According to many health care professionals, obesity is the leading health concern worldwide. However, Nanyang Technological University in Singapore released a statement on their website that university researchers — in collaboration with the Singaporean National University Health System — have developed a “self-inflating” pill, one that they hope will help tackle the obesity epidemic.

The capsule, called the EndoPil, contains “a balloon that can be self-inflated with a handheld magnet once it is in the stomach, thus inducing a sense of fullness.” The magnets are involved to create a chemical reaction between a body safe acid and a salt contained in the packet, which in turn creates carbon dioxide to inflate the balloon.

The idea was inspired by the effectiveness of a similar procedure called an intragastric balloon. The established operation consists of placing a balloon in the stomach, which is then removed after six months. However, the balloon is inserted and removed via
endoscopy, meaning that sedation is required. In addition, up to 20 percent of patients have the intragastric balloon removed early, due to nausea and other intolerances.

The EndoPil can be ingested orally, meaning that it is open to patients who are too sick, or otherwise unable, to undergo general anesthesia. In addition, whereas intragastric balloon surgery was generally exclusive for extremely obese patients, the EndoPil can be given to those who are only moderately obese.

Currently, the research team is finalizing the way in which the capsule can biodegrade and deflate, eventually working its way through the body’s digestive system. The current method is a “deflation plug” that lets carbon dioxide leak out. The plug is triggered after a person’s stomach acid has eaten away at the plug’s capsule.

More information about the EndoPil will be released next month, during a talk at San Diego’s Digestive Disease Week 2019. That convocation will be the largest global gathering of doctors and scientists involved with” gastroenterology, hepatology, endoscopy, and gastrointestinal surgery.”