CYREX® Laboratories

CLINICAL SPECIFICATIONS

CASOMORPHIN (saliva)

Antigen Found In:
Casomorphin purchased from an antigen supplier.

Associated With:
Loss of oral tolerance

Known Cross-Reactions: Cerebellar,[6] Gliadin[7]

Clinical Significance:

The presence of salivary antibodies to Casomorphin is an indication of loss of mucosal tolerance and the onset of food immune reactivity. The production of antibodies to Casomorphin may be indicative of a lack of the enzyme dipeptidyl peptidase (DPPIV). The offending food and its known cross-reactive foods should be eliminated from the diet. Casomorphin is known to modulate the mucosa of the intestinal lining.[5] If the mucosa is damaged, Casomorphin and other ingested peptides can more easily penetrate the intestinal barrier. As an opioid peptide, Casomorphin, once in the blood stream, is capable of disrupting the blood-brain barrier and interfering with the neurotransmitter messaging system.[2, 3, 4, 6] Antibodies against Casomorphin can identify a cause of behavioral and cognitive problems.[1,2]

Suggested Reading:

1. Lindström, et al. CSF and plasma β-casomorphin-like opioid peptides in postpartum psychosis. Am J Psychiatry, 1984; 141(9):1059-1066.
2. Nygaard, et al. The relation between the psychological functioning of children with Down syndrome and their urine peptide levels and levels of serum antibodies to food proteins. Down Synd Res Pract, 2001; 6(3):139-145.
3. Pasi, et al. β-casein-immunoreactivity in the brain stem of the human infant. Res Commun chem. Pathol Pharmacol, 1993; 80(3):305-322.
4. Sun, et al. Relation of β-casomorphin to apnea in sudden infant death syndrome. Peptides, 2003; 24:937-943.
5. Trompette, et al. Milk bioactive peptides and β-casomorphins induce mucus release in rat jejunum. J Nutr, 2003; 133:3499-3503.
6. Vojdani, et al. Immune response to dietary proteins, gliadin and cerebellar peptides in children with autism. Nutr Neurosci, 2004; 7(3):151-161.
7. Vojdani and Tarash. Cross-reaction between gliadin and different food and tissue antigens, Food Nutri Sci, 2013; 4:20-32.