# Getting the most out of **nicotine replacement therapy**

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It is known that the majority of people who smoke want to stop and nearly half will try each year.[1] However most will do it without any pharmacological or behavioural support – an approach that is associated with one of the lowest long-term quit rates (only 2–3% of people who quit in this way will succeed in stopping for at least a year). Quit rates can be increased by using a combination of pharmacotherapy and behavioural support.[2]

This article offers five key points that will help healthcare professionals and their patients get the best out of nicotine replacement therapy (NRT).

## 1. NRT is not a "magic cure" but it does help when used correctly

When recommending NRT, it is important to communicate positive and realistic expectations of what can be achieved. NRT roughly doubles the chances of quitting long-term, and this is independent of the degree of behavioural support utilised.[3] It works by reducing the severity of withdrawal symptoms associated with smoking cessation (urges to smoke, irritability, restlessness and poor concentration), and in doing so make quitting easier.[4] Despite strong evidence of effectiveness, NRT is not a "magic cure" and does not stop a person lighting up a cigarette. Some effort is still required.

NRT products are equally effective so the choice of product can be based upon individual preferences (Table 1) and to provide different types of relief. For example the patch may be best to relieve background craving while faster acting products such as nicotine gum or lozenges can relieve acute urges.

**NRT reduces the weight gain associated with stopping smoking**

For those people who are concerned about weight gain there is evidence to show that NRT can reduce weight gain. This effect appears to be dose dependent and continues for as long as the NRT is used.[5, 6]

**Correct use of oral products reduces adverse effects**

Oral NRT products have a hot or peppery taste, which some people may find unpleasant. This taste is due to the nicotine and although the manufacturers have attempted to disguise it with mint or fruit flavourings the gum and lozenges are still relatively unpleasant initially. People can be reassured that they will get used to the taste over a short period of time.

The nicotine from oral NRT products is absorbed through the buccal mucosa. The gum needs to be chewed for a few seconds, then parked against the side of the mouth for a few minutes, then the process repeated. Chewing NRT gum like confectionery chewing gum, or sucking the lozenge too vigorously results in more nicotine being swallowed. This is not harmful but results in less nicotine being absorbed and increases the likelihood of heartburn and hiccups.

## 2. Use enough NRT

People need a sufficient dose of nicotine to relieve withdrawal symptoms. NRT can be likened to analgesics – use enough to take the pain away. If people are struggling with stopping smoking, they may benefit from a higher dose of NRT, or use a combination of NRT products.

**Table 1:** NRT Products Available

| NRT Products Available on the Quit Card Scheme |
|---|
| Patches |
| Gum |
| Lozenges |

| Other NRT products available over the counter |
|---|
| Inhaler |
| Sublingual tablets (Microtabs) |

See the New Zealand Smoking Cessation Guidelines for more detail on product dosing:
**www.moh.govt.nz/moh.nsf/indexmh/nz-smoking-cessation-guidelines**

Combining NRT products (e.g. patch and gum) is safe and increases the odds of quitting smoking, compared with a single NRT product, by approximately 40%.[3]

**Prescribing NRT – dose and type**

The product labels often use cigarette consumption as a guide to NRT dose. For example the Nicotinell Patch data sheet recommends that people smoking 20 or more cigarettes per day should start on the full-strength (21 mg) patch, while those smoking less start on the medium strength (14 mg).[7] The problem with this approach is that consumption does not always correlate well with blood nicotine levels. Smokers can reduce their cigarette consumption but this may not change their blood nicotine levels due to compensatory smoking (smoking more from each cigarette).

In general most daily smokers can be started on a full strength (21 mg) patch and use an additional oral product for acute urges to smoke. If there is concern that this dose might be too high (e.g. in a long-term five-a-day smoker) then recommend the use of an oral product where the dose can be titrated more easily, i.e. people can use more or less gum or lozenges as required.

**High dependency smokers may require higher doses**

There is evidence that higher dose gum and lozenges are more effective in high dependency smokers (e.g. those who smoke their first cigarette of the day within 30 minutes of waking).[3] The evidence for using higher than standard dose patches e.g. 42 mg (two patches) versus 21 mg is less convincing.

However many of the smoking cessation specialists working within Aukati Kai Paipa (a national smoking cessation service for Māori) have been using a higher dose of patches on their clients with some success. Despite the limited evidence for increasing quit rates there are data to show that higher dose patch therapy is more effective in relieving withdrawal symptoms, in both smokers and smokeless tobacco users, when compared to standard doses.[8, 9]

## 3. Use it for long enough

It is generally recommended that NRT is used for eight to twelve weeks, however a good and simple message is to use it for as long as it takes until the patient feels 100% sure that they can give up smoking. NRT is subsidised

via Quit Cards for as long as it is required. People can be reassured that they are unlikely to become addicted to NRT, but some may need to use it for longer than others, especially those people who are more highly dependent.[10]

## 4. NRT is safe

Compared to smoking, NRT is a safe alternative. It is not associated with increased rates of cancer or heart disease and can be used in the vast majority of people who smoke. Compared to tobacco smoke, NRT supplies less nicotine less rapidly, and without harmful substances. Even in special groups of smokers, such as those who are pregnant and those with severe or acute cardiovascular disease, NRT use usually outweighs the risk of continued smoking.[11, 12]

## 5. Use NRT in a way that best suits the needs of your patient

The phrase "one size does not fit all" is often used in smoking cessation. People have different levels of nicotine dependence as well as different personal circumstances. Therefore different approaches are needed.

In New Zealand NRT is available to help smokers reduce the number of cigarettes smoked before quitting. This "cut down then stop" approach gives people who might be fearful of stopping straight away, a chance to make some positive changes with their smoking behaviour. It does not put people off from quitting altogether, but instead seems to increase the number of quit attempts, as smokers become more motivated and more self confident about quitting.[13]

**Helping people to stop smoking is not impossible**

Stopping smoking can be a difficult task for some people but it is not impossible. The key to successfully helping people to quit, is to encourage them to keep trying and to use the available treatments, that will make their attempts more likely to succeed.

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