

A
28-Day
Program

METABOLIC REJUVENATION™



PREPARE - DETOX - RENEW†

 **DOUGLAS**
LABORATORIES

†These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Why Douglas Laboratories

At Douglas Laboratories, we are dedicated to providing you with the latest, most credible science-based explanations on today's top health concerns and how supplementation can help address them.

One topic that is receiving a lot of attention lately is detoxification, and you may have a number of questions. What is detoxification? Does it really offer health benefits or is it hype? What's the best way to detoxify?

As the toxic load in our bodies becomes increasingly alarming, detoxification is indeed important for our overall good health. Douglas Laboratories has put together this brochure to give you clear and accurate information.

The first step is understanding your body's natural detoxification process, how multiple factors in our daily lives throw this process off balance and the steps you can take to get it back on track – which includes a carefully designed nutrition detoxification program that's supported by research and science.

Ask your healthcare professional about our 28-day Metabolic Rejuvenation program. Because you trust your healthcare professional, your healthcare professional trusts Douglas Laboratories.

Remember, before you start any dietary supplement program, always talk to your healthcare professional to be sure that it does not interfere with any health condition you may have or any medication you may be taking.



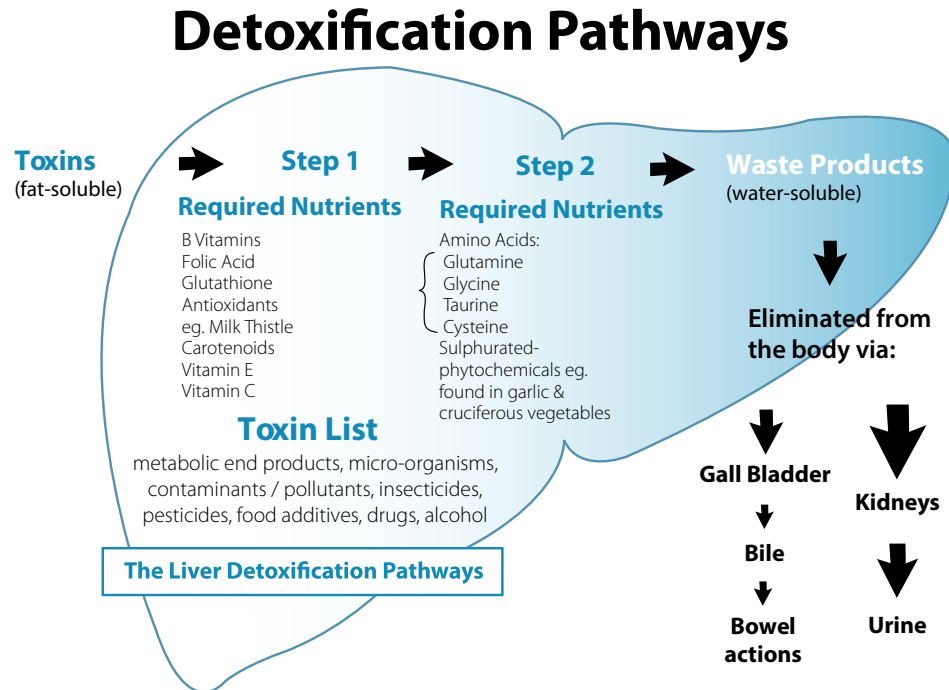
Your Body's Natural Detoxification

Your body is an amazing, highly efficient machine that is designed to eliminate the toxins that it produces naturally during metabolism and a considerable volume of environmental toxins and chemicals we are exposed to in our everyday lives.

Detoxification of these toxins is a highly complex process performed by your kidneys, lungs, skin, lymph systems, and most important, by your liver.

Let's Focus on Your Liver

Your liver is the hardest working organ of detoxification and functions in two phases to transform toxins so they can be eliminated from your body. The two phases have to be in balance with one another and depend on different nutrients to perform optimally.



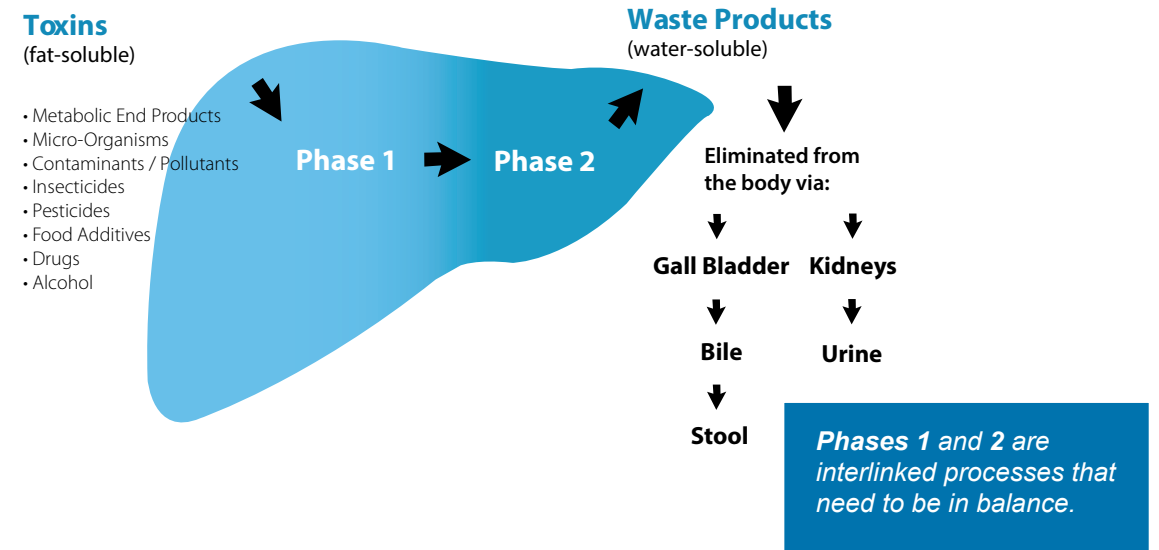
Phase 1 of Liver Detoxification

During **phase 1**, a family of over 50 enzymes called the Cytochrome P450 system converts non-water soluble chemicals into water soluble for easier elimination. However, this process involves oxidation, which produces free radicals (oxidants) and other harmful compounds that may be linked to countless health conditions.

Phase 2 of Liver Detoxification

The toxic chemicals produced naturally in **phase 1** of detoxification have to be neutralized by the liver in **phase 2**. In a process called conjugation, the liver binds a water soluble molecule – which is supplied through your diet – to these chemicals to make them water soluble and prepare them for elimination. After conjugation, they leave the body largely through your bile (feces) or urine, though some are sweated out through your skin.

Figure 1 - Detoxification (Biotransformation) Pathways



The Importance of 2 Phases in Balance

Imagine that **phase 2** is like a series of seven different conveyor belts, called pathways. **Phase 1** sends the non-toxic water-soluble chemicals and free radicals it produces onto the appropriate conveyor belts for **phase 2** conjugation. If a conveyor belt in **phase 2** does not have the specific nutrients required to process them, it will become backlogged and bottlenecked. All the while, however, **phase 1** keeps producing as usual. The result is an overwhelmed **phase 2**.

Why Detoxify?

Our Toxic Burden

Our bodies are assailed day in, day out with chemicals from environmental pollutants, medications, contaminants in our water supply, pesticides and hormones in our food supply, alcohol, and the list goes on.

As amazing as your body's natural detoxification processes may be, at times it may not be able to keep up with the growing exposure to toxic chemicals.

What's more, your body's natural detoxification may be impaired by factors such as:

- Inadequate nutrients, vitamins and minerals that the liver and other detoxification systems need to perform effectively
- Certain medications
- Poor liver health
- Constipation
- Poor kidney health
- Insufficient detoxifying enzymes

The result is toxic burden – an accumulation of harmful toxins in your body.

Over time, this toxic burden could trigger the decline of your overall health.



Total Toxic Exposure – Body's Natural Detoxification = Toxic Burden

Here are some alarming facts about the rise in toxic substances, many of which have been linked to cancer and other health concerns, in our environment:

- 2100 chemicals, including pesticides, herbicides, fertilizers, PCBs, medications such as antidepressants and recreational drugs are in our water supply.^{2&4}
- 80,000 metric tons of carcinogens are released into the air annually in North America.²
- Over 80% of foods have genetically modified ingredients.²
- The EPA (Environmental Protection Agency) estimates that the average U.S. citizen has residues from over 400 toxic compounds in their body.
- 82,000 chemicals are in use today in the United States, but only a fourth have ever tested for toxicity.³

Toxic buildup can impact

- Premature aging
- Joint health
- Skin health
- Gastrointestinal health
- Immune health
- Fatigue
- Cardiovascular health
- Hormone imbalances
- Neurological health



FOOTNOTES

2. Goldman "A Special Report on Toxic Chemicals and Children's Health in North America", 2004 Conacher, Washington DC Center of Study of Responsive Law, 1988
3. Ngm.nationalgeographic.com/ngm/0610/feature4/index.html?fs=www3.nationalgeog
4. Mason, "River Fish Accumulate Human Drugs" Nature Science Update 5 Nov 03

Why Detox?

With all the health concerns linked to today's toxic environment and lifestyle, your liver needs support to help it tackle the toxic burden accumulated in your body. Many of us may be preoccupied with other health conditions, but unless we are experiencing liver dysfunction, we may not realize the vital importance of balanced liver detoxification.

The Best Way to Help Your Body Detoxify?

Simple – feed your body with all the right nutrients, vitamins, minerals and other ingredients needed to help balance your phase 1 and phase 2 of detoxification.

Whether you want to reduce your toxic burden or kick start a new healthy lifestyle regimen, detoxification through targeted nutrition is a safe, effective approach to optimizing liver function for better overall health.†

Supportive Key Nutrients for Detoxification†

Nutrition Required for PHASE 1

- Antioxidants to manage the free radicals produced (eg: *vitamin C, lipoic acid, broccoli powder*)
- Vitamins and minerals (*B vitamins, selenium, magnesium*)
- Glutathione precursors (*N-Acetyl-L-Cysteine- an amino acid derivative found in foods*)

Nutrition Required for PHASE 2

- Sulfur
- N-Acetyl-L-Cysteine
- Glutathione
- Amino acids: taurine, glycine, L-glutamine, methionine, L-cysteine
- B vitamins/minerals
- Lipoic acid to enhance glutathione
- Milk thistle, curcumin, wasabia japonica, and cruciferous vegetable derivatives (*broccoli sprout*)

If you are considering detoxification for the first time, look at it as a great opportunity to kick start some healthy lifestyle changes, healthier eating habits or a new fitness program.

For liver health, you need to provide your body with the nutrients it needs to perform at optimal levels.† Provide the body with the right nutrients at the right time.



Metabolic Rejuvenation Program from Douglas Laboratories

Based on the latest industry-leading science, we at Douglas Laboratories have carefully formulated a powerful detoxification program to support phase 1 and phase 2 of detoxification, as well as a preparation phase with supportive fiber for elimination and a renew phase to provide gut healing nutrients.*

Get the most out of your 28-day program

Once you make the commitment to start a detoxification program, you want to do everything you can to maximize the benefits.

1. The first thing to do is to choose a time that's right for you – when you know that you will be able to stick with your program and won't likely be tempted to cheat.
2. Stock your fridge and pantry with lots of good, healthy, nutritious food that complements your detoxification program. One key to staying committed is planning your meals and your snacks, keeping in mind the following guidelines:

Dietary Guidelines

Foods to INCLUDE:

- Plenty of nutrient-rich fruits and vegetables, preferably organic and fresh (8-10 servings daily) with skins for fiber
- Meats, fish and poultry NOT raised on antibiotics and hormones
- Whole, unprocessed foods
- Clean, filtered water to help your kidneys flush out the toxins and waste
- Brown rice, oatmeal, quinoa (these grains only)
- Almond or rice milk
- Herbal teas (milk thistle) and green teas decaffeinated
- Extra Virgin olive oil, fresh herbs and spices
- Pea, fish, or rice protein powders

Avoid:

- Caffeine
- Sodas
- Alcohol
- Sugar and artificial sweeteners (Stevia is allowed)
- Processed foods
- Trans fats
- Commercial juices
- Sodium, artificial coloring, preservatives

Avoid high allergen foods:

- Dairy (cow and goat milk, cheese, yogurt, ice cream, butter)
- Gluten (barley, rye, wheat, spelt kamut)
- Citrus fruits
- Soy, yeast, corn, eggs, shellfish, peanuts

3. Make a clean sweep of harsh chemicals in your home. Although we are exposed to high levels of chemicals all around, control what you can. Start by safely disposing of all chemical household cleaners and opt for good-old-fashion baking soda, lemon juice and vinegar instead.

Safe household cleaner recipes

Kitchen, Bath Tub, Shower Cleaners:

1 part vinegar to 1 part water Mix in spray bottle. Spray on surface and leave for half-hour, then rinse. For stains, use cream of tartar or baking soda with water to make a paste, then use sponge to wipe

Toilet Cleaner:

3 cups white vinegar, 10 drops of tea tree oil
Pour into toilet bowl, let stand for 15 minutes then scrub

Glass Cleaner:

Spray plain club soda from a water bottle onto glass, wipe clean with lint-free cloth.

4. Get rid of the bad and the ugly. Stop using all personal care items with known carcinogens. Opt instead for certified organic, products that DO NOT contain DEA (diethanolamn), Propylene Glycol, Sodium Lauryl Sulfate (SLS) or petroleum, as found in countless lipsticks and balms.
5. Quit smoking and other substance abuse.
6. Check your medicine cabinet. Are you taking any unnecessary over-the-counter or prescription medications? (IMPORTANT: Always talk to your doctor before stopping or modifying the dose of any medication you may be taking.)
7. Give toxins the run-around. Light to moderate intensity exercise will help boost the benefits of your detoxification program. When your muscles contract, they help your lymph system carry waste from the cells to the blood for elimination via the kidneys, lungs and colon, and the extra sweat will help eliminate toxins through the skin.
8. Try infrared sauna if available. The safe, therapeutic rays penetrate your muscle tissue and heat up your core temperature for a deeper, more detoxifying sweat.
9. Get a good night of sleep, 7-9 hours nightly for your body to rest and reduce symptoms of stress.
10. The program is designed to be complete in vitamins, minerals and nutrients to support proper detoxification. However, continue any nutritional products or medications as recommended by your health care practitioner.

What you can expect from your detoxification

When the body is cleansing, you may or may not experience detoxification symptoms that last a few days. These may include: fever, headaches and other aches and pains, fatigue, skin eruptions, emotional irritability, gas, temporary constipation or diarrhea, or tight muscles.

**This program is not intended for weight loss, but due to the nature of eliminating certain foods during the program, you might experience weight loss as a result.*

Shopping List

Beverages

- Vanilla unsweetened almond milk, rice milk, coconut milk
- Green tea regular and decaf, other organic herbal tea
- Distilled, filtered, or spring water

Fresh organic fruits & vegetables

- Organic salad mixes, organic spinach, arugula, mache, bibb, escarole, romaine
- Washed and trimmed French green beans
- Avocados
- Organic frozen wild blueberries, organic raspberries
- Artichoke, asparagus, bean sprouts, broccoli, Brussels sprouts, cabbage, carrots, onions, cauliflower, chard, celery, cilantro, cucumbers, eggplant, endive, green beans, jicama, leeks, mushrooms, radishes, snow peas, sugar snap peas, scallions, tomatoes, yellow squash, zucchini
- Organic lemons, limes (squeeze in water or on food for flavor)

Nuts and seeds

- Organic roasted unsalted almond butter
- Organic roasted, unsalted almonds and walnuts
- Raw sunflower seeds
- Pumpkin seeds

Meats

- Organic, free-range chicken breasts
- Organic, free range turkey (dark ground meat or breasts)
- Organic, low-sodium chicken or turkey deli meat
- Fresh or frozen fish (no shellfish) such as salmon, mackerel, halibut, herring

Grains

- Gluten-free oatmeal
- Brown rice, quinoa
- Hummus, beans and lentils

Condiments

- Extra virgin olive oil
- Unrefined, cold-pressed safflower oil
- Flaxseed oil (not for cooking)
- Dijon mustard
- Organic sugar- free salsa and/or hot sauce
- Organic garlic, ginger, spices, sea salt, cinnamon
- Raw apple cider vinegar
- Stevia (powdered or liquid)

Journal or food diary to record daily food consumption and symptoms

Meal Suggestions:

Breakfast Options:

- Protein powder (eg. Metabolic Cleanse by Douglas Laboratories) with the following:
Banana or frozen berries and water blended. Options for taste include almond or rice milk.
Can add flax oil or almond butter.
- Oatmeal or cream of rice with berries and walnuts, cinnamon
- Puffed rice cereal with almond milk and fresh fruits and nuts

Lunch or Dinner Options:

- Salmon, halibut, cod or organic free range turkey, chicken or lamb
- Brown rice or brown rice pasta
- Salad or steamed veggies with olive oil and vinegar
- Vegetable soup, turkey chili, or black bean soup with rice crackers

Snack Ideas:

- Nuts or pumpkin seeds (¼ cup max)
- Fresh fruit or baked apple slices with cinnamon
- Rice crackers or fresh vegetables dipped in hummus
- Rice cakes with apple or almond butter
- Metabolic Cleanse by Douglas Laboratories mixed in water or almond milk



How to Use Douglas Laboratories Metabolic Rejuvenation Program

Day 1-7 Preparation and elimination process

- Take one pack in the morning before a meal.
- Take one pack in the evening before a meal.
- Start weaning off caffeine, alcohol, sodas and artificial sweeteners.
Note: "Green tea can be substituted for coffee during the weaning phase"
- Start eliminating potentially allergenic foods. Consume fresh, organic foods and purified water.

**You may experience frequent bowel movements and abnormal feelings, which are normal side effects of detoxifying. Try to avoid taking pain relievers for headaches. If symptoms are severe, please consult your physician.*

Day 8-14 Detoxification to support phase 1 and 2 of the liver

- Take one AM pack in the morning with a meal.
- Take one PM pack in the evening with a meal.
- Follow the Dietary Guidelines on page 10.
- Optional- take one scoop daily of Metabolic Cleanse powder by Douglas Laboratories
- Drink 8 cups of filtered or purified water daily

Day 15-21 Detoxification to support phase 1 and 2 of the liver

- Take one AM pack in the morning with a meal.
- Take one PM pack in the evening with a meal.
- Continue following the Dietary Guidelines on page 10.
- Optional- take one scoop daily of Metabolic Cleanse powder by Douglas Laboratories.
- Drink 8 cups of filtered or purified water daily.

Day 22-28 Replenish and Repair the Body

- Take one pack in the morning with a meal.
- Take one pack in the evening with a meal.
- Optional- take one scoop daily of Metabolic Cleanse powder by Douglas Laboratories.
- Continue the Dietary Guidelines, adding one new food back into your diet every 2-3 days, making note of any reactions you may experience after re-introducing the food.
Symptoms of bowel irregularity, headache, allergies, skin disorders, decreased energy and joint pain may indicate intolerance to a food.

After completion of the 28-day program, return to your healthcare practitioner for follow-up and further instructions.

INFORMATION SUPPORT

douglaslabs.com 1 800 245 4440



TRUST. IN MANUFACTURING EXCELLENCE

NSF International GMP Registration / Health Canada Certification / FDA-Audited Facilities
Audited by International Health Organizations for Product Safety and Quality / ISO 9001-Certified Laboratories
ISO 17025-Accredited Testing Laboratories

TRUST. OUR FULL RANGE OF GALENIC FORMS

Two-piece liquid-filled Capliques® / Time-released liquid and beadlet-filled Capliques®
Two-piece hard capsules / Time-released two piece hard capsules / Tablets in various sizes and shapes
Enteric-coated tablets and capsules / Softgels / Vegetarian soft capsules / Pharmaceutical glaze
Aqueous coating / Chewable tablets / Lozenges / Powders / Liquids / Frozen liquid extracts
Plant cellulose capsules / Animal or fish gelatin capsules



You trust Douglas Laboratories. Your patients trust you.

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