Bupropion.

Wellbutrin® IR / SR / XL | Zyban® (smoking cessation) | Aplenzin® | Forfivo XL®

An atypical antidepressant — the "activating" one with no sexual side effects, no weight gain, and a serious seizure threshold problem.

CLASS	ONSET	BLACK BOX	MAX DOSE
NDRI	2–4 weeks	Suicidality < 24 y/o	450 mg/day

01 DEFINITION · OVERVIEW

What is Bupropion?

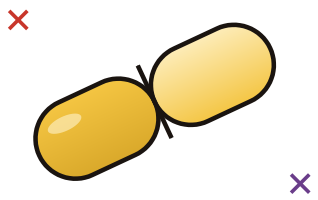
The atypical antidepressant that doesn't act like the others.

Quick Definition

Bupropion is an **atypical antidepressant** classified as a **norepinephrine–dopamine reuptake inhibitor (NDRI)**. It does *not* affect serotonin — which is exactly why it has a unique side-effect profile.

It is also FDA-approved as **Zyban** for **smoking cessation** and prescribed off-label for **ADHD** and **seasonal affective disorder**.

Major Depression | Seasonal Affective | Smoking Cessation | ADHD (off-label)



BUPROPION HCl
150–450 MG / DAY

02 PATHOPHYSIOLOGY · MOA

How Bupropion Works

Blocks norepinephrine and dopamine reuptake — leaves serotonin alone.

STEP 1 — **Bupropion administered**
PO; absorbed and crosses blood–brain barrier

→

STEP 2 — **Blocks reuptake**
of **norepinephrine**
and
dopamine
at presynaptic neuron

→

STEP 3 — **NE & DA accumulate**
in the synaptic cleft (longer signal)

→

STEP 4 — **Postsynaptic activation**
of NE / DA receptors increases

→

STEP 5 — **↑ mood, ↑ energy, ↑ focus,**
↓ nicotine cravings

✓

BOTTOM LINE — *More norepinephrine = energy & alertness. More dopamine = motivation, reward, focus, and a blunted nicotine craving. Zero serotonin effect — that's why no sexual dysfunction, no weight gain, no sedation.*

Why Bupropion Feels Different From SSRIs

	SNRIs	Bupropion (NDRI)

↑ Serotonin only. Calming, sedating, weight gain, sexual SE.

↑ Serotonin + NE. Mood + energy, but still has serotonin SE.

↑ NE + DA. *Activating*, no sexual SE — but ↓ seizure threshold.

03

ADVERSE EFFECTS · RED FLAGS

Signs & Symptoms to Monitor

Common & mild → vs → serious & reportable. Know the difference.

Common / Mild

EARLY · OFTEN TRANSIENT

- **Insomnia** — most common; activating drug
- **Dry mouth** (xerostomia)
- **Headache**
- **Nausea, constipation**
- **Dizziness, tremor**
- **Sweating & mild agitation**
- **Decreased appetite / weight loss**
- **Tachycardia & ↑ blood pressure**

Serious / Report Immediately

RED FLAGS · NCLEX PRIORITY

- **SEIZURES** — dose-related (≥ 450 mg/day, eating disorders, alcohol withdrawal)
- **Suicidal ideation** — black-box, esp. age < 24
- **Severe hypertension** — esp. with MAOIs or stimulants
- **Psychosis, mania, hallucinations**
- **Allergic reaction** — rash, hives, angioedema, Stevens-Johnson
- **Worsening depression / behavior changes**
- **Confusion, hostility, anxiety attacks**

SEIZURE RISK IS DOSE-DEPENDENT

Risk rises sharply > 450 mg/day, with rapid titration, single doses > 150 mg IR, or in patients with eating disorders, head trauma, or abrupt alcohol/benzodiazepine withdrawal. *This is the #1 NCLEX safety concern with bupropion.*

04

PRIORITY NURSING INTERVENTIONS

What the Nurse Does — In Order

ABCs → Safety → Assessment → Education. NCLEX prioritization rules apply.

PRIORITY 1 Safety

- **Assess seizure risk** — history, eating disorder, EtOH/benzo withdrawal, head injury
- **Monitor for suicidal ideation** — black box; esp. first weeks & dose changes
- **Do not exceed 450 mg/day**; single dose ≤ 150 mg IR
- **Seizure precautions** at bedside if high-risk
- **Confirm no MAOI** within last 14 days

PRIORITY 2 Monitor

- **Vital signs** — esp. BP and HR (hypertension risk)
- **Sleep pattern** — insomnia, vivid dreams
- **Weight & appetite** — anorexigenic effect
- **Mental status** — agitation, psychosis, mania emergence
- **Therapeutic response** — onset 2–4 weeks; full effect 6–8 weeks

PRIORITY 3 Administer

- **Give in morning** — prevents insomnia
- **Second dose ≥ 8 hrs apart**; not after 3 PM
- **SR / XL: do not crush, split, or chew**
- **Titrate gradually** — reduces seizure risk
- **Taper, do not stop abruptly**

CONTRAINDICATED Absolute "Do Not Give" Situations

CI 01

Seizure Disorder

Active or history of seizures — bupropion lowers the threshold.

CI 02

Eating Disorders

Anorexia/bulimia — electrolyte shifts dramatically raise seizure risk.

CI 03

EtOH / Benzo Withdrawal

Abrupt cessation of alcohol or sedatives — high seizure potential.

CI 04

MAOIs (14-day rule)

Hypertensive crisis risk — wait 14 days between MAOI and bupropion.

05

PHARMACOLOGY · DRUG PROFILE

Bupropion at a Glance

Forms, dosing, kinetics — and what makes it a unique choice.

BUPROPION HCl

Norepinephrine–Dopamine Reuptake Inhibitor (NDRI)

"The activating antidepressant" — chosen when SSRIs cause sexual side effects, weight gain, or sedation; also when there's a co-occurring need to quit smoking.

IR	Immediate-release · TID dosing · ≤150 mg/dose · ≤450 mg/day
SR	Sustained-release · BID dosing · ≤200 mg/dose · ≤400 mg/day
XL	Extended-release · once daily AM · ≤450 mg/day

MECHANISM

How it acts

- Inhibits reuptake of **norepinephrine**
- Inhibits reuptake of **dopamine**
- No effect on serotonin
- Mild nicotinic acetylcholine antagonist → smoking cessation

KEY SIDE EFFECTS

What patients feel

- **Insomnia, agitation, tremor**
- Dry mouth, headache, nausea
- Hypertension, tachycardia
- Weight loss / ↓ appetite
- **Seizures (dose-related)**

NURSING CONSIDERATIONS

What the nurse watches

- Morning dosing; no doses after 3 PM
- Check baseline BP & weight
- No crushing SR/XL tablets
- Screen for eating disorder, seizures, EtOH use
- Suicide-risk monitoring (black box)

★ Why Bupropion Gets Picked

✓ ADVANTAGE 01

No sexual dysfunction

Major reason patients prefer it over SSRIs/SNRIs.

✓ ADVANTAGE 02

No weight gain

May actually cause weight loss — useful in metabolic concerns.

✓ ADVANTAGE 03

Helps quit smoking

Same drug, brand Zyban — reduces nicotine cravings & withdrawal.

06

NCLEX TEST TRAPS

⚠ Where Students Lose Points

The wrong-sounding-right answers vs. the actual NCLEX-correct action.

1

✗ TRAP

Giving bupropion to a patient with **anorexia nervosa** because "she's depressed and underweight."

✓ NCLEX-CORRECT

HOLD the dose & notify provider. Eating disorders are an *absolute contraindication* — seizure risk from electrolyte instability.

2

✗ TRAP

Teaching patient to take bupropion **at bedtime** like "other antidepressants."

✓ NCLEX-CORRECT

Take in the morning. Bupropion is activating — bedtime dosing causes severe insomnia. Second dose, if any, before 3 PM.

3

✗ TRAP

Reassuring the patient that bupropion has **"no serious side effects"** because it's atypical.

✓ NCLEX-CORRECT

Teach seizure warning signs — and never exceed 450 mg/day or 150 mg/single dose IR. Seizures are the signature risk.

4

✗ TRAP

Starting bupropion in a patient who stopped a **MAOI yesterday**.

✓ NCLEX-CORRECT

Wait 14 days after MAOI discontinuation. Risk of hypertensive crisis & severe drug interaction.

5

✗ TRAP

Mistaking bupropion for an **SSRI** and watching for serotonin syndrome.

✓ NCLEX-CORRECT

		Bupropion is an NDRI — no serotonin action. Watch for *seizures, hypertension, insomnia*, not serotonin syndrome.
6	✗ TRAP Telling the patient they should **"feel better in a few days."**	✓ NCLEX-CORRECT **Onset is 2–4 weeks; full effect 6–8 weeks.** Set realistic expectations and continue suicide-risk monitoring during this window.

07

PATIENT & FAMILY EDUCATION

What to Teach Before Discharge

Empower the patient — but make safety non-negotiable.

Core Teaching Points

01 **Take in the morning** with or without food. If twice daily, take the second dose by mid-afternoon (before 3 PM) to avoid insomnia.

02 **Swallow SR / XL whole.** Do not crush, chew, or split — sudden release of full dose can trigger seizures.

03 **Avoid alcohol** entirely. Alcohol lowers the seizure threshold, and so does bupropion — the combination is dangerous.

04 **Do not double up** Zyban and Wellbutrin — they're the same drug. Combining brands raises dose past safe limits.

05 **Report any seizure activity, severe headache, fainting, confusion, or thoughts of self-harm** immediately.

06 **Don't stop suddenly.** Taper with the provider to avoid withdrawal symptoms.

07 **Allow 2–4 weeks** to feel mood improvement; full effect at 6–8 weeks. Sleep and energy improve first.

08 **Tell every provider** you are on bupropion — it interacts with many drugs and lowers the seizure threshold.

LIFESTYLE

Hydrate & eat regularly

Helps with dry mouth and offsets appetite loss. Maintain normal meals — skipping can worsen seizure risk.

SAFETY

Avoid these triggers

No high-dose caffeine, no recreational stimulants, no abrupt stopping of alcohol or benzos without medical help.

FAMILY

Watch for behavior changes

Family should report worsening mood, hostility, suicidal talk, or unusual restlessness — especially in the first weeks.

SMOKING

If taking for cessation

Set a quit date 1–2 weeks *after* starting Zyban. Continue for 7–12 weeks even if you quit early.

08

MEMORY BOOSTERS

Make It Stick

Mnemonics, patterns, and quick associations for the exam room.

MNEMONIC 01

"SEIZE" — the Bupropion Profile

S **Seizures** — #1 risk; dose-related

E **Eating disorders** — absolute contraindication

I **Insomnia** — take in AM, not at night

Z **Zyban** — same drug for smoking cessation

E **Energy ↑** — activating, no sedation

MNEMONIC 02

"The 3 NOs of Bupropion"

⊘ **NO sexual dysfunction** — unlike SSRIs/SNRIs

⊘ **NO weight gain** — usually weight loss

⊘ **NO sedation** — activating, energizing

★ **BUT yes seizures** — the trade-off

★ **AND yes smoking cessation** — bonus indication

★ Lightning Recall — Last-Minute Cues

Q · DRUG CLASS?

NDRI — Norepinephrine + Dopamine reuptake inhibitor. No serotonin.

Q · WHEN TO TAKE?

Morning. Second dose before 3 PM. Activating drug → insomnia at night.

Q · ABSOLUTE NO-GO?

Seizure history, eating disorder, EtOH/benzo withdrawal, MAOI within 14 days.

Q · MAX DOSE?

450 mg/day total · 150 mg per single IR dose. Above = seizure spike.

Q · TWO BRAND USES?

Wellbutrin → depression. Zyban → smoking cessation. Same drug.

Q · WHY PATIENTS LIKE IT?

No sexual side effects, no weight gain, no sedation — "feel like myself."