## NON-FLUORIDATED CARIES PREVENTIVE

AGENTS - XYLITOL GUM

Chiara S. and Sara O.

### Product's active ingredients

- The product's active ingredient is Xylitol
- Xylitol is a natural occuring
  5-carbon sugar alcohol



ttps://www.amazon.com/Spry-Peppermint-1x240-Ct/dp/B00H4H1C1I

#### Mechanisms of action

- Promotes salivation which therefore enhances reminalization
- Increased saliva production, reduces adhesion of microorgansims to tooth surface
- Increased saliva production raises pH
- Prevents the growth of microorganisms in plaque
- Acts as a substitute for sugary gum or snacks

# Product cost and where it can be purchased

- The price of xylitol gum typically ranges from \$3 to \$15, depending on the brand and quantity
- It is available for purchase at local grocery stores as well as through online retailers

### Instructions for use

- For optimal effectiveness, it is recommended that consumers chew xylitol gum 3-5 times daily for at least 5 minutes
- Recommended dose is 6-10 g/day
- Recommended to chew gum after meals

https://www.amazon.com/PUR-Gum-Spearmint-165-pieces/dp/B06X8Z2W7W

pch.vector: MW's images, Canva

## Who/What is this product recommended for

- For the prevention of caries
- For reduction of harmful bacteria
- For prevention of dry mouth

## Contraindications or side effects

- Excessive gum chewing can lead to jaw fatigue
- May exacerbate TMD pain and symptoms
- For individuals with IBS, it could cause digestive issues
- Excessive use may cause GI effects such as diarrhea and stomach aches
- Avoid use if allergic to xylitol
- Xylitol is toxic to animals

### ADA Seal or FDA approval

- Certain sugar-free gums that meet the necessary standards display the ADA Seal on their packaging
- Xylitol is FDA approved

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## AGENTS - MI PASTE

## Chiara S. and Sara O.

### Product's active ingredients

- Casein Phosphopeptides (CPP) and Amorphous calcium phosphate (ACP)
  - Recaldent
- Available Flavors: Mint, Melon,
  Strawberry, Tutti-Frutti, and Vanilla

### FDA approval

• FDA approval received in 2004

### Mechanisms of action

- When applied to the oral environment in the presence of saliva, MI Paste binds to biofilms, plaque, bacteria, hydroxyapatite, and soft tissues, localizing the bioavailable calcium and phosphate.
- Assists in inhibiting demineralization and promoting remineralization by releasing calcium and phosphate under acidic conditions
- Facilitates the immediate sealing of dential tubules

# Product cost and where it can be purchased

- Prescription only; purchased from dental office or pharmacy
- Dental providers can purchase from dental supplies: Safeco, GC America, etc.
- 10 Pack, 40g tubes \$162
- Typical patient price from \$23+

### Instructions for use

- At home application:
  - Applied directly to the teeth using a finger rather than a brush

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- Use your tongue to spread saliva over the paste to initiate the release of ACP.
- Can be used in disposable applicator trays
- In-office application:
  - Applied with a tray or glove, leave undisturbed for three minutes
  - Have patient expectorate, do not rinse
- Do not eat or drink for 30 minutes after use
- Apply once a day in adjunct to normal toothpaste, does not replace brushing with toothpaste
- Indicated for use in-conjunction with fluoride treatment.

## Who/What is this product recommended for

- For desensitizing, can be used before or after cleaning or whitening
  - Indicated for recession
- For high-caries risk individuals
- For pregnant women
- For children under six
- Individuals with xerostomia
- Orthodontic patients

#### Contraindications or side effects

- Do not use on patients with a milk protein or hydroxybenzoates allergy
- In case of allergic reaction, stop use, rinse mouth with water, and seek medical advice



## References

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