

Thirty years later after the Bulgarian “Second Chernobyl – 1987”

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The use of natural zeolites would have contributed to overcome the consequences on the health of the nation, something that could have been done, but was not during the radiation period from May 1986 until December 1987 (V. Marinov†[4] a member of the Standing Committee for Protection of the Population in Emergencies to the Council of Ministers of the Republic of Bulgaria).

Abstract

After the accident of the Chernobyl nuclear reactor in 1986, the radiation background in Bulgaria has dramatically increased. It was found that the Chernobyl contaminants contain the so-called "hot particles", that penetrate into the lungs when inhaled, and may be retained in the upper or lower respiratory tract, which is a prerequisite for an increased carcinogenic risk.

In the end of May 1986 a rough estimation of the carcinogenic effects of hot particles was made. It turned out that for some groups of Bulgarian population it could reach 0,1 to 1%. The program and its recommendations were classified as confidential ones, and were published as late as in 1989 [1]. All research works, concerning the radioactive contamination, were also classified as confidential. The results were published just in 1990. It was only the rulers, who consumed safe food. They knew the seriousness of the radioactive contamination, but no precautionary measures were undertaken to protect ordinary people [2].

In early June 1986 a monitoring was held on farm workers, who had been in contact with plant material treated with organophosphorus pesticides. A pesticidal exposure was not detected, but toxic effects of the radiation were found. The radioactive contamination on urine samples (expressed in Bq/l) varied from 300 000 Bq/l to 1 million Bq/l. For the people working in enclosed spaces it was within the range of 10 000 Bq/l -17 000 Bq/l, for smokers it varied from 60 000 Bq/l to 120 000 Bq/l. The values in blood samples did not exceed 300 Bq/l (N. Izmirova, “Radioactive contamination after the Chernobyl fallout 1-5 June 1986”, the article was not published).

In the autumn of 1986 the wheat crop products were included in the nutrition of the Bulgarians. In 1987 the radioactive contamination of humans was greater than the one immediately after the Chernobyl disaster in 1986. This was our "second Chernobyl" [2].

The cancer rate within the period 1992-1999 has increased with 0,28 % and the lung illnesses have increased with 0,12 % (the Ministry of public health information- 1999) [3]. These results refer within the limits of the theoretically estimated rates by I. Uzunov † [1].

References:

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