

# Pit and Fissure Sealants

## *For cavity prevention*

A sealant is a strong, plastic, clear or tooth-coloured coating that a dental hygienist applies to the chewing surfaces of the back teeth where pit and fissures form. A sealant acts as a barrier, protecting the enamel from bacterial plaque in these cavity-prone areas.

### THE IMPACT ON ORAL HEALTH

Fissures are the grooves on the chewing surface of the back teeth caused by normal tooth development. Pits form where two fissures cross.

Thorough brushing and flossing help remove food particles and plaque from smooth surfaces of teeth. Pits and fissures, however, are extremely difficult places to clean. Toothbrush bristles cannot reach all the way into the depressions and grooves to remove food and plaque.

The enamel layer can also be particularly thin in pits and fissures, causing decay to progress easier, faster and deeper into the grooves. Sealants protect these vulnerable areas by "sealing out" plaque and food.

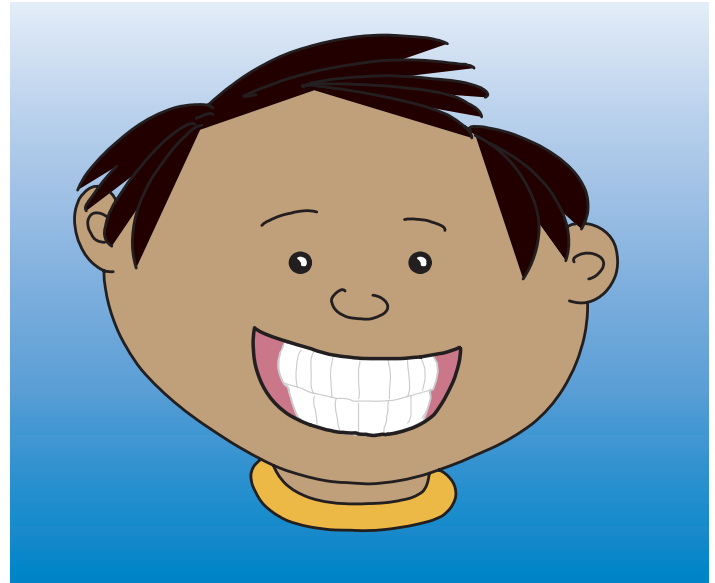
### CANDIDATES FOR SEALANTS

The likelihood of developing pit and fissure decay begins early in life, so children and teenagers are obvious candidates, but adults can benefit from sealants as well.

The most commonly treated teeth are permanent molars and premolars, the teeth directly in front of the molars. In some cases, primary molars with deep pits and fissures can also be sealed. Usually sealants are applied to a child's teeth as soon as they are fully erupted, before the decay process can begin.

### ADVANTAGES

- Properly applied, sealants are very effective in preventing decay in pits and fissures. Even early decay appears to stop when covered with a sealant, because decay-causing bacteria are unable to survive when cut off from their food supply.
- The application of a sealant is quick, easy and painless. No drilling or freezing are required.



- A properly placed sealant will last for about as long as a typical amalgam filling. Even if a sealant is damaged or lost, it is easily repaired or replaced.
- Sealants are safe for use on everyone's teeth, from young children to adults.
- In addition to being an effective preventive measure, sealants cost less than having a cavity filled.

### TREATMENT AND CARE

Dental hygienists will examine the teeth to determine if a pit and fissure sealant would be beneficial. They assess the person's risk for pit and fissure decay. Risk can also vary for the same person over time, because changes in personal habits, health status and medication use are known to increase risk for decay. Lack of access to fluorides and fluoridated water, a history of previous decay and chronic dry mouth are additional factors to take into account when considering sealants.

#### *The application process*

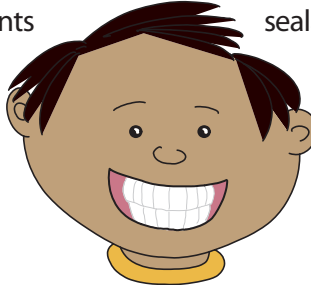
- Correct application is important.
- Teeth must be kept dry throughout various stages of the procedure. If not, the sealant material may not adhere properly.
- After the teeth are cleaned, treated and dried, the sealant is "painted" into the grooves.

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- The sealant is then hardened with a curing light to form a protective coating.
- Excess sealant material can be easily buffed to ensure a proper bite.

### **Maintenance and home care**

- Once the sealant is bonded in place, clients can resume their normal activities.
- No special home care is required to maintain sealants.
- Those who have had their teeth sealed should continue practising good oral



- hygiene with daily toothbrushing and flossing.
- A diet following Canada's Food Guide, which is low in sugar and high in nutrition, is always recommended.
- Occasionally a pit and fissure sealant will pop out. During regular visits, dental hygienists will check sealants and replace any that are worn or missing.
  - Dental exams continue to be important, since decay can still occur under and around the sealant.

*As professional health-care providers, dental hygienists are primarily concerned with promoting good oral health. Dental hygiene is among the largest of the regulated healthcare professions in the province. In Ontario all dental hygienists are registered with the College of Dental Hygienists of Ontario, which regulates the profession to ensure the public receives safe and ongoing comprehensive oral care.*

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