

Exhale

GABA and L-Theanineinfused Buttery Cacao



Benefits*

- · Helps promote restful sleep
- · Promotes mental and emotional calm
- · Helps support a healthy stress response
- May help support occasional anxiety
- Promotes focus, attention, and concentration
- Encourages feelings of relaxation

Highlights

- 100 mg gamma-aminobutyric acid (GABA) and 100 mg L-theanine per serving
- Zero grams of sugar suitable for ketogenic diets
- Free of artificial sweeteners, flavors, or colors
- Low allergen profile, free of dairy, soy, and gluten, and non-GMO
- Suitable for vegans and vegetarians
- Only 3 g carbohydrates per serving
- Each batch has been given a Certificate of Analysis to confirm potency and purity
- Sources of environmentally sustainable harvested cacao beans
- Convenient delivery format for better patient compliance





Dosing Guidelines

Consume 1 square of Fx Exhale once per day. Can take up to two squares per day as needed.

Who Should Not Take

Pregnant women and children under 6 years of age should avoid taking GABA. Use of GABA may conflict with taking anxiety medications. Do not take GABA with excess alcohol consumption, as it may drastically exacerbate the relaxation effect of alcohol.

Refer to the Liposomal NeuroCalm™ Tech Sheet by Designs for Health® for more research and benefits of GABA and L-theanine.

Fx Chocolate® Exhale

| Serving Size 1 Square (4.5 g) Servings Per Container 15 | | |
|--|----------|---------------|
| Amount Per Serving | | % Daily Value |
| Calories | 15 | · |
| Total Fat | 1 g | 1%* |
| Saturated Fat | 0.5 g | 3% |
| Total Carbohydrate | 3 g | 1%* |
| Dietary Fiber | 1 g | 4%* |
| Total Sugars | 0 g | |
| Includes 0 g Adde | d Sugars | 0%* |
| GABA | 100 mg | |
| (gamma-aminobutyric a | acid) | |
| L-Theanine | 100 mg | |

Ingredients: Cacao nibs, allulose, organic cocoa butter. Made on equipment shared with nuts and milk.

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Fx Exhale contains 100 mg of GABA and 100 mg of L-theanine per serving to promote mental and emotional calm without impairing focus and attention.* GABA works by slowing down the activity of nerve cells and preventing them from overfiring, helping to combat stress and occasional anxious feelings.* L-theanine is an amino acid found mainly in green tea and various fungi and is known to promote a sense of calm and a healthy response to stress.*

Fx Chocolate® contains zero grams of sugar and is sweetened with allulose, a sweetening agent that is found naturally in jackfruit, figs, and raisins, with no bitterness or unpleasant aftertaste. The chocolate delivery system is a novel and convenient way to receive the benefits of bioactive ingredients found in nutrients and herbs, especially for individuals who are unable to swallow capsules or softgels, or for those who wish to reduce pill-fatigue.

Ingredient Highlights

Theobroma cacao L. (also known as the "food of the gods") boasts a wide variety of health benefits. Cacao beans are a rich source of bioactive polyphenolic compounds (with more than 200 having been identified), including flavanols, flavan-3-ols, epicatechins, and their proanthocyanidin oligomers, which have been shown to provide antioxidant properties — perhaps a reason to indulge in a little dark chocolate. Fx Exhale may offer various health benefits by reducing oxidative stress, supporting cardiovascular health¹ and blood lipid metabolism, and promoting healthy cognitive function.² The dietary polyphenols of cacao, especially flavanols, have favorable effects on the body's cardiometabolic health, including the support of healthy blood pressure, blood vessel function, and healthy fat ratios, as shown in human and animal studies.^{3,4} Furthermore, cacao polyphenols were shown to support healthy intestinal inflammatory responses by promoting healthy expressions of neutrophils, cytokines, and enzymes.²

GABA is a naturally occurring amino acid in the brain and it is a major inhibitory neurotransmitter in the central nervous system. Being an inhibitory neurotransmitter, GABA blocks nerve impulses and serves as a critical calming agent for the body. Supplementation with GABA may be beneficial by helping to cope with stressful situations and occasional anxiety. The brain synthesizes GABA from glutamate, an excitatory neurotransmitter. These two neurotransmitters work together in a system of checks and balances. When this communication system breaks down, brain function becomes affected. GABA levels in the body may decrease in stressful situations, which can tip this delicate system out of balance.

A small EEG study showed that alpha waves increased while beta waves decreased 1 hour after oral GABA administration, indicating that GABA may help induce relaxation and reduce anxiety. It is believed that GABA supplementation elicits these results by activating the parasympathetic nervous system, a division of the autonomic nervous system responsible for a variety of involuntary bodily processes involved in relaxation. Due to the effects of GABA on the parasympathetic nervous system, supplemental GABA intake may be considerably beneficial in situations where a relaxed state of mind is necessary, allowing for clear thinking, better focus, and greater concentration.

L-theanine crosses the blood-brain barrier and is known to block the binding of glutamic acid to glutamate receptors in the brain. It "has been considered to cause anti-stress effects by inhibiting cortical neuron excitation."⁷ In human studies, L-theanine has been demonstrated to significantly reduce cortisol response and subjective stress response to cognitive stressors and to suppress the stimulatory effect of caffeine.^{8,9} Studies show that orally administered L-theanine reduces anxious tendencies and attenuates blood pressure increases in healthy adults under conditions of physical or psychological stress.7 Animal studies suggest that L-theanine increases brain neurotransmitter levels associated with feeling happy, calm, and satisfied.¹⁰ Compared to a placebo, L-theanine reduced heart rate and salivary immunoglobulin A responses during an acute stress task. Researchers attributed these effects to an attenuation of sympathetic nervous activation. 11 Human EEG studies showed L-theanine to significantly increase activity in alpha brain wave frequency, indicating its ability to relax the mind without inducing drowsiness — a valuable tool for relieving feelings of occasional anxiety or stress while eliminating negative impacts on alertness and focus.12

Allulose is a monosaccharide epimer of fructose, formally called D-psicose, that is found naturally in figs, raisins, jackfruit, and maple syrup. It has a sweet taste — very much like regular sugar (sucrose) — and it occurs in relatively small amounts, so it's referred to as a "rare sugar." While allulose has the taste and texture of sugar, when taken in isolation, it does not affect blood glucose or insulin. Allulose has a glycemic index of zero, which makes it an ideal sweetener for people on ketogenic or low-carbohydrate diets. Humans lack the enzymes to digest allulose, so it is absorbed in the small intestine but not metabolized by the body, making it nearly calorie free. Thus, allulose has just one-tenth the calories of sucrose — only 0.4 calories/gram to be exact. Allulose is primarily excreted in the urine and it has very low colonic microbial fermentability. Therefore, it has no unpleasant gastrointestinal effects common with polyols.



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References

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