

# BUPROPION (WELLBUTRIN)

## SUPPRESS APPETITE

Bupropion is an antidepressant that is used off-label for weight loss. Its mechanism of action is not fully understood. It appears to affect monoamine uptake and inhibit the uptake of norepinephrine and dopamine. In a controlled clinical study, 200 patients taking bupropion lost an average of 9.7 pounds (nearly 5% of body weight). Bupropion seems to work in the hypothalamus, where it reduces cravings by activating POMC neurons, and in the mesolimbic area of the brain, which is a reward center stimulated by pleasurable activities like eating.

### HOW DOES BUPROPION WORK?

Bupropion does not affect serotonin levels, unlike other antidepressants, which means it lacks common side-effects associated with antidepressants such as sexual dysfunction, weight gain, and sedation. Its structure closely resembles that of diethylpropion, an appetite suppressant, and sympathomimetic agent.

Bupropion is an antidepressant that seems to affect monoamine uptake, antagonizes nicotinic receptors, and inhibits the uptake of norepinephrine and dopamine. It appears to affect monoamine uptake and inhibits the uptake of norepinephrine and dopamine. Inhibiting the reuptake of norepinephrine and dopamine may explain how bupropion acts in the brain. Bupropion affects dopamine and norepinephrine concentrations in both the nucleus accumbens and the prefrontal cortex in the brain.

### BENEFITS OF BUPROPION

Potential benefits of bupropion:

- Improve mood
- Suppress appetite
- Increase energy

### INDICATIONS

#### WHAT IS BUPROPION USED FOR?

- Bupropion is medically indicated to treat depression
- Seasonal affective disorder
- Smoking cessation
- It is used off-label to treat antidepressant induced sexual dysfunction
- Attention-deficit hyperactivity disorder
- Depression associated with bipolar disorder
- Obesity

### CONTRAINDICATIONS

#### WHEN SHOULD YOU AVOID BUPROPION?

- An allergy to any of its components
- Seizure disorders
- Discontinuation of alcohol or sedatives
- Arteriovenous malformations
- Severe head injury
- Severe stroke
- Brain tumor
- Significant central nervous system disease
- Taking **monoamine oxidase inhibitors**, linezolid or methylene blue
- History of suicidal ideation

## COMMON BUPROPION SIDE EFFECTS

- drowsiness
- anxiety
- excitement
- difficulty falling asleep or staying asleep
- dry mouth
- excessive sweating
- ringing in the ears
- changes in your sense of taste
- frequent urination
- dizziness
- headache
- nausea
- vomiting
- stomach pain
- uncontrollable shaking of a part of the body
- loss of appetite
- weight loss
- constipation
- sore throat

## RARE BUPROPION SIDE EFFECTS

- Thoughts of suicide or dying
- Attempts to commit suicide
- New or worsening depression
- New or worsening anxiety
- An extreme increase in activity and talking (mania)
- Other unusual changes in mood or behavior
- Trouble sleeping (insomnia)
- Elevated blood pressures
- Feeling agitated or restless
- Panic attacks
- New or worse irritability
- Acting aggressive, being angry or violent
- Acting on dangerous impulses