## Waters Center for Biological Medicine

Spring 2015 Volume 2, Issue 1



# WatersBioMed News

## **Upcoming Lectures**

We have planned a series of lectures this summer in Wisconsin Dells. Come and listen to Dr. Waters speak on these interesting and relevant topics. The talks are free and seating is first come, first served! Question & answer following!

#### at the Ambers Resort & Conference Center

655 N Frontage Rd ~ Wisconsin Dells WI 53965 ~ 608-253-8700 Friends and family are welcome!

Diet, Allergies & Fatigue
Thursday, June 18, 2015 ~ 6:30pm

A Multisystem Approach for the Treatment of Lyme Disease
Thursday, July 23, 2015 ~ 6:30pm

Weight Loss Shouldn't Be So Hard! Thursday, August 20, 2015 ~ 6:30pm

Pain ~ Friend or Foe?
Thursday, September 17, 2015 ~ 6:30pm

## Find us on Facebook!

Stay up to date on current topics of interest.

We would love to engage with you!

www.facebook.com/watersbiomed



## New Blog!

Check out our BLOG on our website. Lots of new and interesting information!

www.watersbiomed.com/ blog



#### New Office Clerk

We would like to introduce Melissa, our Office Support Clerk. Our staff wants to give everyone the time they deserve while in the office, however, we also want to be available to you over the phone. Melissa has been taking supplement orders and scheduling appointments. If she can't answer your questions, she will get you in touch with the right person for your needs that day. If we are assisting patients at the time, please leave a detailed message so we can call you back. We are excited to make this addition to our staff so we can serve you better!

# New Nurse starting soon!

Carol, a Registered Nurse, is starting on June 1st!
She will be assisting Dr.
Waters with his daily patients and answering questions as well as starting IV's as needed.
She will be a great asset to the clinic!

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Pain is the main complaint that brings people to a doctor. It occurs in three general scenarios. The first is acute pain triggered by an insult to the body. An example is the reflexive withdrawal of the hand when a hot stove is touched. This is adaptive pain and protects the body from further damage. In general this type of pain is self-limiting. It does its job and the injured area heals over hours or days. This pain is sharp in nature and requires no treatment.

However, pain often occurs as a result of injuries that never healed, such as sprained ankles or low back conditions. These can occur in relation to the process of aging of the connective tissue in the body. The connective tissue making up tendons, ligaments, joint capsules, disks and muscle fascia becomes frayed and lax. Tiny sensors in this tissue fire and send signals to the brain, which are experienced as pain. This pain is adaptive in that it is trying to tell the sufferer to limit activity but unfortunately, unlike acute pain, often doesn't heal spontaneously. These pain conditions limit our activity, drain our energy and contribute to the acceleration of the aging process.

Why don't these tissues heal?

- decrease in oxygen utilization, which is part and parcel of the aging process
- nutritional deficiencies that disallow normal healing pathways
- secretion of substances at the site of nerves in the area of injury, which result in what is now being recognized as neuroinflammation
- reduced circulation to the injured area due to reduced blood circulation to the entire body

### Prolozone for Pain

Chronic pain can become a self-perpetuating process that worsens over time leading to a third scenario, which is total disability. It is vitally important to interrupt the cycle of chronic pain and promote healing to both avoid a chronic pain syndrome (a disorder known variously as Regional Pain Syndrome, Reflex Sympathetic Dystrophy or Complex Pain Syndrome) and to actually correct the original damage and thus stop the pain and restore function.

Presently, conventional medicine addresses these issues with physical therapy and when that fails, surgery. In most cases, drugs of various types are the only treatment offered. Drugs, by and large, work poorly or are not at all and can cause many side effects. Narcotics in particular have now been shown to not only result in addiction as the dose has to be increased but can actually MAKE THE PAIN WORSE. Narcotics are now thought to be a culprit in initiating the release of neuropathic peptides, the underpinning of chronic pain. They cause an increase in pain sensitivity. So what should one do besides take drugs or hear the abusive "it's in your head" followed by a prescription for an antidepressant when you go to the doctor? Prolozone may be an option.

I had the pleasure of first studying prolotherapy with Gustav Hemwell, M.D. over 30 years ago. This therapy involves the injection of a mixture of dextrose, procaine and other natural substances into the torn connective tissue where it attaches to the bone. Humans are held together by a matrix of collagenous material and injuries such as sprains and fractures result in tears in this matrix. When the prolotherapy solution is injected into the damaged attachments, the body responds by sending in white blood cells and fibroblasts, which then respond to this new injury by secreting growth and repair factors and laying down new collagen fibrils to strengthen the ligament, tendon or joint capsule that had been injured. This leads to increased integrity of the structures, which then results in stabilization of the joint treated. Pain subsides and the person is able to use the joint normally again. At a prolotherapy meeting at UW Madison, Dr. Young Kim shocked the doctors present by showing MRI images of the knee and lumbosacral spine (low back) before and after prolotherapy. Not only did the patient become pain-free but the MRI documented that the knee cartilage improved and that the "ruptured disk" returned to its normal position. Dr. Kim, an orthopedic surgeon, now rarely operates. He uses prolotherapy almost exclusively. Prolotherapists have long known that we have been helping patients with pain but were further inspired to learn that the body actually repairs itself as a result of this therapy.

Some of the top prolotherapy physicians have started adding ozone therapy to their treatment armamentaria, calling it Prolozone. Why? Because oxygen is at the very basis of all our biochemical processes, including the healing of injured tissue. Ozone causes the blood to release more oxygen to the tissues and stimulates the production of tissue growth factors and cellular antioxidants.

In all of the meetings I attend a common theme emerges: nutrition and oxygen utilization are of paramount importance in the healing process in ALL diseases. Body chemistry must be in balance if the innovative treatments are to effectuate the healing process. This centers on diet, efficient digestion, a healthy gut microbiome, hormone balance and proper oxygen delivery to the tissues involved.

If you or a loved one is suffering from a nagging pain, arthritic joints, "sciatica", tennis elbow, "plantar fasciitis" or any other chronic pain condition, please consider the group of regenerative modalities described here. These techniques are increasingly being utilized by professional athletic teams and sports medicine practices. They are safe and they work. They represent a real advance over drugs, surgery and "learning to live with it."

## Ozone can be used other ways too. Why?

When most people think of ozone, they think about the "Ozone Hole" or air pollution. Ozone is the form of oxygen known in the upper atmosphere to protect the earth from excessive ultraviolet radiation. Ozone is toxic to the lungs when it is inhaled at certain concentrations. Ozone is the odor in the air after lightning storms. It is formed when an electric arc is passed through the oxygen in the air. Pairs of oxygen molecules (O2) are split and the single oxygen atoms formed combine with O2 to form the highly reactive form of oxygen which now contains three oxygen atoms known as ozone, O3.

Ozone was discovered in 1840 and by 1900 was being used to kill germs on instruments and wounds, sterilize water and in dental surgery. By the 1950s devices were invented in Germany which allowed for the precise production of specific amounts of ozone – oxygen mixtures. It was found that when certain quantities of this mixture were added to blood, a number of positive changes occurred. These changes occur as a result of the ozone producing small amounts of hydrogen peroxide(H2O2) and by ozone reacting with unsaturated fatty acids in the blood to form "ozonoids" or, more precisely, lipid hydroperoxides. Small quantities of these ozonoids can trigger desirable changes in biological systems. The principle behind this phenomenon is known as Hormesis. It is based on the finding in many areas of biological research that small doses of a toxin act to benefit the organism. This has also been called "preconditioning" and results in an up-regulation of protective and defensive processes. This idea has been known since ancient times and was well described in the Middle Ages by a man whom many would describe as the first physician – scientist: Theophrastus Bombastus von Hohenheim or Paracelsus. He famously said:

#### "The poison is in the dose. Nothing isn't a poison at some dose. Nor is any substance not of benefit at another dose".

The introduction of ozone to the blood at very precise doses creates reactive products that are particularly good examples of the Hormetic effect. Over the last 40 years the scientific underpinning of ozone therapy working first in isolated cell models, then in animal studies and finally in human subjects has documented the following:

When the ozone-oxygen mixture is added to blood, both the red and white blood cells increase their metabolism and more ATP (the energy currency of all of life's processes) is produced in the mitochondria. This allows the cells to perform more efficiently and to remove pathogens, repair damage and improve the function of nerve cells. It is amazing to learn that while the brain only represents about 3% of the body weight, it uses 20-25% of the energy created through oxidative metabolism. The high energy demand of the brain explains why fatigue and diminished mentation are often the first symptoms to appear when a patient realizes they are not completely well.

A regulatory molecule known as 2,3 DPG is increased in the red cells and this triggers the cells to release a higher percentage of the oxygen, carried by the hemoglobin, to be delivered at the tissue level. The health of every cell in our body is dependent on the proper concentration and utilization of oxygen. Various immunocompetent cells, white blood cells known as lymphocytes, macrophages and neutrophils increase their production of cytokines including interferons and interleukins. These are the cell signaling molecules the immune system uses to direct its cellular soldiers to destroy bacteria, parasites, fungi, cancer cells and cells that are infected with viruses.

Both hydrogen peroxide and the lipid hydroperoxides formed from ozone upregulate "anti-oxidant response elements" within the genes that encode for the production of antioxidant enzymes. Antioxidants are made in our own cells. These enzymes include super oxidized dismutase (SOD), glutathione peroxidase (GSH), glutathione transferase (GST), catalase and others. Without adequate production of these protective agents, our mitochondria, cell membranes and DNA itself would become damaged to the point of dysfunction and death. These processes are central to all disease.

There is evidence that when ozone is introduced into the blood, it instantly kills microbes such as viruses, bacteria, etc.). This causes protein fragments from the destroyed organism to stimulate immune activity. Upon recognition of these alien proteins, the immune system begins production of antibodies against the disease entity involved and directs cell-mediated immune attack.

In summary, the gentle oxidative stress induced by an oxygen-ozone mixture into the blood causes a series of biochemical changes that make the person more able to discharge wastes, acquire more oxygen for the mitochondria in order to increase energy production, increase immune function against invader organisms, improve blood flow and increase production of growth factors required in repairing damaged cellular structures.

#### Ozone helps:

- Circulatory diseases including diabetic gangrene, heart disease, cerebrovascular disease and disease sof blood vessels to the lower extremities.
- Acute and chronic infections can be eliminated such as mononucleosis, Lyme, acute influenza, strep throats, shingles, etc.
- Age-related disease such as macular degeneration, Parkinson's, diabetes, etc.
- Weakened immune systems
- Preventive therapy for people who appear to be well!

# Follow-up is the Key to Success!

Proper follow-up and open communication are necessary for successful results. Dr. Waters is committed to our clients and requires a high level of commitment in return. The body is complex and always changing so it is very important to make and attend your follow-up appointments with Dr. Waters and Kory so they can help you to achieve your goals. We do not want our patients to get discouraged. We are here for you to help you retain or regain optimal health.

## Office Updates

Many of you who come in for IV treatments have noticed that we are being more particular about scheduling. This is for two reasons:

- 1. We are getting busier! We want to make sure you get the time slot you desire so please make your appointments in advance!
- 2. There is a shortage of IV solutions right now. We need to be very careful that we do not waste our supply. We need to schedule in even numbers to best utilize our supply.

So we apologize if we can't get you your desired appointment. Again, please give as much advance notice as possible when scheduling and/or canceling your appointments. We can not schedule same day appointments for the day you call.

#### **IV Prices**

In addition to the above difficulties getting IV bags, the government has also put new regulations on the pharmacies making the ingredients for our treatments, such as the EDTA, vitamin C, B vitamins, etc. Therefore, the costs have gone up. The time has come that we need to adjust our prices to offset these increases. Therefore, all IV treatments will be increasing by \$15.00 as of July 1, 2015. We have not raised IV prices in over seven years and hope that the prices of raw materials have stabilized. If the shortage of IV bags does not resolve soon, or gets worse, we may need to charge a surcharge in order to get them specially made for our patients. This is a last resort option, but we want to give you some advance notice of what could happen. We will try to avoid this as best we can. Thank you for understanding!

### Featured Patient!

Gabrielle is a young mother and business owner who felt incredibly ill when she found our clinic. We were so happy to receive the below email about four months after her first visit with Dr. Waters last fall!

"Hi all,

Just wanted to give an update, my symptoms are pretty much gone! I have been able to successfully wean off the hydrocortisone and have been off it nearly 2 weeks! (YAY)...anyways, I am very faithful about taking vitamin D and fish oil, but I feel that my eating habits are so good now, that it has made the biggest difference in healing. (I never honestly thought I would say that)

I was recently diagnosed with Erhlers-Danlos Syndrome and my primaries seem to think that a lot of my symptoms were coming from that disorder. I have pretty much every single thing that they look for with this disorder. My (muscle) twitching is down to less than one twitch per week, which I think falls into the "normal" category at this point. I still have major issues with my jaw joint, and my dentist said that my jaw is not only dislocated much of the time from TMJ, but that it swings to one side when I open and close my mouth. I am seeing a specialist for that to get that corrected. I still have intense neck pain, but I do get massage therapy once a week for muscle release and it seems to help...my issues is in my ligaments and stuff from the EDS. I have also made some ergonomic changes to my office and that has helped as well. Energy is through the roof, and my weight has gone down and stabilized to a healthy 132, (not bad since I am 5'6". I am in my high school jeans)...

Kory, I am **completely** paleo now! I do not eat dairy, legumes, or grains at all!!! I make my own almond "crackers," and dehydrate lots of fruits and veggies for "chips." I don't eat anything processed and as a matter of fact, will be making my own "baconnaise," tonight (nitrate and msg free of course)! I made my own soy free chocolate chips for my nut, chocolate, coconut flake "cereal" in the morning...with coconut milk. I have bone broth EVERY single day, and have at least one mixing bowl sized salad every day. No more juice, (do have about 3 oz of cherry juice if I can't sleep for the natural melatonin)! I now drink water with a handful of blueberries in it, or a cucumber/pineapple/water smoothie if I am having an especially painful day...

Please PLEASE, if anyone is suffering and you ever need a testimony of someone that felt like they were dying, and that nutrition helped, show them this email. This kind of eating is just as easy as fixing the processed stuff and if you would like, I have a TON of photos of easy cool stuff I have made that even my family hogs up!!! (Meaning it better taste good too)!!! Most of the stuff I have made takes less than 15 minutes to prepare, but it is about going shopping and reading labels, and making SURE that you are picking the right stuff...

\*\*\*AS A SIDE NOTE FOR ALLERGENS THAT RECENTLY DISCOVERED...I noticed that even though corn is not an "allergen" to me, I was having nervous system reaction to it and I figured out why...I AM allergic to Aspergillus, the mold...guess what vegetable is MOST contaminated and almost ALWAYS contains it? You guessed it (DING DING DING DING DING)...CORN!!!

Also, another little tidbit...if someone is allergic to soy, (as am I), but is not allergic to chocolate, they MUST make their own; conventional and even most organic chocolate, (even the dark stuff), has soy in it!!! I make my own.

Yeah still learning and appreciate the fire that you guys lit under my bum to self help! Thank you again!"

## Allergy Testing & Treatment

Skin Testing is a method to detect and quantify levels of reactivity to specific antigens. The suspected allergen is introduced into the skin gently without needles. Reactions include a small localized swelling (wheal) similar to a mosquito bite.

Allergenic proteins react with the body's IgE antibodies that are attached to mast cells beneath the skin surface causing the release of histamine and other mediators at the site of application. The size of the local reaction to the standardized antigen solutions is used for diagnosis and quantification of the treatment dose for custom formulated sub-lingual drop therapy.

Allergies result from the body's response to specific proteins from numerous foreign substances. Many classes of proteins in groups of related species of antigens often react similarly (cross -react). Plant pollens rely on wind for transport, are small, very light and travel great distances, often hundreds of miles and irritate many people—contributing to greater health problems than many are aware.

- Grasses Grasses are the most common plants in the world and are also one of the most important allergens.
   The family Poaceae includes many common grasses as well as major crops such as corn, wheat, rice and oats.
- Weeds "Weed" is a general term for any rapidly reproducing invasive species of plant. The most significant weeds are in the family Asteraceae, which includes Ragweed. Other notable families of weeds include Amaranthaceae (Pigweed) and the Chenopodiaceae (Lambs Quarter).

- Tree Wind-pollinated trees are important sources of allergy. Unlike grass and weed, the trees show a greater diversity between species and a higher number of significant families.
- Mold "Mold" is a general term for a large and highly diverse range of fungi. Molds are associated with not only allergy, but other health concerns as well. They can be more clinically significant than pollens or other allergens. Molds release spores in higher volumes as compared to pollens; additionally, the spores are small in size, allowing them to penetrate more deeply into the lungs potentially triggering or worsening asthma symptoms.
- Dust The dust mite is a microscopic arthropod which poses an important allergen. Mites thrive on human skin cells and often populate pillows, mattresses and carpeting.
- Dander Allergy symptoms that follow exposure to animals is common, especially with pets such as cats and dogs. "Dander" refers to the hair and skin particles stuck to the hair while "epithelium" refers to the skin or hide of the animal.
- Food Food items can potentially lead to an allergic sensitivity, but only a small number of foods have been identified as inducers of an allergic reaction (i.e., milk, egg, wheat, soy, peanut, tree-nuts, fish and shell-fish). Ninety percent of food allergies are covered in a list of common food allergens, however, a broad list of food allergens are available for testing. In addition, "superantigens" exist in nature and can cause cross reactions between, for example, birch trees and many vegetables.

To learn more, please attend our lecture on Thursday, June 18th See page 1 for details

## **Treatment Options**

Once allergens are identified, therapy can proceed with a custom formulation containing therapeutic low doses of allergens. Oral treatment doses are to be taken daily in the form of allergy drops which are held under the tongue.

Allergy drops work similarly to allergy shots by delivering a slowly increasing dose of physician-prescribed antigen that over time helps you build a tolerance to the things you are allergic to. The difference is that the drops are placed under the tongue and affect the immune system through very specialized (dendritic) cells found under the tongue. Research shows these cells are both a more friendly and effective route for long-term tolerance, making it an ideal option for patients who would like an alternative to shots. Administering the allergy drops multiple times per day seems to be a key factor effecting treatment outcomes. In clinical trials, researchers also saw additional immunological changes as the course of treatment progressed, so while you may feel better in the short-term, permanent tolerance to antigens can be achieved after three to five years.





Pancakes made by Kory topped with Cashew Butter. Yum!

A whole new "virtual organ" collectively known as the microbiota, or microbiome, is emerging as a major force in the underpinning of health (or disease). Feed your gut!

## Recipe

#### Microbiome Pancake Recipe

- 3 eggs
- 1T chia
- 1T gelatin or collagen
- 1T psyllium
- 1T cinnamon
- 1T cocoa powder (optional)
- 1t vanilla
- 1t erythritol
- 1/2 –1 cup liquid (coconut milk, almond milk, water)
- optional 1/2t baking powder and a squeeze of lemon juice for fluffier cakes

Mix in food processor or blender. Fry in coconut oil. Topped with Wallaby Organic Full-fat Plain Greek Yogurt, and a 1/4-1/2 cup of organic raspberries.

## **Upcoming Lectures!**

See page 1 for Lecture Topics and Dates at the Ambers Resort & Conference Center

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Bring your friends and family!

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