

# LIVER/GALLBLADDER & DIGESTION

When we think of the liver, we think of detoxification. The liver and gallbladder also play a role in digestion. The liver produces bile, and the gallbladder stores it. When food enters the first part of the small intestine, the gallbladder adds its contents, enabling you to digest and absorb fats.

**In 2015 the New York State attorney general's office accused four major retailers of selling fraudulent herbal supplements. Most products (80%) from GNC, Target, Walgreens and Wal-Mart did not contain ANY of the herbs listed on their labels. We have looked into the quality of supplements and can help you avoid fraud and find effective, quality products.**

The liver should produce between one and one-and-a-half quarts of bile per day. If biliary stasis is present, the amount of bile produced by the liver decreases. The bile becomes thick and sluggish. It can back up and cause further damage to the liver. It can become so thick that gallstones form.

In functional medicine, we recognize that even a mild case of fatty liver will have a negative effect on bile production. One just does not suddenly come down with biliary stasis. It has a gradual onset. The functionality of the liver and gallbladder is gradually compromised by toxins, poor eating habits,

dyslipidemia (e.g., high cholesterol), and all the factors that lead to fatty liver. When things become severe enough, then medicine will recognize the “disease”. But small changes in liver and gallbladder function will gradually lower the amount of bile production. Symptoms will begin to appear and often missed by doctors because the “disease” of biliary insufficiency or fatty liver has not appeared yet.

Bile is important for emulsifying and absorbing fats. As its production decreases the digestion and absorption of fats begins to decrease. Other symptoms begin to appear as well. These symptoms include itching, pain (upper right side of the abdomen, right shoulder or between the shoulder blades), varicose veins and spider veins, dry or flaking skin, skin peeling (and cracking) at the heels, deficiencies in essential fatty acids and oil-soluble vitamins (A, E, D and K), constipation, and even GERD (gastric reflux).

Some women experience cholestasis (sluggish bile) during pregnancy. Intrahepatic Cholestasis of Pregnancy (ICP) is a condition in which the normal flow of bile is affected by hormonal changes during pregnancy. Generally, the patient will experience severe itching. She may also have pain in the upper right quadrant of the abdomen. The condition is

**IF YOU SIMPLY FOLLOW THE ROADMAP TO HEALTH DIET FOR 30 DAYS, YOU WILL NOTICE AN IMPROVEMENT IN YOUR SCORE WHEN YOU RETAKE THE SYMPTOM QUIZ. CONTACT OUR OFFICE FOR A COPY.**

usually mild. Medical therapy includes a drug called ursodeoxycholic acid, and creams to control itching. The condition can become severe and threaten the fetus. When it is suspected, there should be regular liver function tests, tests for bile acids in the blood and fetal monitoring.

**Lifestyle considerations for people scoring high in this section:** Dietary and lifestyle changes are much more important than supplementation. Poor dietary choices will prevent getting a good result, even if the supplementation is correct. This is especially true when trying to improve liver and gallbladder function. Follow the *Roadmap to Health* diet (get the free PDF from our office). Along with that, focus on these dietary changes:

- **Drink plenty of water:** Water is necessary for removing toxins. Also, dehydration can contribute to the thickening of the bile.
- **Lose weight (if you are overweight):** Obesity is one of the causes of fatty liver. Being overweight also increases the chance of developing gallstones. Do not lose the weight too rapidly, that is also linked to gallstones.
- **Avoid refined food, hydrogenated oils (trans fats) and chemical additives:** These burden the liver. Sugar and refined starch can lead to metabolic syndrome, which leads to fatty liver.
- **Deal with hypochlorhydra if it is present:** Stomach acid is necessary to trigger bile production.
- **Eat bitter herbs, and bitter green foods:** Anything bitter is good for the liver and gallbladder. Spices and herbs like turmeric, dandelion, fennel, cilantro, and

parsley are good for the liver. Bitter green leafy vegetables like endive and arugula are also good to eat.

- **Eat small meals:** With any digestive issue, biliary insufficiency included, eating small and well-chewed meals will improve digestion.
- **Be mindful of the fats and oils in your diet:** Avoid commercial vegetable oils, like corn and canola, they are pro-inflammatory. Also, a lot of commercial oils contain GMOs. If you eat animal products, eat free-range chicken, grass-fed beef and other animals raised without hormones and antibiotics. Choose lean meats. Animal fat contains arachidonic acid, which is pro-inflammatory. Use extra virgin olive oil, coconut oil or avocado oil. Make sure oils are cold-pressed and not heat or chemically extracted.
- **Be mindful of the possibility of hidden food sensitivities:** One theory held by many in functional medicine is that biliary insufficiency and even gallstones are caused by hidden food sensitivities. For more information about hidden food sensitivities, contact our office.
- **Supplements can help:** Studies have shown that phosphatidylcholine is very good for liver and gallbladder support. Extracts made from artichoke have been shown to thin bile and improve biliary stasis. There are other herbs that can help. Call for a consultation to learn more.
- **Avoid GMOs:** One of the reasons foods are genetically modified is so they can be heavily sprayed with glyphosate (an herbicide, sold commercially as Roundup). Also, there is a fair amount of evidence that eating GMOs inflames the GI tract.

CONTACT US FOR A CONSUTATION