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#### **TOXICITY IS OUR LEGACY**

It is no secret that we live in a world full of toxins. Never before in human history have we been exposed to such high levels of toxins. The air we breathe, the chemicals in our foods, and the release of chemicals in our homes and workplaces all add to our toxic load. Therefore, on a daily basis, it is important for our body to break down these toxins and clear them from the body. Our detoxification organs such as the kidneys, liver, lungs, and skin have a lot of work to do every day.

To do this, they need a variety of nutrients to support the detoxification process. If these nutrients are not available, the body will have a difficult time detoxifying. If the detoxification process is slowed down, the toxins are not effectively eliminated. When this happens, the toxins will re-circulate and are stored subsequently in the tissues for detoxification. As more toxins enter the body, however, those stored toxins won't get eliminated. In time, the toxins accumulate and eventually the cells are not able to receive sufficient nutrients and the energy factory of the cells, the mitochondria, becomes impaired. Symptoms of toxicity appear along with identifiable health issues.

#### **POSSIBLE SYMPTOMS ASSOCIATED WITH DEFICIENT DETOXIFICATION PATHWAYS**

The type of toxin, their physiological adverse effects, and the organ or system involved are factors that can cause a vast range of non-specific symptoms with a deficient detoxification pathway. Examples of such symptoms are:

- Digestive problems
  - Constipation
  - Gas and Bloating
- Headaches or migraines

- Nausea or vomiting
- Weight gain
- Brain fog
- Bitter, metallic taste
- Joint and muscle aches
- Inflammation
- Acne
- Fatigue
- Excessive mucous
- Ringing in the ears
- Circles under the eyes
- Skin rashes
- Strong body odor or bad breath
- Poor concentration

#### POSSIBLE HEALTH ISSUES RELATED TO TOXICITY:

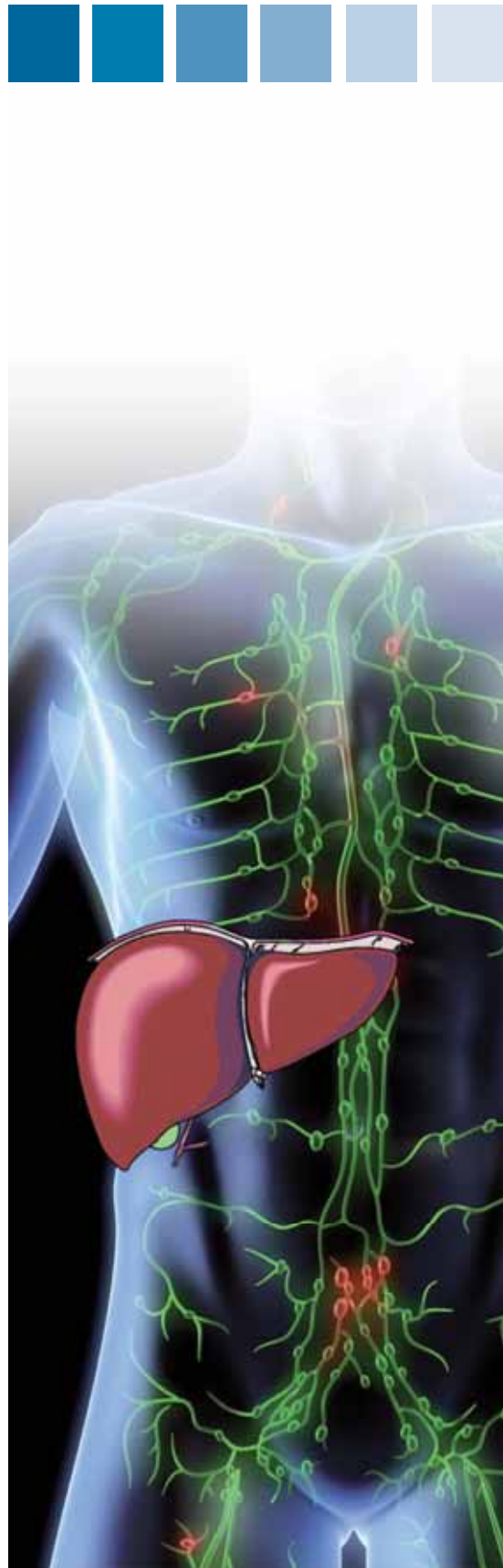
- Chronic fatigue
- Leaky gut
- Multiple Chemical Sensitivity
- Musculo skeletal issues
- Obesity
- Unexplained pain
- Weight imbalance

#### HOW THE BODY DETOXIFIES

A good 80% of detoxification is done by the liver, which has the job, along with the immune system, of identifying these foreign substances and transforming them into something harmless and thereby preparing them for elimination. The liver accomplishes this by turning these harmful toxins into water soluble intermediate chemicals. According to the type of toxin through different metabolic pathways, amino acids, sulfur, and other natural substances bind (conjugate) to the toxins so that they can be eliminated. If the nutrients necessary to conjugate the toxins are in low supply, the toxins re-circulate as new forms of toxins that are sometimes more toxic than the original substance.

It is not only toxins that are broken down, but also hormones, natural waste products, medications, and fat soluble vitamins. *Some of the nutrients needed for better detoxification are:* sulfur (cruciferous vegetables, onions, garlic, eggs), vitamin B6 (nuts, seeds, avocado), zinc (nuts, seeds, shellfish), and protein (meat, fish, dairy, poultry).

As the toxins are being eliminated, a host of free radicals are produced that should also be cleared. Antioxidants disarm these harmful oxidants. Thus, eating a variety of colored fruits and vegetables on a daily basis and when detoxifying is really important.



Healthy elimination is another factor in detoxification. It is through our urine and bowel movements that harmful substances are eliminated. Eating a good amount of fiber and hydrating with purified water every day will assist in this elimination process. Fiber is found in such foods as grains, vegetables, fruits, beans, and legumes. Consuming at least 25 grams of fiber every day will greatly improve your detoxification capacity. Filtering out chlorine and the typical chemicals found in the water supply before you drink the water will lower your toxic load.

### **WHAT CAN WE DO TO IMPROVE OUR CAPACITY TO DETOXIFY?**

Here are some other ways that you can improve your chances of keeping your liver healthy and of assisting the clearance of toxins:

1. Limit exposure to harmful chemicals:
  - Drink purified water in glass bottles and not plastic bottles that contain thalates and Biosphenol A (BPA).
  - Don't heat food in the microwave, especially in plastic containers. The plastic leaches into the food. Microwaving also significantly depletes the nutrient content of foods.
2. Clean your home environment with natural cleaning agents.
3. Buy materials and home accessories that are less toxic: hardwood flooring that is laid without glue, organic cotton bedding, lead-free glassware.
4. Use an air purifier to clear your home environment of chemicals and dust.
5. Purchase a water purifier and put a filter over your faucets and shower heads.
6. Eat only wholesome, organic, fresh foods in a variety of colors.
7. Clean out your heater and air conditioner every season.
8. Eat a balanced diet of all food groups: protein, good fats, grains, legumes, vegetables, fruits, raw nuts, and seeds.
9. Don't cook or fry foods in non-stick pans coated with chemicals. High heat wears away the coating, which is then cooked into the foods.
10. Eat liver- and kidney- enhancing foods: beets, artichokes, dandelion greens, green leafy vegetables, cruciferous vegetables, burdock root, milk thistle, fermented dairy.

### **MENTAL AND EMOTIONAL DETOXIFICATION**

For many of us, the build-up of unresolved and hurtful thought patterns can be toxic to our psyches and affect our bodies. Hurtful thoughts can become habitual and the emotional memories seem to be bound in our cells. Have you ever had the experience of remembering some past traumatic event and at the same time experiencing emotions associated with that event? Have you had an emotional reaction to a situation that seemed out of character to that situation? These are examples of emotional patterns that have become imbedded in us.

When undertaking a detoxification program, it is a good practice to cleanse the mind of these kinds of thoughts as well. In fact, cleansing can help us to uncover and express hidden frustrations, anger, fear, and other held-in emotions and replace them with forgiveness (others and self), love, peace, and happiness. Your mind and body will feel cleansed and heave a sigh of relief as these old, stuck patterns of functioning are released.

# ACTION PLAN



## LIST THE TOXINS

YOU ENCOUNTER IN YOUR LIFE

[illegible]

## LIST WAYS TO AVOID

## THOSE TOXINS

[illegible]