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## Approach of evaluation of influence of gamma and UV radiation on microorganisms in presence of some scavengers of OH radicals.

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During irradiation of microorganisms in liquid media by gamma radiation, hydroxyl radicals are considered as one of the most dangerous agents. Elimination of these radicals by their scavengers (ethanol, methanol and potassium formate) should protect the cells. Comparison of two ways of interpretation of acquired data was performed. Dependencies of  $\sigma$  ( $=(-\ln(s_0))/(\ln(s))$ , where  $s_0$  is fraction of cells surviving in suspension with no scavenger added and  $s$  is fraction of cells surviving in suspension with one of OH scavengers) and  $\alpha$  (increase of survival) on scavenging efficiency ( $Q$ ) were evaluated and compared.

Besides, a method that allows to compare effects of gamma and UV radiation was developed. This procedure, permitting to determine the dose of UV light, is based on constant absorbance and continuous stirring of the sample during irradiation.

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