

ECS

Brain and **autonomic nervous system**

- ↑ FI (depending on neuronal type)
- ↑ Motivation for palatable food
- ↑ Hedonic properties of palatable food
 - Modulation of gustatory and olfactory neurotransmission
- ↓ EE and BAT thermogenesis via SNS
- ↓ WAT lipolysis via SNS
- ↓ Gastrointestinal motility via the vagus

Nose

- ↑ Odor sensitivity
- ↑ Food-seeking behavior

Mouth/oral cavity

- ↑ Neural responses to sweet taste
 - Regulation of taste sensitivity ?
 - Regulation of orosensory processes ?

Gastrointestinal tract

- ↑ Fat preference and intake
- ↑ Secretion of ghrelin
- ↑ Nutrient absorption ?

Pancreas

- ↑ Insulin secretion
- ↑ Apoptotic activity and β cell death

Liver

- ↑ Lipogenesis
- ↓ Insulin clearance
- ↓ Insulin-induced signaling

Skeletal muscle

- ↓ Insulin-dependent glucose uptake
- ↓ Insulin-induced signaling
- ↓ Oxidative metabolism ?

Adipose tissue

- ↑ Storage capacity
- ↑ Adipogenesis
- ↓ Fatty acid oxidation
- ↑ Glucose uptake
- ↓ Mitochondrial biogenesis

Key:

↑, Increased ↓, Decreased ?, Further studies are required