HEALTHY LIVER FUNCTION GUIDE: REDUCING DAMAGE FROM ALCOHOL CONSUMPTION

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Outsmart a Hangover
(And Help Your Liver Stay Young)

A guide to using BioRay's organic products, clinical experience and expertise to safely and successfully restore liver function.

Holiday seasons and other celebrations throughout the year can be hard on our bodies, especially our liver, which has the job of filtering out toxins from any excessive drinking we do. With BioRay's Healthy Liver Function Guide, you can indulge and still be good to your body.

Much of the damage that alcohol causes the body is the result of acetaldehyde. Acetaldehyde is a toxic byproduct created as alcohol is processed by the liver. High amounts of alcohol can overwhelm the liver's ability to produce necessary enzymes, allowing toxic byproducts to remain in the body for longer periods of time. Acetaldehyde binds to red blood cells and prevents the delivery of oxygen to all parts of the body, including the brain. It also causes deficiencies in certain vitamins and enzymes.

Luckily for us, the liver has the ability to regenerate itself and, with proper support, can survive your celebrations as healthy as ever! BioRay's liver restorative formula, Liver Life™, replenishes antioxidants and beneficial enzymes, and increases the liver's ability to neutralize the toxins created by heavy drinking.

Healthy Liver Supplement Intake Guide

HERBS & SUPPLEMENTS WORK UP TO THE SUGGESTED DOSAGE GRADUALLY.	SUGGESTED INTAKE	TIMES A DAY	OK TOGETHER	BETWEEN MEALS EMPTY STOMACH	WITH MEALS	AT BEDTIME
Oxy-Oxc™	4-8 caps or as needed	1	No			X
Liver Life™	6 droppers	3	Yes	X		
Activated Charcoal (As needed in case of an aggravation)	2 - 4 pills	As needed	No Allow 20 minutes between supplements	X		
pH Sticks	Upon Waking	1				

Protocol Rationale

This protocol guide has been used successfully with thousands of patients. It addresses liver support and elimination of acidic waste, helping the body to achieve a healthy pH balance. Liver Life™, the main product of this protocol, is a restorative "food" for the liver containing 1/3 and 1/6 beta glucans derived from herbs and medicinal mushrooms, known for their ability to improve immune response.

Liver Life™ is safe for long-term use or for use with sensitive constitutions. Pre and post laboratory tests with patients on a protocol of Liver Life™ reveal a reduction of liver enzymes and improved Organic Acid Tests. No side effects have been reported. All ingredients are G.R.A.S. listed.

Liver Life™ normalizes liver enzymes, restores healthy pH, balances Phase One and Two liver detox pathways, and modulates the immune system. Taken regularly, Liver Life™ protects against toxins and rejuvenates liver cells, allowing you *and your liver* to enjoy life to the fullest.

Liver Life™ Ingredients

Certified organic or wildcrafted, whole, pure, and predigested: himmematzutake (agaricus blazei), mai-take (grifola ponderosa), milk thistle (sylimarin 80%), trametes (coriolus versicolor), reishi (ganoderma lucidum), red root (cionathus, Jersey tea), olive Leaf, and 18% grain neutral spirits as a preservative.

Additional Remedies

Oxy-Oxc™ is magnesium oxide and ascorbic acid in a capsule to move the bowels. It is essential that the bowels are open at the beginning of this protocol and remain open. Work up to the dose that works for you, everyone's system is different.

Activated Charcoal can be taken at any stage in this program to absorb excess toxins the body cannot rid itself of.

Note: This protocol addresses healthy liver function and does not include other support that may be necessary for metabolic balance.

How to Start:

1. Upon awakening, measure your first morning urine with pH sticks to get a baseline. Desired range is 5.8-6.2.

2. Start Oxy-Oxc™ until your bowels are moving at least 1-2 times a day. More is better.

3. Begin taking Liver Life™ once in the morning and once in the afternoon. Initial dose is 13 drops, 2 times a day. Increase by 1-3 drops per day until a dose of 1-3 ml. (droppers) 2 times a day between or before meals in 2 ounces of filtered water.

   Sensitive individuals may want to start with 1 drop and increase as tolerated. Adjust dose to maintain a healthy first morning urine pH of 5.8-6.2 and insure the elimination of acidic waste.

Drinking with Liver Life™:

1. Take Liver Life™ 30 minutes to 1 hour before your first alcoholic drink. Refer to the above guide on "How to Start'" to determine correct dose.

2. Take 6 charcoal tablets 20 minutes after taking Liver Life™.

3. Repeat Liver Life™ dose at end of night (or early morning) in a large glass of water and continue regular dose schedule (see guideline 3 above.)

4. Throughout the following day, drink 4 - 6 glasses of water with fresh lemon juice.

Phase One & Phase Two Detoxification Pathways

There are two major detoxification pathways in the liver, Phase One and Two, which neutralize toxins in the body.

Boost Phase One:

The Phase One Detox Pathway changes a toxic chemical to one that is less harmful. The antioxidants beta-carotene, vitamins C and E, selenium, and many different phytochemicals found in fruits, vegetables and whole grains assist the Phase One pathway in the liver. Glutathione is the most powerful internal antioxidant and liver protector. It can be depleted by large amounts of toxins and/or drugs passing through the liver as well as starvation or fasting. The B vitamins, including folic acid, are also very important in this Phase One process.

To boost your detox during Phase One, eat three of the following foods each week:

Whole Grain Bread	Oranges	Prunes	Squash
Apples	Tomatoes	Apricots	Broccoli
Beets	Mango	Cantaloupe	Spinach
Carrots	Watermelon	Pumpkin	Eggs
Red Peppers	Peaches	Sweet Potatoes	Beans (Kidney, Lentil)

Boost Phase Two Detox

Many chemicals are converted in Phase One to intermediate forms that are then processed by Phase Two enzymes. During the Phase Two Pathway, the liver adds a substance to the now less harmful chemical to make it water-soluble. It can then be moved out of the body in urine or feces. Foods rich in sulfur are needed.

To boost your detox during Phase Two, eat three of the following foods each week:

Arugula	Watercress	Collard Greens	Napa or Chinese Cabbage
Broccoli	Bok Choy	Mizuna	Horseradish
Cauliflower	Turnips	Tatsoi	Radishes
Brussel Sprouts	Turnip Greens	Rutabaga	Kohlrabi
Cabbage	Mustard Greens	Daikon	Kale

End Note

This protocol guide was created to support your liver specifically during times of overindulgence. We recommend that you maintain daily liver support with Liver Life™. Our current levels of exposure to pollutants and toxins are significant. Liver Life™ was created particularly for those of us living in a city, where exposure is highest. You will notice a physical and emotional ease to your day, even in challenging situations, after 1 to 2 months of regular use.

We at BioRay wish you many happy and healthy celebrations with your family and friends.