

a species of genetically induced methemoglobinemia, the vast majority of it is presented in a form which received in the postnatal period and appears as a result of radiation or the use of toxic substances. Also, during the in vitro storage of blood samples a methemoglobin concentration increases over time, which is one of the factors that complicate this process. It is therefore important to check and control the value of methemoglobin in the blood.

Glycosylated hemoglobin (HbA1) is a complex of hemoglobin A with glucose, which is the result of non-enzymatic chemical reaction, glycation. Glycation is a process of accession to the hemoglobin A of glucose molecules, reaction is irreversible and the speed is proportional to the level of blood glucose over the life of the erythrocyte (120 days) – i.e. glucose content in the blood during this period (normal 3.3-5.5 mmol/l). On this basis, it is used for the diagnosis of diabetes. The normal level of glycated hemoglobin in the range from 4% to 5.9%, and there is an increase in diabetes its value to 6.5% and higher. There are several forms of glycosylated hemoglobin: HbA1a, HbA1b, HbA1c, the latter of which is the primary by the fraction in the blood and most fully reflects glycemia. As blood glucose levels indicates the presence or absence of diabetes, is also very important to control and verify (about once a quarter) in the blood level.

Thus, undoubtedly important for physiology and medicine is a study on the response photoreaction and adaptation of blood system, and in particular hemoglobin, to irradiation of neon-helium laser.

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THE ESTABLISHMENT OF INFORMATION-CONSULTATIVE CENTERS IN ORDER TO ENSURE SAFE USE OF NON-WOOD FOREST RESOURCES ON THE TERRITORY CONTAMINATED BY RADIONUCLIDES

The accident at the Chernobyl NPP caused significant contamination of the territory of Ukraine. Forest plantations performed their natural functions and protected settlements and agricultural areas from more severe contamination. However, forest accumulated considerable amount of radionuclides which caused their accumulation in different species of plants and animals. Forests of Ukrainian Polissia were severely contaminated by radiation. At the same time, forests of these regions are rich in medicinal and berry-like plants and mushrooms; large areas of pine and birch plantations, which are traditionally broached, grow there; the population of the region widely uses forest pastures and hayings. Therefore, it is necessary to rise safety of population living on the territory contaminated by radionuclides: to rise the level of awareness of the population living on the territories of Ukrainian Polissia as for the use of non-wood forest products by establishing information-

consultative centers in Zhytomyr. As far as non-wood forest products are the part of the local population's ration and, to a considerable extent, they form the level of internal irradiation, the knowledge obtained in consultative centers allows decreasing the risk from these products use.

To gain the objectives of the establishing information-consultative centers:

1. To establish information-consultative centers for giving consultations on the possible use of non-wood products on the territory contaminated by radionuclides. At such centers, local population can get information on radionuclides accumulation in different species of wild berries, mushrooms and wild industrial animals; citizens can get to know the allowable contamination level of the territory, where a definite non-wood product can be used; it will be possible to measure radiation contamination level in product samples and get information about the ways of these products' processing.

2. To work out information materials on non-wood forest production use in the conditions of radiation contamination. Based on the previous investigations, the ability to use non-wood resources depending on the density of soil radiation contamination will be determined in these recommendations.

3. To carry out trainings directed on the rise safety of the public living on the territories contaminated by radionuclides. The aim of educational activities is teaching local population to use non-wood forest products safely, depending on the level of the territory contamination by radionuclides. The trainings on the use of modern dosimetric equipment will be carried out.

Following groups of subjects concerned can be defined from the object:

1. Local population can get free consultation on the use of non-wood forest products on the territories contaminated by radionuclides; in this way, the internal irradiation doses can be reduced by limiting the penetration of radionuclides with food.

2. Considering recommendations worked out within the project, the organizations-suppliers can decrease the amount of berries, mushrooms and medicinal plants which have not passed radioecological control.

3. Thanks to qualified specialists and to modern radiological and dosimetric equipment of the information-consultative centers, pupils and students can broaden their knowledge on radionuclides migration in forest ecosystems.

The final beneficiary of the establishing information-consultative centers is a society as a whole, as far as the awareness of the population (especially youth) about safe use of non-wood forest production allows reducing the level of internal irradiation of local population. Thus, it will enable the formation of more healthy society on the territories contaminated by radionuclides.