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**DENTAL HEALTH FACT SHEET**

**DENTAL SEALANTS**

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***WHAT ARE DENTAL SEALANTS?***

Dental sealants are clear or shaded thin plastic coatings which are applied to the chewing surfaces of the back teeth. The sealants are applied in a liquid state, harden and bond to the teeth surfaces in only a few seconds. They are a most effective decay preventive measure.

***HOW DO SEALANTS PREVENT DECAY?***

Most tooth decay in children and adolescents occurs on the chewing surfaces of the back teeth. These teeth naturally have grooves and pits, which tend to trap food and bacteria (plaque). Toothbrushing cannot reach all the way down into many of these grooves and pits. Dental sealants flow into these grooves and pits effectively acting as a barrier to decay. They prevent decay by sealing out the food (sugars) and oxygen which plaque uses to cause decay.

***WHICH TEETH NEED SEALANTS?***

A dentist evaluates the teeth to determine if sealants are indicated. A sealant should be placed as soon as possible after the eruption of the back teeth. A tooth with noticeable fissures, grooves and pits should be sealed. This is determined by the dentist's examination. If other teeth already in the mouth have fillings on biting surfaces, then the remaining new teeth should be sealed. Teeth with shallow grooves and no pits may not need to be sealed.

***WHAT AGES ARE BEST FOR SEALANT APPLICATION?***

First permanent molars appear at about six years of age. Second permanent molars erupt at about twelve years of age. Premolar teeth may need sealants following erupting at about ten to twelve years of age. Sealant programs are carried out in schools in some areas of the state. Children in specific classes are targeted for sealant placement based on age eruption patterns. Primary (baby) teeth may be sealed at three to four years of age. Certain teeth at other ages may also be in need of sealants for prevention.

***WHY ARE SEALANTS IMPORTANT?***

It has been determined that 84 percent of the decay in children now occurs in pits and fissures of the biting surfaces of the teeth. This type of decay can now be prevented by sealants. Sealants are necessary for helping many children to be decay-free.

***WILL SEALANTS REPLACE FLUORIDE IN PREVENTION?***

No, sealants and fluoride are both important. Fluorides such as those used in fluoridated water, fluoride toothpaste, fluoride mouthrinse, fluoride varnishes, and fluoride applied in the dental office are most important for preventing decay on the smooth surfaces of teeth (the sides and in-between teeth). Fluorides have less preventive effect on the biting surfaces, the grooved and pitted surfaces. Fluorides in combination with sealants provide ideal prevention.

## ***HOW DO SEALANTS FIT INTO A PREVENTIVE DENTAL PROGRAM?***

For maximum benefits, sealants should be a part of a child's total preventive dental care. At regular periodic dental appointments, the dentist should examine the child's first teeth and gums, soft tissue, bite and tooth eruption. A complete preventive dentistry program should include brushing and flossing, use of fluorides, use of sealants, good nutrition, and regular dental checkups.

## ***HOW ARE SEALANTS APPLIED?***

Applying sealants is very simple and may be done by a dentist or a dental hygienist. The chewing parts of the tooth are dabbed for 60 seconds with a special solution, which microscopically roughens the surface so the sealants will bond or fuse to the tooth. The tooth is then washed for 10 seconds and dried for 30 seconds. The sealant material is then painted or flowed onto the tooth. It hardens in about 20 seconds. This procedure requires no drilling, anesthesia (numbness), or removal of tooth surface.

## ***ARE SEALANTS VISIBLE?***

Yes, sealants can be seen upon close examination of the back teeth. Sealants can be clear, white, or slightly tinted. Sealants are used only on back teeth and cannot be seen when a child talks or smiles. Parents can check children's teeth periodically to see if the sealants are still in place.

## ***WILL SEALANTS MAKE TEETH FEEL DIFFERENT?***

The biting parts of the teeth may feel a little smoother to the tongue. They will not change the bite because they are very thin and only fill the pits or grooves. The tooth may feel a bit bulkier at first, but a few days of normal chewing will wear the sealant into place.

## ***HOW LONG WILL SEALANTS LAST?***

Studies have shown sealants lasting for seven to eight years and often longer. Sealants should be checked regularly and may be reapplied if they appear to have worn off. Because teeth are most susceptible to decay when they are young, preventing decay during the first five to ten years after the tooth enters the mouth is most important.

## ***HAVE SEALANTS BEEN TESTED THOROUGHLY?***

Yes, tens of thousands of children across the United States and in other countries have had their teeth successfully sealed in clinical studies. These studies have shown sealants to be safe, effective, easy to apply and inexpensive when compared to fillings. Sealants are approved and highly recommended by the American Dental Association, American Dental Hygienist Association, National Institute of Dental and Craniofacial Research, and the American Public Health Association.

## ***WHY IS SEALING BETTER THAN WAITING FOR DECAY, THEN FILLING THE TOOTH?***

Sealants help maintain a strong, intact tooth. Decay destroys tooth structure and weakens a tooth. Each time a tooth is filled or a filling is replaced, additional tooth structure is lost. Amalgam (silver) fillings last an average of about eight to ten years before they need to be replaced. Sealants can save time, money, and the discomfort of restorative dental treatment.

## ***HOW MUCH DO SEALANTS COST?***

The cost of sealants may vary depending on area and whether the dentist or dental hygienist apply them. The cost is consistently less than having a tooth filled, often about half the cost.