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THE ROLE OF EMPLOYEE NUTRITION IN PROMOTING OCCUPATIONAL SAFETY

This article explores employee nutrition as a key factor in occupational safety. It highlights the links between diet quality, physical and mental performance, and workplace injury risk. Emphasising a human-centred approach, it presents recommendations for integrating nutrition into safety systems to enhance health, productivity, and accident prevention.

Keywords: *occupational safety, employee nutrition, workplace health, food policy, employee's well-being.*

The Problem Formulation

Under conditions of modern-day transformation of production processes, labour intensity growth and organisational-technical system complication, the importance of an integral approach to occupational safety guarantees is increasing. The traditional definition of occupational safety as a mechanism of measures aimed exclusively at accident and incident prevention is gradually evolving into a more extended concept that involves physiological, psychological and social aspects of an employee's performance in the production process. In this case, greater attention is now being directed at factors of the quality of sleep, level of physical activity, psycho-emotional state, and diet as factors of physiological well-being.

Modern science recognises that work functions cannot be safely and effectively carried out without the proper physiological state of the employee. Nutrition directly affects an employee's health, energy reserve, focus, endurance and general working capacity. In this regard, the issue of coordinating rational nutrition for workers is particularly relevant not only from a medical and social point of view, but also as a way to optimise the efficiency of the occupational safety management system.

There is a profound reevaluation of occupational safety practices. Systemic risk control with technical and human elements is on the rise. The worker is no longer viewed as merely someone who performs work responsibilities – he is an integral part of the safety system, and his physical, psychological and emotional well-being directly influences production risks. In this context, the question of "human-centricity" for the occupational safety management system is gaining prominence.

Against the backdrop of increased responsibility for workers' health and safety, employers and occupational health and safety specialists particularly emphasise including such intangible factors as psychological (stress, motivation, anxiety level, emotional stability), cognitive (attention, memory, perception, decision-making ability), social (microclimate in the team, trust, leadership, corporate culture), organisational (management practices, management style, communication system), information factors (availability and quality of information, timeliness of data transmission) into the safety system. In particular, the microclimate in the team, the level of stress, fatigue, job satisfaction, the control and regulation of employees' diets, compliance with the diet, and ensuring the availability of healthy food in the workplace are all important.

Among the main arguments in favour incorporating nutrition into the safety system is evidence from numerous studies confirming the connection between an unbalanced diet and lowering cognitive functions, metabolic pathologies, chronic fatigue, and occupational burnout [1-4]. In these cases, the chance of making mistakes increases considerably, especially in high-risk industries (energy, transport, healthcare, military, etc.).

Currently, the most serious attention on the part of employers and researchers is directed to the human factor as a determining factor of occupational safety. This is not only a compliance with prescriptions or demands, but a realisation of the state where the employee works. Health, tiredness, mental strain, and means of restoration are the areas of study and regulation.

In such a paradigm, the physiological maintenance of the worker, particularly regarding providing proper nutrition, takes special importance. Adequate provision of nutrients, vitamins, minerals, and fluids keeps one healthy and allows the body to appropriately deal with

the stress factors, temperature change, and physical and mental stress [5, 6].

Workers with good access to food and a healthy diet exhibit higher productivity, reduced error, fewer accidents and improved job satisfaction. On the other hand, poor diet, malnutrition, and consumption of high sugar or high-fat foods are associated with the risk of impaired performance, sluggishness, and impaired reaction time – all direct implications for the safety of production processes.

In addition, after the expansion of sedentary work, widespread implementation of modern technologies and minimal physical activity, nutrition plays an even larger role in affecting the metabolic health of the employee and, therefore, the ability to react appropriately to non-standard conditions.

The aspect of the research used is no less significant. In Ukraine and most countries, catering organisations at enterprises are still insufficient: workers are often forced to eat chaotically, irregularly, and hurriedly. Nutrition is usually reduced to snacks that cannot provide the body with the resources required. It is here that it is essential not only to identify the needs of the employees but also to prepare proposals for the employers in the introduction of nutrition into the system of occupational safety – e.g., in the format of organizing conditions for a balanced lunch, the structuring of healthy food in canteens, the organization of education programs, etc.

Therefore, the subject's relevance is caused by the need to construct the modern paradigm of occupational safety, which addresses a multidisciplinary approach to the employee as a bio-psycho-social system. In this case, nutrition is not just a physiological need but a risk reduction measure, a means of ensuring work capacity, and a safe workplace.

Literature Review

In scientific literature, the issue of employee nutrition in occupational safety is considered in various contexts: as part of health conservation, as a labour productivity factor, and as part of occupational risk prevention [7-12]. However, few scientific publications have considered the issue directly, highlighting the link between employee nutrition and the occupational safety management system. Given the increasing significance of the human element in safety protocols, the identified issue demands a more in-depth analysis and organisation.

Among the basic sources that consider the influence of nutrition on performance is research into occupational hygiene and human physiology [13, 14], which underlines the significance of supplying the employee with the required nutrients to ensure a functioning state. The studies focus on the fact that irrational nutrition can lower the body's resistance to harmful production factors, fatigue, a decline in attention, and mistakes in work directly influencing occupational safety.

The World Health Organisation also pays much attention to nutrition to prevent occupational disease. In its reports, the WHO stresses that an equilibrium diet is one of the leading indicators of the prevention of chronic diseases and is often an indirect reason for reduced working capacity and increased rates of injury. These are especially prevalent for cardiovascular diseases, type 2 diabetes, metabolic syndrome, and obesity in low-physical activity employees.

In occupational safety, recent studies increasingly include nutrition in a comprehensive risk management system. For example, the authors [15, 16] refer to the interdependence of workplace dietary and behavioural patterns. Notably, it is emphasised that a diet full of sugar and saturated fats is associated with decreased attention and increased risks of production errors and accidents.

Of particular interest are study papers in the field of ergonomics, which show close dependence of the operator's physiological states on the effectiveness of his interaction with technology [17-19]. For example, the study refers to the fact that even minor physiological disorders, such as fatigue, nutritional stress or any other type of reason, significantly change the psychological capabilities of the employee. It is especially significant for operators of complex technological processes with significant error costs.

The papers [20, 21] highlight the issue of providing a health-saving environment at companies, in which nutrition is one of the measures of the company's safety culture. The authors emphasise that creating conditions for a proper meal at the company – a dining room, a buffet, restrooms – increases job satisfaction and reduces professional burnout.

In occupational medicine, some research considers the role of nutrition in preventing occupational diseases or exposure to harmful substances. For example, in the study of workers in the metallurgical industry and chemical production, nutrition with a high antioxidant and protein content is one of the adaptation factors for an unfavourable environment. In particular, authors of studies [22, 23] refer to the necessity of a differentiated attitude towards the composition of employees' diet based on work conditions.

Sociological studies recording employees' attitudes to food also play an essential role. In some of the studies [24, 25], it was noted that the employees provided with good quality food throughout the working day were less likely to suffer from headache, irritability, and fatigue than those who took food on the go. In some pilot schemes, such as "Healthy Workplace" [26], introducing a healthy food system at companies has significantly reduced temporary disability.

It is also worth studying employees' eating behaviour using mixed work arrangements (remote work or mixed). The articles [27-29] specify that loneliness, non-standard working schedules, and the absence of

access to hot food can be the reasons for unhealthy eating habits, affecting long-term work safety and efficiency.

Papers in leading publications primarily address general health or diet problems without mentioning the occupational safety system per se. Thus, further research is urgent from both a scientific and practical perspective to integrate nutrition issues into safety criteria for managing a safe production process.

Aim

The goal is to substantiate the role of rational nutrition of employees as an essential factor in ensuring occupational safety, as well as identify opportunities for integrating nutrition into the occupational safety management system at enterprises, taking into account the physiological, psycho-emotional and organisational aspects of work.

Research methods

Theoretical scientific research methods were used, enabling proper analysis of existing scientific methods to encapsulate the results of previous research and build an understanding of the issue.

The analysis of scientific literature was used to examine professional literature on hygiene, physiology, occupational safety, ergonomics, occupational medicine and production organisation. It enabled the description of the theoretical foundation of the research and the identification of the extent to which nutrition is considered in occupational safety.

Results and Discussion

Nutrition as an occupational safety factor.

Within the occupational safety system, the human factor is one of the most critical variables affecting work procedures' efficiency, reliability and viability. Therefore, supervision of the employee's physiological state, i.e., diet, should become an integral part of the occupational risk reduction strategy.

The concept of rational nutrition in working conditions. Rational nutrition in working activity is a system of food consumption based on science, which equilibrates energy expenditure, the body's physiological needs and the character of working conditions. Contrary to the general law of healthy nutrition, employees' rational nutrition considers the specifics of working conditions, bodily or psychic stress, shift durations, climatic conditions and professional activity hazards.

This means that rational nutrition is not only about the content of calories or the balance of macronutrients, including proteins, fats, and carbohydrates, but also about the timely intake of meals, the correct distribution of food throughout the day, and the correspondence between nutrition and the biorhythms of the employee. Another essential function of nutrition should be

Despite individual scientific results, the science of nutrition has not yet developed an established safety system of knowledge for occupational safety.

Systematisation and classification were used in the organisation of existing scientific means of investigating the impact of nutrition on the physiological and psychological condition of employees, and to establish this factor's place in the whole system of occupational safety.

Systematisation and classification were used to rank the then-existent scientific approaches of investigation of the effect of nutrition on the physiological and employee's psychological state and to clarify the place of this factor in the overall system of occupational safety.

Comparative analysis made it possible to compare different approaches to the role of nutrition in professional activity, studying national and international experience in integrating nutrition into occupational safety measures, and estimating their effectiveness in preventing occupational risks.

Scientific provisions were used to clarify the meaning and content of essential concepts such as "rational nutrition", "physiological safety", and "human factor in occupational safety" and integrate them into the scientific vocabulary of the investigation.

These theoretical concepts offered the potential to develop an integral understanding of the role of nutrition in modern occupational safety management and to support the requirement of its positioning as a single factor in the occupational safety system of companies.

protective, showing protection against the adverse effects of factors of production, the strength of the body's adaptive ability, and preserving resistance to stress and fatigue.

Fundamental laws of reasonable nutrition for employees. The most significant rules of reasonable nutrition among employees from the viewpoint of labour safety are:

1) the adequacy of the energy value. Nutrition must meet the energy costs, based on the nature of work. For example, the daily requirement for employees who engage in heavy physical activity can be 3000 - 4000 kcal; for clerical employees, it can be about 2000 - 2500 kcal.

2) nutrition balance. Preservation of the optimal proportions of proteins, fats, carbohydrates, vitamins, minerals and water. As an example, to work well, ingestion of B vitamins, Omega-3 fatty acids, iron and magnesium is required;

3) regularity. Adherence to a diet regimen (3-4 meals per day), which regulates the level of blood glucose, prevents hypoglycemia, which disrupts the ability for concentration and decision-making;

4) quality and safety of the product. Use fresh, certified products containing low preservatives, trans fats and added sugar;

5) convenience and accessibility. Organisation of conditions for an employee's full-scale diet on the premises or nearby: presence of a canteen, buffet, recreation room with microwaves, refrigerators, etc.

Compliance with these principles is necessary for the normal functioning of the employees.

The relationship between diet quality and working performance, attentiveness, and stamina. Scientific studies indicate a direct impact of the quality of food on the extent of the employee's performance, attentiveness and stamina. Ingestion of low-quality food, especially foods with a high glycemic index, leads to rapid alterations in blood glucose levels, which cause a feeling of drowsiness, reduced focus, and increased irritability.

A sufficient amount of protein in the diet helps in tissue repair, maintenance of muscle strength, and synthesis of neurotransmitters. Brain activity is needed regarding fatty acids, and vitamins are required to support metabolic functions. Poor nutrition severely deteriorates the ability to make quick decisions and decreases adaptability to stressful operations, directly impacting the safety of professional operations.

Under physically demanding occupations, an unsuitable diet can create lower endurance, weakness of muscles, and seizures, which can increase the dangers of injury. On the other hand, under mentally stressful activities – such as driving or operator work – eating disorders lead to reduced focus, errors in instructions, and deceleration of reaction rate.

The influence of nutritional disorders on the decrease in safety. Arrogance in terms of the diet or regular consumption of low-quality food can negatively affect the system of occupational safety. The most typical are:

1) physical and mental exhaustion from a lack of energy and nutrient consumption. The employee becomes less focused, reaction slows down, and performance capabilities in emergencies deteriorate;

2) metabolic conditions that gradually result in persistent illnesses like obesity, diabetes, and hypertension. All of them are conditions that lead to a higher risk of acute disability, heart attack, or syncope in the workplace;

3) psycho-emotional imbalance. Trace elements deficiency, particularly magnesium and B vitamins, causes irritability and anxiety and worsens the team's interaction, threat of conflicts or inappropriate behaviour under challenging conditions of production;

4) dehydration, especially during hot workshop or field work, results in thermoregulation disorders, muscle spasms, and worsening cardiac function.

Thus, nutrition is not just a mode of satisfying a basic physiological need but also a critical field in ensuring occupational safety, directly affecting an employee's ability to perform their work without causing injury to themselves and others.

Organisation of employee nutrition.

Organising proper nutrition for employees is one of the significant elements of staff health assurance and stable and safe operation within the framework of production processes. Nutrition within the framework of modern occupational health and safety management concepts is considered a way of preventing occupational hazards, as an element of corporate social responsibility and as an employee loyalty and motivation factor.

Models of catering in business. Several main models of employee catering organisation differ in the level of employer involvement, depth of integration into the production process and the degree of control over the quality of food products. The most common are:

1) an own canteen or company's cafe is the most extended form of catering, where meals are cooked daily according to a detailed menu. This variant provides an opportunity to control the quality of products, adherence to sanitary and hygienic requirements, as well as meeting the special needs of some groups of employees (e.g., with heavy physical labour);

2) outsourcing catering services – involving third-party organisations that deliver ready dishes or serve the company based on rented facilities. It reduces the employer's costs in organising the process, but can facilitate control over food quality.

3) food courts, vending machines, buffets. A simplified model of catering, where a minimal range of food and drinks is provided to the employees. Suitable for small offices or businesses, but does not usually provide a complete diet;

4) meal compensation or corporate cards/subscriptions. It is the company's financial contribution to the employees for meals outside the company. Despite the convenience for the employer, this model does not guarantee compliance with the principles of healthy nutrition.

Applying one or the other model depends on the size of the company, its budget, field of activity and general policy on labour safety.

Ukrainian practice. In Ukraine, the catering organisation in most enterprises is low. Compared to the EU countries, the situation is characterised by a range of systemic issues:

1) lack of canteens – a vast majority of companies, especially in the private sector, don't have their canteens, so employees are forced to take meals "on the run", eating in the nearest stores, vending machines or bringing from home;

2) irregularity of meals – due to the high tempo of work, unstable timetable, lack of time allocated for lunch, the employees skip or eat irregularly throughout the day. It negatively affects the level of working capacity, especially during the second half of the shift;

3) low food quality – even where there are formal, organised meals available (e.g., in school or hospital premises, state institutions), it is often limited to a one-

type menu, a limited variety, and a lack of fresh vegetables or quality protein products;

4) lack of food policy – on the company level, there is no strategy or internal policy regulating the organisation of food, its coordination with occupational safety, prevention of occupational diseases or employees' well-being;

5) neglect of work specifics – food is not adapted to the specifics (night shifts, increased physical activity, work in extreme conditions).

All this leads to employees' nutrition becoming a personal matter, and there is no proper corporate support mechanism.

Foreign practice. In the European Union, the USA and Japan, employee nutrition is part of corporate culture and occupational health and safety management systems. Some examples:

1) Japanese companies have widely implemented a system of corporate nutrition (shain shokudou) with full menus designed to support the physiological balance of the employee. The menu is adapted to the age and professional characteristics of the employee, includes seasonal food and considers disease prevention;

2) in the context of the Healthy Workplace programs in Germany, the Netherlands and Sweden, food policies are implemented in practice: the employees are provided with free or partially paid healthy food, enlightenment campaigns on healthy nutrition are conducted, and standards for the quality of food products at the company are established;

3) Google, Microsoft, Apple, and other American technology giants offer employees free meals in corporate cafeterias. The emphasis is on the availability of healthy food - salad bars, protein snacks, gluten-free food, etc. It is all a part of the corporate wellness policy.

These examples confirm that proper food organisation can be a valuable tool of occupational safety management and, at the same time, contribute to productivity and motivation improvement and staff turnover reduction.

Recommendations for the introduction of an effective food system in companies. Drawing on the evaluation of theoretical references and real-world practices, the subsequent suggestions can be put forth for establishing an efficient food system for staff members:

1) detailed internal food policies of the company, which determine the principles of providing food as part of labour protection;

2) invest in creating or renovating catering facilities, equip the rooms for food consumption with microwave ovens, refrigerators, and water;

3) conclude agreements with catering organisations that provide balanced and quality food, or compensate half of the cost of lunch;

4) provide a flexible meal schedule, especially for shift employees;

5) conduct explanatory work among the personnel on the need for rational nutrition;

6) Include nutrition issues in programs for stress prevention, fatigue counteraction, and maintenance of the psychophysiological state of personnel.

Thus, the organisation of food needs to become not only a social decision, but a systematic element of risk management in labour safety.

The relationship between nutrition and the prevention of occupational injuries.

Within the occupational safety system, greater emphasis is placed on technical or organisational matters and the human factor – the employee's physiological, intellectual, and emotional status. As one of the most significant determinants of physical and mental performance, nutrition directly impacts the level of occupational injury risk. Research has proven that irregular, imbalanced or poor-quality nutrition significantly increases the risk of errors, loss of concentration, and physical exhaustion, leading to accidents. The following can be distinguished among the most significant risks arising from an employee's unbalanced and irregular diet (Table 1).

Table 1

Risks that may arise from an unbalanced and irregular diet of an employee

№	Risk	Human component of risk
1	Risk of erroneous actions when operating work equipment	1. Decreased concentration and reaction speed due to unbalanced nutrition (for example, sharp fluctuations in blood glucose levels). 2. Physical and mental fatigue due to insufficient calorie intake leads to slower reactions in critical situations. 3. Drowsiness caused by eating foods with a high glycemic index.
2	Risk of sudden disability in the workplace	1. Chronic diseases (hypertension, diabetes) due to systematic violation of the diet, which can lead to heart attacks or fainting. 2. Dehydration of the body in work conditions in hot workshops or outdoors causes thermoregulation disorders, muscle spasms and deterioration of heart function. 3. Hypoglycemia (a sharp drop in blood sugar levels) due to irregular nutrition leads to loss of consciousness.
3	Risk of interpersonal conflicts and disruption of team interaction	1. Increased irritability, anxiety and psycho-emotional instability due to a deficiency of trace elements (magnesium, B vitamins). 2. Deterioration of mood and a tendency to aggressive behaviour may result from eating "stress" foods (with a high sugar and caffeine content).

Table extension 1

4	Risk of decreased physical endurance and injury during physical activity	1. Insufficient energy and protein intake, leading to muscle weakness and decreased endurance. 2. Muscle spasms and cramps caused by dehydration or electrolyte deficiency.

Statistical information, particularly that of the International Labour Organisation (ILO), indicates that up to 25-30% of work-related injuries are indirectly related to the physiological state of the employee, namely, fatigue, dehydration, deficiency of energy or microelements, which are directly linked to nutrition. ILO reports stress that under extended working hours and shifted work patterns (night or 12-hour shifts), the accident risk is doubled if the employee is deprived of proper food or water.

In Ukraine, the data presented by the State Labour Service in recent years also indicate that a high percentage of work-related accidents are due to loss of control, lack of attention, and sudden worsening of physical condition. Such disorders are often the result of underlying physiological disorders or imbalances. The situation is particularly alarming in high-risk sectors such as construction, energy, and mining, where physical exertion is combined with hazardous working conditions and the need for constant vigilance.

Scientific research, including that of the European Agency for Safety and Health at Work, confirms that good and balanced nutrition can help to reduce the risk of workplace mistakes by as much as 20-30%. This is especially so for occupations requiring high concentration, rapid response, precise motor coordination, and quality decision-making under pressure. Improved dietary habits are thus a vital prevention component of workplace safety strategies.

Nutrition as an element of stress management in the workplace.

In modern occupational safety, nutrition is not just a source of energy, but also a way of adjusting an employee's emotional state. It is especially required in stressful conditions, multitasking, and hot work rhythms. Nutrition can be incorporated into stress control, reducing cortisol, stabilising mood, and improving the ability to adapt.

Scientific literature regarding neuropsychology and occupational medicine reveals that a deficiency in magnesium, B vitamins, and Omega-3 fatty acids harms the nervous system. Deficiency of these nutrients is raising anxiety and creating depressive states that are not apparent to the employer but are directly affecting the behavioural safety of the employee.

On the other hand, consuming "stress" foods – candy, coffee, salt – usually attempts to fill the emotional exhaustion. Such foods might momentarily alleviate mood or concentration, yet ultimately compromise general well-being and cause chronic fatigue, irritability, and even hostility.

In firms where corporate components of stress management are incorporated, the program typically includes dietary guidelines: eating often light and healthy meals, reducing caffeine consumption, organising breaks during lunchtime with breaks for relaxation, and teaching employees how their food affects their productivity and well-being.

Thus, nutrition has a systemic impact on work injuries via physical depletion, mental stress and emotional burnout. Providing employees with high-quality, timely, balanced food should be considered an accident prevention measure, not just a social benefit.

Establishing internal corporate nutrition standards, incorporating them into occupational health and safety policies, and creating an environment that promotes easy and safe nutrition should be essential in line with a modern perspective on risk management in the workplace.

Conclusions

Within the framework of conducted theoretical studies, the hypothesis was confirmed that employee's nutrition is a significant and systematically underestimated factor in ensuring occupational safety. Scientific analysis of sources, domestic and foreign experience and organisational practice of offering food shown that the condition of physical health of the employee, depending directly on the quality and frequency of food, has direct relationship with the level of labor capacity, vigilance, stress resistance and, lastly, with the probability of error making and injury.

Generalisation of the research results enables the determination of some fundamental provisions. Rational nutrition at workplaces is not just the supply of the body with energy needs, but also a constituent part of preventing fatigue, chronic diseases, and mental exhaustion, which form the background hazards for the occurrence of industrial accidents.

The nutrition principles, namely balance, regularity, and consistency with energy expenditure, must be adjusted according to the nature of work activity. Failure to follow these principles leads to decreased physical endurance, aggravation of attention, and slowed reactions – the key parameters for occupational safety.

Internal practice of holding catering at companies is typically characterised by a lack of infrastructure, non-systematic feeding, and no food policy, which serves as

evidence of the lack of integration of this element into the occupational safety management system.

International experience confirms the integration of nutrition into the company's safety mechanism, which ensures not only the reduction of injuries but also the increase in employees' motivation, productivity, and mental well-being.

As statistics and specific cases demonstrate, there is a causative link between occupational risks and nutritional pathologies. Malnutrition, overeating or dehydration can serve as root causes of industrial accidents, and official recognition of nutrition's role in the risk management system is obligatory.

Nutrition is also crucial in helping employees manage stress. Proper nutrition lessens stress, enhances mood, and boosts adaptability in high-pressure situations.

Based on the obtained outcomes, it is advisable to formulate the following realistic recommendations:

1) for employers: incorporate the question of meal organisation into the policy of labour protection, provide minimum infrastructure conditions (place to rest, access to drinking water, refrigerators, microwave ovens), conclude contracts with high-quality food suppliers, implement corporate food policy;

2) for labour protection specialists: incorporate food into prevention activities against fatigue, manage the psychophysiological condition of employees, include it in the list of risk factors, and educate employees on the impact of food on safety;

3) for researchers: continue to study the food-injury nexus in some sectors (metallurgy, transport, energy, logistics), and develop recommendations for assessing the effectiveness of food interventions in the labour protection system.

Hence, nutrition must be considered an essential component of the occupational safety system, where a systemic approach, inter-disciplinary cooperation and realisation in the work environment are required. It overlooks unnoticed dangers for employees' health, efficiency of production processes, and overall reliability of the organisational system.

Within the theoretical model of analysis, the essentially crucial function of nutrition to ensure labour safety has been confirmed; however, some of the problems require further careful examination based on empirical data and interdisciplinary approaches. The potential of the subsequent stages of research is given in the following areas.

One of the most relevant areas of further scientific investigation is conducting quantitative empirical research to establish statistically significant correlations between employees' nutritional characteristics and the frequency of work accidents.

These studies will demonstrate the investment's economic and social feasibility in systematically providing employees' nutrition.

Reasonable requirements for nutrition are relatively heterogeneous depending on the nature of labour. Therefore, one of the most promising directions is the development of professionally oriented nutritional standards considering the features of loads, biorhythms, labour conditions, shifts, and climatic conditions.

Nutrition not only exerts a physiological but also a psycho-emotional effect, which in the case of rising numbers of psycho-emotional loads at work becomes especially important. These works will allow for a more profound discussion of nutrition subjects within the field of psychosocial risks at work. They will strengthen interdisciplinary relationships between ergonomics, occupational medicine, psychology, and dietetics.

All these areas form a powerful domain for scientific research and practical developments to develop a new occupational safety culture, where the physiological requirements of the employee hold a central place along with technical and organisational safety.

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РОЛЬ ХАРЧУВАННЯ ПРАЦІВНИКІВ У ЗАБЕЗПЕЧЕННІ БЕЗПЕКИ ПРАЦІ

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У статті досліджується роль харчування працівників як важливого та системного елементу в забезпеченні безпеки праці. Акцент зроблений на взаємозв'язку між якістю та режимом харчування і фізіологічним, психоемоційним станом працівника, що безпосередньо впливає на рівень працездатності, уваги, витривалості та стресостійкості. Зроблений огляд літературних джерел, у якому підкреслено значення раціонального харчування для профілактики виробничого травматизму, зниження втоми, покращення когнітивних функцій і загального стану здоров'я працівників. У статті проаналізовано різні моделі організації харчування на підприємствах, окреслені основні проблеми української практики, такі як відсутність їдалень, нерегулярність харчування та низька якість їжі, а також представлено успішний зарубіжний досвід країн ЄС, Японії та США у впровадженні корпоративних фуд-політик. На основі отриманих даних обґрунтовано необхідність системного підходу до організації харчування як складової управління ризиками в охороні праці.

У розділі результатів дослідження розкрито взаємозв'язок між харчуванням та профілактикою виробничого травматизму. Наведені статистичні дані, які ілюструють, як недоїдання, переїдання або незбалансований раціон призводять до зниження рівня безпеки через втому, неуважність, зниження концентрації та порушення психоемоційного стану. Показано, що харчування також відіграє роль у стрес-менеджменті на виробництві, сприяючи зниженню рівня стресу та підвищенню адаптивних можливостей працівників.

У заключній частині сформульовано практичні рекомендації для роботодавців і фахівців з охорони праці щодо впровадження ефективних систем харчування на підприємствах, які сприятимуть зменшенню виробничого травматизму та покращенню загального здоров'я персоналу. Окремо визначено перспективні напрямки подальших досліджень, серед яких – емпіричне вивчення залежності між типом харчування і кількістю виробничих травм, розроблення диференційованих рекомендацій для різних професійних груп, а також дослідження впливу харчування на психоемоційний стан працівників. У статті підкреслено, що інтеграція питань харчування в систему безпеки праці є необхідною для формування комплексного, ефективного підходу до управління ризиками на виробництві і забезпечення здоров'я та добробуту працівників.

Ключові слова: *безпека праці, харчування працівників, здоров'я на робочому місці, фуд-політика, благополуччя працівника.*