



## **The Detox Process and Your Liver**

What does the liver do?

- Takes toxic substances and prepares them to be eliminated by the body
  - Through the bowels, urine, skin and breath
  - The liver normally removes toxic chemicals from the blood and stores them in its own cells until it is able to dump the toxins into the lymph system or into the bile to be removed from the body.
  - The liver's ability to detoxify itself is dependent on: 1) the amount that needs to be eliminated 2) a healthy functioning detox system
  - If there are too many chemicals (from air pollution, pesticides, herbicides, alcohol, fried foods, drugs, etc.), your liver may stop dumping toxins to be removed and may start reabsorbing them into the blood.
  - Then, the liver tries to hold onto toxins so that the toxin load in your blood doesn't get any higher
- Metabolizes proteins, fats and carbohydrates, and stores vitamins like A, E, D, K, copper, and iron so it provides nutrients and energy to the body
- Creates bile, which breaks down fat
- Stores fuel for the body in the form of glycogen, which easily converts to glucose (or sugar) for quick energy
- Metabolizes drugs and breaks down alcohol
- Stores vitamins, minerals and sugars
- Filters the blood and helps remove harmful chemicals and bacteria
  - More than 2 quarts of blood are filtered by the liver every minute!
- Helps burn and store fat
- Stores extra blood which can be quickly released when needed
- Helps maintain electrolyte and water balance
- Creates substances for a healthy immune system
- Regulates levels of sex hormones; manufactures estrogen and testosterone

How can I keep my liver healthy?

- Eat a whole, natural, organic foods diet with a variety of high-quality fresh foods.
  - Lower how much fat you eat
  - Get good fats from whole nuts and seeds
  - Eat food high in fiber to help the liver do its filtering job
- Rest the digestive system whenever possible – don't eat too late at night or too early in the morning. Don't eat when you're not hungry and avoid overeating.

- Drink lots of fresh water – or better yet, water with lemon in it!
- Exercise
  - Your skin is the biggest organ of detoxification. When you sweat, you cleanse out the skin.
  - Also, the lungs are another way of getting rid of toxins - breathing (like during exercise or yoga) helps the body detox.
  - Exercise also increases blood flow and helps move fat out of the body.
- Try to release emotions in a constructive way. For example, worry or anger can get “stuck” in the liver, so let ‘em go!
- Eat lots of anti-oxidants. When in doubt, if you’re eating a fresh food that is colorful, you’re probably getting a good dose of anti-oxidants!
- Take a supplement or herbal formula that supports healthy liver function
- Stop putting toxic chemicals into your body (caffeine, alcohol, drugs, nicotine, etc.)
- Make sure you’re poo’ing at least every day!

What are signs that my liver might be stressed?

- Acne, psoriasis and other skin problems
- Low energy, fatigue
- Anger, depression, moodiness, poor concentration
- Frequent headaches not related to tension in neck/shoulders or from eyestrain
- On-going menstrual problems
- Cholesterol imbalance, high blood pressure
- Indigestion, acid reflux, gallstones, bloating, constipation
- Allergies
- Sugar cravings, hard time regulating blood sugar, diabetes (type II)

What are some healing foods for the liver?

- Apples, artichokes, beets, carrots, cauliflower, collards, cherries, cranberries, dandelion greens/tea, garlic, grapefruit, grapes, lemons, olives/olive oil, oranges, green peppers, plums, parsley, pomegranate, radishes, raspberries, sesame seeds, spinach, strawberries, tangerines, tomatoes, walnuts, and watercress