PROCEDURE

Nicotine replacement therapy

Nicotine replacement therapy provides controlled nicotine to reduce cravings while you stop using tobacco

PURPOSE
Reduce nicotine withdrawal while stopping tobacco use

PROCEDURE TYPE
Therapeutic, non-invasive medication through skin, mouth, or nose

WHERE IT IS DONE
At home or in an outpatient clinic

ANAESTHESIA
None

HOW LONG IT TAKES
Usually 8 to 12 weeks, sometimes longer

PREPARATION
No fasting; choose a product, quit date, and support

RECOVERY
Immediate; driving is usually allowed

MAIN RISKS
Irritation, nausea, sleep disturbance, excess nicotine

RESULTS
Craving relief quickly; quit outcome over weeks to months

Overview

Nicotine replacement therapy, often called NRT, is a medication-based treatment used while stopping tobacco. It supplies nicotine without the tar, carbon monoxide, and many other harmful chemicals produced by burning tobacco.

NRT can reduce cravings and withdrawal effects such as irritability, restlessness, and difficulty concentrating. It does not remove every urge to smoke, but it can make urges easier to manage.

Available forms include skin patches, gum, lozenges, an oral inhaler, and nasal spray. Availability and prescription requirements differ by country. Patches provide nicotine steadily. Gum, lozenges, inhalers, and nasal sprays act more quickly and can be used when cravings occur.

Why the procedure is performed

NRT is used to help you stop smoking cigarettes or other burned tobacco. It may also be considered for other forms of tobacco use, although the evidence and product approvals are not the same for every product.

The treatment separates nicotine withdrawal from the routines and toxins of smoking. This gives you time to work on triggers, habits, and coping skills while gradually reducing nicotine use.

Using a patch together with a faster-acting product can control both background withdrawal and sudden cravings. Behavioral support, such as counseling or a quitline, can improve the overall treatment plan.

Who should and should not have it

NRT is often suitable for adults who use tobacco regularly and want help stopping. The best product depends on your tobacco use, previous quit attempts, preferences, medical history, and ability to use the product correctly.

NRT may need to be avoided, delayed, or changed if you:

Ask for medical advice before starting if you are pregnant or breastfeeding. Counseling is usually considered first during pregnancy, with medication decisions made individually.

A recent heart attack, worsening chest pain, a serious abnormal heartbeat, or poorly controlled cardiovascular illness also needs review. NRT is generally much less harmful than continued smoking, but the product and timing should be selected carefully in these situations.

- Have had an allergic reaction to nicotine or a product ingredient
- Have severe adhesive reactions or widespread skin disease affecting patch sites
- Cannot safely chew gum because of dentures, jaw problems, or dental work
- Have significant nasal disease that would make nasal spray difficult to use
- Have a condition causing wheezing or narrowed airways and are considering an inhaler
- Are younger than the age covered by the product instructions

How to prepare

Follow the instructions from your treating facility, prescribing clinician, or pharmacist. Their

instructions take priority over general information in this article.

Choose a quit date or a clear date for beginning your attempt. Remove cigarettes, ashtrays, and other smoking reminders where practical. Plan what you will do during common triggers, such as after meals or during work breaks.

Tell your healthcare team about your medicines and health conditions. Stopping smoking can change how your body processes certain medicines, even though NRT itself may not be responsible. Monitoring may be needed for some prescription drugs.

Read the product label before use. Check how often the product is used, whether food or drink affects it, and how it should be stored. Nicotine products must be kept away from children and pets, including after use.

What happens during the procedure

The method depends on the product.

A patch is placed on clean, dry, hair-free skin. It releases nicotine slowly through the skin. Patch sites are rotated to reduce irritation. Some patches are worn all day, while others may be removed at night according to their instructions.

Nicotine gum is chewed slowly until a tingling or peppery feeling appears. It is then "parked" between the cheek and gum so nicotine can be absorbed through the mouth. Chewing it continuously like ordinary gum can cause nausea or hiccups.

A lozenge dissolves slowly in the mouth. It should not be chewed or swallowed whole. The oral inhaler releases nicotine into the mouth and throat rather than delivering it deep into the lungs like an asthma inhaler. Nasal spray delivers nicotine through the lining of the nose.

A steady patch may be combined with gum, a lozenge, or another faster-acting form for breakthrough cravings. Follow the product instructions or the plan provided by your healthcare team.

Recovery and what to expect afterward

NRT does not usually require a recovery period.

Pain is not expected, although patches can cause mild skin irritation and mouth products may cause soreness, hiccups, or throat irritation. Nasal spray may briefly irritate the nose.

You can usually eat normally. Gum, lozenges, and oral inhalers may have instructions about avoiding food or drinks shortly before and during use because some drinks can reduce nicotine

absorption.

Normal physical activity can usually continue. NRT does not normally prevent you from driving, but do not drive if you feel dizzy, faint, or otherwise unwell.

Most people can continue working immediately. You may still notice cravings, irritability, sleep changes, or difficulty concentrating while your body adjusts to less nicotine.

Risks and possible complications

NRT is considered safer than smoking because it does not expose you to tobacco smoke. It can still cause side effects.

Patches may cause redness, itching, sleep disturbance, or vivid dreams. Gum and lozenges can cause jaw soreness, hiccups, heartburn, nausea, or mouth irritation. Inhalers may cause coughing or throat irritation. Nasal spray commonly causes temporary nasal or throat irritation.

Too much nicotine can cause nausea, vomiting, sweating, headache, dizziness, weakness, or a fast or irregular heartbeat. This can occur if products are used incorrectly or if several nicotine sources are combined without an appropriate plan.

Nicotine can be poisonous if swallowed or absorbed by a child or pet. Used patches, gum, and lozenges may still contain nicotine and require secure disposal.

Results and follow up

Craving relief may begin within minutes with faster-acting products. Patches take longer to provide a steady nicotine level. The main result-whether the treatment helps you remain tobacco-free-is assessed over weeks and months.

Routine follow-up can review cravings, withdrawal, side effects, and any tobacco use. Your plan may be adjusted by changing the product, adding behavioral support, or using a steady and faster-acting product together.

A lapse does not mean the entire attempt has failed. Review what triggered it and return to the plan. If you repeatedly smoke while using NRT or develop symptoms of excess nicotine, contact your healthcare team for advice.

Alternatives

Other options offer different benefits and trade-offs:

- Varenicline: A prescription tablet that reduces cravings and the rewarding effects of nicotine. It avoids nicotine but can cause nausea, sleep changes, or vivid dreams.
- Bupropion: A prescription tablet that can reduce withdrawal. It is not suitable for everyone, including some people with seizure risks or certain eating disorders.
- Behavioral support alone: Counseling, quitlines, text programs, and group support involve no medication, but withdrawal may be harder to manage.
- Stopping without treatment: This avoids medication effects and cost, but cravings and withdrawal may be more difficult.
- Nicotine-containing e-cigarettes: These may help some adults stop smoking, but they are not approved as quit-smoking medicines in some countries, including the United States. They continue nicotine dependence and expose you to aerosol with uncertain long-term effects.

When to call your healthcare team

For routine follow-up, contact your healthcare team if cravings remain difficult, side effects are not settling, or you are unsure how to reduce or stop NRT. Product changes often solve irritation or practical problems.

Seek urgent advice for repeated vomiting, marked dizziness or weakness, a fast or irregular heartbeat, or a severe skin reaction.

Call emergency services for severe chest pain, fainting, severe breathing difficulty, or signs of a serious allergic reaction such as swelling of the face or throat.

If a child or pet chews, swallows, or applies a nicotine product, contact emergency services or a poison information service immediately. Do not wait for symptoms.

Common questions

Will I be asleep?

No. NRT does not involve sedation or anaesthesia. You apply or use the medicine while fully awake.

Can I drive home?

Usually, yes. NRT does not normally affect driving. Do not drive if it makes you dizzy or unwell.

How painful is it?

It should not be painful. Mild skin, mouth, throat, or nasal irritation can occur, depending on the product.

When will I know whether it is working?

Faster-acting products may ease a craving within minutes. Patches work more gradually. Success in stopping tobacco is assessed over the following weeks and months.

Can I use a patch and gum together?

Combination treatment is commonly used. A patch controls background withdrawal, while gum or a lozenge treats sudden cravings. Follow the product instructions or your treatment plan.

What if I smoke while using NRT?

A lapse does not require abandoning your quit attempt. Return to your plan, but seek advice if smoking continues or you develop nausea, dizziness, sweating, weakness, or a racing heartbeat.

Sources

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