

Probiotics may help women lose weight

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Certain probiotics could help women lose weight and keep it off, says a recent study published in the *British Journal of Nutrition*.

The study, led by a team of researchers headed by Canada-based Université Laval Professor Angelo Tremblay, have demonstrated that the intestinal flora of obese individuals differs from that of thin people. That difference may be due to the fact that a diet high in fat and low in fiber promotes certain bacteria at the expense of others. Professor Tremblay and his team tried to determine if the consumption of probiotics could help reset the balance of the intestinal microbiota in favor of bacteria that promote a healthy weight.

To test their hypothesis, researchers recruited 125 overweight men and women. The subjects underwent a 12-week weight-loss diet, followed by a 12-week period aimed at maintaining body weight. Throughout the entire study, half the participants swallowed 2 pills daily containing probiotics from the *Lactobacillus rhamnosus* family, while the other half received a placebo. After the 12-week diet period, researchers observed an average weight loss of 4.4 kg in women in the probiotic group and 2.6 kg in the placebo group. However, no differences in weight loss were observed among males in the two groups. "We don't know why the probiotics didn't have any effect on men. It may be a question of dosage, or the study period may have been too short," says Professor Tremblay, who is also the Canada Research Chair in Environment and Energy Balance.

After the 12-week maintenance period, the weight of the women in the placebo group had remained stable but the probiotic group had continued to lose weight, for a total of 5.2 kg per person. In short, women consuming probiotics lost twice as much weight over the 24-week period of the study. Researchers also noted a drop in the appetite-regulating hormone leptin in this group, as well as a lower overall concentration of the intestinal bacteria related to obesity. According to Angelo Tremblay, probiotics may act by altering the permeability of the intestinal wall.

By keeping certain proinflammatory molecules from entering the bloodstream, they might help preventing the chain reaction that leads to glucose intolerance, type 2 diabetes, and obesity. This study focused on only one strain of *Lactobacillus*

rhamnosus, but Professor Tremblay believes that other probiotics found in dairy products could have a similar effect. He stresses, however, that the benefits of these bacteria are more likely to be observed in a favorable nutritional context that promotes low fat and adequate fiber intake.