NUTRITION AND HEALTH

Spring Cleaning

OU'VE CLEANED YOUR HOUSE and washed your car. Maybe its time you give *yourself* a good cleaning. Every spring, many North Americans engage in the ritual of spring cleaning. The dirt, the dust, the grime, the dust bunnies; everything that has built up over the winter is wiped away to begin anew. The house looks better and we feel better.

More and more North Americans are beginning to realize that a spring cleaning should include themselves, and just as spring cleaning means more than a quick vacuum and dusting around the house, our spring body cleaning should be more than a long, hot bath. We should cleanse ourselves both externally and internally.

Just as dirt gradually builds up in our homes over months, so toxins build up in our bodies. Our environment is full of pollutants, and the food we eat is full of additives.

Inside our homes, household cleaners, solvents, and air fresheners all contribute to a toxic environment. Outside the home, we find automobile exhaust fumes, smoggy air, industrial fumes, and pesticides and other agricultural chemicals. The Environmental Protection Agency (EPA) currently recognizes some four million toxins.

The foods we eat can also be a transfer point for toxins. At least 2,800 substances have been recognized as food additives by the U.S. Food and Drug Administration (FDA). These are used to make foods more attractive, to make foods more tasty, and to increase the grocery shelf life. According to some

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Eating a healthy diet, including vegetables, fresh fruits and grains, promotes physical vigor and aids detoxification.

reports, we may consume an average of 8 to 15 lbs (3.6 to 6.8 kg) a year of chemicals that contribute nothing to the body and may do harm.

Even foods with no additives can cause toxins. Eating carbohydrates that are too refined, such as bread and white flour, is like eating glue or paste: it is viscous stuff that does not slide through the intestines, but instead slogs through, sticking to intestinal walls and gumming up the works. This results in a buildup of waste in the colon. This fecal matter begins to decay, producing bacteria and toxins. The toxins eventually seep through the bowel wall, where blood capillaries pick them up and distribute them throughout the body.

Toxins are also created by the body in the metabolic process, usually in response to unbalanced conditions. Emotional stress, an unbalanced diet, and consuming too much food can all generate toxins.

The toxins slowly build up, and like a steady drip into a rain barrel, they eventually spill over, resulting in a health disaster.

Very simply, toxins compromise our health. Elson Haas, M.D., in his book *Staying Healthy with Nutrition*, defines a toxin as "any substance that creates irritating and/or harmful effects in the body, undermining our health or stressing our biochemical or organ functions."

More specifically, a body overloaded with toxins

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INTERNAL TOXICITY Diseases **Symptoms** bad taste in mouth hypertension acne kidney stones coated tongue allergies constipation arthritis obesity dizziness atherosclerosis **PMS** fatigue psoriasis boils uterine fibroids gas cataracts headache colitis itching eczema lowered immunity fibrocystic breasts offensive breath gallstones personality changes gastritis poor circulation hemorrhoids

can result in a number of symptoms. These include constipation, stomach bloat, poor digestion, gas, fatigue, weight gain, excessive mucus, poor concentration, headaches, poor skin, poor memory, depression, body odor, and bad breath.

Some health practitioners relate toxins to specific diseases. R.A. Buist, M.D., writing in the *International Clinical Nutrition Reviews* (1988, Vol. 8, No. 4) states that chronic fatigue syndrome may be related to toxin exposure. Multiple chemical sensitivity and fibromyalgia (muscle and joint pain) may also be environment-related diseases. Indeed, there is a new medical category, clinical ecology, which deals exclusively with how toxins in the environment affect out health.

The body does have a system in place to detoxify these harmful toxins. The most important cleansing organ is the liver. Eliminative channels include the bowels (the digestive system), kidneys, skin, lungs, and lymphatic system.

When the body is doing its job and is not overburdened with toxins, the blood carries them to the liver, which uses enzymes to detoxify the harmful substances or convert them to a water-soluble form, which is then eliminated via the urine or feces.

Unfortunately, this system can handle only so many toxins and was built for "natural" toxins, not the man-made ones we have to deal with today. For example, protection against an age-old toxin—alcohol—is built into our genes. One gene, expressed in the liver, codes for an enzyme that converts alcohol into substances the body can use or excrete.

Our body does not, however, always know how to handle the new toxins in our lives. It cannot understand how to excrete them, and they may then accumulate to harmful quantities or be converted to odd, unknown substances that can interfere with metabolism. According to the textbook *Nutrition, Concepts and Controversies*, this can result in cancers or birth defects.

When our bodies are bombarded with unfamiliar toxins, producing too many toxins, or not eliminating toxins effectively, the toxins build up and can cause health problems. Then it is time for a detoxification program to support the body's natural elimination processes and help prevent the day to-day buildup of toxicity.

The key to detoxification is knowledge: understanding the link between feeling subpar

and toxicity, understanding where toxins come from, and understanding what you can do to help yourself

Drinking water is instrumental in detoxification. Water flushes toxins and waste from the body and transports nutrients to where they are needed. Try to drink eight to ten glasses of pure water a day.

Water is also useful externally: baths and saunas can help detoxification. Hot water increases blood flow and capillary action near the surface of the skin, causing faster release of toxins. The heat also increases sweating and opens up pores. However, you should make sure that the water in which you bathe is pure. You should also be careful because the hot water and detoxification effect could cause dizziness; if so, don't try to get up. Many health practitioners recommend having someone in the house when you take a detoxification bath. There are a number of substances you can add to your bath to help the detoxification process.

Eating a healthy diet ensures that you get proper nutrition and also helps the cleansing process. Fresh, raw foods and grains ensure that you get the enzymes necessary to adequately digest your food. Avoid foods that contain additives or are nutritionally bankrupt. Avoid sugar, salt, saturated fats, caffeine, nicotine, and alcohol. Avoid meat, as animal protein puts a tremendous strain on the digestive system. Lacto-vegetarians can eat yogurt which helps maintain a proper bacterial balance.

Exercising stimulates body systems so that metabolic efficiency is stepped up. This, of course, includes the systems that are integral to cleansing, such as the digestive system. It also strengthens the body and the mind.

Practicing stress management is important

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because stress affects us physically. It weakens the immune system and robs the body of important nutrients. Stress hinders digestion and the cleansing process.

Using herbs, fiber, and supplements can be very important to a cleansing program. Many herbs facilitate the cleansing program and contribute important vitamins and minerals. Fiber "sweeps" the digestive tract clean and quickens the transit time of waste elimination. It absorbs toxins and escorts them out of the body. A probiotic supplement helps balance the good and bad bacteria in the digestive tract.

Fasting has been used for centuries to cleanse the body. However, fasting can be harmful and should only be done under the supervision of a health practitioner.

Using enemas and colonic irrigation helps flush toxins out of the colon. Enemas can be self-administered, but colonics should be done under the supervision of a health practitioner.

Preventing toxins from building up in the future should be ongoing. This is easily done by drinking pure water, eating a plant-based diet, exercising, and practicing stress management. Avoid environmental toxins as much as you can. Wear protective clothing or a mask when working with household or workplace toxins.

DETOXIFICATION PROGRAMS

A number of heath professionals have developed detoxification programs* which usually combine the previous factors in a set schedule, and prescribe specific foods and herbal and fiber supplements. If you follow a program, or simply take the previous factors to heart, you initially may notice that your overall health appears to worsen. You may experience acne, fatigue, headaches, coated tongue, cold extremities, intestinal and digestive stresses, and mood swings during detoxification. These are positive signs because they mean the elimination process in the liver and other organs is occurring.

The toxins in your body have been building up. If

*Suggested Reading

Krohn, Jacqueline, M.D., Frances Taylor, M.A., and Jinger Prosser, LMT. *Natural Detoxification*, Point Roberts, WA, Hartley and Marks Publishers, Inc, 1996

Jensen, Bernard. *Tissue Cleansing Through Bowel Management*, Escondido, CA; Bernard Jensen, 1981, (619) 749-2727

Schumacher, Teresa, and Toni Lund. Cleansing the Body and the Colon for a Happier and Healthier You, St. George, UT 1987, (801) 673-8848

Walker, Norman W., D.Sc. Colon Health: The Key to Life. Prescott, AZ, Norwalk Press. 1979, 1995 this is your first time detoxifying, they have been building up for years! This means it can take much more than a few days, or even a few weeks, to flush out the toxins and begin to feet better. Most people experience a cycle; at first they feel somewhat worse, and then better. As they continue the detoxification program, toxins buried deeper come out, and symptoms reappear, only to disappear as they are eliminated. With each cycle the feeling of being healthy is longer, and feeling worse is shorter. Eventually, you feel better all-around.

SHOULD I DETOXIFY?

Health practitioners ask a number of questions related to your diet and lifestyle to determine if you need detoxifying.

Lifestyle If you can answer "yes" to any of these questions, you may need detoxification. The more "yes" answers you have, the greater need you probably have for detoxification.

- Are you exposed to second-hand smoke?
- Do you live in an area where you are often exposed to automobile exhaust fumes?
- Do you work with toxic chemicals or handle them at home? (insecticides, fertilizers, cleaners, etc.)
- Do you regularly consume fried foods such as doughnuts, chips, etc., cooked in fat or oil?

Symptoms Following are some of the symptoms of a toxic body. How many you have, along with your answers to the preceding lifestyle questions, should give you a good idea of your detoxification needs.

- Do you have allergies, sinus problems, joint pain, or skin problems?
- Are you frequently tired from a "normal" day's activities?
- Do you have a loss of appetite, nausea after fatty meals, a revulsion to fatty foods, or an oily taste in your mouth? Do you have gas, constipation, or constantly feel "full"?
- Do you have frequent headaches not related to stress? Are you on an emotional roller coaster?

DETOXIFICATION: FIBER AND PSYLLIUM

Fiber, what mom used to call *roughage*, can help detoxification. It acts as an "intestinal broom," sweeping out toxins as it winds its way through the digestive tract. It helps relieve constipation. Constipation can lead to a sense of bloating, as well as fatigue, achiness, and mental torpor, all possible

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signs of a toxic body.

There are two types of fiber, insoluble fiber and soluble fiber. Insoluble fiber does not dissolve in water and passes through the digestive system largely unchanged. Insoluble fiber adds bulk to feces because it is not digested, and also because it absorbs water. This results in feces moving more rapidly through the colon, and the "sweeping" effect. Insoluble fiber may help protect against cancer of the colon, either because it dilutes cancercausing bile acids, or because it moves feces out of the colon more quickly. The less time stool is in the

intestinal tract, the shorter the body's exposure time to carcinogens (cancercausing substances) being transported in the feces.

Soluble fiber dissolves in water and is degraded by bacteria in the colon. Soluble fiber forms a bulky gel in the colon which regulates the flow of waste materials.

Psyllium, one type of soluble fiber, is used as an herbal detoxifier in many cleansing programs. Jacqueline in her book Natural Krohn, Detoxification, comments that psyllium is "A bulking agent that helps eliminate toxins and xenobiotics [substances foreign to a biological system] by binding them in the feces so they are not absorbed back into the bloodstream."

Psyllium has been researched for its effect on both constipation and transit time. A report in the Journal of the American Geriatrics Society (June 1995; 43:6) looks at how psyllium affects constipation in the elderly. A group of people 65 years of age and older were given 24 g of psyllium a day for one month. The psyllium decreased transit time from 53.9 hours to 30 hours. The researchers concluded that "Fiber supplementation appeared to benefit constipated older patients clinically, and it improved colonic transit time...."

Constipation is often a symptom of a toxic body and it can lead to other health problems such as hemorrhoids, diverticular disease, and hiatal hernias.

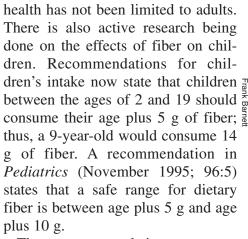
In a study published in the Journal of the American Dietetic Society (March 1988; 88), researchers looked at how psyllium and wheat bran affect transit time. Women were given 23 g of psyllium a day, which decreased transit time by about 11 hours.

Longer transit time has been linked to a number of health problems. An editorial in the British medical journal The Lancet states that "Many diseases and conditions are improved when transit time through the gastrointestinal tract is decreased." (October 20, 1990; 336:8721)

Psyllium has proven to have other health benefits. Recent reports continue to confirm the studies done in the late 1980s on psyllium's cholesterol-lowering effects. A study published in the American Journal of Clinical Nutrition(1992; 56) notes that "Adding

> psyllium-enriched cereal to a prudent low-fat diet may enhance dietary management of hypercholesteroemia."

The research on psyllium and health has not been limited to adults. There is also active research being done on the effects of fiber on children. Recommendations for chilthus, a 9-year-old would consume 14 g of fiber. A recommendation in Pediatrics (November 1995; 96:5) states that a safe range for dietary fiber is between age plus 5 g and age plus 10 g.



These recommendations were put in place in part because of the recognition that preventive health must start early. The same issue of Pediatrics notes that "The consumption of dietary fiber in childhood is associated with important health benefits, especially with respect to promoting normal laxation. Dietary fiber also may help reduce the future risk of cardiovascular disease, some cancers, and adult-onset diabetes."

In sum, fiber is one way to help your body detoxify and maintain a clean and healthy system.

DETOXIFICATION HERBS

Herbs have a long tradition of being used in detoxification programs. They are used alone, together, and with other techniques. Following are brief descriptions of a few of the more popular herbs used for detoxification.

Dandelion

Dandelion is held in high regard as a detoxifier.

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Plantago psyllium

According to Jacqueline Krohn in Natural



Detoxification (Hartley & Marks Publishers, Inc., 1996), dandelion stimulates the elimination of toxins from every cell in the body. It is often used in comprehensive treatments for the liver. Dandelion also increases bile production and stimulates its flow to the gallbladder. The polysac-

charide insulin found in dandelion is said to have white blood cell and immune-boosting properties.

Licorice Root

Licorice root is regarded as an important herb for



treating kidney ailments and is also recommended for the liver and respiratory tract. According to the *Townsend Letter for Doctors* (December 1994), licorice root's antioxidant, antiviral, and antibody-stimulating properties make it a liver protectant and detoxifier. *Planta Medica* (50, 1984)

notes that it may help the liver detoxify powerful chemical poisons.

Milk thistle

Milk thistle is best known as a liver tonic. The active ingredient is silymarin, which is reputed to



repair liver damage due to alcohol, drugs (over-thecounter, prescription, and illicit), hepatitis, and exposure to toxins. In Germany, physicians are so impressed with the liver-protecting effects of milk thistle that they routinely prescribe this herb to patients with liver

disorders. Milk thistle also strengthens and protects the liver in otherwise healthy people.

Cascara Sagrada

Cascara sagrada supports healthy bowel function

by acting as a mild laxative. This herb can also be helpful in the treatment of gallstones and liver ailments. It also increases secretions of the stomach, liver and pancreas and is a potent cleansing herb.

Black Walnut Hulls

Black walnut hulls are known to help remove parasites from the intestinal tract and to facilitate the removal of toxic buildup and fatty materials.

HERBAL CATEGORIES AND ACTIONS

Many herbalists divide herbs into groups, depending on what they do. One group of herbs has detoxifying properties This group is more specifically divided according to how the herbs interact with the body and what organs they affect. Following are some of the detoxifying categories set out in Humbart Santillo's *Natural Healing with Herbs*, their definitions, and some of the herbs that fall into each category.

Alterative—Alters (purifies) the blood: alfalfa, dandelion, licorice root, marshmallow

Anthelmintic—Destroys intestinal worms and parasites: black walnut hulls, cascara sagrada, garlic

Anticatarrhals—Eliminates mucous conditions: comfrey, garlic, Irish moss, marshmallow

Cathartic—Promotes evacuation from upper intestines and bowels: *aloe*, *cascara sagrada*

Cholagogue—Promotes bile flow: beets, cascara sagrada, dandelion

Deobstruent—Removes obstructions: barberry, goldenseal

Expectorant—Facilitates excretion of mucus from throat and lungs: comfrey, garlic, licorice root, mullein

Laxative—Promotes bowel action: *cascara sagra-da*, *licorice root*, *psyllium*

Lithotriptic—Dissolves and discharges urinary and gallbladder stones: *cascara sagrada*, *dandelion*, *marshmallow*, *parsley*, *shavegrass*

Lymphatic—Stimulates the lymphatic system: dandelion, echinacea, garlic □

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