**Bifidobacterium longum** BL999 Supplementation: A New Approach to Managing Dogs with Anxiety

**Q** It is conservatively estimated that 29 percent of dogs suffer from anxiety. What is known about the causes and physical manifestations of this condition?

**A** The causes of anxiety in dogs are complex. Genetics can be a factor, and some dogs are anxious from a very early age while others are calm and happy-go-lucky. Anxiety can also be acquired through triggering events or stressors in the environment. Whether the origins are intrinsic, external or both, the severity of the anxiety may be more important than the cause. An anxious dog lives in a chronic vigilant state of anticipating negative outcomes and negative emotional arousal, even when there's no clear sign that something bad or frightening is about to occur.

While we think of anxiety as a psychological condition, its effect on a dog's physiological state is real. Dogs with generalized anxiety live in a state of chronic stress and thus may have elevated cortisol levels and low heart rate variability, meaning the time between heartbeats fluctuates very little. If a dog is happy and excited to see his owner walk in the door, his or her heart rate and heart rate variability increase. If a dog's heart rate is elevated but the variability decreases, however, it is likely he or she is in a very stressed state.

**Q** Nestlé Purina recently conducted a trial with dogs supplemented with the probiotic **Bifidobacterium longum** BL999,* a strain shown to help dogs maintain calm behavior. What were the findings?

**A** A group of 24 anxious Labrador Retrievers was enrolled in the trial and all dogs were fed the same complete and balanced diet. For the first six weeks, 12 dogs were supplemented with **B. longum** BL999 while the other 12 were given a placebo. Following a three-week washout period, the supplemented and placebo groups were reversed for an additional six weeks, so that each dog served as his or her own control.

During each phase, the dogs' behaviors in response to a variety of stimuli were recorded and heart rate and heart rate variability, as well as salivary cortisol concentrations, were assessed. Day-to-day behaviors (e.g., spinning, pacing, jumping, barking) were also noted.

The findings showed that **B. longum** BL999 administration resulted in statistically significant improvement in dogs displaying day-to-day anxious behavior, as well as reduced salivary cortisol concentrations, decreases in heart rates and increases in heart rate variability* by feeding a probiotic that positively affects dogs, veterinarians can offer owners a new strategy to help manage dogs with anxiety.

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Managing Dogs with Anxiety: Make Behavioral Assessment Part of the Routine

Anxiety in dogs is like any other medical condition. The longer it goes untreated, the harder it can be to manage. Uncovering the clinical signs of anxiety isn’t always simple, because owners don’t necessarily associate their dog’s behaviors with a condition that can be managed. Screening patients and educating owners are key to prompt diagnosis and management of dogs with anxiety. Training several staff members to talk with patients about behavior can also help. Everyone on your staff should be noticing if a pet is exhibiting signs of anxiety in the clinic and reporting behavioral concerns to those with additional behavioral education.

Incorporate behavior screening into routine exams
It’s important to ask questions about specific behaviors because clients often don’t associate subtle signs such as lip licking, yawning, darting eyes or low body posture with anxiety. I ask about those behaviors as well as more overt signs, like pacing, panting, excessive salivation, excessive cleaning, destruction and nighttime vocalization. If a patient appears anxious during a clinic visit, you might start the exam with, “Casey seems pretty anxious today — does he ever act like this at home?” If the client says yes, I recommend probing a little deeper and asking for specifics about in-home behaviors as well as the owner’s perception of the types of triggers that elicit them. Also ask the client how long it takes the dog to return to normal behavior after becoming anxious.

I recommend adding several questions about behavior to the patient history you gather at every wellness exam. If you are dealing with puppies, you’re probably already asking about behaviors that could become problematic over time, such as house and/or crate training and mouthing. However, it’s important to proactively inquire about behavior issues in pets of any age.

Correct misconceptions about anxiety causes
Some owners feel guilty about their dog’s behavior issues, believing they may result from a lack of training or training mistakes. However, many mishandlings can be linked to unrecognized anxiety issues, and both genetics and experiences can contribute to anxiety disorders. Many of my clients acquire their dogs after the four- to 16-week socialization period that is critical in a dog’s early development. Lack of positive exposure to various environmental stimuli can predispose an animal to fears later in life. Likewise, most owners of rescued dogs weren’t able to control factors such as genetics, neglect or mistreatment prior to acquisition. I emphasize to clients that while reward-based dog training can help an owner communicate with his or her pet better, this type of formal training has less to do with managing anxious behaviors than the owner may think. Often, simple steps can be taken by a family to impact the emotional health of their pet. Because many behavioral issues are emotional in nature, aversive punishment should not be used to modify them. For example, putting a shock collar on a dog to stop him from barking when the owner is gone will only make the dog with separation distress equate being alone with something even more terrible happening.

Offer options to owners of anxious dogs
A referral to a behaviorist and prescribing anti-anxiety medications are two potential ways to help manage anxious patients. Purina® Pro Plan® Veterinary Supplements Calming Care, a new probiotic supplement, can also be used as part of a multimodal approach. Even if you refer a patient, be sure to stay apprised of the care the patient is receiving and remain involved with the care program. It’s important to reassure clients that they are not alone in their quest to manage these challenging behaviors.

Easing Anxiety at the Veterinary Office: Keep Calm and Practice On

After nearly five decades of working in veterinary hospitals, attending a veterinary behaviorist seminar several years ago triggered an awakening about how I was living out the veterinary oath that compels me to prevent and relieve animal suffering. While I had always dutifully cared for the physical well-being of my patients, I had never focused on their emotional well-being. Since then, I have dedicated myself to reducing fear, anxiety and stress in pets through the Fear Free educational services.

Many of our patients are managed through our office doors because of medical problems, from torn nails and GI disorders to joint inflammation and cancer. Unlike other medical professionals, we cannot tell patients why they hurt or explain the medical procedures they must undergo. The unfortunate result is that our patients often associate our care with pain. Just pulling into the veterinary hospital parking lot can engage a pet’s fight or flight response. And that can keep patients away from seeking veterinary care when their pets need it.

The good news is that our patients don’t need to suffer in this way. There are many ways to make the veterinary environment a more enjoyable experience, including:

• Reducing or removing anxiety triggers — Avoid what the patient hates. If the examination table causes anxiety, provide a more comfortable surface, such as a yoga mat or pheromone-infused towel.
• Changing the environment — Rather than have an anxious patient sit in the waiting area, it may be helpful to have the clients check in and then wait outside in a calm environment until their appointment begins.
• Incorporating play — Tap into the innate behaviors and needs of pets by giving cats a place to climb, hide and scratch, or dogs interesting smells to sniff. By taking steps to minimize pet anxiety we can provide a better level of veterinary care and help our patients lead healthy and happy lives.

Dog Anxiety Perceptions by the Numbers
To better understand the impact of behaviors potentially associated with anxiety, Purina recently conducted a survey of 68 US dog owners whose pets visited the veterinarian in the last 12 months.

Anxious behaviors are common and often associated with anxiety.

62% of dog owners surveyed have regularly seen behaviors that could be signs of anxiety in their dogs.

40% of owners surveyed whose dogs have experienced behaviors possibly linked to anxiety say it has impacted their lifestyle or changed their routine.

These owners want solutions.

If a veterinarian diagnosed their dog with anxiety...

68% of these owners would be extremely or very likely to consider behavior modification.

64% would be similarly open to nutritional supplements.

39% would be extremely or very likely to consider medications.

Anxiously, data suggests that health issues that are associated with anxiety are linked to decreased quality of life and comfort for pets, as well as increased costs and decreased pet owner quality of life. In the veterinary setting, these changes can include increased anxiety and fear in pets, as well as decreased owner engagement with routine checks and preventive measures.

Data was collected by Relevation via an online survey utilizing the Prodege panel facility. Qualified participants were adult men and women age 18 or older, owned one or more adult dogs age 6 months or older, were the person in the household most responsible for taking the dog(s) to a veterinarian (12% were not qualified) and took the dog(s) to a veterinarian in the past 12 months (12% were not qualified). The survey was nationally representative dog owners qualified and completed the survey. 60% of the dog owners qualified.

Online data collection was conducted from August 15-19, 2018. The online survey averaged 4 minutes in length.

5 Screening Questions for Canine Anxiety

1. Is there anything that makes your dog afraid or anxious?
2. If so, what triggers this fear or anxiety (e.g., being alone, loud noises, going to the veterinarian, thunderstorms)?
3. How does your dog’s fear or anxiety manifest itself (e.g., inappropriate defecation/urination, salivation, dilated pupils, trembling, tail hiding, vocalizing)?
4. Did your dog’s fearful or anxious behavior result from a traumatic event or did it develop gradually? At what age did the behavior develop?
5. Is there anything you can do to calm your dog? If so, what? How long does it take for your dog to return to behaving normally?
WHAT IF…
A PROBIOTIC COULD HELP ANXIOUS DOGS FEEL CALMER?

Introducing Purina® Pro Plan® Veterinary Supplements Calming Care with *Bifidobacterium longum* (BL999), a probiotic strain shown to help dogs maintain calm behavior. In a blinded crossover design study, 90% of dogs showed an improvement in displaying anxious behaviors such as jumping, pacing, and spinning*.


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