

Sighi Drassinower, M.D.



## THE KEY TO HEALTHY PROSTATE



INFORMATION AND ACTION

- ⊕ The most frequent health problems suffered by men over 40 are related to the prostate.  
An update information and knowledge on Prostate Cancer, Prostatitis and Benign Prostate Hyperplasia (BPH).
- ⊕ A practical guide to achieve optimal prostate health.

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## **THE UNDERTAKING**

After many years of research, there is real evidence that aging can be slowed, prolonging youth and maintaining health for a longer period of time. The purpose of this series of books is to inform the public as to what steps the anti-aging medical community recommends in order to prevent aging.

This is the first, of a series of 15 books that deals with the subject of healthy aging.

The beginning of this book will deal with the subject of healthy aging in general.

Then, specific topics are developed, in this case the topic of the healthy prostate.

Yes, this whole undertaking is very ambitious. The probability of making mistakes increases with the magnitude of the project, as Will Durant, the famous American Historian (1885-1978) put it.

On the other hand, little has been done to systematically evaluate the great achievements in medicine in regards to aging. People need to be informed; this knowledge can certainly be understood and applied by everyone.

After every chapter the reader will find the key information repeated, in a simple, understandable, and useable way. You will find that most of these can be taken into action immediately.

So this book has been written for the general public, the medical layman. Great efforts have been made to define complicated terms easily so that their understanding is possible and attainable.

The effort is definitely worth it; because the goal of this book and those that follow in this series is that YOU can stay young and healthy for a long time.

Sighi Drassinower, M.D. Frank Fabian

Florida, November, 2004

## **I. GOOD NEWS, GOOD NEWS, GOOD NEWS**

Since the Anti-Aging movement started in 1993 not a week goes by without good news in relation to staying young. The anti-aging movement gained international recognition, and health care systems in several nations are providing new services. And yes! The biological age (as opposed to the chronological age) is diminishing every year. One can be 75 years old and feel 55! Amazing! Longevity is not a dream anymore. It is an attainable! A vital life span of 120 years is within reach. Medical knowledge is doubling every 3.5 years! Huge advances have been made in cell research, in manipulating atoms and molecules, and in nearly all-medical disciplines.

Influenza, diarrhea, and pneumonia, the main causes of death about a century ago, are not a threat anymore. Techniques to rebuild lost brain and nerve tissue are in progress. Bone re-growth is within reach. There are literally hundreds of techniques existing already for the strengthening of the immune system. Maybe pain, disability, and disease will one day be taught only in history class. Who knows?

We do know that proper diet stops or slows down aging and that unbelievably sophisticated nutritional supplements now exist. We know of hormone therapies, the importance of exercise, and the benefit of vitamins, minerals and antioxidants. And the best is: we get wiser everyday! So the years of getting fat, having a belly, an expanding waist, losing hair and a waning sex life are now optional, unhealthy aging is optional.

The three main diseases that cause death can today be prevented.

Heart disease causes death in 31.4% of Americans, cancer in 23.3%, stroke in 6.0%. These three major causes of death in America are under scientific assault. Today there are numerous techniques and treatments against the typical aging diseases such as Alzheimer's disease, non-insulin dependent diabetes, osteoporosis, autoimmune disorders, arthritis and Parkinson's disease. They are by far not perfect, but we may be entering a GOLDEN AGE in the study of health, especially in view of the pace at which medical research progresses today.

Additionally there is some common knowledge today about aging: We know exercise is important. We know proper nutrition is a must. We know that eliminating alcohol, cigarettes and drugs is helpful. We know a healthy environment is important. We know polluted air and water, pesticides in our food, hormone, antibiotics, fungicides and many chemicals in our foods are detrimental to our health, and some know that even electromagnetic fields created by all the electric appliances we use daily should be avoided. We know that regular sleep, having optimal weight, drinking purified or bottled water and taking regular nutritional supplements are essential.

We know all this because of Anti-Aging-research.

So Anti-Aging is the talk of the day.

Anti-Aging Medicine is the newest and fastest growing clinical medical specialty. It focuses on aggressive preventive health care and goes far beyond cholesterol testing and mammograms.

Anti-Aging medicine encompasses life style, hormone replacement therapies, antioxidants and vitamin supplements to reduce free radical damage.

Clinical testing protocols can not only measure hormone levels, but can even analyze the critical metabolic factors that control life itself, right down to the cellular level.

Ronald Klatz, the President and Founder of American Academy of Anti-Aging Medicine, States: "Aging is NOT inevitable. Biomedical technologies available to your doctor can detect, prevent, treat and even reverse many age-related disorders. Life spans of 100 – 120 will become reality for today's baby boomers."

Every 7.7 seconds a baby boomer turns 50. We have 77 million in the U.S. and there are approximately 70.000 centenarians in the U.S. This number will increase to 160.000 by the year 2010. Without a doubt we are entering a new age of anti-aging medicine with new approaches.

This is already possible and can be achieved: Enhanced immune system, improvement of memory and cognitive functions, increase of sexual energy, improvement of skin tone and texture, increased muscle strength, increased energy levels, improvement of muscle to fat ratio. And more will come.

But wait a minute, you might say. This may all be true, but what can we do? We often don't know HOW TO IMMEDIATELY APPLY what we learn. This is the reason why this information has been put together. It's hard to know what information to select from the information with which we are bombarded

every day. Some products are merely illusions, quirks. So we need an evaluation of this information that can lead us directly into action. An analytical EVALUATION OF THE INFORMATION available is the most important thing.

If the data is not evaluated one is usually overwhelmed with all sorts of “information trash”, as it has been called.

Literally thousands of information sources have to be evaluated TO FIND THE COMMON WORKABLE DENOMINATORS for healthy aging. The entire literature and information about aging has to be examined.

That is exactly what the authors tried to do with the following pages: to evaluate all those tons of information. But who are those authors? You may ask...good question. Allow us to toot our own horn a little bit, because we think it is only fair for you to know whom you are dealing with.

Author number one was born in Peru. He graduated as an M.D. in 1985 at the Peruvian University Cayetano Heredia, a leading university in Latin America. Basically, he came from a family of doctors. His father was a world-renowned Allergist and Immunologist who came to Peru from his native Austria and practiced medicine for over 50 years. Working with his father for many years, he was always interested in preventive medicine, research and education. Despite being an M.D., for the last ten years he committed himself to the research of natural medicine. After attending many conferences of the American Academy of Anti-Aging Medicine, ACAM (American College of Advancement in Medicine), Functional Medicine, Ortho Molecular Medicine and many other seminars and conferences related to natural supplements and natural medicine he became absolutely convinced that proactive PREVENTIVE MEDICINE and ANTI-AGING MEDICINE is the right way to practice medicine today.

He is a member of the American Academy of Anti-Aging Medicine and a Board Certified Physician, American Board of Anti-Aging Medicine, under the auspices of Harvard University. The third generation of doctors in his family is on its way. His daughter Daphnie is graduating as an MD in two years. He is always checking what they study now in medical school, unfortunately, it is not much different than 30 years ago. The next generation of doctors is going to have the same approach as he did: try to solve symptoms with drugs and not to proactively prevent the causes of their patient's health problems.

The second author is a best-selling author who has written quite a few books and is a specialist in putting data together, so you can easily understand it and can APPLY it as soon as possible.

To make a long story short: The following information involves many years of research, requiring the evaluation of hundreds of books and articles, which means attending many conferences and symposiums, and treating many patients including ourselves. This following information is as accurate and as factual as possible. At the same time this information is kept simple so you can understand it easily, but not at the cost of hiding from the reader essential scientific information and knowledge.

Again: In 1993 a group of physicians and scientists started a movement and coined the word ANTI AGING: They declared a war against aging. Author number one is part of that movement.

Now the American Academy of Anti Aging Medicine has over 12,000 members all over the world. All these members agree that AGING IS A TREATABLE MEDICAL CONDITION.

We admit: One cannot stop chronological time. Years will pass and will add to our personal calendar, but we can try to slow, stop and even reverse the aging process. We can try to act PREVENTIVELY and look for health problems before they strike. We can use information and knowledge to look for health problems and do something about them. Find problems at the beginning and not wait until they can threaten our lives. In order to succeed we have to be thorough. To keep it simple: it is not wise to follow the conventional methods of medicine, which is oriented towards treating symptoms when they become obvious. Most often, waiting until symptoms become obvious is too late.

At the same time we should look at ALL the possible sources of information, we should listen to our bodies, learn from our family history and detect minor signs and symptoms and biomarkers that can lead us, to prevent, intervene and treat health problems EARLY. You can compare it to an intelligence department that fights terrorism in the world. Information is VERY IMPORTANT to make the right decisions.

Unfortunately your conventional doctor does not have the time or the in depth knowledge to really inform you on how to prevent disease and the deterioration of your body. So you have to provide yourself with enough knowledge to help yourself. Helping yourself is usually the only approach.

Why? Medicine is not preventive yet. We have a symptom-oriented medicine. We try to fix our bodies when something is already broken. We have to act before, not after, the problem arises.

Your doctor has to see 20, 30, 40 and sometimes 50 patients a day, everyday. Do you really think he can go deep and study your case to find out early signs, symptoms or biomarkers that can lead him to diagnose and prevent early health problems? Impossible!

Besides, most of the time Insurance companies and Medicare will not pay for preventive medicine tests and treatments. They only pay for “Medically Necessary” ones. This unfortunately means that only when the health problem is already established and is hurting you, will insurance companies do something. But we need to act **PREEMPTIVELY**. For this you need guidance.

And you need to be **UPDATED**.

Updated information will help you to act fast. And here’s more good news. There exist today a variety of natural health supplements that are nothing less than stunning. In the end of each chapter you will find supplements, supported by the latest scientific findings, which enable you to *do* something without any side effects! So these are the advantages of the following pages.

To summarize all advantages...

The following information:

- Contains an evaluation of information of thousands of books and articles.
- Has been put together by an M.D., professionally dealing with the subject of aging on a scientific basis, and who is Board Certified (American Board of Anti-Aging Medicine).
- Is presented as simply as possible.
- Contains the most recent scientific results.
- Leads to immediate **ACTION**.
- Enables you to act preventively, dramatically change your life style, reduce environmental aggression, eat healthy, and use high quality **NATURAL** supplements that have been scientifically proven to be useable over a long period of time without side effects.

Ready for and adventure?  
Keep on reading!

## **ACTION**

**Information:** The Anti-Aging movement started in 1993. The biological age as opposed to the chronological age can diminish every year. Longevity is not a dream anymore. It is an attainable fact.

**Action:** Decide to get all the information available as soon as possible.

**Information:** Anti-Aging Medicine focuses on aggressive preventive health care. The problem is the EVALUATION OF INFORMATION. Literally thousands of books and articles have to be evaluated, as well as hundreds of conferences and symposiums.

**Action:** The following information does just that, it is an evaluation of the information that allows you to preemptively act before a health problem strikes.

**Information:** You need updated information, natural health supplement information, simple information, and action-oriented information.

**Action:** Keep on reading.

**Information:** Anti-Aging know-how exists in relation to prostate problems, menopause, immune system, heart diseases, joint, bones, diet, cancer, stroke, diabetes, osteoporosis, arthritis, and even Alzheimer's. All those diseases are under scientific assault.

**Action:** You have to get this anti-aging information early enough to prevent diseases from striking.

## II. NOTHING BUT FACTS

Before we start giving you the “key to healthy aging” let us first consider the facts! We all know that today we generally live longer, and that is indeed good news, in fact very good news. We know that the countries with the highest life expectancy are USA, Denmark, Great Britain, Finland, Belgium, Greece, Germany, The Netherlands, Israel, Luxemburg, New Zealand, Norway, Singapore, Spain, Austria, France, Italy, Canada, Australia, Sweden, Switzerland, Monaco, San Marino and Japan –in that sequence. In the US, in the year 1796, shortly after the French Revolution, one lived an average of 25 years! 1896: 48 years! Today, **77 years**.

In the US people can expect to live an average of 77 years, in Great Britain 77.5 years, in Greece and Germany a little above 78 years, in Austria 79 years, in Australia and Sweden 80 years, in Switzerland a little over 80 years, in Japan about 81.5 years.

These statistics give us the first answer, WHY do people in some countries live longer? When the income is higher, the “civilization” is advanced, and stable work is available, people live longer. This is, by the way, the reason, why people in China die at age 70, in Russia within 65 years. In India the life expectancy is a little over 60, in South Africa it’s 50, in Afghanistan it’s 45, and in Angola only 35 years of age!

We know these facts, and just by knowing the statistics we can learn that environment, civilization, working opportunities, safety, and a good life, are responsible for longer living. We know that!

We also know without a doubt (more than 2500 statisticians in 110 countries supply us with data about that!) that our life expectancy is continuously rising. Every year we live we can expect to live 6 to 8 weeks longer than the generation before us. “Long living”, “longer living”, in the “good countries,” (US, Middle, South, and West Europe, Japan, Australia etc.) guarantees more or less that we continuously grow older. The statisticians tell us that in some countries those born after the year 2000 can expect to live 100 years on average! Not bad! Not bad at all!

But we know even more: we know that women on average live longer than men. The reasons for that: Women have, if at all, heart attacks an average 10 years later than men. Men usually live a more risky life, have more stress, and

experience the ups and downs of the job more intensely. Additionally men on average have more addictions than women.

Finally we know that somebody who is happily married usually lives a longer life. The reasons for that are obvious: We are social beings; we need company: somebody with whom to share our thoughts, feelings, illusions. We seek affection and security: a committed relationship provides both. Communication, a stable partnership, and trust make life easier. Cheerfulness and happiness are often attributed to a good relationship. We know that.

So we **do** know a lot, but when it comes to the analysis of WHY people live longer, some a lot longer, even the experts have different opinions. However, the following “Why’s” have been established without a doubt:

1. If you are married and you have a good stable relationship your chance to live longer is very high. People divorced and without a partner live a more stressful life. Emotional well-being is the key.
2. Having a job that is not too stressful is very important for healthy aging.
3. We also know that the money we make plays an important role: The better our financial situation, the longer we live on average. Economically, the “upper classes”, that is to say people who earn more, have a better chance of living longer. Poverty is one reason why people die at a younger age. People with a really low-income die 4 to 6 years earlier than people in the higher income brackets. Also people with a regular income live longer than people with little or no income. Economic stability matters.
4. It is not only the money that counts. A good education, having a respectable profession and living standards (housing/environment) are without a doubt factors that influence the length of our lives. High administration jobs, university professors, judges and officers usually live longer.
5. Good nutrition, regular sleep, and exercise are all part of a healthy life. We know that alcohol, drug abuse, and tobacco are factors that lead to a shorter life. Innkeepers and prostitutes usually don’t live very long.
6. We also know that advanced medical care is responsible for increasing the average life span. Medical doctors are saving lives. Experts differ here in their opinions, but we can say that good medical care is responsible for adding an average of six years to the normal life span. Surgery, anesthesia, and antibiotics

help with illnesses like cancer, heart, liver, and lung disease, etc. and therefore lead to a longer life.

On the other hand, it is only fair to say that there are also major problems. Let us name three:

1. Do we generally HAVE Healthy Aging Medicine? The answer is a categorical NO. The fact is that overmedication and taking the wrong medications can shorten your life. Every year in the US 106,000 patients die in hospitals because of their medication! The fourth cause of death is complications with medication. So medication poisoning and especially psychopharmacy can be very dangerous. *We have an epidemic of cancer, heart disease, obesity, arthritis, chronic fatigue, fibromyalgia, Parkinson disease, and many other degenerative diseases that come with aging. Our older population spends many hours in doctor's offices, or hospitals and spends a lot of money in prescription medication just to treat symptoms, with many side effects.* Well, if the drug is giving you a side effect your doctor will probably prescribe you another drug or will give you a drug to reduce the side effect of the first drug. So this isn't the solution. The solution to this is simple: just look out for HEALTHY Aging Medicine! Don't listen to the drug advertisement, but listen to those who tell you how to get old AND stay healthy with life style changes, exercise, eating healthy, reduction of environmental aggression, pure water, and natural products! But the only one who can change things is YOU. You can change the health system. You can arm yourself with information and knowledge and ACT. You can have a horizontal relationship with your doctor. Not a vertical, paternal relationship, but a democratic patient-physician relationship. *The doctor should be your partner, your trainer, and your educator by teaching you how to prevent and early detect health problems and give you solutions.*

2. *Problem #2 is that doctors are generally treated as "authorities," whose opinions one dare not challenge. At the same time those "authorities" may have different opinions, often contradictory. What is the solution? Well, the only person who can change things is again YOU!*

3. *Additionally, what we don't know is the real problem:*

*The fact is that most of the people of tomorrow will grow older. But people often can't pay the expenses of the future anymore! That is to say, our health insurance systems will collapse sooner or later. Why? No one can pay all those expenses in the long run. Medical care of tomorrow will be so expensive*

*that many people won't be able to afford it anymore. This is already starting to happen.*

But think Again! More and more people get older and older today. The health expenses rise. The health system is more and more overburdened. One does not need to be a prophet to see a catastrophe at the end of the tunnel! These are the facts: 90% of all health care dollars are spent in the last two to three years of one's life. (Think of the hospital costs!) In the US 3.5 % of gross domestic product is dedicated to the elderly population. Since we are getting older and older, experts predict, that soon insurance rates (say in 2010) will dramatically increase. But who should pay the bills?

What does that mean for YOU?

It simply means that YOU have to take care of YOURSELF! In fact, the only chance for many people is to take precautions. Only taking precautions will give many people the chance to live longer. The health system itself will soon reach its borderline. It means that only KNOW-HOW and KNOWLEDGE will help the average person live a long life of good health. It means that those factors that help you LIVE LONG have to be better understood by you. It means that only specific sophisticated know-how can prevent you from suffering. It means that YOU have to take your destiny back into your own hands.

Let us look on this vicious cycle more clearly!

These are the facts:

Health insurance companies operate today with figures in relation to the average life span, which are often incorrect and old. As stated earlier people do get older. That means that health insurance companies will pay less (or they will raise the premiums so high that only a few can afford it). Like it or not: sooner or later we will face a collapse of the health insurance system. The politicians will help and can help, for a while. But only for a short time! Then they will see that even their pockets are empty. "Health Care" will be the talk of the day. Political parties will fight for their voters, we will see more and more debates on television about health care. In fact this is already the case to some extent. But it will increase. It will get worse.

Both parties, the Democrats and the Republicans, will sooner or later admit that health care systems cannot be endlessly supported. When the "social expenses" get too high they damage the general economy. When the general economy is slowed down the result is that the state has even less money in its pockets, and can pay less. So the state will sooner or later give the responsibility back to its

citizens. And that means that the only one who can do something about it is YOU.

It is exactly for that reason that this book has been written. It has been written with the purpose to providing YOU with KNOWLEDGE. The fact is if you know enough about aging your chances of staying healthy are very good. There is an enormous amount of knowledge in relation to healthy aging. It is a subject in itself. It is a subject that is not difficult to grasp. It is a discipline that can be mastered, that has to be mastered if you want to live a long and healthy life. It is a subject that is even exciting and suspenseful. What is more interesting than finding out new things about life?

At the same time, you must know that science is a never-ending story. Nearly every day new inventions are made. The fact is that our knowledge today about healthy aging is by far greater than it has ever been.

The following provides you with the data necessary for living a long and healthy life. The style we used is intentionally simple, not academic, not artificially complicated, because we want you to understand it.

It is a book you can USE. It is a book you can apply to your daily life. It is a health adventure, an action-book.

This is exactly the way that the body and health should be looked at: as though it were a GAME that obeys certain rules. The better you know the rules of the game the better your chances to win.

Let's play the game!

## **ACTION**

**Information:** The countries with the highest life expectancy are: USA (on average 77 years), Denmark, Great Britain, Finland, Greece, Belgium, Germany, The Netherlands, Israel, Luxemburg, New Zealand, Norway, Singapore, Spain, Austria, France, Italy, Canada, Australia, Sweden, Switzerland, Monaco, San Marino and Japan (on average 80.5 years).

**Action:** Avoid living in countries with violence, with low income, with war, and political instability.

**Information:** People who are married live longer.

**Action:** Go for a long lasting relationship.

**Information:** People with jobs live longer.

**Action:** Find a regular job that gives you satisfaction and a sense of purpose but that does not entail stressing you out, even when older. If your job is too stressful, start practicing anti-stress measures: yoga, meditation, and exercise.

**Information:** People in the upper quarter of income live on average 4 to 6 years longer. These people spend money on themselves, and invest in their health.

**Action:** Get your finances in order if you haven't done so already. Prioritize your expenses so that you can spend on what is really important for you.

**Information:** People with a good education live longer. Educate yourself so that you can lead a better life

**Action:** Never stop to live a strictly professional life, no matter how old you are. (Be active, be curious, and learn something new every day).

**Information:** Exercise, regular sleep and good nutrition are paramount for a longer life.

**Action:** Decide to learn more about these subjects and work out a systematic program that works for you.

**Information:** We don't have a Healthy Aging Medicine. Every year in the U.S. 106,000 patients die in hospitals because of their medications.

**Action:** In general avoid drugs with side effects. Look for natural products.

**Information:** Doctors are looked upon too often as unquestionable authorities.

**Action:** Look for doctors who have a democratic relationship with you. Think for yourself.

**Information:** The health insurance system will collapse sooner or later. Most people will not be able to pay the insurance costs anymore. Only know-how and knowledge will guarantee that you live a longer life in good health.

**Action:** Decide to learn more about the laws of the body, especially the older body. Read this book.

### III. THE IMMORTAL MAN

An old dream exists that man is immortal and will never die. We find this dream in many religions and philosophies in which there usually is a separation between the body and the soul. Religion promises immortality, but only of one's soul, man has never stopped dreaming that he could also make the body live forever.

Science–Fiction authors have envisioned that one day a medicine will exist, or should we say: a body-technology, which enables you to literally change everything the body consists of: arms and legs of course, but also every organ, the head, even the nervous system. In the end, you would have an “organic robot-body” and could live forever. This dream may or may not become true, what is true today is the fact that it is possible to live with today's “body-technology” to 100 years old – an amazing step forward!

But how is this progress possible? We know why men (in the next book we will look at women) age. Another discovery that can completely change the aging process and cancer is the **TELOMERASE THEORY OF AGING**. It is a new theory of aging that holds many promising possibilities. This theory was born from the surge of technological breakthroughs in genetics and genetic engineering. *Telomeres* are sequences of nucleic acids extending from the end of the *chromosomes*. In short: *Telomeres* act to maintain the integrity of our chromosomes. Every time our cells divide, the telomere is shortened, leading to cellular damage and cellular death associated with aging. Scientists discovered that the key element in rebuilding our disappearing *telomeres* is the “immortalizing” enzyme **TELOMERASE** – an enzyme found only in germ cells and cancer cells. Telomerase appears to repair and replace telomeres, manipulating the “clocking” mechanism that controls the lifespan of dividing cells. (Future development of a telomerase inhibitor may be able to ease cancer cells from dividing and presumably convert them back into normal cells.)

But what are enzymes? *Enzymes* are any of several complex proteins that are produced by cells and act in specific biochemical reactions. *Enzymes* are proteins that speed up a chemical reaction. *Enzymes* do their work without being changed or used up in the process. Now the enzyme **TELOMERASE** can repair *Telomeres*! The idea is that we can make our cells regenerate the *telomere* and become “immortal”. And we can make cancer cells return to normal cells, by reducing the telomere at an accelerated speed, so the cancer

cells will die in 3 months or so. Possibly this therapy can one day end cancer and will make humans live many more years.

## HORMONES

But TELEOMERASE treatment is all music of the future. Nevertheless you should keep an eye on the latest scientific findings. What is at our fingertips *today* is the hormone treatment. So many things have changed as to the treatment with hormones! As to hormonal treatment it is no exaggeration to say that we entered a *new age* in medicine! Let us first consider the basics.

We all know that men past age 40 or 50 undergo enormous hormonal changes. So hormones play a key role in aging. But what are hormones for? The word stems from the Greek word *horman* (to *excite*), which in turn comes from the Greek word *horme* meaning *impulse*. Very interesting! Hormones give impulses. To be more exact, a hormone is a substance formed in an organ of the body (gland); this substance is then carried to another organ (or tissue), where it fulfills a specific purpose.

Hormones act in a hormone receptor site, a specific site in the cell. Like a key to its lock, they fit perfectly. Hormones are chemical messengers secreted into the bloodstream or extra cellular fluid. So what one cell secretes, affects the functioning of other cells. Most hormones circulate in blood, coming into contact with essentially all cells. However, a given hormone usually affects only a limited number of cells, which are called *target cells*. A *target cell* responds to a hormone because it bears receptors for the hormone. In other words, a particular cell is a target cell for a hormone if it contains functional receptors for that hormone. Cells that do not have such a receptor cannot be influenced directly by that hormone.

Reception of a radio broadcast provides a good analogy. Everyone within range of a transmitter for National Public Radio is exposed to that signal (even if you don't want to!). However, in order to be a National Public Radio target and thus influenced directly by their broadcasts, you have to have a receiver tuned to that frequency.

*Hormone receptors* are found either exposed on the surface of the cell or within the cell, depending on the type of hormone. The binding of a hormone to its receptor triggers a cascade of reactions within the cell that affects its function.

Growth, sexual activity, and many body functions are controlled or triggered by hormones. So we have many hormones, which should be balanced. When we age, these hormones usually become imbalanced.

The result: The sex-drive lessens; fat tissue increases, muscle mass decreases. Sometimes even depression and fatigue follow. In the worst cases heart diseases, erectile dysfunctions, or prostate disease start. So something *changes!* Hormonal imbalance starts.

But which hormones are affected? Let us take a look at only *four* hormones for the moment: *Estrogen, Testosterone, Progesterone, and DHT*

(*DihydroTestosterone*). We need to understand these four types of hormones! *Estrogen* (a composed word from *estrus* meaning literally *periodic sexual excitement, or heat* points at any female sex hormones. The word was invented in the year 1920.

*Testosterone* is also a coined word, a synthetic word, and invented word. *Testis* (same as testicle), *stero* (pointing to a certain group of chemical compounds) and *one* are in this word. Test-o-ster-one (the first *o* just has been put in that word so that it sounds better) is pointing to the male sex hormone produced by the testicles. (Both men and women have male and female hormones!) By the way: don't be impressed by big words! Usually they are very simple once you take them apart.

But just for kicks, let us look a little bit deeper into those two words!

*Estrogen* is not one hormone; it is the name of a group of hormones. There are three main forms of Estrogen found in the human body: *Estrone, Estradiol and Estriol*, also known as E1, E2, and E3 respectively. *Estradiol* (E2) is the primary Estrogen produced by the ovaries. *Estrone* (E1) is produced in large amounts during pregnancy and is a breakdown product of *Estradiol*. *Estriol* (E3) is also a weak *Estrogen* and may have anti-cancer effects. Before menopause *Estradiol* is the predominant Estrogen. After menopause *Estradiol* levels drop more than *Estrone* so that now *Estrone* is the predominant *Estrogen*. A man over 50 usually can have more *Estrogen* than a 50 year old menopausal woman. There is also a group of compounds called *PhytoEstrogens* (*phyto=plant*) generally found in food, which can have "Estrogen like" effects in the body.

*Testosterone* is responsible for normal growth and development of male sex organs and maintenance of secondary sex characteristics. It is the primary Androgenic (*Andro=Greek=man*) hormone, and its production and secretion are the end product of a series of hormonal interactions. Testosterone is the most important representative of the male sex hormones collectively called *Androgens*. Testosterone itself is responsible for three major functions.

1. The development of secondary male sex characteristics. This is also called the Androgenic functions of Testosterone. Some examples of these characteristics are increased growth of body hair, beard growth, deep voice, increased production of sebaceous glands, development of the penis, aggressiveness, sexual behavior, libido, and the maturation of sperm.
2. Testosterone accelerates muscle build-up, increases the formation of red blood cells, speeds up regeneration, and speeds up recovery time after injuries or illness. It also stimulates the entire metabolism, which results in the burning of body fat.
3. The inhibition of a cycle, which regulates the amount of Testosterone produced in the organism, is done by Testosterone itself. In other words, if you have too much Testosterone, your body will tell itself to reduce or even stop the production of it until it is back down to its normal levels.

During puberty, Testosterone levels are at their lifetime peak. They begin to decline around age 23.

Now DHT (or DihydroTestosterone) is another male hormone that is suggested to be the main cause for the shrinking of the hair follicles, which leads to hair loss and it can also cause prostate enlargement and prostate cancer (DHT is formed when the male hormone Testosterone interacts with a special enzyme).

In relation to the term *Progesterone* let us stay simple. The term was invented in the year 1930. *Progesterone* stimulates the uterus to prepare it for pregnancy. In men Progesterone inhibits the harmful effects of excess Estrogen.

We could even make it easier by stating that 4 hormones (No. 1, 2, 3, and 4) are important, they do have special functions, and do have special complicated names. Those complicated names are, let us repeat:

**ESTROGEN** (Estrone, Estradiol, Estriol)

**TESTOSTERONE**

**DHT**

**PROGESTERONE**

Names, just names! But we need those names to describe the optimal health condition. And now it gets really exciting!

## STAYING BALANCED

Let's go back to our original thought. Those four hormones have to be in special balance to be optimal. Again: As we age, less Testosterone is produced. A lot of physical manifestations follow: loss of hair, big belly, weak muscles, and less sex drive.

So what do we need to do?

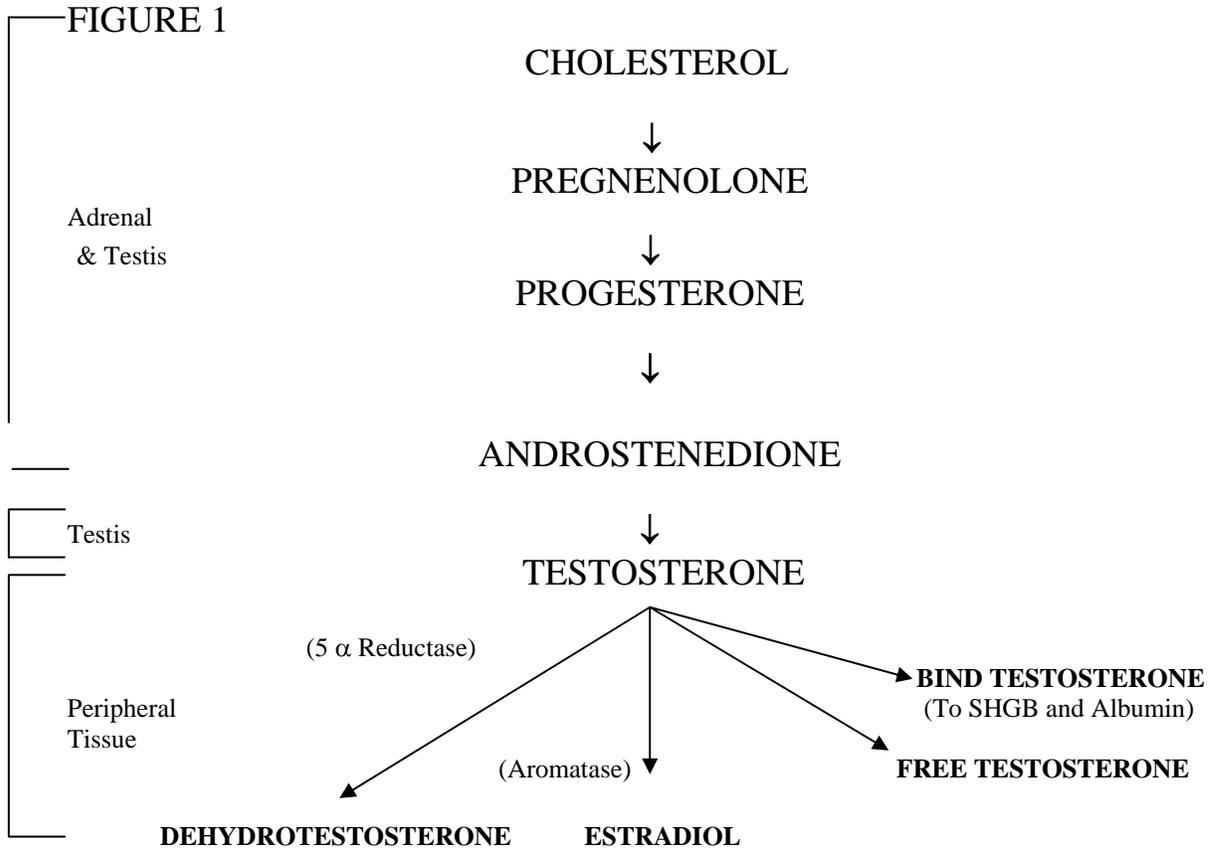
We're letting you in on a secret: Chemistry is *very* simple in the end. You need the right elements or compounds in the right quantity and quality. That is chemistry! Quantity and quality! So what is the right quantity and quality?

You need to balance these 4 hormones: Testosterone, Progesterone, Estradiol, and DHT. A good ratio between Testosterone/Progesterone/Estradiol/DHT: 60/200/1/1.

It cannot be stated more simply!

A way to explain the relation between (free) Testosterone, Estrogen (Estradiol), and DHT is very simple: Imagine a river! The main river is Testosterone and it will divide into 3 different small rivers: one will be Estradiol, the second one will be DHT and the third one will be free Testosterone. When we are young, the main river (Testosterone) has a lot of water...and most of it will go to the free Testosterone "river".

As we age the production of the Testosterone main river diminishes. Testosterone starts converting into Estradiol and also DHT and less into free Testosterone. The imbalance starts and prostate problems also start. So all you have to do is maintain the right balance! When we are balanced we are all set! So we have a golden formula here! The formula again: 60/200/1/1: Testosterone/Progesterone/Estradiol/DHT.



**Figure 1:** Pathway of Testosterone formation in the testis and the conversion to Dihydrotestosterone ( DHT) and Estradiol, in the peripheral tissues.

**Testosterone in plasma is largely bound to proteins, mainly Albumin (54%), SHBG (44%) and 2% is Free Testosterone. Nearly all albumin-bound testosterone is available for tissue uptake, so the bioavailability for testosterone in men is about 46% (equal to the free testosterone 2% plus Albumin-bound fraction 44%).**

## SEARCH FOR THE SECRET OF STAYING YOUNG

Today we do have this golden formula. But in the beginning not everything was so simple. In the beginning scientists thought that *Testosterone* alone would do the job! When scientists found out the importance of Testosterone they had a ball. Great! They were thinking: all we have to do is: feed man with more Testosterone and he will stay forever young. Hormones (especially Testosterone) were the talk of the day. Scientists were dancing on the tops of tables with joy. They thought they had invented man anew. Thousands and thousands experiments took place, but a lot were lead in the wrong direction.

In the beginning the following conclusions were drawn: Let us just produce artificial Testosterone and all is fine. But, scientists found out that simple replacement therapy does not work. Reason: The Testosterone converts (*aromatize* is the scientific word) into even *more* Estrogen, worsening the condition! That is to say one gets older faster! Excess Estrogen means increased risk of heart attacks, stroke, BPH (Benign Prostate Hypertrophy, the prostate growing bigger, too big, and prostate cancer. In other words people were getting sicker! Testosterone injections, creams, and patches failed! Again: Testosterone could be converted to Estrogen.

Much more extensive research was done. A race began! It was found out that Testosterone is more than a sex hormone. We use Testosterone in the brain, the heart, it improves oxygen uptake, controls blood sugar, it is important for the immune system, the red blood cells and a lot more. So obviously it was the KEY. But, more bad news was suddenly the talk of the day. Testosterone can produce prostate cancer! The medical world was shocked. Test after test, research after research was done, costing millions of dollars. Up to today there are at least 27 scientific studies published. The results? There are 22 studies indicating that Testosterone does *not* cause prostate cancer. Also there are 5 studies indicating that Testosterone *does* cause prostate cancer.

So what shall one believe? This is what we know today: What produces prostate cell growth is Estrogen and DHT (DihydroTestosterone), produced from Testosterone. So you need to *reduce* these two hormones and *not* the production of Testosterone. So one doesn't need to castrate oneself with a scalpel or through chemical castration. The score is 22 to 5 against the theory that Testosterone causes prostate cancer. Objectively we conclude that the fear was over-emphasized.

However, more research was done, it was exciting. Scientists found out, again and again, how important this Testosterone is. It helped the coronary arteries. Low Testosterone promoted cardiovascular diseases, raised blood pressure, weakened the heart muscles. Fat increased with low Testosterone. Some doctors became really excited, because it seemed to indicate that with Testosterone one could avoid taking all those horrible drugs usually prescribed to handle conditions like heart problems, fat, blood pressure etc. Could all those problems come just from low Testosterone? Could one go into old age *without* all those drugs, which could have terrible side effects?

The vicious cycle usually was: taking a drug against something, having side-effects, taking a drug against those side-effects, having another side-effect, taking drugs against those new side-effects.... Thus, an endless cycle followed, very dangerous for your health. But again: could depression and 100 other

illnesses, be treated without the dangerous drugs? Just by taking a good hormone or handling the hormonal imbalance could we be all set? Could that be true?

Scientists rolled up their sleeves. We were fighting depression with one drug for example. At the same time the libido, the sex drive, got suppressed. We tried to handle inability to concentrate, moodiness, touchiness, irritability, timidity, inner unrest, and memory failure with drugs and felt heavily disappointed finding out the vast number of side effects. We tried to handle passive attitudes, tiredness, even hypochondria with drugs – and *forgot to just test the hormone-balance-levels!* (Which can cause *all* that!) More and more enemies of the prescription drugs came up. The public or part of the public wanted to get away from those drugs. Horror stories came to light, warnings from many drugs. Drugs, it seemed, had to be avoided, by all means. People in general know that they dance with the devil when they are taking drugs. So why not look for another alternative?

The show went on. More research was done. The hormone specialists pointed out again and again, what was related to Testosterone deficiencies. Brain cell injury, arterial wall damage, immune dysfunctions, all these symptoms had to do only with low Testosterone. On the other hand, just giving an abundance of Testosterone didn't solve the problem. So some clever scientists tried a new approach, the suppression of Estrogen. They tried both giving Testosterone *and* suppressing Estrogen at the same time. So much was sure, Testosterone, builds protein; the muscles improved cellular biogenetics, increased the metabolism, protected the heart, strengthened the heart muscles and even helped to eliminate arrhythmia and angina, prevented blood clots, and prevented colon cancer. It was too good to be totally ignored.

Research went on. The factors that caused the Estrogen and Testosterone imbalance were more intensely researched! And one day some scientist struck pure gold on a research line. It was found that one could *change* that imbalance.

Again: the golden formula of balance is 60/200/1/1.

Testosterone/Progesterone/Estradiol/DHT.

With this formula we can forget the earlier search and research. These are the latest findings, and with this formula we unraveled, one of the major secrets of the human body.

Now let us look at this hormone problem from another angle, another perspective. The *male Andropause* is intensely discussed today. What do we know for sure about this? And how can we apply the knowledge we already established safely?

## ANDROPAUSE, THE FACTS

First of all: what is it all about this mysterious *Andropause*? What does it mean? Well, *Andropause is male menopause*. As men age Testosterone levels go down, conversion from Testosterone to Estrogen (Estradiol) goes up. This is the definition in relation to hormones. By the time men are between the ages of 40 and 55, they can experience a phenomenon, similar to the female menopause, called Andropause. Unlike women, men do not have a clear-cut signpost such as the cessation of menstruation to mark this transition. A drop in hormone levels, however, distinguishes both, Estrogen in the female, Testosterone in the male. The bodily changes occur very gradually in men and may be accompanied by changes in attitude and mood, fatigue, a loss of energy, sex drive and physical agility. We hate it but those are the facts.

What we may hate even more is the fact, that studies show that this decline in Testosterone can actually put one at risk for other health problems, like heart disease and weak bones. Since all this happens at a time of life when many men begin to question their values, accomplishments and direction of life, it's often difficult to realize that the changes occurring are related to more than just external conditions. Unlike menopause, which generally occurs in women during their mid-forties to mid-fifties, men's "transition" may be much gradual and expand over many decades. Attitude, stress, alcohol, injury, surgery, medication, obesity and infection can contribute to its onset. Although with age, a decline in Testosterone levels will occur in virtually all men, there is no way of predicting who will experience Andropausal symptoms of sufficient severity to seek medical help. Neither it is predictable at what age symptoms will occur in a particular individual. Each man's symptoms may be different. You may ask: Is this a new phenomenon? Yes and no. In fact, Andropause was first described in medical literature in the 1940's. So it is not really new. But, our ability to *diagnose* it properly is. Sensitive tests for bioavailable Testosterone weren't available until recently, so Andropause has gone through a long period where it was under- diagnosed and under treated. Now that men are living longer, there is heightened interest in Andropause and this will help to advance our approach to this important life stage, which was identified so long ago. Another reason why Andropause had been under diagnosed over the years is that symptoms can be vague and can vary among individuals. Some men find it difficult to even admit that there is a problem. And often physicians didn't think of low Testosterone levels as a possible culprit. So these factors often led doctors to conclude that symptoms were related to other medical conditions (i.e.

depression) or were simply related to aging and often encourages their patients to accept that “they were no longer spring chickens”. This situation is changing. New blood testing methods and saliva tests are available and there is an increased interest in men’s aging among medical researchers.

The idea that menopause is an experience exclusive to women is simply wrong. As husbands watch their wives (mothers, sisters) go through the hot flashes, night sweats and mood swings of menopause, men may heave a sigh of relief that they don’t have to through it themselves. But in the face of physiology, we know that men are not, in fact, immune to the hormonal fluctuations of middle age. The effect may be more gradual, unlike the roller coaster many menopausal women find themselves on, but male menopause is a very real phenomenon. Again the name: Andropause. That’s the textbook term for the midlife ‘pause’ or decline in male hormone production of the Androgens- specifically Testosterone and DHEA. *DHEA?* DehydroepiAndrosterone it is hormone produced by the adrenal gland, just take it is a name! A new hormone you need to know about!

During the same timeframe, Estrogen (particularly Estradiol) levels in males tend to increase as Androgen levels decline. The result is a negative ratio between the two, a hormonal imbalance that typifies the Andropause profile and signals an associated risk of prostate disease.

## FUNCTIONS OF THE MALE HORMONES

Let us repeat: The Androgens increase energy and decrease fatigue. They help in maintaining erectile function and normal sex drive, and in the anabolic (building) capacity, they are instrumental in increasing the strength of all structural tissues-the skin, bones, muscles and heart. Men make more Testosterone than women, accounting for their generally greater muscle and bone mass. A proper balance of the Androgenic hormones also helps to prevent depression and mental fatigue. These are the hormones that help provide the virility, stamina and drive we associate with the make of the species. To make a long story short, they put the M in ‘macho’.

## SYMPTOMS OF ANDROPAUSE

Needless to say, Testosterone and DHEA levels in short supply are going to have a big impact on all those attributes both physical and mental that make men, male. If at the same time, levels of the female hormone Estrogen are too high as is not uncommon during this time, urinary and prostate problems may

begin to enter the picture. Usually, what the Andropausal male first notices is a subtle loss of sexual desire, along with a downward shift in strength and energy. Bouts of depression and anxiety, the feeling of being ‘tired but wired’ and a persistent lack of stamina are also common symptoms as the Androgens downsize with age. The mid-life male quite often finds himself short on enthusiasm for the things he used to enjoy; work is not quite as challenging and exercise is tougher. Fatigue sets in more quickly and the only bedroom activity he’s really up for is sleeping through the night; a feat too often sabotaged by frequent visits to the bathroom. Thinning hair, shrinking muscles, wrinkles and an emerging pouch seem to go with the territory. He may feel rundown, anxious, edgy and achy. If his stress quotient is too high the male baby boomer may describe himself as ‘burned out’, an indication that his cortisol levels are elevated. Now he is aging rapidly. One thing’s for sure: he is not feeling like his old self.

## HORMONE TESTING AND TREATMENT

The first step towards restoring balance is to test hormone levels so as to identify specific deficiencies and excesses and to what extent they are out of range. This can be done through saliva testing in which optimal collection can take place in the privacy of one’s own home and sent by regular mail for processing in the laboratory. Test results include a complete evaluation of hormone lab levels correlated with symptoms and hormone usage. The report serves as a rationale for patient and provider to determine the most suitable treatment for restoration of hormone balance and relief of symptoms. Stress management, exercise, proper nutrition, dietary supplements and Androgen replacement with physician guidance have all been shown to raise Androgen levels in men and help to counter Andropause symptoms.

Case studies from our files provide a snapshot of Andropause:

A 77-year-old man complained of excessive fatigue, lack of stamina, loss of interest in sex, despite his recent marriage to an attractive younger woman, and general mental lethargy. His saliva Testosterone level was found to be extremely low and his Estradiol (Estrogen) levels were high, a profile commonly seen in late Andropause. This man’s cortisol tested low throughout the day. After consultation with his health care provider, he began supplementation with a bioidentical precursor of Testosterone; called Androstenedione. (*Androstenedione* is a hormone secreted by the adrenal gland, testicles and ovaries. In normal males less than 5% of their Testosterone comes from the conversion of adrenal Androstenedione). The health care provider

added Progesterone to balance his excess Estradiol (Estrogen) level. This man rubbed a physiologic dose (tailored to his individual needs) of this natural hormone cream into his skin every morning and included in his regime adrenal supports such as optimal nutrition, vitamins, morning walks and an earlier bedtime.

Follow-up testing showed balanced levels of Estradiol, Progesterone and Testosterone along with great improvement in symptoms. According to this man, the testing and restoration of hormone balance gave him back his zest for life.

Another example: A 53 year old workaholic complained of loss of concentration, poor recovery from workouts, loss of muscle tone and flagging energy. His capacity for exercise was much reduced and his quality of sleep suffered from recurring urinary urgency throughout the night. This man tested his Testosterone and his SHBG. Wait a minute! *SHBG*? Is it another sex hormone? SHBG is thought to be synthesized in the liver, and in the circulation, its biological function is the *transport* of certain sex hormones. Serum SHBG levels are relatively low at birth, increase to high levels during infancy, then decrease during puberty. The highest physiologic levels of SHBG are observed in pregnant, near-term maternal serum. Just take SHBG (Sex hormone binding globulin) as another name. This man also tested his PSA. PSA is a test used to screen for cancer of the prostate and to monitor treatment. PSA is a protein produced by the prostate gland. Although most PSA is carried out of the body in semen, a very small amount escapes into the blood stream.

He also did a bunch of other tests.

All levels were found to be out of range and out of balance in relation to one another. Stress management and supplementation with natural hormones was initiated. A topical gel to raise Androgen levels, compounded with an aromatase inhibitor and Progesterone to help lower Estrogen levels resulted in a balanced ratio of Testosterone to Estrogen. Our workaholic lost weight, increased energy, improved muscle tone and reported an overall heightened sense of well-being. His family and marital life thrive under the new regime.

## AGAIN: NEWS

So there is in fact a lot of good news in relation to Andropause. And you've learned about two new hormones, in addition to the basic four hormones. The point is you can do something about Andropause and the hormonal imbalance, *and you don't have to take drugs!*

However, you may ask if there is some general advice when it comes to *Andropause*?

What can you do?

Well there are six factors involved causing hormonal imbalance.

## SIX FACTORS

So let us look at those six factors that can restore the hormonal balance. Some were utterly surprising, some were known.

### FACTOR ONE: LIFESTYLE

Let us start with the simplest factor: Lifestyle change.

It was found out that alcohol for example produced a dramatic worsening in the hormonal balance. We don't want to put down the literally 100 different alcoholic beverages, from wine, to beer, to liquors, all the brand names of whiskeys, but without a doubt alcohol is a major cause for declining health, for early aging, for the imbalance of those hormones! So without alcohol one doesn't age so fast.

### FACTOR TWO: ZINC DEFICIENCY

It was found that Zinc inhibits that excess Estrogen! But what is Zinc? Well, Zinc is a bluish white, metallic chemical element as we all know, but is helpful in many ways in the human body. Zinc is an essential mineral. Over 100 zinc metalloenzymes have been identified in the human body. Zinc is important for protein metabolism, energy production, maintaining the health of cell membranes, growth and development of sexual maturation and production, smell and taste, immune function, sperm health, wound healing and many more functions! Zinc is found in every cell in the body; perhaps it is the most important mineral in the human body.

But for our purposes it is enough to know that Zinc inhibits Estrogen, and that is a good thing!

### FACTOR THREE: OBESITY

Fat cells contribute to the build up of abdominal fat, which then in turn causes the formation of more factors that turn Testosterone into Estrogen. This causes even lower levels of Testosterone, which in turn causes even higher Estrogen levels. In other words, you should do everything you can to fight obesity.

#### FACTOR FOUR: THE LIVER

The liver is an organ designed to clean the waste products out of the body. Estrogen is excreted, eliminated through the liver. If the liver is not working properly, if the liver function is impaired, then a surplus of Estrogen is created. A healthy liver is extremely important to hormone balance. How does a liver get clogged? Well with alcohol, unhealthy lifestyles and most importantly with the use of drugs. In other words if you are taking drugs, prescription drugs, your liver can't keep up and the result is an imbalance of your hormone levels!

#### FACTOR FIVE: AROMATASE ENZYME

Again! Enzymes are protein-like substances formed in plant and animal cells. They act as catalysts, they start or speed up specific chemical changes and turn certain substances into others. Sounds complicated? Ok, Let's keep it simple! Special enzymes help to digest faster, better. They speed up the body process of turning food into substances the body can use. They change some chemicals, body chemicals. Enzymes are usually necessary. But, as men age, the body produces larger quantities of an enzyme called *Aromatase*. And that is the problem. The Aromatase enzyme converts Testosterone into Estrogen. So if you could inhibit this *aromatase enzyme* to convert Testosterone into Estrogen – then what? Yes, then you could end with the excess Estrogen level! And remember: We want less Estrogen and more Testosterone! In other words: a man above 30 or 50 should DO just that: balance out hormonal imbalances. He should do everything possible to make sure that the Testosterone levels stay up and Estrogen levels stay low.

#### FACTOR SIX: DHT AND ALPHA REDUCTASE ENZYME

Another enzyme that is a problem is the *Alpha Reductase Enzyme*. Alpha Reductase Enzyme converts Testosterone into DHT (DihydroTestosterone). In other words, you need to keep very low levels of Estrogen, especially Estradiol and low levels of DHT. You need, generally speaking, a correct balance of your hormones.

But what do I need to do exactly, you might ask.

Well there are ELEVEN STEPS, rungs that lead up this ladder called hormonal balance. We will talk about it in the next chapter, and now it gets really exciting!

First let us quickly summarize what we know.

## **ACTION**

**Information:** Hormones *excite, give impulses*. A hormone is a substance formed in an organ of the body (gland); this substance is then carried to another organ (or tissue) where it fulfills a specific purpose. Hormones are in careful balance with one another.

**Action:** Check to see if your hormone levels are still balanced. (Weight? Hair Loss? Muscle-tone!) Do a saliva test.

**Information:** Estrogen points at any female sex hormones. Estrogen is not one hormone; it is the name of a group of hormones. Estrone, Estradiol, and Estriol (E1, E2, and E3) are all Estrogens.

**Action:** The higher the Estrogen level in men, the worse it is. Get the Estrogen level down by natural means.

**Information:** Progesterone is a hormone; in women it stimulates the uterus to prepare for pregnancy. In men Progesterone inhibits the harmful effects of excess Estrogen.

**Action:** Use could Progesterone regularly.

**Information:** Testosterone is pointing to the male sex hormones produced by the *testicles*. When a man gets older, he produces less Testosterone.

**Action:** Get the Testosterone level up, by natural means.

**Information:** (Dihydrotestosterone) is a male hormone, and the main cause for the shrinking of the hair follicle and for hair loss. It can cause prostate enlargement and prostate cancer.

**Action:** A test will show you if you have the optimal amount of this hormone.

**Information:** The golden formula for optimal hormonal balance: 60/200/1/1 (Testosterone/Progesterone/Estradiol/DHT).

**Action:** If your hormones are not in optimal balance you must ACT!

**Information:** During Andropause (male menopause) the level of Testosterone is low. Testosterone has many functions: It is important for the brain, the heart, it improves oxygen intake, controls blood sugar, is important for the immune

system, the red blood cells, and more. Many studies indicate that Testosterone does not cause prostate cancer. High levels of Estradiol and high levels of DHT (DihydroTestosterone) may.

**Action:** The prostate has to be checked before deciding to take additional Testosterone. Taking Testosterone can help avoid taking 200 drugs, which can cause horrible side effects! Replace Testosterone, but NEVER overdo it. Always monitor the results with hormone saliva tests.

**Information:** Alcohol produces a dramatic Estrogen-Testosterone imbalance.

**Action:** Stay away from all types of alcohol.

**Information:** Zinc inhibits excess levels of Estrogen.

**Action:** Take additional zinc.

**Information:** Fat cells start a vicious cycle, and in the end they lower the level of Testosterone.

**Action:** Do everything you can to get slim, but don't take drugs!

**Information:** The liver is extremely important for the hormone balance.

Alcohol, an unhealthy lifestyle, and drugs, clog the liver.

**Action:** Do everything to create a healthy lifestyle, stay away from alcohol and drugs, and do some liver cleaning.

**Information:** The so-called *aromatase enzyme* converts Testosterone into Estrogen.

**Action:** After testing, use natural aromatase inhibitors. (See next chapter.)

**Information:** *The alpha reduction enzyme* converts Testosterone into DHT.

**Action:** Use natural alpha reduction enzyme inhibitors. (See next chapter)

## IV. ELEVEN TOOLS

Let us be poetic for a moment and let us look for substances, which do just that: Inhibit the *aromatase enzyme*, which converts Testosterone into Estrogen. The old magicians did just that: looking for substances, which could possibly give us eternal life. Nearly every alchemist in the Middle Ages was not only driven by his urge to turn lead into gold but also to find some substance which would guarantee a longer life or even eternal life. Contrary to those old charlatans, magicians, and alchemists, today we can precisely measure which substances are doing what. There is no guessing anymore! Galileo Galilei stressed the triumph of exact measurement uncompromisingly, for the first time in history. That was the first milestone. The second milestone, one might say, is globalization. Research is done in Germany, France, South America, North America, Japan, Russia, etc. The results are at our fingertips. Carefully done research, worldwide, provides us with many tools that enable the body to do just that: inhibit the *aromatase enzyme* and therefore inhibit the conversion of Testosterone into Estrogen! There is more good news, those tools can do much more, and they are “natural”. They exist in nature; they are not “drugs”. So let us look at those tools, which can prolong our lives and help us stay healthy.

### CHRYSIN

Chrysin is a *bioflavonoid*.

Again! Not another new word, you might say. Sorry, it is necessary. But it is also simple. *Bioflavonoids* are a group of substances found in plants; they can strengthen the walls of capillaries (the tiny blood vessels connecting the arteries with the veins) and help prevent hemorrhaging (heavy bleeding). Bioflavonoids are present mainly in citrus fruits and black currants and were formerly considered a Vitamin. Collectively bioflavonoids are regarded as one Vitamin, Vitamin P. So the term *bioflavonoid* embraces all Vitamin Ps (there are many sorts of Vitamin P). One *bioflavonoid* is the famous Chrysin.

What does Chrysin do? Chrysin, which can be extracted from several plants, has shown potential as a natural aromatase-inhibitor! The only problem with Chrysin is that it is not easily absorbed into our blood stream. But there is a

solution: pepper extract (piperine) handles this problem. So along with piperine, Chrysin can be absorbed into our blood stream. The result? Chrysin (combined with piperine) reduces Estrogen and increases Testosterone! Bingo! Chrysin has the power to do that within 30 days. It is the most potent aromatase-inhibitor known so far. It does exactly what scientists in the past were so desperately trying to work out: they gave their patients more Testosterone, but this Testosterone was converted into Estrogen. The patient got worse, sicker, and older! We now know the body doesn't work that way: we cannot just administer what it is lacking! The body is an extremely fine-tuned biochemical machine that only functions well, if its original mechanisms are obeyed.

Anyway, the good news is that Chrysin at a daily dose of 1500 to 2000 mg can naturally suppress excess Estrogen and boost Testosterone at the same time. Now allow us to let you in on a little secret: Nobody in the pharmaceutical industry is interested in promoting Chrysin. Why? It is not a patentable drug. No big money can be made with Chrysin. There is no economic potential. But many people who want to do something against aging prefer natural resources. They don't want another drug. They accept taking Vitamins and natural supplements, but not drugs. We are fans of natural sources too! Natural Chrysin also has other benefits. It has anti-inflammatory effects, so chronic inflammation can be inhibited or reduced by Chrysin. It can even protect against atherosclerosis, senility, aortic problems and some sorts of cancer! It also has anti-anxiety, and relaxing effects on the brain, all this makes Chrysin pure gold. Yes, it is like having turned lead into gold, but without any side effects! For our purposes it is important to remember that Chrysin is an inhibitor of Estrogen, that it boosts Testosterone, and that it has several other positive effects. Why obsessively change nature and try to come up with a "chemical" similar to Chrysin?

## NETTLE – ROOT

Even if you start hating us we have to bother you with some more theory. The testicles produce about 90% of male Testosterone; the remainder is produced by the adrenal glands. There are two types of Testosterone in our bodies, *free Testosterone* and *bound Testosterone*. What is the difference? Well, there is another hormone (SHBG) that binds to Testosterone so that it becomes biologically inactive. *Bound Testosterone* is not as interesting as "*free*

*Testosterone*,” precisely because it is inactive. We want to learn about the Testosterone that can DO something. This other hormone, which binds Testosterone, is called SHBG (Sex Hormone Binding Globulin), and we have already talked about it. SHBG increases at the age of 40 by about 40%. By the way, the number of new words a medical student has to learn is equivalent to learning how to fluently speak five languages. In males SHBG has particularly high affinity to Testosterone and DihydroTestosterone (DHT) to which it binds up to 98 percent.

What a horrible fact! So if you’re just taking artificial Testosterone, it is not only converted to Estrogen, it is also bound by that “evil” hormone and is not available to your cells, it cannot be absorbed by your body. Additionally the liver isn’t building Testosterone. And if you use sedatives, tranquilizers, alcoholic beverages, in short, any sort of drug, then this situation is worsened. People usually take the horrible drugs to “help” themselves, prescription drugs like beta-blockers, anti-depressants etc. The result is a vicious cycle. A downward spiral starts. Side effects have to be handled.

That’s the bad news. Here comes the good news! There is a plant called Nettle, you may have heard of it. It has jagged leaves covered with stinging hairs. In Germany (origin) it is called *Nessel*. Now here comes the kicker: Nettle root can bind to SHBG (the evil hormone that inactivates Testosterone) decreasing its bioavailability. There is less SHBG available to bind with Testosterone, so there is more unbound (active) Testosterone. In other words it decreases the negative effects of this bad hormone. What is the result? Well, we have our second tool which points in the right direction. And it is all natural. By the way even the prostate benefits from nettle root. In Germany prostate enlargement has been successfully treated with nettle root for the last ten years. So here again: this plant has other positive effects, unlike drugs.

### DIM (Di-Indolyl Methane)

As we continue in our quest for an optimal hormonal balance we encounter DIM. DIM (Diindolylmethane) is a natural ingredient found in cruciferous vegetables (broccoli, cabbage, cauliflower, and Brussels sprouts), which promotes a beneficial Estrogen metabolism in both men and women.

Now let us differentiate between “good” Estrogen and “bad” Estrogen. The “bad” Estrogen may be responsible for prostate cancer, uterine cancer, breast cancer, and ovarian cancer. Supplementing the diet with DIM and eating

cruciferous vegetables increases the chances for Estrogen to be broken down into its beneficial, or “good” Estrogen metabolites. Many of the benefits that are attributed to Estrogen, like its ability to protect the heart and brain with its antioxidant activity, are now known to come from these “good” metabolites.

But what is a metabolite? And what is the exact definition of the word metabolism?

Well *metabolism* is the sum of all the chemical and physical changes that take place within the body, and enable its continued growth and function.

*Metabolism* is the process of cells burning food to produce energy. This is similar to a car’s engine burning gasoline to produce the energy that is needed to rotate the car’s wheels. The food we eat acts as the gasoline, and the energy we need to move and think is similar to the energy used to move the car.

Metabolism is also referred to as *energy metabolism*. *Metabolites* are substances that are used by or produced by enzyme reactions.

Back to our original thought! When DIM increases the “good” Estrogen, there is a simultaneous reduction in the levels of undesirable or “bad” Estrogen.

Greater production of these “bad” Estrogen metabolites is promoted by obesity and exposure to a number of man made environmental chemicals. These “bad” Estrogen metabolites are responsible for many of Estrogen’s undesirable actions in women and men, including further unwanted weight gain, breast cancer, uterine cancer, and prostate cancer.

## ANDROSTENEDIONE

We already introduced a new hormone in the last chapter. Its name is *Androstenedione*. But now let us look deeper into it. Androstenedione, also known as “Andro,” is a hormone found in all animals and some plants. It can be converted into Testosterone, the principle male sex hormone.

*Androstenedione* is produced in the gonads (*Gonads* are ovaries and testes) and adrenal glands and is required for the growth and maturation of the male sex organs. It also stimulates the growth of muscles and is used by athletes to enhance their athletic performance. Many males are taking *Andro* as a Testosterone therapy to stimulate and restore libido, increase energy, vitality, and a general sense of well-being. *Andro* is safer and far less expensive than Testosterone treatments. *Andro* is converted into natural Testosterone by the liver. In extensive tests it was demonstrated that taking 100 mg of *Andro* increases the Testosterone levels in the male body by 270% one hour after ingestion. *Andro* was used by the East German Olympic Team to enhance athletic performance by increasing Testosterone levels. Today, weight lifters,

body builders, and other athletes are using *Andro* to enhance their performance. It is not recommended that a male take more than 100 mg day. This is a powerful hormone and its abuse can lead to exaggerated Testosterone levels and aggressive behavior. Males over 35 years of age should take 50 mg of *Andro* once a day to maintain their Testosterone at youthful levels. In older men this use will lead to increased sexual performance, vitality, energy, and a general feeling of restored youth. It is strongly recommended that Andro supplements be accompanied of periodic saliva hormone tests to insure that proper levels are maintained and not exceeded. Also it is recommended to monitor Estrogen (Estradiol) levels to be sure they are not increasing.

## PROGESTERONE

We already introduced this hormone. The first thing we need to understand is that men and women have exactly the same hormones only in different amounts. Women have Testosterone and Androstenedione as well. Men have Estriol, Estrone, Estradiol, Progesterone, Luteinizing Hormone (LH) and Follicle Stimulating Hormone (FSH).

Luteinizing Hormone (LH) is a hormone secreted by the pituitary gland in brain that stimulates the growth and maturation of eggs in females and sperm in males.

The follicle-stimulating hormone (FSH) is a hormone secreted by the pituitary gland in the brain that stimulates the growth and maturation of eggs in females and sperm in males, and produces sex hormones in both males and females.

These two hormones are secreted from cells in the anterior pituitary. As men age their levels of Estrogen rise, especially the two most dangerous and potent Estrogens, *Estrone* and *Estradiol*. A man over 50 literally has more Estrogen than his postmenopausal wife! This is scary. It is finally becoming clear that this excess of Estrogen in aging men is responsible for a variety of problems such as adiposity, breast development, many cancers, prostate problems, baldness and other problems that come with advanced age.

Now what is the most potent antagonist of Estrogen? Progesterone! It is Progesterone that inhibits those harmful effects of excess Estrogen more than anything else. As Estrogen levels rise in men there is no parallel rise in Progesterone. Any man over 50 may well choose to use a small amount of *Transdermal* natural Progesterone daily to offset the excess Estrogens in his

blood. (Trans = through, Derma = skin. The substance goes through the skin and will end up in the blood stream. It refers to creams, ointments or other substances applied directly to the skin.) Women commonly use about 24 mg, a man could use 12 mg a day. It is reassuring to know that Progesterone has no toxicity, especially in these small amounts. It is very safe to use without any known side effects. Studies in laboratory animals given very large doses resulted in no side effects.

### DHEA (DEHYDROEPIANDROSTERONE)

DHEA (Dehydroepiandrosterone) is a hormone produced in our body by the adrenal glands. We already talked about it. The adrenal glands are orange colored endocrine glands, which are located on top of both kidneys. The adrenal glands are triangular shaped and measure about one half inch in height and 3 inches in length.

So what are the benefits of taking DHEA? In short: It increases energy, increases libido, increases muscles, strength and endurance, lowers cholesterol, improves memory, strengthens the immune system, facilitates weight loss, maintains bone density, increases resistance to stress, and has anti-depressant effects. DHEA can be converted to Testosterone by the body and it promotes the balanced production of other hormones. Not Bad!

### PREGNENOLONE

We will never stop apologizing for introducing new hormones. This one is called *Pregnenolone*. Just take it as another word! What are the benefits of Pregnenolone? Well it is the most potent memory enhancer, it facilitates learning, it helps us adapt to stress, it improves concentration, it prevents mental fatigue, it increases productivity and it helps prevent depression.

### EURYCOMA LONGIFILIA JACK

Eurycoma Longifolia commonly known as *Tongkat Ali* in Malaysia and *Pask Bumi* in Indonesia is a wild scrub tree found along the hilly slopes of the rainforest of Malaysia and other parts of Southeast Asia. The primary benefits of Eurycoma Longifolia Jack are: It improves Testosterone production, improves physical and mental performance, enhances energy level, endurance,

and stamina, reduces mental fatigue and exhaustion, improves skin tone, muscle and the immune system.

## TRIBULUS TERRESTRIS

Tribulus Terrestris is not a hormone. It is a plant extract and works very different to Andro. Tribulus Terrestris increases Testosterone by increasing luteinizing hormone (LH) in your body. LH sends a signal to the testicles to produce more Testosterone.

## MACA LEPIDIUM MEYENII G

Peruvian Maca Root cultivation goes back perhaps five millennia. Maca was an integral part of the diet and commerce of residents of the Andes region. The Incas found Maca root so potent that they restricted Maca use to Royalty. Colonial Spaniards became aware of Maca's value and collected tribute in Peruvian Maca for export. The Spanish Royalty also used Maca root as an energy enhancer and as food. Eventually knowledge of Maca's special qualities died out, and Maca was preserved only in remote Peruvian communities. In the 1960s and 80s, Peruvian (Gloria Chacon) researching botanicals in Peru, rekindled interest in Peruvian Maca through nutritional analysis of what was designated as 'the lost crops of the Andes'. The publication of a book by that name introduces Maca root to the world. Peruvian Maca was one of the first plants to be domesticated by the Andean people. Maca cultivation continued during the colonial times until the sixteenth century, and Maca's importance gradually varied throughout the years. So Maca was known to have been used a nutrient and medicine for 2000 years. What are the benefits of Maca root for men? Maca root enhances aphrodisiac activity, (sexual drive and desire) it increases energy, stamina and endurance, it improves male potency, it helps with depression, it helps in the treatment of stress and it increases sperm count. In addition it improves athletic performance, balances hormones, increases Testosterone levels, helps with erectile dysfunction and is good for fertility enhancement.

## MUIRA PUAMA

French scientists sing the song of praise to this herbal extract. Muira Puama is won from the stems and roots of a plant called *Ptychopetalaum olacoides*. You better forget that word fast. This plant is very well known in the Amazon

region of South America. Muira Puama can help in many ways. It is said to cure rheumatism, muscle problems, sexual dysfunction, and stomach problems. Again, what we are interested in is the Testosterone level. Quite a few studies have shown that the sexual function is better after taking Muira Puama, which seems to indicate that it does something good for our hormonal balance. We don't know yet exactly how this plant works, sometimes nature jealously keeps its secrets, but we know that it does increase libido. So this is an important weapon in our fight for Testosterone.

## TESTOSTERONE CREAM

This is another way to replace Testosterone: Testosterone cream! But you need a prescription to get Testosterone cream from a compound pharmacy.

So there is a LOT you can DO!

## TESTING

Hurrah! You might say. Now I know the secret for a longer life. Now I am smarter than all those drug companies, the whole pharmaceutical industry, the doctors, the old alchemist and the magicians. Well, you know something, yes. There is a big BUT though: With age all sorts of *specific* problems arise. So it is not wise to leave out testing. The first step when you want to re-balance your hormones is to take some tests first. The good news is there are supplements used today that boost free Testosterone, suppress excess Estrogen, and balance out the hormones, you just read about them. Yes, you can use these supplements but we recommend you *test* your hormone levels before starting, and monitor the results closely. If only for one reason, each human body is unique.

In no case should one just go and buy any synthetic or even natural Testosterone products. You should not follow our “eleven tools” and think all will be better. No! Do test! The best and cost effective way to do it is with a saliva test. You can do it at home and send the sample in by mail. It is very accurate and will measure only the free hormone. The cost is very low and you don't need a doctor's prescription. You need to measure free, or unbound hormones because they are the ones that are acting in your cells. You don't

want to test hormones that are bound to transport proteins, because these are inactive. If your doctor wants to take a *blood hormone test*, be sure it measures *free* hormones. These tests cost much more than saliva tests.

The following hormones can be measured in saliva: Testosterone, Estrogen (Estradiol, Estriol, Estrone), Progesterone, Pregnenolone, and DHEA. Some hormones cannot be measured in saliva yet, so sometimes blood tests are necessary.

Are those tests really necessary? Yes! Again: if you show signs of prostate cancer it could be deadly increasing your Estradiol and DHT levels. And you have to establish the *exact amount* that you should take. Any Testosterone replacement therapy must be accompanied by a special saliva test, a digital rectal examination, and a PSA test, so that prostate cancer is ruled out. Again you don't want to have high levels of Estradiol and DHT when prostate cancer is present, because prostate cancer cells grow better and faster in the presence of Estradiol and DHT.

In general when you replace hormones a good advice: NEVER OVERDO it, you want to restore to youth levels but not more. Like everything in life, not too much, not too little, just the right amount is correct. BALANCE IS THE KEY. So let us summarize quickly what we already know before we attack a more specific problem, which inevitably relates to men, when they age: the prostate decline.

## **ACTION**

There are eleven tools to balance out your hormones.

**Information:** Chrysin is a bioflavonoid. Bioflavonoids were regarded as Vitamin Ps.

**Action:** Extracted Chrysin along with pepper extract (piperine) reduces Estrogen and increases Testosterone. A daily dose of 1500 to 2000 mg can naturally suppress excess Estrogen and boost low Testosterone.

**Information:** Nettle root binds to a hormone that usually binds to Testosterone thus increasing free Testosterone.

**Action:** Use 300 mg natural nettle roots a day (after testing).

**Information:** DIM (Di-Indolyl Methane) is a natural ingredient found in cruciferous vegetable which increases the beneficial Estrogen metabolism.

**Action:** You can use 200 mg of DIM (Di-Indolyl Methane) daily.

**Information:** Androstendione, or simply known as “Andro” is a hormone found in all animals and some plants. It serves as a direct precursor of Testosterone.

**Action:** You can use 50 to 100 mg of Androstendione a day. Always monitor your Estradiol and Testosterone levels with saliva tests.

**Information:** The most potent antagonist to Estrogen is Progesterone! It is Progesterone that inhibits those harmful effects of excess Estrogen. As Estrogen levels rise in men there is no parallel rise in Progesterone.

**Action:** Any man over 40 may well choose to use a small amount of transdermal natural Progesterone daily to offset the excess Estrogens in his blood. Since women commonly use about 24 mg a man could use 12 mg a day.

**Information:** As we age DHEA decreases dramatically.

**Action:** You can use 25 to 50 mg of DHEA a day orally or 12 mg a day in a transdermal cream.

**Information:** Pregnenolone is the most potent memory and mental enhancer.

**Action:** You can take 50 mg of Pregnenolone a day orally or 12 mg a day in a transdermal cream.

**Information:** Eurycoma Longofolia Jack improves Testosterone production, improves physical and mental performance, enhances energy levels, endurance, and stamina, and reduces mental fatigue, exhaustion and more.

**Action:** You can take 200 to 400 mg of Eurycoma Longofolia Jack daily.

**Information:** Tribulus Terrestris increases Testosterone through luteinizing hormone (LH) in your body. LH sends a signal to the testicles to produce Testosterone.

**Action:** You can take 400 mg of Tribulus Terrestris daily.

**Information:** The benefits of Maca for men: it has aphrodisiac activity, enhances libido, increases energy, stamina and endurance, improves of male potency, helps overcome depression. DHEA levels increase significantly in the majority of the males treated, it helps in the treatment of stress, increases sperm count, increases athletic performance, balances hormones, increases Testosterone levels, helps with erectile dysfunction and fertility enhancement.

**Action:** You can use 300 mg of Maca daily.

**Information:** Muira Puama helps improve libido.

**Action:** You can take 300 mm of Miura Puama.

**Information:** Testosterone cream can increase Testosterone levels.

**Action:** it may be used but you need a prescription from your doctor. Always test first!

Saliva Testing is the most cost effective way to monitor your hormone levels (Testosterone, Estradiol, Progesterone, DHT, Pregnenolone, DHEA)

## V. PROSTATE PROBLEMS

The last chapter contains general information. And Yes! It may not be specific enough for the problem you might have. So when we want to fight aging effectively we must go by far more into detail.

The reason for this is obvious:

“Aging” has a lot to do with the sexual functions. So let us jump into our first subject: PROSTATE HEALTH.

Let us first consider some facts, which are indisputable.

Most men don't know that they *have* a prostate until one day they realize one or more of the following:

- Blood in the urine
- Pain while urinating
- Infections in the genitals
- Problems with intercourse  
(Pain, odd sensations, blood in semen)
- Premature ejaculation (often)
- Avoiding intercourse, etc.
- Urination stream is thin
- Urination stream stops halfway
- Bladder does not empty completely
- Frequent urination at night
- Frequent urination during the day
- Losing urine

Well, none of these symptoms necessarily mean that there is a serious problem, but when some of these indicators are present there may be a prostate problem and it is wise to act fast.

When you encounter the prostate subject with patients you usually have to first clear up the word itself. In other words one must know what the prostate is. Well, the prostate is a little gland (actually it is a combination of several glands) with an outer shell, resembling perhaps a walnut or a chestnut. It is located under the bladder, and one could look at it as a little factory, which is necessary

for some of the production of your semen. There may be other functions as well, but this is the main function. A little picture may give you an idea of its location.

So again the prostate is located under the bladder and above the testicles and it assists in the ejaculation process. The cycle is simple:

Sperm is produced in the testicles. The sperm moves finally to the muscle tissue through the *ductus deferens* and through some other stations until it winds up in the prostate, the last station before it moves out of the body. How does the semen move out? The muscles in the *ductus deferens*, the prostate, and the penis, contract. It's simple!

In other words the main function of the prostate consists of producing a fluid, which is mixed with the sperm for ejaculation purposes. The force with which the semen comes out of the body is another function of the prostate. So the prostate is both a gland and a muscle. Some more facts: The prostate size increases with age. At birth it weighs just a few grams. Between the ages of 20 and 55 the prostate weighs about 20 grams. After that the prostate grows.

Now let us define the prostate in the frame of reference of hormones. In fact, prostate growth is *hormonally* regulated! The cycle is as follows:

1. *Testosterone* converts to *DihydroTestosterone*.
2. *DihydroTestosterone* stimulates prostate growth.
3. *Estrogen* also stimulates prostate growth.

We don't have to explain the exact meaning of those hormones again. In short: These *Hormones* are responsible for the growth of this organ!

### THREE PROBLEMS

Generally speaking (and intentionally simplified) there are three main problems, three things that can go wrong with the prostate:

Prostatitis (also called prostate infections)

Prostate enlargement (BPH)

Prostate cancer

The symptoms of infections are usually pain while urinating, and pain during intercourse. Prostatitis may account for up to 25 percent of all young and

middle-aged men's urology consults. Some people can have this for many years. We will talk about that later.

The enlargement of the prostate (also called benign prostate hypertrophy and benign prostate hyperplasia, in short BPH) isn't nice at all, but it has nothing to do with cancer. About half of all men of 60 years of age have BPH, so do about 90% of all men of 85 years of age.

Some symptoms: The enlarged prostate presses the urethra and urine comes too late or there are problems starting urination, the urine is thin and not strong enough, etc. At night one has to get out of bed continuously, perhaps one can't empty the bladder fully anymore or (worse) one can't hold back the urine.

It is not as problematic as it may seem at first glance; many medical and even alternative healing solutions exist.

The third problem, *cancer* is of course the toughest one. But even here there is good news. Anti-aging medicine provides quite a lot of technologies to prevent cancer problems from developing in the first place.

However, these are the three major problems of the prostate. Now let us look at these three problems a little bit closer.

## PROSTATITIS

If you encounter a medical term ending with "itis" know it refers to an inflammation or swelling. Tonsillitis is an inflammation or swelling of the tonsils, prostatitis is an inflammation or swelling of the prostate. There are four types of prostatitis: Acute bacterial, chronic bacterial, nonbacterial inflammation and Prostatodynia, caused by muscle spasms. Let's take a closer look:

- Acute Bacterial Prostatitis: The symptoms include fever, chills, pain in the lower back, pain between rectum and testicles, painful urination, urgent need to urinate, blood in urine.

You are more likely to get Acute Bacterial Prostatitis if you have:

- Obstruction to the flow of urine, so that it backs up and becomes infected.
- Prostate enlargement.
- A prostate tumor.
- A urinary catheter inserted into the urethra.
- A sexually transmitted disease such as gonorrhea.
- Anal and oral sex.

- A suppressed immune system
- A bladder infection
- Diabetes.

The treatment is relatively simple: Antibiotics, anti-inflammatory, immune boosters and thermotherapy will do.

Of course it is a better idea to use natural supplements to reduce inflammation and to boost the immune system.

But what can you do?

Well, you can take *Quercetin* for example. *Quercetin* is a bioflavonoid that reduces inflammation.

*Quercetin* is a natural anti-inflammatory that can work very well in the prostate at 1500 mg a day. *Quercetin* may be the strongest of nature's anti-inflammatories. Numerous studies have shown it effective in treating a wide range of prostate related problems.

A recent published study demonstrates *Quercetin* provides long-term symptomatic relief with few side effects to men that are afflicted with nonbacterial prostatitis. *Quercetin* is an *anti-oxidant* and has been shown to reduce the risks associated with high cholesterol levels. (An antioxidant is a molecule that is capable of reacting with *free radicals* and neutralizing them. *Free radicals* are atoms or molecules that are highly reactive with other cellular structures because they contain unpaired electrons; free radicals can be very harmful to cells.) *Quercetin* gives, by the way, red and rose wines their distinctive color and may be the reason men who drink red and rose wines appear to have a lower incidence of prostate problems.

*Pollen Flower Extract* is another alternative. In simple terms, *Pollen Flower Extract* consists of the male germ seeds of plants, and as such plays a vital role in ensuring that plant life in the world continues.

Pollen contains all other essential substances, such as fat, vitamins, minerals, hormones, enzymes, and co-enzymes. (Co-enzymes are small molecules, not proteins, but sometimes vitamins, essential for the activity of some enzymes.) Therefore, pollen is essential for the survival of the bees in the hive. If too much were removed from any particular hive, the unfortunate colony would surely die. There is no substitute that man has devised to replace pollen, for it is the bee's protein, body and life.

It had been known for generations that a grain of pollen, minute as it is, holds all the elements of plant life, vitamins, minerals, hormones, and nucleic acids. Like honey and royal jelly, pollen contains certain elements that still defy identification. It was a long time before man was able to find a way of piercing

these tiny grains. Pollen has baffled us for years, and it will take much more research before all the secrets are known.

Let us now take a close look at our problem: *Chronic Prostatitis*.

Since 1957 pollen has been extensively used as a tonic in Sweden. During this long period it has been proven effective for patients convalescing from operations or illnesses, and there have been no side effects reported. In 1960, a Swedish specialist, Dr. E. Ask-Upmark, Department of Medicine, University Hospital, Uppsala, issued reports that pollen was effective to treat chronic prostatitis. This is a fairly common genital disease, affecting males, which often proves difficult to treat. Two years later a Swedish specialist, Dr. Leander, used pollen to treat one hundred cases of chronic prostatitis and nearly 80 percent were achieved remission. In 1967 Dr. Ask-Upmark reported twelve patients suffering from this illness who were again treated with pollen: ten were completely cured. Other experts have confirmed the findings of these Swedish specialists. In East Germany, Professor Helse endorsed the opinions of the Swedish doctors. Danish expert Professor Heise did likewise and added that pollen had quickly cured male patients suffering from various sexual problems. Pollen had proved to be effective in many cases where orthodox treatment was not only prolonged but also doomed to fail. In East Berlin three-year trials were conducted on males suffering from impotence, other sexual disorders, and chronic prostatitis. Many had a complete cure and were once again able to enjoy normal sexual relations. Others recovered from prostatitis, which had failed to respond to various kinds of treatment.

## BORAGE OIL

*Borage oil* is another possibility to treat prostatitis. *Borage oil* is derived from the seeds of the borage (*Borago officinalis*) plant. The large plant with blue, star-shaped flowers is found throughout Europe and North Africa. It is naturalized to North America.

*Borage oil*, *evening primrose oil*, and *black currant seed oil* contain compounds that the body converts to a hormone-like substance called prostaglandin E1 (PGE1). Just another name! PGE1 has anti-inflammatory properties and may also act as a blood thinner and blood vessel dilator.

But many things can interfere with this conversion, including disease, the aging process, saturated fats, hydrogenated oils, blood sugar problems, inadequate vitamin C intake, magnesium, zinc, and B vitamins deficiencies. Supplements that provide specific elements circumvent these conversion problems, leading to more predictable formation of PGE1.

## EVENING PRIMROSE

*Evening Primrose Oil* is made from a plant, which is rich in a substance that's biologically important to our bodies. Poor skin condition, eczema, susceptibility to infections and inappropriate wound healing can be associated with a lack of this substance. *Evening Primrose Oil* provides the body with a rich source of oil that supports the body's cardiovascular, nervous, immune and reproductive systems. *Cardiovascular* means related to *heart* and *blood* vessels.

*Evening Primrose Oil* enhances the health and strength of cell membranes throughout the body, and promotes a proper inflammatory response. *Evening Primrose Oil* also helps maintain healthy hormone levels.

## BETA GLUCAN / IP6

Beta Glucan and IP6 boost the immune system.  
Just take them as names!

## PROSTATIC MASSAGE

One of the causes of pain in prostatitis is the build-up of pressure in the prostate due to an accumulation of semen or fluids due to bacterial infection. One way to relieve the pressure is to have the prostate massaged. A doctor can insert a gloved finger into the rectum and use firm pressure to force the excess products from the prostate. The procedure can be somewhat painful. However, relieving the pressure can bring relief from pain for a longer period of time. Prostatic massage is a simple procedure that may be done by a person who is not a physician. Sometimes the patient is advised to have sex with ejaculation at least 2-3 times a week to relieve pressure.

## THERMOTHERAPY

A last resort for prostatitis is *Thermotherapy*. Thermotherapy is a therapy using heat. With use of heat we can treat diseases or disorders. *Thermotherapy* is controlled by a microprocessor that heats a temperature probe. This temperature probe, also called a rectal probe, has the shape of an elongated *suppository*, which is inserted into the anal canal. A suppository is a small plug of medication designed for insertion into the rectum or vagina where it melts. While using the probe, the patient can adjust the temperature in the probe to a comfortable level of 99° F - 113° F (37° C – 45° C). The probe radiates pulsating heat waves for 20-minute periods. This daily therapy eases pain and reduces swelling. According to the studies done in Europe, after 8 sessions 85% of patients with prostatitis feel improvement. (Patients with BPH – 82% feel improvement after 6 weeks.)

- **Chronic bacterial:** The symptoms include long lasting or recurring infections, painful urination, pain in the pelvis and genital areas, frequent, difficult urination, and urgent need to urinate.

Again the treatment is relatively simple: Antibiotics, anti-inflammatory, pollen flower, immune boosters, and thermotherapy.

- **Nonbacterial:** The symptoms include painful urination, pain in the lower back, penis, scrotum etc.

The treatment is a bit more sophisticated, since the source is unknown.

Frequent hot baths, anti-inflammatory medication and a change in diet may help. For sure you shouldn't drink alcohol or coffee. Altogether it is still something you can deal with relatively easily; there is no reason to panic!

- **Prostatodynia** is an inflammation caused by muscle spasms. The symptoms include painful or frequent urination, pain in the lower back, penis, scrotum etc.

It gets treated like nonbacterial prostatitis. Although we don't have to worry too much about prostatitis, any man can get it whether he is young or old.

Sometimes lifestyle changes, no alcohol, no coffee, etc are necessary to avoid it. Anti-inflammatory, medication, pollen flower, immune boosters, and thermotherapy can do the job. The stronger the body, the better the immune system can fight bacteria. But prostatitis is usually not at all dangerous; it won't stop you from getting to be 120 years old.

## BPH

Urologists differentiate between benign *prostatic hyperplasia* and *benign prostatic hypertrophy*. *Hypertrophy* means the actual size of the prostate is bigger, while *hyperplasia* shows that the number of prostate cells has increased.

The term *benign* points to a medical condition generally favorable for recovery.

*Benign* means non-cancerous, non-malignant, not permanently damaging.

Actually the term *benign prostate hypertrophy* is an older expression; more modern is *benign prostatic hyperplasia*. Both terms refer to the growth of a benign tumor inside the prostate today. Some times these two terms are used parallel without differentiation. Again BPH has no relation to cancer. You can totally relax!

But some hard hitting facts are: one in six men (7%) between the ages 40 and 50 years of age, one in four men (25%) between the ages 50 and 60 years and one in every two men over the age of 60 will have BPH. In other words, BPH is very frequent. Hormonal imbalances will cause it. Still there is no reason to panic!

The only thing that may be uncomfortable is that an enlarged prostate can put pressure on the urethra, resulting in urinary problems. You can detect BPH by yourself, by watching these urinary symptoms:

- Weak urine flow;
- The inability to empty the bladder completely;
- The inability to urinate at all;
- Difficulty in holding one's urine or needing to urinate immediately;
- Interrupted sleep due to the constant need to urinate at night;
- Wetting or staining of underwear.

Those urinary problems do not automatically indicate the presence of BPH, because urinary difficulties can signify a wide variety of conditions, but they do point towards it. When you go to the doctor it is likely you will be asked to fill out a questionnaire developed by the American Urological Association, The questionnaire is about your inability to urinate in the past month. The doctor will use your answers to develop a "symptom score" to determine the severity of the problem.

This is what the questionnaire looks like:

1. During the past month or so, how often have you had a sensation of not emptying your bladder completely after you've finished urinating?
2. During the past month or so, how often have you had to urinate again in less than two hours after you've finished urinating?
3. During the past month or so, how often have you found you stopped and started again several times when you urinated?
4. During the last month or so, how often have you found it difficult to postpone urination?
5. During the past month or so, how long have you had a weak urinary stream?
6. During the past month or so, how often have you had to push or strain to begin urination?
7. During the past month or so, how many times typically get up to urinate from the time you went to bed at night till the time you got up in the morning?

**Scoring for Possible  
Answers to  
Questions 1 – 6**

**0 = Not at all**

**Scoring for  
Possible Answers  
Question 7**

**0 = Not at all**

**1 = Less than one time in five**  
**2 = Less than half the time**  
**3 = about half the time**  
**4 = More than half the time**  
**5 = Almost always**

**1 = One time**  
**2 = Two times**  
**3 = Three times**  
**4 = Four times**  
**5 = Five times**

### **Symptom Score (Sum of the Answers)**

If you score 0-7, that means your symptoms are mild, 8-18 indicates your problem is moderate, and 19-35 means your symptoms are severe. Your treatment options will be based on your overall symptoms.

Prostate enlargement occurs in three stages:

#### **The so-called sensitivity stage:**

The first noticeable symptoms are: an increased desire to urinate, the urinary stream is weaker and thin, and frequent passing of small amounts of urine (also during the night) is experienced. It is however, still possible to empty the bladder almost completely. The first stage can continue over a number of years and in some cases it never progresses into the 2<sup>nd</sup> stage.

#### **Stage 2**

It is no longer possible to empty the bladder completely. Quite often residue, amounting to more than 100ml, will remain behind in the bladder. This results in a frequent and irritating desire to urinate without the relief associated with normal urination.

#### **Stage 3**

The urethra has become so narrow that normal urination is no longer possible. *Urethra*: a thin tube that carries urine from the bladder out of the body. The bladder now has to hold up to 3 liters of urine and the pressure within the bladder increases considerably. For this reason drops of urine are passed continually. The urine is also forced back into the upper urinary tract and then into the kidneys. This results in the kidneys functioning less effectively and finally leads to renal failure.

Now, if it were necessary you would take some additional tests:

- A digital rectal exam (DRE): It helps to determine the size of the prostate and rules out prostate cancer.

- A urine test;
- A PSA (prostate specific antigen): This is a blood test to check BPH and cancer.

There may be more tests. But, BPH is usually nothing to worry about. And again: It is frequent and age related. The good news is that there are many treatment options today for BPH. There is a whole battery of natural therapies that exist. Yes, there is also the possibility of medical treatments (with alpha-blockers etc.) or minimally invasive treatments (laser to electrical, from low level *radio-frequency* energy to surgery) all aimed to destroy prostate tissue. *Radio frequency* points at a form of energy that is used to ablate, or destroy tissue. Some can be done with local anesthesia, some with general anesthesia. Surgical treatments are also possible. Prostatectomy (the surgical removal of the prostate) is still the most common treatment in cases of (heavy) BPH. Medical treatment is the second most used type of treatment. But let us look at the alternatives to surgery.

#### TRANSURETHRAL MICROWAVE THERMOTHERAPY (TUMT)

***Trans rectal ultrasound is a procedure using ultrasound through the rectum to see the prostate.***

*Ultrasound* is a diagnostic imaging technique, which uses high-frequency sound waves and a computer to create images of blood vessels, tissues, and organs. Ultrasounds are used to view internal organs as they function, and to assess blood flow through various vessels.

TUMT seems to be a good alternative to surgery. If prostate cells are subjected to temperatures of about 45° C, or 113° F, they will die. The source of hyperthermia is high-frequency microwaves similar to those used in home microwave cooking ovens. The microwave instrument systems are designed so that the temperature and the depth of heating are exactly controlled. A report presented at the 1993 American Urological Association convention listed results of 150 patients who had been treated with TUMT. The patients were subjected to 45° C for about 60 minutes. There was no need for anesthesia or hospitalization. There was little or no bleeding and little pain. There were no reports of retrograde ejaculation or significant changes in sexual function. TUMT appears to offer very good results. The procedure offers an alternative for those men who are not good candidates for surgery.

## TRANSURETHRAL NEEDLE ABLATION (TUNA)

TUNA uses a low-level radiofrequency (RF) of about 490 kHz to create a temperature of 50-90° C in the area to be ablated. The probe is a special catheter that has two flexible needles at the tip. The needles are deployed and inserted into the prostate through the urethra. The needles are about 45 degrees apart. They are shielded at their base so that urethral tissue is not damaged. When the RF energy is turned on, it passes from one needle to the other so that prostatic tissue between the needles is destroyed. A Transrectal Ultrasound (TRUS) can view the progress of the treatment. The needles can be repositioned so that many areas of the prostate can be treated. The treatment can be an outpatient procedure with local anesthesia. The patient can leave soon after the treatment.

## HIGH-INTENSITY FOCUSED ULTRASOUND (HIFU)

High Intensity Focused Ultrasound (HIFU) is being used to treat BPH, prostate cancer, and several other cancers. A special rectal ultrasound probe is used to treat BPH and prostate cancer. HIFU ablates benign prostatic tissue in a minimally invasive manner with low morbidity. HIFU has also been successfully used to treat localized prostate cancer and other tumors.

If you decide on an operation we can only give you one advice: Don't believe a doctor who says you have to act *fast*. No! Wait and think! Get a second opinion. Read about your options and make up your own mind. Consider the natural treatments first, because a lot can be done!

## NATURAL TREATMENTS

Let us repeat: If you are diagnosed today with BPH there is NO need for fear. There are very powerful natural supplements today that can be used in cases of BPH. Let's talk about them.

## SAW PALMETTO

One of the most efficient alternatives to treat BPH is Saw Palmetto. What is Saw Palmetto? Saw Palmetto is a wonder of nature. Saw Palmetto is a berry that grows on dwarf-type palm trees. The botanical names are: *Serenoa repens* (Bartram) Small but common names are *Saw Palmetto*, *American dwarf palm tree*, *cabbage palm* or *sabal*. Saw Palmetto grows wild in Texas, Louisiana, Carolina, Georgia and Florida. Florida's pre-Columbian people and Native Americans already used Saw Palmetto. There are more than 29 published

studies about saw palmetto, demonstrating the scientific effects in case of urinary tract symptoms and benign prostatic hyperplasia (BPH).

### Saw Palmetto

Source: <http://www.thewildrose.net/images/sawpalmetto.jpg>

And these are the effects:

- The reduction of nocturnal urinary urgency
- Increased urinary flow rate
- Decreased urine volume in the bladder
- Reduction of uncomfortable urination symptoms
- Reduction of the size of the prostate
- Balancing out hormonal imbalances
- Smoothing out of muscle contractions
- Reduction of the bladder
- Killing off aged prostate cells
- Anti-inflammatory effect on prostate tissue

In traditional folk medicine Saw Palmetto has even been used to strengthen the whole reproductive system. So far, the reason why Saw Palmetto works so well has not been determined. But the effects are clinically documented! Of course you have to watch what dose of Saw Palmetto you take. There are: fluid extracts, aromatic oils, fixed fat oils, tinctures, and teas. The best source of Saw Palmetto and the correct amount has to be established if there is a BPH problem.

Beware! There are Saw Palmetto-products that hardly work and products that work excellently! In other words you have to take the best quality Saw Palmetto product available.

So what is the optimal Saw Palmetto?

Supercritical fluid extraction technology today produces an extract of extraordinary purity, leaving behind no solvent residues on the product. The process uses carbon dioxide (CO<sub>2</sub>) in its supercritical fluid state, when it is neither liquid nor gas.

Carbon dioxide is a colorless, odorless, incombustible gas. CO<sub>2</sub> is formed during respiration, combustion, and organic decomposition and is used in food refrigeration, carbonated beverages, inert atmospheres, and fire extinguishers for example.

To make a long story short: Use *softgels* in oil form, CO2 extraction at 320 mg a day and standardized 80 to 90% on EFA (essential fatty acid). Softgels are small, soft, smooth containers made from soft gelatin that are easy to swallow.

Important! Your Saw Palmetto should contain *Beta-Sitosterol*, which is very important for prostate health. Science has demonstrated that the most powerful supplement for prostate health is a common plant alcohol called *beta-sitosterol*. It is found in every vegetable. There are studies in France, Germany, Italy, Switzerland, Scotland, Pakistan, China, Brazil, USA and Belgium, which confirm the importance of this plant alcohol. Beta-sitosterol is found in saw palmetto, but watch it: MOST SAW PALMETTO PRODUCTS SOLD IN THE US HAVE VERY LITTLE BETA-SITOSTEROL! Therefore most products you find are useless! Even today it is very difficult to find beta-sitosterol in drug stores, health food stores, and vitamin catalogs.

An additional positive effect: beta-sitosterol can also reduce cholesterol.

So you need a Saw Palmetto product that contains Beta-Sitosterol! And you need a Saw Palmetto product that contains all its properties so that you DO get the effect you want to have!

## BETA SITOSTEROL FROM SOY

Now it is possible to extract Beta sitosterol from soy and get 3000 times more Beta sitosterol compared to the amount in saw palmetto. That doesn't mean it will work 3000 times better, but combined, both can work very well. One of the most important functions of Beta Sitosterol is the reduction of the enzyme 5 *Alpha reductase*. (So less *Testosterone* will convert into *DHT*).

## NETTLE ROOT EXTRACT

Astonishing but true! It is a proven fact that nettle root extract can bind to prostate cells. There is an extract called *Urtica dicica* (often used in combination with saw palmetto) that can treat BPH. One study shows that 86% of the patients with prostate enlargement in stages I – III, improved after three months. And there is even more that you can do.

### NETTLE

Source: <http://www.humboldtredwoods.org/images/nettle.jpg>

## PYGEUM AFRICANUM

*Phyto* is a Greek word meaning *simply plant*. Phytotherapeutics are simply therapeutical plant based methods, means or mediums, which can help in case of diseases. *Pygeum Africanum* is phytotherapeutic. *Pygeum africanum* is a tree that grows in the high elevations of central and southern Africa. The bark is important! Africans used it for a long time for urinary problems. The bark contains substances with anti-inflammatory effects. It may reduce the risk of BPH and help improve urinary flow. Pygeum has the ability to reduce prostate swelling.

It may even help to prevent cancer! It definitely relieves the urinary symptoms, associated with BPH.

In other words: we have four powerful natural “weapons”.

These four weapons (Saw palmetto, Beta sitosterol from soy, Stinging nettle, Pygeum africanum) are available today in standardized forms. Non-standardized versions of those plants exist as well, so we must beware! A study done by the Urological Association Convention in the year 2002 found that a large number of health products lack the ability to really be of therapeutic value! Additionally some pharmaceutical companies do everything they can to substitute natural plant extracts (for patent-reasons, for money). But we will skip all the problems encountered today with some drug companies, because we don't want to write 100 books. The good news is that natural sources cannot be legally “copyrighted”. What is important for you is that you should look for *excellent* products, which really have the effects you want.

## PUMPKIN SEED (*Cucurbita pepo* L.)

Besides those four major weapons there are even more possibilities!

Let us quickly take a look.

After many studies in Europe *pumpkin seed* is an approved drug in Germany for prostate enlargement. The fatty oil in pumpkin seeds is mildly diuretic, and the seeds' principal constituent, cucurbitacins, appears to inhibit the conversion of Testosterone into dihydrotestosterone. The presence of zinc and amino acids further help treat BPH.

SELENIUM is a potent antioxidant important in promoting and maintaining prostate health.

POLLEN FLOWER works very well not only in prostatitis but also in BPH (Prostate enlargement).

#### L ARGININE:

*L Arginine* is an *amino acid*. *Amino acids* occur naturally in plants and animals and are the basic constituents of *proteins*.

This *amino acid* (=L Arginine) pumps up the body's natural supply of nitric oxide – an odorless gas made of nitrogen and oxygen - that relaxes muscles and increases blood flow to vital organs, including the heart and penis. Quite frankly, if you don't have enough nitric oxide, your erection will be soft, limp, or, more likely, non-existent.

#### L GLYCINE and L GLUTAMIC ACID

Both: L Arginine and L Glutamic acid are amino acids needed for maintaining normal prostate function.

*L Glutamic acid* is critical for proper cell function, but it is not considered an essential nutrient in humans because the body can manufacture it from simple compounds. In addition to being one of the building blocks in protein synthesis, it is also important in brain function.

#### LIGNANS from FLAX OIL:

*Lignans* are considered PhytoEstrogens. (Again: *Phyto* = *plant*; *Estrogen* = a *hormone*) By interacting with the complex mechanism of *Testosterone* metabolism, *lignans* bring back the natural balance in hormone levels reducing the effect of *Estradiol*. A sufficient level of these *lignans* can compete with natural *Estrogen* for the *Estrogen receptors*, resulting in balanced *Estrogen* levels in the blood.

Prostatitis and BPH are only two prostate problems. There is a third, more serious problem. Many people don't know that even with the more serious problems, natural healing options exist! However, before going on let us summarize what we know so far.

## **ACTION**

**Information:** Three main things can go wrong with the prostate: Prostatitis (prostate infections), Prostate enlargement (BPH), and Prostate cancer.

**Action:** If a problem exists see a doctor.

**Information:** There are four types of prostatitis: Acute, bacterial, nonbacterial inflammation and an inflammation caused by muscle spasms.

**Action:** Today all four types of prostatitis can be managed; acute and chronic prostatitis with antibiotics, anti-inflammatories, immune boosters, and thermotherapy. Nonbacterial and muscle spasms caused inflammation with hot baths, anti-inflammatory medication and a change in diet. Also remember to avoid alcohol and coffee.

**Information:** Natural supplements that help with prostatitis: Quercetin, Pollen Flower Extract, Borage Oil, Evening Primrose Oil, Beta Glucan, and IP6.

**Action:** In case of prostatitis try natural supplements first.

**Information:** Benign Prostatic Hypertrophy (BPH) is found in one in six men between the ages of 40 and 50, one in four men 50 to 60 years old, one in two men 60 and above, and in men 80 and above, one in 1.2 men. The symptoms: Over dribbling urine flow, inability to empty the bladder completely, inability to urinate, difficulty holding urine, interrupted sleep due to constant urination. BPH is classified into mild, moderate, and severe.

**Action:** If you have those symptoms, find out exactly what stage you are in.

**Information:** Possible tests for BPH: A digital rectal exam (DRE), urine test, PSA (prostate specific antigen).

**Action:** Have the tests done and then get advice from your urologist. But: always get a second opinion. Don't rush! Consider natural treatments first.

**Information:** Transurethral Microwave Thermotherapy (TUMT), Transurethral Needle Ablation (TUNA), and High-Intensity Focused Ultrasound (HIFU) are being used to treat BPH successfully.

**Action:** Try natural therapies first. If no success is achieved, look into TUMT, TUNA, and HIFU.

**Information:** There are a lot of natural treatments possible for patients with BPH. Don't jump into an operation too soon.

**Action:** Inform yourself as to what your possibilities are, and then decide what path to take.

**Information:** The most powerful natural substances for BPH are Saw Palmetto, Beta Sitosterol, Nettle Root Extract, Pygeum Africanum, Pumpkin Seed Oil, Pollen Flower, L Arginine, L Glycine, Glutamic Acid, and Lignans from Flax.

**Action:** Watch for the quality of the product, they don't all have the same quality. Most Saw Palmetto products sold in the US have no beta sitosterol for example!

## VI. PROSTATE-CANCER

Allow us to say something about cancer in general. Cancer is one of the most hated and feared words. Death, hopelessness, and apathy are connected to cancer. Some people think that it is too late for anything when they are diagnosed with cancer. Well, we differ. We think cancer has become a “no-word” that triggers the wrong associations. Cancer is in no way a death sentence. So we are against the emotional shock that accompanies this word. A much more rational approach is necessary. We personally know many people who have had cancer (especially prostate cancer) that live fantastically good lives today. Just take a look at some celebrities and politicians who have had prostate cancer: Collin Powell, Bob Dole, Rudy Giuliani, General Norman Schwarzkopf, Jerry Lewis, Sidney Poitier. John Kerry ran for the Presidency of the U.S. just after a prostate cancer operation. The only real attitude that helps in relation to cancer is a non-emotional attitude, a scientific approach.

We slowly grow into an age where we can fight cancer, discover out its mechanisms, develop more and more weapons to defeat it. Someday cancer will be utterly defeated and there will come the time when we will laugh about cancer, and the fear the word alone spreads. Many other once deadly diseases have now been eradicated. In the 1900s the most common causes of death were Influenza, Diarrhea, Dysentery and Tuberculosis. Not a problem today! In 1900 the life expectancy, was 40 years, today it is almost 80. Those statistics speak for themselves! So let us attack the cancer rationale. First let us look at the word.

*Hippocrates* (460-370 front. J-C), made precise descriptions of cancer and used the Greek terms “*carcinosis*”, and “*carcinoma*” to indicate chronic ulcerations or sizes, which seemed to be malignant tumors.

According to the dictionary *carcinosis* means: crayfish, canker or cancer (tumor). *Celsus* (28 front, J-C. –50 ap.J-C), a Roman doctor, translated the Greek word “*carcinosis*” into “*cancer*”. The Latin word means: 1) crab, crayfish, dunce and 2) cancer, canker. The term “*cancer*” indicated ulcers of malignant pace with major penetration. An assumption is that certain cancerous lesions evoked the shape of a crab; this explains the origin of the words “*carcinosis*” and “*cancer*”. *Galien* (130-200) used the Greek term “*oncos*” to indicate a mass, or a

malignant tumor of pace. At the beginning of the 19<sup>th</sup> century “carcinoma” became synonymous with “cancer” and the termination “-oma” was used to refer to certain cancerous lesions.

The word “cancer” is thus very old. We see an analogy between the crab, to be precise, the claws of a crab, which reach out and want to grab more. This was perhaps the reason the ancients called it cancer (crab). The cancer cells when not under control also reach out and want more. They grow.

There are many reasons and causes of cancer. There is a big genetic component, and a weak immune system plays a big role. Others add on, viruses may be one reason, special substances known as *carcinogens* can trigger cancer. Think of all the polluted air, polluted water, chemicals in the food, in the kitchen, exposure to radioactivity, even heat and excessive sunlight, those are only some of the causes of cancer.

*Cancer* begins in cells, the body’s basic unit of life. Cells have important functions throughout the body. Normally, cells grow and divide to form new cells in an ordered and controlled manner. They perform their functions for a while, and then they die. This process helps keep the body healthy. Sometimes, however, cells do not die. Instead, they keep dividing and creating new cells that the body does not need. They form a mass of tissue, called a tumor. Malignant tumors are cancer. Cells in these tumors are abnormal. They divide without control or order, and they do not die. They can invade and damage nearby tissues and organs. Also, cancer cells can break away from a malignant tumor and enter the bloodstream and lymphatic system. So cancer can spread from the original (primary) cancer site to form new (secondary) tumors in other organs. This spread of cancer is called *metastasis*. When prostate cancer spreads (metastasizes) outside the prostate, cancer cells are often found in nearby *lymph nodes*. If the cancer has reached these nodes, it means that cancer cells may have spread to other parts of the body – other lymph nodes and other organs, such as the bones, bladder, or rectum. When cancer spreads from its original locations to another part of the body, the new tumor has the same kind of abnormal cells and the same name as the primary tumor. For example, if prostate cancer spreads to the bones, the cancer cells in the new tumor are prostate cancer cells. The disease is *metastatic prostate cancer*; it is not *bone cancer*.

Those were only facts! Now let us concentrate on the good news:

If one is diagnosed today with prostate cancer his chances of recovery are excellent. Especially when the diagnosis is early enough. More good news is that prostate cancer is a primary cancer, as the doctors call it, which means that

the condition starts in the prostate and doesn't automatically spread to other places in the body.

The best thing to do against cancer is to prevent it of course, but we will get back to that later. The second best thing to do is to detect cancer early enough so that it may be effectively treated. There is a far better chance of surviving if you detect cancer early. We can *do* something about cancer today.

But first some more facts about cancer:

- Over 400,000 Americans are diagnosed with prostate cancer every year.
- Roughly a third die of the disease.
- The top 3 types of newly diagnosed cancer in men:
  - 1) Prostate Cancer: 41%
  - 2) Lung Cancer: 13% (100,000 newly diagnosed every year, the connection is smoking)
  - 3) Colon & rectal cancer: 9%

Most prostate cancers are due to a combination of genetics (family history), and environmental factors (alcohol, diet, sunlight exposure).

Symptoms of localized prostate cancer are rare; warning signs don't usually appear until the cancer has escaped the prostate. **EARLY DETECTION** is the key. In the end more than two thirds will survive this sort of cancer. Again if you have a suspicion of cancer, the smartest thing you can do is to be certain. So tests are the talk of the day. What could you do?

## CANCER TESTS

The most common symptom of prostate cancer is **NO** symptom at all. Unfortunately there is no positive symptom indicating cancer for sure. By the time symptoms occur, the disease may have spread beyond the prostate. When symptoms do occur, they may include:

- Frequent urination, especially at night
- Inability to urinate
- Trouble starting or holding back urination
- A weak or interrupted flow of urine
- Painful or burning urination
- Blood in the urine or semen
- Painful ejaculation

- Frequent pain the lower back, hips, or upper thighs

These can be symptoms of cancer, but more often they are symptoms of non-cancerous conditions. It is important to check with a doctor. There exist a variety of cancer tests. The most popular is still The *Digital rectal examination*. The *digit* is the Urologists probing finger. This finger is introduced into the rectum and the doctor tries to feel for ridges, nodes, hard spots, etc. Also a genital inspection usually follows. The external genitals are checked, the shape of the penis, the scrotum. Sometimes cancer can be detected this way. If there is suspicion of cancer other tests follow, like the PSA-Test and FREE PSA Test or PSA II. PSA means Prostate specific antigen.

This is a blood test, showing the amount for antigens in the prostate. What is an antigen? *Anti* means *against*, *gen* means *genus* or *kind*. Antigen is a protein substance in humans and animals that helps to create antibodies. But we don't even have to know that. We only have to know that those antigens have a special *level* and they are only found in the prostate. If this protein substance level is above normal then cancer probably exists.

Not all PSA tests are the same. In fact there are more than 30 tests in use today in Europe, six in the U.S. The results may vary from test to test so it is important not to change the type of test. The annual PSA test should be done with the same laboratory each time; the same brand of test should be used. This test, a blood test, has the advantage that nearly no pain is present. Unnecessary prostate biopsies can be avoided.

Actually about 70 % of all men don't have any symptoms of cancer when they are diagnosed with prostate cancer.

## FREE PSA OR PSA II

Free PSA is that percentage of the total PSA, which circulates in the blood without a carrier protein. The lower the percentage, the more likely it is to get prostate cancer. Those who have it below 20% probably have cancer. Free PSA may eventually allow us to forego biopsy altogether in men with PSA between 4 and 10 and a free PSA of >24.

Values suggestive of Prostate Cancer:

Total PSA 3.9 to 4.0 with Free PSA < 19%

Total PSA 4.0 to 10.0 with Free PSA < 17 to 24%

PSA Doubling Time (PSADT) is the time it takes for the PSA value to double. This may be useful in following up on treatment and determining the type of treatment.

PSA Velocity (PSAV) refers to the rate of change in PSA levels over time. It is the rate of change of PSA calculated per year. The normal PSAV is 0. That means no change in a year. PSA levels normally should not change in 10 years. If the PSA is starting to rise, something is wrong and you have to act. The faster the PSAV, the shorter the PSADT.

An example: if last year your PSA level was 2, and now it is 4. The PSADT (the time to double the PSA) is 1 year. The PSAV is 2 in a year: change from 2 to 4. In this case you probably have cancer and need further testing. It is very important to keep your PSA results over the years so you can calculate the PSAV and PSADT.

## MORE TESTS

But there are more tests: *Prostatic Acid Phosphatase* (PAP) is a blood test that is usually done after a tissue biopsy. It shows if the cancer has spread to other regions of the body. In the *Ultrasound*, sound waves are projected against the prostate, they echo from the prostate and are converted into an image.

*Computerized Topography* (CT Scan) describes a whole series of photographs done with the x-ray technique. A computer puts those photographs together to a three dimensional image. *Magnetic Resonance Imaging* (MRI) uses magnetic techniques to get a picture of the prostate. In the end biopsies are still the only sure way to know if there is cancer present or not. A thin needle is put into the body, through the rectum or the skin near the anal opening. Some samples are taken and looked at under the microscope.

Horrible? Of course it is horrible! Who wants it! But all those examinations may be necessary. Remember, the earlier it is detected the less powerful it is. Most people assume by the way that prostate cancer grows in a single spot within the gland. Not true! Average prostate cancer starts in seven different malignant spots; your urologist can check those spots.

## GRADING SYSTEM

So let us assume the worst-case scenario: cancer. Again: even if you are diagnosed with cancer you shouldn't panic! Why? You can do a lot! The next step consists of determining what *grade* of cancer it is. So determining the exact stage of cancer is really important, because most cancers are treatable today.

There are additional tests that can show how far the cancer has spread. We already mentioned CAT (computer axial topography) scan and MRI (magnetic resonance imaging) scan. But also chest *x-rays* can be used or *bone scans* which can find advanced prostate cancer (metastasis).

Again, you need to determine exactly how aggressive, how bad, the cancer really is. The grading technique used in most cases is the *Gleason grading system*. Take it just as a name! Here the two most representative areas of the tumor will be examined under a microscope. Then the pathologist assigns a grade between one and five to those two representative areas. Grade one means the cancer is not very dangerous and will probably not spread. Grade five means the cancer will probably grow fast. Then the pathologist adds those two grades and gives an overall evaluation of the cancer between two and ten. The scores are as follows: 2-4: cancer growing slowly, 6-10 cancer very aggressive. There are other grading tests, like the *Mostofi grading system* (just another name for a test) using Roman numerals. Grade I is comparable to the 2-4 Gleason test. But in both tests cancers are assigned a stage. The *Whitmore-Jewett Test* or *ABCD Staging System* assigns letters to cancer from A-D. A or B means: cancer is only in the prostate region. C or D means cancer has spread beyond the prostate or throughout the body. Another system is called the TNM staging system. T stands for tumor, N for nodes, M for metastasis. M of course means the cancer has spread; T is the size of the tumor, and N whether it has reached the lymph nodes. However, the crucial point always is: has cancer spread into the rest of the body or not? If not there is a good chance it can be handled!

## ATTACKING THE ATTACKER

Whatever stage of cancer a person is in, there are methods to deal with it. Let us look at the most common ones, before we give the alternative that gives hope. Never forget: scientists are searching like mad to find better ways in the detection and treatment of cancer. It is no overstatement to say that we are getting better every day.

However, how is cancer *usually* treated today? Prostate cancer *surgery* is still No. 1. With a scalpel or a laser the cancerous tissue is removed, eliminated. The problem is that sometimes the cancer comes back. Also side effects are common: incontinence and impotence.

*Radiation therapy* is another way. With high energy particles the prostate cancer cells get bombarded. A newer technique consists of tiny capsules containing a radioactive substance that are implanted into the prostate tumor, through surgery. The advantage is that the whole prostate is not under assault. These capsules are supposed to kill the cancer too.

*Drug treatment* is again another way of treating cancer. Unfortunately, there has never been a wonder pill against cancer, but many pills with frightening

side effects. Actually we don't like to talk about drugs, because drugs usually have so many side effects that they're hard to count!

*Hormonal therapy* is another way. The conventional hormone therapy for prostate cancer is to reduce Testosterone levels to 0. We don't like that either. Why? As we wrote at the beginning of the book free Testosterone will do much more good than bad for your body. You can reduce Estrogen (Estradiol) and DHT. Improve free Testosterone and Progesterone and that way balance your hormones. You don't need to feel castrated. By the way the results with this treatment are not good in the long term. At the beginning you can see PSA drop to 0 but in 2 to 4 years it will start increasing again.

We believe you have other natural treatments that can avoid feeling the castration. But let us continue:

*Chemotherapy* is usually not used in treating prostate cancer. The results are very poor.

*Hyperthermia* tries to bombard the cancer with high levels of heat.

*Cryosurgery is another alternative.* *Cryos* means *frost* and is the root word of cryosurgery. For some people *cryosurgery* appears to be more effective than current standard treatments. This freezing treatment is sometimes offered as an alternative treatment and yes, it is less invasive, and seems to bring about fewer complications. Nevertheless it is not without risk.

*Angiogenesis Inhibitors* is another alternative. *Angio* means blood vessels, genesis formation. So *Angiogenesis* = the growth and proliferation of blood vessels. To develop and metastasize cancer cells need blood vessels around the tumor. If we can stop the blood vessel growth we can stop the tumor from growing and spreading. There are many clinical trials running now in different parts of the country with several different drugs that may have an anti-angiogenesis effect. For example *Thalidomide*, used in the 60's to reduce nausea in pregnant women. Unfortunately as a side effect thousands of babies were born without arms and legs. That happened because that drug had an anti-angiogenesis effect. Now it is being used in cancer. In addition *shark cartilage* substances are being studied to unravel their anti-angiogenesis properties.

Some natural plants may also have a similar effect: an extract from *Convolvulus Arvensis* for example.

These are roughly spoken, the traditional treatments when it comes to cancer. How should you evaluate them? Well, go to a surgical oriented urologist and he will praise and glorify his method. Go to a chemotherapist and he will tell you his method is the best. Go to a third specialist and he will tell you that his method is the only one. Every method has its risks, and it is impossible to make a general statement for each and every cancer patient. But we dare make three statements:

1. Inform yourself first. Don't allow anyone to talk you into a therapy you don't believe in and/or you know nothing about! There is a lot of information out there about each therapy! Learn!
2. Usually surgery prolongs life, yes. But the disadvantages are: the loss of natural sexual function (most common) and the loss of normal urination (least common).

Plus: there is never a guarantee that the cancer will not come back and there are many possible side effects.

3. You can't go wrong when you take a look at the natural treatments, which usually can improve your health condition, even cancer! Watchful waiting may be correct sometimes with the advice to regularly check your prostate to see if cancer grows there or not. In fact, changing *lifestyles* can sometimes prevent an operation, imagine! Additionally there are supplements in existence today that really do something to the prostate, natural supplements, which can even *heal* the prostate in a significant amount of cases.

With all the information we have given you, you can easily see that "Health" is not the absence of disease, nor is it not an absolute state. "Health" metaphorically, is "white" in a range where black is disease, a cancer spreading all over your body. We live within that range of grays. "Health" is not an absolute; "disease" is not an absolute.

Your body is usually within one of those different grays, and in fact we could define 100 different shades of gray, not only A, B, C, or D! This means that you can go back from black to a deep gray to a light gray or perhaps even to white. Illness is a process, which may take many years to establish. Health could be considered to be similar. You can go back to a healthy state, a healthy body environment, if you know some rules, some laws and some supplements. The most exciting discoveries have been made when it comes to "going back to health" even and especially related to the prostate. Also never forget, the smartest way to deal with cancer is not getting it in the first place. There are ways to avoid cancer and heal the early stages of cancer in a natural way. So let's summarize our knowledge, and then, without further delay, let's get right to it.

## **ACTION**

**Information:** The earlier the detection of prostate cancer the better the chances. Two thirds of the people diagnosed with prostate cancer survive.

**Action:** If there is the suspicion of prostate cancer, get tested fast. Get a complete physical (including a digital rectal exam) every year since you turn 40.

**Information:** Cancer is due to a combination of genetics and environment.

**Action:** Avoid alcohol, bad diet, and too much sunlight.

**Information:** There are many tests you can do:

- Digital Rectal Examination
- PSA
- Free PSA or PSA II
- PSADT
- PSAV
- Prostatic Acid Phosphatase (PAP), a blood test
- Ultrasound
- Computerized Topography (CT) Scan
- Magnetic Resonance Imaging (MRI)
- Biopsy

**Action:** Do the necessary tests.

**Information:** There are several grading systems in evaluating cancer:

- Gleason's grading system (Grade 1, not very dangerous, Grade 5, cancer growing fast).
- Whitmore-Jewett-Test (ABCD Aging System)
- TNM Staging System (T = tumor, N = nodes, M = metastasis)

**Action:** If you do have prostate cancer find out exactly which stage it is in.

**Information:** There are many possible treatments for prostate cancer: Surgery, radiation therapy, drug treatment, hormonal therapy, chemotherapy, hypothermia, and cryosurgery.

**Action:** Before deciding, inform yourself. Don't jump into a treatment if you are not totally convinced by it. There are dangers and side effects associated to all of these treatments.

## VII. PROSTATE CANCER AND NUTRITION

It may very well be that the art of nutrition will be the key to healthy aging. What we know already about the relationship between eating and health, and even between eating and cancer is nothing short of astonishing. Just consider this: Men in the Far East, in China and Japan, have usually 90% less prostate cancer than men in America! 90 percent! This is a fact, it is not wishful thinking, it is not guessing. Scientists concluded that men in those countries must do something right. A group of researchers, doctors, scientists, statisticians, and urologists therefore started to look deeper into this subject. First they guessed that this fact must have something to do with the genes. But oh, the genes! Many scientists had already over-estimated the power of genes! The genes were once the talk of the day, they were responsible for everything, but science learned that genes are important, but by far not as important as originally envisioned. However, investigators and inquirers actually found out, the genes are not the reason why men in America have prostate cancer. So they carefully researched the rate of prostate cancer in Japanese men that have moved from Japan to the United States. Guess what they found? Yes, Japanese men developed even more prostate cancer than American men! These migration studies were repeated, all with the same result. The moment Japanese or Chinese people moved away from their home countries, prostate cancer inevitably increased!

Of course the attention immediately turned to the diet. The western diet was compared to the eastern diet. The differences were evident. Americans eat hamburgers, cheeseburgers, potatoes, French fries, and pizza; while in the east men eat soy products, rice, and vegetables. In short a totally different diet. More studies were done. The western diet is additionally to a great extent heavily polluted and industrialized. And the diet is based mainly on animal products, meat, and dairy products and is higher in fat. By far less vegetables and fruits are eaten in the U.S. and lots of sugar and starch products instead. Some people didn't like the findings, but the facts were clear: in China only 2 persons out of 100,000 people develop prostate cancer, imagine! Cancer is practically not an issue in China. In America the cancer rate is thirty-six times higher. Again the conclusion was obvious:

“Diet definitely affects the progression of prostate cancer from a microscopic level to a metastatic level”. (Dr. Charles Myers)

The attention of the scientific world turned to the diet. Here a war was nearly started because of the discussion of what diet is the “right” one, the diet is different everywhere. (Look at the number of books about the “right” diet in the U.S. every *year!*)

Nevertheless the picture got clearer and clearer.

It couldn't be ignored any longer, the devils in the prostate cancer war were:

- Animal fats,
- Preserved foods,
- Preserved meats,
- Preserved vegetables,
- Not enough vegetables,
- Not enough fruits,
- Clinically treated food,
- Unusual amounts of sugar in all forms,
- An unusual amount of starches, such as pizzas, and white, refined flour.

The traditional Chinese diet on the other hand, contained:

- Lots of garlic, scallions, and onions
- Fiber
- Plenty of fruits
- Lots of soybeans
- Lots of vegetables, especially green vegetables.

Again and again research was undertaken. English researchers, American researchers and Japanese researchers, everywhere in the world studies were conducted. To quote the most important results of countless studies: “Of all the risk factors for prostate cancer, only nutrition seems to be the difference in global distribution of the disease”.

(Association for the Cure of Cancer of the Prostate.)

So “Foods have incredibly sophisticated powers, like well-designed pharmaceuticals” (*U.S. Scientists*)

In other words: “Change of dietary habit is considered to be a major cause of the increase of prostate cancer”. (*Dr. Y. Kakei, Department of Urology, Faculty of medicine, Kyoto University, Japan*)

So it is not surprising that the *American Cancer Society* tells us to return to the diet we ate when we were evolving, more vegetables. More fruit, less barbecue, and more aerobic exercise are needed.

In fact, we could go on and quote 20 more authorities, but the picture is crystal clear. Wrong diets are the major cause of prostate cancer! So “prostate cancer diets” were designed in the following years to protect against prostate cancer. Again research, research, and more research was undertaken. The result: even patients already diagnosed with prostate cancer could alter the course of their disease just with a change in diet! New words were created, like nutritional therapies, and chemoprevention, the sun was shining again!

Today about 30% of prostate cancer patients use prostate cancer diets with great results. Of course scientists looked deep into different diets to find out the exact food, the exact ingredient that could prevent cancers from growing. And again scientists struck pure gold. But before taking this up let us first clear up some basics so that we know what we are talking about.

### THE BASICS

You should know that hardly any subject is as confusing as the subject of nutrition. Nutrition is BIG MONEY and one should be aware of that. Every nutrition-producer, every nutrition company can hire a few scientists and make them say what they’d like to hear. “Science” is seldom neutral, objective, despite what we all would like to believe. You can even find advertising promoting candies, telling you that candies are good for energy and that they help the body! Nothing could be farther away from the truth, and you must know this.

These false “authorities” trick us into misusing words. Words can be redefined, twisted, used in wrong context, new words can be invented, twisted again, giving them a second, a third meaning – there is a whole science of how to lie efficiently. Usually the money is the motivator behind all of those efforts. Big industries make hundreds of billions of dollars every year selling unhealthy, life threatening nutrition and do everything to make sure that the truth doesn’t spread.

A way of defeating all those efforts is clearing up words. If you know the definition of a word you can judge things by yourself and nobody can twist your opinion. You *know*. Therefore a good dictionary is more important than a good car.

However there are some basic concepts you must know if you are interested in judging for yourself and making up your own mind. So let us take a close look at what nutrition is all about!

Basically you have to differentiate between *proteins*, *fats*, and *carbohydrates*. Proteins, simply put, are mainly found in meat, poultry eggs, fish, etc. The word *protein* stems from the Greek word “*protos*” which means first. So the

first thing we need is protein, excluding water, which of course is even more important. You can get protein from some plants as well, but it is important to substitute some substances you only find in meat and fish. Along with (meat and fish) protein we take in a lot of vitamins, B1, B2, B6, and B12, also zinc and iron, which we need.

So what is the problem with protein? We are exposed to antibiotics and hormones in the usual meat we eat! To make a long story short: About 99 % of the meat available today on the market is low quality meat. So nothing is wrong with the meat itself, it is the quality of the meat that is wrong.

Now we come to a wonderful and misleading word: *carbohydrates*. The word infers that it is food made out of *carbon* and *hydrogen*. (*Oxygen* is part of it too.) All sugars and starches are *carbohydrates*. Cakes, candies, pastas, pizzas, potatoes – these are all carbohydrates. Billions of wrong misleading advertisements are put out every year promoting carbohydrates, the results: people get sick and fat!

Companies get away with misleading advertising because there are *good carbohydrates* as well. Wait a minute! What are “good carbohydrates”? “Good carbohydrates” are green vegetables for example. They are also called *complex carbohydrates*. “Bad carbohydrates” are “bad” because they are refined and lack nutrients like vitamins and fiber for example. In other words the first thing one has to understand is that there is a huge difference between *refined* carbohydrates and *complex* carbohydrates.

So there are “good carbohydrates” and “bad carbohydrates”. Green lettuce = good. Rice cakes with sugar = bad. Of course there are lots of degrees between good and bad carbohydrates.

Now what about fats? That we all need fat is a well-established fact in scientific knowledge. Fats are needed in every cell. Fats can come from animal sources (eggs, chicken, beef etc.) and they can be derived from plant sources (avocados, olives, nuts, and seeds.) What is the best fat? Well organic cold-pressed olive oil and organic cold press flax oil for example. Of course one could get by far more sophisticated than that. But at least we now have some idea about proteins, carbohydrates and fats.

Now back to our subject: Prostate cancer and nutrition.

Scientists worked day and night to find out what ingredients work best to stop prostate cancer from growing and to hind prostate cancer from developing at all. Their findings are worth pure gold.

## PROSTATE CANCER – KILLERS

Here is the first surprise: scientific findings state that when it comes to protein the best source of protein (in relation to prostate cancer) is soy protein. The reasons are that some components of soy restrict blood vessel growth and inhibit certain enzymes. In addition there is a substance found in soy roots called *genistein*. Technically speaking genistein is a plant Estrogen. “But Estrogen is bad!” you say, if you really read this book carefully. Yes, but *genistein* only has one thousandth of the power of full-strength Estrogen. So relax! So, genistein is a plant Estrogen and it acts like an anti-cancer agent. Cancer needs blood vessels to develop, to spread, and to metastasize. Genistein seems to prevent just that. The signal to increase cell growth, cancer cell growth, seems to be stopped by genistein and soy. Lots of scientific explanations have been provided to prove that, but so much seems to be clear: Soy blocks the travel of cancer cells. Finnish, Japanese, American, and British studies show that soy protein has more protein than many types of meat. It has several amino acids (which build up proteins) and can even prevent osteoporosis and diabetes. Therefore, when it comes to nutrition, soy is the first soldier in our fight for prostate health.

## NO INSULIN

Another dietary factor found to be of extreme importance to avoid prostate cancer is insulin. Insulin promotes the growth factor in prostate cells. Elevated insulin occurs with elevated levels of blood fats and blood sugar (called glucose). But how can you avoid high insulin levels? High insulin is caused by excess starch (bad carbohydrates), sugar and fat. Low insulin is achieved by eating fruits, fiber, and vegetables. So cut out sugars, cut bad carbohydrates, and refined flours. Eat beans, vegetables, and fruits, get organic products! In addition high fiber foods and those containing whole grain help with prostate cancer. But what foods contain fiber?

## FIBER

The *fiber* factor has been forgotten in the western diet. Many studies demonstrate, beyond doubt, the advantages of fiber in the prevention of heart diseases, diabetes, obesity, and cancer, including prostate cancer. So go for *soluble fiber*, which you find in vegetables like Brussels sprouts, most beans, soybean, and some fruits like apples, also in oats, rice and whole grains! With these the prostate problems can be attacked in a natural way. So you can

*do* something about it. The truth is: the good news doesn't end here. There is even more that we can do about it in fighting prostate cancer!

## VITAMINS

Nearly a century ago the role of vitamin was detected. In 1912 Dr. Erik Fink, a Norwegian biochemist, isolated the first vitamin. English biochemist I.G. Hopkins continued the research. In 1913 McCollum and Davis, two American researchers, discovered a substance called Vitamin A. In the months and years after that more and more vitamins were discovered. McCollum and Davis discovered Vitamin B, followed by Vitamins C, D and E and so it went through the alphabet. The world was stunned. Vitamin A could help with bad eyesight, B1 could cure infections, B6 was great for muscle problems, and vitamin C was good for 100 other maladies and almost the universal problem solver. Nutrition entered a new age. The possibilities seemed fantastic. In Japan, in the United States, in Germany and many other European countries vitamins became something people talked about enthusiastically. *Vita*, Latin for *life*, seemed to be newly discovered, and in fact many a breakthrough have been made possible thanks to vitamins. Vitamins, in the correct dosage are "natural" and have no side effects, as do drugs. Researchers found without a doubt that vitamins help when it comes to prostate cancer. But you must know that today Vitamins are a science in itself. There are different qualities of vitamins. You should use only natural vitamins rather than synthetic ones. Additionally vitamins must be balanced out with each other. Nevertheless vitamins are a great source for health.

Now which is important for prostate cancer? Vitamin D. Why? Scientists established an interesting fact: The farther north a person lives, the higher the risk of prostate cancer! The reason is because in the north there is less ultraviolet light available. In Scandinavian countries (Finland, Sweden, Norwegian) and in North America, especially Canada, the (precious) ultraviolet light is low. Ultraviolet light is necessary for the manufacturing of Vitamin D! The sunrays, ultraviolet sunrays, stimulate the creation of Vitamin D in the body. Dark skinned people have a serious problem: the color of their skin absorbs *less* ultraviolet light. So who is at a greater risk of prostate cancer? Men with dark skin living in northern climates!

However, Vitamin D is of special importance for the prostate. Scientific studies show that the growth of prostate cancer cells slow down when Vitamin D attaches to the cancer cells. Vitamin D also helps in the case of BPH. Vitamin D acts as a brake in a car driving toward prostate cancer. 200 to 400 international

units per day seem to be optimal. A special form of Vitamin D, called 1, 25 dihydroxyvitamin D (nickname: 1, 25 D), discovered by Dr. David Feldman M.D., is the best sort of vitamin D to help with prostate cancer. 1, 25 D works best as an antigrowth agent. So you could take this, but in addition you should also get sunlight, or rather should seek sunlight! Fact: Solar radiation may provide 75 percent of the necessary vitamin D! Excess sunlight may promote skin-cancer. Right! But there is a simple solution: Just 15 minutes three times a week or ten minutes every day in the sunlight is enough! So you don't need that much sunlight. By the way, the sun is best in the morning, until 10:00 AM, and very good after 4:00PM. The sun during the hottest time (noon) should be avoided.

## EXERCISE

The advantageous effects of exercise on health have long been established. There is no doubt that exercise has many benefits. Literally hundreds, perhaps thousands of studies have been undertaken to prove the positive effects of exercise. The human body has to be moved! Without movement and use it gets old, it stops working properly, comparable to the motor of a vehicle, which also has to be used to operate optimally. Exercise has positive effects on longevity, the heart, and the immune system. But here is the kicker: Dr. Ralph Paffenbarger has established that men over 70 who maintain high levels of exercise are 50% less likely to get prostate cancer. Nothing could be more stunning. So there is no question that you should exercise regularly if you have prostate cancer or want to prevent it. The question of course is: What exercise? How much? How often? How intense? Well, the key is to build an exercise routine bit by bit, starting low and progressing to higher levels. There is nothing more foolish than jumping into an extreme exercise program from day one. Additionally the type of exercise has to be established individually. Doctors' recommendations include walking, running, swimming or biking, but there are hundreds of other possible exercises from aerobics to football and tennis. From the health standpoint the best exercises are walking, running, swimming and biking. Many books have been written about each one of those exercises, and many others. You should be professional, learn about the specific exercise first and then start. It is said that exercising only 2 times a week for one hour is MAINTAINS your health level. But exercising everyday IMPROVES your health. So exercising daily is better than only one or two days a week.

Back to our subject! Many prostate programs exist where exercise plays a part. Many other positive effects of exercise can be expected like an improvement in

the mood, an increase of antioxidant defense, and the betterment of immune functions. The best exercise is of course an exercise that you really like. And: maximum impact on the maximum amount of muscles is better than exercises that train just one part of the body. The rise of workout stations may be a great help in exercising, especially when one can find a professional who shows how to exercise the best. But watch it, extreme exercise, like a marathon everyday, is definitely not good. Too much stress on the bones, joints and muscles will have a negative effect. Altogether the best exercises seem to be running, outside, in nature, where you have fresh air and sunlight at the same time. Outdoors is better than indoors, but exercising indoors with a view you enjoy will do the job too.

## STRESS

Stress is felt when demands are not met. When a job is too stressful, it means that it is difficult to meet the expectations of the job. A relationship is stressful when one or both of the spouses are not satisfied. You feel stressed when you are unhappy.

The least understood factor today is the word “stress” since it seems to embrace everything: professional relationships, work atmosphere, relationships with friends and partners, and even more: the relationship with the environment. We know today that little activity is bad, an environment with no challenge at all is not positive. On the other hand too much stress can definitely lead to maladies and illnesses. There is probably not an objective standard for stress: some people can take a lot of stress, physical stress and psychic stress. The individual stress level can also be very low. Think about the amount of stress a person who is running for the American Presidency has, like John Kerry, who just had a prostate operation! Imagine the overwhelming stress everyday. Enduring attacks, slander, hits, suppressions, oppressions, and lies! Most people couldn't stand a single day of such a life. So stress is very individualized and one must find his own optimum stress level. Without a doubt, a good stable relationship with a partner is of extreme importance, needless to say, sex should be optimal for both. Experts advise normal activity in relation to sex, not too little and not too much.

Aristotle, the philosopher of the “golden midst” seems to be right 2000 years later. A partnership or marriage with stress, often quarrel, troubles, misunderstandings pervaded by negative affect, is of course counter productive. This can be reflected in prostate cancer or prostate problems. If your love life is not good, do something about it. Things will not change miraculously, work with your spouse on making each other happy: listen to each other's needs and compromise. If you cannot do it on your own, seek counseling. Choose your

friends: Ban negative people from your life, people who create problems, and cause stress. Seek good people, people you can trust. Avoid dealing with people who stress you out. There is no contract with God, saying you have to be oppressed all the time. However, the connection between stress and cancer has been well established through scientific studies. Statistically, high amounts of stress lead to prostate cancer. Why? An interesting question, even exciting! Above all body functions, all body laws, there seems to be *affect*. It is what you feel deep inside what affects the way your mind operates. Positive emotions (feeling loved and accepted) actually trigger the production of opiates (dopamine, serotonin) that give you a feeling of well-being, even physical. Furthermore, they modulate the production of cortisol, which sends you to a state of alert phylogenetically designed to fend from physical danger: your body is prepared to flee. That is why people who are stressed refer being so tired physically.

As we know today affect even monitors the hormones. If your *emotions* are full of stress, if you constantly have “black thoughts” so to say, it can throw your hormones out of balance! Hormones again are responsible for a lot of body functions, as we already know, even optimum blood. But white blood cells cannot fight at optimal levels when there are black thoughts, bad thoughts, and negative thoughts. Also the nervous system obeys the hormone-system, but again: the hormone-system obeys the emotions! Even your immune system is put on hold when under stress; therefore, over time, unhappiness weakens the immune system. There are even immune suppressant hormones, like the famous cortisol! But lets stay simple: stress weakens the immune system, and a weakened immune system can't fight cancer. Marital conflicts, an oppressive boss, and problem-creating people can all switch off the immune system and in turn diminish the fight against cancer. It is as simple as that.

It is neither a matter of denying our problems nor avoiding them, it does not help just to think positively since this causes more stress to our mind: being in denial requires a lot of energy! It is a matter of appraising our situation and solving it.

This is even true with simple colds; when there is little or no stress a cold is not as tough as when there is a lot of stress. So yes, stress can be linked to cancer, without a doubt. Depression, distress, bad feelings, bad thoughts can all affect one's health. Wise men have always said, laughter is the best medicine, and they were right!

So take the necessary steps not to be stressed: At work, when tired or stressed take a break, turn off the light, take a ten minute walk. At home, solve the issues that prevent you from having a satisfying relationship. Avoid chronic

stress, and even acute stress by solving your problems and by seeking regular relaxation. This is an additional way to fight prostate cancer.

So one can do a lot about prostate cancer these days. Prostatitis and BPH are things that can be handled; but even the word prostate cancer has lost a lot of its shock-effect. Today there are many weapons in existence to fight cancer. Again: the statistics say that 2/3 of the people with prostate cancer will survive. Applying *all* of the possible techniques available will increase this percentage remarkably. But there is even more one can do directly!

## KEY TOOLS TO FIGHT PROSTATE CANCER

There are four key tools you can apply to fight prostate cancer directly.

These key tools are:

1. Balance hormone levels (You need normal levels of free Testosterone, low levels of Estrogen (Estradiol), and low levels of DHT. Good levels of Progesterone, DHEA and Pregnenolone are also part of the picture.
2. Take antioxidants and natural cancer fighters
3. Use immune system boosters
4. Use angiogenesis inhibitors

## NATURAL SUPPLEMENTS TO COMPLETE EACH TASK

Allow us to give you the following information. You don't have to clear up each word immediately; we will look at some much closer later.

1. To balance your hormone levels:

Testosterone cream  
Androstenedione  
Progesterone  
DHEA  
Pregnenolone  
Beta Sitosterol  
Zinc  
Lignans  
Nettle Root  
Saw Palmetto  
Pygeum Africanum  
Pumpkin Seed Oil  
Chrysin

DIM  
Eurycoma Longofilia  
Tribulus Terrestris  
Maca Lepidium Meyenii G  
Muiru Puama

2. Antioxidants:

Selenium  
Vit E  
Lycopene  
EFA, GLA, Flax Oil  
Resveratrol  
Green Tea  
Isoflavones

3. Immune system boosters:

Beta Glucan  
IP6  
Ellagic Acid  
AHCC  
Maitake D Fraction  
Colostrum  
MGN3

4. Angiogenesis inhibitors:

Convolvulus Arvensis  
Shark Cartilage

Now let us look at some of those words more exactly, and the scientific findings going together with it.

## SELENIUM AND VIT E

The Selenium and Vitamin E Cancer Prevention Trial (SELECT) is a research study to determine if selenium and vitamin E can help prevent prostate cancer. SELECT is funded by the National Cancer Institute and coordinated by the Southwest Oncology Group. Over 400 Study Sites in the United States, Canada, and Puerto Rico are enrolling men in SELECT. Approximately 32,000 men from the United States, Puerto Rico and Canada will participate in the study. SELECT (the Selenium and Vitamin E Cancer Prevention Trial) is the

largest-ever prostate cancer prevention trial. Previous studies suggest that selenium and vitamin E (alone or in combination) may reduce the risk of developing prostate cancer by 30 to 60 percent, but only a large clinical trial such as SELECT can confirm those initial findings. SELECT began enrolling patients on August 22, 2001, and hopes to enroll 32,400 men over a five-year period. As of August 2003, SELECT had enrolled 24,639 men, or 76 percent of the targeted goal. The trial has now entered its third year of enrollment.

## LYCOPENE

*Lycopene*, a carotenoid without pro-vitamin-A activity, is present in many fruits and vegetables. It is a red, fat-soluble pigment found in certain plants and microorganisms, including tomatoes and tomato-based products. Lycopene is also found in watermelon, papaya, pink grapefruit, and pink guava. It is more bioavailable in both processed and cooked tomato products than from fresh tomatoes. Dietary intake of tomatoes and tomato products containing *lycopene* have shown to be associated with a decreased risk of chronic diseases, such as cancer and cardiovascular disease, in cell culture, animal, and epidemiological investigations. In addition, serum and tissue *lycopene* levels have been inversely correlated with risk of lung and prostate cancers. Many studies suggest the *lycopene* may reduce the risk of prostate cancer.

## ISOFLAVONES

A recent study by the U.S. National Institute of Health (NIH) establishes that soy *isoflavones* may prevent prostate cancer and aid in patient recovery where cancer of the prostate has already been established.

*Isoflavone*, are a subclass of flavinoids. In contrast to the flavinoids, isoflavones have a more limited distribution in nature. Isoflavones can be found in soybeans include Glycine, daidzein, glycetin, and genistein. These compounds are known antioxidants and genistein has been shown to influence signal transduction through its effect on several enzymes. Isoflavones may have positive effects on humans such as cancer inhibition, increased bone strength, and a decrease in heart disease.

## GREEN AND BLACK TEA

A new study, by researchers at the University of California at Los Angeles, suggests that green and black tea, already shown to fight other cancers, could slow the growth of prostate cancer cells. More importantly, scientists found that prostate cancer cells grew slower when placed in a medium containing blood

serum of men who had consumed either green or black tea for five days, compared to serum collected before the men began their tea drinking regimen. Serum from men who drank comparable amount of diet or regular soda showed no such slowing in cancer cell proliferation. Again: Prostate cancer is one of the common cancers among men, in the US at least a quarter of all prostate cancer patients use alternative therapies, including green tea. Some researchers noted that recent animal epidemiological studies suggest that tea may have anti-tumor effects against carcinoma of the prostate. Both black and green tea are promising natural dietary supplements for chemoprevention of prostate cancer, according to Dr. Henning.

#### EFA: MARINE FISH OIL

Essential fatty acids – contained in large amounts of fatty fish for example – have been proven to inhibit the growth of prostate cancer cells. Paul Terry and colleagues from the Karolinska Institute, Stockholm, Sweden, followed over 6,000 Swedish men age 55 for up to thirty years to see whether eating fatty fish would reduce the risk of prostate cancer. The men were asked about diet, smoking habits, alcohol drinking, and physical activity. They were followed up between 1967 and 1997. Researchers calculated the number of cases of prostate cancer and deaths caused by the disease by consulting the Swedish National Cancer Register and National Death Register. During a 30-year follow-up, 466 men were diagnosed with prostate cancer and 340 of these men died. The conclusion was that men who eat no fish have a two-fold to three-fold higher risk of prostate cancer than those who eat moderate or high amounts. Paul Terry says: “Our study was done in Sweden, a country with traditionally high consumption of fatty fish from Northern (cold) waters, which contain high amounts of fatty acids.” Since few dietary and other modifiable factors seem to be associated with lower risk of prostate cancer, our results may indicate an important means by which this disease might be prevented.”

Essential fatty acids in fish inhibit the growth of prostate cancer cells in the lab and in experimental animals. But even earlier studies have found that the higher the concentration of fatty acids in man’s bloodstream, the lower this risk of prostate cancer.

People in Sweden traditionally eat a lot of fatty fish from Northern (cold) waters, such a salmon, herring, and mackerel, which contain high amounts of fatty acids. The research was done at the Department of Medical Epidemiology, Karolinska Institute, Stockholm, Sweden.

## FISH OILS

But there is more. Medical researchers in New Zealand provide convincing evidence that an increased consumption in fish oils helps reduce the risk of developing prostate cancer. Their study involved 317 men who had been diagnosed with prostate cancer during 1996-97 and 480 age-matched controls. Blood samples were obtained from all participants. Study participants who took fish oils were found to have a 40 percent lower incidence than those participants with levels in the lowest quartile.

## GLA

Angiogenesis, the formation of new blood vessels, is an essential feature of malignant tumor development. *Gamma Linolenic Acid* (GLA) inhibits the growth and metastasis of a variety of tumor cells, including breast, prostate, and pancreatic cancer. GLA also has anti-metastatic effects.

## RESVERATROL

Resveratrol works through more than a dozen different anticancer mechanisms and selectively targets cancer cells. This single supplement modulates hormones and has several mechanisms that stop cancer cells. Resveratrol is a substance found in grapes. It is also found in a plant called *Polygonum Cuspidatum*. It stops cancer cells from multiplying and even has the ability to destroy cancer cells. Research has found it has no side effects and can be administered orally. Additionally, it is inexpensive. So Resveratrol is very toxic to cancer cells, but does not harm healthy cells.

## LIGNANS

Flaxseed helps against prostate cancer. Mice fed plenty of flaxseed seemed to be protected against the worst forms of prostate cancer. Flaxseed is a rich source of fatty acids, fiber and compounds known as *lignans*, all of which may play a role in protecting against cancer and perhaps also heart disease. A team at Duke University Medical Center fed large amounts of flaxseed to mice that were generically engineered to develop prostate cancer. They compared them to genetically engineered mice that were not fed any flaxseed. About 3 percent of the mice did not develop prostate cancer at all and the rest had smaller tumors that were less likely to spread.

“Tumors in the untreated control group were twice the size of tumors in the flaxseed group.” Dr. Xu Lin, who led the study, said in a statement: “The

tumors were also less aggressive in the flaxseed group and two of the mice in the flaxseed group did not develop prostate cancer at all.”

Other research has suggested that men who eat flaxseed have lower levels of prostate specific antigen, a protein produced by prostate cells that is now used as a test for prostate cancer. The higher levels, the more likely it is for a man to develop prostate cancer. “We are cautiously optimistic about these findings,” urologist Wendy Demark-Wahnefried, who helped lead the study, said in a statement. “The amount of flaxseed given to each mouse was 5 percent of its food intake, which would be a very difficult amount for humans to eat, but it does signal that we are on the right track and need to continue research in this area.” The team is now doing a study in men with prostate cancer.

### BETA GLUCAN

Starting in the 1940's, researchers have investigated the nutritional benefits of *Beta Glucan*. Derived from broken cell walls of yeasts, mushrooms, barley and oats, Beta Glucans are capable of reducing unhealthy amounts of serum cholesterol and boosting the immune system. Beta Glucan is a powerful immune stimulator, activating the *macrophages* in the immune system. *Macrophages* are white, large and versatile immune cells. Studies have found this product not only has a positive action on the *macrophages*, but on natural killer cells too. In addition to these important functions, *Beta Glucan* is an effective antioxidant and free radical scavenger. Beta Glucan is a safe, non-toxic, and orally effective supplement for those who wish to enhance their immune system and lower cholesterol levels.

### IP6: INOSITOL HEXAPHOSPHATE

IP6 is a compound commonly found in fiber-rich plant foods. IP6 has been shown to shrink cancer tumors in laboratory mice 3 fold in 120 days. The National Cancer Institute is currently funding human trials.

### ELLAGIC ACID

*Ellagic Acid* is a compound found in berries. Research in animal and laboratory models has found that *ellagic acid* inhibits the growth of tumors caused by certain carcinogens. A number of double blind studies in humans are underway to determine the effect of long-term daily consumption of concentrated raspberry extract on cancer cell activity in the human colon, prostate, and breast. A new publication called the “American Cancer Society’s Guide to Complementary and Alternative Cancer Methods” has documented that *ellagic*

*acid* is a very promising natural supplement, because it causes death of cancer cells in the lab, without affecting normal healthy cells. Healthy cells have a normal life span of approximately 120 days before undergo cell death. This process is called *apoptosis* (natural cell death). The body replaces these dying cells with new healthy cells. Conversely, cancer cells do not die. They multiply by division, making 2 cancer cells, then 4, 8, 16, 32 and so on. In lab tests, *ellagic acid* caused the cancer cells to go through the normal *apoptosis* process without damaging healthy cells. Chemotherapy, radiation, and most conventional treatments cause the death of cancer cells and healthy cells indiscriminately while destroying the immune system. *Ellagic acid* is clearly the sensible choice.

#### AHCC ACTICE HEXOSE CORRELATED COMPOUND

*AHCC* is made from mushrooms. Various clinical trials conducted since 1987 in Japan have demonstrated that *AHCC* has the ability to support normal immune function and may improve the number and function of immune system cells. *AHCC* has been the subject of numerous clinical studies conducted at prestigious institutions such as Hokkaido University, Kyorin University, and Teikyo University in Japan, and in the United States, Yale University, and the Morehouse School of Medicine.

#### MAITAKE D FRACTION

*Maitake D-Fraction* is a standardized extract from Maitake mushrooms, with special ingredients and compounds. This unique active compound makes it very potent in enhancing the immune system by oral administration. Because it is liquid *Maitake D-Fraction* can attain a much faster and much more effective absorption by your body.

For the sake of scientific honesty we should state that we left out a lot of information about those products, compounds, and ingredients because we would have to explain words, which take whole books to explain in depth. But the main purpose of this booklet is APPLICATION. If you are interested in finding out more, you can check our list of references at the end of this book to find more scientific information.

You now know that you can do A LOT in relation to prostate cancer. There are MANY natural means to avoid it in the first place, and to fight it when it is there.

Now you have the information.

Now you can act.

Today we are not helpless anymore when it comes to cancer. With every passing day we learn more and get wiser about how to defeat this prominent enemy of mankind.

## **ACTION**

**Information:** In the East (China, Japan) prostate cancer hardly exists. The reason: diet. What is wrong with the Western diet: Preserved meats, preserved vegetables, a lack of vegetables and fruits, chemically treated foods, excess sugar in all forms, and an excess in “bad” carbohydrates.

**Action:** Correct those points, start with a really healthy diet.

**Information:** This diet helps in relation to cancer: garlic, scallions, onions, plenty of fruit, and lots of vegetables, everything should be organic.

**Action:** Change your diet accordingly.

**Information:** We need protein, good carbohydrates (complex carbohydrates) and good fats.

**Action:** Change your diet! Get your protein from soy, eat a lot of organic vegetables, and use cold pressed organic olive oil and organic cold pressed flax oil for example.

**Information:** Prostate cancer fighters are found in Bok choy, broccoli, Brussels sprouts, cabbage, cauliflower, collard greens, mustard seed, rutabaga, and turnips.

**Action:** Eat those vegetables on a regular basis.

**Information:** Too many “bad” starches, sugar and fat cause high insulin levels. Low insulin is achieved by eating fruits, fiber, and vegetables.

**Action:** Cut your sugars, bad carbohydrates and refined flours. Eat beans, vegetables, and fruits (remember they should be organic). Eat whole grain foods.

**Information:** Fiber helps prevent heart disease, diabetes, obesity, and cancer, including prostate cancer.

**Action:** Eat vegetables that are high in fiber, like Brussels sprouts, most beans, soybeans, apples, brown rice and whole grains.

**Information:** Vitamins help against prostate cancer. Vitamin D is especially important. The best is a D vitamin called 1,25 D.

**Action:** Take vitamin D 300 IU per day.

**Information:** Ultraviolet light helps create Vitamin D.

**Action:** Get 10 minutes of sun daily. The best time is up until 10:00 am or after 4:00 pm.

**Information:** Exercise helps to fight cancer.

**Action:** Find the form of exercise that works for you. The best exercises are walking, running, swimming, and bicycling. Start slow and increase systematically.

**Information:** Avoiding stress (marital stress, employment stress, environmental stress) helps prevent cancer.

**Action:** Prevent stress by solving problems with your spouse, children and creating a relaxed atmosphere in your home. At work, do not take more than what you can handle, say NO when needed.

**Information:** Natural supplements can help with prostate cancer.

Balanced hormone levels (you need normal levels of Free Testosterone, low levels of Estrogen (Estradiol), low levels of DHT. You need high levels of Progesterone, DHEA and Pregnenolone.

**Action:** Balance your hormone levels with natural supplements:

Testosterone Cream, Androstenedione, Progesterone, DHEA, Pregnenolone, Beta Sitosterol, Isoflavones, Zinc, Lignans, Nettle Root, Saw Palmetto, Pygeum Africanum, Pumpkin Seed Oil, Chrysin, Dim, Eurycoma Longofilia, Tribulus Terrestris, Maca Lepidium Meyenii G, Muira Puama.

**Information:** Antioxidants help with prostate cancer.

**Action:** Take Selenium, Vitamin E, Lycopene, EFA, GLA, Flax Oil, Resveratrol, and drink green tea.

**Information:** Immune system boosters help.

**Action:** Beta Glucan, IP6, Ellagic Acid, AHCC, And Maitake D Fraction.

**Information:** Angiogenesis inhibitors can help with prostate cancer.

**Action:**

You could use Angiogenesis Inhibitors

Convolvulus Arvensis and Shark Cartilage are two natural sources with anti-angiogenesis effect.

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## The book that every man should read.

- ⊕ About 90,000 new cases of prostate cancer are diagnosed every year in the US alone.
- ⊕ Prostate cancer is the second most common male cancer after lung cancer.
- ⊕ Benign Prostate Hyperplasia (BPH), is very common in men over 40 years. In most cases do not notice any symptoms until age of 50 or beyond.
- ⊕ Over half of men aged over 50 have BPH.
- ⊕ Prostatitis is responsible for up to 25 percent of all office visits by young and middle-aged men for complaints involving the genital and urinary systems.

After reading this book you will have **INFORMATION & KNOWLEDGE**. It is up to you to take **ACTION**.



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Board Certified Physician,  
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Dr. Drassinower was always interested in preventive medicine, research and education and has an extensive background in herbal and natural medicine. Dr. Drassinower comes from a family of doctors. His father was a world-renowned Allergist and Immunologist for over 50 years. His brother is a renowned plastic surgeon. The third generation of doctors is on its way.