Self-inflating capsule to tackle obesity menace

BY AGGREY OMBOKI

Scientists in Singapore have developed a self-inflating pill that can help obese individuals lose weight by making them feel they are full.

Researchers from Nanyang Technological University (NTU) and the National University Health System (NUHS) in Singapore announced they had successfully developed a self-inflating capsule, which is swallowed before it enlarges within the stomach under the influence of a hand-held magnet.

Led by Prof Louis Phee, NTU Dean of Engineering and Prof Lawrence Ho, a clinician and innovator at NUHS, the team’s “orally administered self-inflating weight loss capsule could represent a non-invasive alternative to tackle the growing global obesity epidemic.”

Results of the innovation are published in a joint press release dated January 24, 2019. It is also published in the online edition of the Plos One medical journal in a report entitled: Development and Testing of a Magnetically Actuated Capsule Endoscopy for Obesity Treatment.

When swallowed, the balloon brings about a sense of fullness to the patient.

The technology will help obese patients to reduce the amount of food they eat. The capsule is a non-invasive alternative to current therapies used in managing obesity known as intragastric balloons.

Intragastric balloons are a well-established treatment for obesity in patients who struggle to control their eating.

A patient is usually sedated before the intragastric balloons are placed in the stomach using an instrument called an endoscope.

Once the balloon has been placed in the stomach, it is inflated through a tube. This invasive procedure is then repeated in reverse six months later when the balloon is removed. This means the endoscope is used to access the stomach where the balloon has been inflated, deflate and remove it from the stomach.