## Analysis cost of treating vitamin deficiency in patients with coronary heart disease

Podkolzina M.V., Kurylenko Yu.Ye.
National University of Pharmacy, Kharkiv, Ukraine
Department of Organization and Economics of Pharmacy
meggushkakim@gmail.com

Cardiovascular diseases currently account for an increasing share of the working-age population. Recent studies show that proper prevention helps patients delay or reduce the negative effects of the disease by taking vitamins.

For example, in the study "Vitamin deficiency in patients with ischemic heart disease" by Podorozhnyĭ P.G, etc., the multivitamin deficiency was observed in 154 patients with ischemic heart pathology. Liu Y, etc. "Vitamin D Deficiency Harms Patients with Coronary Heart Disease by Enhancing Inflammation" analyzes how vitamin D deficiency harms patients with ischemia and exacerbates inflammatory processes in the body. The review "Thiamine and Cardiovascular Diseases" provides an analysis of the current literature on the role of thiamine in patients with heart disease. Since the treatment of patients with cardiovascular disease is expensive, and maintaining an optimal balance of vitamins in the body is necessary, we analyzed the cost of taking vitamins D3 and Omega 3.

For the calculation, we used prices from the American site of the largest pharmacy chain Walmart. The lowest cost of packaging a dietary supplement was in Now Foods, Vitamin D3, highly active, 2000 IU, 30 soft tablets 2.52 dollars USA, and the highest - Zahler, Omega 3 Platinum + D, Advanced Omega 3 with Vitamin D3, 2,000 mg, 90 Softgels 39.60 dollars USA, respectively. Thus, the cost of preventing vitamin deficiency in patients with cardiovascular disease dietary supplements for three months. Depending on the selected cost of tests was as follows: Vitamin D3 2000 IU, 30 soft tablets (Now Foods) from 66.72 to 69.36 dollars USA; Omega 3 Platinum + D, Advanced Omega 3 with Vitamin D3, 2,000 mg, 90 Softgels (Zahler) from 103.80 to 106.44. dollars USA; Vitamin A 1500 mcg, 100 tablets (Solgar) from 71.32 to 73.96 dollars USA; Vitamin A from Fish Liver Oil, 3,000 mcg (Mason Natural) 100 Softgels from 67.38 to 70.02 dollars USA.

The last two positions in the study were multivitamins, which contained vitamin A and vitamin D in the right amount for daily needs: Natural Factors, multivitamins, 180 tablets from 81.98 to 84.62 dollars. USA; Now Foods, Ultra A & D-3, 100 Softgels from \$ 70.52 to \$ 73.16.

Thus, with a slight difference in the cost of the studied items, it is advisable to take exactly the purpose of vitamins, which are prescribed by a doctor and have proven clinical effectiveness.