Why low-calorie diet plans lead to rebound weight gain at the end of a dieting cycle

"Low-calorie diet plans put the body in a starvation mode. That gets the body into a protective energy saving slow mode. The slow metabolism prevents long-term weight loss."

What is starvation mode – When the total food intake gets low on a daily basis, as in a low-calorie diet program, the body's metabolism slows down to conserve energy. The slow metabolism means the body is burning fewer calories by less activity, both internally and externally. The blood pressure and heart rate go down, and the muscle activity goes down. A 30 – 40% reduction in caloric intake decreases energy expenditure in a similar range. By cutting down energy expenditure, the body is preserving itself. This reduced energy expenditure from reduced calorie intake is the primary reason why "low-calorie diet plans" fail in producing a long-term weight loss.

The excessive weight gain which follows a low-calorie diet plan has been blamed wrongly on the indulgent behavior or lack of willpower on the part of the dieter. This thinking is flawed. It is not the willpower which is the problem, but the body's built-in survival program to conserve energy. By conserving energy, the body preserves itself during low-calorie diet starvation. Unfortunately, slow metabolism continues even after the diet plan has stopped. Additionally, a second protective mechanism follows the low-calorie period of starvation. That is an excessive appetite to prepare the body for any possible future episodes of starvation.