

Eat less, live more

by Karen Krossing



In a world of supersizing, bulk shopping and oversized junk-food packaging, the idea of calorie restriction seems wildly out of place. Yet research suggests that if practiced correctly, a calorie-restricted diet can improve health and extend lifespan. But is it truly a path to a longer, healthier life?

According to the Calorie Restriction Society (CRS), scientific research has shown that calorie-restricted diets improve health and extend lifespan in many species, including worms, spiders, rodents, dogs, cows and monkeys.

In humans, a study out of the Washington University School of Medicine found that calorie restriction has a powerful effect on diseases associated with aging, drastically reducing the risk of heart attack, stroke and diabetes. But the impact on longevity in humans is still debatable.

“Whether calorie-restriction can extend human lifespan by slowing down the process of aging is the subject of much debate among professionals in the biogerontology field,” says Bob Cavanaugh, secretary and editor at the CRS. “Some predict very little life extension while others forecast a robust response.”

Nutrition is key

The goal of calorie restriction is slower aging and extended lifespan, not weight loss. Simply eating less will lead to malnutrition. To maintain adequate nutrition while on a calorie-restricted diet, you must replace calorie-dense foods with calorie-sparse, nutrient-dense foods.

To start, you must ensure that the foods in your diet provide sufficient nutrients to avoid malnutrition once you begin restricting your intake. To do this, avoid simple sugars and flours, eat both green leafy vegetables and non-leafy vegetables, carefully select where you get your protein and fat, ensure your protein intake is sufficient and balanced, and choose monounsaturated fats with some omega-3 fats. Most importantly, take a multivitamin to make up for any deficiencies. Once your diet consists primarily of nutrient-dense, calorie-sparse foods, you can gradually begin to reduce your total calorie intake.

Sound complicated? It can be. That’s why Cavanaugh recommends using computer software to track essential vitamins, minerals and amino acids on a daily basis. “You simply cannot guess your way to a healthy diet,” he says. “There are 31 nutrients established as essential, and a recommended daily allowance has been determined for each. Medical studies have proved that a deficiency in one or more of these nutrients leads to health problems.”

Cavanaugh weighs each portion of his food items, enters it in his daily database, and charts his progress through blood tests to ensure he’s avoiding nutrient deficiencies and other hazards. “My personal program consists of 1,800 calories per day. This maintains my 5’10” frame at 150 pounds, which is what I weighed in my early 20s.”

Risks and benefits

Of course, there are risks associated with a calorie-reduced diet. James Kirkland, Associate Professor of Human Health and Nutritional Sciences at the University of Guelph, argues that calorie-restriction is “basically, going hungry in a world full of food.” While not inherently unhealthy, says Kirkland, it can be. “This is clearly healthy when taken to a certain degree and done correctly,” he says. “However, it is physiologically abnormal in modern times, and can be associated with psychological stress.”

Kirkland points out that we can’t mimic historical food shortages in modern times. “For those that try,” he says, “there’s a risk of slipping from healthy to unhealthy levels of restriction, and certainly a risk of micronutrient deficiencies when caloric intake is very low.”

Also, some people may lose weight too rapidly, which can do more harm than good. Others may notice loss in muscle strength, reduced bone mass, sensitivity to cold, and other issues. Furthermore, children, teens and pregnant or nursing women should never go on a calorie-reduced diet, and anyone planning dietary changes should first consult with a knowledgeable physician or dietician.

And calorie restriction isn’t without critics. Terry Graham, Professor and Chair of Human Health and Nutritional Sciences at University of Guelph, makes an interesting comparison: “The everyday wild mouse in my backyard does not eat a lot and exercises, rather like our forefathers. We compare this mouse to one we put in a cage, overfeed and prevent from exercising (or put you in suburbia and give you a computer) then conclude that caloric restriction extends life. Restricting exercise and overeating shortens life.”

For his part, though, Cavanaugh has noticed incredible health benefits after five years on the program. His chronic skin conditions have disappeared. He hasn’t had a fever or cold in five years. His cholesterol and triglyceride levels have dropped. And no more food cravings. Instead, a sense of fullness and proper nourishment—and the possibility of a longer, healthier life.