



# Nutrition In Viral Hepatitis

VIRAL HEPATITIS

## ► Avoiding High-Iron Foods and Iron Supplements

Hepatitis C progression occurs in patients as a result of accelerated hepatic iron uptake and the oxidative stress caused by iron-catalyzed free radical production. Along with phlebotomy, a low-iron diet helps in reduction of the risk of hepatocellular carcinoma (HCC) in these patients.

## ► Nutritional Supplementation May Be Required

Treatment with interferon (IFN) can cause digestive complaints with a subsequent lack of appetite and has been reported to result in weight loss in 11-29% of treated patients.

## ► A Low-Fat, Low-Cholesterol Diet May Be Helpful

Chronic hepatitis C (CHC) infection increases the risk of hepatic steatosis. A higher intake of dietary cholesterol contributes to this problem and is associated with the progression of hepatitis C-related liver disease. Individuals who consume low-fat (23% of calories) and low-cholesterol (185 mg/d) regimen experience a reduction in elevated-liver enzymes and improvement in immunological abnormalities known to contribute to liver inflammation in patients with CHC.

## ► Adequate vitamin D level

Vitamin D deficiency is common in patients with chronic liver disease, and these patients may have a reduced ability to convert vitamin D to its active form. There is an inverse relationship between vitamin D concentrations and viral load in patients with CHC.



Vitamin D deficiency significantly reduces the risk of sustained virological response to pegylated interferon and ribavirin; though, vitamin D supplementation improves the responsibility to the treatment.

## ► Avoidance of Extreme B12 Level

Adequate B12 level helps in the clearance of hepatitis C virus (HCV) from the circulation of infected patients. However, overly high serum B12 levels may also increase viral replication; therefore, the level of HCV-RNA is increased.

## ► Coffee Consumption And Chronic Hepatitis C

Coffee consumption may be helpful by, reducing oxidative DNA damage, increasing death of virus-infected cells, stabilizing chromosomes and reducing fibrosis. Moderate daily unsweetened coffee is a reasonable adjunctive therapy for NAFLD patients.



## Viral Hepatitis

### ▶ Viral Hepatitis ◀

Viral hepatitis is an infection that causes liver inflammation and damage. Inflammation can damage organs. Researchers have discovered several different viruses that cause hepatitis, including hepatitis A, B, C, D and E.

### ▶ Signs And Symptoms ◀

The effects of hepatitis A, B and C are similar.

You might have:

- ▶ Loss of appetite
  - ▶ Nausea
- ▶ Abdominal discomfort
  - ▶ Hematuria
  - ▶ Acholic stool
  - ▶ Jaundice

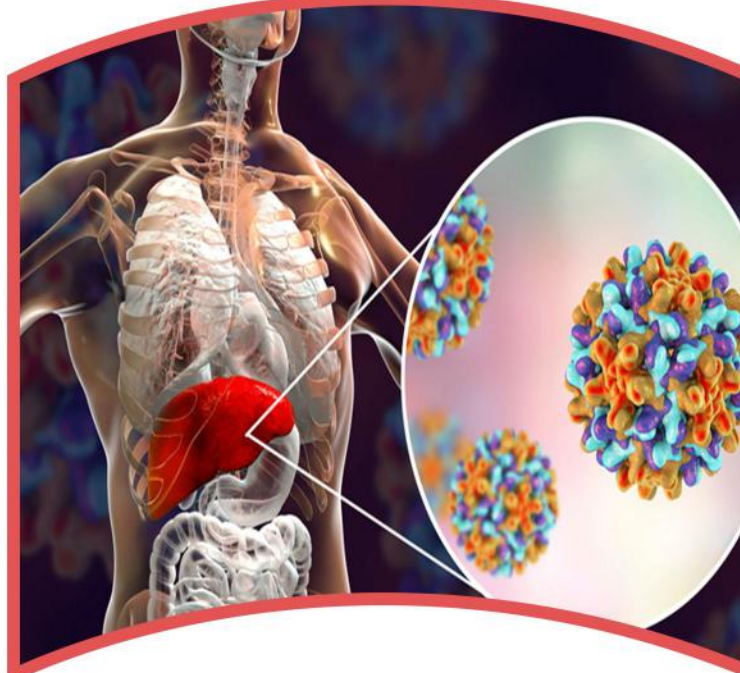
If you have chronic hepatitis C, it could lead to cirrhosis (scarring of the liver).

### ▶ Nutritional Consideration ◀

For prevention and treatment of viral hepatitis:

#### ▶ Hygiene and sanitation.

Persons who travel internationally are at higher risk of hepatitis A virus (HAV) through the consumption or handling of contaminated uncooked fruits and vegetables.



### ▶ Avoiding contaminated shellfish and game meat

Most acute HAV infections are due to contaminated shellfish consumption. Shellfish are often taken from wastewater-polluted areas of the sea and can concentrate the microbial pathogens in seawater. Hepatitis E virus (HEV) has been identified in contaminated shellfish, as well as animal meat, particularly wild game and contaminated pork.

Boiling or cooking food and water for  $\geq 1$  minute to  $85^{\circ}\text{C}$  ( $185^{\circ}\text{F}$ ) is necessary to inactivate HAV.