

CLINICAL SPECIFICATIONS

CASOMORPHIN

Antigen Made From:

Casomorphin purchased from an antigen supplier

Associated With:

Apnea in SIDS¹
 Autism²
 Blood-brain barrier permeability³
 Down syndrome⁴
 Post-partum psychosis⁵

Known Cross-Reactions: Cerebellar,² Gliadin⁶

Clinical Significance:

The presence of antibodies to Casomorphin is an indication of food immune reactivity. 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.⁷ 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.^{1,2,3,4} Antibodies against Casomorphin can identify a cause of behavioral and cognitive problems.⁸

References:

1. Sun et al. Relation of β -casomorphin to apnea in sudden infant death syndrome. *Peptides*, 2003; 24:937-943.
2. Vojdani et al. Immune response to dietary proteins, gliadin and cerebellar peptides in children with autism. *Nutr Neurosci*, 2004; 7(3):151-161.
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. 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.
5. Lindström et al. CSF and plasma β -casomorphin-like opioid peptides in postpartum psychosis. *Am J Psychiatry*, 1984; 141(9):1059-1066.
6. Vojdani and Tarash. Cross-reaction between gliadin and different food and tissue antigens, *Food Nutri Sci*, 2013; 4:20-32.
7. Trompette et al. Milk bioactive peptides and β -casomorphins induce mucus release in rat jejunum. *J Nutr*, 2003; 133:3499-3503.
8. Pruimboom and de Punder. The opioid effects of gluten exorphins: asymptomatic celiac disease. *J Health Population Nutr*, 2015; 33:24.