

Monkeys live longer after eating lighter: study

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Courtesy Science and [World Science](#) staff

A 20-year study on rhesus monkeys suggests that substantially reducing caloric intake slows the aging process and leads to longer life spans, possibly in humans also, researchers say.

Previous studies with yeast, worms, flies, and rodents have suggested that this kind of “caloric restriction” – a reduction of about 30 percent, and very different from malnutrition – can lead to such health benefits in some mammals. But given the many parallels between rhesus monkeys and humans, this study suggests that these benefits might occur in humans as well, according to the scientists.

Ricki Colman at the Wisconsin National Primate Research Center and colleagues began the study in 1989 by assigning adult rhesus monkeys, each between age seven and 14, to either a caloric restriction group or a control group.

Once the monkeys were assigned, the researchers determined their original food intake and began reducing the diets of those monkeys in the caloric restriction group by ten percent for three months until they reached the desired 30 percent cutback in calories.

At the end of the study, 37 percent of the control group had died of age-related causes while only 13 percent of the caloric-restriction group had, they found. This finding means that the control monkeys experienced a death rate from age-related conditions such as diabetes, cancer, cardiovascular disease, and brain atrophy three times that of the caloric restriction group.

Any monkey that died over the course of the study underwent a complete necropsy by a board-certified pathologist, so that age-related deaths could be distinguished from other unrelated conditions, the researchers noted.

The findings are to appear in the July 10 issue of the research journal *Science*.

A study in the November 2007 issue of the journal *Annals of the New York Academy of Sciences* reached similar conclusions about the benefits of caloric restriction by comparing Americans with some Japanese populations with traditionally spare diets.

Image: Calorie restricted monkey "Canto." (Courtesy Science)

