The Liver

What does the liver do?

Your liver's job is to make sure that your body absorbs the nutrients it needs and dumps everything else that it doesn't need! Your liver's major duties are to:

- Metabolize protein, fat and carbohydrate to provide energy and nutrients
- Store vitamins, minerals and glucose
- Filter the blood by helping to remove harmful chemicals and bacteria
- Make bile, which breaks down the fats which you eat
- Help uptake and storage of fat-soluble vitamins: A, E, D and K
- Store extra blood that can be used in times of extra need or stress
- Make serum proteins which maintain fluid balance of the blood and act as carriers
- Help maintain electrolyte and water balance of the body's fluids
- Make immune substances, such as gamma gobulin
- Break down and eliminates excess hormones, such as estrogen

Liver Stress Factors

Unfortunately, our fast-paced lives and fast food diets burden the liver with many stresses. Major liver stresses include eating fried foods, hydrogenated oils, processed food and foods with additives and preservatives (many are not declared on the label and others are disguised by misleading terms). In addition, the liver must battle environmental toxins such as lead emitted from gasoline, pesticides, herbicides, cleaning compounds, smog, and thousands of newly made chemicals every year.

Liver stress factors come from alcohol and recreational drug and many medical drugs, such as painkillers and cholesterol drugs. An ongoing stress for your liver is the excess hormones which it must break down, such as adrenalin, constantly being made by your body in response to over-active and fast-paced lives.

What can go wrong?

As your liver becomes stressed, symptoms of liver toxicity begin to occur. When the liver is not working efficiently, it gets "backed up," so to speak.

1. Digestive problems (such as burping often, bloating, intestinal gas, stomach pain)
2. Food allergies and sensitivities
3. Chemical sensitivities (such as reactions to gasoline, cleaning agents, soaps, cosmetics, etc.)
4. Rashes, various kinds of skin problems
5. Eye problems (such as blurred vision, eye pain, decreasing eyesight, eye flutters or twitches, etc.)
6. Difficulty sleeping
7. Irritability, frequent anger, depression
8. Tendon or muscle problems (such as frequent sprains/strains, muscle injuries, delayed healing)
9. Swelling of the breasts
10. Menstrual problems (such as too little or too much blood flow, blood clotting, cramps)

11. Testicular problems
12. Headaches (especially pain at the vertex of the head, and throbbing headaches).

The Liver's Energetic Pathways
According to the science of acupuncture, the liver meridian (a major energy channel of the body) flows through different parts of the body, especially influencing the eyes, digestion, tendons, muscle, and the sexual organs. The ancient theory of Oriental Medicine also describes how the liver is related to anger. Thus, if a person is easily angered, a liver cleansing program may be needed to clear the "stuck" energy of a congested liver pathway.

Cleansing the Liver
Clearing the liver bile ducts is one of the most powerful procedures that you can do to improve your body's overall health. For best results, it should be done after a basic cleansing and nutritional program have been followed for a period of time. Otherwise, a Liver Flush may be too strong and might cause too many cleansing symptoms.

Bile: The Body's Fat Emulsifier
One of the liver's main jobs is to make bile, an amazing 1 to 1 ½ quarts per day. The liver synthesizes bile and delivers it to the gallbladder through many tiny bile ducts. The gallbladder is the liver's storage reservoir for bile. When you eat fat, the stomach signals the gallbladder that fat is on the way. The gallbladder in turn contracts, sending bile into the small intestine to emulsify the fats.

Bile Sludge: From "Bad Fats"
For many people, including children, the biliary tubing is choked with gallstones due to eating the American diet, full of fried foods and hydrogenated oils. These toxic oils stagnate the bile. Chief offenders in the diet are margarine, mayonnaise, salad dressings, and even baked foods. When you eat a cracker, it doesn't seem like you are eating friend food, but in fact the oil in the cracker has been heated to a high temperature because it has been baked. Highly heated oils initiate destructive free radical cascades, stressing and clogging the liver.

Normal bile is the consistency of a light oil. When the liver is subjected to dietary stress, the bile becomes thick like honey and forms sludge. This can form small clay-like balls and stones which lodge in the liver, along the biliary tract, and in the intestines.

Because of this clogging of the bile tubing, many people develop poor digestion, chronic allergies or allergic reactions such as sinus problems or hives. Often a scan or x-ray of the gallbladder shows nothing. Sludges of old, sticky bile and gallstones are often not in the gallbladder, but lodged in the liver or in the bile tubing. Many stones may be too small or not calcified, making visibility on x-ray almost impossible. Ultrasound may sometimes detect uncalcified gallstones, but not always.

Gallstones
There are over half a dozen varieties of gallstones, most which contain cholesterol crystals. These stones can be black, red, white, green, or tan-colored. The most common is the pea-green color. As the stones grow and become more numerous, they clog the tubing, creating back pressure on the liver, causing it to make less bile. Image what would happen if your garden hose had marbles in it. Much less water would flow, which in turn, would decrease the ability of the hose to squirt out the marbles.

Bile: A Natural Parasite Killer
With gallstones, much less cholesterol leaves the body because bile flow in the small intestine is needed to precipitate excess cholesterol from the blood. As a consequence of reduced bile flow, cholesterol levels may rise, even though the person may eat a good diet. Bile is a key factor that naturally kills many pathogens, such as parasites, which commonly enter the digestive tract via food. If the bile flow weakens, the digestion becomes less efficient, paving the way for more infection.

Since gallstones are porous, they can pick up bacteria, cysts, viruses, and parasites that are passing through the liver. In this way, nests of infection can form, continuously burdening the body's defense systems. The body's immune system must fight ceaselessly to keep these harmful organisms in check. Yet the body cannot rid itself completely of the beachhead of these organisms without first purging these bile formations. Intestinal bloating and other chronic digestive problems are difficult to clear permanently without eliminating the gallstones and gallstone sludge from the liver and intestines.

Kicking Out Old Problems
The Liver/Gallbladder Flush, after it has been repeated for a period of time (typically once a week for 8 weeks) in addition to a good diet, nutritional supplement and exercise program, has helped many people dramatically improve their digestion, the keystone for good health. Many have found that years of old allergies of food, chemicals, scents, etc. have disappeared after a series of flushes.

Incredibly, after a Liver/Gallbladder Flush series, internal pathways can open, which has resulted in the elimination of many types of pain, such as shoulder, upper arm, and upper back pain. This is because many types of external body pain originate from a nerve reflex arc that can link to congested organs, in this case, the liver and gallbladder. Once the reflex is cleared, the pain can be cleared.

After an initial period of cleansing with the Liver/Gallbladder Flush, repeat it once or twice each year for continued clearance.

Liver/Gallbladder Flush
Ingredients for one drink:
½ cup organic tomato juice
2 tablespoons organic virgin olive oil (not solvent extracted)
2 capsules of allicin or ½ teaspoon grated, raw organic garlic
2 capsules (500 mg. /cap) organic turmeric (open the capsules to add to the drink)

Instructions:

1. Mix the above ingredients together in a high-speed blender to make your first drink.
2. Drink this mixture (your first drink) first thing in the morning.
3. Wait 15 minutes, then drink a second drink (make the second drink using the same ingredients above again).
4. Wait 90 minutes before eating or drinking.
5. Repeat the Liver/Gallbladder Flush once a week for 2 months.

Diet and Lifestyle support

- Vegetable fiber foods that absorb excess bile and increase regularity
- Potassium rich foods like seafood and dried fruit
- Bitter foods like artichoke, beet, endive, radish, arugula, dandelion greens, and turmeric
- Chlorophyll rich foods such as leafy greens and sea greens
- Enzyme rich foods
- Sulphur rich foods such as eggs, cruciferous veggie's, garlic, and onions
- Vegetable protein foods like sprouts and whole grains
- Drink plenty of water daily
- Green Tea
- Hot lemon water upon rising (fresh lemon)
- Adequate rest
- Massage therapy

Nutritional and Herbal supplements (just a few)

- A-F Betafood from Standard Process- This product is used to help thin the bile and promote better liver and gallbladder function. It aids in digesting fats, reduces gas, heartburn, and indigestion.
- Livaplex from Standard Process- This product is to help people who need to detoxify. It is a strong liver support along with extracts to support the kidney, and adrenals.
- Herb- Milk Thistle protects the liver, stimulates the secretion of bile, and increases glutathione.
- Herb-Dandelion "clears heat" and relieves toxicity.
- Herb- Burdock is a detoxifying herb for conditions caused by "overload" of toxins.
- Herb-Spanish Black Radish is a liver tonic activating and regenerating liver cells. It helps cleanse and purify the blood. Assists in eliminating stagnating food and toxic waste from the body.
- And many others you and your practitioner can discuss.

Compiled from various sources by Deb Sawyer 2009