

In the present study were used reference mutagens which effects mutagenic activity in prokaryotic and eukaryotic testing systems. Aflatoxin B1 (AFB1) is one of the most thoroughly studied and the well known mycotoxin with carcinogenic activity. 2-Amino-3-methylimidazol[4,5-f] quinoline (IQ) in isolated form has been used as another reference mutagen. These compounds are indirect acting genotoxins, i.e. need metabolic activation to exert genotoxic effect. As a third reference mutagen in the present study there has been chosen N-nitroso-N-methylurea (MNU) which is direct acting carcinogenic N-nitroso compound.

The aim of the study was to investigate antimutagenic effects of ellagic acide (EA), resveratrol (RES), diallyl sulfide (DAS) and phenetyl isothiocyanate (PEITC) on the mutagenicity of the mutagens. The Ames test with Salmonella typhimurium TA98 and TA100 strains was used for the evaluation of antimutagenic effect of EA, RES, DAS and PEITC in vitro.