

# Detoxification For Rejuvenation

by Dr. Gordon Chang, PhD



Detoxification has been a buzz word for the last few years in the ever-growing field of natural health care. Nutritionists recommend a “detox” diet, your yoga teacher may recommend a detox juice fast for a few days, and if you have been seeing a naturopathic doctor for any allergic or digestive upset you have probably already been prescribed a natural body cleanse or detoxification product. Additionally, an herbal detoxification can also help restore proper organ function and helps fight aging by leaving one feeling refreshed and re-energized. But how do these toxins find their way into our bodies?

In our modern 21<sup>st</sup> century lifestyle we have the misfortune to be exposed to many toxins on a daily basis through our environment, from overexposure to toxic chemicals at home and at work, and even contained in pharmaceutical drugs, foods, consumer electronics, cosmetics, many synthetic fabrics, in new carpeting, and in your new vehicle. Environmental toxins seem to be a prevalent by-product of the frantic lifestyles our technology, society and economy have forced us to live.

Toxins can enter the human body via a number of convenient pathways; through the lungs when we breathe, through the skin by contact, or through the GI tract from the food and drink we consume. The toxins are then metabolically processed by the three major organs of detoxification; the liver, the lungs and the kidneys so that they can be excreted from the body with other waste material. That is IF the toxins do not become stored in the cells of the body through toxic overload.

## How Does A Cleanse or Detoxification Work?

A detoxification or cleansing of the body organs is an attempt to increase the efficiency of the organs as well as rid the body of a buildup of toxins. When the major organs of elimination are overloaded by toxins, they begin to store these pollutants in the cells of the body where they can be harmful in various ways. Toxins can interfere with the normal biochemical pathways necessary for healthy bodily functions but we can also fight the onslaught of toxin overload with an herbal cleanse or detoxification.

The liver, the lungs and kidneys are the sites in the body where many toxins are biochemically altered into a form which can then be eliminated from the body through the colon, lung and kidneys. When toxins are biochemically broken down by the liver, these converted toxins are secreted back into the blood for eventual elimination by the lungs or kidneys, or into the bile for elimination through the colon. A gentle stimulation of the organs of elimination will help in the metabolism and release of stored toxins.



## Liver Detoxification

The liver is the major organ in the body that is responsible for the detoxification of many biochemical compounds which can then be excreted by the body in the stool and in the urine. The liver is also responsible for the synthesis of many different types of proteins needed for use in the body. During these processes of synthesis and detoxification the liver generates a large quantity of free radicals (oxidants) which can damage and even destroy the cells of the liver. In addition many of the body's toxins may be stored in the liver until they are broken down and metabolized. However, the liver has a number of defense mechanisms which help prevent it from being totally destroyed – in particular, it has several potent anti-oxidant systems which help prevent damage to the liver cells.

Unfortunately, many individuals use medications (e.g. acetaminophen) which are toxic to the liver, we all live in a polluted environment, many people smoke cigarettes, consume large quantities of alcohol, use recreational drugs, or eat high trans-fat foods - all of which stress the liver and inhibit normal functioning. In order to help the liver, one can periodically flush it clean with herbal formulations. Liver Flush™ by Omega Alpha consists of extracts of well known Western herbs combined with lesser known but highly effective herbs used in Traditional Chinese Medicine (TCM). This particular herbal combination provides antioxidants to the liver, helps the cells of the liver regenerate, and most importantly it increases blood flow to the liver to help flush away the buildup of stagnant material in the liver and thereby cleanse the liver of unwanted debris. A periodic cleanse of the liver will greatly improve liver health. For maintenance of the liver between cleanses, use Omega Alpha's Liver Plus™ for daily protection and support of the liver.

## Lung Detoxification

The lungs are organs that connect directly with the outside world. They process the pollution that comes from the environment on a first-hand basis. The lungs are well supplied with blood and form a barrier that allows the body to absorb oxygen from the air and also to excrete carbon dioxide to the atmosphere. The lungs are also a very metabolically active site for detoxification of some toxins. Because the lungs are in contact with our polluted atmosphere, they can absorb many airborne pollutants. Some of these pollutants are particulate (solid) in nature and can become trapped within the lung tissue, and some pollutants are chemical (fluid) in nature and gain access to the body by dissolving directly through the lung membranes into the blood. These pollutants can themselves act as oxidants (toxins) which damage the lung tissue or cause the lung tissue to be damaged when the body attempts to get rid of the pollutants. Omega Alpha has developed a special herbal formula to help protect the lung tissue from damage and also to help the body rid itself of the trapped particulate pollutants. Lung Flush™ is made up of a combination of herbs used in Western herbalism and Traditional Chinese Medicine to help loosen and expel trapped particulate pollutants and to provide anti-oxidants which specifically protect the lung tissue.



It is recommended that healthy individuals do a total organ cleanse every 6 months (usually in spring and fall). If an individual is exposed to a larger toxin load because of medicines, smoking, alcohol and drug use, or a toxic environment (work outdoors or other exposure to pollution) we recommend an organ cleanse be done on a more frequent basis (every 4-6 months).

## Kidney Detoxification

The primary function of the kidneys is to filter and remove toxic waste products from the body via the blood and then return the cleaned blood back into the body. Approximately every sixty seconds, about one liter of blood will enter the kidneys through the 'renal arteries' and after the blood is cleaned it flows back into the body through the 'renal veins'.



Inside each kidney there are about a million tiny filtration units called nephrons. Each nephron is made up of a very small filter called a glomerulus that is attached to a tubule. As blood passes through the nephron, water and waste products are filtered out. Most of the water is then returned to the blood but toxins and other waste products are deposited in the urine for eventual elimination. Healthy normally functioning kidneys are capable of manufacturing one to two liters of urine every hour depending on a person's individual fluid consumption. Kidneys that are compromised due to toxic overload or illness will certainly have reduced function and will not be able to filter waste products and toxins as well.

People who have a high protein diet, or have gout (a form of arthritis where uric acid is deposited in the joints and tissues causing painful swelling) or who may otherwise suspect a toxic overload should consider doing a kidney cleanse. A detoxification program for the kidneys should be of shorter duration and frequency due to the diuretic effect of most of the herbs and substances used. It is also advisable to increase your potassium intake (via supplementation or foods such as bananas and cranberry juice) during a kidney cleanse. Kidney Flush™ by Omega Alpha is packaged to last about 14 to 20 days, an appropriate length of time for a complete kidney cleanse.

### Parasite and Colon Cleanse

The colon is home to a variety of intestinal bacteria, and often, small colonies of parasites. Parasites such as intestinal worms (pinworms, tape worms), amoeba, etc., can invade our body from many sources including raw uncooked foods such as vegetables, fruits, or sushi. They can also be introduced into our bodies from pets, flies and other common insect pests. Parasites and intestinal bacteria produce toxins as their waste products, which can then be absorbed into the body. Under normal circumstances a healthy individual can tolerate the toxins produced by bacteria and a few parasites. However if the body's toxin elimination systems are overloaded and there are a large number of parasites, this extra toxin load can lead the individual's health into a downward spiral resulting in many chronic diseases. To minimize the amount of toxins absorbed from intestinal sources it is also important that individuals do a periodic parasite cleanse. Omega Alpha manufactures a product called Para-Rid® which provides a gentle but very effective parasite cleanse, using such common herbs as garlic, mint, pumpkin seed, cloves and green hulled black walnut.



After a parasite cleanse the colon should also be cleansed on a fairly frequent basis in order to more fully clean out toxins and any trapped fecal matter. The frequency of colon cleansing depends on the diet of the individual. If one's diet is high in fiber and stools are fairly large, one could do a colon cleanse every 6 months. If one's diet is low in fiber and stools are small then a colon cleanse every 3-4 months is sufficient. When doing a colon cleanse use a product that is high in fiber and avoid taking products that have laxative herbs. Laxative herbs contain chemical compounds that chemically stimulate the colon to produce a bowel movement. High fiber products produce a bowel movement by increasing the volume of stool. This filling of the colon then stimulates a bowel movement. The use of laxatives is habit forming and should only be used as a last resort.

There are several ways to decrease the amount of toxins absorbed by the colon. One can change the balance of the types of bacteria that inhabit the intestinal tract, increase consumption of soluble fibers, or destroy all of the bacteria in the gut. Destroying the bacteria in the gut however is not practical or very healthy as it may lead to an overgrowth of a fungus called *Candida albicans* causing further intestinal illness.



## Importance of Probiotics, Fiber and Anti-oxidants

A better alternative to destroying the entire intestinal flora would be to change the types of bacteria that inhabit the gut as well as increase your intake of anti-oxidants and soluble fibers. Changing the balance of the intestinal microflora can then be easily achieved by consuming a mixture of different species of probiotics (friendly bacteria). Increasing the intake of soluble fiber serves two purposes: 1. Fiber binds to toxins and prevents their absorption by the body. (However, different fibers bind to different toxins with different efficiencies. Therefore it is important that you consume a large range of soluble fibers, not just one single fiber.) 2. Fiber contributes to a decrease in the amount of time that body waste stays in the large intestine. The net result is a decrease in the total quantity of toxins absorbed into the body.

Fortunately, Omega Alpha has created a fiber product – Healthy Colon Plus™ which can be taken on a daily basis and addresses all of these concerns. It has a variety of soluble and insoluble fibers; it contains probiotics to help restore the delicate intestinal balance; and the herbs included help stimulate the bowels to gently move material through the colon and contains antioxidants to help fight free radicals. To



help nurture the body during and after the cleanse, and to help quench free radicals (toxins) consider taking a good multi-antioxidant formula such as Omega Alpha's Super Anti-Ox™ on a regular basis. Super Anti-Ox contains eleven different antioxidants which provide a synergistic defense network for the human body from head to toe to help nurture the body and prevent aging and the destruction of organs at the cellular level.

In summary, anti-aging can be best achieved with a healthy combination of exercise and fresh air, a regular detoxification program, and the addition of anti-oxidant and greens supplements to a balanced diet to complete the cleansing, rejuvenation process.

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