



# The Health Source

Ruthie Harper M.D.

Your Source for Health, Wellness, and Looking Your Best



## Hormones Now Available at Nutritional Medicine Associates

We know it can be a little overwhelming to do everything you need to do on a daily basis to ensure your optimal health. At Nutritional Medicine Associates, we know even the smallest stressors can be unhealthy and we look for ways to help reduce such stress.

Many of you have commented that it would help you if, after prescribing bioidentical hormones, we could provide your customized prescriptions in our office and show you exactly what to use and how to use it.

You have told us that as we make changes in your hormone dosages you would like for us to show you exactly what these changes mean and how to make them. In addition, you have wished you didn't have to make that extra stop at the pharmacy to save you time.

Well, we have heard you and are committed to helping you be successful! Now in the privacy and comfort of our office, we are providing hormones at Nutritional Medicine Associates.

By having the hormones in our office, we can help ensure that you are using each hormone prescription in a way that promotes your optimal health.

We began a trial program of providing hormones in house in January 2006 and it was a huge success.

People who tried this program were excited with its **ease** and **efficiency** and were ecstatic about the cost **savings** that they realized when comparing our pricing to other products.

Now we are offering this program to all of our clients. If this program interests you please call Stacy at (512) 343-9355. ■

*Don't make an extra trip to the pharmacy. Nutritional Medicine Associates now provides hormones in the office.*

Dr. Ruthie Harper is a Board Certified Internist who has spent many years developing her unique vision.

Dr. Harper has been a practicing physician since 1989 and founded her own medical practice - Nutritional Medicine Associates - in 1999. It has since become one of the most successful and innovative of its kind in the United States.

In her medical practice, Dr. Harper uses the latest advancements in science and nutrition to help people become optimally well. Additionally, she made unique discoveries in nutritional science that, combined them with extensive skincare research, allowed her to create The Laser and Skin Care Clinic and a line of skincare products unlike anything else in the cosmeceutical industry.

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# Love the Skin You're In...

## Protect it From Sun Damage



In 2005, it is estimated that 10,600 people will die of skin cancer: 7,800 from melanoma and 2,800 from other skin cancers.

Everyone loves beautiful, youthful, and healthy skin – but not everyone knows how to get it and keep it. One key to fabulous skin is protecting it from the effects of the environment and aging. The number one environmental factor that robs our skin of its youthful appearance is the sun. In December 2002, UV radiation joined the ranks of

toxins such as asbestos and tobacco smoke on the government's list of known carcinogens.

### The Problem

In 1983, approximately 300,000 new cases of skin cancer were predicted in the U.S. By 1995, both the American Academy of Dermatology and the Skin Cancer Foundation anticipated 1,000,000 new cases in the U.S. - more than all other forms of cancer combined. Skin cancer is the most common cancer in the U.S., despite the fact that it is highly preventable. Some alarming statistics:

- It was estimated that 1 out of 3 people will get skin cancer by the year 2000.
- Skin cancer kills one American per hour.
- The rise in melanoma is dramatic: 1 in 1500 in 1938, 1 in 105 in 1991, 1 in 84 in 1997, 1 in 75 in 2000. The incidence is doubling every six to ten years, which could bring the ratio to 1 in 37 by 2006.
- Melanoma is the most common cancer in women aged 25-29; the second most frequent in women aged 30-34.
- In 2005, it is estimated that 10,600 people will die of skin cancer: 7,800 from melanoma and 2,800 from other skin cancers.
- Every blistering sunburn doubles the likelihood of skin cancer formation.

Part of these alarming statistics can be attributed to the fact that people are more aware of skin cancer and such cancers are being identified, reported, and successfully treated. However, we are still looking at the makings of a potential epidemic caused by a lack of sunscreen use. A recent poll by the Skin

Cancer Foundation and American Health Magazine turned up some disturbing facts. While almost 9 out of 10 consumers have used a sunscreen at some point:

- Less than 3 out of 10 people apply sunscreen regularly while on vacation.
- Less than 2 out of 10 people wear sunscreen year round.
- Almost 6 out of 10 Americans still actively seek a tan - the skin's signal that sun damage is already underway.
- Additionally, 80% of the average person's lifetime sun exposure to UV radiation has been received by the age of 18.

### How the sun causes damage

From the early 1930's to the mid 1970's, the "tanned, healthy look" became popular, and so did the myth that a good tan provides all the sun protection necessary. Actually, the deepest tan only affords a maximum SPF of 4.

Within days of a half-hour tanning session, a person over 30 will find the damage easy to see: lines and wrinkles often become more obvious, and sagging, discolorations, and skin cancer can show up as future injuries.

Sun damage is caused by ultraviolet radiation - commonly called UV damage. Of the total solar energy reaching the surface of the earth, about 56% is in the infrared range and 39% is the visible light. However, it is the remaining 5%, the ultraviolet light which has the most profound effect on the body.

Ultraviolet light is divided into three major wavelengths: UVA, UVB, and UVC. Most is blocked by the ozone layer including UVC and large amounts of UVB radiation. UVA, on the other hand, is not blocked by the ozone layer and reaches the earth in very large amounts. Even on an overcast day, 80% of the sun's ultraviolet rays pass through the clouds. On bright, sunny days, the reflection of the sun is considerable: 17% off of sand and 80% off of snow.

### UVA Radiation

Considered the "Aging Ray", it is the longest wavelength and makes up 95% of UV light and is carcinogenic. The longer wavelength penetrates deep into the epidermis and dermis of the skin. Like UVB, it can cause structural

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damage to the DNA, impair the immune system, and possibly lead to cancer.

- It has been linked to 67% of malignant melanoma (mole cancer).
- It turns melanin dark (moles, sun or “age” spots).
- It is at full strength from sunrise to sunset.
- It penetrates glass (including car windows).
- It is present 1,000 times more than UVB.
- Barrier sunscreens such as **Protect Reflective Sunscreen** with titanium dioxide can provide protection

### UVB Radiation

Considered the “Burning Ray”, it is of medium length and comprises 4 to 5% of UV light and also is carcinogenic. It is the most active UV radiation for producing sunburn, and penetrates into the epidermis (outer protective layer) of the skin. It significantly decreases anti-oxidants in the skin, impairing the skin’s ability to protect itself against the free radicals generated by exposure to sunlight. It is considered to be responsible for inducing skin cancer (squamous and basal cell carcinoma) due to DNA damage. It is also suspected of lowering the skin’s immune defense system. UVB:

- Stimulates melanin formation (tan).
- Is strongest between 10:00 a.m. and 4:00 p.m.
- Reflects off shiny or white surfaces (water, sand, concrete, etc.) .
- Is 1,000 times stronger than UVA.

Barrier sunscreens such as **Protect Reflective Sunscreen** with titanium dioxide can provide protection.

### UVC Radiation

This is the shortest wavelength. It is a sterilizing ray that is carcinogenic and can kill small organisms on contact. At present, it does not enter the atmosphere and reach earth. There are currently no sunscreens that protect against UVC light.

### Sunscreens:

#### What You Need to Know

Because the sun is public enemy number one when it comes to damaging our skin, sunscreen is a critical part of a healthy skin care regimen and anti-aging program. While many people use sunscreen for its protection against sunburn, scientists agree that sunscreens need to provide more than just sun protection. Sunscreens should provide a physical barrier to keep skin damaging elements from penetrating our skin on a daily basis and robbing it from its youthful appearance.

Applying sunscreen correctly is vital in order for it to provide optimal protection. Instead of just slathering sunscreen on before going outdoors, there is a science to how and when to apply sunscreen that consumers should follow for best results.

#### When and How to Use Sunscreen

It is important for people to know that sunscreen use is not only for weekends and vacations. Sunscreen should be used on a daily basis during all the hours of sun exposure. Much of our sun exposure happens when we are driving our cars, or walking from our car into office buildings and stores.

Prior to using sunscreen, shake your product thoroughly and make sure you are applying it to well hydrated skin (we recommend using Dr. Harper’s moisturizer, **Hydrate**), as this will improve the application process. Dr. Harper’s sunscreen, **Protect**, is a barrier sunscreen with a Sun Protection Factor (SPF) of 18. It provides protection against both UVA and UVB sunrays. SPF is important because it tells you the amount of time you can safely spend in the sun and expect your sunscreen to protect you.

To understand how long you can stay out in the sun, multiply each number in the SPF rating by 20 minutes. With an SPF of 18, you can spend up to 360 minutes (6 hours) of time in the sun and know you are protected. We recommend, however, that you follow the FDA guidelines for

reapplication of sunscreen and reapply your sunscreen every 3-4 hours. All responsible sunscreen manufacturers will give you this same advice because sunscreen wears off over time, especially when you are active or outdoors.

Contrary to what some believe, buying sunscreens with a higher SPF will not provide more protection, they only extend the time you can stay out in the sun. However, since sunscreen needs to be reapplied every 3-4 hours, having a SPF up over 18 really provides no additional benefit. Also, getting the SPF up over 18 requires the use of chemical sunscreens (see below) which can be harmful to the skin. Remember that an SPF of 40 does not give you more sun protection, it only extends the time you can stay out in the sun. An SPF of 15-18 is optimal.

#### Types of sunscreen:

##### Chemical vs. Barrier

When looking at various types of sunscreen, it is important to be aware of the two categories of sunscreens - Chemical and Barrier - and the distinctions between them.

Chemical sunscreens are seen in most current sunscreen products and have ingredients with names such as Octinoxate, oxybenzone, octyl salicylate, and octyl methoxycinnamate. The major groups of chemical sunscreens are cinnamates, benzophenones, PABA derivatives, and salicylates. Any product with one of these words in its ingredient list is likely a chemical sunscreen.

There is increasing evidence that chemical sunscreens prevent the skin from burning, but there is a cost. This cost is that the sunscreen ingredient itself absorbs the harmful rays of the sun and by doing so, there is a chemical conversion of this

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ingredient to a different chemical. These newly formed chemicals are now believed to be carcinogens in and of themselves. This becomes a vicious cycle of protecting yourself against skin cancer by using a sunscreen that then changes to a substance that actually may cause cancer!

In addition, considerable data and multiple scientific reports have recently found the lack of effectiveness of these chemical sunscreens when used in the amounts recommended on the bottle.

The concern is that people are led to believe they are protected from the harmful effects of the sun because the chemical sunscreen products they use prevent them from turning red when exposed to the sun. However, if chemical sunscreens prevent redness but fail to adequately protect the skin, people may spend many more hours in the sun increasing the risk from exposure to cancer causing sun rays.

Because chemical sunscreens are thought to have little impact on reducing the free radicals generated in response to UV radiation exposure, this combination of chemical sunscreen use and increased exposure is an especially dangerous one. This is why it is so important to use a barrier sunscreen with titanium dioxide such as **Protect**.

#### **Barrier Sunscreens and Titanium Dioxide**

Responsible sunscreen manufacturers are now moving out of the world of chemical sunscreens into the world of barrier or protective sunscreens such as titanium dioxide, which offers a high level of protection against both UVA and UVB radiation.

When applied to the skin, titanium dioxide provides a protective barrier, almost like an umbrella or a shield outside the skin. This “shield” sits on the skin, protecting it and bouncing off the sun’s rays. Because of this protective shield, you may see a very slight whitening effect after titanium dioxide is applied. When rubbed into the skin well, the whitening goes away and is replaced with a translucent glow that people find cosmetically appealing.

Dr. Ruthie Harper and The Laser and Skincare Clinic recommend you protect

your skin by committing to the daily use of our barrier sunscreen, **Protect**. For a list of ingredients [click here](#). In addition, limit your exposure to the sun as much as possible, covering up with lightweight, long sleeve clothing when exposed to the sun.

To support you and your family in beginning a program of daily sunscreen and Waterless Vitamin C use, during the month of February we will be offering 10% off one bottle of Protect Reflective Sunscreen and/or one jar of Waterless Vitamin C, 15% off for two and 20% off for three or more. We encourage you to buy each product for every member of your family.

#### **Anti-Oxidants and Free Radicals**

Natural body processes, certain lifestyle choices, environmental pollution, and UV radiation can cause the formation of free radicals. Free radicals are very reactive molecules, and as such, may cause damage to cells and tissues and accelerate the aging process. They can damage the skin’s collagen and elastin, causing wrinkles and bags. They are believed to produce DNA mutations that can lead to skin cancer.

There is growing evidence that anti-oxidants (such as Vitamins A, E, C) and Beta Carotene function as free radical scavengers and as such may suppress the growth of cancer cells.

Vitamin A can improve skin elasticity, increase skin thickness, normalize photodamaged skin, and help reverse the atrophy of skin with age. Vitamin B complexes aid in cell proliferation, facilitate wound healing (sunburns), and moisturize dry skin.

Vitamin E, a natural moisturizer, plays a crucial role in protecting the skin from free radicals damage, protecting the skin from ozone (environmental) damage, and has a long term, cumulative effect on skin softening and smoothness. Vitamin C helps produce collagen, a major structural protein in the skin. This aids in minimizing fine lines and wrinkles. It is also a powerful anti-oxidant that minimizes UV induced immune suppression.

The combination of vitamins and sunscreens creates an ideal synergy and can play a very important role in the war against aging and the maintenance of a youthful appearance.

For optimal health of your skin and body we recommend you take a quality

multivitamin with antioxidants such as the product formulated by Dr Ruthie Harper ([click here to find out more](#)) and use a high potency form of **Waterless Vitamin C** which can be applied directly to the skin.

#### **Topical Vitamin C Products and the Sun**

Vitamin C has proved to be a superstar in the skin world because of its ability to provide both sun protection and reversal of the aging effects of the sun on the skin. Vitamin C decreases photoaging, wrinkling, hyperpigmentation, and inflammation and improves hydration of the skin.

Vitamin C is also required for collagen synthesis, which declines markedly in aging skin especially after sun exposure. As humans age, they suffer diminished circulation within the skin, thereby depriving skin cells of the supply of vitamin C and other nutrients needed for youthful collagen synthesis. The topical application of vitamin C in a skin-penetrating medium can enhance the availability of vitamin C for collagen production.

For this reason, Dr Harper created a high potency, waterless form of Vitamin C called **Waterless Vitamin C** to obtain these amazing benefits of Vitamin C for the skin. To see a list of ingredients, [click here](#).

The pure form of Vitamin C used in our product is a different form of Vitamin C than is used in most other products (ester Vitamin C), because of our breakthrough “waterless” technology.

The waterless properties are so important because it allows Vitamin C to be used in its purest form and at full strength and effectiveness, which will produce the greatest benefits for the skin.

Dr. Harper created **Waterless Vitamin C** to ensure that the consumer will experience the full health and aesthetic benefits from this incredible nutrient.

**Waterless Vitamin C** should be used twice daily for best results as the last step in your skincare regimen. It should be used prior to **Protect** sunscreen in the morning and as your last step before going to bed in the evening. **Protect** sunscreen should be used on a daily basis in the morning for protection against sun and environmental factors. For use in conjunction with other skincare products created by Dr Ruthie Harper [click here](#).

# Show Some Love To Your Heart

February is the month traditionally devoted to matters of the heart; we affirm our love to the special people in our lives on Valentines Day and show them how important they are to us. However this February, we suggest that you also show some love to **your** heart. After all, your heart not only sees you through all the ups and downs of love, but also plays a vital role in your health and wellness. So, this February, do something special for both your heart and the heart of someone you love! Take the time to ensure your heart's optimal health to guarantee it will see you through all that life and love has to offer.

## Are You at Risk?

The American Heart Association (AHA) estimates that 4.7 million Americans have coronary heart disease and that 400,000 new cases will be diagnosed in this coming year. Heart failure is the leading cause for hospitalization in people over the age of 65, and the risk for developing the disease seems to sky rocket with age.

The risk for developing heart failure is slightly greater in men than in women, however, in 2002, 51% of the deaths from this disease were women. African-Americans are twice as likely to acquire the disease as Caucasians, and mortality from the disease is also twice as great in this group.

The good news is that you don't have to be among these statistics. Nutritional Medicine Associates will help you make changes that will greatly reduce your chances of developing heart disease.

Approximately 95% of people who die from heart disease had at least one risk factor that could have been reduced or eliminated, such as cigarette smoking, high blood pressure, high blood cholesterol, obesity, physical inactivity, poor nutrition, and diabetes. Even more

importantly, you can reduce your risk factors for heart disease and improve your heart health even if you already have heart disease. It is never too late to take action.

## What is Coronary Heart Disease?

Coronary heart disease is a disorder of the blood vessels of the heart that can lead to a heart attack. A heart attack happens when an artery becomes blocked, preventing oxygen



and nutrients from getting to the heart.

Although most people refer to this simply as heart disease, it is one of several cardiovascular diseases, or diseases of the heart and blood vessel system. Other cardiovascular diseases include stroke, high blood pressure, angina (chest pain), and rheumatic heart disease.

Many people believe that heart disease can be "cured" with surgery. This is a myth! Heart disease is a condition which is caused by years of underlying cellular dysfunction and this lack of function must be addressed if you hope to help the individual once again become healthy and well. While it's true that procedures such as bypass surgery and angioplasty can help blood and oxygen flow to the heart more easily, the arteries will continue to become damaged if the environment in which these cells function is not made healthy.

Damaged arteries increase the chances of having a heart attack or a stroke. A comprehensive plan to treat heart disease requires an approach which focuses not only on the cellular health of the heart, but also the health

of the individual as a whole. This is the approach we take at Nutritional Medicine Associates.

## Do You Have Heart Disease?

Research now confirms that a program based on blood testing, supplements, exercise, and nutrition can help lower your risk of developing cardiovascular disease.

Some of the latest research has found that knowing your risk factors for heart disease by monitoring such tests as the Ultrafast CT, VAP, C-reactive protein, Lp(a), and Homocysteine can provide highly valuable information that often times is a better predictor of heart disease than the standard tests we have relied on for years such as total cholesterol, LDL, and HDL values.

## Ultrafast CT info

This five-minute test can take up to 40 pictures of your heart between beats while patients remain fully clothed. The device moves in a circle around the body, allowing many different views of the same organ or structure, and providing much greater detail. The x-ray information is sent to a computer that interprets the data and displays it in 2-dimensional form on a monitor. While many images are taken during a scan, less radiation is received by the patient than with a single standard x-ray.

The images produced by the scan show early calcium buildup, or plaque, which appears as white specks in the walls of arteries. Left untreated, these specks can grow until they severely block the vessels leading to the heart.

By determining the amount of calcification, Dr. Harper can predict more accurately a person's risk of a cardiac event, such as a stroke or heart attack, over the next five years and follow the progression (or regression) of plaque in her patients to ensure that

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they are on a program to protect their heart.

### **The VAP**

Recent advances in science and technology have brought this once esoteric blood test into the mainstream of medicine, making it available to every person and at a price most people can afford. The VAP (vertical auto profile) is an indepth cholesterol profile once available only through your cardiologists or heart labs, but now available through Dr. Harper at Nutritional Medicine Associates.

The VAP shows not only your basic cholesterol, LDL and HDL levels, but also whether you are making the healthy types of LDL and HDL or the ones that will kill you. In addition, the VAP tells you about your Lp(a), or lipoprotein, count. High Lp(a) is an inherited abnormality that when elevated negatively impacts your heart by causing formation of plaque, blood clotting, and abnormal constriction of the arteries which can cause a stroke or heart attack.. High LP(a) is a potent cause of heart disease that is not evident through standard cholesterol testing but can lead to heart attack in women as early as in their mid-50s and in men as early as in their late 40s. Although usually unresponsive to many lifestyle modifications, nutrients such as niacin, flaxseed, raw almonds, l-carnitine, l-arginine, and omega-3 fatty acids— can help control this potent and often unrecognized cause of heart disease.

At Nutritional Medicine Associates these specific recommendations will be made for you as every individual can now have access to the in depth information they need to know to determine and manage their risk factors for heart disease.

### **C-reactive protein**

Clinical studies have found that screening for C-reactive protein (CRP) is important as a predictor of heart disease because CRP measures the

inflammatory potential of your body. Inflammation is the way the body responds to injury, and has been found to play a critical role in the development of arteriosclerosis, the process by which fatty deposits or plaque builds up in the lining of your arteries. In fact, CRP may be a stronger predictor of heart disease than LDL cholesterol level. High levels of CRP can predict new coronary events in patients with stable coronary artery disease. It can also predict the risk of future heart disease and vascular death in people without known cardiovascular disease. High CRP has been associated with increased vascular events in people with acute ischemic heart disease, stable angina and a history of heart attack.

### **Homocysteine levels**

Testing your homocysteine levels is another way to determine your risk of heart disease. Homocysteine is an amino acid in the blood, too much of which is related to an elevated risk of coronary heart disease in patients already at high risk. Homocysteine is also associated with stroke risk, peripheral vascular disease, osteoporosis and cancer. This important marker has also been found to be a predictor of the development of congestive heart failure in adults with no history of heart attack and predicts cardiac death in stable patients following premature heart attack.

### **Insulin**

It has long been observed that cardiovascular disease and diabetes have something in common, and that is a metabolic disturbance known as insulin resistance. Insulin is a hormone that regulates cellular nourishment. It is secreted when blood sugar levels go up as a result of eating carbohydrates (or over eating protein which turns into sugar). When cells become resistant to insulin cellular metabolism goes awry.

### **Testosterone**

Men with coronary artery disease have lower concentrations of

testosterone in their blood than those with normal heart health. Additionally, hypogonadism, a glandular disorder resulting in low testosterone levels, is twice as common in men with heart disease as in the general population. Low testosterone is also associated with risks for heart disease such as high LDL, low HDL and high triglycerides, as well as high blood pressure. Administration of testosterone also may help open up blood vessels, improve exercise tolerance, and reduce angina in men with coronary artery disease.

### **DHEA**

Epidemiological studies confirm the correlation between the levels of DHEA, (Dehydroepiandrosterone) in men and the risk of cardiovascular disease. Most recently, the Massachusetts Male Aging Study where authors found that men with the lowest levels of DHEA were 60% more likely to develop ischemic heart disease.

To read more about the tests available through Nutritional Medicine Associates that will help you to determine how healthy your heart is, [go to www.ruthieharper.com/labtest.pdf](http://www.ruthieharper.com/labtest.pdf).

### **What Nutritional Medicine Associates Can Do For You**

Although heart disease continues to be an epidemic, you can take steps to lower your risk. At Nutritional Medicine Associates, Dr. Harper will recommend appropriate blood testing. Following your in-depth blood evaluation she will evaluate your risk factors for heart disease and then customize a program specifically designed for you including an eating plan, exercise program, natural hormone replacement therapy, and nutrition supplement program. Together, we will get you on the road to optimal heart health. After all, doesn't your heart deserve it? ■



# Don't Blame Cupid!

It could be your testosterone.

If it seems that Cupid is using poison arrows lately and your valentine seems anything but sweet, adorable, and vivacious, then perhaps it's time for a testosterone level

check. While testosterone is a hormone more commonly associated with men, both men and women require the proper amount of testosterone for optimal health.

## Women and Testosterone

Reports show that over 50% of women report some type of sexual dissatisfaction, which may be attributed to testosterone deficiency. Many women suffer from a low testosterone level, but until recently they have either been reluctant to take testosterone or not been able to receive such treatment from their doctors. Myths surrounding testosterone therapy have scared women from taking this hormone and doctors from prescribing it. However, current research dispels the myth that testosterone will turn women into men and the other untruths that surround the controversy of treating women with testosterone.

According to Dr. Susan Rako, author of *The Hormone of Desire: The Role of Testosterone in Women*, testosterone triggers the events of puberty in girls as well as boys, including the growth of pubic hair, heightened sensitivity in the nipples and genitals, and increased sexual libido. Research published over 45 years ago concluded that androgens (primarily testosterone), rather than estrogens, are responsible for sexual desire in women and can improve a woman's mood, energy, leanness, joint health and cholesterol levels. Several studies have been conducted over the last decade and most have found testosterone supplementation to be safe and beneficial for women when given in the appropriate dosage levels.

Postmenopausal women produce substantially lower levels of testosterone, as well as estrogen. Despite the estrogen replacement often prescribed to these women, they continue to suffer from decreased libido,

arousability, and capacity for orgasm along with a lack of energy and sense of well-being if their testosterone levels are low. Studies show that testosterone provides relief for these symptoms and also provides a protective effect on the heart. Women who received testosterone replacement therapy were less likely to suffer from a heart attack or stroke.

## Men and Testosterone

A decade ago, testosterone was thought to be beneficial only for younger men who were deficient in this hormone. It was avoided in older men due to its association with age-related complaints of male-pattern baldness, urinary difficulties, and prostate cancer.

However, current research has shown that excess estrogen, rather than testosterone, may be the cause of these age-related complaints from men. In fact, an average 60-year-old man has more estrogen circulating in his blood stream than does the average woman of the same age which does not contribute to his physical health or well being. This reversal of hormones with high estrogen and low testosterone makes the role of testosterone replacement critical to consider in this age group of men.

Testosterone is vitally important for its muscle building effects as well as its effects on maintaining healthy cholesterol levels, protein synthesis, muscle mass, and bone density. It is also critical for sexual function including libido and erectile capability.

As men age and testosterone levels decrease, classic signs of testosterone deficiency—called andropause—frequently appear, including thinning hair, decreasing libido, increasing fat mass, declining muscle mass, and irritability or depression.

While optimal testosterone levels are needed to maintain muscle mass and bone strength, testosterone is also needed for cognition, sexual functioning, and even heart health. Multiple studies have confirmed that men who maintain optimal testosterone levels as they age have significantly fewer symptoms of mental senility when compared to men with low levels of testosterone.

Studies published in 2002 show that testosterone supplementation improves verbal

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memory, working memory, and visuospatial performance in elderly men. An even more recent study shows that elderly men who suffered from Alzheimer's disease had lower-than-expected levels of testosterone. The study authors are now investigating whether low testosterone levels precede cognitive dysfunction in men at risk for Alzheimer's. If they do, then testosterone replacement therapy could be warranted for men with lower-than-normal testosterone levels to potentially ward off Alzheimer's disease.

### **Male and Female Testing Panels**

The Male and Female Testing Panels at Nutritional Medicine Associates are a responsible way to begin to proactively take charge of your health. Dr. Harper and her staff will provide you with a panel of blood tests appropriate for your needs.

These panels are comprised of the most recent preventative and diagnostic tests, which also happen to be the best and most comprehensive screening tests capable of identifying many common and not so common conditions. They identify risk factors for future disease, and offer a clinical snapshot of your current physiologic well-being.

Both panels consist of a full chemistry and complete blood count (CBC) measuring 35 different blood components, including cholesterol and triglyceride levels, blood glucose, iron and mineral levels, kidney and liver function, and blood cell components.

The male and female panels also test for levels of total and free testosterone, DHEA-S (an indicator of adrenal cortical function), estradiol, homocysteine, and C-reactive protein. Both homocysteine and C-reactive protein, along with levels of cholesterol, are powerful predictors of cardiovascular disease.

The male panel also includes the PSA (prostate specific antigen) test, which is a very sensitive marker for prostate cancer. The female panel includes a test for progesterone levels, providing information concerning premenstrual

symptoms, perimenopause, and menopause.

To read more about male and female test panels provided by Dr. Harper and her staff at Nutritional Medicine Associates, please [click here](#).

### **Ways We Combat Testosterone Loss at Nutritional Medicine Associates**

#### **Physical Exercise**

Multiple studies show that regular, high-intensity exercise keeps both men and women's testosterone levels optimal. A 1999 study examined how the effects of heavy resistance training in both young (23 to 35 years old) and older (58 to 65 years old) men affected their testosterone levels. Both groups saw a statistically significant increase in testosterone levels after exercise. A more recent study published in 2001 also showed that strength training in middle-aged (44 to 48 years old) men increased levels of free testosterone.

#### **Protein**

Adequate protein consumption is vital to maintaining muscle mass in both men and women, and is also important in maintaining testosterone levels. A study published in 2000 examined the relationship between diet and SHBG, and found that "diets low in protein in elderly men [40-70 years old] may lead to elevated SHBG levels and decreased testosterone availability, which can lead to declines in sexual function and muscle and red cell mass, and contribute to the loss of bone density.

#### **Soy and fish oil**

Elderly men often see an increase in unhealthy levels of SHBG and estrogen via activity of the aromatase enzyme, which can lead to a net decrease in testosterone levels. Two recent Japanese studies have shown that men with high levels of soy intake had lower levels of estradiol (a form of estrogen) compared to men with lower levels of soy intake. Another Japanese study examined how the essential fatty acids EPA and DHA (found in high concentrations in fish) affected SHBG levels in men 43 to 88 years of age.

After controlling for other variables, the researchers concluded that both EPA and DHA decreased levels of SHBG in middle-aged and elderly men which increase their levels of free testosterone.

#### **Indol-3-carbinol**

An adequate intake of indole-3-carbinol (I3C), through vegetables such as broccoli, Brussels sprouts, and cabbage, or via supplements, may prove to be very helpful for aging men in both keeping estrogen levels in check and decreasing their risk of prostate cancer. Studies have demonstrated that I3C increases the ratio of 2-hydroxyestrone to 16-alpha-hydroxyestrone, thereby causing a decrease in the "bad" estrogen and an increase in the "good" estrogen. For men, this very well might mean a decrease in prostate cancer and for women a decrease in estrogen-related cancers.

Dr. Harper has created a clinically tested product called **Hormone Defense** to optimize the hormonal balance in both men and women's bodies. This product is a combination of I3C and DIM (the beneficial ingredients that come from cruciferous vegetables) along with a proprietary blend of extracts from broccoli, cauliflower and Brussels sprouts.

#### **Zinc**

Zinc is involved in almost every aspect of male reproduction, including testosterone metabolism, sperm formation, and sperm motility. Multiple studies have demonstrated the effectiveness of zinc in treating male infertility due to low testosterone levels.

Zinc was illustrated in a study of 37 infertile men with decreased testosterone levels and associated low sperm counts. The men were given 60 mg of zinc daily for 45-50 days. In 22 patients, testosterone levels significantly increased and mean sperm count rose from 8 million to 20 million.

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## Natural Hormone Replacement

When our natural hormone production declines, people can now choose to replace them with bioidentical hormones or natural hormones. According to several studies, the natural hormones that are properly replaced can provide both men and women with a drastic improvement in their emotional, physical, and sexual well-being without the tragic side effects produced by synthetic hormones.

Unlike synthetic hormones, the molecular structure of bioidentical hormones is identical to the hormones made in the human body. An added advantage of natural hormone therapy is that it can be used by men and women who may be experiencing hormonal decline but have yet to pass into menopause or andropause (male menopause).

### Why Is There So Little Emphasis on Bioidentical Hormones?

The reason natural hormones do not have the research to support the claim that they are superior to synthetic ones is because natural substances cannot be patented and therefore pharmaceutical companies cannot make the desired

huge profits off of bioidentical hormones. That's right; anything that is innate to the body such as vitamins, nutrients and natural hormones cannot be patented. Therefore, funding for the large-scale trials is impossible to secure.

Drug companies are not willing to conduct expensive long term studies on the benefits of bioidentical hormone replacement therapy because the return on their investment is not there. Some studies have shown the bioavailability and overall value of natural HRT, but natural hormone researchers have not had the funding to compete with the large pharmaceutical company-funded studies. It's as simple as that.

Unfortunately, the term hormone replacement therapy is often used synonymously when prescribing bioidentical hormones vs. prescribing drug-like hormones, and that can be very confusing for the consumer. Because of this confusion, thousands of men and women are now unnecessarily forgoing the many benefits of hormone replacement therapy due to the concern regarding life-threatening side effects of synthetic hormone replacement drugs.

## What Can Natural Hormone Replacement Therapy Do For You?

For men, and women, who are hormone-deficient, natural hormone replacement therapy can greatly improve their quality of life.

Hormones are a critical part of a healthy functioning body. Men and women can maintain their health, vitality, sharpness, and sexual drive as their hormones decline in their 40's and beyond. Getting older can now be associated with quality of life and freedom to do the things that you love.

### How Is Hormone-Deficiency Diagnosed?

If you suspect you might have an imbalance of hormones, you should first get a blood panel drawn to evaluate the various levels of hormones in your body. Discuss your symptoms and the information from the blood panel with Dr Harper so that she can evaluate your health and provide you with a prescription for natural hormone replacement therapy if it's appropriate for you. ■

## What You Missed at January's No Nip/Tuck Night

Our first No Nip/Tuck Night was fun and successful! Attendees received exclusive offers, a chance to win prizes and heard Dr. Harper discuss microdermabrasion's role in skin care including:

- When we are young, our skin turns over every 28 days. As we age this process slows to greater than 50 days. Microdermabrasion helps to return the turnover of your skin to this more youthful rate. This leads to a reduction in fine lines, wrinkling, hyperpigmentation and creates luminescent, radiant skin. **Replenish** exfoliation formula lengthens the beneficial effects of Microdermabrasion.
- Microdermabrasion stimulates collagen synthesis- specially when used in conjunction with skincare products like **Waterless Vitamin C** and **Nourish** – Oxygenation and Circulation formula.
- Microdermabrasion allows all of our cosmeceutical products to work better because they are better able to penetrate and be absorbed by the skin.
- Attendees received an extra 10% off our January Microdermabrasion special for a total discount of 20% off microdermabrasion packages. One lucky attendee was drawn and won a free Microdermabrasion.

Don't miss our next **No Nip/ Tuck Night**, February 28th, 5:30 to 6:30 pm. No Nip/Tuck Night happens each month on the last Tuesday - so mark your calenders! Come and bring a friend for special **give aways** and **prizes**.