

## APPETITE (АПЕТИТ)

Дзюба О.С., гр. ХТП-58

Наукові керівники: канд. техн. наук, доц. А.О. Колесник,

доц. О.О. Манусенкова

Харківський державний університет харчування та торгівлі

*Appetite* is the desire to eat food, sometimes due to hunger. Appealing foods can stimulate appetite even when hunger is absent, although appetite can be greatly reduced by satiety. Appetite exists in all higher life-forms, and serves to regulate adequate energy intake to maintain metabolic needs.

*Neurological mechanism.* The neurological mechanism of appetite is not fully understood. Research has shown that the hypothalamus appears to be a center of control of food intake and drink. As it appears that levels of neurotransmitters (such as serotonin, beta-endorphin and neuropeptide-Y) within the hypothalamus directly influence appetite. Nutrients within the plasma as well as hormones such as insulin and cholecystokinin are tough to cross the blood-brain barrier into the hypothalamus and influence appetite.

*Neural signals from the GI tract.* One method that the brain uses to evaluate the contents of the gut is through vagal nerve fibers that carry signals between the brain and the gastrointestinal tract (GI tract).

*Hormone signals.* The hormones insulin and cholecystokinin (CCK) are released from the GI tract during food absorption and act to suppress feeling of hunger. CCK is key in suppressing hunger because of its role in inhibiting neuropeptide Y.

*Starvation and satiety factors.* Starvation factors are neuropeptide Y, orexin and ghrelin while satiety factors are cocaine and amphetamine regulated transcript, proopiomelanocortin, cholecystokinin, leptin and corticotropin-releasing hormone.

*Psychological factors.* Two psychological processes appear to be involved in regulating short-term food intake: liking and wanting. Liking refers to the palatability or taste of the food, which is reduced by repeated consumption. Wanting is the motivation to consume the food, which is also reduced by repeated consumption of a food and may be due to change in memory-related processes.

*Obesity.* Various hereditary forms of obesity have been traced to defects in hypothalamic signaling or are still awaiting characterization in addition, decreased response to satiety may promote development of obesity.