



WatersBioMed News

Upcoming Lecture

Come and listen to Dr. Waters speak about the Endocrine System (glands that produce hormones) and how it is affected by our environment. This event is free and seating is first come, first served! Question & answer following!

at the AmericInn Lodge & Suites

550 State Highway 13 ~ Wisconsin Dells WI 53965 ~ 608-254-1700

Friends and family are welcome!

Endocrine Disruption—An Environmental Impact?

Wednesday, November 30, 2016 ~ 6:30pm

Meet & Greet at the Clinic

The topic of discussion will be Ozone Therapy. Learn about this exciting therapy and get all of your questions answered by Dr. Waters. There is no fee to attend, however, you must bring a family member or friend who is not a patient here so they can learn about us too! We'll be serving some yummy grain-free treats too!

Space is limited so please call to reserve your spot!

Wednesday, December 7, 2016 ~ 5:00pm

Find us on Facebook!

Stay up to date on current topics of interest.

We would love to engage with you!

www.facebook.com/watersbiomed



Holiday Hours

CLOSED

November 24th & 25th

December 23rd ~ January 1st



Certified Medical Assistant

We would like to introduce Jen, our Certified Medical Assistant. We hired Jen in November 2015 and has been a great addition to our staff. She assists David and Becky with starting IV's and drawing blood. She's also really good at making people smile. We are lucky to have her!

Best of luck to Kory!

Kory Seder, our nutritional counselor is no longer working for us as of October 1, 2016. He is getting married soon and will be working with his fiancé at their food company in Madison. It was a hard decision for him to leave us, as he loved working with our amazing patients, and we will miss him too.

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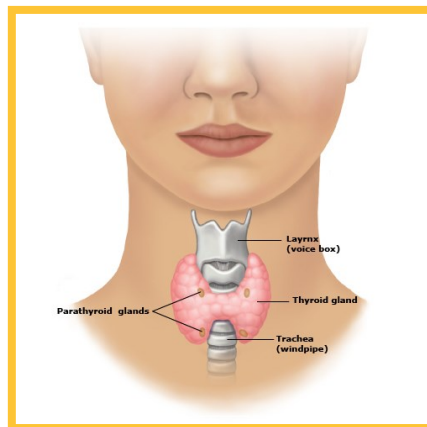
Thyroid—We are not all created equal

Almost every patient I see has a sluggish thyroid and does not know it. The picture is more complex than just measuring the TSH level, deciding if it is too high or low based on the overly simple statistical paradigm and then giving a medicine to suppress thyroid function if the gland is overactive (radioactive iodine therapy) or using a sole preparation of T4 if the gland is under active (brand-name Synthroid). Synthroid is simply a brand-name of the T4 hormone properly called thyroxine. Even though doctors have been taught that T4 is all that is needed to treat underactive thyroid, it should be considered that the thyroid gland manufactures four thyroid hormones- T1, T2, T3 and T4. The numerical designations refer to the number of iodine atoms the various molecules contain. As a general principle of my understanding of biology, I assume that every molecule and organ has a purpose whether we have yet ascertained that purpose or not. To assume otherwise is dangerous. We were taught in medical school that the thymus gland and appendix were "vestigial" structures that are no longer necessary for a fully functioning human body. We later found out that both are important immune organs.

In the case of the thyroid hormones, the functions are as follows: T4 has virtually no biological activity. It acts as a reservoir from which the body draws to make T3 (triiodothyronine). T3 is the business molecule that binds the nuclear response elements thus initiating through a series of events the production of the enzymes needed for energy transformations. As demand for ATP increases, more T4 is converted to T3. This is accomplished by a "deiodinase" enzyme that removes one of the iodine atoms from the T4. That enzyme requires selenium to function. The conversion of T4 to T3 and T3 to T4 is also a further layer of complexity in thyroid function. Some diseases or conditions can block the enzymes that interconvert these thyroid hormones. So as you can see, it isn't so simple as measuring TSH and de-

ciding the dose required of Synthroid as the sole motif in diagnosing and treating hypothyroidism.

Furthermore, during high stress states, some of the T4 is converted by yet another deiodinase enzyme, to reverse T3. This molecule not only has no biological activity but actually blocks the T3 receptors and thus slows down the metabolism. In that situation, the patient may have all the symptoms of hypothyroidism: fatigue, coldness, depression, inability to lose weight, dry skin, water retention etc., but the TSH blood level looks "normal". In this situation the pure T4 the patient is taking is making their TSH level appear to be in range but it is being converted into reverse T3 and thus shutting down their metabolism. There is a constant monitoring of energy need and thyroid hormone production. If more energy is needed, more T4 is converted to T3. If the organism needs to rest for whatever reason some of the T4 is converted to reverse T3 and the throttle of energy production is turned down. Thyroid function is even more complicated than this, however, and there is a lot (as is usual in medicine) that we don't understand.



There are many "endocrine disruption" chemicals in our environment and they may disrupt the production and action of our thyroid hormones. The iodine atoms on our thyroid hormones are known as halogens on the periodical table of elements. The other halogens are fluorine, chlorine and bromine. There is also a radi-

oactive halogen known as astatine but it figures little in thyroid hormone biology except in unusual circumstances of radioactive pollution.

In the Spring of 2016, I took a course at the American Academy of Environmental Medicine given by one Alan Mc Daniel, M.D. He is an ear nose and throat surgeon turned allergist. He told me, "When I learned how to treat allergies effectively, I then realized that all chronically ill people have endocrine disorders." His two-day intensive review of the endocrine scientific literature included over 1500 PowerPoint slides. He demonstrated that the "reference ranges" (which most M.D.'s believe were arrived at by God having come down one night to punch the parameters into the laboratory computer and thus these ranges have become "normal ranges" in their minds and are acted on from a therapeutic intervention standpoint) do NOT reflect desirable or healthy values for most people. How could they? People who go to physicians are usually ill. Why on earth would we define 95% of them as "normal." In fact, reference ranges merely reflect a statistical analysis of the laboratory's accumulated data. The range is created by a computer. The highest 2.5% are considered above the range. The lowest 2.5% are considered below the range. That's all the range means.

When I was a very young doctor, I had a client who worked in a printing business. His company printed a number of medical journals. At times some of the printed journals were defective and had to be thrown away. He asked me if I would like to have some of these "factory seconds." I said of course, and he brought in a number of them. One of them was a Journal of Pathology. Pathologists are the only truly scientific doctors. They operate chemistry machines, look at tissue specimens under the microscope and of course do autopsies which reveal the ultimate failures of our profession in treating patients as well as the results of the lifetime of bad choic-

T3 REPLACEMENT

Dr. Waters has prescribed Cytomel / Liothyronine / T3:

There are 3 options:

- **Compounded:** out of pocket, totally pure T3 in olive oil (*preferred*)
- **Brand Name:** undesirable fillers, most expensive, insurance may not cover (some physicians believe it's better than generic)
- **Generic:** undesirable fillers, least expensive, insurance should cover

Should retest in 1-2 months

- T3, reverse / T3, total / T3, free / TSH / T4, free

es. I went through one of the journals and found an article that addressed the so-called reference ranges. The pathologist that wrote this article cautioned practicing physicians to NOT believe that the reference ranges had any clinical significance. He pointed out that the ranges were merely statistical and did not indicate whether a person was healthy or not. This serendipitous event that occurred in about 1983 allowed me to judge laboratory data in a more realistic fashion when I evaluated patients.

Dr. Mc Daniel has spent a lot of time reviewing the medical literature and applying the information he gleaned to the problems of patients in his practice, which is now limited to helping patients with diet, lifestyle, endocrine analysis and treatment. Thanks to him, we now have a much more defined way to evaluate and thus treat thyroid and other organ disorders. By measuring both TSH, free T3, free T4, total T3 and reverse T3 we can get an idea of what the body is actually experiencing viz. energetic demands and its capabilities to satisfy these demands. As described above, T4 must be converted to T3 for the genes that increase the metabolic rate to be put into action. The "free" form of these hormones are the only forms that actually participate in the biochemistry of the body. These represent only about 1% of the total at most of the hormones measured in the blood by standard laboratory practices. The other 99% are bound to proteins in the blood plasma and are inactive. Other enzymes and hormones regulate how much of the bound, inactive hormones are actually released from the proteins and thus become active. Once released, they are inter-converted, as needed, between T3 and T4 to keep the energy systems in balance. By measuring the TSH, free T3 and free T4 we get a good idea of the general function of the thyroid system. But remember, not all T4 is made into T3, some is converted into the inactive hormone reverse T3, which functions to restrain energy production. This process is actually a protective adaptation that functions to slow us down in order to recover from stressors. Unfortunately, we often don't heed this call to rest and we force ourselves to continue our imbalanced lifestyle. Here is where the need for proper nutrition and sleep are necessary.

Because of this layer of energetic regulation, it is necessary to also measure both the total T3 and the reverse T3. The ratio of these measurements allows us to know whether the thyroid system is working properly. With this information we can determine how to dose various thyroid hormone mixtures to correct the system and meet metabolic demands. Sometimes using animal glandular extracts known variously as Armour thyroid, USP thyroid, Thyroid WP or Naturthroid, among others, is all that is needed. Forms of these preparations have been on the market since the 1880s. Pure thyroxine (Synthroid, T4) has its place, as does pure liothyronine (Cytomel, T3). It is all about the individual and their needs. One size doesn't fit all. The TSH-Synthroid paradigm needs to end. The important thing for the patient with the thyroid disorder is to get their various parameters into an ideal, not statistical, range. Only then will the patient be freed of their symptoms: fatigue, depression, weight problems, dry skin, brittle hair, edema, slow thinking and general lack of enthusiasm for life. If your thyroid hormones are not effectively regulating your ability to produce energy, you will not feel well. This means lack of energy, aches and pains and muddled thinking and all that is related to these symptoms.

Of course there are endless variants of thyroid dysfunction so more detailed evaluations are necessary in some patients. These include measurements of various antibodies to thyroid proteins, ultrasound exams to evaluate nodules in the thyroid gland, iodine uptake studies and even aspirational biopsies of thyroid nodules and cysts. Only by careful historical, clinical and laboratory evaluation can a doctor address the patient whose complaints and physical findings may be related to thyroid, pituitary or hypothalamic dysfunctions

If you haven't had a full thyroid work-up done, the time is now. Those patients on thyroid replacement should have it checked about one month after beginning, and one month after any dose changes, to make sure you are getting the proper amounts for you. It will also be checked at yearly check-ups.

Symptoms of Thyroid Deficiency

- Fatigue
- Depression
- Weight problems
- Dry skin
- Brittle hair
- Edema
- Slow thinking
- Lack of enthusiasm

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 so he 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.

When do I need an office visit?

If you are on a prescription medication from Dr. Waters or having IV treatments, you must come in to the office for a lab order and a lab results visit on a yearly basis. We encourage patients not on prescriptions or IV's to also have a yearly check-up to stay on top of your health.

- You will need two visits
 1. Lab order visit with physical exam (Level 2)
 2. Visit to review the lab (Level 2).Both must be in office and lab fees vary per person.
You could expect it to be \$700 - \$1500 for both visits and lab tests depending on needs.

If you need a change in your prescription or a new prescription

- Changes in prescriptions and/or new prescriptions will not be made through the staff over the phone. A Level 1 or 2 visit will be needed.

If you have complicated questions or want to make changes in treatment plans

- As much as we love to help our patients over the phone, our staff cannot relay complicated information back and forth between patient and doctor. It's not effective for you.

If you have new test results or new information to share with Dr. Waters

- This includes testing or scans, etc. done at our facility or by another doctor. Dr. Waters will not be able to review this information for you until your scheduled appointment.

NOTES:

- * Dr. Waters prefers all appointments to be in person.
- * There will be an extra \$100 fee added to your appointment for lab not done at our clinic. Laboratories use different parameters therefore Dr. Waters needs extra time to review the lab prior to your appointment.

Fees for Office Visit / Lab Results

Level 1	\$100.00	low complexity ~ 0-15 minutes
Level 2	\$200.00	medium complexity ~ 15-30 minutes
Level 3	\$300.00	high complexity ~ 30-45 minutes
Level 4	\$400.00	highest complexity ~ 45-60 minutes

Note: These fees include review of any records before the visit, the actual time spent with Dr. Waters and also any research time he spends on your case. Times are approximate and Dr. Waters will decide what level to charge after the visit. Example: if you talked to him for only 10 minutes, it still may be a Level 2 visit depending on his overall time spent on your case.

Featured Patient - Chad F.

"I have multiple points as it relates to my experience with Waters Center for Biological Medicine. Why the heck does the medical community not establish an entire body system baseline as Waters Medical? This protocol is what identified all of the issues I was dealing with, from the low cortisol, Lyme, low testosterone, strep in my digestive track, etc., etc.

Specifically as it relates to my thyroid - the original tests did not include Reverse T3 and they showed that my TSH, T3, T4, etc. were in the normal ranges. Through investigative consultation with Dr. Waters, and after months of other treatments, he thought I should be experiencing dramatically increased energy and that my mitochondria should be operating at "Wide Open Throttle" (his words, not mine), and in fact, I was not experiencing any such results. Through his experience and knowledge, he advised that I have a Reverse T3 test. Ding, Ding, Ding, when the test results came back my ratios of Reverse T3 to Total T3 and Free T3 were way, way below where they should have been. As explained to me by Dr. Waters, Reverse T3 is like anti thyroid and as such even though my TSH, T3, T4 were "normal" my thyroid was in fact acting Hypothyroid and therefore the lack of energy. Dr. Waters first began with having me take T3 in small doses and then testing again. This showed improvement, but far from where I needed to be. He then prescribed an overall thyroid medication (WP Thyroid) that delivers both T3 and T4 and also increased the straight T3 (cytomel) - now were getting somewhere. I began to see incredible increases in energy; no longer being cold; experiencing proper intestinal function, etc. Wow!! I'm due to have another series of tests to see if my levels are where they're supposed to be. I think we are getting close.

What impresses me about Dr. Waters is his approach to overall system health and not "chasing systems" as is most common in today's traditional medical practitioners. Dr. Waters also draws upon his vast sphere of relationships with other doctors that use the same approach as he does to either verify what he is thinking or to offer varying insights to matters at hand.

Frankly, Dr. Waters practices REAL MEDICINE. And for that I am very grateful. Dr. Waters, you've changed my life!"

Not All Nutritional Supplements are Created Equal

How often do you wonder whether the supplements you buy from health food stores, drug stores, the big “box” retailers or the internet actually contain the materials on their labels and are also free of potentially toxic or allergenic additives? You should wonder because there are currently sparse government regulations put on supplement manufacturers regarding efficacy, potency or quality of the products.

Waters Center for Biological Medicine has always attempted to find the purest, most efficacious products available. After all, using supplements for health issues is REAL medicine, and if they don't contain the potency on the label or are polluted with undesirable additives, you lose twice—you don't get what you need and you do get what you want to avoid. Dr. Waters has visited and evaluated most of the manufacturers that our clinic buys from and personally knows the owners of most of these companies. He has, over the years, always tried to get the best for his patients.

The supplements we prescribe at Waters Center for Biological Medicine are completely free of chemical additives, dyes and excipients (fillers) and are manufactured with the purest crystalline raw materials available. In addition, these supplements have a guaranteed higher potency. As a result, they are often more expensive than similar substances found in mail-order catalogs and at health food stores and especially at your local discount stores. Dr. Waters puts a lot of time and effort into researching the supplements that we sell.

We believe it is important to use the highest quality and purity materials because some people react to the binding agents and other additives used in the manufacture of

tablets and as flowing agents by some companies in the filling of capsules. It is especially important to minimize the possibility of side effects due to additives because if an adverse reaction occurs it may be misinterpreted as a side effect to the vitamins or minerals themselves. This can be very unfortunate because the patient can often really benefit from the supplement, but is led to believe that the supplement is causing the trouble.

Nevertheless, side effects can occur to even pure pharmaceutical grade nutritional supplements. We are all very unique from a genetic and therefore biochemical standpoint. Even natural substances can create imbalances in certain people, which result in new or changing symptoms. At times, this may represent a “Healing Crisis” or an adjustment by the body to a new biochemical environment, which will eventually lead to a more normal state of affairs.

Some individuals simply have sensitivity to certain substances. Excessive amounts of magnesium, for instance, may cause diarrhea in susceptible people. Idiosyncratic reactions can occur to individual B vitamins, minerals and amino acids. In these instances, the side effects do not represent a temporary adjustment reaction but an actual adverse reaction.

Many vitamins and minerals are acidic in nature and may cause upset stomach or intestinal symptoms. Taking the supplements after meals can minimize these problems. All supplements should be taken with food unless stated otherwise. Besides cutting down on gastrointestinal side effects, the nutrients will get into your bloodstream at the same time as the food does, and thus help in the utilization of the incoming energy.

We can guarantee that we have done all the investigation possible to assure the purity and efficacy of our products and therefore, we cannot evaluate other brands of supplements that you may choose to buy elsewhere.

Featured Supplement

This product contains the most concentrated and pure fish derived Omega-3 essential fatty acid available worldwide. Each 1000 mg capsule contains between 820 and 840 mg of EPA and DHA. These two fatty acids are derived from the essential fatty acid known as alpha-Linolenic acid. Essential fatty acids cannot be synthesized in the human body and therefore must be ingested in the diet. The enzymes in the human body which convert this essential fatty acid to EPA and DHA are not active enough to supply us with these very important building blocks. Consequently it is very important to ingest high quality EPA and DHA on a daily basis. The lab test known as RBC EFA profile allows us to properly advise patients on their need for these important molecules.





Pumpkin Cheesecake made by Sarah...a great fall treat!

Notes from Sarah:

- I use more spices than it calls for because I like a strong taste.
- I use all organic ingredients if possible.
- Always taste for sweetness and adjust per your taste.

Crustless Pumpkin Cheesecake

- 3 bricks cream cheese, softened
 - 2/3 cup pumpkin
 - 2 eggs
 - 1tsp vanilla
 - 3/4 tsp cinnamon
 - 1/4 tsp nutmeg
 - Small pinch of cloves
 - 1/4 cup heavy cream
 - 2/3 cup natural, low carb sweetener of choice (I use Xylitol)
- 1) Preheat oven to 325
 - 2) In large bowl, beat cream cheese until smooth, no lumps
 - 3) Scrape sides of bowl and add in pumpkin and eggs, beat until just smooth
 - 4) Add in remaining ingredients after again scraping the sides of bowl and beat on medium for about 60 seconds or until perfectly smooth
 - 5) Place batter into a lightly greased springform pan (I use 9" pan)
 - 6) On a shallow cookie sheet, place a large piece of aluminum foil and raise the sides to make a sort of "mini pan" within the pan. Next, put 2 or 3 cups of warm water into the cookie sheet. The aluminum foil acts a protective barrier to keep water out of the pan in case it should leak. Water bath makes for a creamier cake.
 - 7) Bake the cheesecake for about 40 minutes or until it is nearly firm. Allow to cool, then place in the refrigerator for several hours or until it is chilled. Serve with home-made whipped cream if you like.

Upcoming Lecture! See page 1 for Lecture Topic and Date

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