

# Pycnogenol®

Standardized Extract of French Maritime Bark



## DESCRIPTION

Pycnogenol is an herbal extract derived from the bark of the French maritime pine tree. Pycnogenol, also known as pine bark, contains 40 different plant compounds called oligomeric proanthocyanidin complexes (OPCs) that carry strong antioxidant qualities of potential benefit to human health and physical performance.

## FUNCTIONS

Pycnogenol has been shown to have four basic properties:

- It is a powerful antioxidant
- It provides support for inflammation
- It selectively binds to collagen and elastin providing a chondroprotective effect
- It aids in the production of nitric oxide, thus relaxing and dilating blood vessels

With over 170 published studies and review articles noting its safety and efficacy, Pycnogenol has created great interest with researchers in a wide range of specialties. Its anti-oxidative, anti-inflammatory and chondroprotective effects in vitro and vivo have suggested pycnogenol's usage in mild osteoarthritis (OA), stage 1 and 2 (1). The combination of benefits offered by Pycnogenol is of major interest to athletes and those studying athletic performance (2). The metabolic demands of sport generate a level of stress that causes the production of free radicals. The production of free radicals secondary to high-volume training can lead to problems such as increased muscle damage, inflammation and soreness, and reduced performance. Pycnogenol increases the production of antioxidant enzymes and scavengers, strengthening the body's ability to fight off free radical damage, thereby allowing an athlete to recover more efficiently during heavy training. Of further benefit is Pycnogenol's ability to shut down the production of pro-inflammatory enzymes such as COX-2 and enhance nitric oxide production, which helps increase blood and oxygen flow to muscles, encouraging muscle tissue growth and repair as well as better support for aerobic endurance.

The properties exhibited by Pycnogenol solely and in combination with other nutrients such as L-arginine, have resulted in new treatment options in the area of men's health. A 2019 study noted the benefit of Pycnogenol as an adjunct treatment for antidepressant-induced sexual dysfunction

(3). This study evaluated seventy-two outpatients of both genders who exhibited sexual dysfunction caused by SSRI administration. The improvement in SSRI mediated sexual dysfunction was attributed to Pycnogenol's ability to improve endothelial function by its antioxidant, anti-inflammatory, vasodilatory, and anticoagulant action. A 2016 study demonstrated that the combined effects of Pycnogenol and L-arginine improved sexual dysfunction in elderly men (4). A 2018 study looking at treatment options for benign prostatic hypertrophy (BPH) demonstrated that Pycnogenol helped to improve prostate symptoms such as emptying, frequency, intermittency, urgency, weak flow, straining and nocturia better than the control group using standard management and a group using standard pharmacological management (5). Finally, a 2015 study looking at the effect of supplementation with both Pycnogenol and L-arginine showed an improvement in both the quality of sperm and erectile function in infertile men (6). These studies support the value of Pycnogenol and justify the continued research on the value of Pycnogenol for a wide range of potential indications.

## INDICATIONS

Pycnogenol may be a useful dietary supplement for individuals searching for increased nitric oxide production and endothelial support.

## FORMULA (WW #10373)

### 1 Vegetarian Capsule Contains:

Pine bark extract powder ..... 50 mg

Other Ingredients: Cellulose and water (capsules), rice powder, magnesium stearate and silica.

This product contains NO added sugar, salt, dairy, yeast, wheat, gluten, corn, soy, preservatives, artificial colors or flavors.

## SUGGESTED USE

As a dietary supplement, adults take 1 vegetarian capsule, 1 to 3 times daily with food, or as directed by a healthcare professional.

## STORAGE

Store in a cool, dry place, away from direct light.  
Keep out of reach of children.

*References on following page*

## References

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3. Smetanka A, Stara V, Farsky I, Tonhajzerova I, Ondrejka I, Pycnogenol supplementation as an adjunct treatment for antidepressant-induced sexual function, Physiol Int. 2019 Mar1;106(1):59-69
4. Yagi H, Sato R, Nishio K, Arai G, Soh S, Okada H, Effects of a supplement combining Pycnogenol and l-arginine aspartate on lower urinary dysfunction compared with saw palmetto extract, J Tradit Complement Med. 2016 Jun 11;7(1):117-120
5. Ledda A, Belcaro G, Feragalli B, Cornelli U, Duggall M, Corsi M, Cesarone MR, Benign prostatic hypertrophy: Pycnogenol supplementation improves prostate symptoms and residual bladder volume, Minerva Med. 2018 Aug; 109(4):280-284
6. Kobori Y, Susuki K, Iwahata T, Shin T, Sadaoka Y, Sato R, Nishio K, Yagi H, Arai G, Soh S, Okada H, Strong JM, Rohdewald P, Improvement of seminal quality and sexual function of men with oligoasthenoteratozoospermia syndrome following supplementation with L-arginine and Pycnogenol, Arch Ital Urol Androl. 2015 Sep 30;87(3): 190-3

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.

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