

[6 minute video on Sponge syndrome](#) link

Sponge Syndrome 1

“A new study published in the New England Journal of Medicine finds that hormone changes after weight loss from restrictive diets may make it extra hard to keep the pounds off.

The Study

Researchers at the University of Melbourne in Australia studied the weight loss of 50 obese and overweight subjects over a 10-week period. They found that the changes in hormones that occur during weight loss can last long term. During a deprivation-type diet, hunger hormones leptin and ghrelin, as well as insulin levels change and this study found, a full year after the initial weight loss, hormone levels were still not back to normal. **This suggests you may generally feel hungrier than you did months after you reach your goal weight. In addition, you might not be able to clearly detect when you are full, resulting in overeating and weight regain.”**

Quote from Calorie Count

These are the body’s compensatory mechanisms that I call the Sponge syndrome.

More info on **Sponge Syndrome 2:**

https://docs.google.com/document/d/1r8HRQG_NgDO2uUsdBTQ7qdL_x5u8uWZ0zjLJbRCzC3g/edit

Sponge Syndrome 3

The Sponge Syndrome Protects Humans from Starvation

“THE PHYSIOLOGICAL SYSTEM CONTROLLING FOOD INTAKE AND ENERGY EXPENDITURE . . .

One common misconception is that this physiological system is dedicated to the prevention of obesity. Instead this system’s essential role is in the prevention of starvation (ie, ensuring adequate energy intake to compensate for the energy requirements of basal metabolism, physical activity, growth, and reproduction). As a result, **this physiological system is more strongly biased toward prevention of energy deficiency rather than excess**

storage.”

From Greenspan's endocrine text

Gardner, David G., and Dolores Shoback. Greenspan's Basic and Clinical Endocrinology 9th edition. McGraw Hill 2011

Read Amazon kindle edition for \$3.03 of The Chronic Disease of Obesity