

# 8 Behavior Counseling

## Medication Complementary

### Can natural products be used for behavioral therapy?

This is a broad topic that includes a variety of therapeutic options, including herbal remedies, homeopathic remedies, nutraceuticals, and supplements. There are few controlled studies to show that any of these treatments are effective in pets. Although the same might be said for most of the drugs used in behavior therapy, most of these have at least been proven to be effective in human behavior therapy. In addition, because these products contain “natural” ingredients, there can be great variation in purity, quality, level of activity, and efficacy from manufacturer to manufacturer and from batch to batch.

In addition to the use of the human products available as complementary therapeutics, a number of veterinary products are now on the market for anxiety disorders, cognitive dysfunction, and generalized calming effects. Although these products generally meet a level of quality control and standardization that is similar to pharmaceuticals, efficacy studies are generally lacking. Pheromones are a natural alternative that does provide some sound scientific evidence of efficacy. Other modalities such as aromatherapy, acupuncture, telepathic communication, and TTouch® are beyond the scope of this handout (see (22) TTouch®).

### What are pheromones, and how are they used?

There are commercially available pheromones now available for use in dogs and cats in North America, specifically Feliway®, a synthetic cheek gland pheromone for cats, and Adaptil™ (adaptil.com, feliway.com), a synthetic dog pheromone derived from the intermammary sebaceous glands of lactating female dogs.

Pheromones stimulate the vomeronasal organ and affect areas of the brain that lead to emotional responses. They are species specific; in other words, the pheromones of one species will only have an effect on other members of that species. Each of these pheromone products is available as a spray for use in localized areas (e.g., car, kennel) or as a plug-in diffuser, which aerosolizes the pheromone over about 700 square feet for 30 days. Adaptil™ is also available as a collar for dogs that evaporates pheromones for approximately 1 month. Feliway® may be useful for reducing marking behavior, including some forms of scratching, as well as to help calm a cat in the home, such as in situations where there has been some household change to which the cat is having difficulty adapting. Adaptil™ may help to reduce anxiety, such as when a new puppy is introduced to the home, in cases of separation anxiety or noise phobias, or when there have been changes in the household to which the dog is having difficulty adapting. Dog pheromones may also be useful to help the pet adapt to car travel, boarding, or moving to a new home.

### What is ginkgo biloba, and how is it used?

Ginkgo biloba is an herb that may alter a number of neurotransmitter systems in the brain, including acetylcholine, serotonin, and norepinephrine, and may have antioxidant effects. It may be effective at enhancing blood flow to the brain and may be useful for senior pets with cognitive decline.



“Pheromones are species specific.”

## What is kava kava, and how is it used?

Kava kava is an herbal product that may aid in the relief of mild anxiety. Due to reports of possible liver toxicity in humans, the product is no longer available in some countries. There have been no controlled studies of its use in pets, but it has been recommended for anxiety, as a sedative or muscle relaxant, or as a sleep aid and for the treatment of overgrooming in cats. Kava kava should not be combined with other anti-anxiety medications. It may cause gastrointestinal upset and should be avoided in patients with liver disease.

## What is St. John's wort, and how is it used?

St. John's wort is a plant that has been recommended as a natural alternative to antidepressants. It is said to sedate, reduce anxiety, improve mood and sleep, and reduce inflammation. It may be useful in compulsive disorders. There have been claims of its effective use in dogs and cats, but no controlled studies. As with pharmaceutical antidepressants, it has been suggested that a period of 3 weeks or longer may be required to achieve therapeutic effects. There are the same contraindications as with other antidepressants. St. John's wort should not be used in conjunction with other pharmaceutical antidepressants, due to the potential for severe side effects and/or reactions. St. John's wort may cause increased sensitivity to sunlight.

## What is valerian, and how is it used?

Valerian is a plant that has been used as a natural "tranquilizer" and muscle relaxant in animals, but controlled studies are not available. Valerian is not intended for long-term use but may have benefit as a treatment for helping pets sleep through the night and exposure to periodic stressors, such as travel, thunderstorm phobias, and acute anxiety. Several weeks may be needed to achieve success.

“Melatonin may be used alone or combined with other medications such as antidepressants.”

## What is melatonin, and how is it used?

Melatonin is produced in the pineal gland of the brain and is secreted into the blood at high levels during the night and at low levels during the day. Melatonin may be useful to help dogs with sleep disorders and in the treatment of fears and phobias such as thunderstorm and fireworks phobias. It may be used alone or combined with other medications such as antidepressants. Side effects in humans may include sleepiness, headaches, and gastrointestinal discomfort.

## What is alpha-casozepine, and how is it used?

Alpha-casozepine is a hydrolysate of a protein in cow's milk. In preliminary studies, it has shown some promise in reducing fear and anxiety in dogs (Zylkene® Vetoquinol, N. America; Merck Animal Health, Europe) and cats.

## What is L-theanine, and how is it used?

Based on some initial studies, L-theanine may also be useful for treating some forms of anxiety in dogs and cats .

## What is Harmonease®, and how is it used?

This product is a combination of magnolia and phellodendron (Harmonease®, VPL), which in preliminary studies has been shown to reduce signs of fear and anxiety.

## **What is aromatherapy, and how is it used?**

Both lavender and chamomile aromatherapy may have benefit in reducing anxiety such as that associated with crating or car rides.

## **How might dietary changes and tryptophan be used in treating behavioral problems?**

It has been suggested that a change in diet can also alter behavior. Although some reports indicate that there may be adverse effects from supplements and preservatives in pet foods, there is no evidence to support this premise. For the most part, these additives increase the nutritional balance and may protect against the toxic effects that might be produced by “spoilage.” In addition, one would expect more signs (e.g., dermatologic, gastrointestinal) than just behavioral changes if there were an adverse reaction to the food or one of its ingredients. An elimination diet (e.g., one that did not contain the suspected offending ingredients) could be used to test this hypothesis.

One common suggestion has been that a reduction of protein in the diet may lead to a decrease in aggression, but this has not been validated. In a recent canine study, the level of protein (high vs. low) in the diet or addition of L-tryptophan had no effect on fearfulness or hyperactivity, but a combination of low protein diets with tryptophan supplementation was shown to lower territoriality scores, while high protein diets without tryptophan supplementation were most likely to lead to aggression toward owners. If the pet’s age and health are not an issue, then a feeding trial with a reduced protein diet along with a tryptophan supplement might be considered in pets that exhibit territorial and dominance forms of aggression.

## **Are there any other herbal or natural remedies that have been proven to have some efficacy?**

A number of products such as docosahexaenoic acid (DHA), S-adenosylmethionine (SAMe), and phosphatidylserine have been found to be useful in improving signs of cognitive dysfunction in senior pets. A combination of these supplements along with antioxidants is often used together for greater effect (see (10) Senior Pet Cognitive Dysfunction). DHA may also help to improve learning and brain development in young dogs. Other products such as Eleutherococcus (Siberian ginseng) to improve mental acuity, Panax ginseng as a stimulant, Passionflower (Passiflora) or skullcap for anxiety, hops for insomnia, and a number of manufactured combinations are available for use in pets, but there is little more than anecdotal data to support their efficacy.

## **What are homeopathic and Bach flower remedies, and how do they work?**

The basic principle of modern homeopathy is that “like cures like.” The theory is that a patient’s symptoms can be cured by a product that would produce the same behavioral or physical symptoms in a healthy individual. The homeopathic remedy is prepared by repeatedly diluting the substance to render it nontoxic. Although the substance may be undetectable after dilution, the remedy is said to contain the vibrational energy essences that match the patterns present in the ailing patient. These remedies may be made from plants, minerals, drugs, or animal substances.

Bach flower remedies are intended to improve the emotional state of the pet, using minute dilutions of plant essences. Rescue Remedy® is a combination of five flower essences intended to relieve panic following emotional or physical stress. Calms and Calms Forte are also combination homeopathic remedies that have been recommended as an alternative to psychotropic drugs. Although there is no scientific evidence to support any claims of efficacy, the extreme dilution of the ingredients are likely to render them safe.