

What's Inside Calm-K9

The Scoop on the Evidence Behind the Ingredients!

L-Tryptophan

L-Tryptophan is absorbed from the diet, can cross the blood-brain-barrier into the brain and then can go on to get converted into serotonin. (van Praag, 1981)

Gut microbiome health can impact the extent to which this happens. (van Praag, 1981)

In 2012, a study on diets containing alpha-casozepine and L-tryptophan showed improvement in the ability of dogs to cope with stress and showed reduction in 4 anxiety-related behaviour parameters. (Kato et al. 2012)

In 2010, a study by Rosado et al. and later in 2012 by Leon et al. showed that aggressive dogs had significantly lower levels of serum serotonin and significantly higher serum cortisol concentrations, compared to non-aggressive dogs. (Rosado et al., 2010 and Leon et al., 2012).

And this has been shown in the cerebrospinal fluid also - the fluid that surrounds and communicated with the brain itself. (Reisner et al., 1996)

L-Tryptophan has been shown to reduce barking, staring and stereotypic behaviour in a group of working dogs when assessed by trainers that were blind to whether the dogs had been given tryptophan or not. (Pereira et al., 2010)

Our results suggest that L-Trp supplementation had an effect in changing the frequency of the stress related behaviours, decreasing anxiety signals. Consequently, L-Trp supplementation can be an efficient tool to help treat some behavioural disorders in cats and dogs as part of behavioural therapy. As the L-Trp supplementation reduces some of the animal's

anxiety signs, we conclude that this effect leads to an improvement in the animal's welfare. (Pereira et al., 2010) A study in 2000 showed significant reduction in barking and lunging around an owner's property through tryptophan supplementation alone. (DeNapoli et al., 2000)

Tryptophan depletion/deficit in humans has been shown to be associated with negative emotional states, including lowered mood, increased aggression and cognitive impairment. (Bell et al., 2001 and Murphy et al., 2002)

There are numerous studies in humans showing a positive effect on depression with tryptophan supplementation as compared to a placebo. (Shaw et al., 2001)

Women on diets supplemented with tryptophan showed an increase in the recognition of happy facial expressions, and a decrease in the recognition of disgusted facial expressions - characteristics of optimism and pessimism respectively. (Murphy et al., 2006)

Humans stopping smoking supplemented with L-tryptophan are found to report lower anxiety and negative mood associated with stopping. (Bowen et al., 1991)

Humans with Attention-Deficit Disorder have been found to have lower levels of tryptophan. (Bornstein et al., 1990) In a small study in 1998, tryptophan was found to be as effective as light therapy in helping the mood of those of people with Seasonal Affective Disorder. (Ghadirian et al., 1998)

The Gut Microbiome

The gut microbiome - a community of non-pathogenic living microbes within the gut - maintain a vital symbiotic relationship with animals.

The gut microbiome and gut health impact brain neurotransmitter levels and subsequent behaviour.

In fact, the gut microbiome is closely linked to tryptophan metabolism from the diet. (Kelly et al., 2016)

In 2016, a research team then transplanted the gut microbiome of humans suffering from depression into rats and compared the outcome with a group transplanted with a human microbiome that was not suffering from depression. The depressed microbiome resulted in dysregulated tryptophan metabolism and the rats to exhibit pessimistic behaviour in response to novelty. (Kelly et al., 2016)

Further to this, the team discovered that the rats with the "depressed microbiome" were less accepting of reward - AKA harder to train. (Kelly et al., 2016)

In a study in mice in 2011, it was found that lactobacillus probiotic dosing resulted in alterations in GABA receptor expression in the brain and, in turn, reduced stress hormone, anxiety-associated behaviour and depression-associated behaviours. (Bravo et al., 2011)

In mice in which the microbiome has been removed, they demonstrate reduced social activity with their own species. When supplement with probiotic, this reduced ability to socialise improves! (Desbonnet et al., 2014)

Stressful events can impact gut motility, blood flow and the microbiome negatively, suggesting a two-way communication with both the gut and behaviour negatively (or positively) impacting the other. (Mondo et al., 2019)

There's increasing evidence demonstrating the gut microbiome to be involved in dog aggression and fear-related struggles. (Mondo et al., 2019)

While, we are a long way off from being able to identify specific probiotics for specific behaviour struggles, there is increased focus on overall gut health for which probiotics represent one well established element for restoring gut health.





The only calming aid I have ever tried that actually worked! Took 3 days to work, then I ran out! Waiting on my order and can definitely see the difference when my pup doesn't have it.

Definitely went to auto ship as I do not want to be without ever again. This is a great product to add to my pups training and behaviour modification programme.

Thanks A-OK9!!!

Maureen Arndt



Passiflora - Passiflora In carnata

Passion flower is a perennial, climbing vine with woody stems and axillary tendrils, reaching up to 20 feet in length, used traditionally for anxiety and to promote calmness. Passiflora has a history of being used in a variety of supplements for dogs and humans.

In a 2008 placebo-controlled study, passiflora was shown to reduce anxiety without causing sedation in humans when given before the stressful event of surgery. (Movafegh et al., 2008)

In 2002, a placebo-controlled study demonstrated similar anti-anxiety efficacy between Passiflora and a commonly used benzodiazepine (like diazepam)

without causing sedation. (Akhondzadeh et al., 2002)
Results from one clinical study show that taking passion flower extract reduces symptoms of anxiety comparable to a commonly used benzodiazepine drug without causing drowsiness or impaired ability in humans. (Mori et al., 1993)

In 2001, a study demonstrated increase characteristics of optimism and confidence in mice when fed passiflora, comparable to giving a benzodiazepine but without associated sedation. (Dhawan et al., 2001)

Data suggest that passion flower impacts the GABA neurotransmitter, the main inhibitory neurotransmitter of the brain.

Lemon Balm - Melissa officinalis

Lemon balm is a perennial, lemon-scented herb native to southern Europe, Asia Minor, and North Africa.

In a double blind, placebo-controlled trial on stress in humans, giving lemon balm ahead of a stressful event improved negative mood, increased calmness and alertness as compared to a placebo. Further to this, this was found to improve performance in a maths test rather than worsen it. (Kennedy et al., 2004)

Lemon balm given to children prior to dental examination resulted in reduced behaviours associated with anxiety as compared to a placebo. (Pardo-Aldave et al., 2009)

In humans with anxiety disorders, taking lemon balm extract has been shown to reduce anxiety-associated symptoms. (Cases et al., 2011)

In animal models, reduced behavioural response in response to new and unfamiliar environments has been determined in mice. (Soulimani et al., 1991)

Interestingly, lemon balm has been shown to improve cognitive function and agitation associated with Alzheimer's disease and cognitive decline in humans. (Akhondzadeh et al., 2003)

Its strong performance in Alzheimer's and cognitive decline studies make lemon balm a compelling addition with senior dogs with cognitive decline and associated anxiety.





Fantastic! – within 2 days of giving my energetic 18 month old Irish Water Spaniels (2 brothers) their behaviour changed. They listen and respond on the FIRST command!

A few weeks later we now consistently have recall from our ‘wanderer’ on the FIRST call. Our other, timid boy, is much less reactive to passer-bys and visitors at the door. Even our friends have noticed the change, I can’t thank you enough

Linda J



L-Glutamic Acid

L-glutamine is an amino acid found in high levels in the body. It is produced mainly in skeletal muscle and then released into the circulation for use by the immune system, gastrointestinal tract, kidneys, and liver.

Glutamine is an important energy source for intestinal cells and immune cells and is important in normal growth and maintenance of these cells. (Kim, 2011)

Glutamine helps maintain the barrier between the inside of your intestines and the rest of your body,

thereby protecting against a “leaky gut.” (Rao et al., 2012)

Glutamine has been reported to enhance intestinal and whole-body growth. (Wang et al., 2015)

In humans with poor gut health, glutamine appears to increase water and electrolyte absorption, reduce loss of water and sodium from the gut, and improve gut permeability.





Effective – we have been using this for 4 days now and already we can see huge gains of calmness coming into our two border terriers’ behaviours.

We can even see improvement in our older boy’s allergies (he is 3 years old). This is a minor miracle and we hope to see even more gains as the 50 days proceed. We have them marked on the calender – Day 50 just happens to be New Years Day! Thanks A-OK9 Team!

Dr D



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★★★★★ 5 star review from Debbie Q.:

"Yesssss! - This stuff is fantastic! It's made the world of difference & used alongside training we've seen a change in our pup in just a couple of days. Lovely to see our pup calmer & less stressed. Happier household now she's not on constant high alert. Its not changed her personality, in fact its shining through more. So pleased we've tried this, will definitely buy more! If you happen to have one of the few dogs that is fussy & not keen on the taste like ours, hide it in something they like, it's worth it. A little goes a long way & worth every penny. Thank you Tom & Lauren 😊"

5 ★

CALM-K9 - [1POT] has received a 5 star review.**Title:** Amazing!

Teddy has spent the last year on a number of supplements to help calm his anxiety that occasionally borders on aggression with very limited success. Teddy is currently on day 58 of A-OK9 and I can honestly say I am amazed at how well this works and how easy it is to give him. Each morning he gets a bit of PB with the A-OK9. He just loves it! We have now discontinued all other supplements as he just doesn't need them anymore. Our wow moment occurred today. Teddy has been an absolute star hanging out with a doggie friend and 2 very active boys for the last 6 hours! Normally, he would need additional doses of "rescue" supplements, periodic breaks from the dog & kids and would have really only lasted 1 hour at the very maximum before he became a reactive mess (barking at everything, lunging at movement, growling at the dog, and being overly attached to me). Today for the 1st time (Teddy is 2) I was able to see appropriate dog greetings/interactions/play without having to intervene! Never thought I would be so excited by play bows and butt sniffing not to mention just being able to disengage and find a boundary to sleep on when needed!

Victoria Balbian (teddy.the.doxiepoo@gmail.com)

5 ★

CALM-K9 - [1POT] has received a 5 star review.**Title:** focused

My dog has a frustration not being able to play with other dogs which results in barking and pulling. Since starting him on Calm K9 his is more focused and easier to redirect his attention back to me. Still lots of training to do but feel we are on the right track.

Kathy Otruba (kotruba@hotmail.com)