Benign Prostatic Hyperplasia (BPH)

Difficulty urinating due to an enlarged prostate.

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A famous ad for prostate enlargement medication pictured a balloon full of water held tightly at its outlet by a clothespin.[1] Many a man looked at that depictions and commented, "That is just what it feels like—you try to urinate and very little comes out and it feels like you are still full of urine."

We will be talking about Benign Prostatic Hyperplasia, abbreviated BPH, and it means having an enlarged prostate. We will also talk about Prostatic Specific Antigen abbreviated PSA.

Common symptoms of BPH (from Mayo Clinic's website)[2] include:

- Frequent or urgent need to pee, also called urination.
- Peeing more frequently at night.
- Trouble starting a stream to pee.
- Weak urine stream, or a stream that stops and starts.
- Dribbling at the end of urination.
- Not being able to fully empty the bladder.

Less common symptoms include:

- Urinary tract infection.
- Not being able to pee at all.
- Blood in the urine.

The symptoms of BPH tend to slowly get worse. But sometimes they stay the same or even improve over time, especially if you improve your lifestyle habits.

Other possible causes of urinary symptoms

Some other health problems can lead to symptoms that are like those caused by enlarged prostate. These include:

- Urinary tract infection.
- Inflamed prostate.
- Narrowing of the urethra, the tube that carries urine out of the body.
- Scarring in the bladder neck due to past surgery.
- Bladder or kidney stones.
- Problems with nerves that control the bladder.
- Cancer of the prostate or bladder.

Benign prostatic hyperplasia is age related; the prevalence of BPH rises markedly with increased age. Autopsy studies have observed a histological prevalence of 8%, 50%, and 80% in the 4th, 6th, and 9th decades of life, respectively.[3]

Someone may be wondering if BPH progresses to prostate cancer? And, sad to say, yes, it has a high likelihood of doing just that. BPH is associated with a 300% increased risk of prostate cancer and 150% increased risk of bladder cancer.[4]

Benign prostatic hyperplasia, which causes lower urinary tract symptoms, is a common problem amongst the aging male population with increasing prevalence. The symptoms can be both obstructive (resulting in urinary hesitancy, weak stream, straining or prolonged voiding) and irritative (resulting in increased urinary frequency and urgency, nocturia, urge incontinence and reduced voiding volumes). BPH can affect the patient after micturition (urination), for example, with postvoid dribble, or incomplete emptying. BPH occurs when both stromal and epithelial cells of the prostate in the

transitional zone proliferate by processes that are thought to be influenced by inflammation and sex hormones, causing prostate enlargement.[5]

What about PSA as a screen for BPH? PSA levels are measured in terms of the amount of PSA per volume of fluid tested in ng/mL. Doctors often use a value of 4 nanograms (ng) or higher per milliliter (mL) of blood as a sign that further tests, such as a prostate biopsy, are needed. The percentage of free PSA can help tell what kind of prostate problem you have. If both total PSA and free PSA are higher than normal (high percentage of free PSA), this suggests BPH rather than cancer. If total PSA is high but free PSA is not (low percentage of free PSA), cancer is more likely.[6]

Benign Prostatic Hyperplasia is not a rare occurrence, nor is it on the decline. The worldwide number of cases increased by 70.5% from 2000 to 2019. Globally, there were 94.0 million cases in 2019, compared with 51.1 million in 2000.[7]

There are some important hormonal considerations in approaching BPH. For example the hormone dihydrotestosterone (DHT) increases the risk and severity of BPH. So, in approaching BPH we need to consider the dietary and lifestyle practices that influence hormones and BPH.

What foods cause high DHT? Foods high in saturated fats such as red meat, seafood, shellfish, milk and milk products, poultry foods can increase levels of DHT in the body, thereby increasing the risk of BPH.

What causes increased DHT production in the body? Increased production of cholesterol or high dietary cholesterol can increase the production of DHT in the body.

How do certain foods reduce DHT production? Certain foods such as avocado, spinach, berries and seeds inhibit the action of the enzyme 5-alpha reductase which is responsible for the conversion of testosterone to DHT. Daily aerobic exercise can also reduce DHT, particularly when combined with a low-fat, high-fiber diet consisting of whole grains, fruits, and vegetables.[8]

Red meat has been said to be the new tobacco. What does that mean? Most people recognize health risks associated with tobacco use, but many are now coming to recognize significant health risks associated with red meat consumption. For BPH, daily red meat consumption increases its risk by 38%.[9] And why might that be? Remember we spoke of hormones as instigators of BPH? Hormones found in red meat cause growth stimulation and prostate enlargement. Another factor in meat is its fat content, which increases hormone production in the consumer, decreases blood oxygen levels, creates obesity and lipid peroxidation, which result in elevated inflammation leading to BPH. Lastly, red meat is high in animal protein. Animal protein raises the uric acid levels which in turn increase lower urinary tract symptoms of BPH.[10] All and in all, animal products, especially red meat, do not favor a BPH free life.

Which came first, the chicken or the egg? And which has a milder effect on BPH? Sad to say, eating poultry and eggs can both increase BPH by as much as 40%.[11]

Because fat decreases the oxygen in your tissues and increases inflammation and obesity, butter, margarine and cooking oils are all instigators of BPH.[12] Fat has a devastating effect on the prostate both for BPH and prostate cancer.[13,14] Different High fat diets increase prostate inflammation and BPH to varied extents: vegetable oils and fats increase the risk by 20% polyunsaturated fat by 27% increased total fat by 31% and fish oils (EPA, DHA) by 32%.[15] Fish oils Increase the risk of BPH! BPH risk increases with intake of fish oils including: Eicosapentaenoic (EPA), Docosahexaenoic (DHA), Arachidonic acids.[16] Did you know,

animal fats are discussed in Leviticus 7:23, "Speak unto the children of Israel, saying, Ye shall eat no manner of fat, of ox, or of sheep, or of goat." And besides, where are you going to find an uncontaminated fish on this planet? Consumption of a diet rich in animal fat not only causes obesity, impaired glucose tolerance, and insulin resistance, but also acts directly on the prostate to induce hyperplastic and neoplastic growth contributing to prostate cancer progression and BPH by creating a pro-inflammatory environment.[17] When mixed, animal fat and sugar further accelerate BPH production.[18]

There are more reasons why a high fat diet compromises the prostate making BPH more likely. It has to do with what is called the gut prostate axis. A high-fat diet nurtures undesirable bacteria in the gut that elevate hormones responsible for prostate hyperplasia.[19] So, fat plays a deleterious role in prostate health, that is, refined vegetable fats, and any animal fats. Your best approach is to just take the fats, as they are packaged naturally, in whole food products like nuts, seed, and avocados.

Having now discussed the relationship between meat and BPH, one might be wondering, "What about dairy?" It is a good question. So, I want to share what we know about milk and BPH. In one study there was a higher risk of BPH with increasing intake of high-fat dairy products.[20] Meta-analysis suggests that high intakes of dairy products may also be associated with an increased risk of prostate cancer.[21]

Is your cholesterol up? If so, your risk of BPH will go up too![22] Hyperlipidemia is associated with an increased risk of clinical BPH.[23] Why the connection between elevated cholesterol levels and BPH? First of all, you need to understand that cholesterol is a building block for hormones, and, as we have said before, increased hormones raise BPH risk. What's more, dietary cholesterol is generally oxidized, as such it is a free radical, causing dangerous inflammation in the prostate gland itself which leads to BPH.[24]

Now if you had a choice between beef or beans, which would you choose? And how would that choice impact your prostate? And if it did make a difference, why would it make a difference. Aren't beef and beans both sources of protein? Yes, but not all protein is created equal. Animal protein increases BPH, whereas a diet rich in vegetable protein and low in animal protein helps control BPH.[25]

With all the evidence on the negative impact of animal products on prostate health you may be wondering what you should eat. At this point I need to warn against a diet trend many, would be, vegetarians adopt. Rather than turning to a diet with lots of fresh fruits and vegetables, they tend to become grain-a-tarians—merely adopting a meat avoidant diet. And while there are some good nutrients in grains, over emphasis on gains and breads in the diet can actually increase BPH by up to 69%.[26] The message is, - *Eat your fruits and vegetables*!

In the realm of prostate health more chronic inflammation is associated with more BPH.[27] Things that increase inflammation are: fermented foods, animal products, fried foods, oils
Caffeine, salt, cold or hot exposure, dehydration, and environmental mold. Things that decrease prostate inflammation include: fresh food antioxidants, sunshine, exercise, fresh air, good hydration, and an early bedtime with 7.5-8 hours rest.

If a person adopts a healthy diet, can they eat all they want without restraint? Not really, overeating increases the risk of BPH and prostate cancer.[28,29] Caloric restriction is very beneficial at lowering inflammation and avoiding the multiple other dangers of overeating.

Obesity and BPH, is there a connection? High waist circumference, BMI, and sedentary

behavior all independently predict BPH.[30,31] Obesity induces an androgenic to estrogenic switch in the prostate gland, which is associated with more BPH.[32]

As with many body functions, prostate health is promoted by adherence to a good circadian-rhythm-nurturing schedule. Irregularity of schedule results in circadian rhythm disruption. A regular schedule reduces inflammation in favor of prostate health.[33] This would include sticking with an unvarying schedule on daily eating times, bedtimes and your rising times.

Because inflammation plays such a significant role in the increase of prostate hypertrophy, every precaution to eliminate sources of inflammation should be considered.[34,35] One under suspected actor is mold. Mold increases whole body inflammation.[36] Many people fail to be aware of musty smells in their houses, attics, basements, garages and bathrooms.

In avoiding BPH one needs to be aware of the contribution of common table salt to inflammation and prostate enlargement. It is the sodium in salt that is the culprit, and any kind of salt has it, be it sea salt, pink salt, Celtic salt, or plain old table salt. Adding two-thirds of a teaspoon of salt (1500mg) per day more than doubles the risk of BPH.[37] As much as we like salt, and as much as we need a little of it, most westerners consume way too much of this necessary ingredient and of its dangerous cousin, mono sodium glutamate (MSG). BPH is a known side effect of MSG in your foods.[38] MSG also causes prostate and testicular damage affecting male fertility.[39] MSG is hidden under a lot of names in ingredient lists, so you need to be careful if you are going to shield your prostate from their effects. Ingredients listed as natural flavors, yeast products, soy sauce or soy protein isolate, aminos, carrageenan, and spices are all alternative names for MSG. It is common in seasoning salts, soup bouillon, Chinese food, fast foods, processed meats, cheeses and processed foods.[40]

There is an interesting relationship between diseases. For example, there is a relationship between hypertension and clinical cases of benign prostatic hyperplasia. High blood pressure is associated with increased incidence of BPH.[41] Diabetes also increases the risk of BPH. A high fasting blood sugar level increases BPH.[42,43] High blood insulin levels cause unnatural over growth of the prostate.[44] This is because insulin is also a growth hormone as well as a blood sugar regulator.

Can BPH come in a cup? Yes, if the cup has coffee in it. Why? Caffeine is the culprit! Caffeine intake increases androgenic stimuli, epithelial cell proliferation and hyperplasia in the prostate.[45] Better warm drink choices for the prostate would be medicinal herbal teas like ginger, nettle or Saw Palmetto.

Alcohol is another beverage found to be hazardous to your prostate. For example, laboratory animals given alcohol demonstrate changes in their prostates consistent with BPH and early cancer.[46]

And while we are talking of chemical dependency, men with depression and marijuana usage are more likely to be treated for BPH.[47]

Since the prostate is involved in ejaculation, one must not overlook a connection with sexual function. Sexual stimulation without a natural conclusion (ejaculation and orgasm) and/or continued stimulation leads to prolonged engorgement. This is not good for the prostate. Train the mind to dwell where it belongs. Shun anything hinting of a pornographic nature. Avoid everything that is sexually stimulating outside of the natural marital relationship.[48]

As with every other tissue in your body, the prostate is dependent on a good circulation of blood. Perfect health depends on perfect circulation. If you look at a diagram of the blood supply to the prostate, you will discover that it is at the end of the pelvic arteries and, as such,

it gets the last of the blood and often the worst of the blood—blood filled with the most unwanted nutrients or even impurities. Maintaining good circulation to and from the prostate is imperative, for its nutrition and for removal of waste products from it. When we get to treatments in this article, we will discuss this more.

If you sit on your prostate all the time, compressing it under your weight, what do you think will happen to it? That's right, the blood flow will diminish, inflammation will increase and waste products of metabolism will accumulate. As a consequence, a sedentary lifestyle increases the risk of BPH by 72%.[49]

The circulation is greatly impacted by imbalances in the temperature of individual parts of the body. In winter to be generally cold alters prostate blood flow and increases prostate problems.[50] Two parts of the body especially important to keep warm are the ankles and lower legs. Chilled lower extremities can cause congested prostate blood flow, which in turn can lead to the development of prostatic hyperplasia.[51]

Calcium stones in your prostate? Strange thought, but not unlikely. For some men, calcium stones in their prostates can cause outlet obstruction.[52] Stones occur from increased inflammation in the presence of magnesium/calcium imbalance. A diet sufficient in magnesium helps reduce calcium stones.[53] Foods high in magnesium include: pumpkin seeds, sesame seeds, almonds, hazelnuts, wheat germ, buckwheat, spinach, tofu, and kelp. For this problem stone-dissolving herbal tea might be helpful.[54]

<u>So, let's examine some prostate friendly lifestyle practices.</u>

Ample consumption of fruits and vegetables, especially dark green leafy vegetables can reduce BPH risk by 34%.[55] Men who increase their intake of high vitamin C foods are less likely to have BPH.[56]

Let's consider specific fruits. Cranberry consumption produces significant decrease in: prostate weight (by 33%),[57] dihydrotestosterone (DHT) levels (by 18% in serum and 28% in prostate), and reduces unwanted prostate histological changes. This effect is not limited to fresh or frozen cranberries; dried cranberries can be helpful as well.[58]

Pomegranates have antioxidant and antiangiogenic activity.[59] Pomegranates have phytochemicals which can counter the testosterone-induced BPH effect in the prostates of laboratory animals. This fact gives pomegranates promise for humans.[60]

Black mulberries can be helpful for BPH.[61] Mulberries have been shown to make a difference in BPH caused by excess testosterone in prostate tissues. Mulberries reduce urinary tract symptoms of BPH.[62,63]

Tomatoes, with their lycopene, have been shown to reduce urinary tract symptoms in BPH. Tomato products and lycopene have been shown to improve symptoms of BPH and to lower PSA.[64,65] It is well-established that the beneficial properties of a single phytonutrient can be better attained when it is taken with the complex of the molecules present in their natural milieu— i.e. it is more beneficial to take lycopene by eating a whole tomato rather than taking a lycopene supplement pill. Tomato, the fruit providing the most comprehensive complex of prostate-health-preserving micronutrients, has been shown to be superior to its single-nutrient counterparts in decreasing the incidence of age-related prostate diseases.[66] Consumption of 64g of tomato products per day can reduce the risk of prostate cancer by as much as 28% according to the Adventist Health Study.[67] What's more, lycopene can inhibit disease progression in patients with benign prostate hyperplasia.[68]

Fruits are not the only foods beneficial to the prostate; vegetables can also have positive effects worth taking advantage of.

Broccoli and cruciferous vegetables help BPH by decreasing oxidative stress and bladder dysfunction caused by outlet obstruction.[69] Cruciferous vegetables contain a phytochemical which slows down the metabolism in hyperplastic prostate cells helping to protect against BPH.[70],[71]

Garlic and onions are superfoods. High consumption of garlic reduces the risk of BPH by 35%. High consumption of onions reduces the risk of BPH by 60%.[72]

Not to be left out, nuts, beans and seeds can play a helpful role in prostate hypertrophy management.

Pumpkin seeds have been shown to be helpful for BPH. Pumpkin seed products are popular prostate remedies, which have been helpful for some people, and would be worth trying.[73] Pumpkin seeds are a source of zinc, a protective element against BPH.[74] Zinc rich foods include nuts, pumpkin seeds, sunflower seeds, wheat bran, wheat germ, onions, molasses, peas, beans, and lentils. Warning: zinc is almost nonexistent in refined, processed foods.

Soy consumption reduces BPH and improves voiding symptoms.[75] Soy is helpful in that it significantly decreased serum levels of free testosterone and dihydrotestosterone (DHT)![76]

Flaxseed suppresses prostatic epithelial proliferation, reducing BPH. It is the Omega-3s and fiber in flax that help reduce inflammation.[77]

Brazil nuts are an abundant source of selenium. Selenium is very beneficial to managing BPH, it is both protective and curative, although the protective effects are more pronounced.[78]

The iodine connection is often overlooked. Iodine exerts an anti-inflammatory action on the normal prostate as it does with other glands. It also leads anti-proliferative effects in prostate cells.[79,80] There are many competitors to iodine in modern society.

Now, let's mention a few herbs that hold promise. Everyone with prostate trouble seems to have heard of the herb Saw Palmetto. In one study, Saw Palmetto had the same effect in treating BPH compared with common prostate medications after at least a 6-month treatment cycle.[81] Stinging nettle is another favorite. Stinging nettle appears to be a good treatment for milder BPH. Its scientific name is Urtica dioica L., we call it, stinging nettle, or common nettle or even Ortiga. The root extract has been used traditionally for the treatment of symptomatic BPH, and shows efficacy in clinical trials.[82] An effective herb, used commonly as a spice, is ginger. Ginger has a number of phytochemicals responsible for its positive effects on BPH.[83] Have you ever tried fresh ginger tea? Not to be left out, some have found French Maritime Pine Bark to be of benefit. BPH symptoms like: emptying, frequency, intermittency, urgency, weak flow, straining, nocturia are all significantly improved with Pycnogenol® as it is commercially know.[84]

We explained earlier that the prostate is vulnerable to blood stagnation especially with sitting, thus it stands to reason, (excuse the pun), that a change from habitual sitting to increased activity will improve prostate health. And this is exactly the case. The prostate responds excellently to regular walking. Men who walk 2 to 3 hours per week have at least a 25% lower risk of total BPH.[85] Regular exercise of any kind helps reduce the risk of BPH by 19%.[86]

While you are out there getting your exercise in the open air, don't forget the beneficial contribution of sunshine to your prostate in the form of elevated vitamin D levels. Men with

vitamin D sufficiency have significantly less prostate enlargement.[87]

Now that we have examined the health benefits of exercise out in the sun, we now need to be aware of the benefit of a good sleep in total darkness. Make sleep a habit. Adequate sleep duration is protective for BPH.[88]

One very disconcerting symptom of BPH is the feeling of, or occurrence of, incomplete bladder emptying. One might be wondering if there are any tricks to urinating that promise greater volume expulsion. Research indicates there is, and it has to do with standing vs sitting to urinate. For men with urinary tract issues due to BPH, sitting to urinate can help improve symptoms.[89]

At this point I want to share with you a simple natural remedy that has helped others with this troubling problem. Because BPH is associated with inflammation, and charcoal is an antidote for inflammation, charcoal over the prostate is an excellent way to decrease its inflammation and associated swelling. Since the prostate lies directly under the rectum, this can most effectively be accomplished by a charcoal suppository placed in the rectum each nigh. In helping people employing this remedy, I use a 60 cc catheter tipped syringe, fill it with charcoal poultice material and slowly inject up the anus at bedtime, to be left there till the next bowel movement which usually occurs in the morning. Here is the formula for the syringe refill mixture.

Charcoal suppository
¼ cup water
1/8 cup charcoal powder
½ teaspoon psyllium powder
Mix in a bowl
or
1 cup water
3 tablespoons ground flax
3 tablespoons charcoal
Bring to a boil and let cool.
Place in a catheter tip syringe. Inject into rectum and hold over night. Pass with feces at next bowel movement.

Hydrotherapy is also effective at reducing prostate enlargement. My number one choice is the Sitz bath.[90] For this you will need two buckets or storage containers into which you can sit your behind. Place them in your shower or bath tub. Fill one with cold water and one with hot. Then sit in each one taking three minutes in the hot followed by one minute in the cold. Alternate this five times and end with cold.[91]

“Natural means, used in accordance with God's will, bring about supernatural results. We ask for a miracle, and the Lord directs the mind to some simple remedy.”[92]

For an even more potent Sitz bath add a herbal infusion of Horsetail (Equisetum arvense), Couch grass (Elymus ripens), Bearberry (Arctostaphylos uva-ursi). Infuse 2 oz total of a mixture of equal parts of all three herbs in 1 pint boiling water. Add infusion to hot Sitz bath.[93]

For men with benign prostatic hyperplasia (BPH) or enlarged prostate, pelvic muscle exercises known as Kegel exercises can relieve symptoms by strengthening the muscles around your bladder and penis.[94]

Prostate massage has be shown to be effective at reduction in size of enlarged prostates.[95] This is accomplished by an assistant who puts his finger into the rectum of the patient who is leaning over something like a chair or bed. The prostate should be right there under the finger tip were it can be massaged, for 15 minutes at a time.

There is a theoretical role for fever therapy, as with prostate cancer.[96] It has worked well in patients with BPH and an elevated PSA.

In Summary:

- BPH is the result of poor blood circulation and poor oxygenation, increased inflammation, increased hormones and dehydration.
- Good dietary choices and lifestyle habits reduce inflammation and hormones; increase circulation, oxygenation and hydration.
- Eat more fresh fruit and vegetables.
- Drink more water.
- Exercise more out in the fresh air and sunshine.
- Try some herbs, charcoal, hydrotherapy and massage.
- Ask God to bless His simple natural remedies with supernatural success, and believe that he will bring healing in accordance with His will.

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