



Decline of decay in the twentieth century

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Tooth decay and the gradual damage and loss of tooth-supporting tissues have been the principal complaints causing patients to seek relief at a dental surgery. They have dramatically decreased during the past century. Whereas the twentieth century began with poor understanding of the causes and pathology of dental disease it ended with an imperfect understanding of the relative importance of the factors believed to have contributed to the decrease.

Dental decay and disease of the tissues which support the teeth caused a large proportion of the population to become edentulous before growth and development were complete, with profound effects upon general health. As the century began, the role of dental practitioners was largely devoted to the relief of pain by extraction of teeth and the restoration of masticatory function by the provision of dentures.

Convincing proof of the role of sugar as an aetiological factor in tooth decay was not available until the beneficial effects of its absence from the diet of Norwegian schoolchildren during the Second World War were observed. The ability of fluoride to reduce the solubility of the mineral in teeth was known during the early part of the century but was not used to help reduce tooth decay until the second half of the century when it was incorporated in some drinking water supplies, prescribed in tablet form during infancy and childhood while the teeth were forming, and gradually introduced as an ingredient of practically every proprietary toothpaste on sale in this country.

Advice on the importance of a healthy diet in reducing dental disease was also available from the earliest days of the last century but only very gradually filtered through to those in charge of the diet of the youth of the country. Government measures to ensure adequate mineral in the diet during tooth formation resulted in the addition of calcium to flour for bread during the First World War and the provision of milk to schoolchildren from 1930 to 1960. Local authorities are now aware of the importance of healthy eating in school meals and the need to restrict sweets and snacks between meals.

The results of this increase in knowledge of dental disease, and the change of attitude by the government and population towards it, have been very obvious to dentists during the past half-century. Children generally retain their deciduous teeth until they are replaced, and far fewer are extracted. A complete dentition is now quite common in a young adult and is retained until several decades later than was the case a century ago. The "gas session" at a dental surgery when patients might require a "clearance" is a thing of the past. The need for full upper and lower dentures in elderly patients is much less common than it was. It is now accepted by all that dental disease can be prevented.

This article is among contributions made by Dr Noble to the forthcoming centenary history of the Medical and Dental Defence Union of Scotland.

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