

AHCC & Liver Health

The latest application of Japan's leading bionutraceutical compound may help those with liver problems.

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The liver has a wider array of functions than any other organ, including detoxifying the blood, metabolizing carbohydrates and lipids, synthesizing protein and secreting bile. With influence on numerous critical body functions, damage to the liver can have dire health consequences and can even be fatal. Unfortunately, liver disease is surprisingly common, affecting approximately 10% of Americans. Every year, thousands die of hepatitis C, liver cancer, cirrhosis and other chronic liver diseases. Accordingly, any treatment that can positively affect liver function in those with liver disease is of great interest to the scientific community.

Developed in Japan in the late 1980s, Active Hexose Correlated Compound (AHCC) is an alphaglucan-rich extract obtained from a hybridization of several subspecies of mushroom mycelia. Evidence from *in vitro* research, case studies and human clinical trials suggests that AHCC acts as a biological response modifier that may protect the liver from damage, reduces the viral load of hepatitis patients and prolong the survival of patients with liver cancer – offering promise to those struggling with liver health problems.

LIVER PROTECTION

The liver is susceptible to our toxic modern world's numerous chemical assaults. For example, alcohol is a powerful, liver-damaging toxin and fast food has been associated with liver disease. Many pharmaceuticals, particularly with long-term use, have also been found to damage the liver. Prevention of chemically-induced liver injury is relevant to much of our population. Research has shown the pronounced ability of AHCC to protect against chemically-induced liver injury. In one study, animals treated with chemotherapy experienced large increases in liver enzymes (a key indicator of liver damage) while those treated with chemotherapy plus AHCC maintained normal levels. In other studies, rats pre-treated with AHCC were spared from liver damage and showed improved survival rates when administered liver-toxic chemicals and lethal substances.

VIRAL LOAD REDUCTION

Hepatitis C is a serious liver disease characterized by inflammation and scarring (fibrosis) of the liver. Left untreated, this chronic viral infection can lead to cirrhosis and liver cancer. Typically, hepatitis C patients have elevated levels of liver enzymes as well as high viral loads. Many practitioners, particularly in Asia, have successfully used AHCC on hepatitis C patients for more than a decade. At a dosage of 3-6 grams per day, marked reductions in liver enzyme levels and massive drops in the viral loads of hepatitis C patients have

been observed. Numerous cases have shown hepatitis C patients experienced over an 80% drop in their viral loads after six months of AHCC supplementation.

Some patients were even able to reach the normal viral load range after seven to twelve months of AHCC use. While controlled studies are required, these case reports illustrate the significant effect that AHCC might have on the viral loads of hepatitis C patients.



PROLONGED SURVIVAL

Because liver cancer is difficult to diagnose and treat, prognosis is poor: the overall five-year relative liver cancer survival rate is only 9%. Therefore, the goal of treatment is often simply to improve quality of life. Some studies have suggested that AHCC might help to prolong survival and improve quality of life in liver cancer patients. In a landmark AHCC trial published in 2002 in the *Journal of Hepatology*, about half of the 269 enrolled liver cancer patients took AHCC post-surgery, while the other half did not. After ten years, only 34.5% of the AHCC patients experienced a cancer recurrence, compared with 66.1% of the control group. Similarly, while 46.8% of patients in the control group had died after ten years, less than half that amount, 20.4% of the AHCC group had. Following that trial's results, AHCC was researched in 44 patients with liver cancer in a two-year prospective cohort study and was found to be associated with prolonged survival and improved quality of life when compared to placebo. ^{Rx}