat, breathe, and absorb through your skin. It is your body's internal chemical power plant, converting nutrients in the food you eat into muscles, energy, hormones, clotting factors, immune factors, etc. It stores certain vitamins, minerals and sugars, regulates fat stores and controls the production and excretion of cholesterol. The bile, produced by liver cells, helps you to digest your food and absorb important nutrients. It neutralizes and destroys poisonous substances and metabolizes alcohol. It helps you resist infection and removes bacteria from the blood stream, helping you to stay healthy. Storing iron is another task it performs.

In essence your liver serves as your engine, pantry, refinery, food processor, garbage disposal and "guardian angel". Your liver is your silent partner, your internal chemical power plant, and a *non-complaining organ*. Unfortunately, it doesn't usually let you know it is in trouble until the damage is far advanced. It needs your help to keep it healthy.

One of the most remarkable accomplishments of this miraculous organ is its ability to regenerate. Three quarters of the liver can be removed and it will grow back in the same shape and form within a few weeks. However, overworking your liver can cause liver cells, the employees in your power plant, to become permanently damaged or scarred called cirrhosis. Alcohol, drugs and even some prescribed and over the counter drugs such as acetaminophen, as well as viruses, environmental pollutants and some metabolic disorders can cause liver cell damage. Liver specialists suggest that more than two drinks a day for men and one drink a day for women may even be too much for some people. Medicine should never be taken with alcoholic beverages. Remember all drugs are made up of chemicals and could be potentially hazardous to your precious liver cells.

Fumes from paint thinners bug sprays, and other aerosol sprays are picked up by the tiny blood vessels in your lungs and carried to your liver where they are detoxified and discharged in your bile. The amount and concentration of those chemicals should be controlled to prevent liver damage. Make certain you have good ventilation, use a mask, cover your skin and wash off any chemicals you get on your skin with soap and water as soon as possible.

**Hepatitis A (HAV)** There are safe and effective vaccines for hepatitis A that can be given as early as one year of age. If you eat raw shellfish frequently you should consider being vaccinated. If you work in a health care facility or day-care center you may be at risk. Children who attend day-care centers are also at risk. Food handlers, travelers to developing countries and young people living in dorms or in close contact with others should consider being vaccinated. There also is a risk of contracting hepatitis A through anal/oral contact as the virus is found in feces. Good hygiene, washing hands with soap and water after using the toilet or changing soiled diapers are essential. Individuals who have hepatitis C or any chronic liver disease should be vaccinated for hepatitis A.

**Hepatitis B (HBV)** can cause severe liver damage and even death. Found in blood and body fluids, HBV is easily spread through unprotected sex with an infected partner. Safe and effective vaccines can prevent hepatitis B. Currently the Centers for Disease Control and Prevention recommend that all newborns and everyone up to the age of 18 years and all adults at risk of infection be vaccinated. If you have more than one sex partner within a six-month period or engage in high-risk behaviors including unprotected sex or use of IV needles, you should be vaccinated. Everyone who handles blood or blood products in their daily activities or has a chronic liver disease should be vaccinated.

**Hepatitis C (HCV)** poses a more difficult problem as there is no vaccine available. HCV is transmitted through blood to blood contact. Body piercing, tattooing and sharing razor blades, nail files, scissors, clippers or toothbrushes, needles to inject drugs, and straws used to snort cocaine with an infected person can result in the transmission of HCV and HBV. Hepatitis C transmission through sexual contact is low unless there is blood present either through anal sex or during the menstrual cycle in females.

To care for your liver means; eating a good healthy diet, exercising, getting lots of fresh air, and avoiding alcohol and drugs that can cause liver damage. Your liver has to depend on you to take care of it . . . so it can take care of you.