

# TOWARDS A HEALTHY LIVER



## different ways to help promote the health of your liver

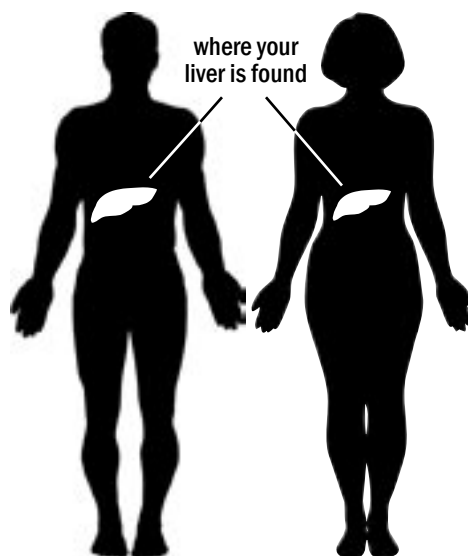
Next to your skin, your liver is the largest organ in your body. It's also one of the hardest working and can even re-grow its own tissue. It can work when a large portion of it is diseased or removed. The things that you eat, drink, breathe and take in through your skin all get filtered through your liver. It's also where your body stores vitamins, releasing them during the day as you need them. In all, your liver performs hundreds of tasks throughout a day.

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Your liver filters alcohol and toxins from your blood. It breaks down many drugs into forms that are easier for your body to use. It changes the food you eat into energy and gives out chemicals that aid your brain and central nervous system. It also helps to maintain your body heat to clot your blood.

Many substances can be toxic to your liver. Alcohol, street drugs, smoke, toxic fumes, some herbs and even some prescription and non-prescription drugs can harm your liver. Infections can harm it as well, such as hepatitis viruses and bacteria. Since the liver performs so many vital jobs, any of these tox-

ins can cause it to not work properly. This, in turn, can hurt almost all of your body's other systems.

A healthy liver is essential to a healthy life. There are many everyday things that you can do to keep your liver healthy. Not putting yourself at risk for liver diseases can help. Simple changes in your diet can go a long way in helping your liver to work well and recover from illness—especially if you have liver disease. This publication describes these and many other ways to promote a healthy liver. Other publications are also available from Project Inform. They include *Hepatitis A*, *Hepatitis B* and *Hepatitis C*.

## Your liver:

- Stores vitamins, minerals and sugars for energy
- Makes new proteins
- Helps to digest food
- Cleans the blood
- Helps your blood to clot
- Controls cholesterol and fats
- Clears alcohol and toxins
- Helps control body heat
- Maintains hormones
- Helps fight infections

Doing simple everyday things can help keep your liver healthy. You'll see over the next few pages many of these ideas to consider when taking care of your liver. Consult your doctor when starting or changing your diet, exercise routine, medicines or supplements.

## Get informed

One of the best ways to take control of your health is by educating yourself. Read up on liver disease and how to prevent it. This publication is a good starting point. Many reliable sources of information can be found on the internet. Your doctor can advise you on a liver health plan. You may want to write down your questions and take them on your next check-up.

Another way to learn about health issues is by talking to others with similar concerns. Consider joining a support group. Online "Ask the Experts" forums and bulletin boards may also help. These can be found through your doctor's office, local health care organization or internet search engine.

## Make lifestyle changes

Making changes in your diet can go a long way in helping your liver work well. Eating a healthful diet can also help the liver recover from illness, and is sometimes an important part of treatment. Check the US Food Guide Pyramid at [www.mypyramid.gov](http://www.mypyramid.gov). For more information on nutrition, see the section *Eat Well and Exercise*.



Alcohol is rather difficult for the liver to process. Some people are more sensitive to it than others. Alcohol can be an issue depending upon the amount a person drinks and over how long a period of time. Stopping or cutting back on how much and how often you drink will give your liver a chance to work better. Some experts suggest no more than two drinks a day while others suggest only one. For people with liver disease, it's recommended to not drink alcohol at all. If you take over-the-counter medicines, read the labels carefully. Many liquid cold and flu products contain alcohol and should be used with caution. As well, drinking alcohol while taking acetaminophen and other medicines can be toxic to your liver. Consult your doctor.

What we breathe into our lungs is filtered by the liver. Two ways to preserve your liver's health are to avoid smoking and to stay away from toxic fumes and liquids. It is believed that smoking cigarettes increases the risk of developing liver cancer. Fumes from everyday items like hair sprays, cleaning products like ammonia, bug sprays and paint thinners, among others, can also damage your liver and should be avoided. If you have to handle these, consider wearing a mask or gloves, covering your skin, or opening windows to air out your living spaces.

Liver damage is common in people who are injection drug users. This activity can pass viruses and bacteria from person to person which can make you sick and harm your liver. Street drugs are often impure and contain harmful chemicals that may lead to liver disease. Limiting or not using street drugs will help protect your liver. If you do use, don't share your works with others—like needles, razor blades, cookers, cotton, water or snorting straws. This also holds true for needles for taking steroids or diabetes or other meds.

Having safer sex and good personal hygiene can prevent infections that affect the liver. Use condoms and other means to prevent infections. Finding out more about your sex partner's sexual history can also help. (For more information, read Project Inform's publication, *Sex and Prevention Concerns for Positive People*.) Also, don't share personal items such as toothbrushes and other dental tools, razors, manicure tools or other items that can have blood on them—especially if your partner has contagious infections that cause liver disease.

Over time, exposure to poisons and other chemicals can cause chronic liver disease. You may want to look around your home for any signs of these chemicals. Also, if you work around them, you may be at higher risk for liver damage.

## Get a vaccine

Two of the most common infections of the liver are hepatitis A and B. Both are preventable. Your doctor can test you to see if you've been exposed to them before. If you haven't, then taking the vaccines can prevent these infections from possibly causing a good deal of harm to your liver. The hepatitis A vaccine is two simple shots while hepatitis B is three. A combined vaccine protects against both.

## Keep up with your health care

Many people don't know they have liver disease. You can get tested by your doctor to find out if your liver is working properly. Talk to your doctor if you think you have any risk factors for liver disease.

Talking to your doctor about your liver health can go a long way in keeping it healthy. Make sure you get regular check-ups and blood work done. Liver function tests will check for abnormal levels of different chemicals in your body. These will show whether your liver is working well or if there's an infection or other problem that needs to be addressed. It can be useful to keep track of your test results over time as well.

If you have chronic liver disease, like hepatitis B or C, there are specialists who can help you. These include a liver specialist called a hepatologist or a digestive system specialist called a gastroenterologist. Some primary care doctors and infectious disease specialists may also help. Depending upon your level of disease, you may also want to consider using a medical team for treatment. Seek out these sources through your health care plan or ask for referrals from your doctor or local health care organization.

Other conditions you have, like diabetes, may affect how well your liver works. Treating these other conditions properly will help your body in general and also help support your liver to work as well as it can.

## Know the symptoms and causes

Your liver can continue to do its job even when there's damage being done. So it's important to know the possible symptoms of liver disease. Report them to your doctor as soon as possible. Many cases of liver disease can be corrected if found early and treated.

Signs of liver disease may not appear in everyone. When they are present, symptoms can include fatigue, nausea, loss of appetite, stomach pain, changes in memory or behavior, and swelling and prolonged itching of the skin. More severe symptoms include yellowish coloring of the skin or eyes (*jaundice*), dark urine and changes in stool.

Inflammation in the liver, called hepatitis, upsets how well your liver works. It also refers to conditions of the

liver caused by viruses, bacteria, alcohol, legal and illegal drugs, among others. Left untreated, hepatitis can lead to liver scarring, cancer, failure, transplant and even death. For these reasons it's important to help prevent disease in the first place.

## Eat well and exercise

Eat a balanced diet with a range of fresh fruits and vegetables, lean meats, whole grains and foods with fiber. Cut down on fatty foods or foods with a high amount of sugar or salt. Excess fat, sugar and salt can stress your liver. This includes fried foods, fast food, processed cheeses and meats, and many boxed and frozen processed foods with long shelf lives. Trim fat off red meat and remove the skin from poultry. Eating smaller meals more often can aid your liver to work less.

Drink lots of fluids, including water, to flush toxins from your body. Eight glasses of water a day is recommended for most people. Also, get regular exercise and reduce stress in your life. Both of these help promote a healthy body, which in turn helps your liver do its work. Consult your doctor before starting an exercise routine.

Read the contents of the foods you buy. If possible, eat quality fruits and vegetables—whether organic or commercial. They should be washed well before using. Be careful with any food if you don't know its source. For example, some innocent looking wild mushrooms can destroy a person's liver in a matter of days.

Getting an adequate amount of protein and keeping a normal body weight is essential. Try to eat vegetables that are sources of protein. Other good sources include lean meat, fish, eggs, poultry, beans, nuts and dairy products. However, getting too much protein can stress your liver. Also, people who are overweight or have diabetes are more at risk for a serious liver disease called *non-alcoholic steatohepatitis*.

Some food can contain dangerous bacteria or viruses that harm the liver. Know the source of the food that you eat. Do not eat raw or undercooked fish or shellfish like sushi, oysters, shrimp or clams if you have a weakened immune system liver disease. Someone with an already damaged or stressed liver doesn't need to fight an additional battle.

## Medicines

Tell your doctor about all the medicines you take—both prescription and non-prescription. This includes over-the-counter meds like pain medicines or flu remedies. Make a list of them and take it in during your next check-up. Many medicines packaged on their own can also be found in other products, like cold and flu products. If you ever

wonder what's in a medicine or product, read the label or ask your doctor or pharmacist. These suggestions will help you avoid dangerous side effects and drug interactions.

Some common over-the-counter pain relievers can be hard on the liver if used too often. A number of prescription drugs, including those used to treat HIV, can also stress the liver. Acetaminophen can be very toxic to the liver. Taking it and alcohol together can cause severe liver damage. If you have liver disease, NSAIDs (*non-steroidal anti-inflammatory drugs*), like Advil (*ibuprofen*) can also be dangerous to take.

*Aspirin* should also be taken with care because it can lower a person's platelet count. People with liver disease often experience a swelling of the spleen. This can destroy platelets faster than the body can make them. Taking aspirin will add to this problem.

All *benzodiazepines* can harm the liver. These include Valium (diazepam), Restoril (temazepam) and others. They should be used with caution. Taking liver function tests will help monitor your liver health while you take these and other drugs.

### Vitamins and herbs

Tell your doctor about all of the supplements you take. You could write up a list of them or take in a bag of the product boxes or labels. Include all the vitamins, herbal teas and remedies, nutrition supplements, over-the-counter items and other products you take. Many of these can have side effects and interact with each other, and with many medicines. This could end up hurting your liver. Your doctor, pharmacist or trained nutrition expert can advise you. More information is found in Project Inform's publication, *Herbs, Supplements and HIV* or visit [www.consulterlab.com](http://www.consulterlab.com).

Some people think taking more vitamins and minerals than necessary will give them better health. However, that can be dangerous. High amounts can actually be harmful. Avoid high doses of vitamins A, D, E and K. As well, taking iron supplements may be hard on your liver. It may be wise to avoid iron-fortified foods or iron-coated cooking utensils. Also, taking vitamins, minerals or herbs probably can't correct the damage from personal habits like smoking or overeating.

Be aware of the claims that some products make. Simply because a product says it's "natural" doesn't mean it's safe for you. (Venom from a spider bite is natural but not safe.) Taking more of a product doesn't mean it will be better or will do more for you. In fact, it could be harmful or even fatal. What your family or friends take may be OK for them, but it doesn't mean it will be safe for you.

Virtually no study has been done to prove which herbs help the liver. In fact, studies are not required to show the safety of herbal products as are prescription meds. This leaves a person with little or no independent information about their benefits or side effects. People have, of course, used herbal products to treat conditions such as aloe vera for sunburns or ginger for mild nausea. However, what may be good for one part of your body may not be good for another. Aloe vera can be good for your skin when used on top of it, but when taken by mouth in some forms can be very toxic.

A few supplements are thought, but not proven, to help the liver. Some of them include artichoke, astragalus, California poppy, chamomile, dandelion, garlic, ginkgo biloba, licorice root, milk thistle, peppermint and soybean. However, many herbs are known to harm the liver. Talk to your doctor before taking herbs. A list of herbs to avoid is found below, excerpted from [www.hcvadvocate.org](http://www.hcvadvocate.org).

What is difficult to know is how each and every herbal product on the market gets broken down by the liver. This is because your liver uses different proteins to break down prescription drugs, and the same proteins may be used to break down herbs at the same time. When this happens, problems occur with the amount of drug in your blood. In particular, one herb called milk thistle affects an important protein, called p450, which is used by some anti-HIV meds. This means that milk thistle could alter the blood levels of these or other drugs. Another common herb, St. John's Wort, greatly lowers the blood levels of some anti-HIV meds. In the end, we just don't have proof what kind of reactions will happen with different herbal products.

Several groups of people should avoid using herbs unless OK'd by their doctor. These include infants, pregnant and nursing women, and people with liver disease, organ transplants, serious medical conditions or those who are scheduled for surgery.

### Herbs to avoid (possible liver toxicity)

(taken from [www.hcvadvocate.org](http://www.hcvadvocate.org))

Blue-green algae, Borage, Bupleurum, Chaparral, Comfrey, Dong Quai, Ephedra (some forms), Germande, Jin Bu Huan, Kava, Mistletoe, Pennyroyal, Sassafras, Shark Cartilage, Skullcap, Valerian.

