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HYGIENIC JUSTIFICATION OF RATIONALIZATION OF NUTRITION IN NURSING HOMES

Хидиров Неъмат Чоршанбиевич
ассистент кафедры Общей гигиены и экологии Самаркандской государственный медицинский университет.

Тухтаров Бахром Эшназарович
д.м.н. доцент заведующий кафедры Общей гигиены и экологии Самаркандской государственный медицинский университет.

Валиева Мархабо Усмоновна
ассистент кафедры Эпидемиологии Самаркандской государственный медицинский университет,
Самарканд. Узбекистан.

Introduction:

Increasing changes in the body, gradually progressing and eventually leading to the development of senile degeneration, seem inevitable. However, at present, a person is increasingly mastering the knowledge of the regulatory abilities of the body. The development of many human health disorders that previously seemed completely hopeless (for example, atherosclerosis and even cancer) are beginning to be considered as those in which it is possible to look for ways to prevent or even reverse their development. With regard to the aging process, it is extremely tempting to explore the possibilities of a long delay in their onset and progression. [1,5,8,1116,17].

The purpose of the research was the development of effective ways to rationalize the nutrition of the elderly in the example of nursing homes, taking into account the nutritional and biological value of local food products in Uzbekistan.

Objects and methods of research

The assessment of the actual nutrition of the elderly and senile was carried out in men over 60 years of age and women over 55 years of age, among the population and wards in nursing homes. All biochemical studies and approbation of the dietary orientation of diets were carried out in nursing homes in Tashkent.

Assessment of the state of actual nutrition was carried out according to generally accepted methods in 1600 respondents of elderly and senile age in 3 age groups, and in 252 dependents of nursing homes in Tashkent and Kashkadarya region. When studying the characteristics of eating habits, they adhered to the generally accepted methodology. [2,3,5,6,23,27].

In order to a more detailed assessment of nutritional factors in maintaining health and assessing the nutritional value of diets, we studied 880 menus of nursing homes in Tashkent and Kashkadarya region according to 26 indicators: total and animal proteins, total and vegetable fats, carbohydrates, di-monosaccharides, polysaccharides, pectin, cholesterol, energy value, salts of calcium, phosphorus, iron, magnesium, the content of vitamins A, beta-carotene, thiamine, riboflavin, pyridoxine, cyanocobalamin, vitamin C, D, E, PP, folic acid and fiber according to the seasons of the year according to A.A. Pokrovsky (1976), M.F. Nesterin, I.M. Skurikhin (1979 [2,3,8,10,31,33]. For a control assessment of the nutritional status of the subjects, we conducted an analysis of the state of fatness according to the "BMI Index (WHO). Laboratory analyzes of ready-made meals were carried out on average 3 times a month and on the days of studying protein and vitamin metabolism. In total, more than 1200 products and dishes were studied.

Research results

The analysis of daily chromometry by observation, questionnaire and determination of physical activity coefficients (CFA) made it possible to determine the daily energy expenditure of wards in the studied nursing homes, by age and sex groups (Table 1).

Table 1 The values of the daily energy expenditure of the subjects, depending on body weight, in kcal / day

№	Body weight	Average daily energy expenditure energy expenditure	
		Men	Women
1.	65.0 kg	2250,2± 125,1	1980+99,9
2.	70.0 kg	2290,61 136,2	2020+100,5
3.	75.0 kg	2320,0± 104,4	20801104,1
4.	80.0 kg	2360,0± 101,3	20751102,9
5.	90.0 kg	2210,01109,1	20301112,3
6.	Over 90 kg	2100,0+100,2	19201118,1

As a comparative assessment of the daily energy costs of wards for the studied zones (objects) shows, there were no significant differences in energy costs in elderly and senile women in Tashkent and Kashkadarya region. The noted slight difference in daily energy expenditure in women is mainly due to the duration of morning exercises, meals and average static fluctuations.

Studies of the average daily energy expenditure of wards in nursing homes, according to the study of energy metry and timing of the day, made it possible to establish daily energy needs for this category of persons in the following values: for the elderly (60-74 years) - men: 2276-2355 kcal; Women: 2040-2075kcal.

An analysis of the distribution of the time budget of the surveyors shows that 38.5-41.1% of the daily time of women are engaged in dynamic activities, and in men this value is 39.3-56.3%. Static activity in women ranges from 58.9 to 61-5%, in men from 43.7 to 60.7%, which is associated with greater physical activity in men, regardless of age.

As a result of the analysis of the data of respiratory energy metry, the timing of the day and the anthropometric indicators of the subjects, we determined the individual values of the daily energy expenditure of the subjects, depending on body weight.

Studies of the average daily energy consumption of elderly and senile people in nursing homes and among this age and sex group of the population, on the basis of energymetric, anthropometric studies, make it possible to establish the optimal average daily energy demand of the disabled group of men over the age of 60 years in the amount of 2350 kcal and the disabled group of women over the age of 55 years in the amount of 2100 kcal.

Studies of the average daily energy expenditure of wards in nursing homes, according to the study of energy metry and timing of the day, made it possible to establish daily energy needs for this category of persons in the following values: for the elderly (60-74 years) - men: 2276-2355 kcal; Women: 2040-2075kcal.

The results of the studies carried out to study the structural composition of the average daily diets of elderly and senile people under care in nursing homes, eating habits and actual consumption of energy and basic nutrients, functional changes in the body of this category of the population, correction of average daily diets was carried out with the clarification of certain types of products from the general group of accepted norms and the inclusion of national dishes. The correction of diets included not only changes in their structural composition, it also included the improvement of technological processes for the preparation of national dishes aimed at increasing their biological value.

The correction of the average daily rations of nursing homes made it possible to increase the proportion of proteins of animal origin, fats of vegetable origin, without changing the total energy value of the diets. The total amount of fats and carbohydrates is reduced by 10-15%, compared to the actual background of nutrition.

A comparative assessment of the structural composition of biologically active substances and the biological value of average daily diets in nursing homes, on the actual and altered backgrounds of nutrition, indicates the effectiveness of the corrections. So, the general biological the value of diets in the winter-spring season increased from 52.5±1.5% against the actual background, to 68.2±1.3% ($P < 0.01$) against the changed background of nutrition (Table No. 3).

Due to a comparative increase in the average daily content in the diets of the altered nutritional background in the summer-autumn season, the increase in the total biological value of the average daily diets was from 56.2 + 1.1% to 72.1±1.2%. The ratio of nutrients was normalized, in accordance with dietary requirements for the elderly and senile. The proportion of vegetable fats, PUFAs, sitosterols, choline, fiber, pectin, potassium, magnesium, vitamins B 6, A, C, B12 and essential amino acids - methionine, lysine, leucine increased. Changes in the energy value, total amount of proteins, zinc, isoleucine, valine, phenylalanine, vitamins B1, B2 on the changed background of nutrition compared with the actual background of nutrition are not reliable (P>0.01).

Analysis of the dietary needs of wards in nursing homes. According to the generally accepted principles for determining the needs of organized and unorganized groups of the population in dietary nutrition, 10% of the adult population and 20% of the working-age population need dietary nutrition. Of this contingent of people, 40% need diet No. 1 (gastric ulcer, 12 duodenal ulcer, gastritis; 25% in diet No. 5 (diseases of the liver and biliary tract); 10% in diet No. 7/10 (kidney disease and cardiovascular system). For the elderly and senile, such standards do not exist, apparently due to the fact that the entire contingent of this age group requires dietary correction. This is evidenced by the above data on the actual consumption of food and data on the study of the health status of wards in nursing homes.

As shown by the analysis of the incidence of wards in nursing homes, 42% of this contingent need diet No. 1 (gastric ulcer, 12-p intestine and hyperacid gastritis), 16.3% in diet No. 10 (diseases of the cardiovascular system), 15% in diet No. 5 (diseases of the liver and biliary tract), 12.7% in diet No. 7 (kidney disease), 5.5% colitis (diet No. 2), 4.3% endocrinological pathologies. In general, 100% of wards in nursing homes need some kind of dietary food.

Findings

The study of the needs for dietary nutrition of the elderly and senile age in nursing homes showed the need for general and individual approaches to nutrition for this category of the population.So, according to the analysis of the incidence of wards in nursing homes, 42% of this contingent need diet No. 1 (gastric ulcer, 12-p intestines and hyperacid gastritis), 16.3% in diet No. 10 (diseases of the cardiovascular system), 15% in diet No. 5 (diseases of the liver and biliary tract), 12.7% in diet No. 7 (kidney disease), 5.5% diet No. 2 (colitis), 4.3% endocrinological pathologies. In general, 100% of wards in nursing homes need some kind of dietary food.

Analysis of the functional state of the chewing function of wards in nursing homes also showed a 100% need for easily digestible dietary food.

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