## TRIGGER FOODS

We notice similar patterns of addictive behavior with food, alcohol and drugs. Alcoholics and drug abusers frequently have atrocious dietary habits. Many of them grew up dysphoric with bad chemicals in their food and environment.

Addicts often report they first felt well when they had their first drink or injected the initial dose of heroin. Opiates, like other molecules, are effective but temporary remedies for dysfunctional mind-body states. The drive to maintain an opiate level is less to "get high" and more to feel "normal" and mostly to avoid the terrible experience of withdrawal.

The digestion of food proteins may produce substances having opiate or narcotic properties. There are also a number of regulatory peptides feeding back to brain control centers to form the brain-gut axis. A stop signal to the brain when enough food is eaten is important for appetite control and may be defective in compulsive eaters.

## **EXORPHINS**

Pieces of milk and wheat proteins (peptides) can act like the body's own narcotics (endorphins) and were described by Zioudro, Streaty and Klee as "exorphins" in 1979. Other food proteins, such as gluten, results in the production of substances having opiate- (narcotic) like activity. These substances have been termed "exorphins". Hydrolyzed wheat gluten, for example, was found to prolong intestinal transit time and this effect was reversed by concomitant administration of nalaxone, a narcotic-blocking drug. Digests of milk proteins also are opioid peptides. The brain effects of exorphins may contribute to the mental disturbances and appetite disorders which routinely accompany food-related illness. The possibility that exorphins are addictive in some people is a fascinating lead which needs further exploration.

Another mechanism, similar to dependency on food-derived neuroactive peptides such as exorphins, would be a dependency on gastrointestinal peptides released from the bowel during digestion. Deficiencies in the bowel production of regulatory addictive peptides, such as endorphins, would likely be associated with cravings and compulsions to increase food ingestion. Eugenio Paroli reviewed the peptide research, especially the link between food and schizophrenia. He suggested that "the discovery that opioid peptides are released by the digestion of certain food has followed a line of research that assumes pathogenic connections between schizophrenic psychosis and diet".