

Fluoride release from fissure sealants

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This 30-day study, compared the amounts and patterns of fluoride release from 5 commercially available fluoride-containing pit and fissure sealants: FluroShield, Helioseal-F, Ultraseal XT, Baritone L3, and Teethmate-F; Delton without fluoride, was used as control. Disc-shaped samples of each sealant were immersed in distilled water and the fluoride release was measured periodically until day 30. All the fluoridated sealants tested released measurable fluoride throughout the test period in a similar pattern: the greatest amount of fluoride was released in the first 24 hours after mixing, fell sharply on the second day and decreased slowly for the last days. On day one, Baritone L3 released significantly more fluoride than all other materials. Teethmate-F released the highest amount of fluoride during all the other time intervals from day 2, until day 30.