

Life Extension Magazine May 2010

AS WE SEE IT

Why Estrogen Balance is Critical to Aging Men

By William Faloon

When we started offering comprehensive **blood test** panels back in **1996**, men did not understand why we were checking their **estrogen** levels. Back in those days, estrogen was considered a hormone of importance only to women.

We tested estrogen based on published data indicating that when estrogen levels are unbalanced, the risk of degenerative disease in aging men skyrockets.¹⁻⁷ Of concern to us 14 years ago were reports showing that excess estrogen contributes to the development of **atherosclerosis**.^{8,9} Human clinical studies conducted more than a decade later confirmed our suspicions. Men with even slightly elevated estrogen levels doubled their risk of **stroke** and had far higher incidences of **coronary artery disease**.¹⁰⁻¹² Our early observations also revealed that men presenting with **benign prostate enlargement** or **prostate cancer** had higher blood estrogen levels (and often low free testosterone blood levels).¹³⁻¹⁶ Subsequent clinical studies help confirm our early observations.¹⁷⁻²¹



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Insufficient estrogen, on the other hand, predisposes men to **osteoporosis** and **bone fracture**.^{22,23}

The fact that **99%** of men today have no idea what their blood **estrogen levels** are helps explain the epidemic of **age-related disease** that is bankrupting this nation's medical system.

NEW STUDY PUBLISHED IN THE *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*

Conventional doctors tend to ignore hard science until it appears in their own medical journals.

A study published in the *Journal of the American Medical Association* (JAMA) measured blood estradiol (a dominant estrogen) in **501** men with chronic heart failure. Compared to men in the balanced estrogen quintile, men in the lowest estradiol quintile were **317%** more likely to die during a 3-year follow-up, while men in the highest estradiol quintile were **133%** more likely to die.²⁴

The men in the *balanced* quintile—with the fewest deaths—had serum **estradiol** levels between **21.80** and **30.11** pg/mL. This is virtually the ideal range that *Life Extension*® has long recommended male members strive for.

The men in the highest quintile who suffered **133%** increased death rates had serum estradiol levels of **37.40** pg/mL or above. The lowest estradiol group that suffered a **317%** increased death rate had serum estradiol levels under **12.90** pg/mL.

The dramatic increase in mortality in men with unbalanced estrogen (i.e., estradiol levels either too high or too low) is nothing short of astounding. It uncovers a gaping hole in conventional cardiology practice that is easily correctable.

This study revealing the lethal dangers of estrogen imbalance was published in conventional medicine's Bastille of knowledge—the *Journal of the American Medical Association*. Physicians no longer have a basis to question male *Life Extension*® members who take aggressive approaches to maintain their **serum estradiol** levels in *optimal* ranges.

LOW ESTRADIOL AND TESTOSTERONE PREDICT MORTALITY IN AGING MEN

Sales of **testosterone replacement drugs** have surged more than 20-fold in response to studies linking low testosterone to a host of common maladies.

In a recent study of **3,014** men aged 69-80 years, serum levels of testosterone and estradiol were measured during a mean follow-up of 4.5 years. Men with low **testosterone** had **65%** greater all-cause mortality, while men with low estradiol suffered 54% more deaths.²⁵

Those men low in estradiol and testosterone were almost twice as likely to die (a 96% increase in mortality) compared to men in the optimal ranges.²⁵

This large study of aged men corroborates prior published reports linking imbalances of testosterone and/or estradiol with greater incidences of degenerative disease and death.²⁶⁻³⁶

HOW DO MEN NATURALLY MAKE ESTROGEN?

Women synthesize most of their estrogen in their **ovaries** and other reproductive tissues.

Since men lack this female anatomy, they need to produce estrogen through a process involving an enzyme called *aromatase* that transforms **testosterone** into **estradiol**.

Aging men sometimes have too much **aromatase** activity, which causes their testosterone to convert to excess estradiol. This results in *depletion* of vital testosterone while *spiking* estradiol to unsafe ranges.

Some men lack **aromatase** and suffer an estrogen deficit. Other men produce so little endogenous testosterone that there is not enough to convert into estrogen, which causes low levels of both **free testosterone** and **estradiol**.

Fortunately, no matter what the underlying cause, aging men can easily achieve *optimal free testosterone* and **estradiol** serum levels.



Free testosterone is the unbound form that is biologically available to cell receptor sites throughout the body. Measuring **free testosterone** blood levels is the most accurate way of assessing testosterone status in aging men.

HOW AGING MEN CAN CONTROL THEIR ESTROGEN LEVELS

An epidemic problem we at **Life Extension** observe in aging male members is insufficient free testosterone, i.e., less than **15-20** pg/mL of serum. When accompanied by excess estradiol (over 30 pg/mL of serum), this can signal excess aromatase enzyme activity.

Excess *aromatase* robs men of their **testosterone** while exposing them to higher than desirable **estradiol**.³⁷ *Aromatase* can be suppressed with *absorbable* forms of **chrysin** (a plant flavonoid) and/or **lignans** such as those extracted from the Norway spruce tree (HMRlignan™).³⁸⁻⁴²

If these nutrients fail to reduce estradiol adequately, then we suggest that men ask their doctor to prescribe an *aromatase-inhibiting* drug like **Arimidex®** in the very low dose of **0.5 mg** twice a **week**.

When *aromatase* is properly suppressed, **estradiol** levels are reduced to safe ranges, while **free testosterone** often increases, since less testosterone is being aromatized into estradiol.

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WHY SOME MEN NEED TOPICAL TESTOSTERONE CREAMS

Most **testosterone** in a man's body emanates from the testes. Aging results in a *decline* in testicular output, thus necessitating the topical application of a **testosterone cream** to restore this vital hormone to youthful levels. Ideal **free serum testosterone** levels for most aging men are between **20-25** pg/mL.

As you may surmise, a man who produces too little testosterone risks a lethal deficiency of both **free testosterone** and **estradiol**. That's because men need testosterone to synthesize estradiol in their bodies. In the presence of *insufficient* testosterone production, some aging men are vulnerable to low **free testosterone** and low **estradiol** that according to the latest study almost doubles their risk of dying over a 4.5 year period!²⁵

CRITICAL IMPORTANCE OF BLOOD TESTING

Today's conventional physicians prescribe **blood tests** to check glucose, cholesterol, and triglycerides, but rarely check their male patients' **free testosterone** and **estradiol** levels.

When looking at the horrific-ally high **mortality** rates associated with **imbalances** of these critical hormones, it becomes strikingly apparent that a significant number of heart attacks, strokes, bone fractures, and other degenerative diseases are easily preventable.

One reason these hormone blood tests are not normally prescribed is their high retail cost, and the fact that many insurance companies refuse to pay for them.

As a member of the **Life Extension Foundation®**, you don't have to be victimized by conventional medical ignorance, high prices, or insurance company indifference.



TAKE CHARGE OF YOUR HEALTH WITH LOW-COST BLOOD TESTING

An all-inclusive blood test panel that includes **free testosterone** and **estradiol** can retail for **\$1,000** at commercial labs. Life Extension members can obtain these same tests for only **\$269**.

If your blood test result reveals an imbalance of **free testosterone** and/or **estradiol**, you are in a position to initiate immediate corrective action. Not only can restoring youthful hormone balance *save* your life, but men (and women) often experience an enhancement in their *quality* of life after their hormones are adjusted to optimal ranges.

A complete description of the **Male and Female Blood Test Panels** can be found on this site. As you'll readily see, these panels contain many important tests (such as homocysteine, C-reactive protein, and DHEA) that mainstream doctors seldom check for.

When you order these tests, a requisition form is sent listing blood drawing stations in your local area. Appointments are usually not necessary, meaning you can have your blood drawn at your convenience.

To order a comprehensive Male and/or Female Blood Test Panel, just call **1-800-208-3444**. It is the single most important step you can take to ensure your continued good health.

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