

Nicotine Pouches

A GUIDE FOR PHARMACISTS



What Are Nicotine Pouches?

Nicotine pouches are smokeless, spit-free products designed to deliver nicotine without the use of tobacco.



Side Effects

Side effects that may be a sign of improper use include nausea, lightheadedness and hiccups.³

Ingredients

Nicotine pouches contain a powder made up of:¹

1. **Nicotine:** Synthetic tobacco-free nicotine. The nicotine concentration varies based on the brand and may range from 2-15 mg.
2. **Flavourings:** Available flavours in Canada are currently limited to mint and menthol. Other flavours such as cinnamon, citrus and coffee are accessible online.
3. **Other ingredients:** Sweeteners, stabilizers or fillers.

How Do They Work?

- The pouch is placed between the gum and cheek, generally under the upper lip.
- The powder dissolves in the mouth, releasing nicotine without the need for spitting.
- Nicotine is absorbed through the gums and oral lining, with gradual release over a period of up to 60 minutes.²
- After use, the pouch is discarded.



Approved Product

Health Canada has approved Zonnic, a nicotine pouch containing 4 mg of nicotine per pouch. Zonnic is produced by Imperial Tobacco Canada Ltd.

Regulations

- Approved for sale in Canada under Natural Health Product Regulations as a Nicotine Replacement Therapy (NRT) for adults who wish to quit smoking or need to temporarily refrain from smoking.
- Nicotine pouches are regulated and can be sold only in pharmacies, behind the counter.
- As a Schedule 2 product, pharmacist intervention is required prior to purchase.
- Like other NRTs, nicotine pouches are not intended for recreational use or for nonsmokers, individuals under the age of 18 or those vulnerable to nicotine's harmful effects.



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Safety Considerations

- Nicotine pouches were found in several studies to contain trace amounts of carcinogenic chemicals such as ammonia, formaldehyde, chromium and tobacco-specific nitrosamines.^{4,5} Though these chemicals were generally present in much lower levels than in cigarette smoke, formaldehyde levels were comparable or higher in some of the pouches analyzed.⁵
- Many studies have shown an increased mortality risk associated with smokeless tobacco use in patients with ischemic heart disease or cerebrovascular disease, although safety data is still lacking on tobacco-free pouches.⁶ Oral nicotine products may also potentially increase the risk of oral cancer, depending on the chemical composition of the product used and the frequency of use.⁷

Efficacy

- Nicotine pouches could be less harmful than cigarettes while providing similar nicotine levels, offering a potential alternative for users of combustible products. However, most available data come from industry-funded studies, highlighting the critical need for independent research.⁵
- Currently, there is insufficient evidence to establish nicotine pouches as an effective smoking cessation aid when compared to established methods such as traditional NRT or behavioural interventions.

Pharmacist's Role

Pharmacists play a critical role in educating patients about the proper use of nicotine pouches along with their risks and their place in harm-reduction strategies. Given the regulatory requirements, pharmacist oversight is essential to ensure safe and appropriate use.



References:

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