

The results were evaluated on a three-level scale (negative, low positive and a positive reaction). The increase of total Ig E concentration from 300 to 1000 IU/l was revealed. The highest frequency of allergic reactions was found in 85 % of cases to products containing nuts. The second highest rate of allergic reactions formation had mushrooms and a variety of teas. Animal proteins and dairy products caused true allergic reactions in 68 % and 66 % of cases. A high titer of Ig E antibodies to seafood was showed in 57 % of the patients. For fruit and vegetables the concentration of specific Ig E-antibodies increased in 55 % of patients. The most often raised Ig E antibodies to allergens contained in carrot roots (1000 IU/l). In some patients having a background of repeated increase in the total concentration of immunoglobulin E (400 IU/l) the increased concentration of specific antibodies were not detected.

Thus, in patients with gastrointestinal disorders the incidence of true food allergy is 1.8 times higher than the general population rate. The elimination diet with respect to identified allergens was recommended for patients with gastrointestinal diseases. The elimination diet use caused the concentration of specific IgE antibodies reducing in 90%, followed by improvement of current general clinical picture of the underlying disease.

## **ASSOCIATION BETWEEN APPENDICULAR LEAN MASS AND DIETARY PROTEIN INTAKE IN POSTMENOPAUSAL WOMEN**

### **ЗВ'ЯЗОК МІЖ АПЕНДИКУЛЯРНОЮ МАСОЮ ТА СПОЖИВАННЯМ БІЛКА У ЖІНОК У ПОСТМЕНОПАУЗАЛЬНОМУ ПЕРІОДІ**

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**Introduction.** The skeletal muscle is a key component of the body composition, and it is highly correlated with physical activity. There are many factors leading to age-related muscle mass loss. Recent studies attest to a strong connection of dietary peculiarities and the body composition of elderly people (Evans W. J., 2004; Campbell W. W., 2007; Lord C. et al., 2007; Bopp M. J. et al., 2007; Cruz-Jentoft A. J. et al., 2010; Morley J. E. et al., 2010). In this context, protein with its prominent dietary status gains an especial standing as far as the older population's health is concerned.

The aim of the study was to evaluate the appendicular lean mass depending on the dietary protein intake in the Ukrainian postmenopausal women.

**Materials and methods.** The study involved 63 women aged 52–89 years, who, depending on their ages, were divided into groups: 52–59 years (n = 9), 60–69 years (n = 26), 70–79 years (n = 21), 80–89 years (n = 7). To assess the dietary habits of women, we used the three-day sampling method and SEC «Viria» software. Lean mass was evaluated using a dual-energy X-ray absorptiometry (Prodigy, GE). We also calculated appendicular lean mass index (ALMI) by the formula: ALMI = lean mass of upper and lower extremities (kg)/height (m<sup>2</sup>).

**Results.** Examination of patients' dietary habits showed an age-related decrease. Women of 80–89 years consuming less than 1.0 grams of protein per 1 kg of body weight accounted for more than a half of their group (57.1 %), which is significantly different from the parameters established in women of 52–59 years (22.2 %). For the purpose of quartile analysis, women were divided into 4 groups depending on their ALMI values: Q1 – ALMI = 5.20–5.84 kg/m<sup>2</sup> (n = 15), Q2 – ALMI = 5.85–6.25 kg/m<sup>2</sup> (n = 17), Q3 – ALMI = 6.26–6.56 kg/m<sup>2</sup> (n = 16), Q4 – ALMI = 6.57–7.65 kg/m<sup>2</sup> (n = 15). Women with the lowest ALMI values consume the lowest amounts of dietary protein (F = 3.67; p = 0.02). Significant correlations among dietary protein, nonessential, essential aminoacids and ALMI values (r = 0.40, t = 3.44, p = 0.001; r = 0.39, t = 3.30, p = 0.002; r = 0.35, t = 2.91, p = 0.005; accordingly) were determined.

**Conclusion.** Further studies are needed to elaborate a set of recommendations aimed at correction of nutritional habits observed in older women of different countries.