First-Ever Study Proves Diet Restriction Can Add Nearly Two More Years Of Healthy Life for Canines

14-Year Purina Study May Provide Significant Clues to Extending Life in Humans

ST. LOUIS, May 6, 2002 /PRNewswire/ -- In the first-ever lifelong canine diet restriction study, researchers from Nestle Purina PetCare have proven that a dog's median life span can be extended by 15 percent -- nearly two years for the Labrador Retrievers in this study -- by restricting diet to maintain ideal body condition*. The study findings, published in the current edition of the Journal of the American Veterinary Medical Association, may provide further evidence for human health as well.

"This study is significant for human as well as canine health because it's the first study completed in a larger mammal that proves the significant power that diet restriction wields in extending life and delaying the markers of aging," says Richard Weindruch, Ph.D., University of Wisconsin professor of medicine and expert in the diet restriction field. "From this study, we can extrapolate that large mammals, including humans, can potentially live longer and healthier through diet restriction."

The 14-year Purina "Life Span" study found that dogs that consumed 25 percent fewer calories than their littermates during their lifetimes maintained a lean or ideal body condition, resulting in longer life.

According to experts, the study provides the most significant data to date on the effects of diet restriction as the:

1. First diet restriction study completed for the entire life span of a larger mammal;
2. First completed study to document that diet restriction increases survival time in mammals larger than rodents;
3. First study to achieve health benefits for dogs with moderate reduction of food intake (25 percent versus the 30 percent to 50 percent typically used in rodent studies)

Study Design - A Lifetime of Information

When the study began, 48 eight-week-old Labrador Retriever dogs from seven litters were paired within their litters according to gender and body weight and randomly assigned to a control or a restricted-fed group. The control group was allowed to eat an unlimited, or free choice, amount of food during 15-minute daily feedings. Dogs in the restricted, or "lean-fed," group were fed 75 percent of the amount eaten by their paired littermates.

All dogs were fed the same 100 percent nutritionally complete and balanced diets (puppy, then adult) for the entire period of the study, from eight weeks of age until death -- only the quantity of food was different.

Dogs were weighed weekly as puppies, periodically as adolescents and then weekly as adults. Beginning at six years of age, they were evaluated annually for ideal body condition using the Purina Body Condition System(TM), a scientifically validated standard used by veterinarians to evaluate body physique in pets to assess weight and health. Other health indicators, including body fat mass, lean body mass, bone mass and glucose, glucose and insulin use, and cholesterol and triglyceride levels were measured annually to assess condition and health.

Study Results ... Living Longer

The study revealed that the median life span of the lean-fed dogs was extended by 15 percent or nearly two years. Median life span (the age at which 50 percent of dogs in the group died) was 11.2 years for the control group versus 13 years for the lean-fed dogs.

By age 10, only three lean-fed dogs had died, compared to seven control dogs. At the end of the twelfth year, 11 lean-fed dogs were alive with only one control dog surviving. Twenty-five percent of the lean-fed group survived to 13.5 years, while none of the dogs from the control group lived to 13.5 years.

"We all know that obesity, whether human or canine, is bad for health -- that's not new news," says Dr. Dennis Lawler, who along with principal investigator Dr. Richard Kealy, led the study. "What's exciting about this study is that, for the first time in a larger mammal, we proved that eating less resulted in longer life. That's powerful stuff."

The study showed that the lean-fed dogs maintained a significantly leaner body condition from 6 to 12 years of age than the control group dogs, with mean body condition scores between 4 - 5 (ideal) and 6 - 7 (overfed), respectively. On average, the lean-fed group weighed less, had lower body fat, and after a certain age, experienced a two-year delay in the loss of lean body mass as they aged, compared to the control group dogs.

In addition, according to observations of the researchers, the control dogs exhibited more visible signs of aging, such as graying muzzles, impaired gaits and reduced activity, at an earlier age than the lean-fed dogs.

What This Means for Pet Owners

The Purina "Life Span" study reveals the crucial role ideal body condition plays in health and longevity. However, obesity remains the number one nutritional problem among dogs. Studies have documented that at least 25 percent of dogs in the U.S. may be overweight.

To maximize their dogs' health, dog owners should learn how to recognize the signs of obesity and feed to ideal body condition. To help pet owners do this, Purina developed the Purina Life Plan(TM), a comprehensive approach applying specific breed size and lifestage guidelines, the Purina Body Condition System and feeding instructions to its packaging. The Purina Life Plan enables pet owners to feed to their individual pet's ideal body condition from puppyhood through the senior years.

"There are many factors that go into determining ideal body condition, from the size of your dog to his age to his breed, and it can be difficult for pet owners to do it on their own," says Aine McCarthy, DVM, executive director of the Purina Pet Institute. "The Purina Life Plan is the outcome of our innovative research in ideal body condition and the application of that knowledge to our packaging. It helps remove the guesswork for pet owners."

For more information on the Purina "Life Span" study findings, visit the Purina Pet Institute website at www.purina.com . To request a copy of the JAVMA manuscript, contact Diane Fagen at 847/925-8070 ext. 6770.

Based at Nestle Purina PetCare's headquarters in St. Louis, the Purina Pet Institute is the embodiment of

Purina's commitment to achieve better nutrition for dogs and cats through scientific discovery and the enhancement of the pet/owner relationship.

The North American headquarters for Nestle Purina PetCare is located at Checkerboard Square in St. Louis, Missouri, where Ralston Purina Company was founded more than a century ago. Nestle Purina PetCare promotes responsible pet care, humane education, community involvement and the positive bond between people and their pets. One of the leading global players in the pet food industry, Nestle Purina PetCare is part of Swiss-based Nestle S.A. - the world's largest food company.

*Ideal body condition: Physical assessment of health defined as when you can feel and see the outline of a dog's ribs, there is a waist when viewed from above and the abdomen is tucked up when viewed from the side.
