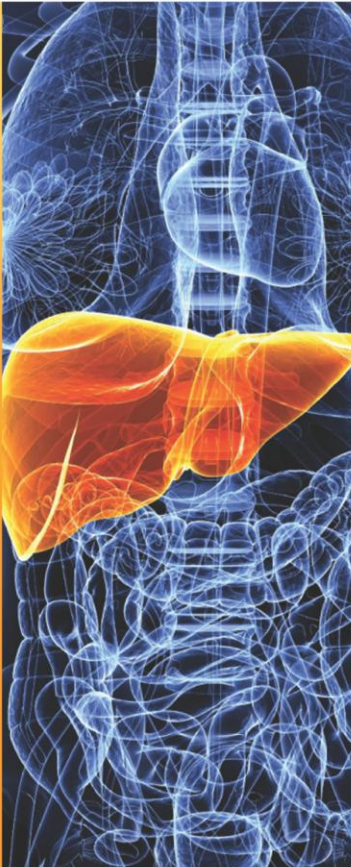




# ORIENS

# STRONG LIV



**HERBAL SUPPORT  
TO THE LIVER**



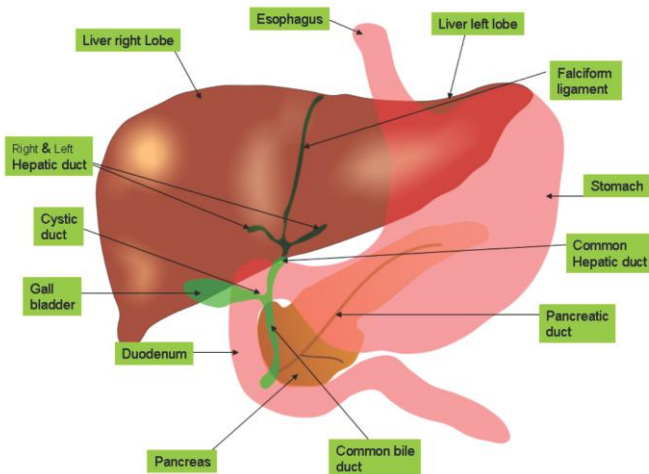
## INTRODUCTION

The liver is the most hard-working organ in the human body. It performs many functions that are vital to life. It plays an important role in digestion (breaking nutrients down) and assimilation (building up body tissues). It is the storage site for many essential vitamins and minerals, such as iron, copper, B<sub>12</sub>, vitamins A, D, E and K. Red blood cells, which are responsible for carrying oxygen around the body, are also produced in the liver and Kupffer cells help to devour harmful micro-organisms in the blood so helping to fight infection.



The liver is one of the most important organs in the body when it comes to detoxifying or getting free of foreign substances or toxins, especially from the gut. The liver plays a key role in most metabolic processes, especially detoxification. The liver detoxifies harmful substances by a complex series of chemical reactions. The role of these various enzyme activities in the liver is to convert *fat soluble* toxins into *water soluble* substances that can be excreted in the urine or the bile depending on the particular characteristics of the end product.

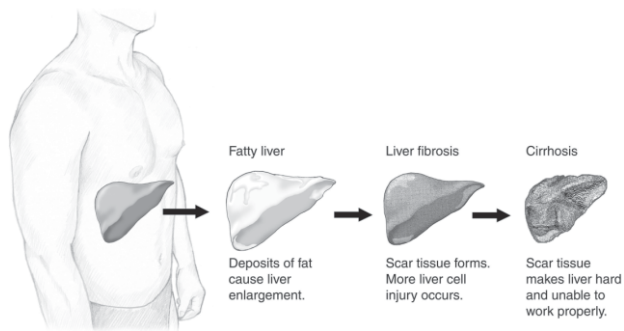
Many of the toxic chemicals that enter the body are fat-soluble, which means they dissolve only in fatty or oily solutions and not in water. This makes them difficult for the body to excrete. Fat soluble chemicals have a high affinity for fat tissues and cell membranes, which are composed of fatty acids and proteins. In these fatty tissues of the body, toxins may be stored for years, being released during times of exercise, stress or fasting. During the release of these toxins, several symptoms such as headaches, poor memory, stomach pain, nausea, fatigue, dizziness and palpitations can occur.



The major percentage of blood being filtered by the liver is from the portal vein, which carries blood from the intestines. The liver can remove a broad spectrum of microorganisms such as bacteria, fungi, viruses and parasites from the blood, which is desirable, as we certainly do not want these building up in the blood and invading deeper parts of the body. Infections and parasites often come from the contaminated water supplies found in large cities, and indeed other dangerous organisms may find their way into your gut and blood stream from these sources.

## LIVER DISEASES

Cirrhosis has various causes. In the United States, heavy alcohol consumption and chronic hepatitis C have been the most common causes of cirrhosis. Obesity is becoming a common cause of cirrhosis, either as the sole cause or in combination with alcohol, hepatitis C, or both. Many people with cirrhosis have more than one cause of liver damage.



Cirrhosis is not caused by trauma to the liver or other acute, or short-term, causes of damage. Usually years of chronic injury are required to cause cirrhosis.

### Alcohol-related liver disease

Most people who consume alcohol do not suffer damage to the liver. But heavy alcohol use over several years can cause chronic injury to the liver. The amount of alcohol it takes to damage the liver varies greatly from person to person. For women, consuming two to three drinks—including beer and wine per day and for men, three to four drinks per day, can lead to liver damage and cirrhosis.

In the past, alcohol-related cirrhosis led to more deaths than cirrhosis due to any other cause. Deaths caused by obesity-related cirrhosis are increasing.

## Chronic hepatitis C

The hepatitis C virus is a liver infection that is spread by contact with an infected person's blood. Chronic hepatitis C causes inflammation and damage to the liver over time that can lead to cirrhosis.

## Chronic hepatitis B and D

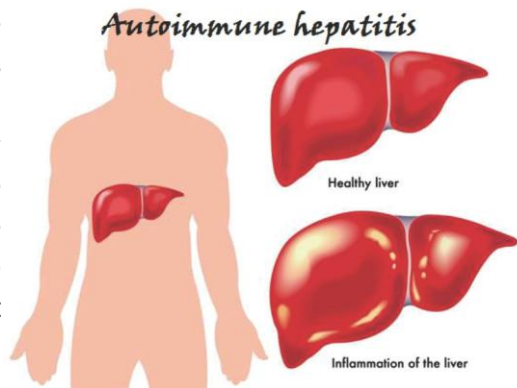
The hepatitis B virus is a liver infection that is spread by contact with an infected person's blood, semen, or other body fluid. Hepatitis B, like hepatitis C, causes liver inflammation and injury that can lead to cirrhosis. The hepatitis B vaccine is given to all infants and many adults to prevent the virus. Hepatitis D is another virus that infects the liver and can lead to cirrhosis, but it occurs only in people who already have hepatitis B.

## Nonalcoholic fatty liver disease (NAFLD)

In NAFLD, fat builds up in the liver and eventually causes cirrhosis. This increasingly common liver disease is associated with obesity, diabetes, protein malnutrition, coronary artery disease, and corticosteroid medications.

## Autoimmune hepatitis

This form of hepatitis is caused by the body's immune system attacking liver cells and causing inflammation, damage, and eventually cirrhosis. Researchers believe genetic factors may make some people more prone to autoimmune diseases. About 70 percent of those with autoimmune hepatitis are female.



## Drugs, toxins, and infections

Other causes of cirrhosis include drug reactions, prolonged exposure to toxic chemicals, parasitic infections, and repeated bouts of heart failure with liver congestion.

It Compile with anti-allergic and anti-inflammatory properties which strengthen the liver cells. Oriens Strong Liv is perfect blend of organic herbs to support the liver function and maintain the liver health. Silymarin and picroliv are added which has been proved to supply herbal nutrient for health liver.



## Why do we need liver protection?

Daily life overloads the liver leading to poor health and disease





## SILYMARINE (MILK THISTLE)

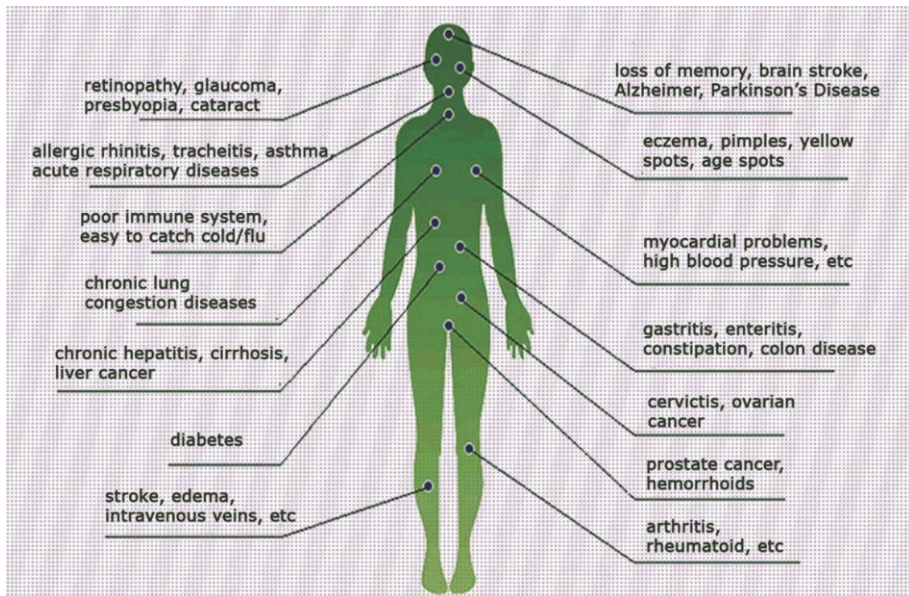
Silymarin, a flavonolignan from the seeds of 'milk thistle' (*Silybum marianum*), has been widely used from ancient times because of its excellent hepatoprotective action. It is a mixture of mainly three flavonolignans, viz, silybin, silidianin, and silychristine, with silybin being the most active. Silymarin has been used medicinally to treat liver disorders, including acute and chronic viral hepatitis, toxin/drug-induced hepatitis, and cirrhosis and alcoholic liver diseases. It has also been reported to be effective in certain cancers.

Its mechanism of action includes inhibition of hepatotoxin binding to receptor sites on the hepatocyte membrane; reduction of glutathione oxidation to enhance its level in the liver and intestine; antioxidant activity; and stimulation of ribosomal RNA polymerase and subsequent protein synthesis, leading to enhanced hepatocyte regeneration.



## MECHANISM OF ACTION OF SILYMARIN

The mechanism of action of silymarin involves: altering the membranes of hepatic cells to inhibit passage of toxins; increasing cellular regeneration by stimulating protein synthesis; antioxidant activity including the inhibition of inflammatory enzymes. Silymarin counteracts the toxic effects of a wide variety of poisons, including alcohol, carbon tetrachloride, acetaminophen overdose, and the Deathcap mushroom (*Amanita phalloides*).

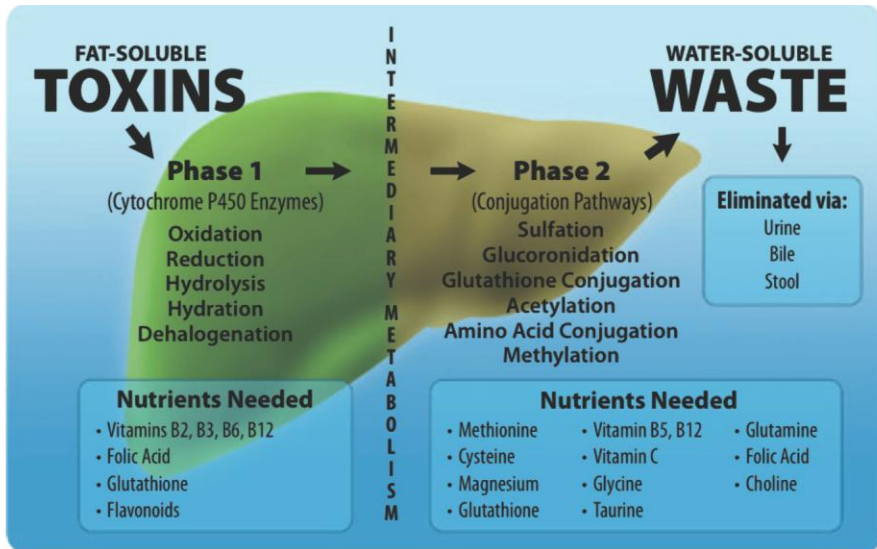


Recent research further indicates that silymarin protects against glutathione (an antioxidant) depletion in liver cells. Silymarin (milk thistle) are believed to protect liver cells in several different ways.



## THE LIVER DETOX PATHWAYS AND ESSENTIAL NUTRIENTS

### DETOXIFICATION PATHWAYS



#### Strong antioxidant

Silymarin has antioxidant properties. Antioxidants are thought to prevent or lessen damage to body cells that is caused by a chemical process called oxidation.

Silymarin scavenges free radicals and leukotrienes, silymarin shows very strong properties of antioxidant, reduce the chance of liver cells damage by free radicals, protect liver cell membrane, owes anti-radiation functions and could be used to inhibiting peritonitis.

Effects of silymarin help keep liver cells from swelling in response to injury. Silymarin seems to encourage the liver to grow new cells, while discouraging the formation of inactive fibrous tissue.

By changing outside layer of liver cells, silymarin may also keep caertain h armful chemicals from getting into liver cells. Milk thistle may also cause the immune system to be more active.

## Prevent liver damage

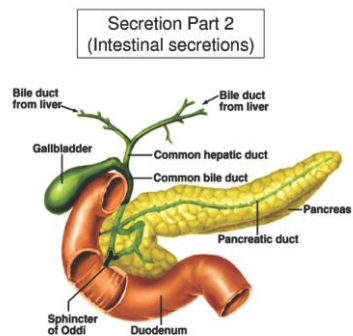
Silymarin especially could be applied to reduce the damage of liver from over dose of alcohol drink. For the silymarin can shape a membrane and prevent poison things, silymarin especially certain detoxifying function for some disease caused by poison.

## Manage liver disease:

Silymarin owes functions to strengthen and restore functions of liver. By prompt and stimulate the synthesis of protein, silymarin can prompt cell of liver recover and restore, stimulate new cell growth. as for functions above, silymarin show good functions to protect and stabilize liver cells, can be used to treat for hepatitis, hepatocirrhosis, hepatomegaly and other liver disease, hepatitis patients recover sooner after silymarin taken.

## Adjust the bile secretion

Silymarin can adjust the bile secretion, since help the lipid and fat metabolism, tonify the five organs including stomach, spleen, gallbladder, kidney and liver.



- 1) Pancreatic secretions
- 2) Biliary secretions
- 3) Mucosal secretions

## Detoxifying

Silymarin can be used to detoxifying the poison for liver from certain prescription medicine.

## Helps in C-hepatitis

Silymarin show good improvement for patients of C-hepatitis, as for these properties, Silymarin could be used especially to treatment of patients without good result from common prescription medicines.

## Supports chronic hepatitis

Silymarin can be good remedy for the patients of chronic hepatitis, if the Liver Index high long terms, result to lower the liver cell damage and protect liver from cancerous cells.

## PICROLIV

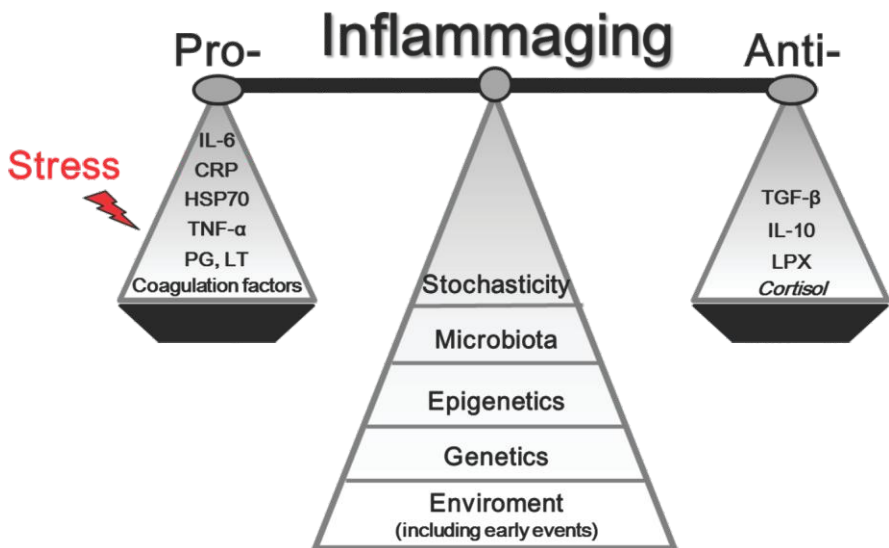
The bitter rhizomes of picrorhiza have been used for thousands of years in India to treat people with indigestion. It is also used to treat people with constipation due to insufficient digestive secretion and for fever due to all manner of infections.



## ACTIVE CONSTITUENTS

The major constituents in picrorrhiza are the glycosides picroside I, kutkoside, androsin and apocynin. They have been shown in animal studies to be anti-allergic, to inhibit platelet-activating factor (an important pro-inflammatory molecule), and to decrease joint inflammation.

According to test tube and animal studies, picrorrhiza has antioxidant actions, particularly in the liver. Picroliv (a commercial mixture containing picroside I and kutkoside) has been shown to have an immune-stimulating effect in hamsters, helping to prevent infections. Human studies on this plant are not prolific. A series of cases of acute viral **hepatitis** in India were reportedly treated successfully by a combination of picrorrhiza with a variety of minerals.



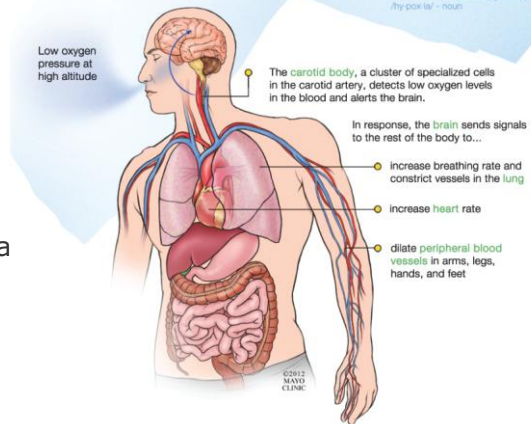
Two preliminary trials suggest that picrorhiza may improve breathing in asthma patients and reduce the severity of asthma.

## Other Reported Uses

Allergies  
Asthma  
Antioxidant  
Hypoxia  
Anti-Inflammatory  
Increases Cellular Oxygena  
Vitiligo  
Immune Enhancing

## Effects of Hypoxia

(hi-pok 'se-ah)  
... a condition in which the body as a whole or a region of the body is deprived of adequate oxygen supply.  
(hy-pok'ee-ah)



Picroliv also inhibited the lipid per-oxidation and nitric oxide release that occurred after hemorrhage-resuscitation (H/R) and altered the activity of glutathione reductase in a favorable manner, thereby suggesting better antioxidant status.

Picroliv significantly down-regulated the stress-sensitive transcription factor AP1 and decreased the level of c-fos mRNA as well as c-jun and c-fos proteins in liver tissue, indicating that its actions could be mediated through AP1 and associated signal transduction pathways. These findings suggest that picroliv has the potential to be developed as a protective agent against H/R injury.



Picoliv primarily effects hepatocyte ionic transport, mitochondrial electron transport chain reaction and finally disposal of free radicals. Picroliv is reported to have preventive as well as prophylactic activity against various hepatotoxic models. Picroliv can prevent and preserve liver histology given before, simultaneously or after liver intoxication. This study for the first time ever report effectiveness of picroliv pretreatment on liver metabolizing enzyme integrity.

Picroliv, an iridoid glycoside derived from the plant *Picrorhiza kurroa*, is used traditionally to treat fever, asthma, hepatitis, and other inflammatory conditions.

## BIOPIPERINE

Biopiperine is an alkaloid that is found in spikes on the plant called peppercorns. Biopiperine enhances the absorption of nutrient into the body through thermo-genesis process. It helps to absorb 90% of the supplied nutrient into the body. The nutrient is also found in high concentration in the skin of the pepper berries. Biopiperine is also found in black pepper and similar plants. The pepper nigrum plant is known for its wide green leaves. You can get biopiperine from the oleoresin in peppercorns. For chemical and medical purposes, it is made in the laboratory, even though in nature, it can be found with about 98 percent purity.

The amount of biopiperine varies from 1-2% in long pepper, to 5-9% in the white and the black peppers of commerce. Further, it may be prepared by treating the solvent-free residue from an alcoholic extract of black pepper, with a solution of sodium hydroxide to remove resin (said to contain chavicine, an isomer of biopiperine) and solution of the washed, insoluble residue in warm alcohol, from which the alkaloid crystallizes on cooling.



## How biopiperine increases the bioavailability of many substances

Biopiperine has the remarkable ability to manipulate all four of these mechanisms. It inhibits a number of enzymes responsible for metabolizing drugs and nutritional substances; it stimulates the activity of amino-acid transporters in the intestinal lining; it inhibits p-glycoprotein, the 'pump' protein that removes substances from cells; and it decreases the intestinal production of glucuronic acid, thereby permitting more of the substances to enter the body in active form.

Consequently, some of these substances are able to reach, enter, and remain within their target cells for longer periods of time than would otherwise be the case. Of course, this can be a mixed blessing — if one is using a drug for which the therapeutic level is not substantially lower than the toxic level, biopiperine supplementation might raise the bioavailability of the drug until its intracellular concentration exceeds the toxic threshold.

On the other hand, biopiperine supplementation can sometimes turn a marginally effective therapeutic substance into a highly effective one simply by increasing its bioavailability and intracellular residency time. A good example of this latter phenomenon is the use of biopiperine to increase the bioavailability of curcumin, a supplement with broad activity against cancers, inflammation and infections. A 20 mg dose of biopiperine can increase curcumin's bioavailability twentyfold.

## Benefits of biopiperine

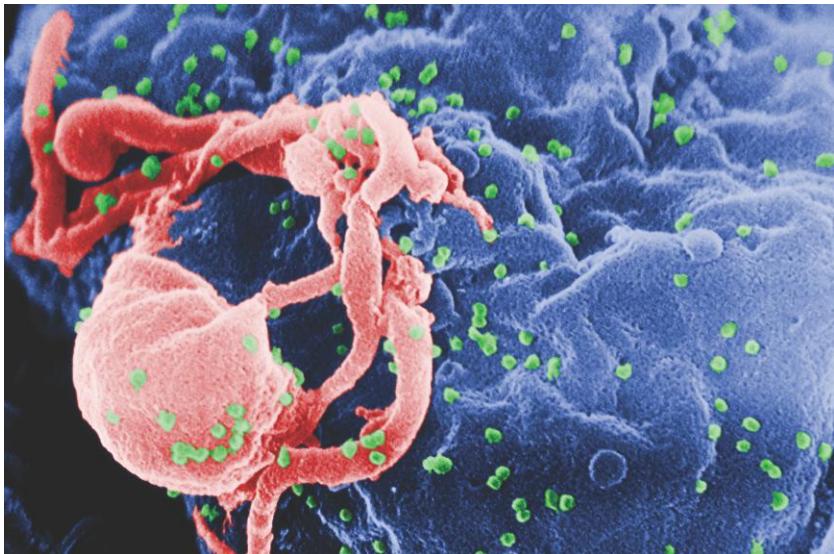
Aside from its effects on bioavailability, biopiperine has a number of other actions in the body. (It is suspected, but not proven, that some of these actions result from biopiperine's effects on the bioavailability of other substances.) These actions include:

- ★ Relieving asthma symptoms
- ★ Increasing the brain's production of beta-endorphins
- ★ Pain relief
- ★ Increasing the brain's production of serotonin
- ★ Anticonvulsant, anti-epileptic action
- ★ Increasing the adrenal glands' production of epinephrine (adrenaline)
- ★ Altering contractions in the upper and lower digestive tract
- ★ Reducing the stomach's production of acid (for about 1 hour)
- ★ Decreasing ulceration of the stomach
- ★ Increasing the pancreas's production of digestive enzymes (amylase, lipase, trypsin and chymotrypsin)
- ★ Stimulating production of melanin
- ★ Reducing inflammation due to irritation or allergy

## Biopiperine and HIV

As mentioned above, the cells in some tissues have 'pump' proteins that expel substances from cells. One such protein is p-glycoprotein (Pgp) which is active in the intestines, where it prevents substances from being absorbed into the blood. Pgp is active against many drugs, among them most or all of the HIV protease inhibitors currently in use. Pgp activity in the intestines lowers the bioavailability of the protease inhibitors, and Pgp activity in other tissues lowers the effectiveness of the drug molecules that do manage to enter the body because it decreases the residence time of the drugs in the cells where they are needed.

Logic says that the effectiveness of HIV protease inhibitors would be increased if they were used in combination with inhibitors of Pgp. Indeed, this concept is supported by experiments with various Pgp inhibitors. In fact, Pgp inhibition has been shown to reduce HIV viral replication. Biopiperine itself has not been studied, but there is no reason to think that it would not behave similarly.



Certain other HIV drugs can cause an increase in the body's production of P-glycoprotein, even though they are not themselves transported by Pgp. Nevirapine, for example, induces the production of Pgp which in turn interferes with the action of other drugs, such as the protease inhibitors. Here again, a Pgp inhibitor seems to be

## CONCLUSION

Oriens Strong Liv is natural herbal extract which detoxify the liver in natural way. It is a combination of Silymarin and Picroliv which has been proved to supply nutrients for the liver cells and also enhances the functioning of the liver. It not only nourishes but also rejuvenates the cells with antioxidant.





## FREQUENTLY ASKED QUESTIONS

### **Q. Does the active components present in Oriens Strong Liv influence liver function?**

A. Yes. All the components present in Oriens Strong Liv perform detoxification mechanism in natural way and also supply nutrient to liver cells which influence liver functioning. If the liver is functioning well then of course the functioning of 500 vital organs will be systemize automatically.

### **Q. Who can take Oriens Strong Liv?**

A. The person who is taking lot of junk food, alcohol addict and smokers. All the toxic gets accumulated over the lungs which finally hamper the functioning of liver and several health related problem. These all people are suggested to take Oriens Strong

### **Q. Whether Oriens Strong Liv is natural product?**

A. Yes. Oriens nutritional supplements are nutraceutical products which are purely of natural herbal source. Our wellness products are called good food supplements because the nutrients contain in it are helpful for functioning of the all the organs.





## **Oriens Global Marketing Pvt. Ltd.**

New No. 571, Old No. 327, First Floor, Kamaraj Bhavan,  
Poonamalle High Road, Aminjikarai, Chennai - 600 029

**Ph: 044 - 4203 3444 / 4900 0999**

**Web : [www.oriensworld.in](http://www.oriensworld.in)**

**E - mail : [customercare@oriensworld.in](mailto:customercare@oriensworld.in)**

**[customersupport@oriensworld.in](mailto:customersupport@oriensworld.in)**

**Webtv : [www.oriensworld.tv](http://www.oriensworld.tv)**