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### **Meditrine Detoxification Plan**

Historically, detoxification therapies have been applied in clinical settings, in medical spas, and at home. Although early practitioners of this approach did not call it “detoxification therapy,” their methods of hydrotherapy, fasting, regulated diet, and Nature Cure are similar to many modern detoxification methods.<sup>i</sup> By studying the work of Sebastian Kneipp,<sup>ii</sup> John Harvey Kellogg,<sup>iii</sup> O. G. Carroll, and John Bastyr,<sup>iv</sup> one gets the impression that doctors and healers found that the best results happened in a setting where the patient could be closely watched. Just preceding this part of the current chapter, a doctor-supervised program was described. Unfortunately, time and cost prohibit this for many patients today, so a home-based program may be recommended to patients, within certain guidelines.

A complete detoxification program should focus on three targets:

1. Retrieve gut functioning
2. Reduce heavy metals; and
3. Reduce organic chemicals stored in fat tissue.

A one-week clinic-based program may help patients detoxify key dysregulating influences that are obstacles to regaining stability and balance in their health. On a biochemical level, such a program can help to support cellular functioning, improve the filtration capacity of the liver, stimulate the excretion of toxins through the kidneys, bowel, and skin, support gut repair, and improve neuroendocrine balance in the hypothalamic-pituitary system.

Such claims may seem exaggerated in a world that relies heavily on expensive and high-risk interventions for patient complaints, and – unfortunately – these natural approaches to detoxification have rarely been researched. However, even a brief review of the literature detailing the powerful negative health effects of toxicity demonstrates that it may be important to help certain patients relieve some of the body burden that modern living imposes.<sup>v,vi</sup>

The clinical detoxification program described here has been used by thousands of patients with reportedly excellent results. It is fairly easy and effective but the clinician needs to be prepared to teach patients what to do, and to offer the appropriate cautions. Patient instructions must be provided and reviewed carefully, and the practitioner must be available to answer questions after patients have started the program.

### **Elements of the Detoxification Program**

The essential steps of this home-based program are:

- brief water fasting (two days),

- oligoantigenic diet (five days) and slow reintroduction of omitted foods,
- saunas and hydrotherapy (one month), and
- nutritional supplements (one month).

In the author's experience, using all these elements together gives reliable results.

## **Fasting**

Fasting on water for a short period can be a safe and powerful way to rejuvenate the mind and body. While water fasting may not be suitable for severely compromised patients (see recommendations earlier in this chapter), research has shown calorie restriction and fasting to alleviate hypertension,<sup>vii,viii</sup> diabetes,<sup>ix</sup> epilepsy,<sup>x,xi</sup> and rheumatoid arthritis.<sup>xii</sup> Recent research has shown that calorie restriction may be the most powerful way known yet to extend lifespan.<sup>xiii,xiv</sup> Studies have shown that high glucose and insulin damage mitochondria, and calorie restriction (fasting) reduces the total amount of oxidative stress within the cellular mitochondria.<sup>xv,xvi</sup>

**Fasting may improve liver function.** Fasting has traditionally been thought to enhance the liver's ability to clear out metabolic byproducts from the blood stream, and regenerate the liver's ability to function in a healthy way. There are indications from a few animal studies that dietary restriction may help to reduce the risk of age-related diseases associated with impaired lipid metabolism.<sup>xvii,xviii</sup> However, caution is indicated because long-term fasting or fasting in a polluted environment can deprive the body of nutrients that are critical to a patient's health. Fasting should be done for short periods of time in a pure environment and, in my practice, I recommend taking vitamin C during fasting in the range of one to four grams per day.

**Fasting may benefit cognitive functioning.** Several studies have shown that as severe liver toxicity progresses, the patient fails to break down valium-like compounds that create a toxic state.<sup>xix,xx</sup> One might hypothesize a continuum of such effects for patients who are not nearly so ill. Patients who fast do often report a sense of renewal and clearer thinking. Fasting allows the liver to reduce the presence of recycled chemical messengers like adrenalin and other stress hormones, which often have a second chance to restimulate the nervous system when they are not biotransformed and excreted appropriately.

**Caloric restriction improves immune function.** Caloric restriction, which can be achieved by short-term fasting, appears to have measurable benefit for the immune system.<sup>xxi,xxii</sup> It rests the intestines and liver, both key sites of immune function. It is estimated that 60% of our immune system resides in our intestines. By resting this major site of immune function with fasting, the patient's immune function may be potentiated. A fast of 36 or 60 hours significantly increases the power of white blood cells to destroy pathogenic bacteria.<sup>xxiii</sup> Conversely, eating can depress immune function and have a proinflammatory effect,<sup>xxiv,xxv</sup> whereas energy restriction may restore the impaired immune response.<sup>xxvi</sup> Studies have shown that a glucose challenge increases the generation of reactive oxygen species (ROS), while nutritional restriction can inhibit ROS generation by leucocytes.<sup>xxvii,xxviii</sup>

**Fasting benefits arthritis.** It has been demonstrated in research settings that fasting benefits arthritis.<sup>xxix</sup> The best results in treating autoimmune arthritis are achieved when a short fast is combined with a change to a vegetarian diet, and foods to which the patient is sensitive or

allergic are removed.<sup>xxx,xxxii</sup> Fasting may be involved in changing the bacterial flora in a favorable way for patients with rheumatoid arthritis. Abnormal bacteria or microflora are present in the stool in patients with a variety of autoimmune problems such as Crohn's disease,<sup>xxxiii</sup> rheumatoid arthritis,<sup>xxxiii</sup> and ankylosing spondylitis.<sup>xxxiv</sup> Anaerobic bacterial species such as Klebsiella and Proteus have been implicated.<sup>xxxv</sup> Fasting may play a role in changing bacterial flora, perhaps by enhancing competition and thereby giving dominance to probiotics. Changes in intestinal flora from a vegan diet have been documented.<sup>xxxvi</sup>

**Fasting contraindications.** A two-day water fast is safe for most patients. Certain exclusions are important, such as diabetics, hypoglycemics, and severely nutritionally deficient individuals. The biggest risks to most patients are hypoglycemia and orthostatic hypotension with vertigo, sometimes resulting in fainting. Although these reactions are generally harmless, they can cause a fall. Patients should be warned to take extra care in standing up – i.e., getting out of bed or a hot bath, or getting up from a chair. If faintness or vertigo does not resolve within a few minutes, patients should contact the doctor in charge of the case.

There is medical literature to suggest that fasting for a prolonged period of time can diminish the body's stores of glutathione, making it more susceptible to aging and disease. Low tissue antioxidant status is found under dietary restriction because fasting lowers glutathione detoxification in the liver.<sup>xxxvii,xxxviii</sup> People who are fasting should be very careful to avoid any chemical exposure, because lack of dietary protein makes the liver unable to process toxins optimally due to lack of inadequate amino acid precursors that are important to the detoxification pathways. (As an aside, patients who are preparing to undergo surgery might have fewer complications to the anesthetic if they were put on a protein-dense regimen instead of clear fluids.<sup>xxxix,xl</sup>)

## **Oligoantigenic Diet**

After a two-day water fast, a simple diet of rice, fruit and vegetables is then followed for five days. This is similar to an oligoantigenic diet, used for allergic, behavioral, and digestive problems.<sup>xli</sup> This simple diet provides enough caloric input to sustain the patient but is very easy on the intestinal environment to allow optimum rest. The rationale for vegetarian fare is twofold: vegetarian diets contain fewer potential food allergens that can cause activation of the gut-associated lymphoid tissue, and enhanced vegetable intake provides more soluble fiber, bioflavonoids, antioxidants, and complex carbohydrates. Some patients do experience fatigue on this program; if it is not ameliorated with rice- or whey-based protein shakes, it will resolve upon resuming normal protein intake (unless, of course, the patient is allergic to the food being reintroduced).

## **Sauna and Hydrotherapy**

Sauna therapy can support the removal of fat-soluble toxins from the body, and has been shown to provide relief of symptoms for patients with toxicity conditions.<sup>xlii,xliii</sup> Sauna programs need to be carefully tailored to the individual patient and supervised closely, particularly with more compromised patients. Hydrotherapy has been employed for hundreds of years because of its ability to stimulate circulation. Although medical studies on the effectiveness of hydrotherapy

for detoxification have not been done, there is a modest research base documenting its usefulness in symptomatic relief of many conditions, including rheumatoid arthritis,<sup>xliv</sup> osteoarthritis,<sup>xlv,xlvi</sup> chronic heart failure,<sup>xlvii</sup> management of spasticity,<sup>xlviii</sup> and other similar conditions. Although the mechanisms are not fully understood, many seasoned clinicians recommend its use.

Theoretically, application of alternating hot and cold water to the body stimulates regulation of sympathetic tone in the extracellular matrix, and generates a “pumping” action that stimulates circulation of blood and lymph. The extracellular matrix is now understood to influence cellular development, movement, reproduction, and shape, as well as biochemical function. Dr. Alfred Pischinger, professor of histology and embryology at the University of Vienna, saw the importance of the extracellular matrix. In 1991, he wrote that the extracellular matrix is the support system for the cell and the foundation substance in which all cells are embedded. The extracellular matrix is made up of collagens and polysaccharides that form proteoglycans. These two molecules form a water-filled, gel-like “ground substance” in which the connective tissue fibers are embedded. The condition of the space around a cell is as important to health as what occurs within the cell and in the membrane that encloses it.

## **Supplements**

There is a complex set of variables involved in choosing the appropriate supplements for detox patients. Supplement programs should be adapted to the individual patient’s need, using the following general strategies:

- Antioxidants for cellular protection
- Amino acids for phase II detoxification
- Cholagogues (bile stimulants)
- Bile binding
- Replacing probiotic bacteria
- Repairing intestinal permeability
- Vitamins, minerals, and nutritional co-factors
- Cathartics
- Antiparasitics

Additional tips:

- No supplements during the water fasting except for vitamin C.
- Structuring supplement recommendations for twice-a-day dosing improves compliance.
- Ensure that there is some sort of protein shake for the patient to use, if needed.

## **Post Detox Recommendations**

After the seven-day program, it is best to continue the hydrotherapy and/or saunas and the supplement strategies for at least a month. A patient should slowly re-introduce foods, starting with foods least likely to irritate the intestinal mucosa. Since the diet is relatively low in essential amino acids, the introduction of eggs, fish, or lean meat on a daily basis helps to restore proper protein balance. After several days of this regimen, begin adding foods that seem prudent for the individual patient; last, introduce known allergens like dairy products, wheat, and soy foods (one at a time and allowing a day or two between each new food to determine any reactions).

Patients may be surprised to discover how well they have adapted to the new diet. Some people experience fewer cravings for many of the foods they gave up during their detox week. The best advice is to support patients to do the best they can throughout this detox program, following the guidelines as closely as possible but being flexible when necessary. However, patients who are highly allergic to certain foods shouldn't eat them—ever. Eating the right diet is the first step, but digesting it properly is critical for long-term health.

### Summary

A home-based detoxification program is within the capacity of many patients, and may generate a significant increase in well being for them. Resting the gut, relaxing the body, the use of heat to release toxic agents, an oligoantigenic diet, and supportive supplementation are all techniques that can be managed at home, provided the patient is given information, advice, and support.

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