

Gluten & Casein Peptide Test

Testing for urinary peptides (incompletely broken down pieces of protein) from gluten and casein is important because these peptides react with opiate receptors in the brain, thus mimicking the effects of opiate drugs like heroin and morphine. These compounds have been shown to react with areas of the brain such as the temporal lobes, which are involved in speech and auditory integration. One of the reasons for the incomplete digestion of these foods may be a deficiency of the enzymes that break down these small peptides. Many parents have reported significant improvements in their children with autism after eliminating gluten and casein from the diet.

Panel Includes:

- Casomorphin peptide
- Gliadorphin peptide

What is Gliadorphin?

Gliadorphin (or gluteomorphin) is a peptide derived from the wheat protein gluten. Other related grains such as rye, barley and oats also contain the sequence of amino acids found in gluten. Gliadorphin is very similar to casomorphin. Gliadorphin has been verified by mass spectrometry techniques to be present in urine samples of children with autism.

What is Casomorphin?

Casomorphin (or casomorphin) is a peptide derived from the milk protein casein. Casein is one of the major proteins in the milk of all mammals including cows, goats and humans. Dr. Reichelt in Norway, Dr. Cade at the University of Florida, and others found that urine samples from people with autism, PDD, celiac disease and schizophrenia contained high amounts of the casomorphin peptide in the urine. We suspect that these peptides may also be elevated in other disorders such as chronic fatigue, fibromyalgia and depression based on anecdotal reports of symptom remission after exclusion of wheat and dairy.

Why are These Peptides Important?

The peptides from gluten and casein are important because they react with opiate receptors in the brain, thus mimicking the effects of opiate drugs like heroin and morphine. These compounds have been shown to react with areas of the brain such as the temporal lobes, which are involved in speech and auditory integration.

Children with autism frequently seem addicted to wheat and dairy products. Presumably, people with autism and schizophrenia incompletely digest wheat and dairy products. These incompletely digested peptides are then absorbed into the body and bind to opiate receptors, altering behavior and other physiological reactions.