

DR. ZAHID SIDDIQUE (M.D., F.C.P.S)

CONSULTANT PHYSICIAN HEPATOLOGY UNIT  
NISHTAR HOSPITAL MULTAN

Alcohol is both used and abused throughout the world by a third of humanity. Certain facts about alcohol use are alarming like its association with liver cirrhosis, hepatocellular carcinoma and alcoholic hepatitis. Alcohol itself, while technically a poison, is not however the main perpetrator of biochemical harm. It is alcohol's first metabolite, Acetaldehyde which causes most of the damage.

When we consume alcohol it is absorbed from the intestines and reaches the blood stream. It is then passed through the liver where it is detoxified by a process of oxidation. In the process of detoxification, it is first converted into Acetaldehyde and then to acetate. Acetaldehyde although produced transiently, causes liver damage, hangover effects and even liver cancer.

Normally Liver cells can detoxify Acetaldehyde to certain limit and alcohol use beyond that limit causes more damage. This is the reason when alcohol is binged, a significant amount of acetaldehyde is formed which destroys liver cells causing alcoholic hepatitis or progressive damage to the cells (thus putting a person at the risk of liver cancer). One thing becomes clear that if we have to protect our liver from the damaging effects of Acetaldehyde, we have to reduce its exposure to the liver cells.

### **How we can avoid dangerous effects of acetaldehyde by reducing its exposure to the liver cells**

The only way to handle Acetaldehyde related liver damage is either through abstention or to remove this dangerous metabolite from the body as early as possible. A lot of research has been done in this direction; a recently introduced supplement Alcotox has been found extremely beneficial as documented in a recent scientific study conducted by Select Pharma Labs in Scotland.

The novel approach about this supplement is that it scavenges Acetaldehyde immediately and reduces exposure of this dangerous metabolite to the liver. As a consultant hepatologist, the results of trials on the safety and efficacy of Alcotox are very encouraging indeed in the preventative treatment of reducing liver damage and even hangover effects of alcohol, which are also closely linked to Acetaldehyde poisoning.