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Improvement of Rational Nutrition of Workers of Modern Cement Production Enterprises with Local Food Products

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Annotation: The role of large-scale industrial enterprises, mining, metallurgy, chemical plants in the current period of development is significant: harmful substances, dust, waste products, gas, cement plants that pollute the atmosphere, affect the health of the population. In particular, the role of measures aimed at preventing occupational diseases among workers of the production enterprise operating in these enterprises can not be overemphasized. Methods of improving the rational nutrition of workers of mining enterprises with local food products were studied.

Keywords: Cement plant, Healthcare, Occupational diseases, dusty chronic rhinitis, nasopharyngitis, gastric ulcer, food products.

The urgency of the problem: In the modern era of development, the role of air pollutants, harmful substances that affect the health of the population, dust, waste products, gas plants, cement plants is invaluable. [1]

As far as we know, large enterprises of the Almalyk, Angren, Bekabad, Navoi, Zarafshan, Quvasoy, Kungrad, Sherabad mining industries operate in the country. Hundreds of millions of tons of various rocks are mined and processed annually from these enterprises for daily needs of agriculture and the national economy. [2]

Quvasoy city cement production enterprise is carried out under the influence of harmful factors in cement production, such as noise in working conditions in the workshops for processing raw materials, clinker grinding and heating, air pollution. This factor is assessed as a detrimental factor and is a factor that hinders the origin and development of occupational diseases. [2] However, the composition of the diet of its employees has not been studied to prevent occupational diseases.

Today, the demand for the products of these industrial enterprises has grown sharply. In particular, the Government and the President of the Republic of Uzbekistan are working not only to ensure the full operation of these enterprises, but also to gradually build new enterprises and workshops, create jobs, and constantly monitor the health of the population engaged in production, improve diets. crosscutting issues of expanding the widespread use of modern technologies.

Based on the above considerations, we have seen that a number of scientific studies have been conducted among the mining industry and its workers, and that this research has not lost its relevance

as it is still ongoing. At present, the use of modern technologies has expanded, and the negative impact of toxic factors in the workplace on the body of workers has been reduced. However, long-term exposure to low-intensity toxic factors has led to problems such as new manifestations of pathological changes. [3-15]

Authors. [1-2] On the basis of complex clinical, epidemiological and social studies conducted among workers of the phosphorus production plant, the technological processes in the shops have a detrimental effect on the health of workers; In the examination of 299 workers, the dynamics of the hygienic condition of the oral cavity was observed without changes in the dynamics of 19.06%, worsening 72.25%, hesitation in responding to the change 5.69%, in the subjective examination; 9.36% of cracks in the teeth, 31.77% of erosion, 4.01% of sharp teeth, 3.48% of tooth movement, 13.71% of tooth discoloration and 25.42% of gingival bleeding were observed. The survey revealed the need to develop plans based on the new socio-economic conditions in the organization of dental services. However, measures to improve the rational nutrition of these workers with local food products have not been studied.

The main toxic properties of cement produced by large enterprises of the mining industry are due to the fact that the fibrogenic nature of the powder is 0.8-7.3% free SiO2, the dust of the stream absorbs yellow metals in the air and has a carcinogenic effect. [4]

As mentioned above, dust from cement plants can lead to the development of serious diseases. Especially the respiratory system, digestive system and other new diseases. That is, from diseases of the respiratory system HOBL [5], pneumocaniosis [6], chronic bronchitis, bronchial asthma [7], emphysema [8], chronic rhinitis, nasopharyngitis, pharyngitis, allergic rhinitis [9]

Cement dust from the class of diseases of the digestive system leads to the following diseases: gastric ulcer, duodenal ulcer [10], fibrosis and cirrhosis of the liver [11].

Cement dust from the class of oncological diseases causes the following neoplasmic diseases: malignancy of the nose and middle ear, malignancies of the sinuses, trachea, trachea, bronchi, lungs and other respiratory organs. [12]

Children and adolescents from the population living near cement plants have been studied the effects of cement dust on their lives. In particular, allergic rhinitis in children aged 6-9 years is 2.2 times higher, in children aged 15-17 years 2.7 times higher, chronic rhinitis, nasopharyngitis 4.8 times, ulcers 6.1 times, peptic ulcer and duodenal ulcer 4, 6 times higher. [13]

Кумир ишлаб чиқариш конларида фаолият олиб бораётган ишчиларнинг касбий касалланиш структурасининг 4 гурухга бўлиб, биринчи ўринда 48% таянч-харакат тизими касалликлари, иккинчи ўринда 22,2% нейросенсор эшитиш бўзилишлари, учинчи ўринда 16,2% вибрация (тебраниш) касалликлари, туртинчи ўринда 7% пневмоканиозлар сабаб бўлади. [14]

Therapeutic and prophylactic nutrition, among other factors, plays an important role in the prevention of occupational diseases. [17-18-19-20] The basics of therapeutic and prophylactic nutrition of workers of large enterprises of the mining industry, hazardous industries have hardly been reconsidered.

Today, the work of local and foreign scientists has studied the problems of safe use of healthy food. Donchenko L.V., Nadykta V.D., 2018; Donskovoy L.A. 2014; Aleshkova A.V., 2014; Zaytsevoy N.V., Tutelyan V.A., Shur P.Z., Khotimchenko S.A., 2014; Tunievoy E.K., 2015; Matison V.A., Arutyunovoy N.I., 2016; Gmoshinskogo I.V., Bagryantsevoy O.V., Khotimchenko S.A., 2019; Shur P.Z., Zaytsevoy N.V., 2018; Hoang Y.T.H., Vu A.T.L., 2019.

Scientific works on the problem of safety of food additives have been published (Baeva E.A., 2014; Bannova A.S., 2019; Glotov E. N. et al., 2013; Komarova S.G., 2015; Poznyakovsky V.M., 2011; Sarofanova L.A., 2012 Kitiraj KG, 2015).

On a number of scientific researches, estimations and increase of efficiency of influence of new food products on health of population of different age groups in the Republic (T.I.Iskandarov, 2009, 2018; G.I.Shaykhova, 2010, 2017, 2020; L.A. Ponomareva, 2010, D.A.Zaredinov, 2019; R.T.Kamilova, 2017, 2018; A.S.Khudoyberganov, 2017; 2020; F.I.Salomova 2009; 2018; N.J.Ermatov, 2016, 2019; F.L.Azizova, 2016, 2018; D.Sh.Alimukhamedov, 2018; B.B.Rakhimov, 2017) scientific work is carried out but there is no scientific work on improvement of hygienic assessment of therapeutic and prophylactic nutrition of workers of cement enterprises.

Many years of scientific research confirm that changes in working conditions in industrial enterprises, the application of modern technologies, the widespread use of various protective equipment by workers, etc. do not allow the human body to fully protect itself from environmental chemical, physical and biological factors. This means that production, various industries and the impact of environmental factors on the human body need to be further studied. Therefore, the problem of improving food safety assessment and dietary learning, as well as the development of therapeutic and prophylactic nutrition for workers in various fields, remains very relevant.

REFERENCES:

- 1. Гаффаров.С.А., Рахимов.Ф.Э., Гайбуллаева.Ю.Х., Маматкулов.Х.А., Насимов.К.К. / Тоғ кончилиги ва цемент махсулотлари ишлаб чикариш саноатидаги ишчилар саломатлиги ва иш ўринларидаги гигиеник муаммолар. / Ўзбекистон врачлар ассоциацининг бюллетени №4(106) 2011
- 2. Астанакулов Д.Й, Исоков.Э.З. Гигиенический анализ условийтруда рабочих мест цементного производства г Кувасай. Ўзбекистон врачлар ассотсиацияси бюллетени №3(104) 2021.
- 3. Методы анализа минорных биологически активных веществ пищи / под ред. В.А. Тутельяна и К.И. Эллера. – М.: Изд-во «Династия», 2010. – 160 с.
- 4. Жилов, Ю.Д. Справочник по гигиене труда и производственной санитарии / Жилов Ю.Д., Куценко Г.И. 2011г. 240 с.
- 5. Глобальная стратегия диагностики, лечения и профилактики хронической обструктивной болезни легких /под ред. Чучалина А.Г. — М., 2003. - 96 с.
- 6. Движков, П.П. Пиевмокониозы /Движков П.П. М., 1965. 423 с
- 7. Вредные вещества в промышленности: Справ. для химиков, инженеров и врачей. Изд. 7-е, пер. и доп. В 3-х томах. Том III. Неорганические и элементорганические соединения /под ред. Н.В. Лазарева, И.Д. Гадаскиной. – СПб., 1977. – 608 с.
- 8. Ретиев, В.М. Гигиена труда на цементном заводе /Ретиев В.М. М., 1964. 48 с
- 9. Portland Cement Dust Hazard assessment document EH75/7, UK Health and Safety Executive, 2006: http://www.hse.gov.uk/pubns/web/por tlandcement.pdf.
- 10. Stancari V., Penazzato N. //Rass. med. ind. 1964. V. 33, N 6. P. 697 713.
- 11. Pimentel, J.C. Pulmonary and hepatic granulomatous disorders due to theinhalation of cement and mica dusts /Pimentel J.C., Menezes A.P. //Thorax. 1978. – P. 219227.

- 12. Effect of exposure to dust on lung function of cement factory workers /Noor H., Yap C.L., Zolkepli O., Faridah M. //Med. J. Malaysia. – 2000. – P. 5157.
- 13. Фадеева А.Е., Жилина Н.М., Полукаров А.Н., Чеченин Г.И., Климантова И.П. // Состояние здоровья детей и подростков г. Новокузнецка, проживающих (обучающихся) вблизи территории цементного завода. Мат и Дитя в кузбассе. №4(47) 2011.
- 14. Комплексная оценка риска для здоровья работающих при открытой добыче угля от воздействия физических факторов / В.В. Захаренков, А.М. Олешенко, Е.А. Пананотти, Я.В. Суржиков // Бюллетень ВСНЦ СО РАМН. 2006. № 3 (49). С. 29–36.
- 15. Доценко В. А.Лечебно-профилактическое питание // Вопр. питания. 2008. Т. 70, № 1. С. 21— 25
- 16. Доценко В. А., Власова В. В., Мосийчук Л. В.Основные пути развития лечебнопрофилактического питания // Концептуальные вопросы питания населения и военнослужащих. СПб., 2007. Т. 1. С. 39–42
- 17. Абрамова Ж. И., Болтушкина Л. А., Миролюбов И. Г.Пути повышения эффективности лечебно-профилактическогопитания работающих с фосфорорганическими соединениями// Вопросы лечения профессиональных заболеваний и интоксикаций. Л., 1967. С. 119–125.
- 18. Бондарев Г. И., Виссарионова В. Я.Питание как фактор профилактики профессиональ-ных заболеваний // Вопр. питания. 1980. №6. С. 6–9.
- 19. Голощапов О. Д. Разработка методических основ изучения и алиментарной профилак-тики интоксикаций химической этиологии веществами общетоксического действия типа формальдегида и диметилформамида: Автореф. дис.... д-ра мед. наук. СПб., 1992. 39
- 20. Истомин А. В., Чижов С. С. Экология и гигиена профилактического питания. СПб., 2000. 97