

Patient Information

DHA LABORATORY



DHA Laboratory | 411 E Business Center Drive Suite 107 Mt. Prospect, IL 60056
T 847.222.9546 | F 847.222.9547 | E info@pyroluriatesting.com | W www.Pyroluriatesting.com



Our laboratory specializes in testing that is used in the diagnosis of biochemical imbalances and metabolic conditions that impact the nutrient supply available to the brain and body. The testing we do is based on biochemical individuality and nutrition. Each of us has innate biochemical factors, which influence personality, behavior, mental health, immune function, allergic tendencies, etc. It is important for all of us to ask the question "Who am I nutritionally?" Our mental health is dependent upon understanding what critical nutrients we are deficient in and what we are overloaded in. The next step is correcting our deficiencies or overloads.

The following tests are all included in our Metabolic Panel, the Carl C. Pfeiffer M.D. Ph.D. Model:

Kryptopyrrole Quantitative Urine Test

- ✓ Pyrrole disorder/pyroluria is detected thru kryptopyrrole testing. Kryptopyrrole testing is very specific, and may raise a lot of questions. **Please refer to the next to page for extensive information on kryptopyrrole testing and pyroluria.**

Whole Blood Histamine

- ✓ Influences mood, appetite, sleep, and thought. A high histamine result creates different symptoms than a low histamine result. Therefore, different symptoms are directly connected to the different results.
- ✓ Clinical studies indicate that when histamine is elevated symptoms include depression, obsessive-compulsive disorder (OCD), and perfectionism. When the levels are too low, there is a tendency for high anxiety, panic disorders, depression, and chemical or food sensitivities.

Serum Copper

- ✓ Is an essential trace element. Excessive levels are toxic to the body and can interfere with processes compromising the brain's access to its major source of fuel. Thus, leaving the brain starved for energy
- ✓ It has also been implicated in attention and hyperactivity disorders, learning problems, temper tantrums, depression, agitation, post-partum depression, and autism spectrum disorders.

Zinc Plasma

- ✓ Enhances resistance to stress and helps maintain intellectual function, memory, and mood levels.
- ✓ Deficiency can lead to headaches, lethargy, amnesia, other memory impairment, irritability, behavior disorders, and paranoia.

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Kryptopyrrole Testing and Pyrrole Disorder; Known as Pyroluria Optimal range 0-9 mcg/dl

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Practitioners ordering testing will receive a complimentary clinical consultation with an M.D. regarding the interpretation on the test results. **If you do not have a practitioner**, you can order your testing with an M.D. Consultation at a reasonable price. Visit www.Pyroluriatesting.com or call our lab.

What is a pyrrole disorder, or pyroluria?

Pyrroles are primarily normal by-products of hemoglobin synthesis. Pyrrole Disorder is an abnormality in biochemistry resulting in the overproduction of pyrrole molecules. Excess pyrroles have little or no function in the body and are effectively excreted in the urine. However, pyrroles have an affinity for zinc and vitamin B6. So, when pyrroles are elevated in the urine they deplete the body of vitamin B6 and zinc and represent a marker for functional deficiencies in vitamin B6 and zinc. A high incidence of pyrrole disorder is found in individuals on the autism spectrum, individuals with anxiety disorder, depression, obsessive-compulsive disorder, schizophrenia, bipolar disorder, aspergers, and ADHD.

What are the symptoms?

Symptoms include poor stress control, anxiety, mood swings, severe inner tension, addiction, episodic anger, and depression. The body having a severe deficiency in B6 and Zinc causes these symptoms.

How is pyrrole disorder diagnosed?

Pyroluria is diagnosed by performing a quantitative test, which measures pyrroles in the urine. When the testing is complete the results are reported with the following reference ranges. Optimal Range is 0-9 mcg/dl. Also the concentration of urine should be taken into consideration when interpreting the KP results. The calculated kryptopyrrole compensates/corrects for how dilute or concentrated the urine specimen is. The actual kryptopyrrole is uncorrected/not calculated. The value for kryptopyrrole (KP) can vary quite a bit depending on concentration of the urine. We would recommend using the corrected value since it will be easier to follow changes in levels and to adjust your treatment. By using the corrected value for concentration of urine, you will be able to better assess the impact of your treatment. By following the changes, you will be able to correlate changes in your patient's symptoms with changes in KP levels/dosages. You would also develop a better feel for patients who may have symptoms of pyroluria but are not pyroluric versus those who really are pyroluric.

How is pyroluria treated?

There is not a one size fits all treatment plan. Patient history along with weight, age, and severity of symptoms all must be taken into consideration before moving forward with treatment. Patients must use the correct form of the supplements and the correct dose. Too much of a supplement can be toxic and too little ineffective. We offer consultation on treatment and results with Albert Mensah M.D. and Judith Bowman M.D. from Mensah Medical.

Additional Information:

If no other chemical imbalances are present, patients with mild or moderate symptoms of pyroluria may see a response to treatment in 2-4 weeks. Patients with more severe symptoms usually require 1-2 months before some improvement is seen, with greater improvement occurring gradually over 3-12 months. Pyroluria is a marker for a genetic tendency of increased need for vitamin B6 and zinc; it is very likely that the symptoms of pyroluria will reoccur if nutritional treatment is stopped.

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Pyrrrole Disorder Questionnaire

Vitamin B6 is essential in over 50 enzymatic brain reactions. It also plays an important role in your nervous system's balance. It is required to utilize protein for energy, and a deficiency can create ongoing anxiety and depression. Zinc has a marked effect on mood states. Zinc enhances resistance to stress and helps maintain intellectual function, memory, and mood levels. Poor stress control,

nervousness, anxiety, mood swings, inner tension, anger, depression, aggressiveness, and learning problems are all hallmarks of pyrrole disorder. These symptoms are derived from a deficiency in B vitamins and zinc. You or someone you know could have pyrrole disorder. Pyroluria runs in families, so if you are pyroluric, chances are the same anxiety and poor stress will occur in other family members. Pyroluria is diagnosed by elevated pyrroles in the urine. Pyroluria is correctable. Take this test. It is an easy way to identify symptoms in yourself.

Yes No

- ___ ___ 1.) When you were young, did you sunburn easily? Do you have pale or fair skin?
- ___ ___ 2.) Do you have a reduced amount of head hair, eyebrows, or eye lashes?
- ___ ___ 3.) Do you have prematurely grey hair?
- ___ ___ 4.) Do you have poor dream recall, or nightmares?
- ___ ___ 5.) Have you been anxious, fearful, or felt a lot of inner tension since childhood?
- ___ ___ 6.) If yes on question 5, Have you hid those inner feelings from others?
- ___ ___ 7.) Is it hard to clearly recall past events and people in your life?
- ___ ___ 8.) Do you have bouts of depression and/or nervous exhaustion?
- ___ ___ 9.) Do you have cluster headaches?
- ___ ___ 10.) Are your eyes sensitive to sunlight?
- ___ ___ 11.) Do you belong to an all girl family, or have look alike sisters?
- ___ ___ 12.) Do you get frequent colds or infections, unexplained chills, or fevers?
- ___ ___ 13.) Do you dislike eating protein or become vegetarian because of your dislike?
- ___ ___ 14.) Did you reach puberty later than normal?
- ___ ___ 15.) Are there white spots/specks on your fingernails, or do you have opaquely or paper thin nails?
- ___ ___ 16.) Are you prone to acne, eczema, or psoriasis?
- ___ ___ 17.) Do you prefer smaller gatherings of one or two over a larger gathering of friends?
- ___ ___ 18.) Do you have stretch marks on your skin?
- ___ ___ 19.) Have you noticed a sweet smell or fruity odor on your breath or sweat when ill or stressed?
- ___ ___ 20.) Do you have, or did you have, crowded upper front teeth?
- ___ ___ 21.) Do you prefer not to eat breakfast, or even experience light nausea in the morning?
- ___ ___ 22.) Does your face sometimes appear swollen while under a lot of stress?
- ___ ___ 23.) Do you have a poor appetite, or a poor sense of smell or taste?
- ___ ___ 24.) Do you have any upper abdominal or splenic pain?
- ___ ___ 25.) As a child, would you get a "stitch" in your side when you ran?
- ___ ___ 26.) Do you tend to focus internally (on yourself) rather than on the external world?
- ___ ___ 27.) Do you frequently experience fatigue?
- ___ ___ 28.) Do you feel uncomfortable with strangers?
- ___ ___ 29.) Do your knees crack or ache?
- ___ ___ 30.) Do tranquilizers, barbiturates, alcohol, or other drugs feel strong? Does a little bit cause heavy effect.
- ___ ___ 31.) Does it bother you to be seated in a restaurant, or in the middle of a room?
- ___ ___ 32.) Are you anemic?
- ___ ___ 33.) Do you have cold hands and/or feet?
- ___ ___ 34.) Are you easily upset (internally) by criticism?
- ___ ___ 35.) Do you have a tendency toward morning constipation?
- ___ ___ 36.) Do you have tingling sensations or muscle spasms in your legs or arms?
- ___ ___ 37.) Do changes in your routine provoke stress?
- ___ ___ 38.) Do you tend to become dependent on one person whom you build your life around?

Tally up the Yes answers, mark the score here _____. If you have scored 15 or more, it could be beneficial for you to take a kryptopyrrole test. Biochemical treatment with nutrient's may be necessary.



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Follow-up Testing Protocol

- ✓ It has been documented that low levels of zinc generally cause pyrrole levels to appear under represented.
- ✓ If the initial test is normal, but symptoms are present, re-test in 2-4 months.
- ✓ After starting therapy, follow up testing would be 2-4 months. This will ensure the kryptopyrrole is normal.
- ✓ If kryptopyrrole is not normal, adjust treatment and repeat in 2-4 months.
- ✓ After patient is stable, Kryptopyrrole testing should be tested yearly or as symptoms warrant.

Copper and Zinc

- ✓ Repeat in 3 months from initial diagnosis. Adjust treatment if needed, and then repeat in 3 months.
- ✓ Once stable, test in 6-12 months as diagnosis and symptoms warrant.

Histamine Whole Blood

- ✓ Follow up is 3-6 months after initiating treatment, or making a change in treatment.
- ✓ For patients who are stable with 3 histamines on record, histamine does not need to be re-tested

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