ZINJABURN™

An Efficient Adipose Tissue Blocker

Enter Dehydrozingerone (DHZ), which is a half analog and degradant of curcumin, meaning that it is very structurally similar yet may resolve the bioavailability issues associated with its relative curcumin. As such, DHZ, a natural phenolic compound that is also known as *feruloylmethane* and is obtained from rhizomes of *Zingiber officinale* (also of the ginger family), has attracted much attention from medicinal chemists due to its broad range of biological activities.

THE BENEFITS

- Powerful antioxidative activity and anti-aging effect
- Shows anti-inflammatory properties
- May help regulate metabolic processes to support weight management
- Supports healthy blood sugar metabolism
- Improves mood

Who It's For

DHZ is ideal for folks who are looking for weight management, people who are looking for health blood glucose regulation, and anyone who are interested in anti-aging benefits.

How To Use

2
Servings per day

400-600 mg
Per serving

Can be added to smoothies, shakes and more.

www.nnbnutrition.com info@nnbnutrition.com

OUR ADVANTAGE

Potentially more promising than the highly-touted curcumin

A Better AMPK activator than curcumin

Good water solubility – easy to mix

Better bioavailability than curcumin

How does Dehydrozingerone Work?

DHZ is one of the metabolic by-products of curcumin, which is highly prized for its range of biological activities: antimicrobial, antioxidant, free radical scavenging, anti-inflammatory, pro-healing, anti-depressant and cognitive-supporting activities. [1]

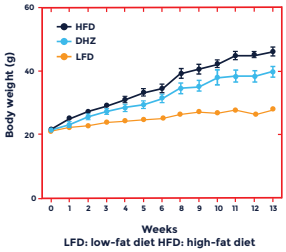
DHZ has also been shown to activate AMP-activated protein kinase (AMPK), which contributes to beneficial metabolic effects, such as improved glucose uptake. [2] And while DHZ shares this property with curcumin, DHZ appears to be a much better and stronger AMPK activator than curcumin.

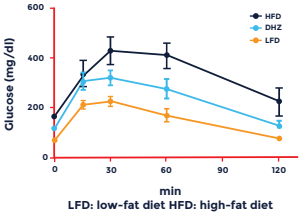
DHZ BY THE NUMBERS

1. Weight Management and Blood Sugar Regulation

- Research has shown that DHZ suppresses weight gain, lipid accumulation and hyperglycemia in obese mice fed a high-fat diet. Treatment with DHZ led to a 15% body weight reduction and a 30% liver fat decrease. [2]

- DHZ Supplementation reduces blood glucose levels by 35% and insulin levels by 30% in mice fed a high-fat diet. DHZ-supplemented mice also have 35% lower leptin levels compared to mice fed a high-fat diet without DHZ. [2]





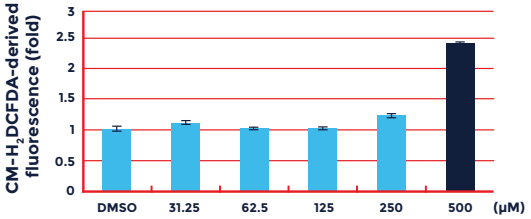
2. Anti-Aging

- In one animal study, DHZ significantly elevates endogenous antioxidant enzymes (e.g., GSH, GST and SOD) and scavenges multiple free radicals (e.g., ABTS, DPPH, superoxide radical and nitric oxide radical), which contribute to its anti-aging potential. [3]

Antioxidant models	IC_{50} concentration (μM)		
	DHZ	Curcumin	Ascorbic acid
DPPH	123.21		9.7
ABTS	18.44		1.64
Superoxide	165.47	20.5	
Nitric oxide	223.84	24.0	
Ferric ion reduction	184.2		184.2

3. Cellular Pruning

- DHZ has been shown to possess antiproliferative effects, and it can inhibit the growth of unhealthy cells. Research has shown that when DHZ is applied at a concentration causing 70% inhibition of the cell growth, it induces the death of 11% of the cells. [4]



Intracellular ROS accumulation induced by DHZ

4. Mood Improvement

- DHZ demonstrates significant antidepressant-like activity in behavioral models of depression (e.g., tail suspension test, forced swim test), which is mediated in part through the monoaminergic system. [5] DHZ can also reduce lipid peroxidation on the cortex, hippocampus and cerebellum of mice.

References

[1] Obregón-Mendoza MA, Estévez-Carmona MM, Hernández-Ortega S, et al. Mol J Synth Chem Nat Prod Chem. 2016;22(1). doi:10.3390/molecules22010033. **[2]** Kim SJ, Kim HM, Lee ES, et al. J Cell Mol Med. 2015;19(3):620-629. doi:10.1111/jcmm.12455. **[3]** Parihar VK, Dhawan J, Kumar S, et al. Chem Biol Interact. 2007;170(1):49-58. doi:10.1016/j.cbi.2007.07.006. **[4]** Yogosawa S, Yamada Y, Yasuda S, Sun Q, Takizawa K, Sakai T. J Nat Prod. 2012;75(12):2088-2093. doi:10.1021/np300465f. **[5]** Martinez DM, Barcellos A, Casaril AM, Savegnago L, Lernardão EJ. Pharmacol Biochem Behav. 2014;127:111-117. doi:10.1016/j.pbb.2014.10.010.