



Summary of biological factors and food influencing mood, emotions, food intake, and brain signaling pathways.

Foods and biological factors	Influence on mood, emotion, food intake, and brain signaling pathways
Chocolate	Increases pleasant feeling, reduce tension, and results in good mood via serotonin and cannabinoid receptors signaling.
Caffeine	Enhances alertness and increases anxiety and results in withdrawal symptoms in some individuals <i>via</i> cannabinoid CB1 receptor signaling pathway.
Omega-3 fatty acids	Influences neuroticism, mood, behavior, and plays a role in mood disorders. Omega-3 fatty acids in receptor functioning, neurotransmitters levels, and monoamine metabolism are all implicated in depression.
Micronutrients	Thiamine plays a role in emotion, mood states, and cognitive functioning.
Iron	Iron deficiency results in depressed mood and lethargy.
Folic acid	Folic acid deficiency is associated with depressed mood.
Ghrelin	Linked to stress mediated food reward behavior, depression, and anxiety via ghrelin receptor signaling pathway.
Serotonin	Linked to food intake, depression, and anxiety via serotonin receptor signaling pathway.
Dopamine	Linked to food reward behavior and mood via dopamine receptor signaling pathway.
Leptin	Linked to food intake, depression, anxiety, and mood disorder via leptin receptor signaling pathway.
Adiponectin	Linked to depression and mood disorder. May involve adiponectin-induced inhibition of GSK-3 β pathway.
Resistin	Indirect link to depression.
Insulin	Linked to mood, depression, anxiety and negative emotion via insulin receptor signaling.