

Can Probiotics Help Obese Cats?

UC Davis nutritionists are researching new options to combat cat obesity

With obesity in cats being a major health problem, veterinary nutritionists at the school are tackling the issue with new approaches. One method they are exploring is the use of probiotics to assess its effect on food intake, body composition and metabolic parameters in healthy, overweight and obese cats. Probiotics are live micro-organisms introduced into the body to confer a health effect, usually benefits to the digestive system. They have been used for various purposes, most notably to treat diarrhea or chronic gastrointestinal disease. However, research into their use as potential weight loss tools in companion animals is lacking.



Recently, a resident research project conducted by Dr. Aarti Kathrani (mentored by faculty members Drs. Jennifer Larsen, Philip Kass and Andrea Fascetti) studied the use of probiotic *Enterococcus faecium* strain SF68 on 20 cats (eight in the control group). Studies in mice and humans showed the probiotic to reduce food intake, promote weight loss and improve metabolic profiles. The veterinarians were hopeful to find similar outcomes in cats.

“Unfortunately, we did not see that outcome with cats in our limited study,” Larsen said. “We did see some trends, though, before the 8-week study ended. There was potential for a different outcome if the study lasted longer or if we included more cats.”

Researchers hope to launch additional projects with a longer or broader study to see if those trends, such as movement toward greater lean body mass in the cats, could point to probiotics having a positive effect on weight loss and overall health. A potential future clinical trial of probiotics could help determine if this could be a new tool to fight obesity in pets.

Donors supporting the Center for Companion Animal Health funded this research project. Findings were presented in poster format at the 2016 American Academy of Veterinary Nutrition annual meeting, and discussed by Kathrani at House Officer Seminar Day last spring where dozens of research projects are presented by UC Davis residents. As the veterinary school with the largest advanced training program in the world, UC Davis is able to offer its house officers (residents, interns, fellows) valuable research opportunities not available at other institutions.