REUTERS NEWS
FEATURE

03 September, 2001 22:09 BST

Lean Diet Quickly Helps Old Mice, Maybe Humans Too

WASHINGTON (Reuters) - Elderly mice put on a low-calorie regime for even short periods saw anti-aging effects that researchers say suggests older humans could quickly reap the benefits of such diets.

In a study published Monday, the researchers from the University of California, Riverside, said the results also held promise for the rapid screening of drugs and treatments that might mimic the effects of a low-calorie diet.

Stephen Spindler from the university's biochemistry department said the belief that restricting caloric intake extends life and health is backed up by research.

`This is the first clear indication these low-calorie diets rather rapidly switch the physiology of the animal toward a healthier state," he told Reuters.

Spindler said human anti-aging studies might now be possible if the effects could be observed relatively quickly as suggested by the mouse study.

In a paper published in the Proceedings of the National Academy of Sciences, the researchers said they put young and old mice on short- and long-term low-calorie diets and observed detailed changes in the genes of their liver cells.

Caloric restriction reversed the changes in several genes that were altered in aging animals.

Furthermore, 70 percent of the anti-aging effects of long-term caloric restriction also occurred in old mice put on a short-term low-calorie diet.

But Spindler cautioned people against thinking they could eat all they want before cutting back in their latter years, saying it was like quitting smoking later in life.

An old mouse on a low-calorie diet lived longer but not as long as one that started on the diet early in its life.

`The bad news is, the longer you wait the less time there is for the positive benefits to influence your aging," said Spindler.
