

Fluoride bioavailability from disodium monofluorophosphate fluoridated milk in children and rats

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The aim of the present work was to study the usefulness of disodium monofluorophosphate (MFP) as a milk-fluoridating agent by measuring the bioavailability of F from MFP in milk relative to that of F from NaF in water. Long-term (multiple-dose) studies were performed on rats measuring F bone uptake. The relative F absorption from MFP in milk was also determined in preschool children by means of 24-hour F urinary excretion. In both studies F absorption was determined either under fasting conditions or when F ingestion occurred together with food intake. The results show that F absorption from MFP in milk is as high as that of NaF in water under fasting conditions and that the F bioavailability decrease from NaF in water is more important than that of MFP in milk when F ingestion occurs simultaneously with food intake. © 1989 S. Karger AG, Basel.