

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ**



МАТЕРІАЛИ

**106-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького колективу
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Матеріали підсумкової 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) – Чернівці: Медуніверситет, 2025. – 450 с. іл.

У збірнику представлені матеріали 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) зі стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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cholesterol (HDL-C, LDL-C) blood content, Atherogenicity index (AI). *GNB3* (rs5443) and *NOS3* (rs2070744) genotyping performed by TaqMan probes (CFX96™Real-Time PCR). All enrolled /examined patients signed the Informed Consent to participate in the study.

Results. The changes' frequency in the lipid and glucose panels in EAH patients depending on polymorphic variants of the *NOS3* gene (rs2070744) does not differ reliably. The risk of metabolic disorders (dyslipidemia and hyperglycemia) in EAH patients does not depend on *NOS3* gene polymorphism (rs2070744). EAH patients with T-allele of the *GNB3* gene (rs5443) were relatively more likely to increase LDL cholesterol (>3.0 mmol/l) than those with CC-genotype - by 13.89% ($p=0.05$). Other lipid metabolism parameters and hyperglycemia value did not differ significantly between *GNB3* (rs5443) genes genotypes. However, the mutational T-allele of the *GNB3* gene (825C> T) presence in the patients' genotype increases the risk of hyperlipidemia due to atherogenic LDL-C 8.5 times [OR=8.45; OR 95%CI:0.99-72.70; $p=0.05$], with the CC-genotype protective role [OR=0.12; OR 95%CI:0.01-1.0; $p=0.048$].

Moreover, the fasting hyperglycemia increases the overall risk of EAH in the examined population almost 9 times [OR=8.80; OR 95%CI:2.86-27.08; $p<0.001$], hypertriglyceridemia (>1.70 mmol/l) – 3 times [OR=2.62; OR 95%CI:1.23-5.56; $p=0.009$] and HDL-C decrease (<1.2 mmol/l) – more than 3.5 times [OR=3.57; OR 95%CI:1.46-8.71; $p=0.003$], respectively.

Conclusion. Thus, the polymorphic site of *GNB3* (rs5443) gene, but not *NOS3* (rs2070744) gene associate with metabolic disorders in hypertensive patients. Fasting hyperglycemia, hypertriglyceridemia with HDL-C decrease enhances the risk of arterial hypertension development 3-9 times ($p<0.01$).

Tashchuk M.V.

IMPACT OF DIABETES THERAPY ON CLINICAL OUTCOMES AND MORTALITY AMONG PATIENTS WITH CARDIOVASCULAR DISEASES

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Introduction. Diabetes mellitus (DM) is one of the major risk factors for the development of cardiovascular diseases (CVD), such as coronary artery disease, strokes, and heart failure. Patients with concomitant DM and CVD have a significantly higher risk of mortality and clinical deterioration, which necessitates optimal therapy to control both conditions.

Hyperglycemia in DM induces metabolic changes that lead to endothelial dysfunction, oxidative stress, inflammation, and atherosclerotic processes, further worsening the course of CVD. The presence of comorbidities such as arterial hypertension and dyslipidemia requires therapy adjustment using antihypertensive and lipid-lowering agents to reduce the overall burden on the cardiovascular system.

The aim of the study. To provide an analysis of up-to-date science literature to find an answer to the optimal combination of treatment strategies in patients with CVD and diabetes, with additional data analysis about clinical outcomes in patients with analogous comorbidities.

Material and methods. This study was based on a comprehensive review of scientific literature from PubMed and Google Scholar databases, focusing on the impact of diabetes therapy on clinical outcomes and mortality in patients with cardiovascular diseases (CVD).

Additionally, clinical indicators of 10 patients with concomitant diabetes mellitus (DM) and CVD were analyzed. The analysis included evaluating glycemic control, cardiovascular risk factors, and the overall therapeutic approach used for these patients. Data were collected and processed to assess the effects of different therapeutic strategies on clinical outcomes.

Results. Long-term glycemic control reduces the risk of developing microvascular complications and has a positive impact on the cardiovascular system. However, excessive intensification of glycemic control may lead to hypoglycemic episodes, which increase the risk of cardiovascular events. The treatment of patients with concomitant DM and CVD should be comprehensive, including not only glycemic control but also the correction of risk factors such as blood pressure and lipid levels.

The integration of cardioprotective agents into antidiabetic therapy improves prognosis and reduces mortality in this patient group. Own results on a small group of 10 patients proved positive cardiotropic effects in both groups, patients on SGLT-2 inhibitors and other ways of diabetes therapy, however with a tendency to have better outcomes in the SGLT-2 inhibitors positive group.

Conclusions. Appropriate antidiabetic therapy, which takes into account the individual characteristics of the patient and cardiovascular risks, is essential to improve the clinical course and reduce mortality among patients with a combination of diabetes and cardiovascular diseases. SGLT-2 inhibitors showed high efficiency through confirmed and expected positive effects on the state of the cardiovascular system, however, even with the use of drugs that do not have a combined endocrine-cardiological effect, the effective therapy of both diseases leads to a synergistic positive effect.

Vasiuk V.L.

MODERN TRENDS IN UNHEALTHY FOOD HABITS AND THEIR IMPLICATIONS FOR HEALTHCARE PROFESSIONALS

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Introduction. In the past decade, unhealthy food habits have become increasingly complex, driven by shifts in social, economic, and technological landscapes. The proliferation of ultra-processed foods, convenience-driven dietary choices, and the rise of digital food delivery platforms have reshaped eating behaviors globally, fostering a rapid decline in nutritional quality. High-sugar, high-salt, and high-fat diets are now predominant, contributing to rising incidences of obesity, cardiovascular disease, type 2 diabetes, and various cancers.

Emerging trends include the widespread adoption of “hyper-palatable” snack foods, irregular eating schedules, and a growing reliance on nutrient-poor, calorie-dense foods. Additionally, digital and social media platforms have influenced dietary choices, often promoting fad diets that may lead to harmful patterns, such as restrictive eating or unbalanced intake of essential nutrients. These behaviors challenge healthcare systems by increasing the burden of non-communicable diseases (NCDs) and necessitating more complex patient care.

The aim of the study. To analyze modern nutritional trends of Ukrainian society.

Material and methods. Literature analysis, 400 patients were interviewed about their feeding habits for last 3 years.

Results. In Ukraine, dietary habits have traditionally been rooted in a mix of high-carbohydrate, protein-rich foods, and fats with a lack of diversity in fruits and vegetables depending on the season. Westernized/convenience-based diet has increased in popularity in Ukraine over the last decade. It means the consumption of ultra-processed and fast foods. Increased urbanization and busy lifestyles have contributed to the popularity of packaged snacks, sugary beverages, and ready-to-eat meals. Among health-conscious individuals, low-carb, high-fat diets, such as the ketogenic and paleo diets, are gaining traction. These diets are often promoted for weight management and metabolic health, though they require careful management to ensure balanced nutrient intake. The use of dietary supplements and “superfoods” like chia seeds, quinoa, and goji berries has also become more popular, especially among younger populations interested in fitness and wellness.

COVID-19 significantly impacted global eating habits, largely due to changes in lifestyle, financial insecurity, and health priorities. It influenced eating patterns in many ways. The psychological stress and isolation during lockdowns led many people to consume more “comfort foods” that are often high in sugars, unhealthy fats, and refined carbohydrates. There was a marked increase in processed snack foods and fast food consumption, especially as people sought convenience and emotional comfort. Alcohol intake increased for many during the pandemic as people coped with stress, boredom, and isolation. The shift to online grocery shopping and meal delivery was also a recent trend. The pandemic accelerated the adoption of online grocery shopping and food delivery services with more frequent ordering of fast food and prepackaged meals, which are often higher in calories, sodium, and unhealthy fats.