General Information on Parasites:

Parasites can cause a myriad of symptoms. Here are some symptoms that we have resolved in our patients by treating them for parasites:

- 1. Chronic fatigue
- 2. Joint pains (especially ones that seem to migrate from one joint to another)
- 3. Insomnia (parasites are more active at night)
- 4. Severe irritable bowel symptoms (IBS) (pain, bloating, diarrhea, chronic constipation)
- 5. Heart burn (GERD)
- 6. Inflammatory bowel disease (we have cured several patients with documented Ulcerative colitis by treating parasites)
- 7. Multiple food sensitivities (the parasites irritate the gut lining and violate the integrity of the gut lining and cause leaky gut syndrome)
- 8. Any variety of skin abnormalities but especially chronic hives and itchy undiagnosed skin rashes
- 9. Symptoms of nutritional deficiencies. Patients frequently have increased energy and vitality when their parasites are removed from their bodies.
- 10. General feeling of malaise and unwellness.
- 11. Other serious problems that will not resolve. For example, patients who have been unsuccessfully treated for chronic Lyme disease will frequent respond when their parasite condition is diagnosed and treated.

FAQ's regarding parasites and their treatment:

Why didn't my GI doctor not diagnose my problem?

- In medical schools throughout the country, students and physicians are taught that parasitic illness is a tropical disease or a disease that occurs in mainly third world countries that have poor sanitation. The disease is not even considered unless the patient has a recent travel history outside the U.S. Hence most doctors including specialists in gastroenterology rarely consider parasites as a possible diagnosis.
- If doctors do consider the diagnosis of parasites, they ask for three stool specimens collected by the patient and have them sent to a lab. After a negative test, they stop considering the diagnosis.
- Unfortunately, there are 4 common testing flaws:

Flaw #1: Parasites live in life cycles and if you're not collecting a stool sample at the time of the month that the parasites are not shedding eggs then the testing is really a waste of time. The trouble is it's hard to predict when the parasites will hatch. This leads to patients who are actually infected from being diagnosed.

Flaw #2: Parasite eggs will perish when they're exposed to air for more than a few hours. Yet there are no preservatives used in the stool specimen containers that most laboratories use. By the time a pathologist is able to review a specimen it's often long past that short window of time; meaning, of course, that the parasites will be missed by the very test that was designed to find them.

Flaw #3: Many doctors fall for the colonoscopy myth. They believe that they will be able to see a parasite with a colonoscopy. In my over 30 years on the job I have NEVER seen a colonoscopy reveal a parasite. And there are several good reasons for that. First, the clean-out process for the colonoscopy is very thorough (if you've had one you know what I mean) and it wipes out any obvious parasites. Even more important, is the fact that parasites actually live INSIDE the colonic wall which will not be seen with the camera. But the most obvious reason colonoscopies don't work is that many of these parasites live in the small intestine not the large intestine that's viewed in a colonoscopy. The small intestine, which makes up about twenty feet of the gastrointestinal system, is basically unchartered territory where these critters can hide.

Flaw #4: There are many different species of parasites and standard current testing simply isn't designed to search for all of them... or even most of them for that matter. Parasites can range from microscopic ameba to large tapeworms. And some don't even live in the intestinal tract—such as flukes that set up shop in your liver instead, (therefore they are usually not found in the stool).

How did I catch the parasites?

- We believe that parasites come from contaminated raw imported fruit and vegetables, and rare or raw meats, poultry, fish. Even organic produce if they are imported can be contaminated.
- U.S. doctors are correctly taught that foods grown in this country are very unlikely to be contaminated because the water used to irrigate our produce is free of parasites because they are not cross contaminated with sewage water. Unfortunately, we now have a global food supply. Whenever, we eat fruit or salad in the winter, they are commonly imported from places whose water supply can be contaminated. Most doctors who do medical mission trips to central America will tell you that the number one drug they take to treat the inhabitants are anti-parasitic medications. Sadly those doctors forget that we get some of our produce from those very same countries. Many doctors advise patients not to drink the water or eat fresh salad when traveling to places like Mexico and forget that we get a great deal for fruits and lettuce from those very same places.

How do I prevent re-infection?

- Like other infections, some people are more susceptible and others just never seem to get an infection with an exposure. That is why some people can eat regularly from a poor street dingy vendor in a third world country and never have a problem while a susceptible person could catch a parasite from a single lone parasite egg hidden in a salad in an upscale restaurant.
- One's ability to prevent parasite infections depend on a healthy stomach that produces good amount of acid and a healthy gut that has a strong immune system.
- For average individuals:
 - o Try to eat locally grown or U.S. grown produce that are in season. Even non-organic local produce may be safer than organic imported produce.
 - o Wash all produce carefully. We recommend to avoid produce that are hard to wash: e.g. raspberries, strawberries, cantaloupes. Watermelons should be washed

before cutting into the skin otherwise the knife may become contaminated while cutting through the skin. Remember that vegetable and fruit washes are designed to remove pesticide residue so soaking may not kill eggs. Washing merely physically removes the parasite eggs so mild liquid dish washing soap is adequate.

- o Frozen fruit or vegetables are probably OK because freezing will usually kill the parasite eggs.
- o High speed blenders will destroy all parasites as well. Fruits and raw vegetables that are hard to wash such as kale, and raspberries are OK if blended.
- o Eat more local "winter vegetables" such as winter squashes etc.
- Avoid salad bars in restaurants.
- o Avoid rare or raw meats, poultry, and fish.
- For very susceptible individuals (more than one parasitic infection in one year):
 - o Eat only fruits that you can peel or that you blend
 - Avoid raw vegetables obtained from outside this country unless you cook them thoroughly, or put them in a high speed blender.
 - No restaurant salads

Why am I being prescribed a pharmaceutical medication and not a natural herb?

• Our practice is "Integrative Medicine", we use what works best. We generally prefer herbs or homeopathic remedies whenever possible. However, in the case of parasites, we have found medications to work more consistently and more quickly. Herbal treatments can sometimes take many months and are less successful. For patients with a track record of severe reactions to most medications, can try the herbal therapy recommended below.

How will I feel when I take the medication?

• Frequently, as the parasites are dying, there is temporary increase in inflammation. Either the parasites are releasing toxins, or the body is reacting to the presence of foreign proteins that are deteriorating. Patients can typically feel more ill. It is common for them to experience an increase in whatever symptoms that have been ailing them. Typical symptoms are: nausea, fever, diarrhea, intestinal cramps, malaise, fatigue, dizziness.

How do I take the medication?

- Depending on the medication. You will take either a one day course, three-day course, or five-day course of one or medications and then repeat the whole process again two weeks later. We do this because sometimes the eggs are not as easily killed and so the first course kills the adult forms, and the repeat dose is taken two weeks later to allow the eggs to hatch and then can be killed.
- Remember if you are prescribed more than one medication, we prefer that you take them in succession and not simultaneously. For example, if you were prescribed praziquantel and albendazole. You would take the praziquantel every four hours for 3 doses for one day then you would take albendazole two pills twice daily for five days. That would complete your first cycle. Then you repeat the whole process two weeks from the last dose of your first cycle.
- On rare occasion if a person feels particularly ill during the treatment, you can pause the treatment for one to three days until you feel less ill and then complete the course.

• If you happen to develop hives or total body rash, swollen tongue, you may be allergic to the medication. You should stop immediately and hold off until you speak to one of the doctors in our practice.

Will the medication take care of the problem?

• Unfortunately, approximately 20% of the time, in multiple parasitic infections, when we see you in follow-up, we will need to treat you either with a repeat course of medication or another set of medications.

Can I treat parasitic infections at home with over-the-counter herbs?

- Raw garlic, carrots, beets, coconut, honey, pumpkin seeds, papaya seeds, cloves, wormwart and pomegranate have all been traditionally used to kill parasites. If you have symptoms that you suspect as possibly due to parasites we recommend you try the following:
 - Obtain a papaya fruit. Cut in half lengthwise, spoon out the seeds and save. Scoop out ¼ of the reddish-orange fruit, mix with 1 tablespoon of seeds in a blender with 1 tablespoon of honey. Blend at medium speed than drink. Drink this mixture once or twice a day for 7 days.
 - We like this method because in one medical study it was reported to be 70% successful in treating documented parasite infections in 60 children that were studied.