GM, insect-resistant Bt rice unlikely to pose a health risk, study shows

Rice is considered one of the most important staple food crops. Genetically modified (GM) Bt rice [harboring the] cry1Ab gene expressing the insect-resistance protein has been developed to [control pests]. In this study, we assessed the safety of the GM Bt rice on Sprague–Dawley rats for 90 days.

Totally, 120 rats in both sexes were used for three different diets, including 50% GM Bt rice, feeding with 50% rice, and standard feeding. …. The clinical variables such as body weight and food consumption were measured and a range of clinical tests was examined, including hematology, serum chemistry parameters, urinalysis profile, thyroid, and sex hormone levels. Pathological assessments were also done.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other ‘disruptive’ innovations. Subscribe to our newsletter. SIGN UP

The results showed that the mean weekly feed utilization (%) had no significant difference among the studied groups. Also, blood biochemistry, hematological parameters, urine analysis, and hormonal levels had no significant differences among the groups.

However, alanine aminotransferase was less in males versus female feeding with GM Bt rice. No histopathological changes were observed among the groups. In conclusion, this study demonstrated that GM Bt rice had no obvious adverse effects on rats’ health.

Read the original post