

Effects of Institutionalization on Nutritional Status of the Elderly in Australia

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The nutritional status of 28 elderly people living at home was assessed and compared with 100 elderly people who had been institutionalized for 3 months or more. The sample of the community 'elderly' was obtained by a two-stage cluster technique, whilst the 'institutionalized elderly' were randomly selected. The nutritional status was assessed dietarily, biochemically and haematologically. For community based old people the vitamin concentrations were serum folic acid 6.8 ± 0.4 ng/ml; red cell folic acid 553 ± 0.9 μ g/ml, platelet ascorbic acid $41.3 \pm \mu$ g/ 10^{10} , whereas for institutionalized elderly, the serum folic acid was significantly less at 4.1 ± 0.3 ng/ml ($P < 0.001$), red cell folic acid $374 \pm$ ng/ml ($P < 0.01$), plasma ascorbic acid less at 6.8 ± 0.6 μ g/ml ($P < 0.001$), and platelet ascorbic acid less at 30.9 ± 1.4 ($P < 0.001$). In both groups plasma ascorbic acid correlated with serum folic acid. (Community $r = 0.4$, $P < 0.05$; institutionalized $r = 0.3$, $P < 0.01$.) Plasma zinc levels in the community elderly were 0.90 ± 0.02 μ g/ml and for the institutionalized 0.74 ± 0.01 μ g/ml ($P < 0.001$). Institutionalized elderly persons had lower concentrations of serum albumin (34.4 ± 0.5 g/l) than those in the community (42.0 ± 1.5 g/l) ($P < 0.001$). Inadequate dietary intakes by the institutionalized may account for these differences. The data suggest marginal ascorbic acid, folic acid, protein and trace metal nutrition for old people who are institutionalized.

Examination of Miners' Feeding Arrangements

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Miners' feeding arrangements in the case of life-saving search parties in six mining centres of the GOP (Upper Silesian Industrial Region) were examined. The study included both the food which miners bring with them to work and the meals which are provided free for the miners. The quality and quantity of the food and its caloric value were estimated.

The results obtained regarding miners' feeding (both individual and collective) differ from what is recommended by food science—the meals did not include fruit, vegetables or whole-meal bread. The amounts of fish and dairy products were not sufficient either.

Our findings indicate the need to reorganize the way in which miners' feeding is arranged, both during working hours and in their homes.

A scheme for rational feeding was presented.

Migration and Food Habits: Mediterranean Migrants Living in an Industrialized Society

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A study is in progress on food habits and nutrition in households of Mediterranean migrant workers living in The Netherlands. The objective of the study is to investigate how migrants and their households cope with food and nutrition in their new environment. Analyses of data obtained so far on 30 Turkish households indicate:

(i) The migrant tries to maintain as far as possible his own food habits. Making use of Dutch foods is more to substitute non-available Turkish foods than to accept Dutch dishes.

(ii) The attitude towards alcoholic drinks is rather relaxed, but meat-containing dishes served in cafeterias for instance, such as minced meat and croquettes, are avoided for fear of a possible contamination with pork.

(iii) Mothers do visit MCH clinics. Breast feeding is still common, but is under pressure by the way of life of the industrialized society. There is a tendency to overfeed infants. Processed infant foods are very popular.

Compared with other problems of coping with the new environment such as finding cheap and adequate housing, work and social security, migrants do not consider food and nutrition as their first priority. There is a felt need for product information in Turkish on foods available on the market.

Daily Intake of Essential and Toxic Elements in Vegetarian Diets as Compared with Non-vegetarian Diets in Sweden

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Conventional methods used for the assessment of essential nutrients do not provide satisfactory data as regards the dietary intake of essential and toxic trace elements. We have investigated the dietary intake of essential and toxic trace elements in the diets of vegetarians, adults and pensioners in Sweden by duplicate portion technique. The duplicate portion is a replica collected while eating normally to represent as exactly as possible the food and drinks consumed during 24 hours. The daily food portions are homogenized, fat-extracted and lyophilized. The lyophilized powder was used for the metal analysis. Calcium, magnesium, iron, zinc, copper, sodium, potassium, nickel, chromium, selenium, lead, mercury and cadmium were analysed by atomic absorption spectrophotometry after wet-ashing. The results showed that the intake of most essential trace elements—especially potassium, magnesium, zinc and copper—was high from vegetarian diets