



Smart-Gel for non-Surgical Bariatric Treatment

Summary

Obesity is a serious problem in modern society. Bariatric surgery has achieved positive patient outcomes more consistently than traditional non-surgical treatments. However, the incidence of serious complications can be almost 4%. Post-operative mortality has been estimated at 0.3%. An alternative, non-surgical approach is to induce a sensation of satiety in the patient, thus curbing appetite. Cambridge Polymer Group has developed a unique orally administered ingestible hydrogel for use in induced satiety treatment that utilizes both a chemical and mechanical solution to the problem.



Description

The induced satiety treatment (IST) hydrogel developed by Cambridge Polymer Group uses acid-swellable hydrogel confined within a novel engineered structure to provide a reversible temporary feeling of satiety. The key features of the gel are:

- Covalently crosslinked hydrogel
- Non-toxic composition
- pH dependent swelling (up to 600% at pH 1)
- Good safety profile
 - readily passed through high pH intestine
- Residence time of IST gel controllable
 - ability to "trigger" complete collapse if required

Applications

Bariatric surgery

Gastric drug release

