

## The next challenge

Some members of our Academy will recall the time in their practice experience when rampant caries in children was not the exception but the rule. Even today, groups of children have been identified by the recent Robert Wood Johnson Preventive Dentistry Study that require extensive restorative care resulting from dental caries in the primary and permanent dentition. However, in general there is a greatly reduced caries prevalence in our child population. In Indiana, caries prevalence has declined nearly 70% during the past 25 years. It is presumed that the decrease results from: water fluoridation; the use of fluoride dentrifices, mouth rinses, and supplements; health education measures; and the increased availability of dental care.

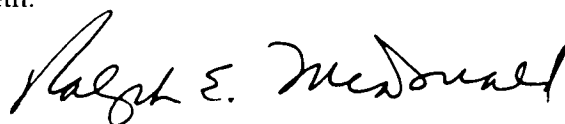
The next challenge facing our profession is the reduction of periodontal disease. Voluminous data show periodontal disease is a major health problem. The insidious nature of the disease is evidenced initially by slight gingival inflammation in children, increasing severity of the inflammatory process in youths and young adults, and, frequently, the progression in later life to significant bone loss and partial or complete loss of the dentition. In a recent U.S. survey of more than 28,000 persons aged 1-74 years, it was concluded that the younger group (1-18 years) had unmet periodontal treatment needs that would require 24.5 million hours of treatment by dentists.<sup>1</sup>

A recent survey of periodontal disease in North Carolina revealed that its prevalence had increased sharply in the general population during a 16-year period between surveys, with the increase being particularly dramatic in the non-Caucasian child population.<sup>2</sup>

Successful prevention and treatment of periodontal disease are possible today. Plaque control through proper toothbrushing and flossing plays an important role in preventing the onset or progression of the disease. It should be recognized, however, that many children and adults consume

inadequate amounts of fresh fruits and vegetables which are needed for good general health, including health of the gingival tissues. The contribution of fruits and vegetables to the prevention of periodontal disease long has been recognized. Lind's *A Treatise on the Scurvy*, first published in 1753, is a discussion of scurvy, the debilitating disease experienced by sailors who spent long periods at sea. The occurrence of severe periodontal problems in cases of scurvy was recognized, and it was noted that the first step in dealing with the condition both at sea and on land was the consumption of fresh fruits and leafy vegetables.<sup>3</sup>

The profession will be aided in the future treatment of periodontal disease by the continued development of new oral chemical agents and perhaps vaccines, but today we must rely on proven preventive procedures. A major challenge to the profession lies in educating the public, particularly the parents of our young children, to the dangers of a slowly progressive, insidious disease of oral soft tissue that is virtually symptomless at the onset, but which can progress to juvenile periodontitis and the eventual loss of teeth.



1. Douglass CW, Gammon M, Gillings DB, Sollecito W, Randle DG: Estimating the market for periodontal services in the United States. *JADA* 108:968-72, 1984.
2. Hughes JT, Rogier RG, Bawden JW: A survey of periodontal disease in a state population — an emphasis on children. *Pediatr Dent* 3:114-20, 1981.
3. Lind J: *A Treatise on the Scurvy*. London, 1753.