

## The Walsh Research Institute and the Walsh Protocol

Your mental health symptoms can be the manifestation of an imbalance in many things, but one of the most important may be an imbalance of your brain chemistry. After all, pretty much any mood, feeling or thought is linked to a change in brain chemistry - either through cause or effect. There are a couple different approaches to deal with this: the standard approach is to manage symptoms with medications, and another approach is to look for the underlying biochemical imbalances that are exacerbating the imbalances and fix them as close to the root cause as possible using nutrients.

If you'd like to follow the standard approach with drugs, Dr. Heermann is happy to provide that service. She can start you on something during your very first visit, and adjust doses and use different drugs as things change over time. If you'd like to try to treat the root causes, we can check some labs (some of which aren't covered by insurance) and then create an individualized treatment plan for your biochemistry. Some imbalances may take months to correct, but some improve fairly quickly, in just a few weeks. We can also take an integrated approach, getting the labs right away, before complicating things with medications, and then starting medications to manage symptoms until the nutritional support starts kicking in. Then, we can back off medications as needed. If you opt to just go with the regular medication approach, that doesn't rule out trying the nutritional/biochemical approach later.

If you'd like to read more before making a decision, here's a bit more background. At the American Psychiatric Association meeting in May, 2014, Dr William Walsh, an internationally recognized expert in the field of nutritional medicine and a key scientist paving the way for nutrient-based psychiatry and nutritional medicine, presented his research on the biochemistry of disorders ranging from violent behaviors to depression. His research, while not yet fully embraced by mainstream psychiatry, is based on 30,000 patients with mental disorders acquiring an unparalleled database of more than 3 million chemical assays during his clinical and research work. This approach represents a major breakthrough in finding biological explanations and treatments for problems like depression and anxiety that can sometimes be challenging to diagnose and treat.

Dr. Walsh believes he has identified four key variables to re-balance brain chemistry: zinc, copper, histamine, and pyrroles. Zinc and copper imbalances indicate a problem with metal metabolism, which is often inherited, and directly impacts the production of several neurotransmitters. Histamine is a marker of DNA methylation, explored by the exciting new field of epigenetics. When chromosomes are exposed to either too much or too little methylation in our cells, this impacts neurotransmitter levels at the DNA level. Pyrroles are break-down products of our red blood cells that, in excess, cause us to lose too much of our stores of zinc and B6, nutrients which both play vital roles in regulating mood and behavior. The testing done with the Walsh protocol evaluates all of these crucial areas for optimal mental health. When the tests are abnormal, the prescription is a combination of vitamins and minerals, individualized for each person based on both the lab values and that person's symptoms. Testing and adjusting these variables is becoming an important part of the evaluation and treatment program for many of Dr. Heermann patients.



To learn more about Walsh and his work, we recommend reviewing his website (<u>WalshInstitute.org</u>), or, better yet, reading his book, "<u>Nutrient Power</u>". We also recommend reviewing his lectures on YouTube by searching for William Walsh, PhD. Here's one excellent lecture by Dr. Bill Walsh on epigenetics as it relates to depression: <a href="https://www.youtube.com/watch?v=W14kkO61Ano">https://www.youtube.com/watch?v=W14kkO61Ano</a>

In 2014, along with 45 other physicians, Dr. Heermann attended an intensive five day course that Dr. Walsh presented. Dr. Walsh was joined by the doctors who work with his protocols at the Mensah Medical Clinic outside of Chicago, and the trainees were fortunate to observe and learn the details of the treatment of the patients seen in their clinic during those five days. Dr. Walsh continues to provide ongoing guidance and supervision for doctors who complete this rigorous training.

If you decide to pursue the Walsh approach for yourself, the first step is for us to order labs. After we send an order to Direct Health Care Access you will get a call about the process and costs of testing (could be between \$40 and \$300 depending on your insurance) and a kit will ship directly to you. You will receive all the instructions you need to collect a urine specimen at home, and you will also need to have blood drawn at LabCorps. When results are back we will review them and create a nutrient prescription for you.

If you'd like further information about the Walsh nutrient protocol, there's a good summary on this page: <a href="http://www.walshinstitute.org/biochemical-individuality--nutrition.html">http://www.walshinstitute.org/biochemical-individuality--nutrition.html</a>, and a bit more detail on the treatment program and scientific rationale here: <a href="http://corepsych.com/walsh">http://corepsych.com/walsh</a>

If you'd like more information on epigenetics and how this applies in general well-being and to mental health concerns in particular, we recommend this excellent Nova special on the topic: <a href="http://www.pbs.org/wgbh/nova/genes/">http://www.pbs.org/wgbh/nova/genes/</a> (watch free online here: <a href="http://topdocumentaryfilms.com/the-ghost-in-our-genes/">http://topdocumentaryfilms.com/the-ghost-in-our-genes/</a>) and this informative article on behavioral epigenetics: <a href="http://discovermagazine.com/2013/may/13-grandmas-experiences-leave-epigenetic-mark-on-your-genes/">http://discovermagazine.com/2013/may/13-grandmas-experiences-leave-epigenetic-mark-on-your-genes/</a>

We look forward to using these approaches to help you!



# **High-Incidence Chemical Imbalances**

## Pyrrole Disorder

- Pyrrole disorder (or pyroluria) is detected by the presence of elevated kryptopyrroles in the urine.
  This test represents a marker for functional deficiencies of Vitamin B-6 and zinc, and elevated oxidative stress.
- Symptoms include: poor tolerance of physical and emotional stress, poor anger control, frequent mood swings, poor short term memory, reading disorder, morning nausea, absence of dream recall, frequent anger and rages, depression and high anxiety.
- Dosages are based on the individual's age, body weight, lab results, severity of symptoms and ability to metabolize supplements.
- After the initial diagnosis, a follow-up evaluation after 3-6 months is recommended to fine-tune dosages.

### Histamine

- Histamine is a marker for methylation status.
- When histamine is elevated, clinical features include depression, obsessive-compulsive (OCD), perfectionism, seasonal allergies, competitiveness, and internal anxiety.
- When histamine is too low, there is a tendency for high anxiety, panic disorder, depression, chemical and food sensitivities, music/artistic ability, and empathy for others.

## Copper

- Copper is an essential trace element but excessive levels are toxic to the body.
- Copper overloads tend to lower dopamine levels and increase norepinephrine in the brain.
  Imbalances in these important neurotransmitters have been associated with anxiety, postpartum depression, ADHD, autism, violent behavior, paranoid schizophrenia and bipolar disorder.

### Zinc

- Zinc is a trace metal essential for all forms of life.
- It enhances behavior control to stress and helps maintain intellectual function, memory and mood levels.
- More than 90% of persons diagnosed with depression, behavior disorder, ADHD, autism and schizophrenia exhibit depleted zinc levels.
- Zinc deficiency has been associated with delayed growth, temper control problems, poor immune function, depression, poor wound healing, epilepsy, anxiety, neurodegenerative disorders, hormone imbalances and learning problems.

#### Vitamin D

 Vitamin D deficiency has now been strongly correlated with cases of long-standing depression as well as many other physiologic and biochemical conditions.

# **Thyroid Dysfunction**

 Thyroid dysfunction (whether over or under active) can mimic many of the symptoms associated with biochemical imbalances, such as mood swings, anxiety, fatigue, hyperactivity, depression and poor mental processing.