

First line therapies include 5 FDA approved medications. Bupropion SR, Nicotine Gum, Nicotine Patch, Nicotine Inhaler, Nicotine Nasal Spray.

Bupropion SR (Wellbutrin SR or Zyban SR)

Description:

Bupropion Hydrochloride SR is a quit-smoking medication approved by the Food and Drug Administration (FDA) that doesn't have any nicotine in it. It is available as Zyban (also called Wellbutrin) and only by prescription. You can use it for up to six months. And you can use it along with medications that do contain nicotine, called nicotine replacement therapies (NRTs).

How Do I Take This Medication:

- Start taking the medication one to two weeks prior to your quit date.
- Begin with a dose of 150 mg every AM for 3 days, then increase to 150 mg two time a day for 3 months after the quit date

Contraindications:

- You should not take this medication if you have had a seizure
- You should not take this medication if you have had an eating disorder.
- You should not take this medication if you have used an MAO inhibitor in the past 14 days.
- You should not take this medication if you are using another form of bupropion.
- You should not take this medication if you have an allergic reaction to bupropion.
- Avoid use with alcohol.

Precautions:

- *Pregnancy* - Pregnant smokers should be first encouraged to quit without pharmacologic treatment. Bupropion SR should be used during pregnancy only if the increased likelihood of smoking abstinence, with its potential benefits, outweighs the risk of bupropion SR treatment and potential concomitant smoking. Similar factors should be considered in lactating women.
- *Cardiovascular diseases* - Generally well tolerated; infrequent reports of hypertension.

Side Effects:

- Insomnia--40%
- Dry mouth--10%

Costs:

- \$100 per month

Nicotine Gum

Description:

Nicotine gum is currently available as an over-the-counter medication in 2 mg and 4 mg dosages>

How Do I Take This Medication:

- You should completely quit smoking before you start using the gum.
- Recommend 2 mg for those smoking less than 25 cigarettes per day (max 30 pieces per day)
- Recommend 4 mg for those smoking more (max 20 pieces per day)
- The gum should be used for up to 12 weeks. Gradual reduction in use is recommended over the last seven to 12 weeks.

Chewing Technique:

- It should be chewed slowly until a peppery or minty taste emerges, then “parked” between the cheek and gum. It should be chewed and parked intermittently for 30 minutes.
- Avoid soda, juices, and coffee 15 minutes before or after, as acid inhibits absorption of nicotine
- Encourage patients to use at least 10-12 pieces per day--one every 1-2 hours for at least 1-3 months. This is the dose necessary to relieve their withdrawal symptoms (anxiety, irritability, difficulty concentrating, craving etc.).

Side Effects:

- Jaw Ache
- Hiccups
- Mouth Soreness
- Dyspepsia (indigestion)
(All of the above can be lessened by proper chewing techniques)
- Nausea, vomiting, headache, dizziness, cold sweat, pallor, and weakness are all symptoms of an overdose.

Precautions:

- *Pregnancy* - Pregnant smokers should be first encouraged to quit without pharmacologic treatment. Nicotine gum should be used during pregnancy only if the increased likelihood of smoking abstinence, with its potential benefits, outweighs the risk of nicotine replacement and potential concomitant smoking. Similar factors should be considered in lactating women.
- *Cardiovascular diseases* - Nicotine replacement therapy is not an independent risk factor for acute myocardial events. Nicotine replacement therapy should be used with caution among particular cardiovascular patient groups: those in the immediate (within 2 weeks) postmyocardial infarction period, those with serious arrhythmias, and those with serious or worsening angina pectoris
- The gum might not be right for you if you have active peptic ulcers.
- The gum might not be right for you if you have malignant hypertension.
- The gum might not be right for you if you have hyperthyroidism or IDDM.

Costs:

For 2-mg pieces

- \$8.62 for 15
- \$13.79 for 24

For 4-mg pieces

- \$6.47 for 10
- \$12.93 for 20

Nicotine Patch:**Description/Availability**

- The nicotine patch is available over the counter and in prescription form. Find out if your insurance will reimburse you for the prescription patch.
- **Nicoderm CQ and Nicotrol**--available OTC
- **Habitrol**--by prescription only
- Generic patches are also available, often at lower costs.
- The recommended duration of usage is eight to ten weeks.

How Do I Take This Medication:

- **Nicoderm CQ and Habitrol**--
 - dosage starts at 21 or 22 mg per day for 4 weeks,
 - then 14 mg per day for 2 weeks,
 - then 7 mg per day for 2 weeks.
- **Nicotrol**--dosage is 15mg per day for 8 weeks
- Patches should be applied immediately upon waking up on your quit date. At the start of each day, place a new patch onto a relatively hairless area on the skin, anywhere between your neck and waist.
- Patches are to be applied once a day. The 24-hour patch can be removed at night if sleep disturbance is a problem. Alternatively, you could use the 16-hour patch

Side Effects:

- Up to 50% of patients using the patch will develop a rash (1% hydrocortisone cream to treat the rash, and rotate patch sites on upper body daily to help prevent)
- Insomnia

Contraindications:

- *Pregnant Women:* Because nicotine can damage or impair the fetal brain, if you are pregnant you should *not* use the patch. Talk to your doctor about other nicotine replacement therapies.

Costs: \$120 mo

Nicotine Inhaler:**Description:**

- Nicotine inhaler is only available through prescription.
- It consists of a mouthpiece and a cartridge. The cartridge contains 10 mg of nicotine.
- Each cartridge delivers 4 mg of nicotine via eighty deep inhalations over 20 minutes--2 mg of which are systemically absorbed.
- Recommended dosage is 6 to 16 cartridges per day.

How Do I Take This Medication:

- You should completely quit smoking before you start using the inhaler.
- For maximum benefit, you should puff frequently. Follow your doctor's directions exactly.
- Avoid soda, juices, and coffee 15 minutes before or after, as acid inhibits absorption of nicotine.
- Use is recommended for up to 6 months
- Gradual reduction in frequency is recommended over the last three to six months.
- *Ambient temperature* - Delivery of nicotine from the inhaler declines significantly at temperatures below 40F. In cold weather, the inhaler and cartridges should be kept in an inside pocket or warm area.

Side Effects:

- Irritation of the mouth or throat--40%
- Coughing--32%
- Rhinitis (inflammation of the nasal mucous membranes) --23%

Precautions:

- *Pregnancy* - Pregnant smokers should be first encouraged to quit without pharmacologic treatment. The nicotine inhaler should be used during pregnancy only if the increased likelihood of smoking abstinence, with its potential benefits, outweighs the risk of nicotine replacement and potential concomitant smoking. Similar factors should be considered in lactating women.
- *Cardiovascular diseases* - Nicotine replacement therapy is not an independent risk factor for acute myocardial events. Nicotine replacement therapy should be used with caution among particular cardiovascular patient groups: those in the immediate (within 2 weeks) postmyocardial infarction period, those with serious arrhythmias, and those with serious or worsening angina pectoris.

Relative Contraindications:

- Asthmatics

Nicotine Nasal Spray

Description:

- The nasal spray is only available by prescription.
- Each spray delivers 0.5 mg of nicotine. Each bottle contains approximately 100 doses.
- One dose consists of 1 spray in each nostril for a total of 1.0 mg of nicotine.
- Initial dosing should be 1-2 doses per hour, increasing as needed for symptom relief.
- Eight to 40 doses per day is the recommended range.
- Therapy duration is three to six months

How Do I Take This Medication:

- You should completely quit smoking before you use the nasal spray.
- You should administer 1 spray to each nostril. Your head should be tilted back slightly when administering
- To reduce irritating effects, do not sniff, swallow, or inhale through the nose when administering doses.

Side Effects

- Nasal irritation which decreases in severity with use
- Runny Nose
- Throat Irritation
- Watering Eyes
- Sneezing
- Coughing

Precautions:

- *Pregnancy* - Pregnant smokers should be first encouraged to quit without pharmacologic treatment. Nicotine nasal spray should be used during pregnancy only if the increased likelihood of smoking abstinence, with its potential benefits, outweighs the risk of nicotine replacement and potential concomitant smoking. Similar factors should be considered in lactating women.
- *Cardiovascular diseases* - Nicotine replacement therapy is not an independent risk factor for acute myocardial events. Nicotine replacement therapy should be used with caution among particular cardiovascular patient groups: those in the immediate (within 2 weeks) postmyocardial infarction period, those with serious arrhythmias, and those with serious or worsening angina pectoris.
- *Dependency* - Nicotine nasal spray has a dependence potential intermediate between other nicotine-based therapies and cigarettes. 15-20% of patients report using the active spray for longer periods than recommended (6-12 months) and 5% used the spray at a higher dose than recommended.

Cost:

- \$9.71 for 10 cartridges/day
- \$15.54 for 16 cartridges/day