Metabolic Detoxification Questionnaire

Part 1: Symptoms Date: Rate each of the following symptoms based on the last week using the point scale below: O Never or rarely have the symptom 3 Frequently have it, effect is not severe 1 Occasionally have it, effect is not severe 4 Frequently have it, effect is severe 2 Occasionally have it, effect is severe 0 1 2 3 4 Respiratory Chest congestion Digestive Tract Nausea, vomiting 0 1 2 3 4 0 1 2 3 4 Asthma, bronchitis Diarrhea 0 1 2 3 4 Shortness of breath 0 1 2 3 4 Constipation 0 1 2 3 4 Difficulty breathing 0 1 2 3 4 Bloated feeling 0 1 2 3 4 **Respiratory Total:** Heartburn 0 1 2 3 4 Eyes Watery or itchy eyes 0 1 2 3 4 Intestinal, stomach pain 0 1 2 3 4 Swollen, red, or sticky eyelids 0 1 2 3 4 **Digestive Total:** Bags or dark circles under eyes 0 1 2 3 4 **Joints / Muscles** Pain or aches in joints 0 1 2 3 4 Blurred or restricted vision 0 1 2 3 4 Arthritis, joint swelling 0 1 2 3 4 **Eves Total:** Stiff or limitation of movement 0 1 2 3 4 Pain or aches in muscles 0 1 2 3 4 Nose Stuffy nose 0 1 2 3 4 Feeling of weakness or tired Sinus problems or dripping nose 0 1 2 3 4 0 1 2 3 4 (0) (1) (2) (3) (4) Joints / Muscles Total: Hay fever **Emotional** Sneezing attacks 0 1 2 3 4 Mood swings 0 1 2 3 4 0 1 2 3 4 Anxiety, fear, nervousness 0 1 2 3 4 Excessive mucus Anger, irritability, aggression Nose Total: 0 1 2 3 4 Mouth / Throat 0 1 2 3 4 Depression Frequent, consistent coughing 0 1 2 3 4 0 1 2 3 4 Gagging, need to clear throat **Emotional Total:** Sore throat, hoarse, loss of voice 0 1 2 3 4 Weight / Food Binge eating, drinking 0 1 2 3 4 Craving certain foods 0 1 2 3 4 Swollen or discolored tongue, gums, or lips ① ① ② ③ ④ Canker sores, other mouth sores 0 1 2 3 4 Excessive weight 0 1 2 3 4 Mouth / Throat Total: Compulsive eating, food addictions 0 1 2 3 4 Ears Itchy ears 0 1 2 3 4 Water retention 0 1 2 3 4 Earaches, ear infections 0 1 2 3 4 Underweight 0 1 2 3 4 Drainage from ear, waxy buildup 0 1 2 3 4 Weight / Food Total: Ringing in ears, hearing loss 0 1 2 3 4 Energy / Sleep Fatigue, sluggishness 0 1 2 3 4 **Ears Total:** Apathy, lethargy 0 1 2 3 4 Head Headaches 0 1 2 3 4 Hyperactivity 0 1 2 3 4 Restlessness, achiness 0 1 2 3 4 Faintness or lightheadedness 0 1 2 3 4 Dizziness 0 1 2 3 4 Sleep disturbances 0 1 2 3 4 **Head Total:** Energy / Sleep Total: Cognitive Poor memory, recall 0 1 2 3 4 Skin Acne 0 1 2 3 4 0 1 2 3 4 Confusion, poor comprehension Hives, rashes, dry skin, redness 0 1 2 3 4 Poor concentration 0 1 2 3 4 0 1 2 3 4 Flushing, hot flashes Poor physical coordination 0 1 2 3 4 0 1 2 3 4 Difficulty in making decisions 0 1 2 3 4 Excessive sweating 0 1 2 3 4 Skin Total: Stuttering, stammering 0 1 2 3 4 0 1 2 3 4 Heart Irregular or skipped heartbeat Slurred speech 0 1 2 3 4 Learning disabilities 0 1 2 3 4 Rapid or pounding heartbeat 0 1 2 3 4 Cognitive Total: Chest pain 0 1 2 3 4 **Heart Total:** Other Frequent illness 0 1 2 3 4 Frequent or urgent urination 0 1 2 3 4 **Grand Total** Genital itch or discharge 0 1 2 3 4 Other Total:

For Practitioner Use Only:

Urinary pH



Metabolic Detoxification Questionnaire

Part 2: Xenobiotic Tolerability Test (XTT)

1. Are you presently using prescription drugs? Yes (1 pt.) No (0 pt.)	7. Do you develop symptoms with exposure to fragrances, exhaust fumes, or strong odors?
If yes, how many are you currently taking? (1 pt. each)	○ Yes (1 pt.) ○ No (0 pt.) ○ Don't know (0 pt.)
 2. Are you presently taking one or more of the following over-the-counter drugs? Cimetidine (2 pts.) Acetaminophen (2 pts.) Estradiol (2 pts.) 3. If you have used or currently use prescription drugs, which of the following scenarios best represents your response to them: Experience side effects; drug(s) is (are) efficacious at lowered dose(s) (3 pts.) Experience side effects; drug(s) is (are) efficacious at usual dose(s) (2 pts.) Experience no side effects; drug(s) is (are) usually not efficacious (2 pts.) Experience no side effects; drug(s) is (are) usually efficacious (0 pt.) 	8. Do you feel ill after you consume even small amounts of alcohol? Yes (1 pt.) No (0 pt.) Don't know (0 pt.) 10. Do you have a personal history of: Environmental and/or chemical sensitivities (5 pts.) Chronic fatigue syndrome (5 pts.) Multiple chemical sensitivity (5 pts.) Fibromyalgia (3 pts.) Parkinson's type symptoms (3 pts.) Alcohol or chemical dependence (2 pts.)
 4. Do you currently (within the last 6 months) or have you regularly used tobacco products? Yes (2 pts.) No (0 pt.) 5. Do you have strong negative reactions to caffeine or caffeine-containing products? Yes (1 pt.) No (0 pt.) Don't know (0 pt.) 6. Do you commonly experience "brain fog," fatigue, or drowsiness? Yes (1 pt.) No (0 pt.) 	 Asthma (1 pt.) 11. Do you have a history of significant exposure to harmful chemicals such as herbicides, insecticides, pesticides, or organic solvents? Yes (1 pt.) No (0 pt.) 12. Do you have an adverse or allergic reaction when you consume sulfite-containing foods such as wine, dried fruit, salad bar vegetables, etc.? Yes (1 pt.) No (0 pt.) Don't know (0 pt.)
	Total
Part 3: Alkalizing Assessment	
1. Do you have a history of or currently have kidney dysfunction? Yes (1 pt.) No (0 pt.) 2. Have you ever been diagnosed with hyperkalemia? Yes (1 pt.) No (0 pt.)	3. Are you currently taking diuretics or blood pressure medication? Or Yes (1 pt.) No (0 pt.) Total
Overall Score Tabulation	
For Practitioner Use Only: Part 1: Symptoms Grand Total (High >50; moderate Part 2: XTT Total (High >10; moderate 5-9; low <4) Part 3: Alkalizing Assessment Total (High ≥1) Urinary pH	

Notes:

- Patients with high symptoms but low XTT may be exhibiting reactions that are not related to toxic load. Other mechanisms should be considered, such as inflammation/immune/allergy, gastrointestinal dysfunction, oxidative stress, hormonal/neurotransmitter dysfunction, nutritional depletion, and/or mind body. Individualize support with specific medical foods, diet, and/or nutraceuticals.
- Recommend non-alkalizing nutrients if patient answers "yes" to any questions in the Alkalizing Assessment.

Disclaimer: This questionnaire is for informational purposes only. It is not meant to diagnose or treat any condition or illness. All medical symptoms should be addressed by a qualified medical professional.

FirstLine Therapy Clear Change Program

Safe and Effective Metabolic Detoxification Program

In the United States, tens of thousands of chemicals—many of which are toxic—are used by industries to make products such as automobiles, clothing, and pharmaceuticals.¹ In 2012 alone, the Environmental Protection Agency (EPA) Toxin Release Inventory (TRI) reported that 3.63 billion pounds of chemicals were disposed of or released to air, water, or land.¹ The sheer volume to which humans are exposed to these toxicants and biological toxins on a daily basis can overburden the body's natural metabolic detoxification capacity. Long-term exposure to toxins is associated with a number of challenges, such as fatigue, waking up feeling unrefreshed, difficulty concentrating, mood disturbances, and gastrointestinal disturbances.*

Research has shown that certain nutritional ingredients including xanthohumol, broccoli, isomalto-oligosaccharides, green tea catechins, ellagic acid, N-acetyl-L-cysteine, L-ornithine, and zinc can support the body's detoxification function and help facilitate the removal of undersirable compounds from the body.*

The Clear Change Program—which includes these targeted ingredients—is designed to enhance the body's natural metabolic detoxification process while providing adequate fuel for both cleansing and other daily activities.* Metagenics offers value-priced bundles for 10-day and 28-day programs that include a low-allergy-potential menu plan, targeted nutritional support, moderate exercise recommendations, and tips for stress management.

Why Clear Change?

- Choice of UltraClear Plus®, UltraClear Plus® pH, or UltraClear® RENEW nutritional powder mix for metabolic detoxification support*
- All UltraClear formulas deliver advanced, specialized nutritional support for Phase I and II detoxification*
- UltraClear RENEW and UltraClear Plus pH also benefit Phase III detoxification by nutritionally supporting alkalinization and excretion*
- All UltraClear formulas are designed to complement a diet that is strategically structured to reduce the impact of processed foods and excess simple sugar by providing an array of nutrients that support the 3 phases of detoxification*



For complete supplement facts information, visit www.metagenics.com

- AdvaClear® dietary supplement supports balanced metabolic detoxification activity and provides antioxidant protection*
- Free blender cup, comprehensive program guide, and program diary
- Online support options include a free webinar, additional recipes, FAQs, and daily motivational



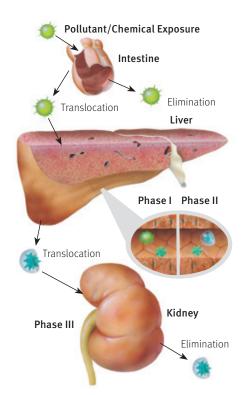


Figure 1. Three Phases of Metabolic Detoxification

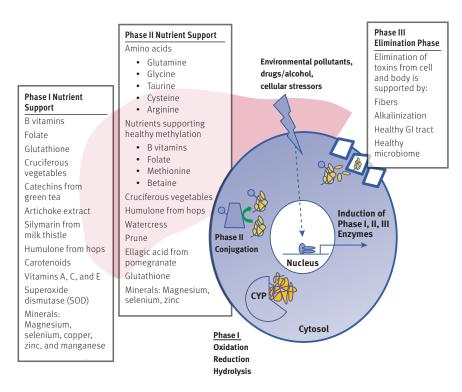


Figure 2. Phases of Detoxification and Associated Nutrients and Foods That Support the Process

Scientific Rationale

Metabolic detoxification consists of 3 main phases (Figure 1):

- Phase I (functionalization)—Cytochrome P450 enzymes in the liver break down harmful substances, generating highly reactive molecules and free radicals
- Phase II (conjugation)—Large molecules are conjugated with newly modified substances, producing more water-soluble, less harmful substances
- Phase III (elimination phase)—Proteins transporters export conjugated substances from the cell for eventual elimination. Toxins are mainly eliminated from the body via urine, feces, and sweat

The impact of toxic exposures on the body can be exaggerated or mitigated by the person's nutritional status. 15

It is important to promote the endogenous mechanisms of detoxification to promote health. Many nutritional ingredients have been shown to support metabolic detoxification and protect against free radicals generated during the detoxification process (Figure 2).*

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