

# NUTRI NEWS



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## Integrative Approaches to Prostate Health

Isaac Eliaz MD, L.Ac

Integrative medicine is an approach to health care that draws upon various healing traditions and modalities in order to create a synergistic movement towards health and away from disease.

Conventional treatments, especially in oncology, focus on attacking and destroying the disease. Unfortunately, these disease-focused treatments neglect to support overall health and vitality of the individual and lead to a further disintegration in a person's health. The goal of integrative medicine is to support a person's health and vitality while at the same time reducing the disease (Figure 1).

In order to design an effective treatment, one must be able to evaluate the health of the individual and the strength of the disease as well as the patient's treatment preferences and overall health goals. This requires a more in depth evaluation than is done in typical oncological practices. Due to space limitations I can only give you a flavor for this process and not a complete tool kit.

### Men's Health - Avoiding Prostate Trouble

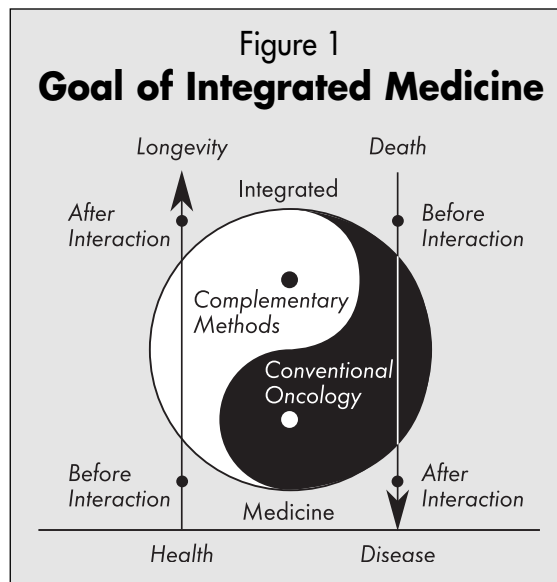
Health and vital energy is what makes living a pleasure. Good nutrition, plenty of exercise, and satisfying work balanced with leisure activities sets the stage for enhanced life satisfaction. In contrast, stress, chronic pain, disease, and progressive degeneration of the body cloud the senses and detracts from experiencing the beauty in the world. Luckily, maintaining vitality and health isn't a mystery. Science has shown that eating well, exercising frequently, and maintaining emotional balance can prevent the diseases that are a major threat to longevity such as cancer and heart disease. In addition, many chronic diseases like arthritis can be improved with

changes in diet and appropriate physical activities, not to mention the benefit of integrative therapies such as acupuncture and chiropractic care. A proactive approach to living well may not extend life but certainly will improve the quality of life in the later years.

These general lifestyle suggestions apply to both men and women and should not be overlooked when creating a foundation for good health. However, men also have problems that are unique to their sex, problems that often develop or progress as they age. Many men find they need to urinate more frequently, often needing to get up in the middle of the night to do so. And when they urinate they find that the stream doesn't come easily, or that it's too hard to urinate standing up anymore so they do so from a seated position. Urination problems such as these can be due to a prostate tumor, but more frequently are the result of more benign issues such as enlargement of the prostate, a condition known as benign prostate hypertrophy (BPH) and prostatitis.

The prostate is a walnut sized gland that encircles the urethra right where it leaves the bladder. It functions by providing the sperm with nutrient rich fluid. When this gland becomes swollen or enlarged it puts pressure on the urethra, cutting off the flow of urine. This pressure results in the need for greater force when urinating and may also result in an inability to empty the bladder. These are symptoms of BPH which are quite common. Prostatitis, infection or inflammation of the prostate, is another common problem when the prostate is out of balance.

Maintaining prostate health is an important issue for men as they age, especially if prostate cancer or prostate



*Wellness is represented by two vertical axes/arrows. The health axis points up with increasing health representing increasing longevity. In contrast as one travels up the disease axis one gets closer to death. A hypothetical patient presenting with a weakened vitality and an aggressive disease would show up on the axes at the points labeled "Before Interaction". The goal of integrative medicine is to use a combination of conventional and complimentary methods to increase health and decrease the disease resulting in the patient ending up at the points "After the Interaction".*

issues run in their family. As for BPH one third of men over 50 have this condition, while the number jumps to 50% for the 60 year olds and 80% for men in their 70s! With these types of statistics, some might consider this to be a normal part of aging, but many studies have shown that specific herbs and nutrients can reverse this condition, which suggests that similar nutritional changes can prevent it.

The following nutrients should be included as part of a daily health plan for men. They help support and maintain prostate health in particular and of course should be used in conjunction with a good diet, regular exercise and stress reduction activities. There are multiple nutrients and botanicals with established benefit for Prostate Health. I will discuss a few of them. For a more complete list you can refer to the table on page 6.

## Zinc

One of the critical nutrients that the prostate concentrates and secretes into the seminal fluid is zinc. A healthy prostate has ten times the zinc compared to other body tissues. Zinc is important for immune health and infection prevention (The effectiveness of zinc in the treatment of the common cold has been verified in at least six clinical studies.) as well as enhancing sperm motility. The complete role of zinc in maintaining prostate health is not known, however, we do know that cancerous prostates have lower tissues stores of zinc compared to healthy prostates and

that the symptoms of BPH disappear in some men upon supplementing with zinc. One last note: be careful when supplementing with zinc since supplementation of zinc in amounts that exceed 100mg/day on a long term basis can actually suppress your immune system and possibly speed up the spread of existing Prostate cancer.

## Selenium, Vitamin E, Padma Basic, Other Antioxidants

People with cancer tend to have lower levels of antioxidants in their blood. The benefits of vitamin E and Selenium in prostate health is well established.

## Lycopene

Lycopene is a member of one of nature's most important antioxidant families, the carotenoids. It is the red pigment that is found naturally occurring in tomatoes, pink grapefruit, watermelon and the skin of red grapes. One cup of chopped raw tomatoes contains about 15 mg of lycopene, however, the lycopene in raw tomatoes eaten alone is not readily absorbed, since cooking is required for enhanced bioavailability.

Recommended daily allowances for this nutrient have not been established. Likewise there are no accepted supplementation levels for specific conditions. However, a review of the literature suggests that 16mg/day for 10 weeks protects against sunburn, and 30mg/day for one week reduces the incidence of exercise induced asthma in prone individuals.

## Saw Palmetto Berries

Testosterone and its more active derivative, dihydrotestosterone (DHT), stimulates the growth of normal prostate tissue as well as prostate cancer. The enzyme (5-alpha reductase) that converts testosterone to DHT is the target of drugs designed to reduce BPH. However, in comparing study results testing the FDA approved drug (Proscar) with studies testing saw palmetto berry extracts, we find that saw palmetto is effective in 90% of men with BPH symptoms within 4 to 6 weeks while Proscar works for only 50% and only after taking the drug for a year! Although herb and drug alike have demonstrated the ability to inhibit 5-alpha reductase, the herb also contains other components which apparently create a more effective synergy. Other activity of saw palmetto has been studied (anti-estrogenic, smooth muscle relaxing) and the fast action of the extract points to more, as yet unidentified, actions.

## Integrative Approach to Prostate Health

There are many things we can do to improve our health, but men don't often realize that they need to be concerned about maintaining a healthy prostate until a more serious condition like prostate cancer sets in. Or perhaps the motivation comes when they are told the potential side effects of surgery - urinary incontinence and erectile dysfunction. In any case, a diagnosis of a serious illness or lack of satisfactory conventional therapeutic options lead many men to consider alternative options.

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Contact Us:

### NutriNews Inquiries

600 Boyce Road • Pittsburgh, PA 15205

Phone: (412) 494-0122 • Fax: (412) 278-6804

Email: [nutrinews@douglaslabs.com](mailto:nutrinews@douglaslabs.com)

### Canadian Inquiries

Toll-Free: 866-856-9954

Email: [info@douglaslabs.ca](mailto:info@douglaslabs.ca)

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Prostate cancer (PC) is a heterogeneous disease ranging from a physiological, "non-malignant" process to a disease that can kill you in months. Therefore the basic principles of treatment are maximum diagnosis and minimum intervention. What does this mean on a practical level?

The first step in evaluating a patient is to create a broad and extensive baseline. The baseline should focus on both the health and the disease aspects. I frequently see patients that were initially evaluated by the leading institutions in this country. The evaluation they received often lacks basic information critical to designing intelligent treatment protocols.

## The First Step: Evaluation

In order for a person to get back to optimal health they first need to know where on the health and disease axis they are. This requires a thorough evaluation. Listening to the patient will enable us to get a feel for the health status of the patient. How well are they taking care of themselves? Do they exercise, walk, maintain a healthy diet, and use stress reduction methods? How quickly will a person respond to a health concern or health opportunity? For example, a man notices a change in urinary frequency, does he call his doctor the same day, or does he wait six months before reporting it?

Another factor to evaluate is the willingness of a person to address their own condition. Do they have enough flexibility to make the necessary changes in their lives and follow through with them? This information is critical when making our assessments as well as our recommendations. A physician can think that a particular patient needs to walk one hour a day, alter their diet, take six different supplements, change their job, etc., but making the above recommendations without considering if the person is able or willing to follow them would be an example of doctor driven medicine. In patient driven medicine, the reality of the patient's situation will determine the plan.

An initial evaluation has a few basic components, that when combined give us a better ability to assess the health and disease status of the person:

1. Detailed history and intake
2. Thorough physical exam
3. Additional diagnostic methods (In my practice I rely heavily on pulse diagnosis.)
4. Laboratory work.
5. Imaging.
6. Biopsies, if needed

This article will focus on selected issues of blood tests, imaging and biopsies.

## IMPORTANT BLOOD TESTS

### PSA (Prostate Specific Antigen)

It is important to measure both the total and free levels as well as track the magnitude of changes and the velocity or how fast the PSA is increasing. I could devote a full article on evaluating the PSA. In lieu of this, here are

some key points:

- Low PSA doesn't mean an indolent disease.
- Rate of change is very important.
- PSA can have seasonal variations.
- Evaluate the PSA in relationship to the size of the prostate. A PSA of 4.5 with a prostate of 30mld is more worrisome than a PSA of 7.5 with a Prostate of 110ml (very large). A normal prostate secretes PSA at an average rate of 0.07ng/ml. For the 30ml patient, it accounts for 2.1 out of the 4.5. For the 7.5 patient, it accounts for all the PSA. So a small prostate with an elevated PSA is not good news as many will think.
- Prostatitis is quite non specific and will elevate the PSA. Elevated PSA with urinary symptoms is less worrisome than the same PSA without any complaints.

### PAP (Prostatic Acid Phosphatase)

This was the test used pre PSA. However, it still plays an important role in the initial evaluation. For example, a patient with normal bone scan and a localized disease with the appropriate imaging will assume that the bones are not an issue. However, if PAP is elevated or even in the upper normal range, and especially if the urine DpD is elevated, the patient may be at greater risk for bone metastasis, and my program will focus on bone support. This is what I consider simple, good medicine.

### Hormonal Profile

The hormone profile is very important. It can give valuable information about the nature of the disease, causative factors and treatment strategies. A thorough evaluation of the hormonal profile as a base line will allow for fine-tuning of the treatment protocol on both a short term as well as long term basis.

The basics:

- **Total Estrogens** - Environmental toxins, xenoestrogens and toxic heavy metals are the main causes for the increase in total estrogen, estrogen to testosterone ratio, and 16-hydroxy estrogen to 2-hydroxy estrogen ratio. These hormonal changes are major factors in the pathogenesis of disease. Restoring hormonal balance is one of the areas where complementary and integrative medicine plays a leading role in the maintenance of prostate health.
- **Testosterone** - total and free
- **Progesterone**
- **DHEA-S**
- **DHT (Dihydrotestosterone)**

In addition:

- **Prolactin** - Higher levels (including high normals) have a worse prognosis.
- **CEA** - Elevation of this marker tends to correlate with aggression.
- **IGF-1** - When elevated this also indicates more aggressive situations. However, I haven't found this

# Mitigating the Effects of BPH on Lifespan and Quality of Life

Dr. Ronald Klatz and Dr. Bob Goldman

Benign prostate hyperplasia (BPH), a nonmalignant enlargement of the prostate gland, alters the normal flow of urine. BPH is characterized by symptoms of bladder obstruction, such as increases urinary frequency (dysuria), nighttime awakening to empty the bladder (nocturia), and reduced force and speed of urinary flow. Over fifty percent of men will develop an enlarged prostate in their lifetime. Left untreated, BPH will eventually obstruct the bladder outlet, resulting in urine retention and, eventually, kidney damage. High-risk invasive surgery is required at that point. Thus, BPH is a condition that affects the quality of life and can grossly shorten lifespan. As such, BPH is a primary concern of anti-aging physicians.

In Europe, physicians use plant-based agents as the first-line of treatment for BPH, and 90% of BPH cases are managed by botanical means. Clinical success is correlated to degree of obstruction. As indicated by residual urine content, levels below 50 mld frequently result in excellent results of botanical therapy; where residual urine content is above 150 mld, botanical therapy is not likely to produce any significant improvement.

BPH is thought to be primarily the result of hormonal changes associated with aging. In aging men, levels of the main male sex hormone, testosterone, decreases, while levels of the female hormones, namely estrogen, prolactin, LH, and FSH, all increase. Consequently, net concentration of testosterone within the prostate gland rises. Furthermore, due to a decreased rate of removal coupled with an increased rate of enzymatic activity acting on the body's male and female hormones, an increase in the conversion of testosterone to its potent form as dihydrotestosterone (DHT) results.

*Serenoa repens* (saw palmetto) is the fat-soluble extract of the fruit of the saw palmetto (*Sabal serrulata*) tree. It serves to inhibit DHT, inhibits the overactive enzymatic activity, and interferes with prostate estrogen receptors. As a result, saw palmetto has produced excellent clinical results in numerous scientific studies of BPH. In as little as 28 days, Champault et al (1984) found that a majority of their 110 study subjects experienced significant improvement in dysuria, nocturia, flow, and residual urine. Patients on 90 days of therapy were found to experience decreased volume of the prostate along with improvement in dysuria, nocturia, and urine flow (Tripodi et al, 1983).

With regard to BPH and its impact on quality of life, saw palmetto therapy yields marked improvements. In a multicenter study involving 305 men, Bach et al (1996) found that at three months, the subjects were much more satisfied (36.8 vs 9.7% at start of study), happy (24.0 vs. 2.3%), and delighted (5.4 vs. 0.6%). Negative emotions such as unhappiness (2.4 vs. 18.5%) and hopelessness (1.0 vs. 2.3%) experienced beneficial decline.

In order to achieve BPH-related benefits with saw palmetto, the extract should be fat-soluble and standardized to contain 85 to 95% fatty acids and sterols. A study by Giannakopoulos et al (2002) found that dosages of 80 mg two or three times daily decreased the International Prostate Symptom Score by improving dysuria and nocturia, while improving quality-of-life scale scores.

Because of the relationship between hormonal imbalances and the onset of BPH, it is critically important that anti-aging physicians monitor their male patients. By doing so, men can live longer, more fulfilling, more rewarding lives. To locate an anti-aging physician in your geographical area, visit The World Health Network, [www.worldhealth.net](http://www.worldhealth.net), and utilize the online, interactive Physician Locator.

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**Dr. Ronald Klatz and Dr. Bob Goldman are physicians and co-founders of the anti-aging medical movement and of the American Academy of Anti-Aging Medicine (A4M; Chicago, IL USA; [www.worldhealth.net](http://www.worldhealth.net)), a non-profit medical organization dedicated to the advancement of technology to detect, prevent, and treat aging related disease and to promote research into methods to retard and optimize the human aging process. A4M is also dedicated to educating physicians, scientists, and members of the public on anti-aging issues.**

one to be as useful as I hoped. It may be a laboratory detection issue.

- **Thyroid Function** - Thyroid function is also important as it can indicate the speed of the individual's metabolism. In certain conditions the body will often attempt to slow down the thyroid as an attempt to slow down the disease. The problem is not really in the thyroid, it's an adaptive response of the body. From the perspective of health and disease, if the disease is moving faster than the health aspect, speeding up is NOT A GOOD IDEA. If on the other hand the person is winning, speeding up

can allow for more healing to be accomplished in a shorter period of time. I want to emphasize the dynamic and time sensitive approach to medicine that brings dead medicine into live medicine.

## Imaging

A good baseline requires good imaging. An ultrasound taken in the average urologist's office is unacceptable. The state of the art imaging techniques are:

- **MRI-S** - This is a metabolic MRI that determines the ratio between choline and citric acid. PC is low in citric acid.

- **Color Doppler Flow Ultrasound** - This is an excellent and inexpensive imaging method. The limitation is that at the present time very few doctors know how to do it well. I am fortunate to have one of the best imagers in the country close by at UCSF.

### Localized Treatments:

- **External Radiation (3D conformal) Therapy** - This has been improved as IMRT, (Intensity Modulated Radiation Therapy) where the intensity can be modified based on the location, delivering more radiation to the tumor and less to the surrounding tissue.
- **Seed Implants**
- **Radical Prostatectomy** - This is the last on my list as it tends to result in a high number of undesirable effects.

### Androgen Deprivation Therapy

Combined hormonal therapy (the use of more than one hormonal modulating drug) when used appropriately can yield positive results over a long period of time. However, monotherapy, the use of a single agent (Casodex) without suppression of testosterone, offers the best quality of life. I prefer to use it in cases of less aggressive disease where the quality of life and sexual function are a major consideration.

### Complementary Modalities

Based on the latest scientific research, many different nutrients have shown promise in maintaining prostate health. They can be used at all stages and in conjunction with conventional treatment protocols. These nutrients can be divided along their beneficial principles:

1. Detoxification, liver support
2. hormonal modulation
3. Anti microbial
4. Anti inflammatory and antioxidant
5. Anti angiogenesis
6. Immune enhancement

There are many supplements that can be used, some of which I detail later (Table 2), but here is a highlight on two of the most important: modified citrus pectin for prevention of metastasis and medicinal mushrooms for immune enhancement.

### Modified Citrus Pectin

Modified citrus pectin (MCP) is essential for prostate health. It directly attacks abnormal cells thereby reducing the disease, but at the same time it has properties that enhance the overall health of the individual. A true super nutrient! Let me explain how it can do all this.

Cancer cells are different from normal cells in a number of important ways. First and foremost they have lost control of the "cell cycle". This is the natural cycle that controls when cells live, when they divide, and when they die. Cancer, by definition, grows out of control without any of the normal checks and balances. Many herbs, nutrients, and drugs function by getting cells to enter back into the cell cycle and die a normal death.

Another important difference that abnormal cells have is they "look" different from normal cells. All cells have different molecules on their surface. These molecules allow the cells to communicate with each other and their environment:

- They are receptors for neurotransmitters or hormones.
- They are markers that identify what type of cell it is.
- They are "hands" that let the cell stick in place or move around.

These cells have more of one type or less of another or they have markers on their surface that are unique. These changes allow white blood cells to recognize them.

One type of molecule that these cells have too many of is called galectin-3. Galectin-3 molecules function as "hands" and help the cancer spread in many ways. First they are important in reaching out and stimulating the growth of new blood vessels. Second, galectins allow cells that break off to clump together in the bloodstream – this allows the cells to move to a new site in the body.

Modified citrus pectin is a natural substance that can bind to galectin molecules and block them. Early research on the prostate showed that oral administration of MCP to rodents resulted in a dramatic reduction in prostate cancer metastasis to the lungs. More recent research from this same group of scientists has extended the protection of MCP for both the breast and the colon.

A commercially available form of modified citrus pectin was developed in response to the positive results of the animal studies and was tested in men. A pilot trial using PectaSol MCP at 15 grams a day and a subsequent phase II trial both showed that MCP slows the progression of disease as evidenced by a reduction in the rate of PSA rise. The phase II trial involved men where primary conventional treatment was initially successful, but subsequently their PSA began to climb again. Seventy percent of the men in the trial showed a significant reduction in the rise of their PSA climb.

Heavy metals in conjunction with the abundant presence of environmental toxins and xenoestrogens constitute a dangerous insult to the body through DNA damage, hormonal modulation, immune suppression, oxida-

Table 1  
**The Use of Modified Citrus Pectin**

| MCP Application       | Use (Take on an empty stomach)                                                                                                                   |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Therapeutic           | 15 grams/day (5 grams TID)                                                                                                                       |
| Heavy Metal Chelation | High body burden levels:<br>15 grams/day (5 grams TID)<br>Lower levels: 15 grams/day for<br>5 days a month, 5 grams/day<br>the rest of the month |
| Prevention            | 5 grams/day ongoing                                                                                                                              |

Table 2

## Selected Valuable Nutrients for Maintaining Prostate Health

| Nutrient or Herb               | General Use                                                           | Highlighted Properties                                         |
|--------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------|
| Modified Citrus Pectin         | 15 grams a day on an empty stomach (1-2 hours from other supplements) | Anti-angiogenic, Toxic Metal Chelation                         |
| Medicinal Mushrooms            | 4 to 12 grams a day                                                   | Immune Enhancement<br>Detoxification/Liver Support             |
| Curcumin                       | 1,500-4,500 mg a day                                                  | Cytotoxic, Hormonal Modulation<br>Detoxification/Liver Support |
| Chinese Herbs                  | varies                                                                | Cytotoxic, Multiple Properties                                 |
| Saw Palmetto<br>Pygeum         | 100-600 mg/day                                                        | Cytotoxic, Hormonal Modulation<br>Anti-inflammatory            |
| Lycopene                       | 30 mg a day                                                           | Cytotoxic/Anti-Tumor, Antioxidant                              |
| Artemisinin                    | 200 to 1,200 mg a day                                                 | Cytotoxic (use carefully- can weaken digestion)                |
| Selenium                       | 200 mcg-3,600 mcg (depending on length of application)                | Cytotoxic, Antioxidant                                         |
| Thymic protein A               | As directed                                                           | Immune Enhancement                                             |
| Stinging Nettles               | 200-400 mg extract a day                                              | Immune Enhancement                                             |
| Soy isoflavones.               | 100- 1,000 mg/day                                                     | Anti-angiogenic, Bone Protection                               |
| I3C (Indole-3-Carbinol)        | 50-300 mg a day                                                       | Hormonal Modulation                                            |
| DIM (Diindolymethane)          | 50-300 mg a day                                                       | Hormonal Modulation                                            |
| Garlic                         | varies                                                                | Anti-microbial                                                 |
| Cayenne                        | varies                                                                | Anti-inflammatory                                              |
| Green Tea Extract              | 50-500 mg a day                                                       | Antioxidant, Hormonal Modulation                               |
| Vitamin D-3                    | 1,000 IU- 6,000 IU<br>(Monitor kidney function with high doses)       | Promotes Cell Differentiation                                  |
| Zinc                           | 30 to 50 mg a day                                                     | Antioxidant, Hormonal Modulation                               |
| Vitamin E                      | 400 to 1,200 IU a day                                                 | Antioxidant                                                    |
| Vitamin C                      | 1,000 to 6,000 mg a day                                               | Antioxidant, Other Multiple Functions                          |
| Quercetin                      | 250-2,000 mg a day                                                    | Antioxidant, Anti-inflammatory,<br>Reduces Drug Resistance     |
| Conjugated Linoleic Acid (CLA) | 3,000 mg/day                                                          | Cytotoxic, Promotes Cell Differentiation                       |

tive stress, and hyper inflammation. They are of particular concern in prostate cancer. The metal chelation properties of PectaSol (US patent 6,462,029) have been confirmed in a recent pilot trial. In healthy individuals, PectaSol increased the urinary excretion of toxic metals such as mercury, cadmium, arsenic and lead. The idea that long term administration of a gentle chelator such as MCP could effectively reduce the body burden of heavy metals has now been validated in a number of patients using MCP for heavy metal chelation. Four patients that used MCP for 4-10 months were evaluated for Mercury body burden using a six hours urine collection post DMPS provocation (250 mg DMPS, IV). A dramatic reduction in Mercury body burden post DMPS IV challenge compared with base line has been observed, ranging from about 50% in the patient using MCP for the shortest period of time to over 70%. I will be presenting the study results in a large scientific conference this summer. Additional studies are currently underway as a follow up on these encouraging results. The ability of MCP to remove heavy metals and environmental toxins on an ongoing basis may be of significant clinical benefit to cancer patients.

Not all MCPs are the same. If the molecular weight of the MCP is too high it can't be absorbed into the bloodstream. If it is too low it won't effectively block all the galectin sites. Another property, the degree of esterification, must be below 5% in order to get optimal binding. The most effective specifications were defined by cell culture studies (Dr. Weiss) and remain a trade secret. The recommended dose is 15 grams/day.

## Medicinal Mushrooms

These are essential for the maintenance of vitality. In addition, medicinal mushrooms have been well researched for their immune stimulating effects. They support the body's natural immune functions. In an ideal world all aberrant cells in the body would be identified and destroyed by natural killer cells or other immune cells that circulate in the body. Stress, exposure to toxins, and other health imbalances can reduce the ability of the immune system to work optimally. Medicinal mushrooms stimulate the immune system to perform at its potential. They are important for maintaining long term health in this modern world and are critical for individuals who have cancer.

For individuals that are new to using mushrooms I recommend they start with a "priming" dose for one to two months. This dose should be two or three times the maintenance level. After this you can drop to the normal maintenance dose which is typically the suggested dose. I suggest that you double your maintenance dose during the first two weeks of the spring and autumn.

It is important to take medicinal mushrooms on a long term basis, as some of their benefits require an extended time of consumption. In addition, I suggest a balanced mushroom formula with many different mushrooms to obtain optimal protection.

## Other Nutrients

As you can see in Table 2 on the previous page, many

nutrients and herbs have multiple functions, for example Curcumin helps with hormonal modulation and liver detoxification and stabilizes the P-53 chromosome. One of the strengths of nutritional and herbal therapies is the ability to combine nutrients that have similar properties to get a stronger, synergistic effect. The disadvantages of having so many options, is that patients may end up taking a very large number of pills or the dosing regime can be too confusing. To simplify things, I recommend using nutritional blends that are formulated to encompass many different therapeutic aspects. I also use other therapeutic modalities such as acupuncture, infrared saunas, lifestyle and diet recommendations, body work, IV therapies and body-mind medicine. The protocol is further modified to accommodate the use of conventional treatment. Some supplements are specifically used to prevent or counteract side effects of conventional treatments. A good example is preventing osteoporosis in patients undergoing CHT and preventing clots in patients after procedures or in men receiving estrogenic treatments.

When addressing prostate health as part of integrative medicine, we want to combine a number of beneficial therapeutic principles and modalities. We need to design protocols that honor the basic principles of health and disease. My clinical experience has repeatedly demonstrated to me the value of integrative medicine in prostate health at all stages and with all conventional treatment modalities.

## About the Author

Dr. Isaac Eliaz is a medical doctor and licensed acupuncturist with extensive training in complementary modalities. For the last 15 years his medical practice has centered on the integrative treatment of cancer. He has been involved in numerous research studies investigating the effects of various nutritional supplements on cancer and has been granted two patents on his discoveries. Currently, he lives in Sebastopol, California with his family where he directs the Amitabha Medical Clinic and Healing Center (707) 829-5900. For more information about integrative approaches to chronic illness please visit: [www.dreliaz.com](http://www.dreliaz.com).

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