



NEO Institute of Functional Medicine

...Your Center for *Hope & Healing*

PYRROLE DISORDER

Pyroluria, or pyrrole disorder, is a condition that occurs in people genetically predisposed to deficiencies in magnesium, zinc and Vitamin B6. It is typically triggered by stress that depletes the body of certain vitamins and minerals before they are able to be absorbed.

Symptoms: Issues may include anxiety, mood swings, mid-morning nausea, poor morning appetite, digestive problems, skin problems, joint pain and sensitivity to noise.

Treatment: Assessing the bloodwork of the patient is the first step to determining whether someone has Pyrrole Disorder, and if so, to what degree. Supplementation of B vitamins, magnesium and zinc is typically part of treatment, but manganese, glutathione, fatty acids and vitamin C may also be options.

Patients with Pyrrole Disorder often have intestinal permeability, so repairing the gut is typically a key part of treatment. This may include removal of irritating foods, adding probiotics, and rebuilding with glutamine.

Stress is also an important factor, so patients may be advised to consider yoga, meditation or other stress management techniques.

More information: Pyrrole disorder is caused by the overproduction of hydroxyhempyrolin (HPL). Stress of any kind will increase the production of pyrroles/HPL, and this will decrease zinc and vitamin B6. The main biochemical features of this condition are severe zinc and vitamin B6 deficiency. Zinc is essential for hundreds of processes in the body, but especially for boosting immune function, digestion, neurotransmitter activation, healing, insulin sensitivity, control of blood sugars, memory, physical growth, and DNA replication.

Both zinc and vitamin B6 are necessary for production of neurotransmitters such as serotonin (our happy hormone), melatonin (our sleep hormone), GABA (our relaxation hormone), and acetyl choline (important for memory). They are also very important in the production of our steroid hormones such as cortisol (our anti-inflammatory, anti-allergy hormone, and stress hormone), as well as the conversion of oils in the body.

Read more at: <https://www.askdrmaxwell.com/2016/05/what-is-pyrrole-disorder/> or <https://www.neuropsychotherapist.com/pyrrole-disorder-for-therapists/>