It is vitally important that patients with liver disease maintain a balanced diet, one which ensures adequate calories, carbohydrates, fats and proteins. Such a diet will aid the liver in the regeneration of liver cells. Nutrition that supports this regeneration is a means of treatment of some liver disorders.

Patients with cirrhosis, for example, who are malnourished, require a diet rich in protein and providing enough calories per day to help the liver re-build itself.
When are specific diet restrictions required?

Beyond the maintenance of a good, well-balanced diet, several conditions that develop in the later stages of cirrhosis require specific dietary management.

**Hepatic Encephalopathy**

Hepatic encephalopathy is a condition of impaired mental function due to altered liver function. It is often seen when scar tissue formation (cirrhosis) in the liver prevents the normal flow of blood through the liver. Hepatic encephalopathy is diagnosed with a neurological exam. Its onset may be gradual or sudden. Other symptoms may include movement problems, changes in mood, or changes in personality. You may be given medicines to help reduce the amount of ammonia and other toxins that your body absorbs. Do not drink alcohol as it can worsen your condition. Eat low-protein and low-sodium foods.

**Ascites and Edema**

Ascites is the accumulation of fluid in the abdominal cavity. Edema is fluid built up in the tissues, usually the feet, legs, back. Most affected patients will require strict fluid restriction. Sodium intake is often restricted for patients with cirrhosis to avoid retention of fluids in the body. Such a diet would allow only 2 grams of sodium and would exclude canned soups and vegetables, cold cut meats, condiments such as mayonnaise and ketchup, dairy products, cheese and ice cream. Most fresh foods are low in sodium. The best salt substitute is lemon juice (which is salt free).

**Cholestasis**

Cholestasis is an inability of the liver to excrete bile. This may result in fat malabsorption due to inadequate amounts of bile which dissolve fat in the intestines which may go unnoticed by the patient or can be associated with weight loss due to lost calories. Stools may be foul smelling and float. Fat supplements are available; the most commonly used being medium chain triglycerides (MCT oil) and safflower oil which are absorbable with less dependence upon bile. They may be used as a caloric supplement. MCT oil is used like any other cooking oil, in salad dressings or in cooking. Patients may also have difficulty absorbing fat soluble vitamins. However, water soluble vitamins are absorbed normally. Supplementing the diet with fat soluble vitamins is possible, though it should only be carried out under the guidance of a physician.

**Wilson Disease**

Wilson Disease is a defect in copper metabolism. Patients affected by this disorder have an abnormal build-up of copper in the body due to the inability of the liver to excrete it. This inability allows the copper to accumulate in several organs: first the liver and then, usually the brain and the cornea of the eye. Treatment involves the use of a copper chelating agent, which removes the excess copper from the body. Dietary therapy for this disease includes the avoidance of copper-containing foods like chocolate, nuts, shellfish and mushrooms.

**Hemochromatosis**

Hemochromatosis is a disease in which there is an inappropriate absorption of iron from the intestine. The excessive iron then accumulates in the liver, pancreas, heart and other organs in the body. Patients with this disease should avoid iron supplements, vitamin c and alcohol. Aside from this precaution, those with hemochromatosis may follow a normal diet. Treatment is achieved by frequent removal of blood.

**Fatty Liver**

Fatty liver is related to poor nutrition, alcohol, obesity, starvation, some drugs and other factors, even thin people can have fatty liver disease. The fructose molecule (in sugar and high fructose corn syrup) is a chronic toxin to the liver (similar to alcohol) promoting fatty liver. It is not caused by eating fats and it should be treated with a well-balanced diet or the removal of the responsible chemical substance or drug.

Finally, patients with liver disease should be wary of supplements to the diet, particularly fad foods or packaged “nutritional” aids. Such foods can contain a lot of salt, potassium or inappropriate protein mixtures. Those that are safe should be taken only under a physician’s guidance.