

# Promising hormone may help reduce malnutrition in gastric cancer patients

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In gastric cancer patients who have had part or all of their stomach removed, the hormone ghrelin may lessen post-operative weight loss and improve appetite, according to a new study in *Gastroenterology*, the official journal of the American Gastroenterological Association (AGA) Institute.

"It is our obligation to invent novel procedures to minimize the side effects of gastrectomy. Our study provides convincing data for the beneficial effects of [ghrelin](#) — the only gastrointestinal hormone known to stimulate appetite — on [body weight](#) and dietary activity after gastrectomy," said Shuji Takiguchi, MD, of Osaka University's Graduate School of Medicine and lead author of the study. "Although there are some issues to be resolved before clinical use, surgeons dealing with gastric cancers and other gastroesophageal diseases should be encouraged by the availability of ghrelin."

In this randomized phase II study, doctors assigned 20 gastrectomy patients to receive either ghrelin (10 patients) or placebo (10 patients) via IV twice a day for 10 days after starting oral food intake following surgery. Changes in body weight, appetite, food intake, body composition, metabolic rate and various blood tests were evaluated.

When comparing both groups, food intake (average 13.8 versus 10.4 kcal/kg/day) and appetite (5.7 versus 3.9 cm) were significantly higher in the ghrelin group than in the placebo group, respectively. Body weight loss was significantly lower in the ghrelin group than in the placebo

group (-1.4 percent versus -3.7 percent). Fat mass, lean body mass and metabolic rate decreased significantly in the placebo group. Although the reductions in lean body mass and metabolic rate were not significant in the ghrelin group, the fat mass reduction was significant.

Body weight loss is a common and serious outcome in patients with [gastric cancer](#) who have undergone total gastrectomy, or excision of the stomach. It may also lead to a decline in post-operative quality of life and is the most reliable indicator of malnutrition, which impairs immune function, infection susceptibility and survival. Although various factors have been considered, reduced [food intake](#) is the most conceivable explanation for body [weight loss](#) after gastrectomy.

**More information:** [www.gastrojournal.org/](http://www.gastrojournal.org/)

Provided by American Gastroenterological Association

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