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## **Chewing gum associated with enhanced bowel recovery after colon surgery**

Chewing gum is associated with enhanced recovery of intestinal function following surgery to remove all or part of the colon, according to an analysis of previously published studies in the August issue of *Archives of Surgery*, one of the *JAMA/Archives* journals.

"Postoperative ileus [inability of the intestines to pass contents] is regarded as an inevitable response to the trauma of abdominal surgery and is a major contributing factor to postoperative pain and discomfort associated with abdominal distension, nausea, vomiting and cramping pain," the authors write as background information in the article. The problem is estimated to cost approximately \$1 billion in U.S. health care expenditures.

Sanjay Purkayastha, B.Sc., M.R.C.S., and colleagues at St. Mary's Hospital, London, analyzed data from five trials published in or before July 2006 and involving 158 patients. In each trial, a group of patients chewed sugarless gum three times per day following surgery for a period of five to 45 minutes and were compared with patients who did not chew gum.

When the trial results were combined, patients who chewed gum took an average of .66 fewer days to pass flatus (gas) and an average of 1.10 fewer days to have a bowel movement, both signs of returning intestinal function. "Postoperative length of hospital stay was assessed in four trials comprising 134 patients," the authors write. "This was also reduced in the chewing gum group by longer than one day; however, this result was not statistically significant."

Gum chewing is thought to act as a kind of "sham feeding," stimulating nerves in the digestive system, triggering the release of gastrointestinal hormones and increasing the production of saliva and secretions from the pancreas, the authors note.

"In conclusion, we feel that the current evidence suggests that gum chewing following abdominal surgery offers significant benefits in reducing the time to resolution of ileus; however, the studies are insufficiently powered to identify a significant benefit in length of stay," they write. "The potential benefits to individual patients, in health economics terms, are

such that a well-designed, large-scale, blinded, randomized, controlled trial with a placebo arm is warranted to answer the question of whether gum chewing can significantly reduce the length of stay after abdominal surgery or whether it merely represents a placebo effect."

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