



The balloon that beats the blade

by Cliff Dominy PhD

In the battle against obesity, those who prefer to avoid the scalpel and the needle have traditionally had few choices. Now there might be a third option: a high-tech inflatable water balloon swallowed in a quick outpatient procedure. What's more, with a 22.1% average weight-loss, it appears just as good as surgery or medication.

The Smart Capsule, an inflatable balloon, was tested for its ability to induce weight-loss in people with obesity. Researchers in Italy conducted the retrospective analysis, and their report was published in *Obesity Surgery*.

The study's design was straightforward. Researchers looked at weight-loss data

from 121 middle-aged, obese adults across 11 international sites who had taken two Smart Capsules during a weight-loss trial. This research builds on a previous paper that tracked one-year weight loss results in patients who had received a single capsule.

In a quick 15-minute procedure, participants swallowed a capsule that,

once in the stomach, was inflated with distilled water to induce satiety. After four months, the capsule was naturally eliminated from the body, and the procedure was repeated. The group tracked weight loss as a primary outcome and provided remote support and behavioural counseling to participants via the Allurion Virtual Care Suite app.

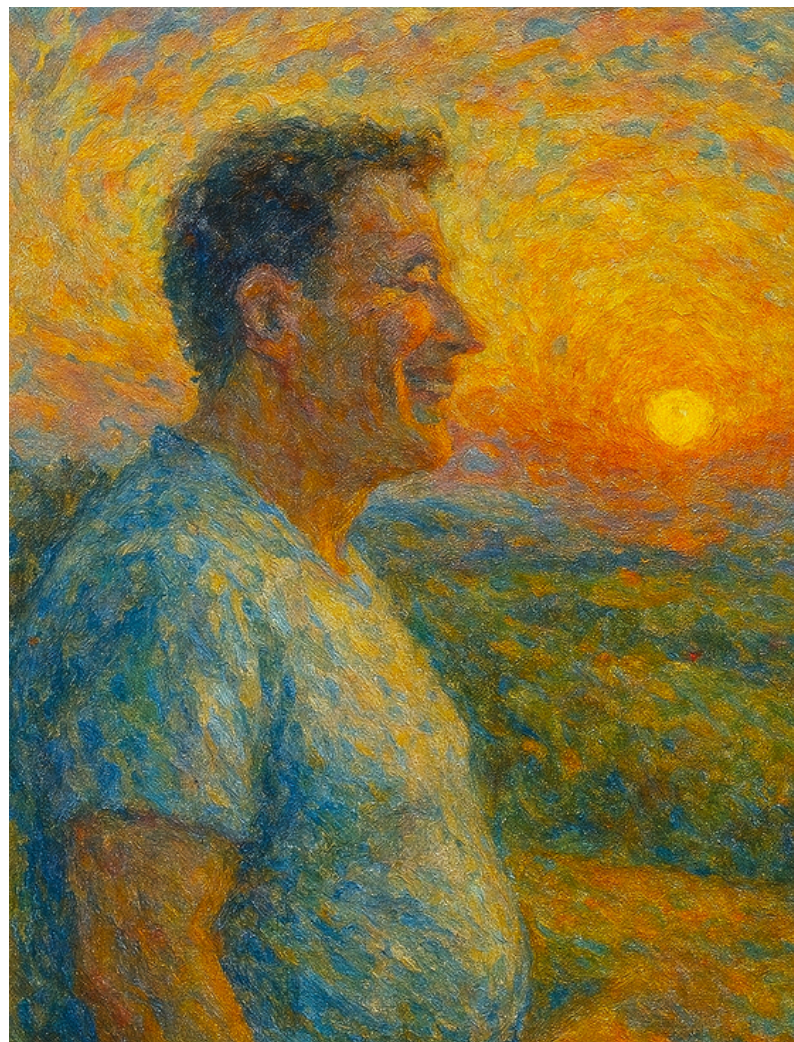
What the study found

At the four-month mark, participants experienced an average weight loss of 14 kg (15.9%, total body weight) with the first Smart Capsule. A second capsule, swallowed at that point, provided an additional 7.3 kg of weight-loss (9.3% of total body weight), by the eight-month mark. No significant adverse events related to either capsule were reported.

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Dr Roberta Lenca

Senior author Dr Roberta Lenca noted: "This study provides robust evidence that consecutive use of the Allurion Smart Capsule is both safe and effective. What excites me most is that it shows patients can achieve weight loss of over 20% without surgery. Consecutive treatment broadens what is possible in obesity care, as a flexible, scalable tool that could meet the needs of patients at different stages of their weight-loss journey."



Who's behind it

Allurion Technologies (NYSE: ALUR), headquartered in Natick, Massachusetts, is the developer of the Smart Capsule. Founded in 2009 by Dr Shantanu Gaur and Dr Samuel Levy, Allurion is on a mission to tackle weight-loss through non-invasive scalable technologies. The company has invested heavily in its flagship Smart Capsule technology, and if successful, it will give Allurion's bottom line a much needed boost.

Allurion CEO, Shantanu Gaur is upbeat: "This is a milestone for Allurion, but more importantly, for patients. The data show that a non-surgical, swallowable device can deliver weight-loss outcomes once thought possible only with surgery or high-dose drugs. As we continue to build the evidence base, our goal is to redefine what is possible in non-surgical weight loss and set a new benchmark for innovation in the field."

References

1. Caballero, A., Giardiello, C., Quartararo, G. et al. Multicenter Retrospective Analysis of Consecutive Swallowable Gastric Balloon Treatments in a Community Obesity Care Setting. *Obes Surg* (2025).
2. Caballero A, Giardiello C, Schiano Di Cola R, et al. Weight Loss Maintenance 1 Year after the Swallowable Gastric Balloon: Results from an International Multicenter Study. *Obes Surg*. 2025;35(9):3591-3598.

What's next

Allurion is considering combining weight-loss approaches to get a double bang for its proverbial buck. They are investigating placing blockbuster GLP-1 weight-loss drugs inside their capsule to see if a two-pronged attack will deliver even better results.

The weight-loss market is fiercely competitive, with newer drugs and technologies constantly knocking former champions off their pedestals. However, for the millions of people living with chronic obesity, the development of another safe and effective alternative is good news indeed.

"Our goal is to redefine what is possible in non-surgical weight loss"

Dr Shantanu Gaur