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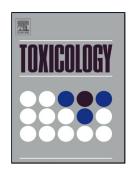
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ACCEPTED MANUSCRIPT

Anorectic response to the trichothecene T-2 toxin correspond to plasma elevations of the Satiety Hormone Glucose-Dependent Insulinotropic Polypeptide and Peptide YY₃₋₃₆

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ABSTRACT

T-2 toxin, a potent type A trichothecene mycotoxin, is produced by various *Fusarium* species and can negatively impact animal and human health. Although anorexia induction is a common hallmark of T-2 toxin-induced toxicity, the underlying mechanisms for this adverse effect are not fully understood. The goal of this study was to determine the roles of two gut satiety hormones, glucose-dependent insulinotropic polypeptide (GIP) and Peptide YY₃₋₃₆ (PYY₃₋₃₆) in anorexia induction by T-2 toxin. Elevations of plasma GIP and PYY₃₋₃₆ markedly corresponded to anorexia induction following oral exposure to T-2 toxin using a nocturnal mouse anorexia model. Direct administration of exogenous GIP and PYY₃₋₃₆ similarly induced anorectic responses. Furthermore, the GIP receptor antagonist Pro3GIP dose-dependently attenuated both

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