



60 Capsules Bottle



Black Ginger *Kaempferia parviflora*

If you're from the West, chances are you've never encountered black ginger extract before. If, however, you're from the East, and in particular Thailand, the legendary reputation of this spice precedes itself. Also known as *kaempferia parviflora*, black ginger is touted for its effects on male sexuality; increasing libido, endurance, and of course, sexual prowess.

How Does Black Ginger Work?

If you've ever researched or used Viagra before you would have discovered that it works via a mechanism known as phosphodiesterase inhibition. Phosphodiesterase (PDE), and in particular phosphodiesterase-5 (PDE-5) is an enzyme which cleaves a bond in the compound cAMP, known to mediate vasodilation in blood vessels via nitric oxide synthesis.

Upon breakage of these bonds, the compound loses its action and vasodilation subsides. By inhibiting the cleaving of these bonds, the compound persists longer in blood and is able to exert effects. Most notably is the dilation of the cavernosal artery found in the penis, translating to much firmer and longer lasting erections. Black ginger works via this same mechanism—PDE-5 inhibition.¹

However, it is important to set realistic expectations when using black ginger as a pro-erectile supplement, as it is not as potent as the synthetic PDE-5 inhibitors. Pharmaceuticals such as

Viagra and Cialis are much stronger inhibitors, but are also more likely to cause undesirable

effects, ranging from severe headaches (migraines are believed to be caused by dilation of blood vessels under the scalp), nasal congestion, dizziness, and priapism (a never-ending erection that you absolutely do not want to experience).

You may be wondering, is there any other reason black ginger trumps Viagra as a better option for treatment of ED?

In addition to its PDE-5 inhibiting effects, black ginger also acts on the dopaminergic system, boosting levels of this neurotransmitter² (by inhibiting its breakdown) which plays an important role in normal sexual function. **In persons who exhibit reduced dopamine sensitivity or levels, sexual dysfunction is very common and will not be fixed by use of mere vasodilators.**

Its ability to increase dopamine levels also improves your mood in the process and can help combat depressive illness. In this sense, black ginger is considered superior to pharmaceuticals such as Viagra since it tackles both the issue of diminished penile blood flow and your arousal to sexual stimulus thanks to upregulation of dopamine receptors.

But wait there's even more.

In addition to its amazing effects on your erectile health and sexual well-being, black ginger extract also possesses several other functions that you are likely to benefit from whether you are a man or woman. **These include those from the impressive list below:**

- Decreases the period of erectile latency (in simple terms, the time it takes for you to attain an erection after exposed to sexual stimuli).
- Said to increase both length and girth of the flaccid penis.
- May promote lifespan via activation of sirtuin 1 gene.³
- Improves symptoms of BPH; an enlarged/enlarging prostate.⁴
- Improves brain function and possesses anticholinesterase activity (which may offset Alzheimer's and dementia).

Using Black Ginger In Poor Health

In general, using anything that affects the function of the heart (via vasodilation, or blood flow alterations) is not ideal if you are in sub-par health. While the heart is an extremely resilient organ, there is just so much it can take.

But black ginger should not be scratched off your list of promising supplements just because of a little extra fat. Why? It has the ability to increase caloric expenditure. Unknown to many is the fact that a higher metabolic rate does not just increase the rate of calorie

burning, but also boosts recovery, your resistance to stress along with improved sleep patterns, and energy production.

Black ginger is able to boost energy production via stimulation of AMPK (or AMP-activated protein kinase). This is an enzyme which increases the rate of calorie burning in the mitochondria of muscle cells, resulting in greater energy production. Also worth mentioning is the fact that black ginger activates brown adipose tissue (BAT) which is a good type of body fat that possesses thermogenic properties and is frequently found in the mitochondria itself?⁵

How to Use Black Ginger for Best Results

Of note is the fact that there is little to no evidence of adverse effects experienced while using black ginger, as it has been recommended by the Thai Traditional Medicine Institute as a safe supplement with centuries of proven use behind it.

A dose of between 450mg to 900mg daily is normal. It does not adversely affect blood

pressure, nor does it affect hormonal balance, making it safe for use while on hormone replacement therapy. The only time black ginger should not be used is if you suffer from pre-existing arrhythmias as it may exacerbate the condition even more.

When you look at black ginger from an overall perspective, you can see that it is much more than a one-hit wonder in terms of boosting sexual prowess. It is something that also works to address issues of sexual sensitivity dysfunction and boosts your energy levels in the process.



Black ginger has been used as a vitalizing and stimulating herb for centuries. It displays adaptogenic activities and reduces triglycerides, preventing diabetes.

Black ginger is a popular ingredient in male sexual performance formulations due to significant levels of PDE5 inhibitors which increase blood-flow to the testis and stimulate dopaminergic function in the hypothalamus.

Dopamine is an organic chemical that acts as a neurotransmitter and neuromodulator in the human brain. Among its activities, dopamine influences motivation, arousal and sexual gratification.

Additionally black ginger has been shown to increase sperm density. Its aphrodisiac activities include enhanced sexual desire, motivation and performance as well as supporting the structure and function of Sertoli cells.

The Sertoli cell barrier (SCB) sometimes referred to as the “blood testes barrier” protects

and controls the environment which produces, nourishes, maintains and stores sperm cells.

A clinical study of 45 healthy elderly males tested the effects of *Kaempferia parviflora* on erectile function. Response latency time to visual erotic stimuli as well as size and length of penis at erectile state showed significant changes. The study concluded "Our study clearly demonstrates that KP is a potential resource for the development of nutraceutical compound against aged related male erectile dysfunction." *

*"Efficacy Assessment of *Kaempferia parviflora* for the Management of erectile dysfunction" Panakaporn Wannanon et. al., *OnLine Journal of Biological Sciences* Volume 12, Issue 4, pp. 149-155

In addition black ginger has strong antioxidant and anti-inflammatory effects due to the presence of strong antioxidants in the dark purple (almost black) flavonoid pigments that give black ginger its name.

In Lab animals fed black ginger body weight, visceral fat accumulation, lipid metabolism abnormalities, hyperinsulinemia, glucose intolerance, insulin resistance, hypertension and peripheral neuropathy were suppressed. "Because KP had preventive effects on metabolic diseases, including anti-obesity effects ... we propose that KP will be extremely valuable as a medicine or component of food in alternative health care."**

**" Anti-obesity effects of *Kaempferia parviflora* in spontaneously obese type II dietetic mice' Tomoko Akase et. al. "Journal of Natural Medicine", Jan.2011, vol. 65, issue 1, pp. 73-80

Cognitive Health: We mentioned that black ginger stimulates dopaminergic functions in the human brain. Parkinson's disease is caused by a loss of dopamine secreting neurons. Dopamine relays messages to the area of the brain that regulates coordinated body movements and with less dopamine people are less able to control these movements. Alzheimer's disease characterized by impaired memory and cognitive functions are linked to substantial disturbances in dopamine regulation in the brain. ADHD (Attention Deficit Hyperactivity) is also associated with decreased dopamine activity. Boosting dopamine naturally can help to treat depression and bipolar depression. The ability of black ginger to stimulate dopaminergic function may greatly contribute to cognitive health.

Chemical Constituents: (The chemical compounds found in Black Ginger)

5, 7-dimethoxyflavone

5-hydroxy-3, 7, 4'- trimethoxyflavone

5-hydroxy-3, 7-dimethoxyflavone and most major flavones compounds

Alex Eriksson
Coach
Supplements, Nutrition

Alex Eriksson is the founder of Anabolic Health, a men's health website dedicated to providing honest and research-backed advice for optimal male hormonal health.

Black Ginger powder produced by Cellular Preservation Technology is available in 450 mg capsules. 60 capsules to each bottle.



CELLULAR PRESERVATION TECHNOLOGY

It is this process that distinguishes our herbs from all others.

1. Our herbs do not require any preservatives or heat treatment to prevent degradation. If this were a crème or liquid it would require preservatives since moisture is the medium for the enzymes and microorganisms to degrade the product.
2. The enzymes, vitamins, minerals and other vital ingredients are preserved with their full potency intact. The value of the herbs and botanicals are kept at their highest level.
3. It is exactly this high level of preservation of the vital ingredients that create the results that we would otherwise not achieve in traditional drying methods, even if we had used exactly the same ingredients in exactly the same proportions.
4. If we use heat to remove the moisture (de-hydration), the heat will denaturize the enzymes (making them ineffective), reduce the protein levels considerably and oxidize thermo-sensitive vitamins such as Vit C and beta-carotene.
5. The freeze dry process eliminates water without exposure to heat thereby preserving all of the enzymes, vitamins, minerals, and bioactive compounds.
6. The very small particle size (micronization - no need for grinding) and porous particle structure achieved by the Bio-Dynamic Freeze Dry Process allow our herbs to be more easily absorbed and metabolized. Vitamins such as Vit C are fat soluble and are easily and quickly absorbed into our body.
7. The effectiveness and capabilities of all our herbs are greatly enhanced due to the particulate size and structure produced by our transitional and evolutionary Freeze Dry process.



The Technology – Cellular Preservation Technology (CPT)

Cellular Preservation Technology or CPT is a proprietary technology which utilizes a modified form of freeze drying.

Freeze Drying has been used for centuries however the common industry standard freeze dry method typically uses traditional 'static' freeze drying with a further process of mechanical grinding.

Image 1 – Traditional Vs Cellular Preservation Technology (CPT)

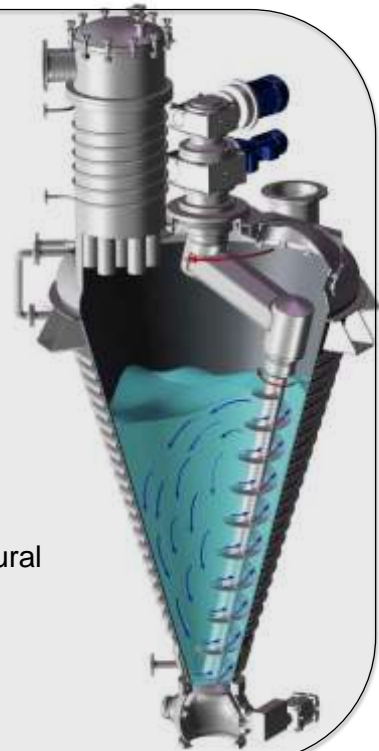
Traditional freeze drying



- multi-step process; bacteria and mould growth risk.
- static materials sitting on trays; 10-20% residual moisture
- product ground into a powder; product cell structure destroyed

Cellular Fracture Line technology

- 1-step process
- super frozen particles fly around in the product chamber
- no mechanical grinding.
- brittle material motion and sublimation of ice structure that hold it together causes product to break along natural elemental fracture lines.
- <0.1% residual moisture



CPT is a key component in the creation of our functional foods. It allows us to preserve a whole food in its fresh form, thus maintaining all of the medicinal activity of a live plant while providing the safety of a stable commodity.

This proprietary and transitional preservation process gives us the unique ability to provide a superior product compared to anything else available on the market today. The 'secret' to our technology is the Herbs are dried while they remain frozen in a vacuum state, rather than sitting motionless on trays (as in the traditional tray freeze drier), the product is flying round in a vortex.

The deeply flash-frozen CPT granules decrease in size due to sublimation of the connecting ice structure and break into increasingly smaller particles along natural elemental fracture lines. This creates a smaller particle size and porous structure without cellular hemorrhaging, caused by mechanical grinding of the traditional process as used in the industry today. CPT particles are much more easily absorbed and metabolized (more bio-available), and are more soluble for use as a catalyst ingredient in other formulations.

Solubility

As a food ingredient our herbs are highly soluble. Solubility ties into taste as well as ease to combine with other ingredients. This high level of solubility (enhanced by the CPT freeze dry process creates a more soluble particle structure),

Fresh Super herbs and Super foods

As soon as our botanicals are harvested they naturally begin to degrade. It is critically important to get them into the CPT process immediately after harvest. The logistics are challenging in any case, but the fact that they are grown at our doorstep in the mountains surrounding Chiang Mai, Thailand makes it all possible.

Higher Bioactivity Superior Efficacy

The objective achieved by CPT is preservation not only of the targeted ingredients but preservation of the entire cellular and molecular structure of the live plant. This is achieved by:

- An Evolutionary and Transitional Freeze Dry Process where the product is never exposed to the destructive oxidative forces of heat.
- Plant tissue fractures between/along the layers of the cell walls preserving cellular integrity and improving the retention of the bioactive intracellular contents.
- Water removed as a liquid at an extremely low constant temperature (minus 55 deg C) evaporates at a constant rate while the quantity of water steadily decreases. This creates surface tension. Any solid structure in contact with the water will normally experience surface tension strong enough to damage fragile cell walls; CPT removes water in its gaseous state (water vapor) and avoids this destructive surface tension.
- Exposure of the entire surface area to sublimation results in “even” drying which preserves cellular integrity.

The net result is preservation of the complex synergistic structure as close as possible to how it exists in nature. This translates to a more highly bioactive more effective powder.

Higher Absorption and Higher Bio-Availability

~~Particles break down inside the product chamber with minimal need for mechanical grinding. They~~

break down due to the movement of the super frozen particles and sublimation of the ice structure that holds the particles together. This causes them to fall into small porous particles along the natural Cellular Lines creating soft, porous particles which have more surface area per unit of weight and therefore are absorb more easily.

The function and value of our food supplements lie not in lab tests alone, but in their energetic breakdown and uptake inside your body and the preservation of enzymes, proteins and vitamins.

The ability of your body to store or use these nutrients is called bio-availability – yet another huge advantage of our Cellular Preservation Technology activated botanicals.

The quality and effectiveness of our Products are the result of the remarkable protocols and processes we employ from the fields to the finished product.

For details on this evolutionary process, please contact us at www.cptsuperherbs.com

References:

1. **Efficacy Assessment of Kaempferia parviflora for the Management of Erectile Dysfunction** [OnLine Journal of Biological Sciences, 2012].
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3. **Standardized Kaempferia parviflora Extract Inhibits Intrinsic Aging Process in Human Dermal Fibroblasts and Hairless Mice by Inhibiting Cellular Senescence and Mitochondrial Dysfunction** [Evid Based Complement Alternat Med. 2017] PubMed-NCBI.
4. **Suppression of benign prostate hyperplasia by Kaempferia parviflora rhizome** [Pharmacognosy Res. 2013] PubMed-NCBI.
5. **Kaempferia parviflora extract increases energy consumption through activation of BAT in mice** [Food Sci Nutr. 2014] PubMed-NCBI.

