

1: Br Dent J 1999 May 8;186(9):460-2

Fluoride ingestion from toothpaste by young children. Bentley EM, Ellwood RP, Davies RM.

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OBJECTIVE: To investigate the reported and observed brushing habits of young children and their ingestion of fluoride from toothpaste.

DESIGN: In 1997, a random sample of 50 children, aged 30 months, from three districts in the North West region of England, were visited at home. **METHODS:** The reported and observed toothbrushing behaviour was determined and the weight of toothpaste applied to the toothbrush was measured. The amount of fluoride retained in the mouth after brushing with either a 400 ppm F or 1,450 ppm F toothpaste was determined.

RESULTS: All parents claimed that their children's teeth were being brushed with a fluoride toothpaste at least once daily. The mean amount of toothpaste applied on the brush was 0.36 g of which 0.27 g (72%) was retained in the mouth. The mean amount of fluoride ingested per brushing was 0.42 mg when using the 1,450 ppm F toothpaste and 0.10 mg when using the 400 ppm F toothpaste. Although most parents applied a small amount of toothpaste a small minority applied a large amount. If using the 400 ppm F toothpaste twice daily no children of average weight would have exceeded ingestion of 0.05 mgF/kg body weight whereas 14 average weight children would have exceeded this value if using the 1450 ppm F toothpaste.

CONCLUSIONS: It is essential that parents of children aged less than 7 years apply a small (pea-sized) amount of fluoride toothpaste on the toothbrush and discourage swallowing.

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#2, From <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5014a1.htm>