

# Male Support Formula

Among the two leading health concerns for men are maintaining optimal prostate and sexual health throughout life. There is a good deal of merit to justify men's concerns about these two specific health issues. First, certain prostate-related problems, such as benign prostatic hyperplasia or BPH, are very common among older men and, unfortunately, are accompanied by a range of troublesome and inconvenient symptoms. Second, male virility is a central component of a man's self-image and identity, and men want to be as virile as possible well into mid-life and beyond.

According to the National Institutes of Health's National Institute of Diabetes and Digestive and Kidney Disorders, it is normal for a man's prostate gland to become enlarged as he ages.<sup>1</sup> Yet, however common prostate enlargement may be, it can cause symptoms that can disrupt a man's life and interfere with his ability to enjoy sex.

During a man's lifetime, the prostate undergoes two main periods of growth. The first period of growth occurs during puberty when the prostate doubles in size. The second growth period occurs around age 25, and it is this growth phase that can often lead to problems later in life such as benign prostatic hyperplasia (BPH).<sup>1</sup>

Loss of libido or impotence, however, is another major health problem aging men face. Sexual function, particularly erectile capacity, decreases with age in men.<sup>2</sup> Results from the Massachusetts Male Aging Study comprised of 1,085 men aged 40 to 70 revealed that over the course of nine years, sexual intercourse or activity frequency decreased by less than once per month, two times per month, and three times per month in men in their 40s, 50s, and 60s, respectively; the number of erections per month declined by three, nine, and 13 in men in their 40s, 50s, and 60s, respectively.<sup>3</sup> Furthermore, men with prostate cancer or BPH self-report more sexual problems, including lowered rates of sexual desire, pleasure and attraction, lower intercourse frequency, and sexual satisfaction.<sup>4,5</sup>

Because sexual health is a core element of a man's self-image, most men would like to be more virile or at least as virile as possible.

## The Prostate Gland and Its Functions

The prostate is a small (approximately the size and shape of a walnut) organ found below the bladder. It surrounds the urethra, which is the tube-like structure that carries urine away from the bladder.<sup>6</sup> The main function of the prostate is to produce prostatic fluid, which is a major component of semen. Prostatic fluid lubricates the urethra to prevent infection and increases sperm motility.

Prostate problems are common in men age 50 and older.<sup>6</sup> Men may notice symptoms and report them to his doctor or an irregularity can be discovered during a routine physical exam.

Some of the common types of prostate problems include acute and chronic prostatitis, BPH, and prostate cancer.

### Acute Prostatitis

Acute prostatitis is inflammation caused by an infection of the prostate. Onset usually occurs rapidly and symptoms include fever, chills, pain in the lower back or between the legs, and painful urination. A physician will usually treat this condition by prescribing antibiotic drugs to eliminate the infection.

### Chronic Prostatitis

Chronic prostatitis is a recurring prostate infection. Symptoms may be milder than acute prostatitis; however, this condition can be difficult to treat—especially if it is not due to recurrent bacterial infection. In these cases, antibiotic drugs are ineffective and the individual will need to work closely with his physician to develop an effective treatment plan.

### Benign Prostatic Hyperplasia (BPH)

BPH is a term used to refer to an enlarged prostate. An enlarged prostate is common in older men and, over time, can block the urethra, making it very difficult to urinate. According to the American Urological Association, nearly half of all men ages 51-60 years suffer from BPH; for men ages 80 and older, the statistic jumps to 90 percent.<sup>6</sup> Symptoms of an enlarged prostate include difficulty urinating, frequent urge to urinate (especially at night), and dribbling of urine.

If you suspect you may have or if you have been diagnosed with BPH, there are several medically recognized treatment options available, which include:

- Watchful waiting, which involves the patient and his physician closely monitoring the condition through regular check ups.
- Alpha-blocker drugs that relax the muscles near the prostate. Side effects include dizziness, headaches, and fatigue.
- Finasteride (Proscar), a drug that shrinks the prostate by acting on testosterone, the male hormone. Side effects include loss of sexual interest/desire and difficulty with erections and ejaculations.
- Surgery

### Prostate Cancer

Prostate cancer is one of the most common types of cancer in men. It's more among African-Americans than Caucasians. Early screening, including a physical exam and blood test, is the best way to prevent and treat prostate cancer.

After age 50, men should visit their physician annually for a routine checkup, which should include a digital rectal exam and prostate specific antigen (PSA) test, which

measures levels of the PSA enzyme. High levels of PSA may indicate early-stage prostate cancer. The encouraging news, however, is that the survival rate for prostate cancer is 97 percent (compared to 67 percent 20 years ago).

## Helpful Lifestyle Tips

Besides taking pharmaceutical medications, there are many things men can do to lower their risk of prostate-related problems. Lifestyle, behavioral, and nutritional changes can all influence prostate health. Some of these specific changes include the following:

- Eat a diet low in saturated and trans fats. Research studies show an association between diets high in saturated fat and increased risk of prostate cancer.<sup>7</sup> Reduce consumption of meat in the diet and substitute healthier fats such as monounsaturated (*e.g.*, almonds, flaxseed, olive oil, etc.) or omega-3 fats (*e.g.*, salmon, mackerel, albacore tuna, flaxseed).
- Eat soy-rich foods. Asian men have a lower risk of prostate-related problems, which some researchers attribute to their consumption of soy foods.
- Exercise. Men who exercise frequently have a decreased risk of BPH. One study found that men who walked two to three hours weekly had a 25 percent lower risk of BPH compared to men who did not exercise.<sup>8</sup>
- Avoid diuretics such as alcohol and caffeine, which can reduce the frequent urge to urinate. Alcohol and caffeinated beverages increase the need to urinate. In addition, substances such as caffeine may irritate the bladder.
- Monitor fluid intake. Some men find it helpful to reduce fluid intake, especially in the late afternoon and evening, to avoid repeated nighttime trips to the bathroom. Conversely, some men find that increasing fluid intake or taking an occasional diuretic during the daytime may help flush the urinary system.
- Eat more fiber. Constipation may inflame the symptoms of BPH.
- Get regular check ups. Beginning at age 50, men should get a regular medical check up that includes a PSA (prostate-specific antigen) and digital rectal exam.

## Sexual Health

Sexual health is another important health concern for men as they grow older. Sexual function can be attributed to the health of the specific male glands and organs, but it can also be a reflection of overall health and well-being. As men age, they may experience problems with loss of libido or impotence, which can be the result of increased stress, illness, BPH, prostate cancer, or other factors such as an existing health condition (atherosclerosis, high blood pressure, diabetes, depression, etc.), or medications. If you are experiencing loss of libido or impotence, a physician can conduct a thorough case history and examination to ascertain any underlying physical conditions and recommend lifestyle and diet modifications and, if necessary, certain medications.

## Essential Nutrients

Besides adopting healthy lifestyle and eating habits, many men are turning to supplements, including minerals, herbs, and vitamins, to nutritionally support male libido, sexual and reproductive system health well into their middle ages and beyond. Indeed, there is research showing that supplementing certain minerals, vitamins, and herbs can make a positive difference in prostate health.

## Facts About MRI's Male Support Formula

Men require an additional level of nutritional support, including a proper intake of certain minerals, which is often not provided by the standard diet.

Unlike other men's health supplements that focus on herbs, MRI's Male Support formula combines essential minerals and vitamins important for men's health and well-being with specially selected herbs, enzymes, and other important nutrients for the male glands and organs. This product is formulated to replenish essential nutrients commonly lacking in a man's diet, support the health and function of the prostate, and support male vitality.

## Minerals

Essential macro minerals and micro elements such as magnesium and zinc perform important physical and biochemical functions in the body. They are needed to develop and maintain healthy bones and teeth, assist the body's metabolism, and contribute to central nervous system function. Besides performing essential functions in the body, several minerals have been shown to play crucial roles in the function of the prostate and other male glands.

- **Magnesium:** An essential mineral, magnesium participates in more than 300 enzyme reactions in the body. Most people know that magnesium is beneficial for cardiovascular health, yet many are not aware that magnesium plays an important role in male sexuality and reproduction. Normally, the prostate contains high levels of two minerals: magnesium and zinc. Both minerals are released into seminal fluid, and a reduction of either mineral is associated with disorders of male fertility.<sup>9</sup> According to one study, low magnesium may be a marker for prostatitis. One study that analyzed the differences in magnesium and zinc levels in men with chronic prostatitis found that magnesium levels were *significantly* lower in men with chronic prostatitis.<sup>9</sup> The study's investigators proposed magnesium as a marker of prostatitis. Magnesium is also important for male fertility. A 1988 study that examined semen magnesium levels in fertile and infertile men found that infertile men had lower levels of magnesium versus fertile subjects, which led researchers in that study to conclude that assessing semen magnesium represented a good criterion in evaluating prostate function.<sup>10</sup>
- **Zinc:** Zinc is an important trace mineral for men. As stated earlier, the prostate and seminal fluid contain high concentrations of zinc, and low levels of zinc (and magnesium) are associated with male infertility.<sup>9</sup> In addition, men with prostatitis have low levels of prostatic fluid zinc, but it is unclear whether prostatitis is due to low zinc or if the low zinc status is due to the prostatic infection.<sup>11</sup> Research has uncovered some

interesting associations between zinc status and supplementation and prostate health. Adequate zinc levels have been shown to prevent prostate enlargement, but one study reported that zinc helped shrink an already enlarged prostate.<sup>12</sup> Zinc has been shown to improve chronic bacterial prostatitis (CBP). In one study of 61 patients with CBP, 39 men who received zinc supplements following antibiotic treatment reported an improvement versus men who received only the antibiotic treatment.<sup>13</sup> Zinc absorption is influenced by other nutrients, including vitamin B-6. MRI has included vitamin B-6 in Male Support to help ensure optimal absorption of zinc. In addition, this dietary supplement is also balanced with copper, a trace mineral, to prevent a mineral imbalance or deficiency. Minerals and trace minerals share synergistic and antagonistic properties. An over consumption of zinc can negatively influence copper status in the body; therefore, MRI has included copper in this formula for optimal balance.

- **Calcium:** Calcium is an essential macromineral that seems to provide some protection against prostate cancer. One study, which analyzed zinc, magnesium, and calcium concentrations in infertile men with prostatitis observed a significant difference in calcium concentration in the infertile men with prostatitis.<sup>14</sup> A separate study uncovered a link between low levels of calcium and magnesium in drinking water and an increased risk of prostate cancer development.<sup>15</sup>
- **Boron:** Boron is known to affect human steroid hormone levels. According to a study conducted at University of California at Los Angeles, men who consumed diets with the most boron had a lower risk of prostate cancer.<sup>16</sup>

## Herbs

Certain herbs may also be helpful in providing nutritional support for prostate function and male libido. The herbs in Male Support were carefully researched and selected to serve a two-fold purpose in this formula: first, to provide nutritional support and stimulation for the male glands and organs and second, to assist a man's body in dealing with stress and fatigue by providing a blend of energizing herbs such as Eleuthero (Siberian ginseng), Gotu Kola, and capsicum.

- **Saw Palmetto:** Clinical studies have reported that saw palmetto (*Serenoa repens*) is moderately effective for alleviating BPH.<sup>17-21</sup> Studies comparing the effects of saw palmetto to commonly prescribed drugs used to treat BPH show that saw palmetto produces similar improvement in urinary tract symptoms and urinary flow and is associated with fewer adverse events.<sup>19</sup> In Germany, saw palmetto is approved for use for prostate complaints and irritable bladder by the German Commission E, which is the government expert committee responsible for evaluating the safety and efficacy of herbs.<sup>22</sup> Scientists studying the exact mechanisms of saw palmetto on BPH assert it affects hormone receptors on prostate cells. Saw palmetto appears to inhibit a specific enzyme that converts the male hormone *testosterone* to dihydrotestosterone, which is believed to be involved in prostate enlargement.<sup>23</sup>

- **Capsicum Fruit (Cayenne):** Capsicum is well known both for its culinary and health attributes. One of the main components of capsicum is capsaicin, which gives the cayenne red pepper its spice. In Traditional Chinese Medicine, capsicum has been used to stimulate and balance circulation.<sup>24</sup> Herbalists also have a long-standing tradition of using capsicum for this purpose as well as using it as a catalyst for other herbs in multi-ingredient herbal supplements.
- **Eleuthero (Siberian Ginseng):** In herbal medicine, Eleuthero has a long history of use as a tonic for energy and endurance. It has exhibited anti-fatigue, anti-stress, immuno-enhancing, and anti-depressive effects.<sup>25</sup> It is approved by the German Commission E for lack of stamina.<sup>26</sup>
- **Gotu Kola:** Like Eleuthero, Gotu kola has been used as a tonic for vitality. Gotu kola has been used in folk medicine to combat physical and mental stress and regulate hormone levels. Current scientific studies demonstrate Gotu kola has anti-inflammatory and vascular/venous tone effects.<sup>27</sup>
- **Damiana:** Damiana has a traditional use in herbal medicine as an aphrodisiac. It has been used for sexual disturbances as well as for boosting and maintaining mental and physical capacity.<sup>28</sup>
- **Licorice:** In Traditional Chinese Medicine, licorice is recognized as one of the herbs that stimulate Qi, which is the Chinese term used to describe the vital breath or life-energy force inhabited by all living beings.<sup>30</sup> Licorice is popularly used in herbal formulas as a stimulant for the pituitary and adrenal glands.

## Suggested Use

Take three tablets once or twice daily, preferably with meals. Check the product label for additional instructions.

MRI also recommends that men taking Male Support simultaneously take a multi-vitamin/mineral supplement for complete nutritional support. MRI has two multivitamin/mineral formulas: *Multi Complete* or *Hair, Skin, and Nails*.

## Safety

It is beneficial and worthwhile to take personal responsibility for your overall health, however, if you have or think you might have prostate cancer, BPH, an infection, or a sexually transmitted disease, consult your physician immediately to decide on an appropriate course of action. Self-treatment under these circumstances can be dangerous and would be inappropriate.

Saw palmetto, one of the main herbs in Male Support, is believed to exert estrogen, androgen and alpha-adrenergic blocking effects.

MRI's Male Support Formula should not be used by women who are pregnant or breast-feeding due to the potential hormonal effects of saw palmetto.

Some of the herbs in this formula, such as saw palmetto, damiana, capsicum, and sarsaparilla, may cause stomach upset in rare cases. If this occurs, discontinue taking this product.

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