



STUDY AND ASSESSMENT OF THE NUTRITION STATUS OF CATEGORY "A" EMPLOYEES WORKING WITH IONIZING LIGHT

F. I. Salomova

L. K. Abdukadirova

D. Sh. Esonova

Department of Environmental Hygiene
Tashkent State Medical University

Abstract

Providing workers in hazardous occupations with therapeutic and preventive nutrition As stated in the "Fundamentals of Labor Laws" of the Republic of Uzbekistan, the amount of food products and the nature of their impact are determined in accordance with the type of harmful factors and occupations. In this scientific study, the state of proper nutrition and provision of therapeutic and preventive nutrition of persons in contact with ionizing radiation sources was studied based on a questionnaire survey and the following results were obtained: 70% of employees do not adhere to a healthy lifestyle, and 54% of employees do not adhere to a rational diet. It was found that employees are not fully provided with milk and dairy products.

Keywords: Ionizing radiation source, diet, milk and dairy products, vitamins.

Introduction

Relevance of the topic Providing workers in hazardous occupations with therapeutic and preventive food In accordance with the "Fundamentals of Labor Laws" (Article 177 of Part 10 of the Labor Code of the Republic of Uzbekistan) and the "Fundamentals of Labor Laws" of the Republic of Uzbekistan, the quantity of food products and the nature of their impact are determined in accordance with the type of harmful factors and occupations.



Objects and Materials of the Study

A total of 23 employees of the X-ray and radiology departments of the TTA clinic, including radiologists, nurses and junior medical staff, were selected to conduct the research. Each selected person was addressed with a specially developed questionnaire. The results obtained were analyzed in comparison with the sanitary norms, rules and hygienic standards of the Republic of Uzbekistan (SanQM 0105-01 "Average daily rational norms of food consumption by sex, age, and professional groups of the population of Uzbekistan").

Results

Analyzing the results of the study, it was found that out of a total of 23 employees in the inspected facilities, 15 were female and 8 were male. It was found that 69.6% of the employees in the X-ray radiology department at the DPM were middle-aged, that is, employees aged 30 to 49. It was found that employees aged 20-29 accounted for 17.3%, and older employees - those aged 50 to 60 and older - accounted for 13.1%.

By profession, 13.2% of category "A" persons are radiologists, 13.2% are technical workers, and the majority (73.6%) are nurses and junior medical staff. When examining the work experience of employees working with ionizing radiation sources, it was found that almost 39% of them have been working with ionizing radiation sources for more than 10 years, 47.6% of employees have more than 5 years of work experience, and 13.2% of employees have up to 5 years of work experience.

To the question "Do you follow a daily meal schedule?", 72 percent of those surveyed answered "Yes, I eat 3 meals a day," 15 percent answered "No, I don't follow a meal schedule," and the remaining 13 percent said they do so sometimes. It was found that 85.7 percent of the employees who said "I eat breakfast at home" made up 73 percent of employees who said that they eat lunch outside, 14 percent of employees said that they do not eat lunch at all, and 13 percent of employees who do not eat lunch at all.

Almost 98 percent of healthcare workers surveyed reported making dinner at home.



The following answers were received to the question "What food products do you consume the most?":

70% of male employees said they limit themselves to whole grains, and 12-18% to "dry foods." Female employees, in response to the same question, reported that 38% ate whole grains, 43% ate "dry foods," and the remaining women reported consuming more sweets (19%).

Healthy life of the type main from the signs one harmful without habits to live Harmful to habits and alcoholic drinks consumption to wear, to smoke and drug addiction like defects enters.

"You are harmful. " from habits alcoholic drinks Do you drink or smoke? said to the question from male employees below answer received:

"Yes, I drink " - 6.3 percent , " sometimes. " on holidays I drink » - 54.4 percent 39.3 percent « no " I don't drink ." 3 percent of female employees answered "I sometimes drink on holidays," while the remaining 97 percent said they don't drink alcoholic beverages at all.

The following answers were obtained from male employees when asked "Do you smoke cigarettes?": 14.3 percent said they smoke regularly, 40.4 percent said they smoke occasionally, and the remaining 45.3 percent said they do not smoke at all. 98.7 percent of female employees said they do not smoke at all.

The average performance of employees who felt bad during the week is as follows: 20.1 percent of employees complained of headaches, 16 percent of back, leg, and stomach pains, and 32 percent of employees complained of increased blood pressure.

It was found that 52-54 percent of employees complain of bad mood or nervousness.

As we know, providing workers in hazardous occupations with therapeutic and preventive meals In accordance with the therapeutic and preventive "Fundamentals of Labor Laws" (Article 177 of Part 10 of the Labor Code of the Republic of Uzbekistan) and the "Fundamentals of Labor Laws" of the Republic of Uzbekistan, workers in hazardous working conditions are provided with free milk or other food products of equal value in accordance with the established norms. Unlike hot breakfasts intended for broad prevention (associated with protection from a



complex of extremely harmful working conditions), milk is usually provided for nutritional prophylaxis against the effects of a specific harmful production factor (substance). The list of harmful production factors for which it is recommended to consume milk for preventive purposes in order to avoid exposure to it includes more than 1,000 chemical substances. The free milk allowance is 0.5 liters per shift, regardless of how long it lasts.

Free milk is provided at workplaces with production factors specified in the List approved by the Government of the Republic of Uzbekistan during the days when employees are actually working. Instead of milk, employees may be provided with 500 ra certain amount of dairy products (various types of sour yogurt (kefir), bio-kefir, sourdough, acidophilus, low-fat (up to 3.5%) fermented baked milk, as well as yogurts with the addition of natural fruits and berries). The basis for the replacement may be preventive expediency (the need for probiotics, desensitizing effects, etc.) or individual intolerance to fresh milk. Thus, instead of fresh milk, employees engaged in the production or processing of antibiotics may be provided with dairy products enriched with probiotics (bifidobacteria, sour-milk bacteria) or colibacterin prepared on the basis of fresh milk.

Milk must be distributed and consumed in canteens, cafeterias or in specially equipped rooms in accordance with sanitary and hygienic requirements. Payment for milk, its replacement with other food products of equal value (provided for in the norms of food products of equal value that can be provided to workers instead of milk, provided free of charge), as well as the provision of milk for one or more shifts in advance or for missed shifts and its delivery to the workplace are not allowed. In connection with extremely harmful working conditions, milk is not provided to workers receiving another type of dietary and preventive nutrition - hot breakfast .

Accordingly, in the questionnaire we distributed, the question “Do you receive additional milk and dairy products from your workplace?” was asked, and the following answers were received: 23 percent of employees answered yes. The remaining 77 percent of employees answered that they are not given milk. How can such an answer be understood, that is, whether half of the employees working in one place are given milk, and the rest are not? First of all, almost all of the



employees who confirmed that they are given milk are junior medical workers, that is, nurses, who either did not understand the question or read it indifferently and answered yes without thinking. Doctors, radiologists and nurses working in one place and in one department answered no, that they are not given milk. In order to get a complete and accurate answer to this question, the chairman of the DPM trade union and the deputy chief physician were contacted. It turned out that milk is not given. It was revealed that the milk that was supposed to be provided would be paid in cash as an additional "damage payment" to the monthly salary.

When asked whether they provide free vitamins at their workplace, 100 percent of employees answered no.

« Last in days how medicines you drank to the question

Winding and for cough that - 2 7 percent; b pain - 3 3 percent , blood pressure increase 25 percent, etc to diseases against 15 interest employees Medicines accepted.

"You are yourself." healthy because "Can you count? " said to the question

26-68 percent of employees (male and female employees, respectively) answered "Yes", 14.3-10 percent said "I am not very healthy", and the rest said they are almost healthy (64.2-21.1 percent).

Conclusion

The results of the survey show that although almost 100% of the respondents are medical workers, most of them do not adhere to a healthy lifestyle and a balanced diet. At the same time, it was revealed that workers in hazardous workplaces are not fully provided with milk and dairy products. It was also found that the provision of free vitamins to employees is not properly implemented in some places.

References

1. Абдукадилова, Л. К., & Абдуллаева, Ў. Я. (2019). Тошкент шаҳри кичик ёшдаги болалар тарбияланаётган оилаларнинг ижтимоий-гигиеник ҳолатини ўрганиш натижалари. *Интернаука*, (5-2), 47-48.



2. Абдукадирова, Л. К. (1999). Бир ёшгача бўлган болалар соғлиқ ҳолатига ижтимоийгигиеник ва экологик омилларнинг таъсири. кандидатлик диссертацияси. кандидатлик диссертацияси. кандидатлик диссертацияси.
3. Абдукадирова, Л. К. (2017). Соғлом турмуш тарзининг гигиеник асослари. *Фан ва техника тараққиётида хотин-қизларнинг ўрни. Республика илмий-амалий анжумани маърузалар тўплами.*
4. Абдукадирова, Л. К. Она ва бола саломатлиги-миллат соғлиги. *Тиббий таълимда инновацияларни қўллаш ва интеграл маърузаларни такомиллаштириш-2016* С96-97, 3.
5. Абдукадырова, Л. К., Иброхимова, Д. И., & Гуломова, Ш. Х. (2023). ВЛИЯНИЕ БЕССОННИЦЫ НА ПСИХОЭМОЦИОНАЛЬНОЕ СОСТОЯНИЕ СТУДЕНТОВ. In *Proceedings of International Conference on Educational Discoveries and Humanities* (Vol. 2, No. 3, pp. 151-155).
6. Абдукадирова, Л. К. (2019). ЭКОЛОГИК БАРҚАРОРЛИКНИ ТАЪМИНЛАШНИНГ МУҲИМ ОМИЛИ-АТМОСФЕРА ХАВОСИНИ МУҲОФАЗА ҚИЛИШДИР. *Интернаука*, (5-2), 49-50.
7. Абдукадирова, Л. К., & Абдурахмонов, Б. О. (2019). РАДИОЛОГИЯ БЎЛИМИ ХОНАЛАРИДАГИ НУРЛАНИШ ДОЗА ДАРАЖАСИНИ АНИҚЛАБ БАХОЛАШ. *Интернаука*, (3-3), 30-31.
8. Абдукадирова, Л. К., Турсинбаев, А. А., & Халиуратов, Б. З. (2021). ЭКОЛОГИК МУАММОЛАР-ИЖТимоий СИЁСАТНИНГ АЖРАЛМАС ҚИСМИ. *Интернаука*, (1-3), 36-37.
9. Абдукадирова, Л. К. (2022). Хомиладор аёлларнинг хакикий овқатланиши ва витаминлар билан таъминланганлик ҳолатини ураганиш ва баҳолаш.
10. Абдукадирова, Л., Саломова, Ф., Угли Рахимов, Б.Б., Ахмадалиева, Н., и Садуллаева, К. (2025). Оценка мутагенных эффектов: Совместное воздействие азотфиксирующих соединений и фенола на растительные и животные организмы. *Мед Дж Малайзия* ,



11. Salomova, F. I. (2024, December). STIMULATION OF THE IMMUNE RESPONSE BY CYTOKINE PREPARATIONS AND THEIR STANDARDIZATION. European Youth innovation society conference.
12. Salomova, F. I., Sadullayeva, K. A., & Toshmatova, G. (2024). Modern solutions for cleaning wastewater from car washes. *Central Asian Journal of Medicine*, (1), 5-12.
13. Khakimova, D., Sh, K., & Salomova, F. (2023). Results of hygiene assessment of food of school students. In *International Scientific-Practical Conference "Only English: Advances in Medical Research and Practice Conference"* (Vol. 23, No. 2023, pp. 78-79).
14. Саломова, Ф. И., Миррахимова, М. К., & Кобылжонова, С. Р. (2022). Влияние факторов внешней среды на развитие атопического дерматита у детей. In *Серия конференций Европейского журнала научных архивов*.
15. Axmedova, P. B. (2025). Adenotomy in children with allergic rhinitis and bronchial asthma. *Web of Medicine: Journal of Medicine, Practice and Nursing*, 3(3), 459-466.
16. Kobiljonova, S. R., Jalolov, N. N., Sharipova, S. A., & Mirsagatova, M. R. (2022). SPECTRUM OF CAUSE-SIGNIFICANT ALLERGENS CAUSING POLYNOSIS IN CHILDREN.
17. Саломова, Ф. И., Кобилжонова, Ш. Р., & Жалолов, Н. Н. (2023). Оценка эффективности диетотерапии при пищевой аллергии у детей в различные возрастные периоды. In *Вестник ТМА SPECIAL ISSUE Dedicated to The 10th International Symposium On Important Problems of the Environmental Protection and Human Health*.
18. Саломова, Ф. И., & Кобилжонова, Ш. Р. (2026). ФАКТИЧЕСКОЕ ПИТАНИЕ ДЕТЕЙ С ОЦЕНКОЙ БИОЛОГИЧЕСКОЙ И ПИЩЕВОЙ ЦЕННОСТИ РАЦИОНОВ У АЛЛЕРГИЧЕСКИХ ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА. *Медицинский журнал молодых ученых*, (17 (03)), 384-389.
19. Саломова, Ф. И., Кобилжонова, Ш. Р., & Юлдашева, Ш. П. (2026). АЛЛЕРГИЯ У ДЕТЕЙ: ПРИЧИНЫ, ПРОЯВЛЕНИЯ И СОВРЕМЕННЫЕ ПОДХОДЫ К ПРОФИЛАКТИКЕ.



-
20. Rustamovna, Q. S. (2025). A MODERN VIEW OF THE PROBLEM OF CARDIOVASCULAR DISEASES IN WOMEN.
 21. Mirkhamidova, S., Rustamova, H., Sharipova, S., Mamadjanov, N., Tuychieva, D., & Karimbayev, S. (2021). Methods of HIV infection prevention used by nurses. URL: <http://repository.tma.uz/xmlui/handle/1/1617>.
 22. Sharipova, S. A., & Ikramova, N. A. (2024). CONSEQUENCES OF NOT BREASTFEEDING FOR THE MOTHER AND INFANT.
 23. Саломова, Ф. И., Искандарова, Г. Т., Садуллаева, Х. А., Шарипова, С. А., Шерқўзиева, Г. Ф., Нурматов, Б. Қ., & Садирова, М. К. (2022). Атроф муҳит ва инсон саломатлиги мутахассислиги амалий кўникмаларни ўзлаштириш бўйича” услубий кўрсатма.