



DETOXIFICATION – WHAT YOU NEED TO KNOW

Everyone is doing it, or so they say. It seems to be the fashion to “do a detox”. Most of us have heard stories of people who have done it and felt awful while they were doing it, and then felt great afterwards. You can go to a naturopath and do it, and you can even buy a kit on the Internet. And now with the spa movement offering more and more detox treatments, what do we need to know about detoxification, what do we need to watch out for and what can we expect?

Throughout the last century and more, advances in industrialisation, manufacturing and technology have resulted in more and more toxic substances being released into the environment. This can include air pollution, amalgam mercury fillings in your teeth, skin creams, paint, dyes, batteries, heavy metals in seafood, pesticide contamination of vegetables, etc. Over a lifetime, these toxic substances can accumulate and cause problems as the toxic burden contribute to a variety of physical and mental disorders.

In addition to the toxins that come from the outside the body, there are normal by-products of cell reactions that need to be dealt with. Poor diet and lifestyle with excessive alcohol, coffee and saturated fat intake can slow down detoxification in the body and cause these internally produced substances to accumulate.

What detoxification means

The term “detoxification” means different things to different people. To a doctor specialising in toxicology (the science of poisoning) it means the treatment for a patient suffering from a drug or chemical overdose. To a pharmacologist it means the mechanism by which the body breaks down the pharmaceutical substance and then eliminates it from the body. To the chemically dependent person it means a treatment programme designed to rid them of their drug addiction.

What we are referring to here is the naturopathic and biochemical concept of detoxification which some people can use to recover from “bad living” or even chronic health complaints. The idea behind this type of detoxification is to correct all aspects of diet and living to help the systems of the body to recover and operate more effectively by getting rid of toxins.

How detoxification can help

Many people do a detox to correct the consequences of too much rich food, drink, coffee and bad living. Some health practitioners claim that a detoxification programme can help people improve or eradicate the problems such as:

- acne
- allergic tendencies
- anxiety
- asthma
- abnormal heart rhythms
- bowel colic
- conjunctivitis
- depression

- dermatitis
- diarrhoea
- gut problems
- dizziness
- eczema
- fatigue
- food intolerance
- headaches
- hyperactivity
- infertility
- insomnia
- joint pain
- malaise
- mood swings
- muscle pain
- muscle weakness
- nausea
- numbness
- light sensitivity
- sexual dysfunction
- shortness of breath
- excessive sweating
- taste impairment
- tremors
- urticaria
- weight loss.

I believe that a detox and an ongoing healthy diet and lifestyle help health.

The role of the liver in detoxification

The idea is to get rid of toxins. Toxins are anything that can be harmful or hazardous to the body, or that affects the balance of the body. This can be a drug product or environmental chemical, and the normal products of your own body cell metabolism.

People often refer to this process as “liver cleansing”. The emphasis is given to the liver because it is the main organ of detoxification. Indeed up to 80% of all the processes of the human body are for detoxification. This means that 80% of the person’s overall physical health comes from their ability to efficiently detoxify and eliminate waste. The main place where this occurs is the liver.

The liver’s role is as the body’s primary distributor of blood – it responds to the demands of the body by shifting blood to the area of demand such as the stomach after the meal, or to the legs when running a marathon. The liver also plays an important role in storing sugar and insulin, and helping to regulate chemical messengers in relation to sugar in the body as well as the signals that come from the adrenal glands to regulate blood sugar and blood pressure. The liver also has important roles in regulating hormones, fat metabolism and cholesterol in the body.

The liver's major job in detoxification includes detoxifying drugs and any other chemicals or products of normal cell metabolism by neutralising them and ultimately sending them on to other organs of elimination – the skin, lungs, kidneys and bowels.

Phases of neutralisation

The process of neutralisation involves two phases.

Phase one detoxification takes the product and often converts it into something more harmful than the original substance. This phase needs antioxidants, vitamins, minerals and amino acids (protein building blocks) for proper functioning. If this pathway does not have enough of the raw materials, it will not work efficiently and the accumulated toxic products will harm the body. Other substances that slow this pathway down include alcohol, caffeine, saturated animal fats, drugs and pesticides.

If substances at the end of phase one are accumulating, they can still go back into the system if they are not converted and then eliminated. This will result in the substance having to go through the liver several times before the body gets rid of it, thus leading to damage.

Phase two detoxification in the liver takes this initial harmful substance and then breaks it down into something completely inert and ready for elimination out of the body via the gut and the kidneys. This pathway also requires antioxidants, vitamins and amino acids.

The dangers of overload

If either phase one or phase two detoxification is overloaded, the result is a build up of toxins in the body. In addition, if the kidney and gut are not functioning properly, this too can cause overload. This extra strain on the liver reduces the liver's capacity to do all the other jobs that it needs to do in balancing cholesterol, blood hormones, sugar, blood pressure, etc.

So, it sounds like it's actually a good idea for all of us to be doing detoxification. However, rather than living badly and then going through a process of detoxification once or twice a year, it would be best to live a prudent lifestyle all of the time.

Principles of a prudent lifestyle

The fundamental principles of a prudent lifestyle are in relation to the air you breathe, the water you drink and the food you eat.

Not only does the air need to be clean, but how you breathe is important. Breathing from the abdomen instead of the chest gives you a more relaxed, centred feeling and flows onto the rest of the body. The abdominal breathing technique (which is normal breathing) is often lost in people who are too stressed in a busy life and end up breathing with their upper chest all the time. Taking time to practice abdominal breathing regularly and also some form of relaxation or meditation technique is good for the immune system and your health as a whole.

Our water is full of chemicals. If you cannot afford to put a filter on your house, then start with putting one on your showerhead. Just the chlorine coming through and bathing your body at least once a day is harmful, let alone the chlorine and other chemicals that you drink from the tap. The cost of a water filter will surely save on those bottles of water many people buy!

The ideal diet is to eat like the original caveman or woman and avoid anything that is foreign to the body, e.g. alcohol, nicotine, preservatives, chemicals, artificial sweeteners, MSG and all forms of

sugar. Eat raw or lightly cooked vegetables, salad and fruit daily to improve the gut's function and drink at least six to eight glasses of water daily to prevent dehydration.

Exercise aids detoxification

Exercise is also an important part of general ongoing detoxification. Aerobic exercise increases your fitness, while promoting sweating and deep breathing which also detoxifies you. It also helps the circulation. Regular stretching in the form of yoga or other stretching exercises improves circulation and lymphatics. Lymphatics hold more volume than your blood and are a parallel system to your blood vessels that carry your immune cells around the body.

Have a massage. A massage not only stimulates the lymphatics and circulation, but helps to create the relaxation response in the body which helps your immune system additionally.

Naturopathic detoxification

Aside from all of the above points, the naturopathic detoxification process can additionally involve the taking of herbs, the taking of a liquid diet for a period of time, and even colonic hydrotherapy followed with a course of probiotics and prebiotics.

This naturopathic detoxification is a more intense detoxification, the principles being to take the pressure off the liver and gut with the liquid diet and to use the herbs to kill any infectious toxins like parasites in the gut, etc. This may be why some people feel terrible during a naturopathic detox – in killing the parasites and invaders that shouldn't be in the gut, further toxins and chemicals are released which make the person feel awful.

Colonic hydrotherapy is an additional or alternative and controversial way to help to get the bad bugs out of the gut. Afterwards, using probiotics (normal friendly bacteria that reside in your gut) to restock the bowel helps the bowel to remain balanced. Prebiotics are probiotic foods which help feed the probiotics so they can grow and restock your gut properly. An example of this is FOS or fructo oligosaccharides.

Detoxify without becoming unwell

I believe it is not necessary to become unwell during a detoxification. A skilled naturopath can conduct a serious detoxification programme without allowing you to become unwell. Some use warm to hot Epsom salt baths.

I believe there is more risk in detoxification programmes that are bought from the health shop or the Internet because of the lack of supervision. You could be on medications that could interact with the herbs in the detox kit. Also, many people don't realize the effect of suddenly stopping the regular intake of large amounts of coffee. It can cause severe low blood pressure or withdrawal headaches. These symptoms are but a few that can contribute to the misery some people experience during detoxification.

Benefits of detoxification

Some of the benefits of an effective detoxification programme can include:

- Reduction of an illness
- Improvement in physical appearance and skin

- A boost in physical and emotional well-being
- Sharpening of mental clarity
- Enhancement of digestion and elimination of food
- Eradication of addictions and allergies
- Weight loss
- Increase in energy.

Spa detoxification therapies

The spa movement is embracing many of the principles of detoxification and are offering some detoxification therapies. Dry brushing of the entire body is one of their techniques. This takes off the top layers of the skin and stimulates the circulation and lymphatics. It can be done two to three times a week using a loofa.

Other techniques that can be included in spa therapies include water therapies, i.e. hydrotherapy. This can mean the application of hot and cold water to various surfaces of the body. This technique has been used for detoxification of the body for centuries. It can help with elimination and detoxification of various toxins from the skin, especially as the skin is the largest organ in the body.

A simple technique that can be performed at home would be to turn on the cold at the very end of your shower for at least 30 seconds before you hop out. This stimulates your body to heat itself up and cool itself down in order to compensate. The temperature contrast helps strengthen and normalise the nervous, circulatory, hormonal, musculoskeletal and immune systems, and is excellent for helping the body cope with physiological and psychological stress.

Another method is the body shock – a hot shower with a one-minute cool or cold water rinse which causes a superficial circulatory flush and stimulates the central nervous system. The cold closes your pores and your body pushes the cold surface blood to your core and exchanges it for warmer blood from your depths. This deep dredging of your circulatory system is like vascular aerobics.

Hot and cold therapies should be avoided in pregnant women, young children and elderly people with heart problems.

Sauna treatment

Sauna is based on the principle of the skin being the largest detoxification organ in the body. The purpose here is to get the body to sweat so that toxins are released through the skin.

I believe that any form of sauna will be beneficial. The benefits include:

- Increased fat breakdown and growth hormone production
- Increased elimination of fat which also contains chemicals
- Increased elimination of trace minerals and heavy metals.

Saunas should be avoided in pregnant women, young children and elderly people with heart problems.

Daily detox programme

You can do your own daily detox programme:

1. Get enough sleep
2. Ensure you breathe correctly. If not, get help from a breathing physiotherapist or Buteyko clinic
3. Daily aerobic and resistance exercise
4. A healthy diet, avoiding alcohol and saturated animal fats, with an emphasis on whole foods and fresh fruit and vegetables
5. Take probiotics when you have eaten poorly
6. Massage as regularly as you can afford it
7. Regular stretching exercises
8. Regular meditation/relaxation technique
9. Give yourself the body shock in the shower two to three times a week
10. Regular sauna.