

# 論文要旨

〔 肥満者及び肥満マウスにおいて、抗グレリン免疫グロブリンはグレリン安定性とその摂食促進作用を調節する 〕

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Obese individuals often have increased appetite despite normal plasma levels of the main orexigenic hormone ghrelin. Here we show that ghrelin degradation in the plasma is inhibited by ghrelin-reactive IgG immunoglobulins, which display increased binding affinity to ghrelin in obese patients and mice. Co-administration of ghrelin together with IgG from obese individuals, but not with IgG from anorectic or control patients, increases food intake in rats. Similarly, chronic injections of ghrelin together with IgG from *ob/ob* mice increase food intake, meal frequency and total lean body mass of mice. These data reveal that in both obese humans and mice, IgG with increased affinity for ghrelin enhances ghrelin's orexigenic effect, which may contribute to increased appetite and overeating.