

An epidemiological study of child health and nutrition in a Northern Swedish county. Dissertation. Umeå University 1971
Gösta Samuelson

Abstract

Groups of 8- and 13-year-old children were able to provide an acceptable picture of their consumption of a single meal in a dietary recall covering the past 24-hours. There was relatively good agreement on a group basis between the children reported in the recall and their actual consumption as checked by the double-portion technique.

In all age groups studied the children consumed a diet which, in relation to recommendation, was rich in fat and protein, and which had relatively low iron content for the 13-year-olds, and low vitamin D content for all age groups. Frequent carbohydrate – rich between-meal consumption was common, especially in the rural areas. Breakfasts were often incomplete from the standpoint of nutrient intake, whereas the school meals met the recommendations for Swedish children, with the exception of fat and iron content.

The frequency of consumption of different foods and dishes showed regional differences, with more traditional food habits in the rural areas, in contrast to somewhat more varied food habits among the urban children.

The general health of the children was good. Subclinical upper respiratory infections were common. Differences in anthropometrical data were found between the sexes and between the areas, with higher skinfold thicknesses in girls, and in part, in urban children. The regional differences may be due to differences in physical activity.

The prevalence of iron deficiency-anaemia among 4-8- and 13-year-old children taken together was 0.1 per cent. Among the 13-year-old girls it was 0.6 per cent. Among the children with Hb and/or PCV values \leq the mean – 2 S.D., there was a higher incidence of subclinical infections than in the material as a whole.

There was a high frequency of caries in all age groups. Only 17 per cent of the 4-year-olds and 0.4 and 0 per cent of the 8- and 13-year olds respectively were caries-free. Caries, plaque-and gingival indices were higher in the rural areas than in the city of Umeå.

In the analyses of the relationship between general and oral health, food habits and socio-economic conditions it was found that both socio-economic conditions and the frequency of consumption of different foods influenced general and oral health.