

BenPros

- Functional food ingredient for prostate health
- A complex of fermented camellia oil and other extracts




Prostate health

- As the prostate enlarges abnormally with age, it compresses the urethra that passes through the middle of the prostate, resulting in urinary disorders such as frequent or residual urine.
- As the number of patients with prostate health problems gradually increases in an aging society, interest in prostate health is increasing to the extent that it is considered a major policy task.

Functional food ingredient for prostate health

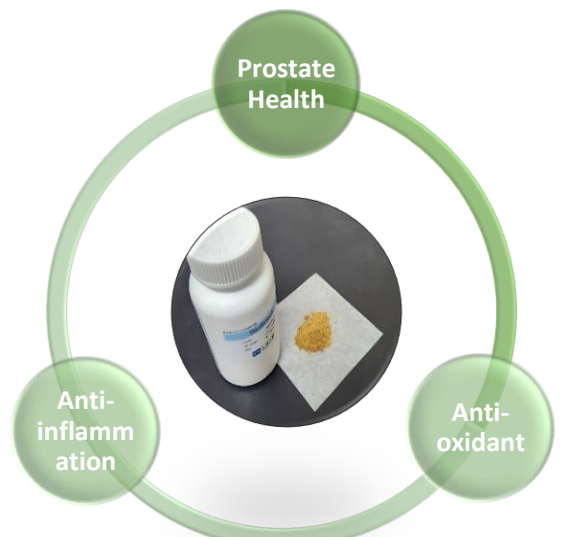
- BenPros, a patented natural complex, is a 100% plant-derived ingredient that is rich in bioactive compounds such as essential free fatty acids and polyphenols.
- We are developing it to establish itself as the best health functional food ingredient that come to mind first in many people's minds when they hear 'prostate health'.

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Efficacy evaluation according to health functional food (prostate health) development guidelines

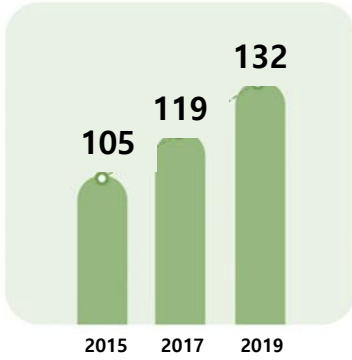
	Biomarker	Types of measurable research		
		In vitro	In vivo	Human
Clinical symptoms	International Prostate Symptom Score (IPSS)			○
Urination related factors	Maximal flow rate (Qmax)			○
	Post-voided residual urine (PVR)			○
Prostate indicators	Size of the prostate		○	○
	Prostate-specific antigen (PSA)		○	○
	Histological analysis		○	
Hormone-related indicators	5-alpha reductase	○	○	
	Testosterone (TT), dihydrotestosterone (DHT)		○	○
	Hormone receptors (Androgen receptor, estrogen receptor)	○	○	
Cell proliferation/apoptosis indicators	Growth factors (FGF, TGF-β, VEGF, IGF-1 etc.)		○	
	Cell proliferation related proteins (SRC-1, PCNA etc.)	○	○	
	Apoptosis-related proteins (Bcl-2, Bax, caspase-3, caspase-9, Akt etc.)	○	○	
Inflammatory indicators	COX-2	○	○	
	Cytokines (IL-1β, IL-6, IL-8, TNF-α etc.)	○	○	

※ Items in red text have been evaluated for efficacy.

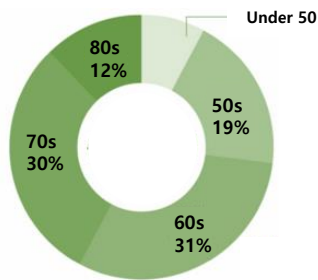


Health Information for Benign prostatic hyperplasia

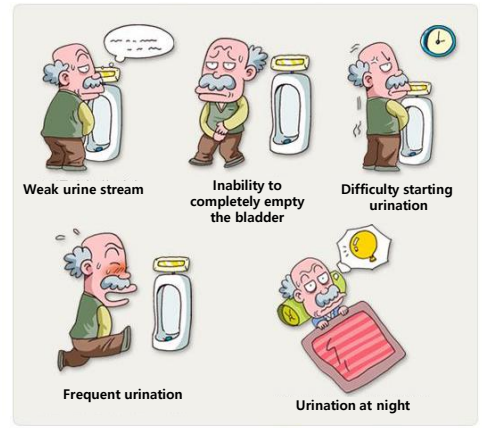
Medical treatment patients



Number of patients by age



Source: Health Insurance Review & Assessment Service



보건복지부 대한 의 약 회

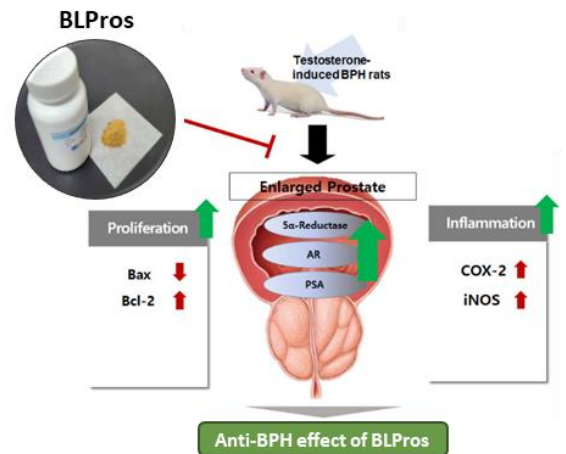
※ Health information is not related to product information.

Causes and symptoms of Benign prostatic diseases

- ✓ Although the exact cause has not been identified, it is a very common disease that starts after the age of 40 and appears in almost all men at the age of 70, so it is also understood as a kind of aging. In addition, many studies have shown that the amount of testosterone decreases due to aging, but the amount of dihydrotestosterone increases through the increase in the activity of 5-alpha reductase, resulting in enlargement of the prostate.
- ✓ It is known that there are symptoms such as frequent urination, urgency, delayed urination, interrupted urination, and nocturia.

Reasons for the development of BenPros

- ✓ Those who concerned about prostate health
- ✓ Those who frequently go to the bathroom
- ✓ Those who have a feeling of residual urine after urinating
- ✓ Those who need to exert force during urination
- ✓ Those who have trouble sleeping at night due to nocturia
- ✓ Those who sit and work for long periods of time



Development stage of BenPros (as of December 2022)

