

Dealing With Parasites

Given the number of outbreaks of various parasites in recent years, it's not surprising that the issues of water quality, parasites and potential epidemics are on the minds of many Canadians. Formerly obscure names such as *Escherichia coli*, *Clostridium difficile*, *Candida albicans*, *Giardia lamblia* and *Helicobacter pylori* have become household words - and they should be! The probability of a serious epidemic in North America is on the increase due to the convergence of many significant risk factors.

It has been stated that the advent of modern medicine came with the development of antibiotics. Up until that point, our medical system did not have many successes to speak of. Antibiotics allowed many serious and potentially life-threatening infectious conditions to be managed more efficiently. Unfortunately, this is no longer the case. The widespread misuse of these "wonder drugs" by the medical establishment, the agricultural industry and the general public have led to the development of numerous antibiotic resistant strains of microorganisms.

With these "super bugs" on the rise, the risks of serious epidemics are becoming very real. To make matters worse, poor dietary and lifestyle practices are the norm these days. The modern North American lifestyle is reducing our capacity to fight off everyday infections. However, if we understand the nature of the risks, they can be significantly reduced. There are also safe, natural ways to treat these kinds of infections. As always, education and accepting personal responsibility are our most powerful allies.

It is no mystery that many microorganisms enter our body through our digestive tract. What most people don't realize is that our digestive system is our first line of defense against water- and food-borne pathogens. If our

digestive system is functioning adequately, hydrochloric acid in our stomach and, to some extent digestive enzymes in our stomach and small intestine, will kill most potentially harmful microorganisms. Those that manage to survive will have had their populations reduced to a level that they can be easily controlled by beneficial flora that live in our digestive tract and immune cells that are also present.

Due primarily to poor diet and eating habits, most North Americans secrete insufficient amounts of digestive enzymes and stomach acid. Thus, our digestive system is inadequately equipped to eliminate potentially harmful microorganisms. A reduction in digestive secretions also decreases the efficiency of digestion resulting in reduced nutrition for our body cells and tissues. Poor digestion leads to the creation of an environment in the digestive tract that is not as conducive to the growth of beneficial microorganisms and encourages the growth of the unfriendly varieties. This leads to increased fermentation, gas, bloating, indigestion and eventually inflammation of the mucus membranes of the digestive tract. As the mucus membranes become increasingly more compromised, leaky gut syndrome can develop. This is characterized by absorption into the body of undigested food materials, microorganisms and the toxins that they produce. As a result, a problem that originates in our digestive system can have negative consequences throughout our body.

An unhealthy digestive system can also lead to poor elimination. If waste products from our digestive tract move through our system too slowly, it will further disturb the balance of intestinal flora and increase the potential for harmful microorganisms and their toxins to be absorbed into our body and have a negative impact on our health.

To promote healthy digestion it is important to eat a healthy diet consisting of whole foods (certified organic as much as possible), including lots of fruits and vegetables. We also need to reduce consumption of foods

that contain artificial flavors, colors and preservatives. Animal proteins (including dairy products) should be certified organic and eaten in relatively small quantities.

Equally important is how we eat. We don't want to overeat. It is best to eat in a slow, relaxed manner, chew our food well and stop eating when we are comfortably satisfied. If our stomach feels uncomfortably distended after a meal, we have eaten too much. Another problem is incessant snacking. It is not a good idea to eat between meals. If we are hungry and must snack, it is preferable to eat small amounts of foods that are easy to digest. About the only acceptable snacking foods are fruits. Unfortunately, most people snack on fatty or starchy foods that are more difficult to digest. The result is that their digestive system is always working hard and never gets a rest so that it can replenish itself. Similarly, it is preferable to eat supper in the early evening and not consume anything except liquids between supper and bed time. In this way our digestive system will be able to rest through the night we will really be "breaking a fast" when we eat in the morning.

If we follow these simple principles it will help improve our digestive functioning. As always, moderation is the key. It isn't helpful if we are obsessive.

Proper immune function is also extremely important. Once again we are at a disadvantage. Poor dietary and lifestyle practices have resulted in most of us suffering from some degree of immune dysfunction. The most important factor that disturbs immune functioning is tissue toxicity. Internal toxicity comes from a variety of sources including agricultural chemicals and food additives, environmental pollutants, household cleaners, furniture and building materials, chlorinated water, microorganisms and many others. Given the multitude of toxins that we absorb on a daily basis, our cells are being bathed in a chemical soup. Medical professionals will usually tell us not to worry about it because these toxins are supposedly at levels that are

low enough to reduce their harmful effects. This is pure nonsense. Toxicity research is conducted on individual chemicals in isolation. Toxicologists don't have the slightest clue about the cumulative effects of the synergistic interactions of the thousands of toxins on our body. Toxicity affects every cell in our body. However, the important point for this discussion is that toxicity leads to compromised immune function. We must therefore try to reduce potential sources of toxicity as much as possible. In addition, supplementation with antioxidants can be helpful to protect our body against the harmful effects of many toxins, as is eating more fruits and vegetables as they are rich sources of naturally occurring antioxidants.

Stress is another important factor that needs to be addressed. Excessive amounts of psychological stress suppresses both digestive and immune function. Various methods of stress reduction such as relaxation techniques, meditation, tai chi, yoga, and others are highly recommended for those of us whose lives are relatively stressful. Exercise is also beneficial. Exercise helps reduce the impact of stress in our lives. It also helps improve digestive and immune function and facilitates detoxification.

In addition to living a healthier lifestyle, herbs can be very valuable tools to give us the extra edge that we need. Many herbs are digestive tonics that can help improve digestion and elimination. A simple digestive formula can be created by combining one or two aromatic herbs like peppermint herb (*Mentha x piperita*), spearmint herb (*Mentha spicata*), lavender flowering spike (*Lavandula angustifolia*) or lemon balm herb (*Melissa officinalis*); a bitter herb such as yellow gentian root (*Gentiana lutea*), dandelion root (*Taraxacum officinale*), blue vervain herb (*Verbena hastata*) or white horehound herb (*Marrubium vulgare*); and a warming herb such as ginger rhizome (*Zingiber officinale*), turmeric rhizome (*Curcuma longa*) or cayenne fruit (*Capsicum annum*). This kind of combination will stimulate all of the secretions of the digestive tract. The best way to take

these herbs is in the form of a fresh herb tincture (3-4 droppers of the entire combination per dose). A tea is the next best method (2-3 teaspoons of the entire combination per cup). They should be taken 15-20 minutes before each meal for 2-4 week periods. Do not use these herbs in capsule or tablet form as their effectiveness is drastically reduced if you don't taste them.

Periodic use of immune stimulants is also beneficial to give our immune system a boost. Try combining a couple of immune stimulants like purple coneflower root (*Echinacea* spp.), elecampane root (*Inula helenium*), black elder flower (*Sambucus nigra*) or plantain herb (*Plantago* spp.) with one or two lymphatic herbs like cleavers herb (*Galium aparine*), yellow bedstraw herb (*Galium verum*), nettle herb (*Urtica dioica*) or horsetail herb (*Equisetum arvense*). Once more a warming herb like those listed above should be added as a catalyst. These herbs are best taken 3-4 times per day on an empty stomach (before meals and before bed) for 1-2 week periods, followed by at least a one week break. Once again, the fresh herb tincture is preferred.

Adaptogenic herbs help to reduce the negative impacts of both psychological and chemical stress. Many of them are also powerful immune tonics. Herbs such as Chinese milkvetch root (*Astragalus membranaceus*), reishi mushroom (*Ganoderma* spp.), chaga fungus (*Inonotus obliquus*) and Siberian ginseng root (*Eleutherococcus senticosus*) are very beneficial for this purpose. A simple combination of two or three of these herbs along with a warming catalyst taken three times per day on an empty stomach 20-30 minutes before each meal has a deep tonic action on immune function. For maximum benefit adaptogens need to be taken over a 2-3 month period.

Implementing these measures into our lives will significantly reduce the likelihood that we will suffer from a serious parasitic infection and reduce the severity of the infection if it does occur. There are also ways of addressing this kind of infection when it occurs.

Firstly, it is essential to flush out the digestive tract and keep the bowels moving. This can be accomplished by taking one heaping teaspoon each of psyllium husks and whole flax seeds along with ¼ teaspoon (or the contents of one capsule) of a high potency probiotic supplement (it must be taken in powder form) containing several species of friendly microorganisms. Mix these together in 10-12 ounces of warm water and drink all of it. Take this mixture several times per day on an empty stomach. It will absorb parasites and their toxins and remove them from the digestive tract. It will also soothe and protect the lining of the digestive tract and thicken the stool (in the case of diarrhea). The probiotics will help replenish healthy intestinal flora that will compete with and control the growth of pathogenic organisms.

Herbal support is also beneficial. Fortunately, as long as we include some good, broad-spectrum antimicrobial herbs, the herbal protocol is pretty much the same for a wide cross-section of bacterial, fungal and protozoal infections. A combination of either goldenseal rhizome (*Hydrastis canadensis*) or barberry bark (*Berberis vulgaris*) with one or two additional antimicrobial herbs such as wormwood herb (*Artemisia absinthium*), oregano herb (*Origanum vulgare*), thyme herb (*Thymus vulgaris*) or pot marigold flowers (*Calendula officinalis*). These herbs will help to control the parasite. Add to your antimicrobials two good antioxidant diuretics such as goldenrod herb (*Solidago* spp.), dandelion leaf and flower or horsetail herb. These will flush out the urinary tract and help protect the kidneys from and eliminate bacterial toxins. As with the other formulations, include a warming catalyst. Take your herbs as fresh-herb tinctures at double the normal dose 5 or 6 times per day on an empty stomach. The best times are 20-30 minutes before your fibre drink mix.

Finally, water-soluble antioxidants are also important. Take 1,000-1,200 mg of vitamin C (preferably as calcium ascorbate) along with a good

bioflavonoid complex including at least 50 mg of anthocyanin extract (grape seed, pine bark or berry extracts) and 100 mg of quercetin. Take this combination 3-4 times per day at the beginning of a meal. These will help to protect your body (including your kidneys) from the harmful effects of toxins produced by microorganisms.

If there are symptoms such as high fever, vomiting and moderate to extreme diarrhea (especially if there is blood), it is essential to get to a hospital to identify the nature of the infection. If the infection is serious and treatable with antibiotics, it may be necessary to use them as well, supported by herbs that will increase their effectiveness and reduce their side-effects.

All of the above protocols should be continued until 7-10 days after the symptoms have subsided. If your symptoms don't change or worsen, you should consult with a qualified herbalist or other health care practitioner. Following any infection of this nature, it is also a very good idea to do at least two courses each of the immune and digestive tonic formulations mentioned above to boost these systems and reduce the side-effects of the antibiotics (if used).

No matter what anyone says, there are no magic bullets, natural or pharmaceutical. When it comes to good health there is no substitute for healthy lifestyle practices. It requires knowledge, effort and common sense. Use them in good health.