

## Tobacco/Smoking Cessation Medications The Details of Nicotine Replacement Medications

The U.S. Food and Drug Administration (FDA) has approved the following medicines to help you quit smoking.

The following medicines are Nicotine Replacement Therapy (NRTs). These medicines provide nicotine to your body in a different way than tobacco. You also get less nicotine with NRTs than from tobacco. Using an NRT when you quit can lessen cravings and withdrawal symptoms.

Follow these recommendations to receive the most benefit:

- Start taking an NRT before or on your Quit Day.
  - Read and follow the package instructions to make sure you:
    - use the correct technique
    - use the correct dose for the amount you smoke



NRTs include nicotine patch, gum, lozenge, nasal spray and inhaler.

### Nicotine Patch

The nicotine patch (Habitrol, NicoDerm, CQ, Nicotrol) is a nicotine replacement medicine. The nicotine patch slowly releases nicotine to your body through your skin. This keeps the nicotine in your body steady throughout the day to ease withdrawal symptoms. This allows you to focus on breaking your smoking routines and learn new coping skills. Nicotine patches are available over-the-counter.

There are three different strengths of the nicotine patch: 21mg, 14mg or 7mg. The dose and duration recommendations vary by individual.

Follow the directions on the label, and ask your doctor or pharmacist to explain any part you do not understand. Use the nicotine patch exactly as directed.

### How to Apply the Patch

- Choose a non-hairy, clean, dry area of skin; do not apply lotion or sunscreen on this area.
- Avoid placing the patch over joints (ankles, knees, elbows) or skin that is burned, broken out, cut or irritated in any way.
  - Wait at least seven days before applying the patch to a previously used skin site.
- Apply the sticky side of the patch to your skin. Press firmly for at least 10 seconds.
- If needed, apply medical adhesive tape over the patch to help keep it in place.
- Wash your hands when you have finished.

## How to Remove the Patch

- Remove the patch after 24 hours of use. If wearing the patch disturbs your sleep, remove it about 30 minutes before bedtime.
- Carefully dispose of the used patch so it will be out of reach of children and pets. Wash your hands.

## Notes on Use

- It is normal to feel some tingling or burning for the first hour after you put on the patch. Your skin may be red after you take off the patch. Your skin should not stay red for more than a day. If redness continues, contact your doctor.
- You can take a shower or bath, or swim for short periods of time while wearing the nicotine patch. You can use medical or sports tape if needed to keep the patch in place.
- It is OK to wear the nicotine patch with mild to moderate exercise. However, it is recommended that you remove the patch with vigorous exercise.

## Effectiveness

The patch has been found in many studies to be safe and can double your chances to quit successfully.

## Nicotine Gum

Nicotine gum (Nicorette) is a nicotine replacement medicine. The nicotine gum is available over-the-counter. It has also been found to double chances of quitting successfully! It gives your body nicotine through the skin lining of the cheek and gums in your mouth. One nice thing about the gum is that it keeps your mouth busy. It can be a very helpful substitute not only for those who are trying to quit cigarettes but also for those trying to quit spit tobacco.

## How to Use Nicotine Gum

Many users start with the 2-mg gum. Smokers who use 20 or more cigarettes per day may start with the 4-mg gum. Nicotine gum may be used by chewing one piece of gum every one to two hours at first, or it may be used by chewing one piece of gum whenever you have the urge to smoke.

The gum should be chewed slowly until you can feel a slight tingling in your mouth. Then stop chewing and place (or park) the chewing gum between your cheek and gum. When the tingling is almost gone (about one minute), start chewing again; repeat this procedure for about 30 minutes.

Follow the nicotine gum directions closely. Do not chew nicotine gum too fast or chew more than one piece of gum at a time or you may get too much nicotine. Do not chew one piece too soon after another. Instead, space them out over the course of your day. Try not to chew more than 24 pieces of the gum per day unless your doctor gives you permission. Do not eat or drink for 15 minutes before chewing the gum, or while using it (some beverages can reduce its effectiveness).

## Reducing the Use of Nicotine Gum

Begin to reduce the amount of gum you are using by months two and three. Slowly reducing your use over time will prevent uncomfortable withdrawal symptoms. Using the nicotine gum for longer than three or four months is not recommended. Do not use nicotine gum longer than six months without talking with your doctor.

Here are some tips to slowly reduce your gum use over time:

- Each week, decrease the chewing time for each piece of gum by five minutes (see chart below). For example, during week one, the normal chewing time is 30 minutes per piece of gum. By week two, bring it down to 25 minutes per piece. By week three, bring it down to 20 minutes for each piece. By about six weeks of use, you will be using the gum only 5 minutes each time you chew.

- Reduce the pieces of gum you use a day by about one piece every four to seven days. Begin to use more and more sugarless gum instead of nicotine gum.
- Consider totally stopping the use of nicotine gum when your craving for nicotine is satisfied by one or two pieces of gum per day.

Week	Chew Time	Pieces per Day
1	30 minutes	18-20 pieces
2	25 minutes	16-18 pieces
3	20 minutes	14-16 pieces
4	15 minutes	12-14 pieces
5	10 minutes	10-12 pieces
6	5 minutes	8-10 pieces

### Stop use and ask a doctor if any of the following develop:

- Mouth ulcers
- Jaw muscle aches
- Dizziness
- Headache
- Upset stomach

### Effectiveness

Nicotine gum is considered safe and effective to help people quit smoking. Using the gum as directed can prevent side effects or nicotine overdose symptoms.

### Nicotine Lozenge

The nicotine lozenge (Commit) is a nicotine replacement medicine. It gives you nicotine in a lozenge that dissolves in your mouth. Like other nicotine replacement medicines, it has been found to double quit rates! One nice thing about the lozenge is that it can be used any time you have tough cravings. Some people prefer the taste of the lozenge to the gum.

### How to Use Nicotine Lozenges

The nicotine lozenge should be used when you are having strong cravings or by following the recommended use:

**Weeks 1- 6:** 1 lozenge every 1- 2 hours

**Weeks 7- 9:** 1 lozenge every 2 - 4 hours

**Weeks 10-12:** 1 lozenge every 4 - 8 hours

On average, people use nine or more lozenges per day for the first six weeks.

There are two dose strengths of lozenge: the 2mg and 4mg. Many users start with the 2mg lozenges. Heavy smokers (those who smoke within 30 minutes of waking) may start with the 4mg lozenges.

Use lozenges exactly as directed. Place the lozenge in your mouth and let it slowly dissolve. Move the lozenge from one side of your mouth to the other. It is normal to feel a warm or tingling sensation. Do not eat or drink 15 minutes before using or while the lozenge is in your mouth; this may make them less effective. Do not chew or swallow lozenges.

### Stop use and ask a doctor if you develop:

- Mouth problems (ulcers, bleeding, pain)
- Severe indigestion or severe sore throat

- Irregular heartbeat or palpitations

## Effectiveness

Nicotine lozenges have been found to be safe and effective as a stop smoking aid. Using the lozenges as directed can prevent side effects or nicotine overdose symptoms.

## Nicotine Nasal Spray (prescription only)

The nicotine nasal spray (Nicotrol NS) has been found to more than double your chances to quit successfully! The spray is only available by prescription and can be more costly than other products.

## How to Use Nicotine Nasal Spray

The nasal spray delivers nicotine to your body through your nostrils. Tilt your head back slightly when dispensing the spray and be careful not to sniff, swallow or inhale through the nose. Gently spray into your nose.

The amount of nicotine spray you should use depends on your needs. You should talk to your doctor about what makes sense for you. One dose is made up of one spray in each nostril. The suggested starting amount is one or two doses per hour. This may be increased to 40 doses per day if you smoke 20 cigarettes or more per day. Take at least eight doses (a total of 16 sprays – eight in each nostril) per day; anything less may not be helpful for you. Do not take two doses at one time.

The spray is not recommended for people with asthma. It can make the condition worse. You should also avoid the spray if you have a chronic nasal disorder such as an allergy, nasal polyps, nasal inflammation or sinusitis.

## Effectiveness

The nicotine spray has been found to be safe and very effective as a stop smoking aid. Using the spray as directed can prevent side effects or nicotine overdose symptoms.

## Nicotine Inhaler (prescription only)

The nicotine inhaler (Nicotrol Inhaler) is a nicotine replacement medicine. Like other nicotine replacement medicines, it has been found to double quitting success rates. It is available only by prescription. It has the advantage of simulating cigarette smoking because the inhaler is shaped like a cigarette. With the inhaler, nicotine is administered quickly, unlike the patch. This can be a good choice for highly addicted smokers who have strong cravings and need immediate relief.

## How to Use a Nicotine Inhaler

The inhaler is shaped like a cigarette. You inhale deeply to receive a vaporized dose of nicotine, similar to inhaling when smoking a cigarette. However, the inhaler does not have all of the cancer and disease-causing smoke and chemicals like actual cigarettes. Also, the nicotine is actually deposited in the mouth, not the lungs.

Each inhaler package includes a mouthpiece and 42 cartridges of nicotine. Treatment takes place in two stages. During the first part of quitting (up to 12 weeks), you use as many cartridges as you need (at least six, but no more than 16 daily) to soothe your cravings for cigarettes. During the second part of quitting (six to 12 weeks), you gradually reduce the amount you use each day until you are nicotine free. It is important to gradually cut back on the inhaler after the first three months. Its use for more than six months is not recommended.

For best results, puff often on each cartridge for about 20 minutes. Remember to clean the mouthpiece regularly with soap and water.

## Effectiveness

The nicotine inhaler has been found to be safe and very effective as a stop smoking aid. Using the inhaler as directed can prevent side effects or nicotine overdose symptoms.

## Considerations with All Forms of NRT

### Warnings

**Tell your doctor if you have or have ever had:**

- Heart attack
- Irregular heart rate
- Angina or uncontrolled high blood pressure
- Ulcers
- Pheochromocytoma
- Overactive thyroid
- Diabetes
- Kidney or liver disease
- Dental condition or disorder

**Important Note:** Tell your doctor if you are pregnant, plan to become pregnant, or are breastfeeding. If you become pregnant while using the nicotine patch, stop using it and call your doctor immediately. Nicotine and the nicotine patch may cause harm to your baby.

**Ask a doctor or pharmacist before using NRT if you are:**

- Using prescription and/or nonprescription medication(s), especially acetaminophen (Tylenol), caffeine, diuretics ('water pills'), imipramine (Tofranil), insulin, medications for high blood pressure, oxazepam (Serax), pentazocine (Talwin, Talwin NX, Talacen), propoxyphene (Darvon, E-Lor), propranolol (Inderal), theophylline (Theo-Dur, Slo-bid), and vitamins.

**Important Note:** It is optimal to begin using the NRT products on the day you stop using tobacco. However, it is not essential to stop using tobacco products when you begin NRT products, if you are not able to stop using tobacco at that time. If you are using an OTC NRT while trying to quit smoking but slip up and have a cigarette, you should not stop using the NRT. You should keep using the OTC NRT and keep trying to quit. Call your doctor if you get too much nicotine (an overdose). Signs of an overdose may include dizziness, upset stomach, bad headaches, vomiting, cold sweats, confusion, blurred vision, hearing problems, weakness or fainting. If you experience any of these problems, take off the patch and call your doctor.

**If you experience any of the following symptoms, call your doctor immediately:**

- Seizures
- Heart rhythm disturbances
- Difficulty breathing

**Important Note:** Side effects or overdose symptoms of nicotine are quite rare. Make sure to use the patch as directed.

**Please note, National Jewish Health does not endorse specific products. The names of NRT products are included to familiarize the consumer with the various products that are available.**

Visit our website for more information about support groups, clinical trials and lifestyle information.

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