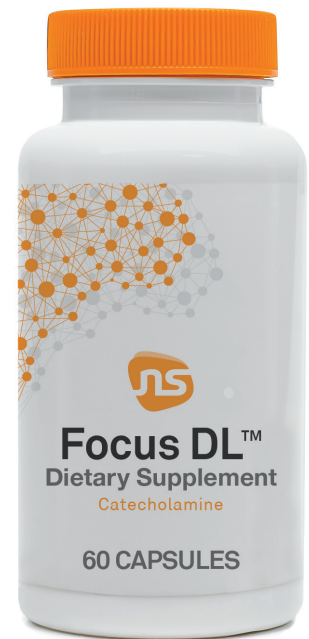


Focus DL

Contains the precursor to PEA, a neuromodulator important for focus, cognition, and catecholamine activity*

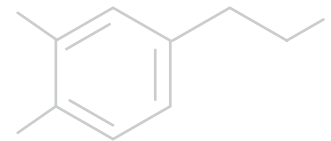


Item Number	Available Sizes	Serving Size
20003	60 Capsules	2 Capsules

Key Ingredients

DL-phenylalanine	<ul style="list-style-type: none"> ■ Precursor to phenylethylamine (PEA), dopamine, norepinephrine, and epinephrine¹ ■ PEA is a neuromodulator shown to increase the release of catecholamines such as dopamine and norepinephrine² ■ PEA levels were found to be significantly lower in individuals with focus issues compared to controls³
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The Science

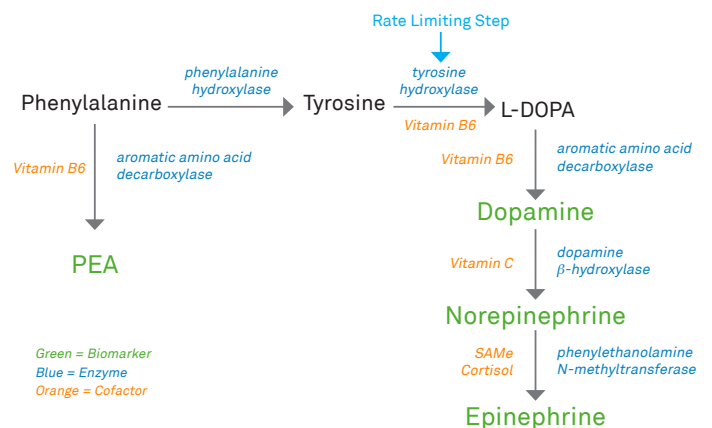


Catecholamines

A class of neurotransmitters responsible for many functions in the nervous and endocrine systems⁴

- Catecholamines play an important role in mood, energy, memory, **attention**, and **cognition**⁵⁻⁸

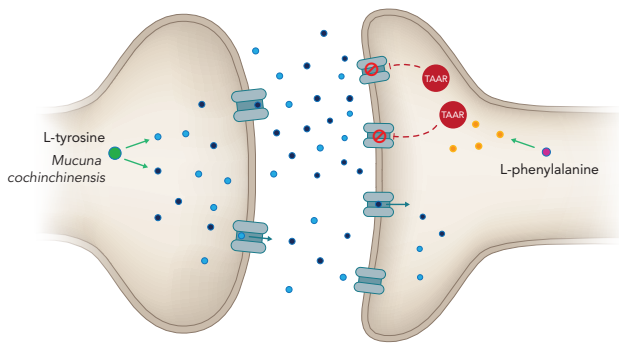
Catecholamine Pathway



*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

MORE SCIENCE BEHIND FOCUS DL

Figure 1. Activation of TAAR by PEA



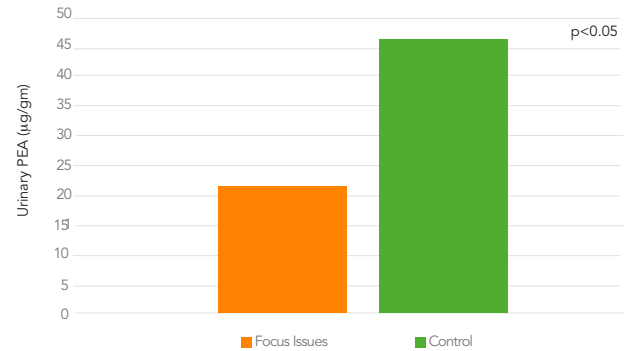
Action of PEA

Trace amines, like PEA, are similar in structure to neurotransmitters and are involved in the regulation of dopamine, norepinephrine, and serotonin²

- The trace amine associated receptor (TAAR) functions to inhibit the reuptake of the catecholamines dopamine and norepinephrine *in vitro* (Figure 1)⁹
- Activation of TAAR by PEA allows these neurotransmitters to remain in the synapse, leading to increased concentrations of catecholamines⁹
- Catecholamines from the prefrontal cortex control multiple cognitive functions including attention, focus, impulse, and craving control

Supporting PEA can work alone or together with dopamine and norepinephrine support to naturally sustain catecholamine activity

Figure 2. PEA Levels and Focus

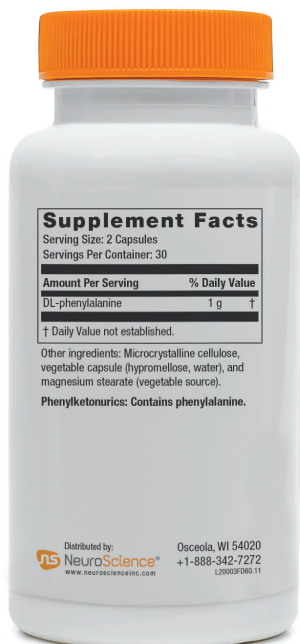


The science behind symptoms

A cohort study of pediatric subjects with focus concerns had significantly lower PEA levels when compared to the control group ($p < 0.05$)³

- There was a 73% difference in urinary PEA levels in the control subjects (Figure 2.) when compared to the group with focus issues³
- Another double-blind study showed that daily use of 200mg of DL-phenylalanine for 30 days may improve mood^{10*}
- PEA is converted into the metabolite phenylacetic acid, a compound with similar natural effects to that of endorphins⁹

Focus DL contains amounts of DL-phenylalanine per serving that meet and exceed those used in this study¹⁰



Supplement Facts

Serving Size: 2 Capsules
Servings Per Container: 30

Amount Per Serving	% Daily Value
DL-phenylalanine	1g †

† Daily Value not established.

Other ingredients: Microcrystalline cellulose, vegetable capsule (hypromellose, water), and magnesium stearate (vegetable source).
Phenylketonurics: Contains phenylalanine.

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1. Ng J, et al. Nat Rev Neurol. 2015;11:567-84.
2. Xie Z and Miller G. J Pharmacol Exp Ther. 2008;352(2):617-28.
3. Kusaga A, et al. Ann Neurol. 2002;52:371-74.
4. Eisenhofer G, et al. Pharmacol Rev. 2004;56(3):331-49.
5. Clark K and Noudoost B. Front Neural Circuits. 2014;8:33.

6. Blier P. J Psychiatry Neurosci. 2001;26 Suppl:S1-2.
7. Verhoeff N, et al. Pharmacol Biochem Behav. 2003;74(2):425-32.
8. Xing B, et al. Brain Res. 2016;1641(Pt B):217-33.
9. Irsfeld M, et al. Webmedcentral. 2014;4(9):1-15.
10. Beckmann H, et al. Arch Psychiatr Nervenkr. 1979; 227:49-58.



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