

Are de-stressing petfoods efficacious?

The marketplace offers food formulas, which are advertised to relieve stress in dogs and cats. These calming foods contain added L-tryptophan and/or alpha-casozepine as purported effective substances. Products for dogs are sold in both pet-supply shops and veterinary clinics. Therapeutic foods for cats with idiopathic cystitis may feature de-stressing as co-treatment.

High tryptophan intake is thought to increase brain serotonin synthesis, resulting in better mood. Four studies have looked at the impact of supplemental L-tryptophan on behavior in dogs with different forms of anxiety. There is one published study in cats. The overall outcome can be interpreted as lack of support for the effectiveness of additional L-tryptophan in canine and feline stress control.

Alpha-casozepine is a decapeptide derived by tryptic hydrolysis of alpha-S1 casein from bovine milk. It binds to the GABAA receptor and may elicit an anxiolytic effect. A double-blind study with an anxiolytic drug as positive control, claims equal efficacy of the drug and alpha-casozepine in dogs with anxiety-related disorders, but a placebo-effect cannot be excluded. A test diet with casein hydrolysate changed various behaviors in dogs, pointing at both less and more anxiety. In a double-blinded, placebo-controlled trial, alpha-casozepine treatment improved social phobias in cats, but the magnitude of the effect can be considered meaningless whereas reproducibility is unknown.

Therapeutic calming foods for dogs and cats have been put to the test. The foods contained added L-tryptophan and hydrolysed milk proteins as source of alpha-casozepine. In a longitudinal study, a veterinary stress-management food was evaluated in dogs with anxiety-related behavior problems. The blinded owners reported an immaterial improvement of anxiety-related behaviors while a time effect cannot be excluded. In cats, a calming food did not affect plasma cortisol as index of acute stress or was ineffective in a human-interaction test. In a trial using cats with idiopathic cystitis, the intervention involved both a de-stressing food and environmental enrichment, whereas the design was open and non-controlled.

Available research data cannot endorse efficacy of calming petfoods supplemented with L-tryptophan and/or alpha-casozepine. Irrespectively, the foods do not address the root cause of anxiety. Perhaps behavior modification and training are successful.

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