Guzzelle 甘新乐

Liver Tonic
Improve Liver Detoxification & Alcohol Metabolism
Liver disease

**Alcoholic hepatitis**
About 10% to 20% of patients with alcoholic hepatitis develop cirrhosis each year.

**Fatty liver**
Fatty liver is found in 75% of obese people.

**Liver injuries**
130 million Chinese are suffering from liver injuries.
Factors Causing Liver Disease

- Over-eating
- Smoking
- Drinking
- Overstress
- Liver overloaded due 24-hour society

- Overweight
- High Cholesterol
- Blood Pressure

- Toxin Overdose
When you drink an alcoholic beverage, one-third of the liquid goes into your stomach and the other two-thirds ends up in your small intestine. The alcohol itself is absorbed into your blood from there.

Your kidneys filter some alcohol out, but the remainder is sent to your liver. Here, the alcohol is metabolized, or broken down, into a chemical called acetaldehyde, which is toxic. Your body knows it’s bad for you, so the acetaldehyde is burned as instead of fat like usual.

Drink too much, and two things happen: the fat that should be used by the body gets stored in your liver, and excess acetaldehyde damages liver cells. Too much fat in the liver causes fatty liver disease. Symptoms include abdominal pain, fatigue, and weight loss. Fatty liver disease cannot be cured. Symptoms can last an entire lifetime.
Ingredients

- **Tripeptide**
  - Glu-Cys-Gly

- **Two tetrapeptides**
  - Val-Thr-Pro-Tyr, 479Da
  - Val-Leu-Leu-Tyr, 507 Da

- **Hexapeptide**
  - Val-Gly-Thr-Val-Glu-Met, 635 Da

- These active oligopeptides can participate in the redox reaction in vivo and the transport of amino acids into cells, and promote clearing free radicals, maintaining the normal function of liver cells, and promoting bile acid metabolism.
- The glutathione also decomposes the acetaldehyde, an intermediate generated from alcohol metabolism, thereby reducing its damage to the liver, and work with other remaining peptides on detoxification and antioxidant.
Suitable for: People with Alcoholic Liver Issues

Active Ingredient: Sea Cucumber

1) Protect liver cell activity - Effectively inhibit the activity of aspartate aminotransferase AST and alanine aminotransferase ALT, reduce hepatocyte swelling, reduce lipid droplets, and exert significant liver protection effect.

2) Antioxidant - Improve liver total antioxidant capacity (T-AOC) by increasing the content and expression of Glutathione (GSH-PX) and superoxide dismutase (SOD) in hepatocytes to reduce the content of malondialdehyde (MDA) in liver tissue.

3) Anti-inflammatory - effectively inhibiting alcoholic hepatitis. It reduces the expression of Toll-like receptors 4 (TLR4) and Myeloid differentiation primary response 88 (Myd88), inhibits the amplification of inflammatory signals, and also increases the level of NF-kappa-B inhibitor alpha (IκBα), and then form the NF-κB/IκBα compound with the nuclear factor NF-κB.

4) Increase alcohol metabolism – Help you sober up by activating the activities of liver alcohol dehydrogenase (ADH) and aldehyde dehydrogenase (ALDH).

5) Promote liver detoxification- Promote the metabolism of toxins in the liver, enhance its detoxification and hormone inactivation, and reduce the damage of toxic substances on tissue cells.
Features

Produced from high-quality raw materials, with cutting-edge technology

Hand-picked deep sea sea cucumbers, pure natural high quality raw materials.

Natural functional food

No components of any Western medicine or hormone;
Help rehydrate, easy and safe to take, digest and absorb, no antigenicity.

Fermentation culture mixed with yeast

The active polypeptides are converted to an organic active polypeptide similar to its original biological activity, further enhancing the absorption mechanism and increasing the biological potency.
Alcohol is converted into acetaldehyde, which then is converted to acetic acid, and finally into carbon dioxide and water through the effect of enzymes and glucose.

Different people have different content of enzymes. Lack of enzymes will lead to hangover.

Ethanol metabolism: factors influencing alcohol catabolism are rate of alcohol absorption, concentration and activity of liver ADH and aldehyde dehydrogenase (ALDH).

Alcohol is converted to acetaldehyde by ADH, with cofactor NAD+. Aldehyde is responsible for harmful effects and addictive process; high blood aldehyde found in alcoholics and relatives after alcohol consumption—either increased ADH activity or depressed ALDH activity in people susceptible to alcohol dependence.

Acetaldehyde is converted by ALDH to acetate, with little entering Krebs cycle; most is converted to long-chain fatty acids, leading to fatty liver.
Mechanism: Prevent Hangover, by increasing alcohol metabolism

Guzelle accelerates the decomposition of ethanol to acetaldehyde by stimulating alcohol dehydrogenase (ADH). At the same time, it also stimulates aldehyde dehydrogenase (ALDH) and accelerates the decomposition of acetaldehyde into acetic acid, which decompose into water and carbon dioxide in tricarboxylic acid cycle.

It also increases the content of GSH (reduced glutathione) and SOD (superoxide dismutase) in hepatocytes, thereby reducing oxidative damage. Based on such mechanism, it effectively reduces the physical harm of alcohol to drinkers.
Quickly start alcohol dehydrogenase, acetaldehyde dehydrogenase activity, accelerate alcohol decomposition, effectively reduce alcohol damage to the liver, prevent alcohol from liver damage, and prevent alcoholic liver disease.
Mechanism: Sober Up by increasing alcohol metabolism

**Glutathione (GSH)**

- Improve GSH in hepatocytes. GSH can combine with peroxides and free radicals to reduce the disruption of sulfhydryl groups from oxidants and protect thiol-containing proteins in cell membranes.
- GSH is abundant in the liver. It activates and protects a variety of enzymes.

**Superoxide dismutase (SOD)**

- Superoxide Dismutase (SOD) catalyzes the reduction of superoxide anions to hydrogen peroxide. It plays a critical role in the defense of cells against the toxic effects of oxygen radicals.
Mechanism: Liver Protection

Protect liver cellular activity - effectively inhibit the activity of aspartate aminotransferase AST and alanine aminotransferase ALT, reduce hepatocyte swelling, reduce lipid droplets, and exert significant liver protection effect.
Antioxidant- Guzelle can reduce the content of malondialdehyde (MDA) in liver tissue by significantly increasing the content and expression of reduced glutathione (GSH-PX) and superoxide dismutase (SOD) in hepatocytes, thereby, it improves the total antioxidant capacity of the liver (T-AOC), stabilizes the liver cell membrane, maintain its integrity, improve the function of hepatocytes, lower enzyme, and avoid re-emergence of abnormal enzyme.

It can promote the ultrastructural recovery of hepatocytes, promote the division and proliferation of normal hepatocytes, and improve the ability of hepatocytes to synthesize RNA and protein.

We can conclude Guzelle is the protector of your normal liver cells and facilitator to the recovery of your damaged hepatocyte membrane, and promoter of the metabolic function of the liver.
Mechanism: Antioxidant

Guzelle can improve the antioxidant capacity of liver tissue, reduce concentration of lipopolysaccharide (LPS) and inhibit the expression of cytochrome P4502E1 (CYP2E1), reduce free radicals generation, and thus reduce liver damage caused by oxidative stress.
Anti-inflammatory - Reduces the expression of Toll-like receptor 4 (TLR4) and myeloid differentiation protein 88 (Myd88), inhibits the amplification of inflammatory signals, and also increases the level of nuclear factor κB inhibitor α (IκBα), and subsequently activates nuclear factor kappa B (NF-κB) binds to form the NF-κB/IκBα complex, thereby effectively inhibiting alcoholic hepatitis.
Target audience: People with alcoholic liver disease

Active ingredients: Sea cucumber peptide

1) Protecting liver cell activity - Effectively inhibits the activity of aspartate aminotransferase and alanine aminotransferase, reduces hepatocyte swelling, reduces lipid droplets, and exhibits significant liver protection.

2) Antioxidant - Reduces the content of malondialdehyde (MDA) in liver tissue by significantly increasing the content and expression of reduced glutathione (GSH-PX) and superoxide dismutase (SOD) in hepatocytes, thereby improving the total antioxidant capacity of the liver (T-AOC).
Target audience: People with alcoholic liver disease

Active ingredients: Sea cucumber peptide

3) Anti-inflammatory - Reduces the expression of Toll-like receptor 4 (TLR4) and myeloid differentiation protein 88 (Myd88), inhibits the amplification of inflammatory signals, and also increases the level of nuclear factor κB inhibitor α (IκBα), and subsequently activates nuclear factor kappa B (NF-κB) binds to form the NF-κB/IκBα complex, thereby effectively inhibiting alcoholic hepatitis.

4) Improve alcohol metabolism - By activating the activities of liver alcohol dehydrogenase (ADH) and aldehyde dehydrogenase (ALDH), significant hangover reduction is achieved.

5) Supports liver detoxification system - Promote toxin metabolism in the liver, enhance its detoxification and hormone deactivation system, and reduce damage to tissue cells by toxins.
Invention Patent: Sea Cucumber Extract

➢ Patent name: An extract for improving liver detoxification, alcohol hangover liver protection and its preparation method thereof

➢ Patent number: 201811052276.9