

## 36. THE DIVERSITY OF SEALANTS USED IN DENTAL CARIES PROPHYLAXIS

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**Introduction.** Tooth decay affects both temporary and permanent teeth, in some cases within a short time after eruption. The sealing of dental fissures and pits is one method of preventing tooth decay. It isolates areas susceptible to carious processes from the effects of local cariogenic factors and creates optimal conditions for complete mineralisation. Sealants create protection for insufficiently mineralised areas of the tooth by preventing microorganisms from coming into contact with them. Today's market offers a wide range of sealants used for sealing. There is the dilemma, which product to choose.

**Aim of study.** The main purpose of this study was to evaluate the sealants used for sealing dental pits and fissures.

**Methods and materials.** The bibliography was selected from The Cochrane Library, PubMed, Embase Electronic databases using the keywords: sealant, caries prophylaxis in children, sealed teeth and study duration of at least one year. Twelve sources, published between 2011-2021, were relevant to our research.

**Results.** The following sealants were nominated in the study: Concise White Sealant (3M), Fissurit FX (Voco), Delton, Delton DDS, Delton Plus (Dentsply), Helioseal, Helioseal F, Cavifil (Vivadent), Estiseal LC (Heraeus Kulzer), Seal-Rite (Pulpdent), Ultra-Seal XT Plus (Ultradent), Dyract Seal - componer (Dentsply DeTrey), CIS, CIMR and RDC flowable.

**Conclusion.** The most frequently nominated sealants in the study were: Fissurit FX, Delton, Helioseal.