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**HYGIENIC ANALYSIS OF NUTRITION STATUS AMONG MINING AND  
METALLURGICAL INDUSTRY WORKERS**

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**Introduction.** According to the International Labour Organization (ILO), inadequate nutrition significantly impacts workers' health, productivity, and industrial losses. Specifically, malnutrition or an unbalanced diet can lead to a 20% reduction in labor productivity. Research indicates that workplace interventions focusing on nutrition and physical activity—particularly the promotion of a healthy lifestyle—improve health outcomes, reduce absenteeism, and enhance overall work efficiency[1,6]. Therefore, establishing a scientifically grounded preventive nutrition framework for mining and metallurgical workers remains a critical task for occupational hygiene and preventive medicine[2,5].

**Results.** An analysis of the dietary patterns of mining and metallurgical workers focused on key food groups, including meat, fish, milk, and dairy products. The consumption of these products was evaluated and compared against established hygienic nutritional standards. The findings revealed significant imbalances, characterized by deficiencies in certain food groups and excessive consumption in others[3,4].

**Meat and Meat Products:** Beef consumption among men was 46 g (standard: 65 g) and 43 g among women, representing a deficiency of 29.2% and 28.3%, respectively. While mutton consumption in men (42.5 g) exceeded the standard, it remained lower in women (36.2 g). Offal consumption was near the norm for men (8.7 g) but slightly exceeded the 5 g standard for women. Notably, poultry consumption was significantly higher than recommended for both genders (77.8 g for men; 70.2 g for women), indicating that protein intake is primarily sourced from poultry. The excessive consumption of sausages in both groups highlights a disproportionate reliance on processed meat products.

**Fish and Seafood:** Intake was found to be insufficient, with average consumption at 31.1 g for men and 25 g for women, falling below the recommended standards. Canned fish consumption was also low, suggesting an inadequate supply of essential omega-3 fatty acids to the body.

**Milk and Dairy Products:** The most significant discrepancy was observed in milk consumption. Against a standard of 400 g, actual consumption was 182.5 g for men and 174.6 g for women—nearly a twofold deficiency. Intake of cheese and cottage cheese also failed to meet nutritional norms. Conversely, butter consumption exceeded recommended levels for both genders, pointing to an excess of animal fats in the diet.

**Conclusion.** The daily diet of mining and metallurgical industry workers, while quantitatively sufficient in some areas, is qualitatively unbalanced. The deficiency in milk and fish products, combined with the excessive intake of processed meats and animal fats, contradicts the principles of preventive nutrition. Consequently, it is essential to optimize

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the diet based on hygienic standards by increasing the proportion of products with high biological value.

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