# **Functional Medicine**

Dr. Jennifer Tremain offers the following services to support healing and ongoing wellness:

- Laboratory-based assessments
- Nutritional supplement programs
- Chiropractic care
- Diet and lifestyle counselling, including weight loss and hormone balancing programs

Dr. Jenn's wellness philosophy involves balancing the three body systems. Your hormonal system produces your sex and stress hormones; your digestive system breaks down food for use by the body; and your detoxification system protects you from free radicals and chemical toxicity, both from your environment and from your diet. Every health issue can be traced back to a problem within one or more of your three body systems.

Through targeted lab testing that you can do in the privacy of your own home for each of these systems, Dr. Jenn is able to assess how each system is working and design an individualized program to rebalance your body.

### **Hormonal System**

Hormones act as the command and control system of the body and regulate energy production, fat burning and mood. Hormonal imbalances are common among people suffering from weight issues, fatigue and depression. Most cases of hormonal imbalance are a secondary response to a primary stress, whether it is emotional stress, physiological stress due to pain and inflammation, or dietary stress. In general, if the stress can be addressed with diet changes, correction of chronic inflammatory conditions and support for emotional health, the need for continued hormonal support is eliminated.

In your hormonal system, the adrenal glands produce and regulate your stress hormones. Normally, when the stress dissipates, the glands have time to rest and prepare for the next stressful event. However, if your stress levels remain chronically high, your body will remain locked in a state of stress. If your stress hormone levels remain elevated for extended periods of time, your body's ability to recover can be reduced, and the ability of your adrenals to make stress hormones can be compromised. Under chronic stress conditions, the adrenals eventually "burn out." At this point, the adrenals become fatigued and can no longer sustain an adequate response to stress. Once the glands have been depleted of their ability to produce stress hormones, it becomes more and more difficult for the body to recover. Constant fatigue and low-level depression can appear in otherwise emotionally healthy people.

Stress hormone depletion also impacts the female hormones progesterone and estrogen, as well as the predominant male hormone, testosterone. Since sex hormone levels drop as stress hormone levels drop, sex drive diminishes in both men and women. In both men and women, hormonal symptoms such as mood swings, irritability, sweet cravings and headaches can be related to the failure of the adrenals to adapt to stress. Female hormone symptoms such as menstrual cramping, infertility, night sweats and hot flashes can also be related to adrenal insufficiency. Many women feel they are on an emotional roller coaster with their female hormones, and testosterone levels in men also suffer as a result of weak adrenal output.

#### **Digestive System**

The digestive tract is responsible for our vitality via the breakdown and absorption of every nutrient that fuels our trillions of cells. Problems with the digestive system are typically experienced as bloating, indigestion, gas, constipation or diarrhea. Many people have experienced gastrointestinal discomfort for so long that they have adjusted to it and think that their system's poor function is normal. With healthy digestive function a person will feel energized and revitalized after a meal for several hours and will not experience any cravings for sweets.

The foundation of good health lies in proper digestive function. If you are not able to digest and absorb nutrients, your overall health will suffer. Assimilation of vitamins, minerals, proteins and essential fatty acids from the foods you eat is required to keep you healthy. Low stomach acid and low digestive enzymes are common problems due to poor diets and high stress levels. In addition, an imbalance in the healthy organisms that inhabit the intestinal tract can be caused by parasitic infections, bacterial overgrowth, or invasive yeast often referred to as candida. Hidden inflammatory conditions can also interfere with digestion. Did you know that the majority of your immune system lies within your intestinal lining? The lining of your gastrointestinal tract is your first line of defense from invading pathogens. If this lining is compromised from years of faulty digestive function, you will be more susceptible to invasion from pathogens, parasites, and infections.

#### **Detoxification System**

The detoxification system refers to the body's pathways for eliminating harmful toxins such as mercury, various chemicals and the products that result from the breakdown of alcohol or medications. Our modern world is creating a level of chemical and heavy metal exposure that is taxing our detoxification system.

Your liver is at the center of your body's detoxification system. The liver is an amazing organ, responsible for filtering toxins out of your blood. Our bodies must handle and process toxins from many sources. One major source of toxic exposure is through the digestive tract. High fat diets, alcohol, caffeine, sugar, artificial sweetener consumption and the use of medications contribute to the total burden placed on the liver. Hormones and antibiotics fed to animals, preservatives and dyes used in foods you eat can all cause

serious symptoms and side effects. Heavy metal toxicity from dental fillings, contaminated food and water, and other environmental exposure also add to the total toxic load on the body. In addition, everything you apply to your skin or expose yourself to in your environment must pass through your liver, where it is must be neutralized and excreted.

An overworked liver can become clogged, causing toxins to back up and recirculate into the bloodstream. Inadequate detoxification leads to allergies, asthma, joint pain, skin problems, headaches, inability to concentrate, and alcohol intolerance. Inadequate detoxification leads to accelerated aging and promotes the onset of degenerative diseases. Despite all the work it has to do everyday, the liver has an amazing ability to regenerate.

These three body systems all interact with one another. For example, if you eat a food you are reactive to it will cause inflammation in the GI tract which impacts normal digestion and absorption of nutrients. The inflammation generates a hormonal response and as the anti-inflammatory hormone cortisol rises, immune function lowers and your sex hormone levels drop. All this can happen simply because you had a pancake breakfast and a large glass of orange juice!

#### The Role of Diet and Exercise

"I believe that most depression, fatigue and weight gain (the three most common complaints in our clinic) can be relieved by exercise and diet changes and proper nutritional supplements based on lab assessments."

#### **Chronic Health Problems**

The most common problem diagnosed in our clinic is infection - low grade, chronic infection caused by parasites, bacterial infection and food intolerance - that over time wear people down physically and emotionally. 90 percent of people experience renewed health and vitality within a year or so of starting treatment for chronic infections.

The tools we use to create your wellness plan:

- 1. Diet changes: Learn what foods to eat and what foods you need to avoid, when and how much to eat in order to maximize the efficiency of your unique biochemistry. Food allergy testing, hormone assessments and learning what your metabolic type is enable us to discern how to meet your unique needs.
- 2. Supplement programs: What exact nutrients you are deficient in and what supplements will have a therapeutic benefit for you to promote your transition to a healthier body. Lab results for all body systems matched with your clinical presentation of symptoms enable us to discern what supplements will be supportive in this process.
- 3. Exercise, lifestyle and stress management advice: It is important to establish an appropriate exercise program based on strength training, stretching and cardiovascular exercise. We suggest lifestyle modifications such as changes to

your sleep patterns, water intake or daily work schedule. Examples of stress management vary widely. Some people need more time with family, more sleep, or more connection to their spiritual life. The chronic stressors we all experience are often a major source of our health complaints and need to be addressed as part of a comprehensive plan to restore health.

### **Lab Testing**

Natural therapies have advanced to the point where we can now use the perfect blend of science and nature to create lab guided, doctor recommended supplement programs. This is done by using advanced clinical laboratory testing to create individualized nutrient programs. Lab testing results can be applied to a wide range of health concerns, from weight loss to hormone balancing. Using the latest technologies, we can now accurately assess specific nutrient deficiencies, measure hormone levels and determine the best therapeutic protocol for correcting many chronic health conditions. This technology can also be used on a preventive basis, to maintain healthy functioning in those without any current health problems.

## **Supplements**

As part of your program, we usually recommend that you purchase nutritional supplements. These may include specific vitamins, minerals, herbs, natural plant-based hormones, and various other products. All of the supplements we recommend are sourced from nutrition companies that only sell their products to physicians. These are the highest quality products available. They contain only the purest pharmaceutical grade nutrients (nutraceuticals) and the potency of each product is guaranteed. In the past when designing nutritional programs, in an effort to save clients money, many doctors have suggested that patients purchase products at local health food stores. While this seems to save people money in the short run, the results of these programs have been inconsistent and less than would be expected had we been using physician-only brands. Therefore, it is in many ways more sensible both financially and in terms of consistent results to use the highest quality products available.

You may purchase most of your products directly from our clinic. In so doing, you can be assured of consistent results - if a specific protocol is not working we will know it is not the quality or potency of the nutrients that is slowing the healing process. All of the supplements I carry have been proven clinically effective by hundreds of naturally oriented doctors. They have been shown to help resolve patients' health concerns with predictable outcomes. In addition to proven clinical results, these products have also been carefully scrutinized for effectiveness based on lab testing. Thousands of physicians have used laboratory tests to determine nutritional deficiencies. Through the use of follow-up testing doctors have determined which brands and which specific nutrients and herbs are consistently clinically effective. In fact the vast majority of supplements on the market are not effective as evidenced by lack of patient improvement on follow-up lab testing.