“…fluoride supplements have been promoted as an alternative to water fluoridation for more than 50 years…” (p 73, col 1)

“The basis for the widespread acceptance of fluoride supplements in caries prevention is a large number of mostly small clinical trials in the late 1950's and 1960's. The early studies have been reviewed again recently in a series of publications and they have again been criticized (8, 13-15). The criticisms are serious and virtually none of the early fluoride supplement studies would be published today, because of methodological and other shortcomings. They present conclusions that are not supported by their data or consistent with their designs.” (p 73, col 2)

“A clinical trial is usually conducted on a random sample. Within certain limits, such a sample is considered to be representative of the population. Samples consisting of dental students, dentists' children and persons attending private schools are unlikely to be representative, yet such groups are frequently used in fluoride supplement trials. Although Arnold et al. (33) had a large influence on the U.S. Public Health Service policy on fluoride supplements, their sample consisted of the children of dentists and other employees of the service.” (Note: #33; Arnold FA, McClure FJ, et al. Sodium fluoride tablets for children. Dental Progress 1960;1: 8-12.) (p 78, col, 1)

“Fluorosis has long been accepted as a consequence of chronic toxic doses of fluoride, from whatever source. .and in recent years the association has consistently been reported in a series of studies (15, 43-46). In some of these studies, the effect of supplements has been difficult to isolate from that of other fluoride sources, but typically about 30-45% of regular supplement users developed fluorosis.” (p 80, col 1,2)

“The public is generally not aware of dental fluorosis. This is changing; there have been attempts at litigation in several countries. Cosmetic issues related to teeth matter, witness the increasing proportion of dentists' time devoted to aesthetic care and the many articles in clinical journals about techniques to improve the appearance of moderate and severe fluorosis. It is only a matter of time until a case is brought that gets public attention. The risk is that noticeable fluorosis will be perceived by the public as a toxic consequence of fluoride ingestion – which, arguably, it is (57)…” (p 81, col 1)

“Supplement use by children younger than 5 years entails a risk of fluorosis which, at the community level, becomes a certainty. A second factor is that the evidence in support of the effectiveness of fluoride supplements is poor. The benefits claimed for fluoride supplements are, in any case, available through regular toothbrushing with fluoride toothpaste and fairly minor and sensible lifestyle changes.” (p 81, col 2)

“Given the absence of demonstrable benefits associated with non-lozenge supplements, and the frequent finding that lozenge or chewable supplements do have a slight caries preventive effect, there seems little reason to recommend supplements designed to be swallowed rather than chewed.” (p 79, col 2)

“It seems likely that the difference in preventive effect between lozenges with 1.0 mg fluoride and 0.25 mg fluoride would be small, so that by standardizing on the lower dose, the total fluoride intake could be reduced….There does not seem to be scientific evidence to support the widespread use of fluoride supplements by young children, even in the absence of fluoride in water.” (p 82, col 1)