

# Proquil™: A Clinically-Proven Solution for Men with Enlarged Prostate Symptoms

Past the age of 40, an enlarged prostate can sometimes be an indicator of a much more acute condition, but more often, it can be attributed to Benign Prostatic Hyperplasia (BPH). In men with BPH, it is common to experience more frequent urges to urinate and difficulties with sexual performance. Many men simply consider these issues to be an unfortunate but normal part of the aging process. But the truth is that these problems are no longer something that any man needs to simply accept as they get older.

BPH is a problem that goes undetected in many men, but the negative impact it can have on your quality of life certainly does not go unnoticed. Frequent trips to the bathroom can be disruptive and inconvenient during social occasions, and having to wake up in the middle of the night to urinate can prevent you from getting a good night's sleep. And of course, impaired sexual performance caused by an enlarged prostate can damage self-confidence.

Symptoms of an enlarged prostate gland include:

- Frequent need to urinate
- Difficulty urinating, weak stream, dribbling at the end of urination
- Urination that starts and stops
- Frequently waking up at night to urinate, also known as “nocturia”
- Feeling unable to fully empty the bladder
- Blood in urine
- Sexual impotence or difficulty performing
- Urinary tract infection (less common)

Men with a family history of prostate cancer or prostate-related health problems have a greater risk of developing an enlarged prostate. Other risk factors include obesity, erectile dysfunction, type-2 diabetes, heart disease, and a lack of regular exercise. Men over the age of 40 are most at risk. Approximately 50% of men will develop an enlarged prostate between the ages of 51-60,<sup>1</sup> while up to 90% of men aged 80 or older are affected.<sup>2</sup>

Doctors typically recommend that men with an enlarged prostate get regular exercise and reduce caffeine intake, as well as get plenty of hydration. Standard drug treatments for an enlarged prostate gland include certain types of drug therapies such as alpha blockers, 5-alpha reductase inhibitors like finasteride, tadalafil (an erectile

dysfunction drug which has shown some effectiveness in treating an enlarged prostate), or some combination of these drugs. Unfortunately, some of these drugs can have very undesirable side effects, which we'll cover in more detail later in this report.

The good news is that these problems are not something you simply need to accept as you get older. New, clinically proven products like ProQuil™ from AlchemLife are leading the way in helping to reduce the symptoms of enlarged prostates and preserving quality of life for middle-aged and older men.

## **ProQuil™: A Smarter Solution for Enlarged Prostate Symptoms**

ProQuil™ is a new, clinically-proven solution for overcoming the urinary and sexual side effects of an enlarged prostate. Using our proprietary PhytoAdvantage™ nutrient extraction technology, our experts in the lab have isolated and extracted 4 of the most powerful ingredients found in nature which have proven their effectiveness for treating BPH symptoms in clinical settings:

- **Pygeum Extract.** The term “pygeum” is used to describe an herbal remedy which is derived from the bark of the *prunus africana* tree. Clinical trials with pygeum extract capsules have demonstrated an ability to significantly reduce BPH symptoms.<sup>3</sup>
- **Saw Palmetto Oil.** This oil is, as the name implies, derived from the Saw Palmetto, which is indigenous to the southern United States and has been used in various forms of Native American medicine. Multiple studies have demonstrated saw palmetto's effectiveness at mitigating symptoms of BPH.<sup>4</sup>
- **Pumpkin Seed Oil.** This oil derived from a common snack food packs a surprising amount of health benefits for men. Pumpkin seeds contain minerals, amino acids and anti-inflammatory compounds which help with an overactive bladder, and clinical studies have demonstrated its alpha-reductase inhibiting qualities which contribute to better prostate health.<sup>5</sup>
- **Zinc.** This mineral is found in many health products aimed at active and athletic men. There ample research showing zinc's ability to maintain healthy testosterone levels and libido, as well as prostate health. Multiple studies have found a significantly lower risk of death from prostate cancer in men who supplemented with zinc.<sup>6</sup>

Each of these ingredients has proven themselves time and again in clinical trials. But how does our ProQuil™ formula measure up?

### **Clinical Evidence for ProQuil™**

A study at the Department of Biomedical Sciences at Chieti-Pescara University in Italy revealed how ProQuil™ was found to be effective in mitigating the symptoms of BPH.<sup>7</sup>

This 150-day registry study focused on male subjects in their early 60s who were diagnosed with BPH, but had no other health problems.<sup>8</sup> Elimination criteria for study subjects included having had a serious infection over the past three years, experiencing urinary retention at the time of the study, or any past surgeries for BPH.

A total of 48 eligible subjects were divided into two groups:

**“Standard Management” (SM) Group:** This group received the typical non-invasive treatments for BPH symptoms mentioned above, including alpha blockers and 5-alpha reductase inhibitors. In addition to drugs, general health recommendations for men with BPH were followed, including caffeine avoidance, getting plenty of exercise, staying hydrated and not sitting for extended periods. Collectively, these actions and medication uses were labeled “Standard Management”, and served as a control.

**ProQuil™ Group.** In this group, the same Standard Management guidelines were followed, and the same drugs were used when needed. However, this group also received 2 capsules of ProQuil™ each day.

Group	ProQuil™	Standard Management
Number	19	29
Days of follow up	166;7	182;4.7
Age	63.2;4	62.6;3.3
PSA >4 ng/mL	3.2	3.14
Creatinine levels	Normal	Normal
Prostatic volume (normal <30 mL)	39.4;5.5	39.3;3.1

In order to evaluate the effectiveness of the supplement versus standard management, a variety of techniques were used, including high-resolution ultrasound scans to check prostate morphology and residual urinary volume. Blood tests on kidney and liver function and hematocrit levels were run at inclusion and again at the end of the study, as was a prostate-specific antigen (PSA) test. Bloodwork, PSA test results, and prostate volume dimensions were comparable for both groups at the beginning and end of the registry.

Over the course of the 150 days however, multiple urinary tests were taken to determine frequency and urgency of urination, and the prevalence of problems like weak stream, nocturia and other symptoms of BPH. The most important target measurement to gauge the efficacy of ProQuil™ versus standard management was residual vesical urinary volume (a lower score is better).

## RESULTS<sup>9</sup>

	Score	ProQuil™	ProQuil™	Controls	Controls
Symptoms	Range	Inclusion	150 Days	Inclusion	150 Days
Emptying	(0-5)	3.4;0.4	1.2;0.4*	3.3;0.2	2.7;0.4*
Frequency		3.5;1	1.2;0.4*	3.6;0.3	2.7;0.4*
Intermittency		3.4;0.4	1.2;0.4*	3.5;0.3	2.7;0.1*
Urgency		3;0.3	1.3;0.2*	2.9;0.2	2.8;0.2*
Weak Flow		3.6;0.1	1.9;0.2*	3.5;0.2	2.8;0.4*
Straining		3.5;0.2	2.1;0.1*	3.6;0.2	3.1;0.2*
Nocturia		3.4;0.1	1.4;0.2*	3.4;0.2	2.8;0.4*
Residual vesical urinary volume in ml (method a + method b)/2		98.8;11	44.3;8*	97.2;3.3	68.2;6*

**Volume formula:**  $(4/3) \cdot (r1) \cdot (r2) \cdot (r3)$  where  $r1$  = radius 1,  $r2$  = radius 2,  $r3$  = radius 3 are the radii of the three dimensions. In 3 dimensions, the volume inside a sphere/spheroid (ball-shape) is derived to be the  $v=4/3\pi r^3$  where  $r$  is the radius of the sphere and  $\pi$  is the constant pi. The formula is also derived using integral calculus, i.e. disk integration to sum the volumes of an infinite number of circular disks centered side by side along the x axis from  $x = 0$  where the disk has radius  $r$  (i.e.  $y = r$ ) to  $x = r$  where the disk has radius 0 (i.e.  $y = 0$ ).

The evidence was clear: **Subjects in the ProQuil™ group experienced significantly improved measurements for all urinary BPH symptoms.** In the most important measurement (residual vesical urinary volume) the ProQuil™ group saw a reduction of 54.5 mL versus a mere 29 mL reduction for the control group.

**What does this mean for those taking ProQuil™ for BPH symptoms? It means fewer trips to the bathroom, less difficulty urinating, and better, more restful sleep since you won't be getting up to use the bathroom as often.** The registry study concluded that considering its impressive performance over this 6-month period, supplementation with ProQuil™ “may be an important option for self-management in most uncomplicated patients with BPH.”<sup>10</sup>

## ProQuil™ for Sexual Performance

**That's great news, but what about the awful sexual symptoms of an enlarged prostate— as well as some the drugs used to treat it? Is there any evidence the ProQuil™ can help mitigate these problems as well? The answer is yes.**

Some of the drugs commonly used for treating BPH like finasteride can have cause erectile dysfunction, impaired ejaculatory ability and a reduction in libido. Luckily, ProQuil™ offers an alternative approach to treating BPH symptoms without these terrible sexual side effects.

In another ProQuil™ study at Chieti-Pescara University, researchers wanted to track how ProQuil™ supplementation (2 capsules in the evening each day) affected subjects' sexual performance over the course of 6 months. Subjects in both the supplement and control groups filled out a questionnaire to gather data on how both approaches affected sexual performance and satisfaction. The results were quite revealing:<sup>11</sup>

	ProQuil™ 5 months before	ProQuil™ in 24 weeks	Controls 5 months before	Controls in 24 weeks
<i>Interactions</i>	<i>Inclusion</i>	<i>150 days</i>	<i>Inclusion</i>	<i>150 days</i>
Effective	16.3;1.1	24.3;1	16.1;1.1	18.3;1.6
Completed	15.2;0.9	22.1;1	14.4;1.2	15.8;1.4
Satisfactory	11.3;1.1	21.5;1	12;1.1	13.3;1.2

The results speak for themselves— subjects who supplemented with ProQuil™ experienced improved performance, satisfaction and significantly less sexual difficulties.

Does that sound like a better way to manage your BPH symptoms to you? We thought so.

## Conclusion

ProQuil™ offers men who are coping with the symptoms of an enlarged prostate a way to manage their symptoms without the terrible side effects linked to other drug treatments. Our clinically-proven phytoceutical extracts address the problem at the source, and give you a chance to take back control of your life. To learn more about what ProQuil™ can do for you, visit us at **[INSERT URL HERE]**

## About Us

*AlchemLife is a division of Alchem International Pvt. Ltd, a global leader in high-quality phytochemicals and herbal extracts. Our first phytonutrient plant opened in 1984, in Delhi, India where we began implementing our proprietary PhytoAdvance™ technology. Backed by over 75 years of*

diligent research and development, this technology is a precise method of extracting active plant phytonutrients and turning them into natural, beneficial health solutions.

Alchem International's facilities are certified by the U.S. Food & Drug Administration (FDA), the World Health Organization (WHO) and the French Agence Francaise de Securite Sanitaire des Produits de Sante. In addition, we are vendor-validated by international companies worldwide. We've also earned a long-term A-rating, and a short-term A2+ rating from CRISIL, a global analytics company. Learn more about us at <http://www.alcheminternational.com/>.

<sup>1</sup> "What is Benign Prostatic Hyperplasia?" *Urology Care Foundation*, [http://www.urologyhealth.org/urologic-conditions/benign-prostatic-hyperplasia-\(bph\)](http://www.urologyhealth.org/urologic-conditions/benign-prostatic-hyperplasia-(bph)).

<sup>2</sup> "Enlarged Prostate: A Complex Problem." *WebMD*, <https://www.webmd.com/men/prostate-enlargement-bph/features/enlarged-prostate-bph-complex-problem#1>

<sup>3</sup> "Pygeum". *American Journal of Health-System Pharmacy*, 2001; 58(2). <https://www.medscape.com/viewarticle/406935>

<sup>4</sup> <https://www.ncbi.nlm.nih.gov/pubmed/15049985> P.Boyle, C. Robertson, F. Lowe, C. Roehrborn. "Updated meta-analysis of clinical trials of *Serenoa repens* extract in the treatment of symptomatic benign prostatic hyperplasia". *BJU International*, Vol. 93, Issue 6, April 2004, p.751-756.

<sup>5</sup> Heeok Hong, Chun-Soo Kim, Sungho Maeng, "Effects of pumpkin seed oil and saw palmetto oil in Korean men with symptomatic benign prostatic hyperplasia." *Nutrition Research and Practice*, 2009 Winter, 3(4), p.323-327. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2809240/>.

<sup>6</sup> "6 Benefits of Zinc for Men's Health". *Prostate.net*, <https://prostate.net/articles/benefits-of-zinc-for-mens-health>

<sup>7</sup> Ledda A., Belcaro G., Dugall M., "BPH: Variation in Prostate Volume and Vesical Volume; Effects of Prostaquil™", *International Journal of Pharma Standard (PS) Supplements*, June 2016, p.1-6.

<sup>8</sup> *In Asia and Europe (where this study was conducted) Proquil™ is sold under the brand name Prostaquil™, and that is the name used in this study. The product and formula are identical to the Proquil™ sold in the United States.*

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Ledda A., Belcaro G., Hu S., Dugall M., "BPH: Variations in Sexual Interactions & Activity With Prostaquil™", *International Journal of Pharma Standard (PS) Supplements*, June 2016 p.7-12