Nutritional Breakthroughs Help Pets Sustain Brain Health As They Grow Older, Nestlé Purina Research Finds

• Study shows that cognitive function, such as memory retention, can be improved in middle-aged cats with new nutritional blends • More than half of dog owners don't realize their pets can experience significant cognitive decline during aging, new survey reveals

ST. LOUIS (Aug.18, 2014) -- Nestlé Purina, a global leader in the pet care industry, announced today that company scientists have developed new food solutions for middle-aged pets to help sustain a healthier brain as they enter the latter stages of life. The finding is a breakthrough in pet care, providing nourishment to strengthen brain cells to help pets maintain function well into their senior years.

The solution, a new Brain Protection Blend™ (BPB), is a nutritional enrichment that targets metabolic changes and risk factors linked to brain aging. It is designed for pets to start consuming in middle age. The BPB can help maintain cognitive functions, such as memory, social interaction and learning abilities, and can keep them as sharp as they can be as pets age.

"By taking a more proactive approach, we may be able to slow the brain's decline often experienced among pets as they get older," said Dan Smith, Nestle' Purina's vice president of research and development. "Humans understand the need for additional nutrients to live healthily, so it's imperative that pet owners are aware of similar nutritional breakthroughs available for their pets that help slow the changes associated with aging."

Purina scientists have found that the BPB can improve cognitive function – thinking abilities and memory – in cats between 5 - and 8-years old.[1] Plans call for the new BPB to be added to select Purina products for cats or dogs in the next 12-18 months. Purina is still evaluating the effects of the BPB on dogs, and hopes to eventually offer the solution to both species.

The BPB can be added to pet food and is comprised of a unique formulation including key ingredients such as fish oil, B vitamins, antioxidants and the essential amino acid, arginine.

"All of these nutrients may be present in the natural prey of cats and can be found in many types of foods," said Dr. Yuanlong Pan, Purina senior research nutritionist and an author of the influential study on improving memory function in middle-aged cats. A study on the effects of the BPB on dogs is expected to be published soon.

The launch of the BPB is the second phase of Purina's two-pronged approach to addressing cognitive decline in pets using extensive research techniques that focus on adding nutritional enhancements to pet food.

The first phase centered on developing a neuron-targeted nutrition with a blend of nutrients based on medium chain triglycerides (MCTs) to improve memory function in senior dogs. Typically, cognitive decline is a slow and gradual process that begins in middle age and can be linked to a drop in brain glucose metabolism that occurs as dogs age. The outcome often results in memory loss, reduced social interaction, learning impairment and disorientation.

MCTs are nutrients sourced from vegetable oils such as coconut oil. A breakthrough diet blend containing MCTs is an innovative way to provide fuel to a pet's brain.

A research study confirmed significant improvements in behavior and cognition in as little as 30 days when senior dogs were fed diets with MCTs. Improvements were seen in attention span, trainability, decision making and overall cognitive function. Cognitive decline also occurs in cats and Purina is currently researching ways to include MCTs in cat food.

Cognitive Decline in Pets a Growing Concern

Some pet owners associate mobility problems to physical issues that come from old age without realizing that many of those issues actually stem from cognitive decline. This can result in pets forgetting how to perform normal functions such as using a litter box or finding a food bowl.

Studies have found 28 percent of dogs ages 11-12 years old and 68 percent of dogs ages 15-16 years old have one or more signs of mental issues. [2] Among cats, 28 percent of 11-14 year olds show signs of cognitive decline and increases to 50 percent when 15 years of age or older. [3]

According to an April 2014 survey conducted by Penn Schoen Berland and issued by Purina, more than 37 percent of dog owners have a dog older than seven. [4] This means a large group of pet owners may soon face issues related to their pet's health due to cognitive decline. Unfortunately, 51 percent of dog owners are not aware that dogs can suffer from cognitive decline as a side effect of aging.

Purina is widening its focus to finding nutritional options that will strengthen pets' cognitive abilities at a younger age and promote long-term brain health. Based on the April survey, 83 percent of dog owners would consider feeding their dog a premium food at a younger age if they could sustain brain health in the future.[5]

More than 400 Purina scientists, veterinarians and nutritionists a have been studying the effects of aging on pets since 1986, when Purina began the breakthrough "<u>Lifespan Study</u>" to look at canine diets. Since 2001, Purina researchers have studied the benefits of healthy nutrition on brain health in pets and in 2009 Purina was the first company to launch a MCT-based nutrient blend. Purina is also working on addressing other aging issues among pets including eye-care and weight management.

For more information, visit www.purina.com/innovation.

About Nestlé Purina PetCare

Nestlé Purina PetCare promotes responsible pet care, community involvement and the positive bond between people and their pets. A premiere global manufacturer of pet products, Nestlé Purina PetCare is part of Swiss-based Nestlé S.A., a global leader in nutrition, health and wellness.

Media Contacts

Bill Etling Nestlé Purina

314.982.4825

William.etling@purina.nestle.com

Darlene Naolhu
Burson-Marsteller
312.596.3449
darlene.naolhu@bm.com

[1] Yuanlong Pan, Joseph A. Araujo, Joey Burrows, Christina de Rivera, Asa Gore, Sandeep Bhatnagar and Norton W. Milgram (2013). Cognitive enhancement in middle-aged and old cats with dietary supplementation with a nutrient blend containing fish oil, B vitamins, antioxidants and arginine. British Journal of Nutrition, 110, pp 40-49. doi:10.1017/S0007114512004771.

- [2] Neilson, J.C., B.L. Hart, K.D. Cliff and W.W. Ruehl, 2011. Prevalence of behavior changes associated with age-related cognitive impairment in dogs. J. Am. Vet. Med. Assoc., 218: 1787-1791
- [3] Moffat KS, Landsberg GM. An investigation of the prevalence of clinical signs of cognitive dysfunction syndrome (CDS) in cats. JAAHA 2003;39:512.
- [4] Penn Schoen Berland. 2014 Purina Pet Owner Survey. 2014.
- [5] Penn Schoen Berland. 2014 Purina Pet Owner Survey. 2014.