

Exercise Improves Parrot Health

Since most captive parrots lead a sedentary lifestyle, a group of UC Davis researchers was interested in learning what effect this had on the birds' overall health. Was their inactivity a contributing factor in susceptibility to high cholesterol (hypercholesterolemia) and hardening of arteries (atherosclerosis)? Exercise has been shown to be an important component to manage breakdown of fat (lipid metabolism) in human and poultry studies, and the researchers were curious if increased exercise could improve parrot health as well.

Wild parrots spend more than 50 percent of their waking time being active, foraging for food and flying several miles a day. Captive parrots, however, spend more than 90 percent of their waking time inactive. This extremely high level of inactivity seemed an obvious point to improve the health and welfare of captive parrots.

Dr. Joanne Paul-Murphy, a faculty veterinarian specializing in zoological medicine as well as animal welfare, with her post-doctoral graduate student, Dr. Kate Gustavsen, collaborated with other scientists to conduct a study with Amazon parrots. Eight birds were placed in an exercise group, while four made up a sedentary control group.

The exercise group performed 30 minutes of flight and 30 minutes of walking for five days every week. The sedentary group continued to live as typical companion birds. Body weight, chest girth and lipid panels were measured at three time points over several months. Lipid panels included total cholesterol, high-density lipoprotein cholesterol (HDL-C) (the "good" cholesterol), low-density lipoprotein cholesterol, and triglycerides.

The exercised birds lost significant weight and showed decreased body measurements compared to the unexercised birds. HDL-C measurements were significantly higher about midway through the study, but returned to near baseline by the end. The investigators think the reason that the birds' HDL-C did not stay elevated for the second half of the study was because the birds learned ways of avoiding the flight exercise, even though they continued to enjoy the walking exercise.

This study supports the theory that exercise has a positive effect on parrots' health, and further research is needed to determine the amount of exercise necessary to validate long-term positive changes in the parrots' health and welfare.



An Amazon parrot on an exercise "treadmill."