

Dental sealants, developed by Buonocore in the 1960s, are plastic coatings that occlude the pits and fissures of tooth surfaces. Sealants are complementary to water fluoridation and other fluorides. Although the primary effects of fluoride products are on smooth surfaces, sealants prevent caries of pits and fissures. Dental sealants are thin coatings that when painted on the chewing surfaces of the back teeth (molars) can prevent cavities (tooth decay) for many years. Sealants protect the chewing surfaces from cavities by covering them with a protective shield that blocks out germs and food. Once applied, sealants protect against 80% of cavities for 2 years and continue to protect against 50% of cavities for up to 4 years. Studies have demonstrated that bacteria in early caries beneath sealants decline in number when deprived of nutrients