

# Change

By Dr. Leila Kirdani

## Inflammation: The Deeper Meaning of Aches & Pains

### How Toxins, Allergens and the Gut Affect Daily Life

I am so excited to present this year's one day seminar event entitled "Inflammation: The deeper meaning of aches and pains. How toxins, allergens, and the gut affect daily life." The reason I am so excited is that the topics covered in this year's seminar truly get to the core of why we are experiencing such a skyrocketing rate of illness in our society today. One has only to listen to the evening news for a few minutes or take a brief glance of any newspaper to hear about yet another ailment that is on the rise. Whether it is Alzheimer's disease, rheumatoid arthritis, autism, heart disease, obesity, diabetes, or cancer, the root cause is inflammation. If we know how to treat inflammation then we know how to reverse disease – and how incredibly exciting is that?

#### Causes of Inflammation

The bottom line is that we know what causes inflammation and we know how to treat it. The causes of inflammation can be broken down into six categories: stress, sex-hormones, vitamin D, environmental toxins, genetics, and food allergens. During this year's conference I will be quickly reviewing the first three causes because we wanted to spend most of our time focusing on the areas of genet-

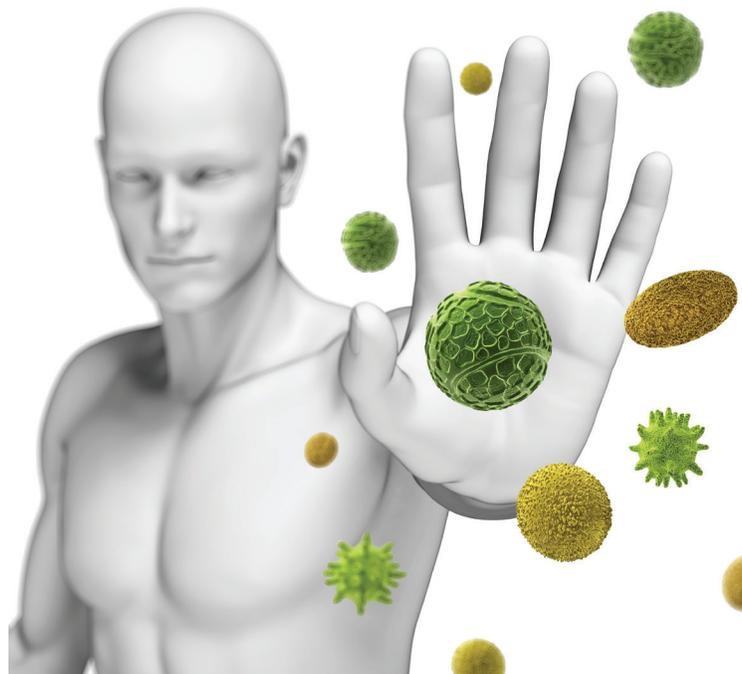
ics, toxins, gut health, and the gut-brain connection. To entice you to come to the conference, here are a few highlights from what will be covered.

There is so much new and exciting information that is coming out about genetics and how the genes that make us up interact with the environment we put them in to result in our health. Since the completion of the human genome project in 2003 scientists have discovered that we all have genetic defects that are crucial to the body's ability to break down toxins. This is compounded by the fact that

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we are bombarded on a daily basis with chemicals and toxins that the body was not meant to have to deal with. Think of all of the pesticides and insecticides that are used in agriculture. These chemicals get into our food and water and wreak havoc with our systems. Not only do they create inflammation, but they act to disrupt the balance of our hormones – often increasing estrogen and decreasing thyroid hormone. This combination leads to obesity, infertility in both men and women, and cancer, among other things. The number of chemicals used in industry is equally as lengthy and equally as toxic, not to mention toxicity and inflammation from heavy metals. Put all of this together with the fact that so many of us have genetic defects in the enzymes that allow the body to break down and release toxins, it is no wonder that we have such high rates of diseases caused by inflammation! Truly, this part of the conference is not for the faint of heart!

The exciting part is that along with learning about these genetic defects scientists are also learning how we can support the enzymes that are affected so that they can function better. Epigenomics - the study of how our genes interact with the environment and vice versa, and nutrigenomics – the study of how foods impact our genes, are two of the most thrilling and for me, fascinating areas of learning. We now know based on the very DNA that you have within



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you, what foods and what supplements will impact your genes and the enzymes they make in the most positive ways possible. For example, we can turn on or turn off genes that cause cancer simply by what we eat. A big Mac with fries turns on inflammation and hence genes that increase our risk for cancer, whereas a cup of broccoli reduces inflammation and turns off genes that cause cancer. Similarly, if an enzyme that is not working well needs a certain cofactor to do its job, such as B6, for example, taking more B6 could help that enzyme to work more efficiently. Not only are we no longer doomed to our parent's illnesses, we can reduce and reverse diseases by getting the body to clear toxins optimally.

### 75% of Immune System in the Gut

Whenever we have inflammation our gut takes the hit because 75% of the immune system is in the gut. For most of us, our intestines are not working well to absorb and process food because of this increased inflammation. Inflammation in the gut can cause leaky gut, which is a problem where large particles of food are able to cross the gut-blood barrier and get into the bloodstream. This is why leaky gut is a major cause of inflammation and chronic disorders like inflammatory joint diseases, asthma, eczema, food allergies, chronic sinusitis, urticarial, migraine, irritable bowel, fungal disorders, fibromyalgia, uterine fibroids, PMS, breast fibroids. Traditional doctors don't often believe in "leaky gut," but they do understand now that many patients can have "increased intestinal permeability," which is essentially the same thing.

A variety of things can trigger leaky gut such as over the counter or prescription medications, pregnancy, surgery, vaccines, traumatic brain injury, imbalance of good

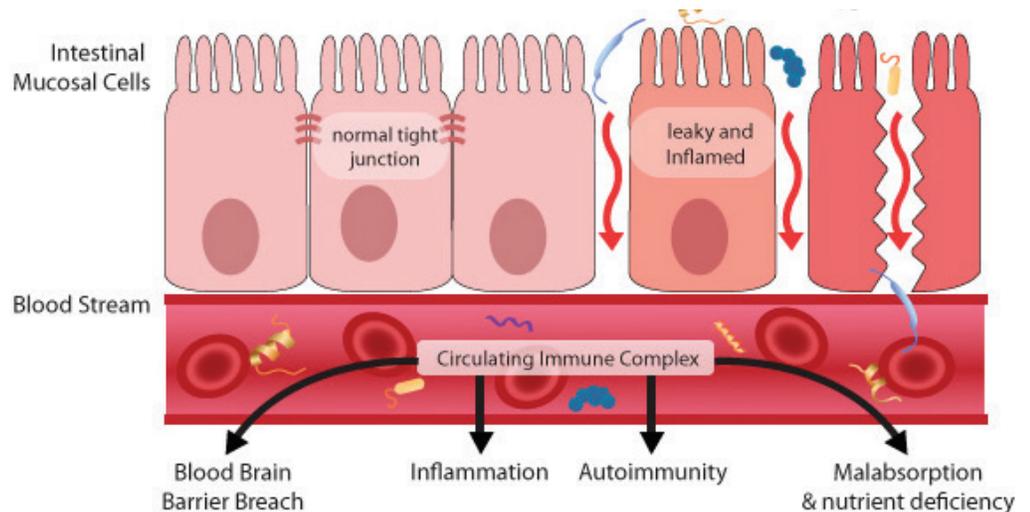
and bad bacteria, chronic daily stress, food allergies, toxins and more. Leaky gut itself can lead to poor functioning of the entire body, including imbalances of adrenal, thyroid, and sex hormones, along with poor pancreatic and immune function. A major cause for weight gain is leaky gut because the holes in the gut lining allow microbes to cross over into the liver increasing the toxic burden on the liver and impairing the liver's ability to metabolize fat.

### Leaky Gut

Leaky gut is often not diagnosed by traditional doctors because much of the testing that traditional gastroenterologists perform looks at the structure of the gut, not the function of the

Treatment requires a comprehensive program known as the four "R" program: Remove toxic foods and bugs, Replace stomach acid if needed and nutrients, Repair inflammation and the intestinal lining, and Re-inoculate with good bacteria. It may take time and effort to heal your leaky gut but the end result is health and wellness that is well worth the extra effort.

And finally, scientists have long known that there is a gut-brain link. When the gut is inflamed, we are more likely to experience psychological symptoms such as brain fog, depression, and anxiety. Similarly, our thoughts and feelings affect how



gut. For example, an gastroenterologist may perform an endoscopy, and he or she will be able to see if the lining of the intestines looks pink and healthy or red and inflamed, however this kind of testing does not tell us anything about what is going on in the gut on a cellular level. Specialized functional gut testing may be necessary to identify the root cause of disease. Anti-aging and Metabolic Medicine providers have been trained in how to order and interpret this testing.

our gut works and the gut symptoms we might experience like pain, bloating, diarrhea, and constipation.

### The Impact of Stress

To appreciate the impact of stress on the gut, it is helpful to understand the similarities and connections between the brain and the digestive system. The gut is controlled by the enteric nervous system (ENS) which is a complex system of about 100 million nerves that oversees every aspect

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of digestion. The ENS is heavily influenced by the central nervous system (CNS), with which it communicates through pathways of nerves. The “second brain,” as the ENS is sometimes called, arises from the same tissues as the CNS during fetal development. It has many structural and chemical components that are exactly the same as in the cranial brain, including nerves that help with sensation and with movement. Both “brains” also have specialized immune cells called glial cells, which support and protect the nerves. The gut uses many of the same neurotransmitters, or chemical messengers, as the cranial brain. In fact, most of the neurotransmitters needed by both brains are actually made in the

gut and then travel to the cranial brain. The gut and brain use their shared neurotransmitters, including acetylcholine and serotonin, to transmit information back and forth by way of the sympathetic and parasympathetic nerves. This two-way communication system between the gut and the brain explains why you stop eating when you’re full (sensory neurons in your gut let your brain know that your stomach is distended), or conversely, why anxiety over this morning’s exam has ruined your appetite for breakfast.

Traditional psychiatry has focused on the cranial brain only as the target for treatment of mood and mental health disorders. We now know that to experience true health and

healing, both “brains” must be included in treatment. Often mood disorders can be drastically improved if not completely reversed by balancing and healing the gut.

Imagine it – a world where true health is not just possible but probable. The road to health can take many twists and turns, but by taking the steps to clear out toxins, eat to support a healthy gut and optimal enzyme function, reduce stress and balance hormones almost every disease is reversible. This is the vision that I hold, and that I hope to share with you on April 25<sup>th</sup>.



**April 25<sup>th</sup> - One Day Special Event**

Breakfast 8:30 am • Seminar 9:00 am - 1:00 pm

# INFLAMMATION ACHES & PAINS

THE DEEPER MEANING OF



How Toxins, Allergens & the Gut affect Daily Life

Join Dr. Leila Kirdani and her team as they focus on the underlying causes of inflammation. Attendees will learn:

- Why inflammation is the cause of most diseases
- Genes & Toxins: Finding the nutritional bypass to your genetic code
- Leaky Gut: Remove the triggers and restore your health
- Fire In the Belly / Fire in the Brain: the gut / brain link to many health related issues

**Date:** Saturday, April 25, 2015

**Time:** Breakfast & Registration 8:30 am  
Seminar 9:00 am - 12:45 pm

**Location:** Rochester Museum & Science Center  
Eisenhart Auditorium  
657 East Ave., Rochester NY

**Cost:** \$40 per person until April 24  
\$50 per person at the door

**Register Today!** (585) 773-4777 • [www.drleila.com/events.html](http://www.drleila.com/events.html)