

# FAST BLISS

The Diamond on Cannabinoid Crown™

Anandamide (AEA) is often referred to as the “bliss molecule”; in fact, its name is derived from the Sanskrit word for “internal bliss”. AEA is one of the body’s two most well-documented, naturally-occurring ‘endocannabinoids’.

Unlike phytocannabinoids (such as cannabidiol, CBD), AEA is produced endogenously in the central nervous system (e.g., human brain). What’s more, recent studies report that AEA is also contained in cocoa and truffles.<sup>[1, 2]</sup>



## THE BENEFITS

- Pain management
- Sleep support
- Cognitive function, learning and memory support
- Appetite stimulation
- Mood support
- Circulatory health

## Who It’s For

Folks seeking support for pain management, sleep, mood, appetite stimulation, memory and more.

## How To Use

**200 mg**  
Per day

## OUR ADVANTAGE

Naturally found in plants, like cocoa and truffles

Can be found in human brain

Better vasodilatory activity than cannabidiol (CBD)

The body creates AEA on demand to be used within the ECS to promote homeostasis. As it is made available, AEA binds primarily with the receptors of the ECS, primarily CB1 but also CB2 and other receptor targets. Upon binding to its targets, AEA helps regulate inflammation and neuron signaling.

It has been reported that AEA is principally formed in two consecutive reactions by N-acyl-transferase and N-acyl-phosphatidylethanolamine-hydrolyzing phospholipase D (NAPE-PLD), and it is degraded by fatty acid amide hydrolase (FAAH) or N-acyl-ethanolamine (NAE)-hydrolyzing acid amidase.<sup>[3]</sup>

## AEA BY THE NUMBERS

### 1. Pain Management

- AEA has been shown to have analgesic effects in animal model. Dose-dependent response with greater effects at higher doses.<sup>[4]</sup>

### 2. Sleep and Memory Support

- Murillo-Rodriguez et al. report that AEA leads to a 27.3% increase in slow-wave sleep 2 (SWS2) frequency and an 83.8% increase in rapid eye movement (REM) frequency. AEA supplementation also increases SWS2 frequency level by 72.7% and REM frequency level by 105.5%. In an animal model, AEA is shown to facilitate memory retrieval.<sup>[5]</sup>

### 3. Appetite Stimulation

- AEA doubles the number of eating bouts (203%) and produces a 600% increase in chow intake in rats. Also, AEA doubles the number of positive 'liking' reactions elicited by intraoral sucrose, without altering negative 'disliking' reactions to bitter quinine.<sup>[6]</sup>

### 4. Circulatory Health Support

- AEA significantly decreases blood pressure by  $40 \pm 7$  mm mercury column (Hg) by reducing systemic vascular resistance index from  $3.3 \pm 0.1$  to  $2.3 \pm 0.1$  mm Hg min/ml/100 g, with no significant change in cardiac index, stroke volume and index heart rate.<sup>[7]</sup>

AEA ( $0.1$ - $100$   $\mu\text{mol/L}$ ) produces a concentration-dependent relaxation of endothelium-intact isolated rat pulmonary arteries. This vasodilatory activity is found to be more potent than CBD (the respective  $p\text{EC}_{50}$  values are:  $5.00 \pm 0.09$ ,  $n=15$  and  $4.60 \pm 0.07$ ,  $n=13$ ).<sup>[8]</sup>

### 5. Unhealthy Cell Proliferation Inhibiting

- AEA dose-dependently inhibits the proliferation of the unhealthy cell lines MCF-7 and EFM-19 with  $\text{IC}_{50}$  values between  $0.5$  and  $1.5$   $\mu\text{M}$  and 83-92% maximal inhibition at  $5$ - $10$   $\mu\text{M}$ .<sup>[9]</sup>

## References

[1] Crozier S J, Hurst W J. Polyphenols in human health and disease. 2014, pp.1077-1085. [2] Pacioni G, Rapino C, Zarivi O, et al. Phytochemistry. 2015, 110:104-110. [3] Atkinson D L, Abbott J K. The Complex Connection Between Cannabis and Schizophrenia. 2018, pp.37-74. [4] Fride E, Mechoulam R. Eur j pharmacol. 1993, 231(2), 313-314. [5] Murillo-Rodriguez E, Sanchez-Alavez M, Navarro L, et al. Brain res. 1998, 812(1-2), 270-274. [6] Mahler S V, Smith K S, Berridge K C, et al. Neuropsychopharmacology. 2007, 32(11), 2267-2278. [7] Wagner J A, J rai Z, B tkai S, et al. Eur j pharmacol. 2011, 423(2-3), 203-210. [8] Baranowska-Kuczko M, MacLean M R, Kozłowska H, et al. Pharmacol res. 2012, 66(3), 251-259. [9] De Petrocellis L, Melck D, Palmisano A, et al. Front. P Natl Acad Sci. 1998, 95(14), 8375-8380.