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MULTIDISCIPLINARY APPROACHES IN NUTRITION AND DIETETICS

Targu Mures, Romania
22-24 May 2025

BOOK OF ABSTRACTS

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MULTIDISCIPLINARY APPROACHES IN NUTRITION AND DIETETICS

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THE ROAD TO THE STOMACH PASSES THROUGH THE HEART: ESSENTIAL COMMUNICATION TECHNIQUES FOR SUCCESS IN THE PATIENT RELATIONSHIP

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Objective: To explore the impact of appreciative and emotionally intelligent communication in nutritional counseling, focusing on tools that enhance patient engagement and adherence.

Methods: The presentation synthesizes practical approaches from coaching, heart coherence techniques, and principles of appreciative communication. Core strategies include active listening, reframing patient resistance, and delivering challenging recommendations using the well-established "sandwich technique," adapted to the nutritional context.

Results: Through case-based examples and verbal reformulation exercises, participants learn how to avoid common communication pitfalls, such as judgments, assumptions, and authoritative advice, and instead foster dialogue rooted in empathy and mutual respect. The structure encourages the patient's autonomy while increasing receptivity to behavioral change.

Conclusions: Integrating techniques from coaching and heart-brain coherence into patient conversations enables professionals to transform clinical recommendations into collaborative, motivational exchanges. This communication style improves both short-term compliance and long-term therapeutic alliance.

Keywords: appreciative communication, patient counseling, behavioral change, heart coherence, sandwich technique

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DIETARY APPROACHES IN IRRITABLE BOWEL SYNDROME WITH COMORBID ANXIETY: AN INTEGRATIVE ANALYSIS

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Objective: To explore the connection between irritable bowel syndrome (IBS) and anxiety, and to identify evidence-based nutritional strategies tailored to the complex clinical profile of patients affected by both conditions.

Methods: A literature search was conducted in PubMed, Scopus, and Web of Science databases, using the keywords 'Irritable bowel syndrome', 'IBS', 'anxiety', 'gut-brain axis', 'nutrition', and 'dietary intervention'. The search covered the period from January 2020 to April 2025. Approximately 1,200 articles were initially identified. After screening titles, abstracts, and applying inclusion criteria, a total of 22 articles were selected and included in this integrative review.

Results: IBS and anxiety are frequently comorbid, with overlapping mechanisms such as gut-brain axis dysregulation, genetic predisposition, low-grade inflammation, and altered gut microbiota. Dietary interventions—such as the low-FODMAP diet, the Mediterranean diet, and emerging AI-assisted personalized diets—can reduce gastrointestinal symptoms and improve emotional well-being. However, restrictive eating behaviors and food-related anxiety are common and can worsen nutritional status and quality of life. A comprehensive and individualized nutritional evaluation, considering psychosocial factors, is crucial for effective management.

Conclusions: Nutritional therapy for patients with IBS and comorbid anxiety must address both gastrointestinal symptoms and psychological distress. A personalized, integrative dietary approach—balancing symptom relief, nutrient adequacy, and emotional resilience—offers the best outcomes for long-term health and quality of life.

Keywords: Irritable bowel syndrome, anxiety, gut-brain axis, nutrition, integrative approach

FUNCTIONAL NUTRITION IN INTESTINAL DYSBIOSIS AND ALTERED ENERGY METABOLISM – A CASE STUDY

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Objective: This case study aimed to evaluate the effects of a personalized nutritional intervention, including functional foods, on key biomarkers of intestinal dysbiosis and energy metabolism in a patient undergoing oncological treatment.

Methods: The study involved a 47-year-old female patient diagnosed with left breast cancer and pulmonary and bone metastases. Based on intestinal dysbiosis and low blood pyruvate, a two-stage dietary protocol was implemented over ten months. The intervention excluded dairy, red meat, and refined sugars, and included a diet composed of 70% plant-based and 30% animal protein sources, enriched with fiber, fruits, and vegetables. Supplementation included calcium pyruvate, probiotics, L-glutamine, vitamin D3 with K2 and magnesium, botanical extracts, and enzymes.

Results: Significant improvements were observed in key biomarkers: secretory IgA increased from 164 to 1039 µg/ml, 25-hydroxy-vitamin D rose from 26.26 to 66.81 ng/ml, and fecal beta-defensin improved from <4.6 to 17.69 ng/g, all indicating enhanced mucosal immunity and epithelial defense. Concurrently, blood pyruvate, initially below the reference range, normalized with an increase from 25.3 to 62.4 µmol/L, reflecting improved cellular energy metabolism. Microbiota analysis revealed reduced proteolytic species (Escherichia coli, Candida) and restored acidifying flora (Bifidobacterium, Lactobacillus).

Conclusions: Functional nutrition had a favorable impact on mucosal immunity, intestinal microbiota balance, and cellular energy metabolism. This case highlights the role of personalized dietary strategies in supporting patients with chronic disease and dysbiosis.

Keywords: functional nutrition, intestinal dysbiosis, blood pyruvate

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MECHANISMS AND TARGETED THERAPIES OF METABOLIC DISORDERS: THE KEY ROLE OF GUT MICROBIOTA IN OBESITY AND TYPE 2 DIABETES

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Background: Obesity, insulin resistance, and type 2 diabetes are steadily increasing in prevalence worldwide and continue to pose major public health challenges. The Western diet (characterized by high energy density, saturated fats, refined carbohydrates, and low fiber intake) plays a central role in developing these complex metabolic disorders. While traditional interventions such as pharmacotherapy, lifestyle modification, and bariatric surgery can lead to moderate improvements, they often fail to provide lasting therapeutic benefits or address the core biological mechanisms behind these conditions.

Methods: Recent research has identified the gut microbiota as a key regulator of host metabolic balance, immune responses, and low-grade inflammation. Microbial dysbiosis, disruption of epithelial barrier integrity, and associated molecular pathways—such as mTORC1 activation, altered short-chain fatty acid production, and changes in bile acid metabolism—are increasingly recognized as contributors to adiposity and insulin resistance.

Results: We present a comprehensive literature review of current scientific evidence linking gut microbiota to the pathophysiology of metabolic diseases, focusing on inflammation-related mechanisms and microbiota-targeted therapeutic strategies.

Conclusion: Interventions aimed at restoring microbial diversity (including precision nutrition, pre- and probiotics, and lifestyle medicine) offer promising new directions in preventing and managing metabolic disorders. Reframing these conditions through the lens of host-microbiota interactions opens novel perspectives for personalized dietetic practice and integrative care.

Keywords: obesity, insulin resistance, type 2 diabetes, gut microbiota, dysbiosis, mTORC1, short-chain fatty acids

THE MULTIDISCIPLINARY TEAM IN ONCOLOGY - THE ROLE AND COLLABORATION OF SPECIALISTS FOR INTEGRATED AND PERSONALIZED CARE

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Background: Cancer is not merely a disease of the body, but a profoundly human experience that affects patients on multiple levels: physical, emotional, psychological, social, and spiritual. Modern oncology has shifted from a purely medical model to a biopsychosocial one that places the patient at the center of care. Nutrition and nutritional status play a vital role in this integrative approach, influencing both the effectiveness and tolerance of cancer therapies.

Methods: A multidisciplinary team worked to deliver comprehensive and coordinated patient care. The dietitian plays a key role in preventing and treating malnutrition, tailoring diets to symptoms and treatment-related complications, and counseling patients to foster a healthy relationship with food. Close collaboration between the psycho-oncologist and dietitian is essential.

Results: According to ESPEN (2021), between 30% and 70% of oncology patients suffer from malnutrition, while psychological distress affects over 35%, according to NCCN (2023). The psycho-oncologist is crucial in managing the emotional aspects of the disease. Commonly used tools include the Distress Thermometer, HADS (Hospital Anxiety and Depression Scale), and the Beck Depression Inventory. The dietitian assesses nutritional status using validated instruments such as the PG-SGA (Patient-Generated Subjective Global Assessment) and MUST (Malnutrition Universal Screening Tool), and designs individualized dietary plans based on cancer type, treatments, and symptoms. They also provide educational support and help patients maintain a balanced eating routine, emphasizing autonomy and food enjoyment.

Conclusion: Collaboration among specialists in the multidisciplinary team is fundamental to holistic oncological care. The synergy between the psycho-oncologist and dietitian illustrates the importance of an integrative approach that attends to the disease and the person living with it.

Keywords: oncology, multidisciplinary team, psycho-oncology, nutrition, nutritional status, malnutrition, interdisciplinary collaboration, integrative care

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THE IMPACT OF THE WORK ENVIRONMENT, PHYSICAL ACTIVITY, AND STRESS ON COMPULSIVE EATING BEHAVIOR

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Objective: Compulsive eating involves episodes of excessive food intake without true hunger, often followed by guilt and a sense of lost control. In today's high-stress lifestyles, this behavior is increasingly common. Work environments and daily routines significantly influence eating habits. This study examined factors contributing to compulsive eating, focusing on the impact of workplace stress on post-work dietary control and the role of physical activity.

Methods: A total of 252 individuals completed an online questionnaire assessing the frequency and triggers of compulsive eating (e.g., stress, work context), physical activity levels, and dietary control after work. Data were analyzed using descriptive and correlational methods.

Results: High levels of workplace stress were significantly associated with reduced dietary control after work. Participants with sedentary jobs and low physical activity reported higher stress levels. Conversely, regular physical activity was linked to lower stress and improved control over eating. Stressful moments, particularly after work or during emotional strain, were the most commonly reported triggers for compulsive eating.

Conclusions: Work-related stress and physical inactivity contribute notably to compulsive eating. Individuals with active lifestyles reported lower stress and better eating control. These findings underscore the importance of stress reduction and daily physical activity in managing compulsive eating behavior.

Keywords: Compulsive Eating, Work Stress, Dietary Control

THE IMPACT OF A PERSONALIZED ANTI-INFLAMMATORY DIET ON INFLAMMATORY MARKERS AND CLINICAL SYMPTOMS IN PATIENTS WITH RHEUMATOID ARTHRITIS- CASE SERIES

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Objective: This study aimed to evaluate the effects of a twelve-week personalized anti-inflammatory dietary intervention on inflammatory markers and clinical symptoms in individuals diagnosed with RA.

Methods: Seven patients followed a nutrition plan based on anti-inflammatory principles, adapted to personal preferences and tolerances. Every two weeks, dietary adjustments were made during brief follow-up consultations. Blood levels of protein C reactive and erythrocyte sedimentation rate were measured before and after the intervention, while symptoms were monitored continuously. Background pharmacological treatment was maintained throughout the study without any modifications.

Results: Five patients showed significant reductions in protein C reactive, with decreases ranging from thirty-nine percent to over ninety percent. Erythrocyte sedimentation rate decreased in four patients, with the most notable reductions of forty and sixty percent, respectively. Clinically, all participants reported improved energy, less frequent and less intense joint pain, improved bowel transit, and better functionality in daily life.

Conclusions: The dietary intervention contributed to measurable reductions in systemic inflammation and clinically relevant improvements in patient well-being. These findings support the integration of personalized anti-inflammatory nutrition in the management of rheumatoid arthritis.

Keywords: rheumatoid arthritis, anti-inflammatory diet, inflammatory markers

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ASSESSMENT OF MITOCHONDRIAL FUNCTION AND NUTRITIONAL INTERVENTION IN A POST-NEOPLASTIC RECOVERY – A CASE STUDY

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Objective: This case study explores the impact of a targeted nutritional intervention on systemic inflammation, mitochondrial redox balance, and immune function in a 43-year-old female patient with a history of stage IIB cervical squamous cell carcinoma, post-radiotherapy.

Methods: Over 10 months, a personalized nutrition protocol was implemented to address hypo-prealbuminemia, residual fatigue, and mitochondrial insufficiency. The intervention included an anti-inflammatory, predominantly plant-based diet excluding dairy, red meat, and refined sugars, alongside daily supplementation with 40 g egg white protein, 5,000 IU vitamin D3, 1,000 mg calcium pyruvate, 30 mg zinc (glycinate), probiotics, 1,000 mg lion's mane extract, 500 mg curcumin, and 25 mg full-spectrum CBD oil. Clinical monitoring included serum vitamin D, prealbumin, zinc, high-sensitivity C-reactive protein, ferritin, tumor markers, lactate/pyruvate ratio, and magnetic resonance imaging to assess tumor evolution.

Results: Vitamin D increased from 14 to 91 µg/L, prealbumin rose from 0.17 to 0.20 g/l, and ferritin improved from 10.8 to 21.6 ng/mL. High-sensitivity C-reactive protein decreased from 0.603 to 0.200 mg/dL, while CA 125 declined from 75.74 to 24.69 U/mL. The lactate/pyruvate ratio decreased from 13.0 (elevated) to 5.6 (within normal range), suggesting improved mitochondrial redox function. Magnetic resonance imaging follow-up confirmed partial regression of the tumor mass.

Conclusions: This case illustrates the therapeutic potential of micronutrient-focused, protein-rich nutritional strategies in oncology. Functional nutrition may contribute to immune regulation, inflammation control, and tumor stabilization through enhanced metabolic and mitochondrial function.

Keywords: prealbumin, cervical cancer, egg white protein, lactate-pyruvate ratio

NUTRITIONAL INTERVENTION APPLIED IN PRIMARY HYPERPARATHYROIDISM

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Background: Hyperparathyroidism (HPT) is characterized by excess parathyroid hormone (PTH) production. Vitamin D and PTH are two major regulators of mineral metabolism. They play critical roles in the maintenance of calcium and phosphate homeostasis as well as the development and maintenance of bone health. PTH and Vitamin D form a tightly controlled feedback cycle, PTH being a major stimulator of vitamin D synthesis in the kidney, while vitamin D exerts negative feedback on PTH secretion. Calcium acting through calcium receptors and vitamin D acting through nuclear receptors reduce the synthesis and release of PTH.

Methods: We monitored a sample of patients with HPT from Bucharest in 2018. We carried out a targeted nutritional intervention for two years(2018-2020), hypercaloric dietary intervention for weight gain (based on a diet with 15% protein, 55% carbohydrates, 30% lipids), also recommending vitamin D, Calcium, magnesium, probiotics, omega 3 acids, vitamins B, and C supplements, based on nutritional assessment through medical history, medical records, a questionnaire with 150 questions related to signs and symptoms, medical parameters, food intolerance test Ig G4, nutrigenetic test, DEXA evaluation, and somatometric analysis.

Results: Through the nutritional intervention applied, a decrease in PTH from 158 pg/ml to 43.2 pg/ml, and at the same time, weight gain from 45.3 kilograms to 54.1 kilograms, and an increase in vitamin D from 23.8 ng/ml to 38.1 ng/ml, was obtained.

Conclusion: The approach to a patient with hyperparathyroidism, weight loss, and malabsorption is complex, requires rigor, precise calculation of specific nutrients according to dietary protocols, and long-term patient compliance. Therefore, the intervention of a multidisciplinary team consisting of a specialist doctor, dietitian, and psychologist is necessary.

Keywords: hyperparathyroidism, vitamin D, calcium, malabsorption, osteoporosis

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NUTRITIONAL PROFILE AND LIFESTYLE OF WOMEN IN ROMANIA: DATA FROM A NATIONAL HEALTH CAMPAIGN

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Background: In recent decades, the prevalence of chronic diseases has increased significantly among the female population. Unbalanced diets, physical inactivity, and chronic stress are major risk factors associated with a modern lifestyle. In Romania, current data on adult women's dietary and health behaviors are limited, constraining the development of effective prevention strategies and nutritional education programs. Health campaigns have played an essential role in raising public awareness and providing individuals with the tools to make healthier choices. However, there is a lack of specific data on the impact of such campaigns on dietary habits and health outcomes among Romanian women. The Health Caravan (Caravana Sănătății) is a national health campaign aimed at improving the health and well-being of women in Romania, with a particular focus on nutritional education and screening for various conditions. The present study analyzes data from participants in this campaign, examining Romanian women's main dietary habits, health concerns, and lifestyle patterns. The study highlights the need for structured interventions in nutritional education and public health policy by identifying key risks and behaviors.

Methods: This cross-sectional study was conducted on a sample of adult women who participated in the Health Caravan campaign, and included health screenings and educational sessions on nutrition, physical activity, and stress management. A structured questionnaire was developed and distributed to collect data on various aspects of lifestyle and health, including: frequency of food consumption, physical activity levels, sleep duration, use of electronic devices, perceived stress levels, and concerns about body weight and weight management attempts. Data were analyzed descriptively, emphasizing identifying correlations between behaviors and self-reported health status.

Results: The study sample consisted of 1,000 Romanian adult women, mostly from urban areas. The data revealed the following key findings: 27% were overweight, 6% obese, and 8% underweight. Nearly 67% of women with obesity and 40% of those with normal weight had previously attempted various diets. Only 26% consulted a nutrition specialist, while the remaining 74% followed diets without professional guidance.

Conclusions: The findings of this study emphasize the urgent need for comprehensive interventions to improve dietary habits and overall lifestyle among women in Romania. Public health programs should integrate personalized nutritional counseling, promotion of physical activity, and stress management strategies to address the growing prevalence of chronic diseases.

Keywords: lifestyle, dieting, obesity

THE GUT MICROBIOTA IN IRRITABLE BOWEL SYNDROME: FRIEND OR ENEMY?

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Background: Irritable bowel syndrome (IBS) is a prevalent gastrointestinal disorder clinically characterized by abdominal pain related to bowel habits and modification in stool consistency and/or frequency according to Rome IV criteria. IBS strongly impacts quality of life and imposes a significant economic burden. Although its etiology remains multifactorial and incompletely understood, growing evidence supports the key role of gut microbiota in the pathophysiology of IBS.

Methods: Current research has identified specific dysbiotic patterns in patients with IBS, such as reduced microbial diversity, reduced levels of beneficial bacteria like Bifidobacteria and Lactobacilli, and increased levels of pathogenic bacteria such as Escherichia coli or Bacteroidetes spp. Over-representation of specific pathogens is responsible for gut inflammation, increased intestinal permeability, and alteration of gut motility. Moreover, the gut-brain axis, which is defined by the bidirectional relationship between the central nervous and digestive systems, is one of the pathogenic links in IBS.

Results: Psychological factors such as stress and anxiety can determine changes in microbiota composition, leading to altered neurotransmitter production, altered immune responses, causing modification in gut motility and visceral sensitivity, and exacerbating IBS symptoms. On the other hand, dysbiosis can also lead to mood changes in such patients. Interventions targeting gut microbiota, such as prebiotics, probiotics, and dietary modifications, improve symptoms in selected IBS patients, suggesting the vital role of modulation of gut microbiota in this condition.

Conclusion: Understanding the complex relationship between gut microbiota and IBS could lead to personalized management in this challenging condition.

Keywords: irritable bowel syndrome, gut microbiota, gut-brain axis, dysbiosis

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LIPID PROFILE IN CLOSE RELATION WITH NUTRITIONAL STATUS IN PATIENTS WITH CARDIOVASCULAR DISEASES

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Background: Cardiovascular disease is the leading cause of death worldwide. Studies have repeatedly shown that altered nutritional status has profound implications for recovery from disease and is generally associated with increased morbidity and mortality.

Methods: A total of 115 patients in the Târgu Mures, Emergency County Clinical Hospital with acute myocardial infarction in 2023, whose nutritional status was determined using the Controlling Nutritional Status screening tool, along with the lipid profile, including HDL-cholesterol, LDL-cholesterol, and triglycerides. For comparison, our group was divided into two categories: those with good and poor nutritional status. In the group of patients with normal nutritional status, the CONUT score was <3; for those with nutritional deficiency, the CONUT score was ≥3.

Results: The results showed that patients with poor nutritional status had a lower median HDL value of 40.79 mg/dl versus 48.33 mg/dl in patients with good nutritional status. However, this difference was still statistically insignificant (p=0.06). Regarding LDL cholesterol, undernourished patients had statistically significantly lower values, 65.57 mg/dl versus 87.22 mg/dl in patients with normal nutritional status, p<0.0001. Triglycerides differed significantly with much lower values in patients with poor nutritional status, 80.85 mg/dl versus 131.53 mg/dl in patients with normal nutritional status.

Conclusion: Malnutrition and lipid profile are closely related, especially in cardiovascular diseases, as shown by the results of our study, where patients with nutritional deficiency show a more altered lipid profile, and as preventive recommendations, it would be indicated to adjust the nutritional status.

Keywords: nutritional status, cardiovascular disease, LDL-cholesterol

CHANGES IN GUT MICROBIOME COMPOSITION IN CANCER PATIENTS

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Objective: To assess alterations in gut microbiota composition in cancer patients compared to standard reference values, focusing on identifying key bacterial and fungal taxa.

Methods: An observational study was conducted on 44 cancer patients who underwent fecal dysbiosis testing between November 2022 and July 2023. Microbial profiling involved DNA extraction, PCR amplification, and 16S rRNA gene sequencing via NGS.

Results: Over half of the subjects exhibited moderate to severe dysbiosis. Increased putrefactive flora was found in 36 cases, decreased acidifying flora in 37, and elevated facultative pathogenic fungi in 25. A strong statistical correlation was observed between putrefactive flora and elevated Escherichia coli levels and between intestinal pH and toxicity indicators. Enterococcus species deviated from reference values in 37 subjects. Elevated histamine levels were recorded in 36 cases and showed a statistically significant, high-intensity positive correlation with putrefactive flora.

Conclusions: A significant proportion of the studied group exhibited gut dysbiosis marked by reduced acidifying and increased putrefactive flora, with downstream effects including altered pH and accumulation of toxic metabolites like histamine. These imbalances may promote chronic inflammation, compromise the intestinal barrier, impair nutrient absorption, and reduce the effectiveness of oncological therapies. Addressing gut dysbiosis represents a vital component of integrative cancer care, potentially improving patient prognosis and quality of life.

Keywords: microbiome, dysbiosis, cancer

ANALYSIS OF THE ACCURACY OF NUTRITIONAL ESTIMATES PROVIDED BY FIVE LARGE LANGUAGE MODELS COMPARED TO THE FOODDATA CENTRAL DATABASE

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Objective: Manual nutritional analysis of meal plans using food databases is a time-consuming and labor-intensive process. Artificial intelligence offers a rapid alternative with the potential to significantly streamline this workflow. This study aims to compare the nutritional estimates generated by different large language models to the reference values provided by the FoodData Central database.

Methods: A total of 20 food items were selected from FoodData Central. Five large language models (ChatGPT-4o, Grok, Claude, Gemini and DeepSeek) were then used to estimate the nutritional values (calories and macronutrients per 100 grams) for each food item. Differences between FoodData Central reference values and artificial intelligence-generated estimates were statistically analyzed using GraphPad InStat.

Results: The analysis revealed very strong ($r > 0.8$) and statistically significant ($p < 0.0001$) correlations between the calorie and macronutrient values from FoodData Central and those estimated by the large language models. A statistically significant difference was observed in protein content between FoodData Central values and estimates provided by ChatGPT-4o ($p = 0.0443$), although the mean difference was slight (-0.1270).

Conclusions: The nutritional values generated by the artificial intelligence models were closely aligned with those in the FoodData Central database, underscoring their strong potential for integration into nutritional analysis tools for accurate caloric and macronutrient assessment. Further studies using larger datasets and more comprehensive nutrient profiles are needed to validate and expand upon these findings.

Keywords: artificial intelligence, calories, macronutrients.

THE LINK BETWEEN SLEEP QUALITY, ENERGY LEVELS, AND SWEET CRAVINGS – A PILOT STUDY

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Objective: This study investigated how sleep duration and perceived energy levels influence sweet cravings and dietary self-control, with attention to the time of day when these behaviors intensify.

Methods: A digital behavioral questionnaire, including 10 items, was distributed to 140 adult respondents. The questions addressed sleep duration, perceived restfulness, appetite, craving for sweets, and behavioral eating tendencies, including timestamp analysis for chrononutrition patterns.

Results: 57.1% of respondents reported sleeping 7–8 hours the previous night, but only 17.1% felt fully rested. Among those who slept under 7 hours, 50% experienced sweet cravings, compared to only 26.6% of those with adequate sleep. Notably, sweet cravings were more frequently reported in the afternoon, with a peak of 60% around 14:00, suggesting a connection between declining energy and food-seeking behavior. Furthermore, 75% confirmed that lack of sleep affects their dietary self-control, while 60% believed they would consume fewer sweets if they slept better.

Conclusions: These preliminary results point to a potential association between shorter or poor-quality sleep, decreased perceived energy, and increased sweet cravings, especially in the afternoon. These behavioral trends suggest that sleep-related factors may influence appetite regulation and dietary choices. As a pilot study, the findings offer valuable directions for future research on the role of sleep in nutritional interventions.

Keywords: sleep, energy, sweet cravings, dietary behavior, circadian rhythm

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THE IMPACT OF SOCIAL MEDIA ON NUTRITION AND MENTAL HEALTH

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Objective: This paper aims to analyze the influence of social media on eating behavior and mental health, focusing on the adverse effects of misinformation, aesthetic pressure, and the promotion of unhealthy diets. It explores how content like Instagram, TikTok, and YouTube can distort perceptions of body image, nutrition, and a healthy lifestyle.

Methods: This study is a narrative review based on recent scientific articles from international databases such as PubMed, ScienceDirect, and ResearchGate. It includes studies investigating the association between intensive social media use and disordered eating behaviors, eating disorders, negative body image, sleep disturbances, anxiety, and depression. Data regarding the dissemination of inaccurate nutritional information was also analyzed.

Results: Excessive use of social media is associated with an increased risk of anorexia, bulimia, orthorexia, and impaired mental health. Children and young adults are particularly influenced by content shared by unqualified influencers, which can lead to dangerous dietary practices and the unjustified elimination of essential food groups. Social media algorithms tend to favor viral content, often lacking scientific verification, which amplifies the spread of "miracle diets" and negatively impacts self-esteem, sleep quality, and the need for social validation.

Conclusions: Misinformation, idealized aesthetics, and digital pressure contribute to the development of unhealthy eating habits and the worsening of mental health conditions. There is a pressing need for public health institutions and professionals to intervene by promoting critical thinking and leveraging social media platforms for evidence-based nutritional education.

Keywords: social media, eating behavior, mental health, misinformation, eating disorders, influencers, diet, body image

EATING IN FRONT OF SCREENS AMONG ROMANIAN YOUTH: BEHAVIORAL INSIGHTS AND PERCEIVED HEALTH IMPACT

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Objective: This study aimed to investigate the frequency and context of food consumption in front of screens (phones, televisions, laptops) among Romanian youth and to analyze participants' perceptions regarding its impact on satiety, digestion, and body weight. Additionally, the study explored subjective factors sustaining this behavior and perceived strategies for its reduction.

Methods: An online questionnaire was distributed to a convenience sample of 126 participants, primarily high school or university students (77.8%), most of whom were under 25 years old (81.7%). The instrument included closed-ended questions and multiple-choice grids analyzed descriptively.

Results: Among the 126 respondents, 84.1% reported eating in front of screens weekly. While 43.7% divided their attention equally between food and screen, 31% focused more on eating. Short videos (56.3%) and films/TV shows (24.6%) were the most common content. Regarding behavior, 46% ate more slowly, and 43.6% tended to overeat. Only 8.7% perceived a positive effect on quality of life, whereas 30.2% noted a negative impact. Weight gain was reported by 23.8%, and 9.5% experienced digestive discomfort. Relaxation (39.7%) and avoiding solitude (31.7%) were the primary triggers. Awareness of adverse effects was seen as the most helpful strategy by 43.7%.

Conclusions: Screen-time eating is highly prevalent among youth and is linked to poorer satiety regulation and, in some cases, weight gain. Despite a mostly neutral perceived impact on health, nearly half believe it warrants attention in public health campaigns. Educational interventions promoting screen-free meals and mindful eating may be effective preventive strategies.

Keywords: screen-time eating, youth behavior, satiety perception

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TRANSDISCIPLINARY FOOD APPROACH FOR CHRONIC DISEASES

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Objective: In this research, we showed how food development and menu establishment must be approached transdisciplinarily to ensure the effectiveness of allopathic treatments, prevent food-drug interactions, and prevent the occurrence of specific adverse reactions in patients with chronic noncommunicable diseases.

Methods: The Clarivate and PubMed databases were consulted for 2020-2025. Original articles about adjuvant foods in the prevention/treatment of chronic non-communicable diseases, as well as the interaction of plant resources with enzymes responsible for the metabolism of drugs included in the treatments of these pathologies, were analyzed.

Results: Acrylamide is a carcinogenic compound that is formed as a result of the reaction between natural food constituents (asparagine and sugars) during preparation at temperatures above 120°C and low humidity (baking, frying), such as fried or baked potatoes, crisps, breakfast cereals, coffee, coffee substitutes containing more than 50% cereals or chicory, baby biscuits and cereals for young children, jarred infant foods (low-acid and prune-based foods) and bread. Phytic acid is another organic compound that inhibits iron absorption in the human body and can lead to iron deficiency anemia, sideroblastic anemia or worsen the symptoms of an already existing anemia. Carrots inhibit the cytochrome P 450 enzyme, CYP2E1, and tomato juice inhibits CYP1A1, CYP1B1, uridine-5'-diphospho-glucurinosyl-transferase, and interacts with xenobiotic drugs.

Conclusions: The development of adjuvant foods in the prevention/treatment of chronic diseases and the establishment of menus for patients with this type of pathology involves transdisciplinary knowledge in the fields of food technology and control, food safety, pathophysiology and nutrivigilance areas.

Keywords: transdisciplinary, chronic diseases, adverse reaction

PEDIATRIC OBESITY MANAGEMENT: THE ROLE OF THE DIETITIAN IN PREVENTION AND TREATMENT

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Objective: Childhood obesity is a current public health issue, with the latest data from the World Health Organization indicating that 1 in 3 children in Europe suffered from this condition in 2022. Excess weight is associated with a range of short and long-term complications, including cardiovascular diseases, type 2 diabetes, depression, and other mental health disorders. This paper aimed to emphasize the importance of the dietitian's intervention in the prevention and treatment of childhood obesity, within the context of a multidisciplinary approach.

Methods: The method used consisted of analyzing recent literature and nutritional intervention protocols on childhood obesity and presenting the authors' own experience. Knowledge and skills related to childhood obesity therapy have become essential for primary and pediatric subspecialty care clinical teams. For more than two decades, the American Academy of Pediatrics and its members have collaborated with multiple scientific and professional organizations to improve clinical care for overweight and obese children.

Results: Dietitians' interventions led to significant improvements in dietary lifestyle, a mean reduction in BMI and percentiles, increased adherence to physical activity, and decreased dysfunctional eating behaviors. Success in treating childhood obesity requires a multidisciplinary approach, including the integration of age-appropriate nutritional models and physical activity, with special attention paid to the family and other environmental factors that can significantly influence outcomes.

Conclusions: Nutritional assessments should focus on key obesity-related areas within the family context. Recent expert recommendations for assessing and treating pediatric obesity provide a framework that includes multidisciplinary teams.

Keywords: obesity, pediatrics, nutrition therapy

LOWER URINARY TRACT INFECTIONS IN IRRITABLE BOWEL SYNDROME: ASSOCIATIONS WITH EATING BEHAVIOR

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Background: Lower urinary tract infections (LUTIs) and irritable bowel syndrome (IBS) are conditions that share several common aspects despite affecting different systems. Both are frequently encountered in young women, can be influenced by dietary habits, and involve altered microbiota and heightened nervous system sensitivity. While the role of diet in preventing and treating LUTIs remains unclear, certain foods have been identified as triggers for IBS symptoms. Given these shared factors, understanding the impact of dietary behavior on both conditions may provide insights into symptom management and prevention.

Methods: A cross-sectional study conducted in 2024 included two groups of women selected through dietetics clinics in Targu Mures county - one with a history of recurrent LUTIs and another diagnosed with IBS, both without other known underlying conditions. Participants completed a rapid dietary habits assessment questionnaire. The study design, eligibility criteria, and data collection method were structured to identify nutritional patterns relevant to both conditions.

Results: Dietary behavior analysis revealed several common trends in both groups: low consumption of fresh vegetables and fruits, preference for fast food, salty and high saturated fat snacks, processed sweets, and increased intake of sweetened beverages and alcoholic drinks.

Conclusion: Unhealthy food choices demonstrated substantial similarity between the two groups evaluated. Future research should explore the potential interdependence between IBS and RLUTIs from the perspective of dietary habits, assessing possible shared mechanisms contributing to symptom aggravation.

Keywords: Urinary tract infections, irritable bowel syndrome, eating behavior.

THE ROLE OF NUTRITION IN THE PREVENTION AND MANAGEMENT OF OPHTHALMOLOGICAL DISORDERS

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Objective: This study's purpose was to highlight that a correct and healthy diet could prevent or slow the progression of eye diseases that may eventually lead to blindness.

Methods: The study aimed to analyze the diets of individuals who agreed to participate and the presence or absence of eye conditions. To determine the impact of proper nutrition on eye health, a comparison was made between the habits of people who wear glasses and those without visual impairments. A questionnaire was designed and distributed online. A total of 101 individuals of different ages and both sexes completed the survey. The questionnaire covered health status, smoking habits, medical history, place of residence, dietary patterns, and the use of food supplements. It was anonymous, and all personal data was used strictly for academic purposes.

Results: The study found a close link between the risk of developing eye diseases and lifestyle factors, especially nutrition. Diets rich in sweets, refined carbohydrates, fast food, and processed meats, as well as smoking, were associated with a higher prevalence of vision problems. In contrast, a higher intake of vegetables (e.g., kale, carrots), fruits (e.g., lemons, blackberries), oilseeds, fish, and supplements such as vitamin C, beta-carotene, lutein, zinc, and omega-3 appeared to have a protective role in maintaining eye health.

Conclusions: The findings emphasized the importance of promoting a healthy lifestyle and increasing public awareness regarding the role of proper nutrition in preserving visual function and preventing eye diseases.

Keywords: eye diseases, nutrition, preventive food

MICROBIOME TESTING AND ABLATIVE ANTIBIOTIC THERAPY, FOLLOWED BY FECAL MICROBIOME TRANSPLANTATION, CAN SAVE COLECTOMY IN IBD REFRACTORY TO MULTIPLE BIOLOGICAL THERAPIES - A CASE REPORT

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Introduction: In many cases of IBD refractory to biological therapy and with a cancerous history, colectomy is still the last therapeutic option for severe pancolitis. Microbiome analysis in these cases may reveal an aggravating pathogenic bacterial colonisation independent of the underlying disease. Ablative antibiotic therapy combined with Fecal Microbiome Transplantation (FMT) may allow a gut-saving treatment strategy and restore the efficacy of biological therapy in these cases, thus having a gut-saving effect.

Methods: A 41-year-old male patient presented to our clinic in 2019 for severe biological therapy with clinical symptoms of refractory pancolitis. He had a history of IBD treated at another institution since 2010, for which he had been treated over the years first with 5 ASA, then steroid and Azathioprine, and later with Infliximab and Adalimumab and Vedolizumab. The diagnosis was initially considered as Ulcerative Colitis and then as Corhn's disease based on endoscopic examination and histology. In 2018, a 30 mm diameter clear cell renal cell carcinoma with T1N0M0 stage was detected in the right kidney, which was successfully surgically removed. He subsequently relapsed with no symptoms for 1 year. Biological treatment was not an option thereafter, so Azathioprine treatment was tried, without success. Before colectomy, the patient was referred to our institution for microbiome cluster analysis.

Results: A fecal microbiome analysis was performed by S16 amplicon sequencing, which showed a retained diversity (86 percentile) and a severe Fusobacterium nucleatum colonization (20.46%). After 14 days of oral 4x125mg/day Vancomycin ablative eradication, Mesalazine and Ustekinumab biological therapy was initiated. Inflammatory markers (CRP, calprotectin) and clinical symptoms showed complete remission. Repeated microbiome analysis after ablative antibiotic therapy demonstrated a critical diversity reduction (11p) and eradication of Fusobacterium colonisation (0.8%). Subsequently, he underwent 4xFMT at the Department of Internal Medicine, University of Szeged, to restore diversity. 2 years after FMT, after targeted feeding therapy, microbiome analysis again showed that diversity was recovered (89 percentile), Fusobacterium colonisation was low (0,12%).

Conclusion: Pathogenic dysbiosis associated with IBD may present clinically as refractory disease to biological therapy. Microbiome testing before surgical treatment should be considered in such cases.

Keywords: IBD, microbiome, fecal microbiome transplantation, intestinal barrier, diagnostics, nutritional therapy

THE EFFECTIVENESS OF THE DIETITIAN'S INTERVENTION IN THE NUTRITIONAL MANAGEMENT OF PHENYLKETONURIA IN CHILDREN

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Objective: This study aims to highlight the dietitian's role in managing phenylketonuria in pediatric patients by reviewing current international and national guidelines, nutritional interventions, and their impact on metabolic control and quality of life.

Methods: A narrative literature review was conducted using scientific sources indexed in PubMed, focusing on studies published between 2016 and 2025. The analysis was complemented by recommendations from the National Guideline for the Diagnosis and Treatment of Phenylketonuria issued by the Romanian Ministry of Health. Selected articles evaluated dietary interventions, adherence to low-phenylalanine diets, neurocognitive outcomes, and the quality of life in children with phenylketonuria.

Results: Specialized literature supports the effectiveness of low-protein diets supplemented with medical formulas in maintaining metabolic control and preventing neurological impairment. Compared to standard approaches, intuitive dietetic interventions improve treatment adherence and support normal cognitive development. The dietitian plays a vital role in family education, nutritional counseling, and dietary adaptation according to age and context (school, holidays, puberty). In Romania, limited access to special foods and the need for continuous professional development remain significant challenges.

Conclusions: In the nutritional management of pediatric phenylketonuria, the dietitian's involvement improves metabolic outcomes and patient quality of life. Strengthening multidisciplinary care teams, enhancing access to dietary resources, and integrating digital tools are recommended to support long-term adherence and individualized nutritional planning.

Keywords: phenylketonuria, nutritional management, dietitian

NUTRITIONAL STATUS AND DIETARY BEHAVIORS OF A GROUP OF SHIFT WORKERS

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Objective: This study aims to evaluate the impact of lifestyle and dietary habits on body composition among shift workers, based on initial anthropometric measurements and a 3-day food diary. It also explores how eating behaviors are associated with health parameters such as muscle mass, body fat percentage, and hydration status, about the participants' fixed or rotating work schedules.

Methods: A total of 214 adult participants were included in this cross-sectional study. Each individual underwent a series of body composition assessments, including weight, fat mass, muscle mass, Body Mass Index (BMI), metabolic age, visceral fat, and total body water percentage. Additionally, systolic and diastolic blood pressure, heart rate, and peripheral oxygen saturation were measured. Out of the total group, 84 participants also completed a 3-day food diary questionnaire, which recorded daily hydration levels, physical activity, and self-reported mood.

Results: The study identified distinct nutritional patterns and body composition differences across work shifts. Night shift workers had the highest average body fat percentage and the lowest total water content, while morning shift workers maintained better hydration and more regular meal patterns. Participants working in rotating shifts showed a reduced muscle mass compared to those with fixed schedules. Across all groups, low water intake was associated with less favorable anthropometric indicators, highlighting a potential nutritional vulnerability among night and rotating shift workers.

Conclusions: Workers engaged in rotating shifts exhibit a more imbalanced metabolic profile, greater variability in sleep duration, and less stable physiological parameters than those with fixed schedules. These findings underline the detrimental impact of irregular work rhythms on overall health status.

Keywords: shift work, nutritional assessment, eating behavior

NUTRITIONAL INTERVENTION IN TYPE 2 DIABETES WITH COMPLICATIONS: CASE REPORT

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Objective: We aimed to highlight the importance of lifestyle changes in improving biochemical parameters and overall health outcomes by presenting the case of a 67-year-old patient with a long-standing history of type 2 diabetes and multiple associated complications.

Methods: Nutritional status was assessed through clinical anamnesis, specific questionnaires, and a food frequency questionnaire, revealing an unhealthy diet high in fried foods, saturated fats, and alcohol, with poor adherence to medical advice. A 6-month intervention included a personalized antioxidant-rich diet, reduced refined sugars and alcohol, omega-3 and vitamin D supplementation, sodium and medication rigorously monitoring, and daily 50–90-minute walks added. The patient responded well to the recommendations.

Results: At 6-month follow-up, notable improvements were observed: fasting glucose dropped by 61.3% (225 to 87 mg/dL), HbA1c by 36.8% (9.5% to 6.0%), and blood pressure from 145/94 to 123/71 mmHg. Body weight decreased from 77.1 to 64.9 kg, with Body Mass Index reduced from 28.32 to 23.84 kg/m^2. Lipid profile improved markedly: total cholesterol fell by 48.1%, low-density lipoproteins by 60.9%, triglycerides by 59.4%, while high-density lipoproteins increased by 29.8%. Inflammatory markers also declined: C-reactive protein (5.2 to 1.8 mg/L), fibrinogen (420 to 310 mg/dL), and Interleukin 6 (8.5 to 3.2 pg/mL).

Conclusions: Adopting a balanced nutritional regimen, with strict glycemic control and lifestyle changes, significantly impacted the patient's progress.

Keywords: complications, nutritional intervention, type 2 diabetes

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OPTIMIZING NUTRITIONAL STRATEGIES FOR A GROUP OF TENNIS PLAYERS: SIX MONTHS OF BODY COMPOSITION INTERVENTION

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Objective: Professional male tennis players participating in complex, high-intensity activities are travelling frequently and, therefore, are at risk of inadequate nutrition and impaired recovery. This study aimed to determine if personalized nutrition and supplementation protocols significantly improve body composition in a group of male tennis players.

Methods: The research was developed over a 6-month period in Belgrade, Serbia, starting with baseline measurement (BMI, body fat, and muscle mass) and a 6-month follow-up, data being recorded with a Tanita device. Each participant received personalized menus based on nutrients, calories, and food frequency calculations, also total calorie needs being personalized based on daily activity and exercise intensity. In addition, each athlete received a supplement program (with protein, creatine, magnesium, vitamins and minerals).

Results: Most players (88%) demonstrated significant reductions in body fat (2–4%) and increases in muscle mass (2–5 kg), correlated with strong adherence to the recommended diet. Before the program, players weighed, on average, 82.45 kg (SD=3.22), and after 6 months, the average weight became 79.28 kg (SD=3.10), suggesting significant weight loss during the intervention.

Conclusions: Personalized dietary interventions and the use of supplements can effectively optimize body composition in professional male tennis players. Future work measuring direct on-court performance could better clarify the competitive advantage of these changes.

Keywords: tennis, nutrition, performance

INFLUENCE OF GLUTEN-FREE DIET ON BLOOD MARKERS IN HASHIMOTO'S THYROIDITIS

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Background: Chronic autoimmune Hashimoto's thyroiditis (HT) is an endocrine pathology characterized by progressive damage to the thyroid gland due to lymphocytic infiltration of the thyroid parenchyma. Both genetic and environmental factors, such as pollution, stress, a sedentary lifestyle, gluten sensitivity, low vitamin D intake, and lactose intolerance, can affect the progression of autoimmune diseases. Gluten can compromise the integrity of the tight junctions of the epithelium, favoring the establishment of intestinal dysbiosis.

Methodology: The present case study aimed to evaluate the impact of nutritional intervention on the anthropometric, biochemical, and clinical parameters of a 49-year-old patient diagnosed with TH, without other declared pathologies. The intervention was carried out over three months (January – March 2025) and included adjustments to the dietary plan based on the patient's metabolic needs and specific objectives.

Results: Weight changes, body mass index, waist circumference, relevant biochemical markers, lipid profile, and thyroid parameters were monitored. The outcomes were good, and the personalized nutritional plan was followed by lifestyle changes.

Conclusion: The gluten-free diet was associated with a significant improvement in symptoms, suggesting a beneficial effect on clinical and anthropometric parameters.

Keywords: autoimmune disease, gluten-free diet, Hashimoto's thyroiditis

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PERSONALIZED NUTRITION STRATEGIES IN INTENSIVE CARE

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Background: Critically ill patients in intensive care units (ICUs) are at significant risk of malnutrition, which can lead to muscle atrophy, polyneuropathy, and complications in post-hospital recovery. Inadequate nutritional intake increases the risk of mortality associated with the illness, while appropriate nutritional support has a significant impact on clinical outcomes for critically ill patients. Despite the importance of nutrition, ensuring adequate intake in ICUs remains a challenge, with many hospitals lacking specialized nutritionists.

Methods: Recent guidelines, including those from the European Society for Clinical Nutrition and Metabolism (ESPEN), recommend initiating enteral nutrition (EN) or parenteral nutrition (PN) within the first 48 hours of hospitalization. EN is preferred, but PN can also be safely used when EN is not feasible. The use of indirect calorimetry is recommended for assessing energy consumption in critically ill patients, although this practice is not widely implemented.

Results: Nutritional management of critically ill patients must be individualized, tailored to the patient's needs, the specifics of the disease, and genetic factors. Advances in "omics" (genomics, proteomics, metabolomics) enable the development of personalized nutrition based on the patient's genetic profile, thereby improving biological responses to nutritional treatments.

Conclusions: To ensure proper care, it is necessary to integrate nutritionists, geneticists, and other specialists into ICU teams. In this context, personalized nutrition becomes an essential tool for improving clinical and functional outcomes for critically ill patients, with emerging technologies such as AI, genomics, and metabolomics playing a crucial role in optimizing nutritional treatments.

Keywords: nutrition, critical illness, personalized diet

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DIAGNOSES, LIFESTYLE, AND DIET PLANS IN MENOPAUSE

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Background: As ovarian estrogen production declines in middle-aged women and eventually stops, it is estimated that over 47 million women worldwide enter perimenopause/transition each year (between 45 and 55 years of age and lasting 2-10 years long); of these, over 70% will experience musculoskeletal symptoms and 25% will have disability-related symptoms. This editorial highlights the central preventive health interventions for women over 45, facing the impact of menopause.

Material and method: Current research supports the importance of a lifestyle span, adapted to each woman, and which includes: anti-inflammatory diet, resistance exercises (resistance training, in smaller repetition sets, which tend to increase muscle strength), mobility and balance exercises (walking, swimming), physiotherapy, adequate hydration (water and chamomile or mint tea), stress management (meditation, breathing techniques and yoga), rest (quality sleep is essential for the body's recovery and hormonal balance) and quitting smoking and excessive alcohol.

Results: The personalized diet should help maintain glycemic balance (to avoid the appearance of abdominal fat, the risk of diabetes or stroke, anxiety or depression, low energy, and the phenomenon of brain fog). Among the recommended foods are eggs and other animal sources of protein, extra virgin olive oil, turmeric, blueberries, seeds, broccoli, and pomegranates. If necessary, vitamin D, magnesium, vitamin K2, or local anti-inflammatory ointments are supplements to consider.

Conclusions: The symptomatology of the menopause period is varied and creates discomfort and metabolic imbalance. Anamnesis is very important in preparing for an intervention plan. Experts recommend a balanced lifestyle, a Mediterranean-type diet, adapted food supplements, moderate physical exercise, sleep management, and a positive attitude.

Keywords: menopause, anti-inflammatory diet, lifestyle, musculoskeletal syndrome

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THE EFFECTIVENESS OF NUTRITIONAL INTERVENTION IN INSULIN RESISTANCE AMONG OVERWEIGHT PATIENTS

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Objective: Our goal was to determine the proportion of participants who successfully reversed their insulin resistance, to design a standardized nutritional intervention protocol for managing insulin resistance in overweight individuals.

Methods: The study was conducted in a private clinical setting on a sample of 10 individuals, over three assessment phases. The Tanita body composition analyzer was used throughout all stages, while HOMA index laboratory testing was performed at the initial and final stages. The intervention consisted of adherence to a low-carbohydrate diet combined with the administration of the dietary supplement berberine for two months. The observational study, including questionnaire completion, was conducted from January to December 2022–2024.

Results: Among the study participants, 8 persons showed significant improvement in quantitative markers, effectively reversing insulin resistance, and 5 persons returned to normal weight.

Conclusions: These results demonstrate a high degree of success, supporting the development of a standardized nutritional intervention protocol for insulin resistance management in overweight patients.

Keywords: dietary intervention, insulin resistance, nutrition

THE IMPACT OF A MEDITERRANEAN LOW-CARBOHYDRATE DIET ON ANTHROPOMETRIC AND BIOCHEMICAL PARAMETERS IN A FEMALE PATIENT WITH POLYCYSTIC OVARY SYNDROME (PCOS)

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Objective: This paper presents a case study evaluating the effects of a Mediterranean low-carbohydrate diet on anthropometric and metabolic markers in a female patient diagnosed with polycystic ovary syndrome (PCOS). The aim is to highlight the role of dietary intervention in improving insulin sensitivity and weight-related parameters in PCOS management.

Methods: The case involves a 34-year-old woman with PCOS, who underwent a 6-month nutritional intervention focusing on a Mediterranean diet low in carbohydrates. The plan emphasized fresh vegetables, lean proteins, healthy fats, and reduced high-glycemic carbohydrates. Anthropometric (weight, BMI, waist circumference) and biochemical parameters (fasting insulin and HOMA-IR index) were measured at baseline and the end of the intervention.

Results: After 6 months, the patient showed notable improvements: body weight decreased from 90.2 kg to 86.8 kg, BMI dropped from 33.6 to 32.3, and waist circumference reduced from 98 cm to 90 cm. Fasting insulin levels declined significantly from 16.6 µU/mL to 8.5 µU/mL, and the HOMA-IR index improved from 3.5 to 1.8, indicating enhanced insulin sensitivity and reduced metabolic risk.

Conclusions: This case demonstrates the efficacy of a tailored Mediterranean low-carbohydrate diet in managing PCOS symptoms. The intervention led to meaningful reductions in weight and insulin resistance, supporting the growing evidence that diet plays a central role in treating PCOS. Nutritional counseling and education should be integral parts of PCOS management strategies.

Keywords: PCOS, Mediterranean diet, low-carbohydrate diet, insulin resistance, HOMA-IR, nutritional intervention, body weight, metabolic health

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THE ROLE OF THE MICROBIOME IN THE MANAGEMENT OF THERAPY-RESISTANT EPILEPSY – A CASE STUDY

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Objective: To explore the relationship between therapy-resistant epilepsy and the gut microbiome through a complex case study, focusing on the therapeutic relevance of decreased microbial diversity and pathogenic dysbiotic strains.

Methods: A 28-year-old female patient with long-standing therapy-resistant epilepsy and known encephalopathy was evaluated. Stool Genomic Testing revealed multiple pathogenic dysbiotic strains (Clostridioides difficile, Bacteroides vulgatus, Ruminococcus gnavus, Escherichia Shigella coli, Bacteroides fragilis), critically low microbiome diversity, and markedly elevated fecal zonulin and calprotectin levels. Following an ablative antibiotic regimen and fecal microbiota transplantation, therapeutic response was monitored through clinical, neurological, and microbiological parameters.

Results: After treatment, seizure frequency decreased significantly (from 2–3 per day to approximately 6 per month), and the patient's stool consistency and general condition improved. Microbiome diversity increased from the 6th to the 38th percentile, several pathogenic strains were markedly reduced, and intestinal barrier function markers normalized.

Conclusions: This case supports the association between microbiome dysfunction and therapy-resistant epilepsy and highlights the clinical relevance of targeted microbiome modulation.

Keywords: epilepsy, encephalopathy, microbiome, fecal microbiota transplantation, intestinal barrier, diagnostics, nutritional therapy

NUTRITIONAL CARE IN DEMENTIA: INSIGHTS FROM A CASE STUDY

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Objective: Patients with dementia have issues related to dysphagia and gastric motility, and this can result in malnutrition, dehydration, weight loss, and pneumonias. The use of psychotropic drugs such as Olanzapine complicates nutritional status, causing side effects like constipation. This case report reveals the complex link between dementia, drugs, and nutrition in a male patient with an impacted esophageal bolus and multiple fecalomas.

Methods: We present a 65-year-old male with malnutrition, mixed dementia, with a regular solid diet and olanzapine as current medication for agitation and aggression. The clinical presentation of the patient was with abdominal pain, emesis and dysphagia, constipation, and reduced oral intake. Following the computer tomography scan, a distal esophageal food bolus and large fecal masses are observed in the descending and sigmoid colon. An emergency endoscopy was conducted to remove the ingested bolus.

Results: During hospitalization, the patient followed a diet consisting of pureed food and received laxative medication as needed, along with enemas when necessary, and the change of psychiatric medication (from olanzapine to tiapride). Along with family support, the patient continued a pureed diet at home, rich in proteins, fiber, and carbohydrates, resulting in an improvement of BMI from 15.4 to 16.5 over a period of six months.

Conclusions: This case highlights the crucial role of individualized nutritional management and multidisciplinary support in the care of patients with dementia. The initiation of texture-modified and nutrient-rich foods, customized treatments, and sustained caregiver involvement after discharge contributed to improvements in nutritional and neuropsychiatric status.

Keywords: dementia, nutrition, impacted esophageal bolus

CONUT SCORE: IS IT USEFUL IN CARDIOVASCULAR EMERGENCIES?

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Objective: The leading causes of morbidity and death worldwide are still cardiovascular emergencies. Recent studies have shown how closely nutritional status, systemic inflammation, and cardiovascular disease prognosis interact. Originally designed to evaluate hospital malnutrition, the Controlling Nutritional Status (CONUT) is an index that counts lymphocytes, total cholesterol, and serum albumin into a single score. In this study, we aimed to evaluate whether the CONUT score could be helpful as a prognostic tool in patients with cardiovascular pathologies.

Methods: We synthesized in this review the most critical results from clinical studies and meta-analyses released between 2018 and 2025. Using terms including "CONUT score" and "cardiovascular emergencies," studies were found by methodical searches on PubMed. New studies have investigated the link between CONUT score and clinical outcomes, including mortality, major adverse cardiovascular events (MACE), myocardial reinfarction, infection, and hospital readmission.

Results: CONUT Score was independently associated with a higher incidence of significant adverse cardiovascular events. New studies combined in a meta-analysis showed patients with high CONUT scores had noticeably higher rates of mortality, cardiac death, myocardial reinfarction, and MACE. Rising CONUT scores consistently revealed worse short- and long-term prognoses across all examined studies.

Conclusions: Early risk stratification in patients with cardiovascular emergencies can be done with a practical and affordable CONUT score. According to available data, the CONUT score is a valid prognostic indicator for cardiac patients. To further confirm its predictive ability and ascertain its function in directing therapeutic interventions, prospective studies are necessary in the future.

Keywords: CONUT Score, cardiovascular emergencies, cardiovascular outcomes

NUTRITIONAL RECOMMENDATIONS IN THE MANAGEMENT OF PATIENTS WITH ANTI-OBESITY PHARMACOTHERAPY

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Objective: This study emphasizes the critical role of personalized nutritional recommendations in enhancing pharmacological treatment's efficacy and long-term sustainability for obesity.

Method: An integrative review of current clinical guidelines and recent studies was conducted to assess the impact of structured nutritional counseling in patients treated with anti-obesity drugs (GLP-1 receptor agonists, lipase inhibitors, and combination therapies). Outcomes of patients receiving pharmacotherapy alone were compared with those receiving individualized nutritional support.

Results: Patients who combined pharmacological treatment with tailored dietary interventions showed significantly greater weight loss (up to 15%), improved waist circumference, and enhanced metabolic profiles. Additionally, better treatment tolerance and increased adherence were observed in patients who received nutritional guidance, particularly in minimizing gastrointestinal side effects.

Conclusions: Personalized nutrition plays an essential role in the success of anti-obesity pharmacotherapy. Integrating dietary counseling into treatment plans supports sustained behavior change, improves clinical outcomes, and reduces the risk of relapse. A multidisciplinary approach involving physicians, nutritionists, and psychologists is recommended to optimize long-term management.

Keywords: CONUT Score, cardiovascular emergencies, diet

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