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Republika ng Pilipinas
(Republic of the Philippines)
MINISTRI NG EDUKASYON AT KULTURA
(MINISTRY OF EDUCATION AND CULTURE)
Maynila

October 17, 1978

MEMORANDUM
No. 280, s. 1978

PROFESSIONAL REFERENCE MATERIALS FOR HOME ECONOMICS
AND HEALTH EDUCATION TEACHERS

To: Bureau Directors
Regional Directors
Chiefs of Services and Heads of Units
Coordinator, State Colleges and Universities
Schools Superintendents

1. The inclosed abstracts of articles, which appeared in different American journals on home economics and nutrition, are being issued to the field in the hope that they will contribute something toward the professional enhancement of home economics and health education teachers handling nutrition subjects.

2. Teachers of home economics and health education are enjoined to read these abstracts and to impart the concepts contained therein to their classes for better understanding of nutrition.

(SGD.) JUAN L. MANUEL
Minister of Education and Culture

Incl.:

As stated

Reference:

None

Allotment: 1-2-3-4--(D.O. 1-76)

To be indicated in the Perpetual Index
under the following subjects:

~~CURRICULUM~~
~~HEALTH EDUCATION~~

~~TEACHERS~~
~~TEACHING AIDS~~

ABSTRACTS

Food and Nutrition

1. Journal of Home Economics, Vol. 67, No. 1 January 1975
"The Relationship of Nutrition to Brain Development and Behavior, pp. 50-51.

The development of the brain and consequent behavior evolves from the interactions of numerous genetic and environmental factors including nutrition. The effects of these interrelationships are dependent on the age when deprivation occurred and its duration. During gestation neuronal growth is maximal and two types of intrauterine malnutrition have been identified. The first results from poor maternal diet and the second from placental insufficiency.

Severe malnutrition in early life affects brain structure and disrupts normal chemical development and is associated with deficiencies in physical and psychological development. The effects of mild to moderate malnutrition are less defined and social-familial factors may play an important role in later development. Undernourished or hungry children may exhibit behavior alterations including apathy, inability to pay attention, and hyperactivity, all contributing to poor learning ability.

2. "Alcohol, Nutrition, and the Liver", C.S. Lieben.
American Journal of Clinical Nutrition 26: pp. 1163-1165, Nov. 1973.

Liver disease in the alcoholic has generally been thought to be caused by nutritional deficiencies and not by alcohol alone. A study was made of the extent to which an adequate or enriched diet would prevent alcohol from affecting the liver. One of the first manifestations of alcohol's effect on the liver is a fatty liver. It was determined that this effect could not be alleviated merely by nutritional supplements.

A study model, using rats, was developed to determine the origin of the liver fat. When alcohol

is taken with a diet containing fat, dietary lipids are deposited in the liver, when taken with a low-fat diet, newly synthesized lipids are found. By decreasing fats in the diet, the capacity of alcohol to produce a fatty liver is reduced. When alcohol is ingested in large amounts, the body cannot easily dispose of it since the kidneys and lungs are inefficient excretors and alcohol cannot be stored in the body. The only effective way to rid the body of alcohol is through oxidation, and the liver is the only organ that contains enough enzymes to achieve this. When large quantities of alcohol are drunk it becomes the liver's preferred fuel, and fat accumulates because it is not being burned or utilized.

3. "The Cancer Connections with Immunity and Nutrition", D.G. Jose. Nutrition Today 2: pp. 4-9, March-April 1973.

A discovery may have been made of a connection between malnutrition and immune response to cancer. Research indicated that the incidence of malignancies is markedly reduced in malnourished animals when compared to well-nourished animals of the same genetic strain and environment. Life insurance statistics suggest that a similar relationship may exist in man. The immune system that provides a defense against bacteria and viruses invading the body may also provide protection against deleterious cells that develop within the body. Nutritional deficiency produces profound changes in man's immune system. Under controlled experimental conditions, resistance to malignant tumors and to some virus infections appears to be increased during nutritional deficiency.

The question of whether there is a direct relationship between nutrition and cancer is currently being approached on a global scale through skin cell analysis.

4. "Aging and Nutrition", Journal of Home Economics, Vol. 66 No. 6, Sept. 1974, page 58.

Medicine has prevented death from bacterial diseases but mortality from other causes has increased. Very little has been done to educate our population

about the effect of better diets on the aged. Calories should be decreased in the elderly but evidence shows that nutrient levels should be maintained. Since quality of the diet is lowered, the quality must be higher than for younger individuals.

In addition to nutrients, the elderly need increased roughage and water to maintain bowel regularity, restriction of salt to prevent fluid retention and elevated blood pressure, and reduction of saturated fats and cholesterol to prevent arteriosclerosis. Reduction of sugar intake will help curtail diabetes, overweight, and dental caries. Exercise should be encouraged. Although proper diet cannot deter old age it can help prevent the diseases that often accompany it.

Study results show that there is a definite need for socialization by the elderly, and that the socialization factor affects their response to their meals. As people become older, their satisfaction with their food decreases. Contributing factors, to loss of appetite and appeal of foods include poorly fitting dentures, inactivity, special dietary restrictions, and the loss of taste, smell, or teeth.

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