Suppression of glutathione S-transferase placental form-positive foci development in rat hepatocarcinogenesis by Chlorella pyrenoidosa

Summary:
1) Test Method
This test was to examine chemopreventive effect by administering chlorella powder as 10 % of the diet to rats with hepatic cancer induced by carcinogen.
We used DEN as initiative material and MeIQx as promotional material in this test.
We measured the number and area per cm$^2$ of GST-P-positive foci, which are developed in liver by administering carcinogen.

2) Test Result
① The effect of Chlorella on DEN + MeIQx (Poster Figure3)
Chlorella inhibited 67.6% of number and 74.2% of area of GST-P-positive foci induced by administering DEN + MeIQx.
② The effect of Chlorella on MeIQx (Poster Figure4.)
Chlorella inhibited 52.0% of number of GST-P-positive foci induced by administering MeIQx.

This result shows that chlorella inhibits carcinogenesis action of carcinogen, which is potentially taken in with food.

Abbreviations:
DEN… diethylimidazo
MeIQx … 2-amino-3, 8-dimethylimidazo[4,5-f]quinozaline
GST-P … glutathione S-transferase placental form