



For Immediate Release

## **Chewing Gum after Heart Surgery May Help Relieve Gut Problems**

*First-of-its-kind study examines the impact of ‘sham feeding’ on patient recovery*

CHICAGO (September 10, 2021) — Chewing gum after heart surgery may kickstart the digestive tract, helping patients feel better and potentially be discharged sooner than those who don't use this generally safe and simple intervention, according to research presented today at the 18th Annual Perioperative and Critical Care Conference from The Society of Thoracic Surgeons.

“Prior to our study, there were no previously published studies looking at the use of chewing gum in cardiac surgery patients, but we found that it may accelerate the return of gut function,” said Sirivan S. Seng, MD, who is a resident physician at Crozer-Chester Medical Center in Upland, Pennsylvania. “This easy-to-implement intervention can be used with almost all patients in the postoperative setting.”

Dr. Seng and colleagues studied patients from Crozer-Chester Medical Center who received elective open heart surgery, aortic valve replacement, or mitral valve repair/replacement. One group comprised 341 patients who underwent surgery from 2017 to 2020 and took part in the sugarless chewing gum protocol after their operations. A second group, which included 496 patients, received similar heart surgeries between 2013 and 2016, but did not chew gum after their procedures.

The research found that only two of the gum-chewing patients (0.59%) had confirmed postoperative ileus, while 17 patients in

the non-gum chewing group (3.43%) developed postoperative ileus—lack of normal muscle contractions in the intestines that leads to a buildup and potential blockage of food material.

This brief shutdown of the digestive system is among the more common complications following heart surgery, occurring in up to 5.5% of patients, Dr. Seng explained. While not a major health concern, ileus may lead to abdominal cramps, bloating, nausea, vomiting, constipation, and difficulty tolerating a normal diet. As a result, patients may experience discomfort, slow recovery, and longer hospital stays, which in turn, leads to increases in the physical, emotional, and financial burden on patients.

“An underappreciated concern after cardiac surgery is the development of an ileus or a slow return of bowel function,” said Rakesh C. Arora, MD, PhD, from St. Boniface Hospital in Winnipeg, MB, Canada, who was not

### **KEY POINTS**

- Ileus—a brief shutdown of the digestive system—is a common complication following heart surgery.
- Sham feeding with chewing gum may reduce the risk of postoperative ileus.
- Chewing gum after heart surgery is an inexpensive and well-tolerated intervention that should be considered as a new standard of care.

directly involved in this research. “The notion that something as simple as chewing gum after heart surgery could minimize this problem is highly appealing. In hundreds of patients undergoing cardiac surgery who were given one piece of gum to chew after recovering off the ventilator, fewer than 1 in 100 patients developed an ileus. This was a striking nearly 5-fold reduction compared to the historical average. This anticipated study will be highly discussed with much to chew on!”

Chewing gum is believed to stimulate the intestines by tricking them into believing that food is coming. This is known as “sham feeding,” which is any procedure that mimics normal food consumption but where food and drink are not actually digested or absorbed.

According to the researchers, postoperative gum chewing is an effective and inexpensive intervention that helps improve how patients feel after surgery. When patients feel better, they're more likely to participate in their own recoveries and ultimately be discharged faster.

“Given the minimal risk and extremely trivial cost of this intervention, the incorporation of chewing gum following cardiac surgery should be strongly considered as a new standard of care,” said Dr. Seng. “Talk to your surgeon about considering using chewing gum after surgery. Almost everyone can benefit from an affordable, tasty, and refreshing pack of gum.”

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The other authors of the study were H. Orbay, MD, PhD, and C. Geller, MD.

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Founded in 1964, The Society of Thoracic Surgeons is a not-for-profit organization representing more than 7,500 cardiothoracic surgeons, researchers, and allied health care professionals worldwide who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society’s mission is to advance cardiothoracic surgeons’ delivery of the highest quality patient care through collaboration, education, research, and advocacy.