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Abstract:

The dietary factors may contribute to variety of cancer developments. Among them, amaranth as one of food coloring agents was suspected to be carcinogenic. By using unscheduled DNA synthesis methods, the mutagenic effect of amaranth was studied in vitro using primary rat liver cell culture. Hidrazine HCl was used as positive control. The testing concentration for both compound were 0 ppm, 17 ppm, 33 ppm, 67 ppm, 100 ppm and 150 ppm. The Unscheduled DNA Synthesis at 100 ppm for both amaranth and hydrazine HCl were higher than blank. The result demonstrated that amaranth and hydrazine HCl posses mutagenic effect.

(End)