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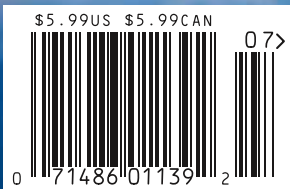
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July 2026

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**References:** 1. *Antioxidants (Basel)*. 2021 Jun 3;10(6):906. 2. *Int J Mol Sci*. 2024 Jun 20;25(12):6765. 3. *Int J Mol Sci*. 2023 Jan 30;24(3):2585. 4. Data on File. Manuscript in prep: 2025. FenuMat® is a registered trademark of Akay Group.

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## REPORTS



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**NMN** is an effective, lower-cost way to support **NAD<sup>+</sup>**. Clinical trials show that **NMN** significantly *increases* circulating levels of **NAD<sup>+</sup>** in older adults.



### 34 **COLORECTAL CANCER: A GROWING THREAT TO YOUNGER ADULTS**

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In a clinical study, two **plant extracts** *increased hair growth* for **95%** of men with male pattern baldness. In a separate trial, another plant extract *decreased hair loss* by **29%**.



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Recent studies show **ApoB** levels more accurately *estimate atherosclerotic disease* risk than **LDL** cholesterol levels alone. Experts advise testing *both ApoB and LDL* to assess risk, and monitor medication effectiveness.

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Elevated **ApoB** *increases cardiovascular disease* risks. **ApoB** blood tests provide a more complete picture of cardiovascular risk and allow for corrective actions before a cardiovascular event strikes.

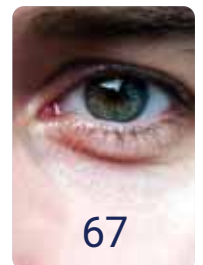
### 15 **IN THE NEWS**

Higher folate and vitamin D levels protect against mortality risk from plasticizer chemicals;

higher carotenoid levels linked to lower mortality among cancer survivors; magnesium reduced mortality among ICU respiratory distress patients; testing and rebalancing two hormones may improve sleep.

### 67 **WHAT IS SAFFRON?**

Compounds in **saffron** help *balance mood* and *improve eye health*. Also, a saffron extract decreased snacking by **55%** and *promoted weight loss*.



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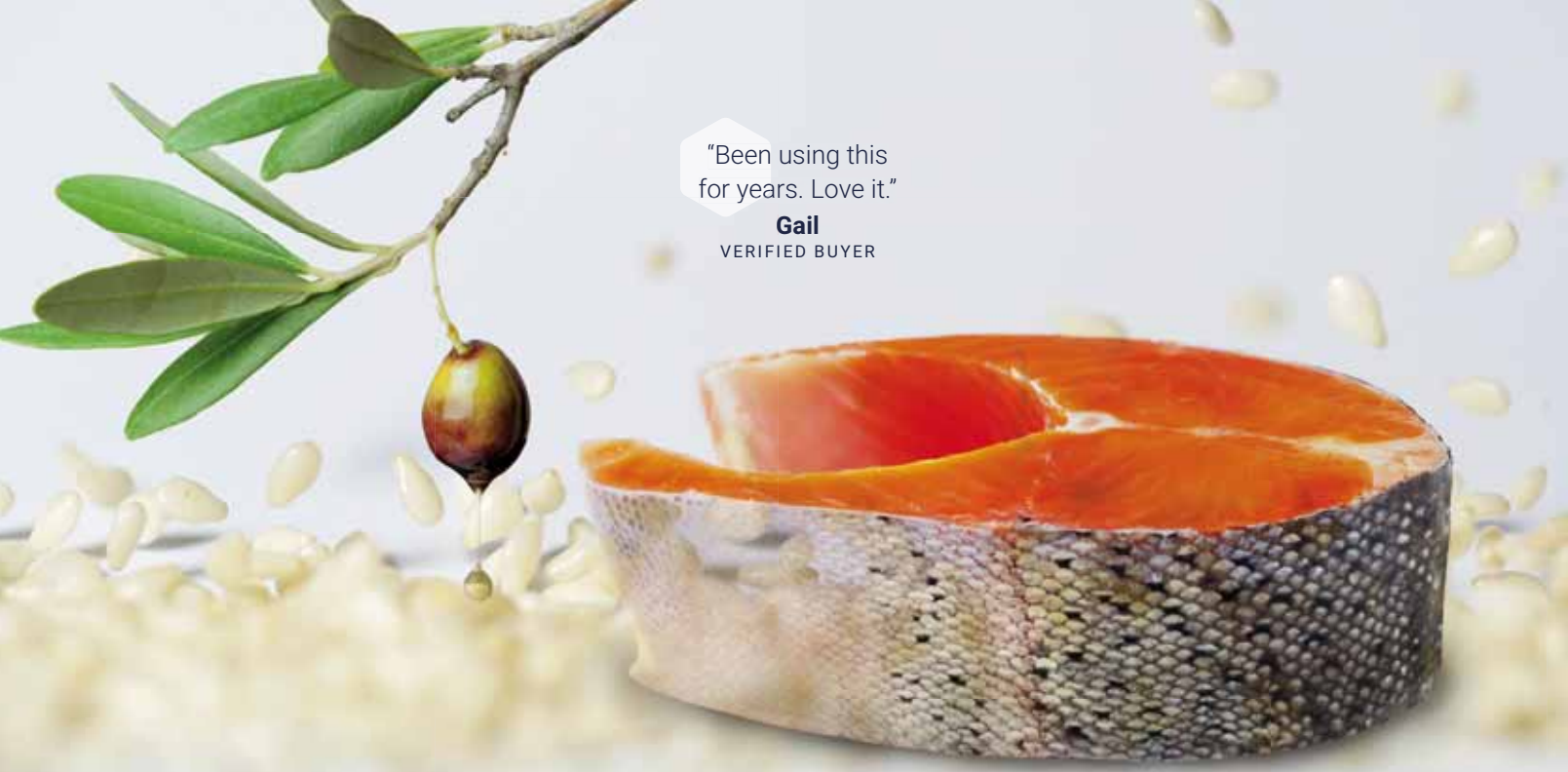
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# Neutralize a Harsh Reality

BY WILLIAM FALOON



**Atherosclerosis** is one of the leading causes of **morbidity** and **mortality** in individuals over the age of **65**.<sup>1,2</sup>

The medical literature shows that atherosclerosis underlies the majority of heart disease, cerebrovascular disease, and peripheral arterial disorders.<sup>1,2</sup>

Coronary artery disease,<sup>3</sup> driven by **atherosclerosis**, is the leading cause of **cardiovascular death** in older adults.<sup>3-5</sup>

Complications include **heart failure**<sup>4,6</sup> and **arrhythmia**,<sup>7,8</sup> which are major contributors to morbidity, loss of independence, and impaired quality of life.<sup>9</sup>

The prevalence of **coronary atherosclerotic** lesions in people just over **50** years old may be extremely **high**.<sup>10</sup>

A study on over 2,000 people living in South Florida, whose average age was **53**, showed that about **half** had **plaque** in their **coronary arteries**.<sup>10</sup>

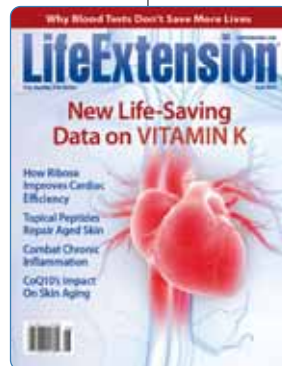
The question is what can be done to halt and partially **reverse** this?

Arterial clogging begins *early* in life but does not usually manifest symptomatically until later years.<sup>11</sup> By that time, there is systemic arterial damage that often requires aggressive steps to correct.

Based on current evidence, some physicians are aggressively **lowering** the recommended levels of a major cause of **atherosclerosis** in their patients.

This risk factor is called **apolipoprotein B** (ApoB).<sup>12</sup>

There is no debate that elevated **ApoB** increases cardiovascular disease risks.



I wrote about this in the **June 2019** issue of **Life Extension Magazine**<sup>®</sup>, and we added ApoB to our comprehensive blood test panels long ago.<sup>13</sup>

The consensus is that optimal ApoB ranges are under **90 mg/dL** for primary prevention and below **60 mg/dL** for higher-risk patients.<sup>13,14</sup>

Some argue **ApoB** recommendations should be even lower, especially for high-risk individuals. About half of people over age **50** may have **coronary atherosclerotic** lesions...and thus are potentially **high-risk** individuals, especially if they live long enough.

Most readers of **Life Extension Magazine**<sup>®</sup> practice healthy longevity via diet, exercise, supplements, and appropriate use of medications. It is also important to reduce **ApoB** blood levels if elevated.

This editorial succinctly describes differing views of the published clinical data in an effort to identify ideal ApoB levels to protect against cardiovascular diseases.

There has been a long-standing debate regarding the atherogenic properties of elevated **cholesterol**.

There is also a debate about the value of **ApoB** testing, the results of which many argue can be inferred from LDL cholesterol results. (Some believe that those with low LDL are also likely to have low ApoB.)

**ApoB** is a protein found on the surface of all non-HDL-carrying lipoproteins in the blood, such as LDL and VLDL. ApoB is a critical element that makes **lipoprotein** particles **atherogenic**, meaning they can cause atherosclerosis.<sup>12,15</sup>

ApoB-containing particles can enter the walls of arteries. Once inside, they tend to get stuck, especially in areas where the artery wall is damaged or inflamed. This trapping is a critical step in the development and progression of **atherosclerosis**.

The more **ApoB**-containing particles present in the blood, the more likely they are to accumulate in the artery wall, leading to the buildup of plaques which can grow, become inflamed, and eventually block blood flow, rupture, or erode, causing heart attacks or strokes.<sup>15</sup>

What this means is that while the effects of elevated **cholesterol** have been fiercely debated, the insidious role of elevated **ApoB** is often overlooked.

### The Benefits of Lowering ApoB

Clinical trial data and ongoing studies indicate that for those at high risk of cardiovascular disease, achieving very low **ApoB** using newer lipid-lowering agents is

feasible and generally safe, but long-term outcome data remains limited.<sup>16,17</sup> We have much more data when it comes to reducing LDL to very low levels.<sup>14</sup>

Interventional data that targets lowering **ApoB** levels is limited. But there are some studies using **PCSK9 inhibitors**, which are medications primarily recommended for high cardiovascular risk patients who are not achieving lipid targets with statin therapy alone.<sup>14</sup>

Two randomized controlled trials found that adding the PCSK9 inhibitors **evolocumab (Repatha®)** or **alirocumab (Praluent®)** to statin therapy significantly reduced **ApoB** levels, achieving mean ApoB concentrations roughly below **50 mg/dL**.<sup>14,16,17</sup>

These studies have demonstrated that rigorous lipid-lowering with these drugs may have a small effect at reducing major adverse cardiovascular events in high-risk populations without a safety concern. However, there is a lack of long-term outcome data specifically for sustaining **ApoB** at this low level.

### Can Atherosclerosis be Reversed?

Aggressively lowering **ApoB** and/or **LDL** in people with elevated atherogenic lipids is more effective at reducing the lifetime cardiovascular risk when initiated during *young* adulthood rather than later in life. This is because early exposure drives a greater burden of atherosclerosis and adverse cardiovascular events over decades.<sup>18</sup>





The degree of plaque regression is proportional to the extent of LDL- and ApoB-lowering, as demonstrated in intravascular ultrasound studies and clinical trials.<sup>19,20</sup>

Complete regression is not consistently achieved in all patients, especially those with established, advanced disease.

A meta-analysis of randomized controlled trials in patients with high cardiovascular risk or atherosclerosis compared intensive lipid-lowering therapy achieving LDL cholesterol **<40 mg/dL** with therapy achieving higher **LDL levels (>40 mg/dL)**. Very low LDL levels were associated with fewer major adverse cardiovascular events and no increase in serious adverse events.<sup>21</sup>

However, not all patients treated with statins to achieve low LDL levels (**<70 mg/dL**), or even the very low levels (**<40 mg/dL**) achievable with a combination of statins and a PCSK9 inhibitor, will experience plaque regression. This may be due, in part, to other atherogenic factors such as elevated **glucose-A1C** and **C-reactive protein (CRP)**.<sup>22,23</sup>

Gaining control over all atherogenic risks is the best we can do to mitigate the risk of cardiovascular disease... today's leading cause of disability and death. Elevated ApoB is one of these major risks.

### What I am Doing to Reduce Cardiovascular Risks

If we could travel back in time to our youth and avoid secondhand smoke and atherogenic foods, exercise more, avoid early-life weight gain, maintain lower blood

pressure, and take corrective actions where needed, atherosclerotic diseases would likely be a rarity.<sup>24</sup>

I envy *younger* people who have a lower rate of exposure to artery-damaging tobacco smoke. For many however, poor dietary habits and lack of corrective interventions will likely doom them to atherosclerotic risks that people over 65 face today (**90%** of men).<sup>25</sup>

The chart below is consistent with what I achieved over the past several years as it relates to suppressing ApoB (and CRP).

Whether you target these very low ApoB numbers is a personal choice. However, a growing body of expert guidance, including the **2024 National Lipid Association Expert Clinical Consensus**, is aiming for **ApoB below 90 mg/dL** in adults with borderline to intermediate risk. This lower level is associated with lower cardiovascular risk and has not been linked to adverse effects.<sup>14</sup>

Bill Faloon's Most Recent CRP and ApoB Results					
LAB RESULTS					
Last Name	Lab ID	Specimen Number	Time Collected	Date Entered	Time Reported
FALOON			3/20/2026 12:00 AM	3/21/2026	3/25/2026 10:26 AM
First Name					
WILLIAM					
Test		Result		Reference Test	
Apolipoprotein B (ApoB)		27 mg/dL		<90 mg/dL	
C-reactive protein (hs-CRP)		<0.20 mg/dL		0.00-3.00 mg/L	
These levels are lower than conventional recommendations.					
Ask Your Doctor to include hs-CRP and ApoB in Your Next Blood Test Panel					

### Neutralize Harsh Realities with Comprehensive Blood Tests

Normal aging often results in dyslipidemia, which is the abnormal levels of artery-damaging lipids, including apolipoprotein B (ApoB).<sup>24</sup>

This contributes to the surge of ischemic **stroke** and **heart** disease older people confront.<sup>24,26</sup>

Early comprehensive **blood testing** reveals an opportunity to take corrective actions before a major medical event strikes.<sup>27,28</sup>

Many of the nutrients you already take, along with healthy dietary choices, have significant cardiovascular protecting properties.

But if a **blood test** result detects even a single risk factor, interventions using conventional and/or complementary approaches are highly recommended.



The graphic below my signature is used in my live presentations urging people not to think that avoiding a diagnostic or treatment will enable their problem to disappear.

You can view our **Male and Female Blood Test Panels** available at annual **super sale** pricing on the next page.


For longer life,



William Faloon, Co-Founder  
Life Extension

This Does Not Work!

Ignoring a sign/symptom of a disease...or avoiding diagnostics/treatment **does not** prevent the onset and progression of degenerative illnesses.



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# Comprehensive Blood Tests at Low Lab Sale Prices



Commercial labs charge around **\$3,000** for **blood tests** needed to evaluate cardiac, inflammatory, immune, and other degenerative risk factors.

**Life Extension** offers these same tests for **\$243** when the **Male** or **Female Panel** is ordered during the annual **Lab Test Sale**.

This represents a savings of about **90%** compared to commercial labs.

**Regular Price: \$325**  
**Sale Price: \$243**

**LAB TEST SALE**  
**ENDS JULY 13, 2026**

To obtain these extensive **Male** or **Female Panels** at these low prices, call **1-800-208-3444** or visit [www.LifeExtension.com/LabSale](http://www.LifeExtension.com/LabSale) to order your requisition forms.

## MALE PANEL

### CARDIOVASCULAR MARKERS

**Apolipoprotein B (ApoB)**  
**C-Reactive Protein** (high sensitivity)  
**Homocysteine**  
**Total Cholesterol**  
**LDL** (low-density lipoprotein)  
**HDL** (high-density lipoprotein)  
**Triglycerides**

### GLUCOSE PROFILE

**Insulin**  
**Hemoglobin A1c**  
**Glucose**

### VITAMIN D

(25-hydroxyvitamin D)

### ORGAN FUNCTION

**Kidney:** creatinine, BUN, uric acid, BUN/creatinine ratio  
**Liver:** AST, ALT, LDH, GGT, bilirubin, alkaline phosphatase  
**Blood proteins:** albumin/globulin ratio, total protein

### HORMONES

**Free and Total Testosterone**  
**DHEA-S**  
**Estradiol** (an estrogen)  
**TSH** (thyroid function)  
**Cortisol**  
**SHBG**

### MINERALS

**Magnesium** (serum)  
**Ferritin** (measure of iron status)  
**Calcium**  
**Potassium**  
**Phosphorus**  
**Sodium**  
**Iron**  
**Chloride**

### COMPLETE BLOOD COUNT (CBC)

**Immune Cells including:** lymphocytes, monocytes, eosinophils, neutrophils, basophils  
**Red Blood Cells including:** hemoglobin, hematocrit, MCV, MCH, MCHC, RDW  
**Platelets**

### CANCER MARKER

**PSA (Prostate Specific Antigen)**

After you order and receive our form, you can visit a blood-draw facility we suggest at your convenience in your area or the **Life Extension Health & Wellness Market** in Ft. Lauderdale.

## FEMALE PANEL

### CARDIOVASCULAR MARKERS

**Apolipoprotein B (ApoB)**  
**C-Reactive Protein** (high sensitivity)  
**Homocysteine**  
**Total Cholesterol**  
**LDL** (low-density lipoprotein)  
**HDL** (high-density lipoprotein)  
**Triglycerides**

### GLUCOSE PROFILE

**Insulin**  
**Hemoglobin A1c**  
**Glucose**

### VITAMIN D

(25-hydroxyvitamin D)

### ORGAN FUNCTION

**Kidney:** creatinine, BUN, uric acid, BUN/creatinine ratio  
**Liver:** AST, ALT, LDH, GGT, bilirubin, alkaline phosphatase  
**Blood proteins:** albumin/globulin ratio, total protein

### HORMONES

**Progesterone**  
**Free and Total Testosterone**  
**DHEA-S**  
**Estradiol** (an estrogen)  
**TSH** (thyroid function)  
**Cortisol**  
**SHBG**

### MINERALS

**Magnesium** (serum)  
**Ferritin** (measure of iron status)  
**Calcium**  
**Potassium**  
**Phosphorus**  
**Sodium**  
**Iron**  
**Chloride**  
**CO2**

### COMPLETE BLOOD COUNT (CBC)

**Immune Cells including:** lymphocytes, monocytes, eosinophils, neutrophils, basophils  
**Red Blood Cells including:** hemoglobin, hematocrit, MCV, MCH, MCHC, RDW  
**Platelets**

Lab tests are available in the continental United States and Anchorage, AK, only. Not available in Maryland.

Restrictions apply in MA, NY, NJ, and RI. Kits not available in PA. The Lab Test Sale expires on **July 13, 2026**.



# Annual Lab Test SALE

## Through July 13, 2026

Save **25%**  
on ALL Lab Tests

**Over 250 Labs to choose from.**  
Find Out if You're at Risk for Heart Disease,  
Cancer, Alzheimer's, Diabetes & More.

## 1-2-3 EASY

### How it works:

**ORDER**  
Call 1- 800-208-3444 or visit  
[LifeExtension.com/LabSale](http://LifeExtension.com/LabSale)

**DRAW**  
For your blood draw, bring the requisition we send you to your nearest Quest Diagnostics location. Nearest locations are included with your requisition paperwork. At-Home tests (denoted by \*) are collected in the convenience of your home.

**REVIEW**  
Go over results **for free** with our Wellness Specialists by calling 1-800-226-2370. You may wish to review them with your doctor as well.

**IT'S THAT SIMPLE!  
DON'T DELAY! CALL TODAY!**

**For Our Local Customers:**

For those residing in the Ft. Lauderdale, Florida, area, blood draws are also performed at the Life Extension Wellness Market from 9 a.m. to 2 p.m. Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is:

**900 NORTH FEDERAL HIGHWAY  
FT. LAUDERDALE, FL, 33304**

**Terms and Conditions**

This lab-test service is for informational purposes only and no specific medical advice will be provided. National Diagnostics, Inc., and Life Extension contract with a physician who will order your test(s), but will not diagnose or treat you. Both the physician and the testing laboratory are independent contractors and neither National Diagnostics, Inc., nor Life Extension will be liable for their acts or omissions. Always seek the advice of a trained health professional for medical advice, diagnosis, or treatment. When you purchase a blood test from Life Extension/National Diagnostics, Inc., you are doing so with the understanding that you are privately paying for these tests. There will be absolutely no billing to Medicare, Medicaid, or private insurance.

	REGULAR PRICE	SALE PRICE
<b>MALE AND FEMALE PANELS</b>		
<p>○ <b>MALE PANEL (QD322582)</b> <span style="color: red; font-weight: bold;">NEW</span> <i>Now includes SHBG</i>  <b>CBC/Chemistry/Lipids Panel</b> • DHEA-S • PSA (prostate-specific antigen)            • Homocysteine • C-Reactive Protein (high sensitivity) • ApoB • Cortisol • SHBG            • Free Testosterone • Total Testosterone • Estradiol • TSH for thyroid function            • Vitamin D (25-hydroxyvitamin D) • Hemoglobin A1c • Insulin • Magnesium</p>	<del>\$325</del>	<b>\$243</b>
<p>○ <b>FEMALE PANEL (QD322535)</b> <span style="color: red; font-weight: bold;">NEW</span> <i>Now includes SHBG</i>  <b>CBC/Chemistry/Lipids Panel</b> • DHEA-S • Estradiol • ApoB • Cortisol • SHBG            • Homocysteine • C-Reactive Protein (high sensitivity) • Progesterone            • Free Testosterone • Total Testosterone • TSH for thyroid function            • Vitamin D (25-hydroxyvitamin D) • Hemoglobin A1c • Insulin • Magnesium</p>	<del>\$325</del>	<b>\$243</b>
<b>HEART HEALTH</b>		
<p>○ <b>CARDIO CORE ESSENTIALS (QD100086)</b>            Essential cardiovascular risk factors provide a low-cost analysis of your heart and vascular function. CBC • Chem/Metabolic Panel            • Lipid/Cholesterol Profile • ApoB • C-Reactive Protein (high sensitivity)</p>	<del>\$99</del>	<b>\$74.25</b>
<p>○ <b>NMR LIPID PANEL (QD123810)</b>            The NMR Lipid Panel directly measures LDL and HDL particle size and number as well as VLDL particle size. Also includes a standard lipid panel.</p>	<del>\$95</del>	<b>\$71.25</b>
<p>○ <b>NMR PLUS LIPID PANEL (QD100049)</b>            In-depth analysis of cardiovascular risk markers including: NMR Lipid Panel, C-Reactive Protein, Myeloperoxidase, Oxidized LDL, and standard lipid panel markers.</p>	<del>\$269</del>	<b>\$201.75</b>
<p>○ <b>OXIDIZED LDL (QD092769)</b>            Oxidized low-density lipoprotein (LDL) cholesterol is one of the main causes of the formation of atherosclerotic plaque in the arterial wall. This blood test measures levels of oxidized LDL.</p>	<del>\$75</del>	<b>\$56.25</b>
<p>○ <b>MYELOPEROXIDASE (MPO) (QD092814)</b>            The myeloperoxidase (MPO) test measures levels of an enzyme that oxidizes low-density lipoprotein (LDL) cholesterol, which could lead to increased arterial plaque formation.</p>	<del>\$129</del>	<b>\$96.75</b>
<p>○ <b>OMEGA-3 INDEX COMPLETE* (LC100066)</b>            Beneficial for everyone! People <u>not</u> taking omega-3/fish oil should check their baseline Omega-3 Index to see if it is in the desirable or concerning range. Those taking Omega-3/fish oil supplements should take the test to see if they need to adjust their dosage. You want to target a range of <b>8%-12%</b> for your Omega-3 Index score.</p>	<del>\$99</del>	<b>\$74.25</b>
<b>CONDITION-SPECIFIC TESTS</b>		
<p>○ <b>PERSONALIZED AMINO ACID HEALTH ASSESSMENT* (LC100090)</b>            An in-depth analysis of amino acid metabolism provides insight into various health concerns, such as maldigestion, GI dysbiosis, neurological issues and more, with a personalized report of diet and supplementation suggestions. Provided as an at-home urine collection kit.</p>	<del>\$299</del>	<b>\$224.25</b>

# Know YOUR NUMBERS



**NEW** Now Includes *H. Pylori* Stool Antigen

- |  | REGULAR PRICE    | SALE PRICE      |
|--|------------------|-----------------|
| ○ <b>GI360™ ** STOOL ANALYSIS (LC100088)</b><br>Best and most advanced assessment of microbiome dysbiosis, diversity and digestive health, the GI360™ provides the most information about gut and microbiome health. Contains all the tests included in the CPP and CSAP along with cutting-edge markers of microbiome diversity and dysbiosis.  | <del>\$599</del> | <b>\$449.25</b> |
| ○ <b>TOXIC &amp; ESSENTIAL METALS PROFILE* (24-HOUR URINE) (LC900013)</b><br>Deep dive into both the body's toxic metal burden and nutritional status. Measures 20 toxic and 18 nutritional elements.  | <del>\$169</del> | <b>\$126.75</b> |
| ○ <b>NEUROTRANSMITTER PANEL-COMP.*† (LC100085)</b><br>Serotonin, Dopamine, Epinephrine, Norepinephrine, GABA, Glutamate, Glycine, Histamine, PEA, DOPAC, 3-MT, Normetanephrine, Metanephrine, 5-HIAA, Tryptamine, Tyrosine, Tyramine, Taurine. Alterations in neurotransmitters play a significant role in contributing to symptoms such as cognitive disorders, depression, anxiety, diminished drive, fatigue and sleep difficulties, craving, addictions, pain, and more. | <del>\$375</del> | <b>\$281.25</b> |
| ○ <b>OPTIMAL WELLNESS GENETIC INSIGHTS PROFILE* (LC100097)</b><br>Analyzes genetics in 7 key areas of health (methylation, neurotransmitters, mitochondrial health, detoxification, inflammation, and more) and provides genetically targeted nutritional suggestions.   | <del>\$299</del> | <b>\$224.25</b> |
| ○ <b>APOE GENETIC TEST FOR ALZHEIMER'S AND CARDIAC RISK* (LC100059)</b><br>This simple at-home cheek swab reveals your ApoE genotype and association with risk of Alzheimer's and cardiovascular disease.  | <del>\$149</del> | <b>\$111.75</b> |
| ○ <b>FOOD SENSITIVITY PANEL-ELITE** (LC100096)</b><br>This in-depth food sensitivity assessment measures both IgG and IgA response to 240 foods.   | <del>\$449</del> | <b>\$336.75</b> |
| ○ <b>GUT BARRIER PANEL** (LC900004)</b><br>Measure immune response (IgG/C3d & IgA) to three key GI markers associated with intestinal permeability and leaky gut: Candida, Zonulin, and Occludin.  | <del>\$165</del> | <b>\$123.75</b> |

## NEW TESTS

- |   |                  |                 |
|---|------------------|-----------------|
| ○ <b>PERSONALIZED WEIGHT &amp; NUTRITION GENETIC PANEL* (LC900015)</b><br>Genetic analysis of metabolic risks, food intolerances and nutritional needs, responsiveness to GLP-1 medications, and more!                                | <del>\$349</del> | <b>\$261.75</b> |
| ○ <b>GENETIC METHYLATION PATHWAYS PANEL* (LC900016)</b><br>This genetic analysis provides a deep dive into 21 methylation gene variants, including MTHFR, FOLR1, VDR Taq, SLC19A1, MTRR and more.                                     | <del>\$279</del> | <b>\$209.25</b> |
| ○ <b>PERSONALIZED HAIR GROWTH GENETICS PROFILE* (LC900014)</b><br>Determine an optimal and genetically personalized hair regrowth treatment protocol with this innovative test.   | <del>\$239</del> | <b>\$201.75</b> |
| ○ <b>ENVIRONMENTAL TOXINS PROFILE** (LC900018)</b><br>Toxic pollutants affect our bodies in several different ways. This test helps assess possible exposure to several common environmental pollutants with a convenient urine test. | <del>\$249</del> | <b>\$186.75</b> |

## WHOLE-BODY HEALTH

- |  | REGULAR PRICE    | SALE PRICE      |
|--|------------------|-----------------|
| ○ <b>MALE ELITE PANEL (QD100016)</b><br><b>CBC/Chemistry/Lipids Panel</b> • Free and Total Testosterone • Estradiol • Total Estrogens • DHEA-S • Progesterone • Pregnenolone • TSH • DHT • FSH • LH • Free T3 • Free T4 • Reverse T3 • IGF-1 • SHBG • Free and Total PSA • Vitamin D 25-OH • hs-CRP • Ferritin • <b>TIBC</b> • Homocysteine • Insulin • Hemoglobin A1c • Cortisol • ApoB • Magnesium | <del>\$599</del> | <b>\$449.25</b> |
| ○ <b>MALE BASIC HORMONE PANEL (QD100012)</b><br>DHEA-S • Estradiol • Total and Free Testosterone • PSA • SHBG  | <del>\$95</del>  | <b>\$71.25</b>  |
| ○ <b>FEMALE ELITE PANEL (QD100017)</b><br><b>CBC/Chemistry/Lipids Panel</b> • Free and total Testosterone • Estradiol • Total Lipids • Estrone • DHEA-S • Progesterone • Pregnenolone • DHT • FSH • LH • TSH • Free T3 • Free T4 • Reverse T3 • IGF-1 • SHBG • Vitamin D 25-OH • hs-CRP • Ferritin • TIBC • Homocysteine • Insulin • Hemoglobin A1c • Cortisol • ApoB • Magnesium                    | <del>\$599</del> | <b>\$449.25</b> |
| ○ <b>FEMALE BASIC HORMONE PANEL (QD100013)</b><br>DHEA-S • Estradiol • Total and Free Testosterone • Progesterone • SHBG   | <del>\$95</del>  | <b>\$71.25</b>  |
| ○ <b>WEIGHT LOSS PANEL-COMPREHENSIVE (QD100028)</b><br><b>CBC/Chemistry/Lipids Panel</b> • DHEA-S • Free and Total Testosterone • SHBG • Estradiol • Progesterone • Cortisol • TSH • Free T3 • Free T4 • Reverse T3 • Insulin • Hemoglobin A1c • Vitamin D 25-hydroxy • Ferritin • C-reactive protein (high sensitivity)   | <del>\$300</del> | <b>\$225</b>    |
| ○ <b>HEALTHY AGING PANEL-COMPREHENSIVE (QD100026)</b><br><b>CBC/Chemistry/Lipids Panel</b> • C-reactive protein (high sensitivity) • Vitamin B12 • Folate • Homocysteine • Vitamin D 25-hydroxy • Hemoglobin A1c • TSH • Free T3 • Free T4 • Ferritin • Urinalysis • ApoB • Insulin  | <del>\$249</del> | <b>\$186.75</b> |
| ○ <b>COMPLETE HORMONE &amp; METABOLITES PROFILE (HUMAP)** (LC900001)</b><br>Comprehensive assessment of hormones and their metabolites. This urine test helps assess how your body metabolizes hormones, providing insight into endogenous hormone secretion, supplemental hormone utilization, enzyme activity, oxidative stress.   | <del>\$299</del> | <b>\$224.25</b> |

## CBC/CHEMISTRY/LIPIDS PANEL

These **CBC/Chemistry/Lipids Panel** tests are included in the popular **Male** and **Female Panels**, and other panels on this page so you don't have to order them separately.

### CARDIOVASCULAR RISK

Total Cholesterol • HDL Cholesterol • LDL Cholesterol • Triglycerides  
Cholesterol/HDL Ratio • Non-HDL Cholesterol • Glucose  
**LIVER FUNCTION**

AST (SGOT) • ALT (SGPT) • LDH • Total Bilirubin • Alkaline phosphatase

### KIDNEY FUNCTION

BUN • Creatinine • BUN/Creatinine Ratio • Uric Acid

### BLOOD PROTEINS

Total Protein • Albumin • Globulin • Albumin/Globulin Ratio

### BLOOD COUNTS

Red Blood Cell Count • White Blood Cell Count • Eosinophils  
Neutrophils (Absolute) • Lymphs (Absolute) • Eos (Absolute)  
Baso (Absolute) • RDW • Monocytes (Absolute) • Monocytes  
Lymphocytes • Platelet Count • Hemoglobin • Hematocrit  
MCV • MCH • MCHC • Neutrophils

### BLOOD MINERALS

Calcium • Potassium • Sodium • Chloride • Iron • CO2

The sale price for the **CBC/CHEMISTRY/LIPIDS PANEL** alone is ~~\$60~~ **\$45**. (QD381822)

This is NOT a complete listing of LE lab test services.

Call **1-800-208-3444** for additional information.

Lab tests available in the continental United States and Anchorage, AK only.  
Restrictions apply in NY, NJ, RI, and MA. Not available in MD. Kits not available in PA.

\* This test is packaged as a kit.  
† Not available in NY.



# LE REWARDS

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- Rewards NEVER expire

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	 <b>LE REWARDS BASIC</b>	 <b>LE REWARDS PREMIER PLUS</b>	<div style="background-color: #8B6914; color: white; padding: 2px; font-weight: bold; font-size: 0.8em;">MOST POPULAR</div>  <b>LE REWARDS PREMIER ELITE</b>
Annual cost	FREE	\$19.95	\$49.95
Instant yearly credit*		2000 (\$20)	5000 (\$50)
Points earned per \$1 spent	2	3	4
FREE Standard shipping (\$5.50 value) on every order		✓	✓
Birthday reward	Free Shipping (1x)	500 (\$5)	1000 (\$10)
Anniversary reward		500 (\$5)	1000 (\$10)
Early access to sales		✓	✓
Exclusive savings & content		✓	✓
Double points days		✓	✓
Refer-a-friend reward	250 (\$2.50)	500 (\$5)	1000 (\$10)
Yearly bonus for auto-renewing		500 (\$5)	1000 (\$10)
Free Life Extension Magazine®	✓	✓	✓

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\*Instant credit will be given every year upon signup and will be applied to the cost of products in cart. If the credit exceeds your product total or if you choose to use only a portion, the remaining amount will be saved in your LE Rewards account for future purchases. Points never expire.

# In the News



## Folate, Vitamin D May Help Counteract Mortality Risk from Plasticizers

Greater exposure to a mixture of common plasticizers, chemicals such as phthalate metabolites and bisphenol-A, found in cosmetics, food packaging and other sources, was associated with an increased risk of cardiovascular mortality, cancer mortality, and mortality from all causes over an 8.5-year average follow-up period.\*

But this association was observed *only* among individuals whose red blood cell **folate** and **vitamin D** levels were among the lowest third of the people in the study.

The study included 8,378 adults enrolled in the U.S. National Health and Nutrition Examination Survey (NHANES) 2005–2016 cycles. Participants were divided into thirds according to their urinary levels of eight phthalate metabolites, plus bisphenol-A.

**Editor's Note:** "Plastic pollution is a major environmental and health issue," the authors stated.

\* *Lancet Planet Health*. 2025  
Dec;9(12):101394.

## Higher Carotenoid Levels in Cancer Survivors Linked with Reduced Death Rate

In a prospective cohort study, researchers found that higher serum levels of carotenoids were associated with reduced all-cause mortality in cancer survivors.\*

Researchers analyzed serum concentrations of carotenoids in **1,816** cancer survivors from the National Health and Nutrition Examination Survey (NHANES) III and Continuous NHANES (2001–2006).

During 15 years of follow-up, only **40%** survived.

People with *higher* blood levels of **alpha-carotene, beta-carotene, lycopene, and lutein/zeaxanthin** had a significantly lower risk of death from any cause.

The association persisted even after adjusting for factors such as age, lifestyle, body weight, kidney function, supplement use, and existing health conditions.

**Editor's Note:** A carotenoid is a pigment responsible for producing red, orange, and yellow colors seen most commonly in fruits and vegetables. They have been shown to have antioxidant, anti-inflammatory, and immunomodulatory properties.

\* *Clinical Nutrition ESPEN*. Volume 70, December 2025;165-173.





## Magnesium Can Lower Mortality Risk for ICU Patients with Respiratory Distress

A recent study found that hospitalized adults with acute respiratory distress syndrome (ARDS) who received magnesium during their intensive care unit (ICU) stay had a significantly lower risk of death.\*

The study included 1,282 critically ill, adult ICU patients with acute respiratory distress syndrome (ARDS) who received intravenous magnesium, and an equal number of ARDS patients who did not receive magnesium.

Patients who received magnesium had a **29% lower risk of in-hospital mortality** compared with those who did not receive the treatment.

When examining **30-day all-cause mortality in the ICU**, magnesium recipients showed a **25% lower risk**.

**Editor's Note:** "Magnesium homeostasis disturbances, especially hypomagnesemia, can increase infection risk, impair respiratory system function, and worsen disease progression, ultimately leading to increased mortality," the researchers stated.

\* *Sci Rep.* 2025 Oct 10;15(1):35528.



## Hormone Imbalances Can Cause Sleep Problems

Approximately half of adults over the age of 60 report difficulty with sleep.<sup>1</sup> While sleep aids may offer temporary relief, they do not solve the underlying cause of sleep problems.

For many people, poor sleep is associated with imbalances in two important hormones: cortisol and melatonin. Cortisol is the body's primary stress hormone, and its secretion follows a strong circadian rhythm. Levels are low at sleep onset and remain minimal during the evening and early night, which supports relaxation and sleep. Cortisol then begins to rise in the early morning hours, peaks shortly after awakening (around 30-45 minutes after waking up), and gradually declines throughout the day.<sup>2,3</sup>

Melatonin is the body's primary sleep-promoting hormone, and its secretion follows a circadian rhythm. Levels begin to rise in the evening, peak during the night to support sleep, and decline after sunrise; this rhythm is regulated by the brain's internal clock and coordinated with cortisol to control the sleep-wake cycle.<sup>2,3</sup>

Circadian rhythm disruption, common in shift-working healthcare workers, leads to poor sleep and biological misalignment. This causes chronic fatigue, stress hormone imbalance, and metabolic strain, increasing burnout, depression, and overall health risks.<sup>3</sup>

The Sleep Hormones Profile Saliva Test is a simple at-home test that measures your cortisol and melatonin levels. Understanding these patterns can provide valuable insight into why sleep issues are occurring and how to restore healthy hormone balance.

**Editor's Note:** If you experience any type of sleep difficulty, checking your hormones should be an important part of your plan for achieving better sleep and long-term health.

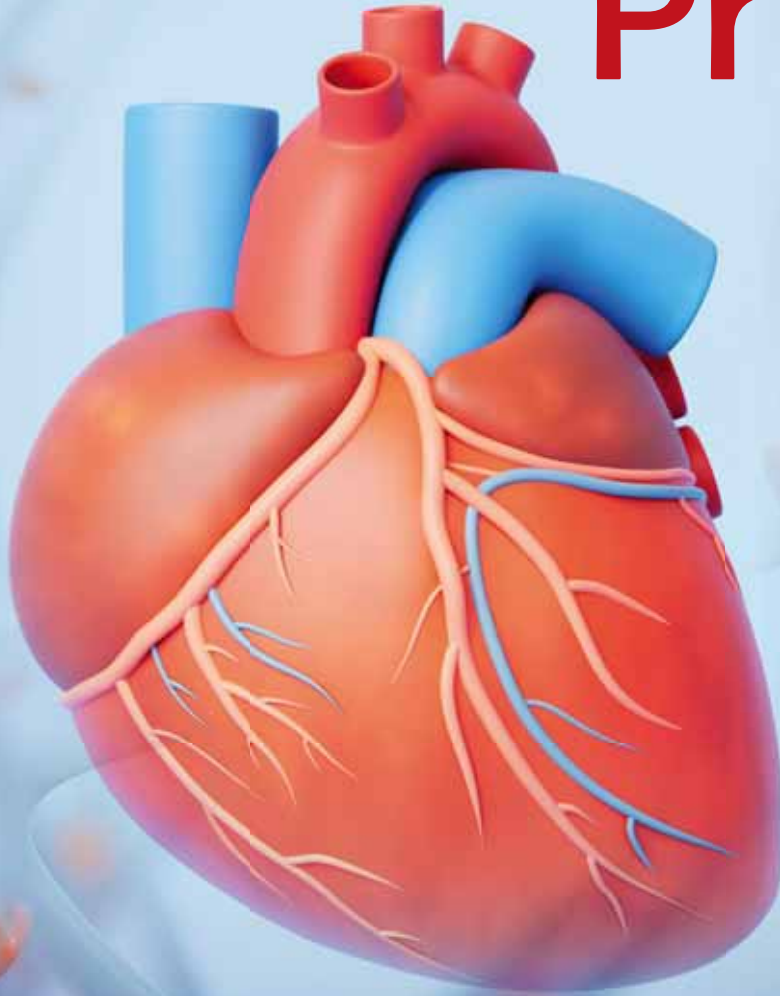
### References

1. *Lancet Neurol.* 2019 Mar;18(3):296-306.
2. *Endocr Rev.* 2025 Jan 10;46(1):43-59.
3. *Clin Pract.* 2025 Oct 29;15(11):199.

To order this at-home test, call  
1-800-208-3444 (24 hours).

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# Arterial Protect



**Arterial Protect** supports the body's natural processes for managing arterial debris to help maintain endothelial and circulatory health.\*

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For full product description and to order **Arterial Protect**, call **1-800-544-4440** or visit **www.LifeExtension.com**

\* *Int Angiol.* 2014 Feb;33(1):20-6.

**Item #02004**

30 vegetarian capsules

1 bottle **\$33**

4 bottles \$29 each



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# THE VERSATILE BENEFITS OF **PYCNOGENOL**<sup>®</sup>

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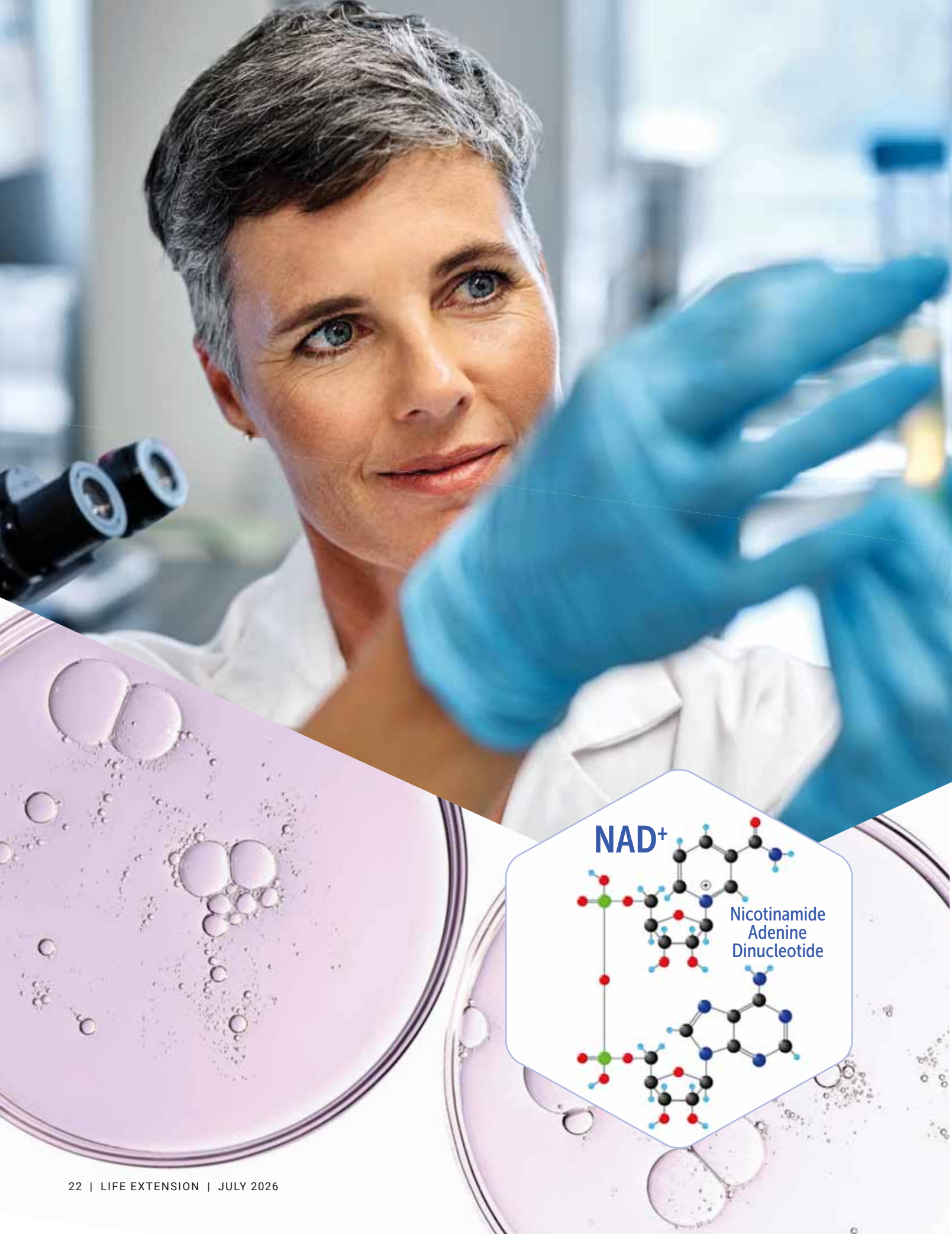
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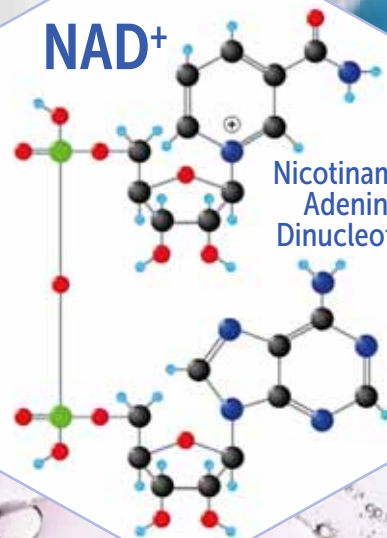
† Ratings based on results of the 2024 ConsumerLab.com Survey of Supplement Users. More information at [www.consumerlab.com/survey](http://www.consumerlab.com/survey).

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**NAD<sup>+</sup>**



Nicotinamide  
Adenine  
Dinucleotide



# Cost-Effective Option to Boost NAD<sup>+</sup>

BY MICHAEL DOWNEY



There's a good reason why **NAD<sup>+</sup>** is found in every *living cell* in our bodies.<sup>1</sup>

NAD<sup>+</sup> is *required* for hundreds of critical **cellular** processes, including energy production, DNA repair, and immune responses.<sup>2-4</sup>

It plays critical roles in processes related to **aging** at the cellular level.<sup>2,5</sup>

But **NAD<sup>+</sup>** levels decrease as we **age**, which can contribute to age-related functional decline.<sup>2,6,7</sup>

**NAD<sup>+</sup> precursors** are compounds that have been shown to boost NAD<sup>+</sup> when taken orally and have the potential to support healthier aging.<sup>8</sup>

*Life Extension*<sup>®</sup> readers are familiar with the NAD<sup>+</sup> precursor **nicotinamide riboside** or **NR**. It was introduced to readers of this publication in **2014**.

A lower-cost and effective **NAD<sup>+</sup> precursor**, called **NMN (nicotinamide mononucleotide)**, has recently entered the commercial marketplace.

In controlled human trials, oral **NMN** supplementation significantly increased blood **NAD<sup>+</sup>** levels compared to placebo. NMN is a lower-cost way to boost **NAD<sup>+</sup>**.<sup>9,10</sup>

**NMN** may support healthy aging at the cellular level via increased **NAD<sup>+</sup>** production.

## The Importance of NAD<sup>+</sup>

The coenzyme **NAD<sup>+</sup>** (**nicotinamide adenine dinucleotide**) is *essential* for normal cellular function.<sup>4,11</sup>

Without ample NAD<sup>+</sup>, cells cannot properly convert food into usable **energy** or effectively mitigate **DNA damage**.<sup>4,11</sup>

**NAD<sup>+</sup>** is required for the normal function of over **300 proteins**, including:<sup>2</sup>

- **Sirtuins**, which maintain mitochondrial health, suppress chronic inflammation, and help regulate cell metabolism,<sup>12,13</sup>
- **PARPs** (poly-ADP ribose polymerases), which handle **DNA repair**, autophagy (cell cleanup), and gene regulation,<sup>2,13</sup> and
- **CD38** (cyclic ADP-hydrolase), which supports immune responses and calcium signaling.<sup>2,13</sup>

**NAD<sup>+</sup>** is critical for all cells. Preclinical data shows that it is a key mediator in energy metabolism, DNA repair, cellular antioxidant defenses, inflammation regulation, and more.<sup>2,5,13-15</sup>

## Why NAD<sup>+</sup> Declines as You Age

NAD<sup>+</sup> levels progressively decline across multiple human tissues and have been associated with age-related chronic disorders and metabolic dysfunction.<sup>6,16</sup>

With age, **cellular damage** accumulates due to inflammation, oxidative stress, and DNA damage.

Sirtuins, PARPs, and CD38 help mitigate this damage.<sup>13,16,17</sup> But to function properly, these critical proteins “consume” **NAD<sup>+</sup>** thereby depleting levels.<sup>18</sup> This decline is continuous and progressive. One human observational study showed that by **age 50**, NAD<sup>+</sup> levels can drop by about **50%**.<sup>19</sup>

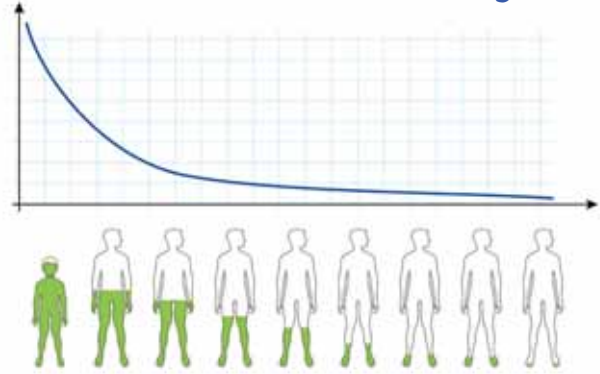
Decreased **NAD<sup>+</sup>** levels are associated with reduced mitochondrial function and increased risk of **premature aging** and chronic age-related conditions.<sup>16,17,19,20</sup>

## Restoring NAD<sup>+</sup> Levels

Orally consuming NAD<sup>+</sup> is not an effective way to replenish levels. In addition to being poorly absorbed, it cannot readily pass through the cell membrane intact.<sup>21,22</sup>



## NAD<sup>+</sup> Levels Decline with Age



To get around this problem, scientists studied **NAD<sup>+</sup> precursors**, compounds that can be taken orally to boost NAD<sup>+</sup>.

Two precursors have been shown in clinical studies to raise blood NAD<sup>+</sup> levels significantly, efficiently, and safely:

- **NR** (**nicotinamide riboside**),<sup>23,24</sup> and
- **NMN** (**nicotinamide mononucleotide**).<sup>9,10</sup>

## A Lower-Cost Option

In **2014**, **Life Extension** researchers were among the first to recognize the importance of boosting **NAD<sup>+</sup>** throughout the body for cellular health.

**Nicotinamide riboside** was recommended 12 years ago as a method to boost **NAD<sup>+</sup>** levels.

Another option to boost **NAD<sup>+</sup>** is to supplement using **NMN**.

In **2022**, however, the **FDA** formally classified **NMN** as a *drug*.<sup>25</sup>

In late **2025**, that classification was removed, allowing **NMN** to re-enter the consumer marketplace as an *officially recognized dietary supplement*.<sup>26,27</sup>

Both NR and NMN boost NAD<sup>+</sup> levels in a similar fashion and at equivalent levels. However, **NMN** can be produced at a **lower** cost.

This allows aging individuals to boost their NAD<sup>+</sup> levels in a more *cost-effective* way.

**NMN** and **NR** have both been clinically shown to boost **NAD<sup>+</sup>** levels. They have overlapping as well as unique pathways for cellular entry.<sup>17</sup>

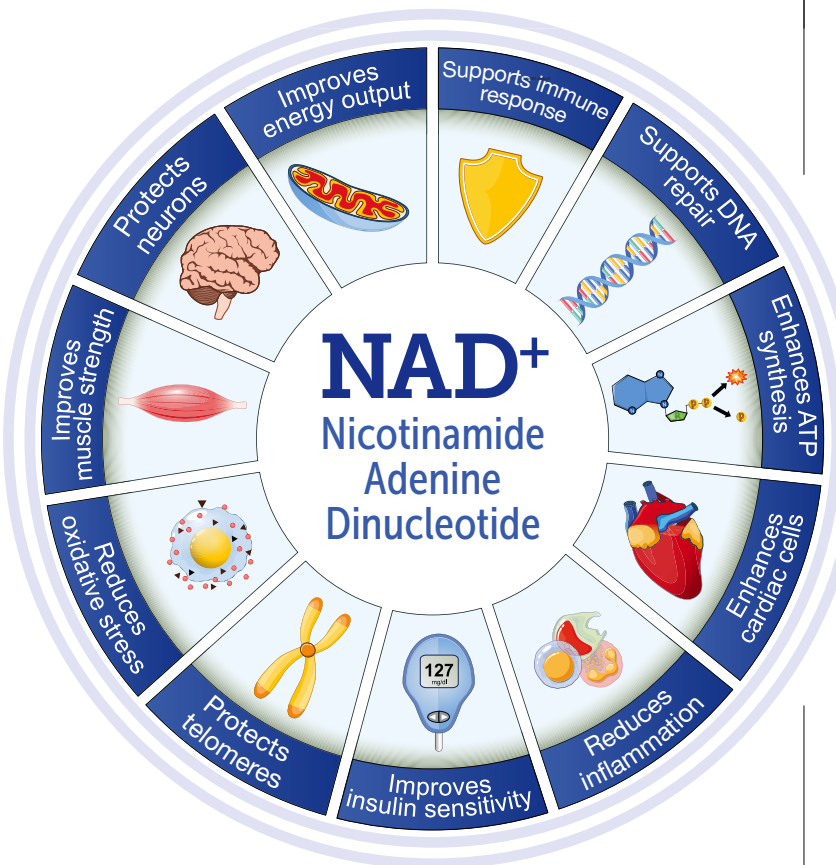
**NR HAS TWO MAIN PATHWAYS:**

- NR can be directly transported into the cell where it then needs to be converted into NMN to produce NAD<sup>+</sup>.
- NR can be metabolized by the gut before entering the cell and producing NAD<sup>+</sup>.

**NMN HAS THREE MAIN PATHWAYS:**

- NMN is converted into NR to enter the cell where it then gets converted back into NMN to produce NAD<sup>+</sup>.
- NMN can also be metabolized by the gut before entering the cell and producing NAD<sup>+</sup>.
- NMN appears to have a unique cell transporter that allows for direct entry into the cell where it produces NAD<sup>+</sup>. (However, this is evolving science and has so far only been described in animal studies.)<sup>28</sup>

Importantly, regardless of the pathways that **NR** or **NMN** use, studies have shown increases in **NAD<sup>+</sup>** production.



What You  
Need  
To Know

## A New Alternative for Boosting NAD<sup>+</sup>

- **NAD<sup>+</sup> (nicotinamide adenine dinucleotide)** is critical to cellular processes that support healthy aging, including energy metabolism, DNA repair, and immune responses.
- NAD<sup>+</sup> levels drop with older age. The precursor **NMN (nicotinamide mononucleotide)**, taken orally, can be converted into **NAD<sup>+</sup>** in the body to help boost levels.
- In animal studies, oral NMN increased lifespan, increased energy metabolism and physical activity, reduced frailty, and decreased age-related gene-expression changes.
- In clinical studies of older men and women, NMN significantly increased circulating **NAD<sup>+</sup>** levels.
- **NMN (nicotinamide mononucleotide)** is a **NAD<sup>+</sup> precursor** that has recently become commercially available at a relatively low cost.

## Benefits of NMN

Preclinical studies suggest that **NMN** may support aspects of **healthy aging** by boosting NAD<sup>+</sup>.

In one study, giving mice **NMN** for 12 months:<sup>29</sup>

- Increased **energy** metabolism,
- Boosted **physical activity** levels,
- Decreased age-associated **weight gain**,
- Improved **insulin sensitivity** and **blood lipid levels**, and
- Reduced **age-related gene-expression** changes.

A second study administered NMN throughout the lifespan of a premature aging mouse model, starting at an early age. These mice exhibited:<sup>30</sup>

- **Increased lifespan** and improved median life expectancy,
- Reduced **frailty**, and
- Better **overall health**.

## Validated in Clinical Studies

In a clinical study, healthy older men (mean age 71) were given **250 mg** of **NMN** or a placebo.

After 12 weeks, NMN significantly **increased NAD<sup>+</sup> levels** compared to **placebo**.<sup>9</sup>

In another clinical study, healthy older men *and* women (mean age 69) were given **250 mg** of **NMN** or a placebo.

Again, after 12 weeks, NMN significantly **increased NAD<sup>+</sup> levels** compared to the placebo group.<sup>10</sup>

In both trials, **NMN** also increased levels of *other* NAD<sup>+</sup> precursors and intermediates. This provides additional evidence that **NMN** raises **NAD<sup>+</sup> levels**.<sup>9,10</sup>

These *higher* NAD<sup>+</sup> levels may help support **healthy aging**.

## Summary

**NAD<sup>+</sup>** (**nicotinamide adenine dinucleotide**) is a compound found in *every* living cell in the body. It's required for essential cellular processes like energy production, DNA repair, and immune function.

Levels of NAD<sup>+</sup> decline with age, reducing mitochondrial function and accelerating aging. The precursor **NMN** (**nicotinamide mononucleotide**), taken orally, can boost NAD<sup>+</sup> levels.

Clinical studies show that NMN safely **increases NAD<sup>+</sup>** levels in older adults, which may support **healthy aging** at the cellular level.

Consumers now have access to NMN or NR. The major difference from our view is that **NMN** costs far less than **NR**. ■

If you have any questions on the scientific content of this article, please call a **Life Extension** Wellness Specialist at 1-866-864-3027.





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“Good stuff.”

Scott

VERIFIED BUYER

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1. *EBioMedicine*. 2018 Oct;36:18-28.
2. *J Nutr Sci*. 2022 Sep 9;11:e74.

\* Studied against powder fisetin (98% purity)

Item #02414

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"I am sure it has helped me."  
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References: 1. *Nutrients*;14:5235.10.3390/nu14245235. 2. *J Alzheimers Dis.* 2016;49(4):971-90.

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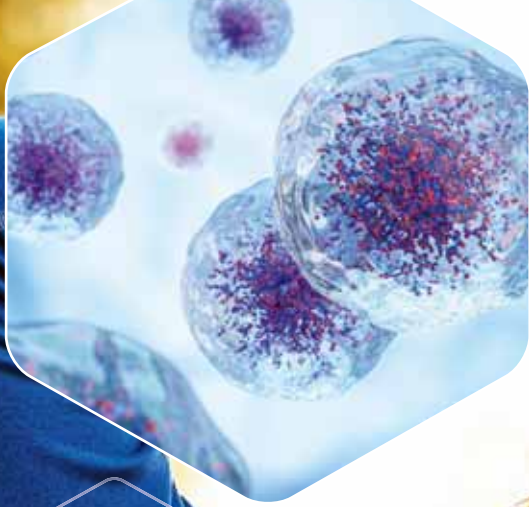
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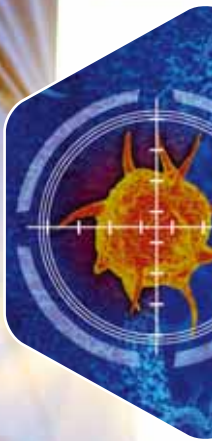
For full product description and to order **NMN** or **NMN with Resveratrol Elite**, call **1-800-544-4440** or visit [www.LifeExtension.com](http://www.LifeExtension.com)

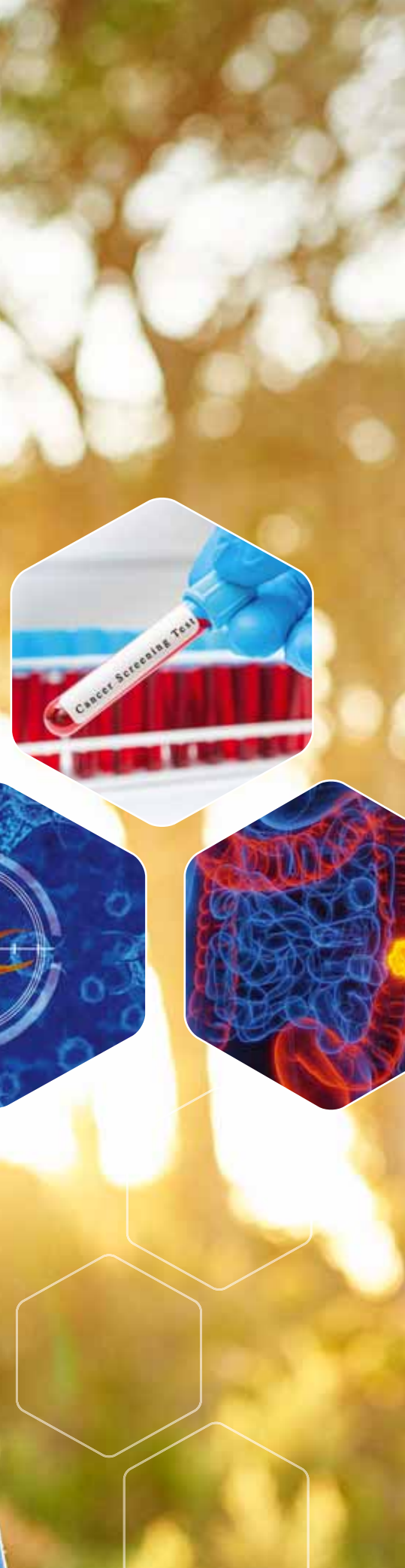
References: 1. *Nat Rev Mol Cell Biol.* 2021 Feb;22(2):119-41. 2. *NPJ Aging.* 2022 May 1;8(1):5. 3. *Geroscience.* 2024 Oct;46(5):4671-4688.

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# COLORECTAL CANCER: A Growing Threat to Younger Adults





BY PATRICK STURGES

**Colorectal cancer** is the second most common cause of cancer-related death in the U.S.<sup>1</sup>

The **American Cancer Society** estimates there will be approximately **55,000** deaths from colorectal cancer nationwide in **2026**.<sup>2</sup>

Recent years have seen a notable shift. While rates of colorectal cancer have declined slightly among older adults, they have increased among adults younger than 50.<sup>2-4</sup>

The good news is, over the past several decades, evidence from observational studies as well as experimental research suggests that certain nutrients<sup>5,6</sup> and overall dietary patterns<sup>5-7</sup> are associated with a lower risk of cancer of the colon and rectum.

Improving diet quality and adopting healthy lifestyle habits, including adequate intake of these nutrients, may help support colorectal health.

Individuals at high risk may want to consider discussing supplementation with a healthcare provider.

Early diagnosis using various screening options can prevent many of these deaths.

## The Changing Landscape of Colorectal Cancer

**Colorectal cancers**, cancers of the **colon** (large intestine) and the **rectum**, were until recently considered diseases of older age. Routine screenings like colonoscopies were recommended for those over 50 years old.<sup>8,9</sup>

Over the last few decades, an increasing number of adults under 50 have been diagnosed with colon cancer, suggesting that risk factors may begin early in life and contribute to disease later on,<sup>4</sup> often in advanced stages that are more difficult to treat.

In **1995**, the proportion of cases in younger adults was about **11%**. By **2022**, it was up to **22%**. Colorectal cancer is now the **leading cause of cancer deaths** among men **under 50** years old.<sup>3</sup>

The American Cancer Society now recommends that adults start getting screened for colorectal cancer at age **45** instead of 50.<sup>10</sup> However, risk may still be present in younger individuals.<sup>4</sup>

**Life Extension®** has historically advocated **earlier colorectal cancer screening than what was once standard.**<sup>11-13</sup> In recent years, leading medical organizations have moved in this direction as well, advising that **average-risk adults begin colorectal cancer screening discussions with their physicians at age 45.**<sup>10,14</sup>

Fortunately, there are steps people can take that may help **reduce the risk** of developing colorectal cancer, including avoiding smoking, maintaining a healthy weight, and improving diet and nutrient intake.<sup>15</sup>

## How Diet Impacts Colorectal Cancer Risk

Poor **diet** is considered a significant contributor to colorectal cancer risk.<sup>16</sup>

The cells that line the colon and rectum are directly exposed to food components that have passed through the mouth, stomach, and small intestine. Diet also influences the gut **microbiome**, the mix of microorganisms in the digestive tract.<sup>17,18</sup>

Healthy gut bacteria help ward off disease. Harmful bacteria create toxins, damage the lining of the intestines, and contribute to chronic inflammation, which are associated with increased cancer incidence.<sup>17,18</sup>

One population-level modeling study estimated that approximately **38%** of colorectal cancer cases in the U.S. could be attributed to suboptimal **diet.**<sup>7</sup>

Eating lots of fruits and vegetables, fish, nuts, legumes, and whole grains is associated with lower cancer risk, while excessive intake of red meats, sugary drinks, and alcohol increases risk.<sup>10</sup>





What You  
Need  
To Know

## Reduce Risk for Colon and Rectal Cancer

- Colorectal cancer, cancer of the colon and rectum, is responsible for tens of thousands of deaths in the U.S. annually.
- Younger adults are increasingly diagnosed with these tumors.
- High-fiber, plant-based diets are associated with lower risk of colorectal cancer.
- Specific nutrients have been associated with potential protective effects against colon cancer, including vitamin D, calcium, polyphenols, and sulforaphane.

A pooled analysis of 27 studies involving about 30,000 colorectal cancer cases found that each quartile increase in **red meat** consumption was associated with a **30%** increased risk, while each quartile increase in processed meat consumption was associated with a **40%** increased risk of colorectal cancer.<sup>19</sup>

Specific nutrients have been tied to lower risk of colorectal cancer.

### Dietary Fiber

Dietary fiber may help protect against cancer—especially colorectal cancer—by working on several levels at once.<sup>20</sup>

Many plant foods contain indigestible **fiber**, which helps reshape the gut microbiome, reducing harmful bacteria and helping beneficial gut bacteria thrive. When healthy microbes ferment fiber, they can produce **butyrate**, a fatty acid that has demonstrated anti-tumor effects in preclinical research.<sup>20,21</sup>

At the same time, fiber may help lower inflammation and support immune responses that help the body recognize and fight tumor cells.<sup>20</sup>

In addition, **bile acids** secreted into the gut by the liver can contribute to the development of colon cancer. Dietary fiber may interfere with the metabolism of these bile acids, which may help limit their tumor-promoting effects.<sup>21</sup>

Epidemiological studies show that *low* fiber intake is associated with *increased* risk of colorectal cancer, while a diet high in fiber is associated with reduced risk.<sup>21</sup>

Pooled evidence from multiple meta-analyses shows that higher dietary fiber intake is associated with a **22%** reduction in cancer risk and a **17%** reduction in cancer-related mortality.<sup>22</sup>

Low fiber intake is common in Western countries and may be one contributing factor to rising colorectal cancer rates.<sup>21</sup>

A landmark study of over 1,500 patients with colorectal cancer found that each **5 gram** per day increase in post-diagnosis fiber intake was associated with a **22%** reduction in colorectal cancer-specific mortality, with an **18%** reduction among those who increased fiber intake after diagnosis.<sup>23</sup>



## Calcium

In epidemiological studies, those who consume the **most calcium** have *lower* rates of colorectal cancer.<sup>24</sup>

A study published in 2025 of almost **500,000** subjects aged 50 to 71 found those with the *highest* calcium intake were **29% less likely** to develop colorectal cancer, for up to 22 years, than those with the lowest intake.<sup>25</sup>

One way in which calcium may be protective is by binding to potentially harmful compounds like bile acids and free fatty acids.<sup>24</sup>

In a follow-up analysis of a randomized controlled trial, participants who had received **1,200 mg** of elemental calcium supplementation daily for four years experienced reductions in adenoma formation for as long as five years after calcium supplementation ended.<sup>26</sup>

## Vitamin D

Preclinical studies suggest that vitamin D and its metabolites have demonstrated anti-tumor activity, inhibiting the formation of cancerous tumors.<sup>27-29</sup>

In population studies, those with the lowest vitamin D levels have the highest rates of cancers, including colorectal cancer,<sup>29-31</sup> and the **highest risk of death** from cancer.<sup>32,33</sup>

Pooled data from eight prospective observational studies, including the Physicians' Health Study, showed a **34%** lower risk of developing colorectal cancer for those with the highest versus lowest vitamin D levels.<sup>34</sup>

## Polyphenols

**Polyphenols** are plant compounds found in many foods that have been studied for potential health benefits.

In preclinical studies polyphenols have demonstrated **anti-cancer** activity, including effects on tumor formation, progression, and cell survival.<sup>35-38</sup> Human observational studies have linked higher polyphenol intake to lower risk of colorectal cancer.<sup>39</sup>

Evidence from studies of individual polyphenols provides additional context to these associations:

- In animal models, curcumin has been shown to inhibit colorectal tumor growth through diverse mechanisms,<sup>40,41</sup> including by reducing harmful secondary bile acids linked to colon cancer risk.<sup>42</sup>
- In preclinical settings, green tea polyphenols known as catechins, including the well-known epigallocatechin-3-gallate (EGCG), have been studied for their potential to inhibit carcinogenesis in various cancers, including colorectal cancers.<sup>43</sup> A meta-analysis of five randomized controlled trials found that long-term EGCG supplementation was associated with reduced colorectal cancer recurrence after polyp removal.<sup>44</sup>
- In preclinical studies polyphenols such as resveratrol have been shown to support gut health by strengthening the intestinal barrier, reducing inflammation, balancing the gut microbiome, and showing antitumor activity with potential for cancer prevention and treatment.<sup>36</sup>
- Animal studies indicate that quercetin has shown potential to influence pathways associated with colorectal cancer by reducing tumor growth, pre-cancerous lesions, inflammation, and oxidative stress.<sup>45</sup> In a pilot study, patients with familial adenomatous polyposis who took curcumin and quercetin for six months experienced reduction in polyp numbers by about **60%** and polyp size by about **50%**.<sup>46</sup>
- A systematic review and meta-analysis of 39 pre-clinical studies showed that the polyphenol flavonoid apigenin has been shown to reduce cancer cell viability, slow cell growth, and induce apoptosis and cell cycle arrest in vitro.<sup>47</sup> In an animal model with colorectal cancer, it was associated with reduced tumor growth and limited metastasis to the liver and lungs.<sup>48</sup>

## Importance of Regular Screening

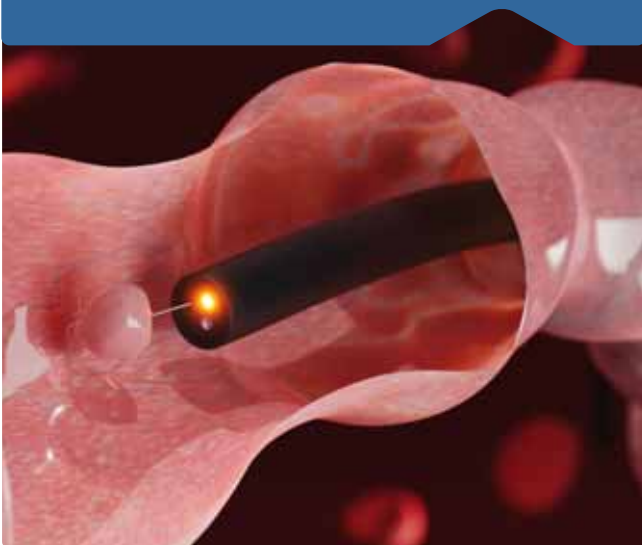
**Screening** for colorectal cancer can catch the disease early when treatment is likely to be successful.

A **colonoscopy** is considered the gold standard for screening because it allows clinicians to directly visualize the colon, identify precancerous polyps, and remove them *before* they turn malignant.<sup>24</sup>

Additional screening options include capsule endoscopy (**PillCam**) and **at-home stool tests**.<sup>24,52</sup>

These tests are non-invasive, but they vary in sensitivity (ability to correctly identify disease) and specificity (ability to correctly rule out disease) when compared with the colonoscopy. Importantly, while these tests can indicate the possible presence of colon cancer they do not allow for biopsies or the removal of suspicious lesions, like colonoscopies do.

The current recommendation is that people with average risk begin getting colonoscopies or doing stool testing at age **45**. Those at high risk or with a family history of colon cancer should consult their physician about when to undergo screening.



## Sulforaphane

**Sulforaphane**, a compound produced by the digestion of **cruciferous vegetables** like broccoli has demonstrated anti-cancer activity in preclinical studies.<sup>49,50</sup>

In a cell study, sulforaphane was shown to block the proliferation, invasion, and spread of **colon cancer** cells. It did this by helping to block gene expression and pathways tied to cancer progression.<sup>51</sup>

Increasing intake of cruciferous vegetables may influence processes involved in cancer growth and spread by blocking harmful processes inside cancer cells.

## Summary

In recent decades, the rate of **colorectal cancer** diagnoses in younger adults has been increasing.

Increasing intake of calcium, fiber, vitamin D, polyphenols, and sulforaphane may support gut health. Low intake has been associated with factors linked to colorectal cancer risk. ■

If you have any questions on the scientific content of this article, please call a **Life Extension** Wellness Specialist at 1-866-864-3027.

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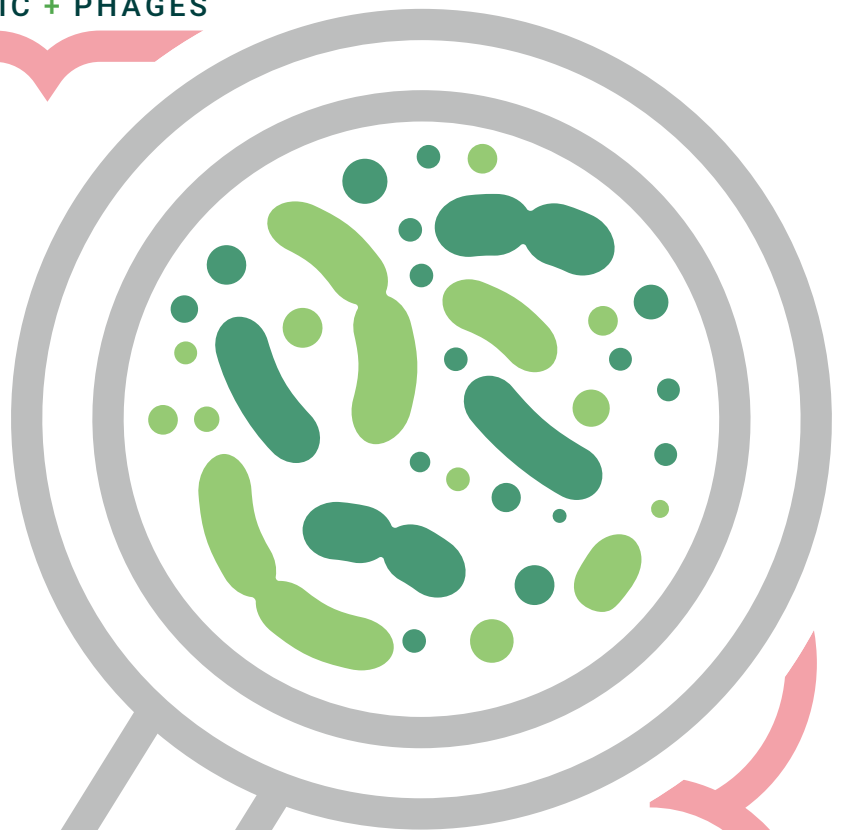
\* Regular luteolin defined as 98% pure powder luteolin

1. Akay. Data on file. Bio-Luteolin pharmacokinetics study. 2025. 2. Molecules. 2023;28(24):8038.

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1 bottle **\$28.50**

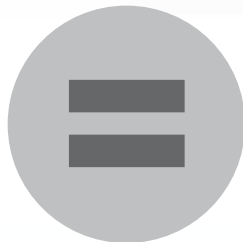
4 bottles \$25.75 each



For full product description and to order **FLORASSIST® GI with Phage Technology**, call **1-800-544-4440** or visit **www.LifeExtension.com**

**References** 1. *Gut Microbes*. 2024 Jan-Dec;16(1):2338322. 2. *Int J Food Sci Nutr*. 2014 Dec;65(8):994-1002. 3. *Lett Appl Microbiol*. 2011 Jun;52(6):596-602.

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# Convenience and Cost Savings

**Vitamins D and K** as well as Iodine perform multiple functions for heart and bone health.

Life Extension brings these three nutrients together in one convenient capsule.

### Just one capsule daily provides:

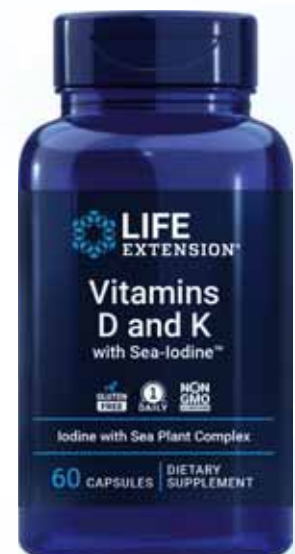
Vitamin D3	125 mcg (5,000 IU)
Vitamin K1	1,000 mcg
Vitamin K2 (MK4)	1,000 mcg
Vitamin K2 (MK7)	100 mcg
Iodine	1,000 mcg

Item #02040

60 capsules

1 bottle **\$18**

4 bottles \$16.50 each



For full product description and to order **Vitamins D and K with Sea-Iodine™**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

**CAUTION:** Individuals consuming more than 50 mcg (2,000 IU)/day of vitamin D (from diet and supplements) should periodically obtain a serum 25-hydroxy vitamin D measurement. Do not exceed 250 mcg per day unless recommended by your doctor. Vitamin D supplementation is not recommended for individuals with high blood calcium levels. If you have a thyroid condition or are taking antithyroid medications, do not use without consulting your healthcare practitioner. If you are taking a vitamin K antagonist (e.g. warfarin), consult your healthcare practitioner before taking this product.

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The side effect is often unpleasant bloating.

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- Heart health and already-healthy cholesterol levels
- Prebiotic fiber
- Already-healthy blood sugar and insulin levels

*Natural orange flavor with other natural flavors and sugar free!*  
*Do not take if you have difficulty swallowing.*

#### References

1. *Nutrition* 22 (2006) 1112–1119.
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<sup>†</sup> This supplement should be taken in conjunction with a healthy diet and regular exercise program. Individual results are not guaranteed, and results may vary.

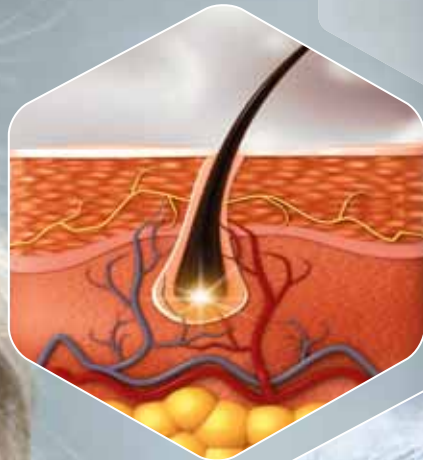
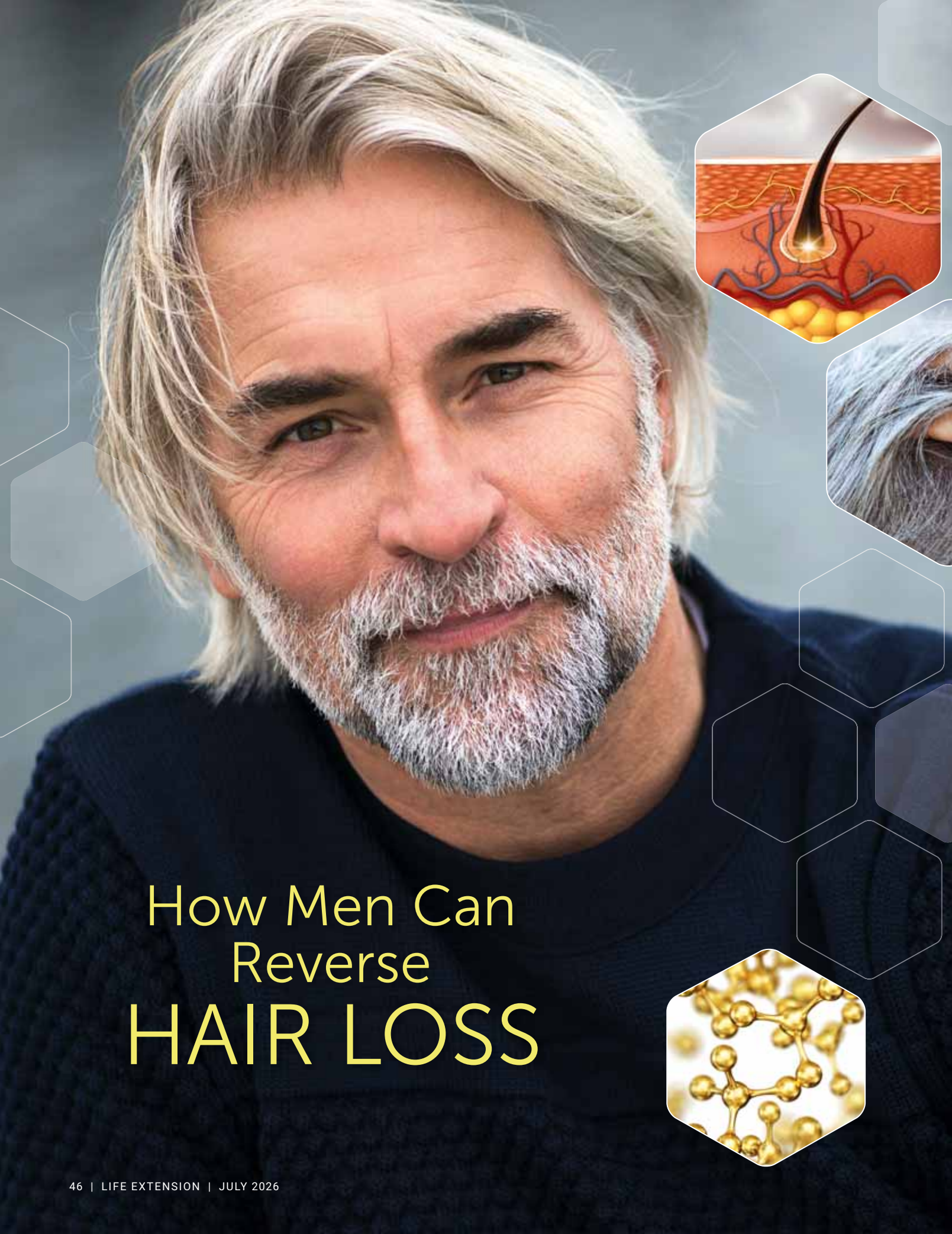
**CAUTION:** Fiber supplements may affect absorption of medications. Take 2 hours before or 1 hour after any medications.

**Item #02514**  
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4 jars \$20 each

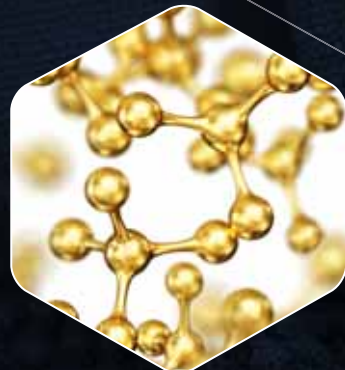


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# How Men Can Reverse HAIR LOSS





BY HEATHER L. MAKAR

Progressive hair loss may begin in early adulthood, affecting about **30%** of men by age **30** and worsening with age.<sup>1</sup>

For many men, hair loss can seem inevitable.

But researchers have identified three **plant extracts** that may help men save their hair.

In a clinical study, **95%** of men taking a blend of two of these ingredients showed **improvements in hair growth** measures within six months.<sup>2</sup>

In another clinical trial, participants who took a third plant extract experienced a **29%** decrease in hair loss and a **5%** increase in hair density.<sup>3</sup>

These three plant-extract ingredients have been combined into an **oral** formula designed to support hair growth and reduce hair loss.

## Why Men Lose Their Hair

Progressive hair loss in men is known as **male pattern baldness**, or androgenetic alopecia, caused by increased levels of a hormone called **dihydrotestosterone (DHT)**.

**DHT** acts on genetically sensitive hair follicles, leading to gradual hair loss.<sup>4</sup>

When DHT binds to hair follicles, it causes them to shrink. Over time, thick, healthy hairs are replaced by thinner, shorter ones until only fine, barely visible hairs remain, gradually leading to the appearance of baldness.<sup>4</sup>

An enzyme in the body called **5-alpha-reductase** converts testosterone into DHT.<sup>4,5</sup> Men experiencing hair loss often have more of this (DHT) enzyme.<sup>5</sup>

Inflammation, oxidative stress, and vascular changes affecting follicles can all accelerate hair loss and balding.<sup>2,4,5</sup>

## Conventional Therapies for Hair Loss

Currently, two FDA-approved therapies—topical minoxidil and oral finasteride—are commonly used for male pattern baldness.<sup>4,6</sup> In addition, non-pharmacologic options including low-level laser and light-based devices (such as red-light therapy) have obtained FDA clearance for hair regrowth.<sup>7</sup>

Minoxidil, applied topically, improves blood flow to hair follicles, and promotes cell growth. Finasteride, taken orally, inhibits the enzyme **5-alpha-reductase** that contributes to DHT production.<sup>6</sup>

Both have limitations. Results can take six to twelve months to appear, so it should be used for up to a year before deciding whether treatment is a success, and any gains vanish when treatment stops. Both can prevent further hair loss but they only partially reverse baldness.<sup>4</sup>

Finasteride can cause decreased sex drive and erectile problems in some men.<sup>8,9</sup>

## Plant-Based Compounds for Hair Growth

To support individuals seeking non-drug alternatives, scientists evaluated several plant-derived extracts including **standardized black rice** and **prickly pear flower extracts**.

A preclinical cell study provided evidence that **prickly pear flower extract** is capable of inhibiting **5-alpha-reductase**.<sup>10</sup>

**Black rice** provides **cyanidin-3-glucoside (C3G)**, an anthocyanin with antioxidant properties that may help protect follicles from oxidative damage.<sup>2</sup>

When these two extracts were combined in a clinical study, supplementation with the standardized extracts resulted in increased hair growth and density, and a slowing of hair loss.<sup>2</sup>



## What You Need To Know

### Boost Healthy Hair Growth

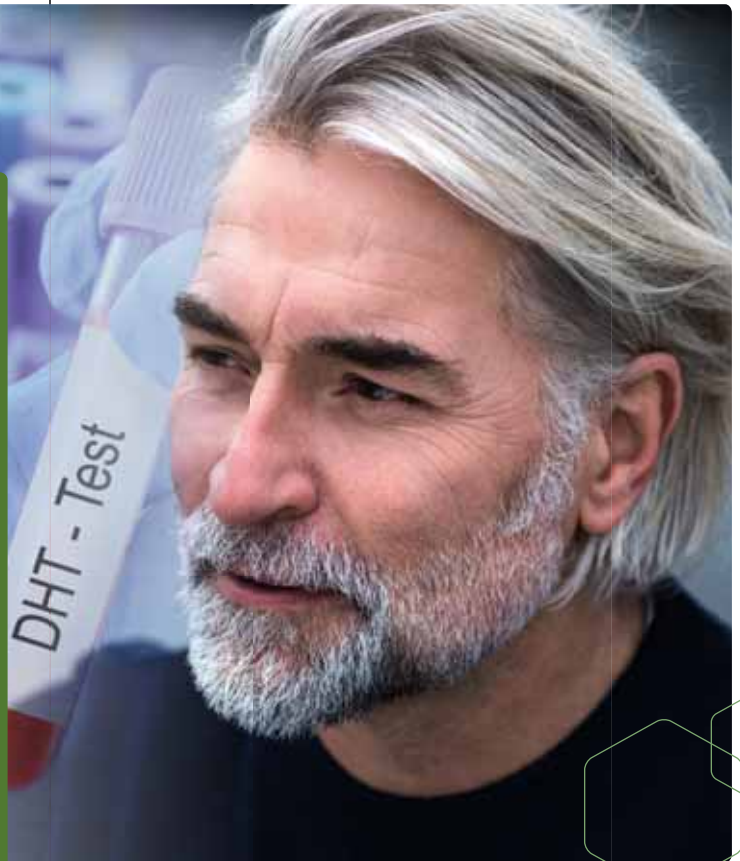
- Male pattern baldness, a type of progressive hair loss, affects up to **80%** of men.
- In a clinical trial, a **black rice-prickly pear flower** extract blend improved hair growth measures in **95%** of men within six months. Over **63%** of men noticed visible improvements within **three months**.
- In another trial, **saw palmetto oil** reduced hair shedding by **29%** and increased hair density by **5%** in 16 weeks.
- A blend of these three oral ingredients may help optimize hair growth and fullness and reverse hair loss.

Researchers tested the combination of **black rice** and **prickly pear** extracts in 86 men (18 – 55 years old) with mild-to-moderate male pattern hair loss. Half received **250 mg** of the extract blend daily, while half took a **placebo**, for six months.

Treatment progress was evaluated using a high-resolution phototrichogram—a noninvasive tool for assessing hair growth—along with a self-assessment questionnaire. Dermatologists analyzed high resolution scalp images to quantify hair density per square centimeter and to measure hair thickness and length.

After six months, advanced imaging technology revealed notable differences between the two groups. Men taking the extract blend had a:<sup>2</sup>

- **9.5%** increase in total **hair density**,
- **28%** increase in density of hair in the **growing** phase, and
- **31%** decrease in dormant, **non-growing** hair.



Dermatologists reviewing before-and-after photos, rated a remarkable **95%** of treated men as showing **hair growth improvement**, compared to just **34%** in the placebo group.<sup>2</sup>

Overall, **75.6%** of those receiving the extract blend were satisfied with the results, and **63.5%** noticed visible improvements within just **two months**.<sup>2</sup>

### Saw Palmetto May Help Reduce Hair Loss

**Saw palmetto**, long used in prostate health applications, has demonstrated potential benefits for hair health as well.<sup>3</sup>

In a cell study, standardized saw palmetto oil inhibited 5-alpha reductase and provided **anti-inflammatory** and **angiogenic** (forming new blood capillaries) effects.<sup>11</sup>

Saw palmetto oil standardized to **2–3% beta sitosterol** and **85% total fatty acids**, has been shown in laboratory studies to inhibit **5-alpha-reductase** and support anti-inflammatory and angiogenic (forming new blood capillaries) effects.<sup>3</sup>

In a clinical trial, participants with mild to moderate hair loss who took **100 mg** of standardized **saw palmetto oil** daily for 16 weeks had:<sup>3</sup>

- A **29%** reduction in **shedding** during a hair comb test,
- A **20.5%** decrease in **shedding** during a hair pull test, and
- A **5.17%** increase in **hair density** (compared to a **3.23%** decrease in those taking a placebo).

Half the men taking saw palmetto reported thicker, better-looking hair, compared to just **10.5%** in the placebo group.<sup>3</sup>

Blood tests confirmed that **DHT** levels dropped by **22.2%** in those taking saw palmetto while remaining within the normal range for healthy men.<sup>3</sup> Saw palmetto does not appear to affect PSA levels, which may be relevant for men undergoing prostate screening.<sup>12,13</sup>

Combining these **three** plant extracts may help reduce hair loss and support hair growth.



## Summary

Progressive **hair loss** may be slowed or managed.

In a clinical trial, **95%** of men taking a blend of **black rice** and **prickly pear** flower extracts showed increased **hair growth** measures by six months.

In another trial, oral **saw palmetto oil** was associated with a **29%** reduction in **hair shedding**.

A combination of these three ingredients offers a promising approach to promoting hair growth and reducing hair loss. ■

If you have any questions on the scientific content of this article, please call a **Life Extension** Wellness Specialist at 1-866-864-3027.

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**Item #01713**

125 mcg (5000 IU)

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90 vegetarian capsules  
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# Power Up!



## Promote Youthful TESTOSTERONE Levels†

Free testosterone is the unbound form active in cells throughout the body.

The **Testosterone Elite**® formula promotes more *youthful* free and total **testosterone** levels with three **plant-based** nutrients:

- In a **clinical** study, a proprietary blend of **pomegranate** and **cacao** extracts in this product *promoted* **free testosterone** by up to **48%**.<sup>1</sup>
- Formulated with an innovative **fenugreek** fiber coating, the highly bioavailable **luteolin** in this product demonstrated up to a **14-fold** increase in luteolin levels compared to unformulated luteolin.\*<sup>2</sup>
- This advanced **luteolin** ingredient *supported* **free testosterone** by up to **22%** in a separate **human** trial.<sup>3</sup>



GLUTEN FREE

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NON-GMO CERTIFIED

Item #02500  
30 vegetarian capsules  
1 bottle \$39  
4 bottles \$36 each

Tesnor® is a trademark of Laila Nutra and Gencor.

†This product is intended to promote testosterone levels but does not contain testosterone.

\* regular luteolin defined as **98% pure powder luteolin**

Not for sale in India.

1. *Int J Med Sci.* 2022;19(8):1290-1299.

2. Bio-Luteolin Bioavailability Study. Data on file. 2025.

3. Bio-Luteolin Efficacy Study. Data on file. 2025.

Don't let testosterone levels hold you back from feeling your best. The once-daily **Testosterone Elite**®† product is the perfect complement to a testosterone-friendly lifestyle.

**For full product description and to order Testosterone Elite**®, call **1-800-544-4440** or visit **www.LifeExtension.com**

# READY *for* ACTION

Advanced Male Sexual Support includes three plant-based nutrients that help maintain male sexual health.

- Pomegranate and cacao were shown in a human study to promote *all* aspects of sexual function evaluated, including erectile function, sexual arousal, behavior, and satisfaction.<sup>1</sup>
- A highly bioavailable<sup>2\*</sup> form of luteolin was clinically shown to help maintain healthy levels of SHBG and estradiol. Lower levels of SHBG (sex hormone binding globulin) and estradiol are associated with healthy male vitality.<sup>3</sup>

*Take Advanced Male Sexual Support daily and fire up your passion!*

For full product description and to order **Advanced Male Sexual Support**, call **1-800-544-4440** or visit **www.LifeExtension.com**



GLUTEN  
FREE

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Item #02549  
60 vegetarian capsules  
1 bottle \$48  
4 bottles \$42 each

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References: 1. *Int J Med Sci.* 2025 Jan 1;22(2):383-397. 2. *Bio-Luteolin Bioavailability Study.* Data on file. 2025. 3. *Bio-Luteolin Efficacy Study.* Data on file. 2025.

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# Great Hair!

Oral Formula Promotes Hair Growth and Fullness



Item #02538

30 softgels

1 bottle \$21

4 bottles \$19 each

**Hair Growth for Men** is a **plant-derived** formula that *supports* the normal growth cycle for **healthy hair**.

Just one **Hair Growth for Men** softgel daily can help maintain healthy hair.

In a clinical trial, a proprietary blend of **black rice** (*Oryza sativa*) and **prickly pear** (*Opuntia ficus indica*) flower extracts helped to:<sup>1</sup>

- Support hair health
- Promote hair fullness and density

This formula also features a standardized **saw palmetto** oil that in a 4-month clinical trial demonstrated support for:<sup>2</sup>

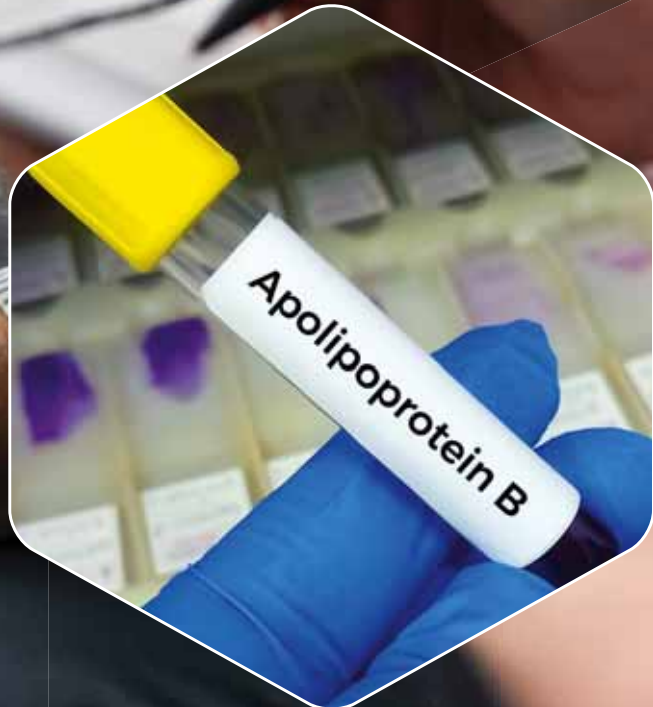
- Fuller hair with more density
- Reduced hair shedding
- Healthy hair appearance

For full product description and to order **Hair Growth for Men**, call **1-800-544-4440** or visit **www.LifeExtension.com**

References: 1. *J Cosmo Tricho.* 2023;9(3):207. 2. *Clin Cosmet Investig Dermatol.* 2023 Nov 11;16:3251-3266.

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# A Better Way to Estimate **CARDIOVASCULAR RISK**

BY MARK DOWNING

For decades, checking **LDL cholesterol** and other common atherosclerotic factors has been the primary way to assess **cardiovascular disease** risks.

Now there may be an even better way.

Recent studies<sup>1-3</sup> and updated guidelines<sup>4</sup> have increasingly focused on a more precise approach to cardiovascular risk assessment:

**Apolipoprotein B...** also known as **ApoB**.

In parallel with other blood markers, **ApoB testing** has gained attention as a complementary way to determine cardiovascular risk and evaluate the effectiveness of treatments.<sup>1,5,6</sup>

## The Problem: Atherosclerosis

Cardiovascular disease is frequently driven by **atherosclerosis**, the buildup of plaque within artery walls that can restrict or block blood flow.<sup>7</sup>

When plaque builds up in the arteries supplying the heart, it causes coronary artery disease and can trigger chest pain or heart attacks. In the arms and legs, it leads to peripheral vascular disease, a painful and debilitating condition.<sup>7</sup>

In brain arteries, it causes cerebrovascular disease and increases the risk of ischemic stroke and transient ischemic attacks (TIAs).<sup>7</sup>

Atherosclerotic plaque is largely made up of accumulations of lipoproteins that often contain cholesterol and triglycerides, but also contains immune cells that contribute to inflammation as well as dead and dying cells of various types.<sup>8,9</sup>

Although we tend to say that blood tests check our “lipids,” they are in fact testing lipoproteins like low-density lipoprotein (LDL) and high-density lipoprotein (HDL). More informed doctors are including a test for another lipoprotein, **ApoB**.

Testing ApoB allows doctors to estimate the risk of developing atherosclerosis and cardiovascular disease.

## LDL Cholesterol Explained

**Atherosclerosis** often begins when lipoproteins deliver lipids to the arterial walls.<sup>10</sup>

But some lipoproteins are particularly **pro-atherogenic**. This means they are *more* likely to enter and remain within artery walls, contributing to atherosclerosis.<sup>8,10</sup>

One of the most well-studied pro-atherogenic lipoproteins is **LDL (low-density lipoprotein)**.

Higher levels of LDL cholesterol, often called “bad” cholesterol, are a well-established risk for cardiovascular disease.<sup>1,11</sup> (**HDL**, or **high-density lipoprotein**, can carry excess cholesterol away from the blood and artery walls to be excreted, so that it is sometimes called “good cholesterol.”)<sup>12</sup>

Measuring **LDL cholesterol** levels via a blood test, generally in combination with assessment of other risk factors, allows physicians to estimate patients’ risk of developing cardiovascular disease or suffering **cardiovascular events** like heart attack, stroke, or cardiovascular-related death.<sup>1</sup>

The effectiveness of cholesterol-lowering drugs like **statins** can be monitored by re-measuring LDL cholesterol to ensure levels are coming down.

But several other lipoproteins are also pro-atherogenic, so that measuring *only* LDL cholesterol gives an incomplete picture of cardiovascular risk.<sup>1</sup>

In recent years, scientists have turned more and more attention to a more precise and accurate way to assess cardiovascular risk: **apolipoprotein B (ApoB)**.<sup>1,11</sup>

## Why ApoB Is More Accurate

**ApoB** is a protein found in the outer shell of atherogenic (cardiovascular-disease promoting) lipoproteins. Each of the following **pro-atherogenic** lipoproteins contains one molecule of ApoB:<sup>11</sup>

- **LDL**,
- **VLDL** (very-low-density lipoprotein),
- **IDL** (intermediate-density lipoprotein),
- **Chylomicrons**, and
- **Lipoprotein (a)**, or **Lp(a)**.

HDL does *not* contain ApoB.



While testing LDL levels tells you the amount of cholesterol in the *low-density variety* of lipoproteins, measuring **ApoB** provides an estimate of the **total number** of *all* pro-atherogenic lipoprotein particles in the blood.<sup>1,8,10</sup>

As a result, ApoB may better represent the **overall risk** for cardiovascular disease and events.<sup>4,8,13</sup>

For example, people with **metabolic disease**, including metabolic syndrome, insulin resistance, and type 2 diabetes, often have a disproportionately high number of atherogenic lipoprotein particles despite normal or near-normal LDL cholesterol levels.<sup>1</sup> An **ApoB** test *would* detect these pro-atherogenic particles and elevated levels would indicate increased risk of **atherosclerosis**.

In an analysis of results from the United States National Health and Nutrition Examination Survey of 2011–2018, close to **42%** of U.S. adults aged 20 years and older had **metabolic syndrome**.<sup>14</sup> Thus, it is possible that for many metabolic syndrome adults, **ApoB** levels could offer a better estimate of cardiovascular risk than LDL cholesterol.

### What Studies Show

A human clinical study published in 2000 was one of the first to suggest that elevated ApoB is a better predictor of major cardiovascular events, compared to high LDL cholesterol, in people taking statins for cholesterol.<sup>15</sup>

Many studies published since then support the value and accuracy of ApoB testing.<sup>1,11</sup>

One review published in **2025** analyzed data from 15 studies including nearly **600,000** participants. In nine of those studies, LDL cholesterol was compared to ApoB as a predictor of **cardiovascular risk**. In all nine of those studies, **ApoB** was the superior biomarker.<sup>11</sup>

The authors concluded that ApoB may be considered as the **primary measure in estimating cardiovascular risk** as well as in assessing the adequacy of treatments to lower lipid levels.<sup>11</sup>

Another large observational study of over **40,000** participants published in **2025** compared **ApoB** testing with **LDL-P**, which measures the **number** of LDL particles in the blood. (Typical LDL cholesterol tests measure the *amount of cholesterol* carried by LDL particles, not the number of particles.)<sup>1</sup>

This analysis found that when LDL-P and **ApoB** disagree, ApoB is the more accurate predictor of risk for major cardiovascular events and coronary artery events.<sup>1</sup>



What You  
Need  
To Know

## ApoB Reveals Cardiovascular Risk

- Atherosclerosis drives most cardiovascular disease. It develops when **lipoproteins**, lipid-containing particles in the blood, enter and are retained in the walls of arteries.
- **LDL cholesterol** levels have long been used to assess risk for atherosclerosis and cardiovascular disease. However, measuring LDL may not identify all individuals at risk.
- **Apolipoprotein B (ApoB)**, a protein found within the surface of all pro-atherogenic lipoproteins, such as LDL, is an indicator of the total number of potentially dangerous lipoprotein particles in the blood.
- Numerous studies have found that, when ApoB and LDL disagree on cardiovascular risk, ApoB levels are more accurate for predicting risk of **cardiovascular disease** and events like heart attack and stroke.
- Many experts recommend testing **ApoB** in addition to cholesterol to assess risk for cardiovascular disease and adverse cardiovascular events and to monitor the effectiveness of treatments.

With findings like these accumulating, many experts encourage physicians to consider ApoB as an additional estimate of cardiovascular disease risk. The **National Lipid Association** now recognizes ApoB as a *stronger predictor of cardiovascular risk* when conventional lipoprotein measures give results that conflict with the ApoB levels.<sup>6</sup>

Elevated LDL cholesterol remains a major risk factor for cardiovascular disease. Adding an annual **ApoB test** can provide a more comprehensive assessment for cardiovascular disease risk and assess whether lipid-lowering interventions are working.

### Summary

**LDL cholesterol** levels have long been used to estimate risk of **cardiovascular disease**. But research suggests that adding another test is likely a more accurate and precise approach.

**Apolipoprotein B (ApoB)** is found within the surface of LDL and other **atherogenic** lipoproteins. Testing for ApoB offers an estimate of the total number of lipid particles in blood that contribute to **atherosclerosis** development and progression.

Studies confirm that **ApoB** is an excellent and reliable indicator of risk for cardiovascular disease and cardiovascular events like stroke and heart attack.

Many experts now recommend testing ApoB and cholesterol levels to estimate cardiovascular risk and monitor the effectiveness of lipid-lowering medications.

**ApoB** was long ago added to the comprehensive **Male and Female Blood Test** panels used by many readers of this magazine. ■

If you have any questions on the scientific content of this article, please call a **Life Extension Wellness Specialist** at 1-866-864-3027.

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# Up Your Game

With Ultra Prostate Formula, you'll always have a great play.



**Ultra Prostate Formula** addresses multiple factors essential to lasting prostate health, so you can stay on top of your game.

Our best prostate supplement features ingredients like nettle root, pygeum and beta-sitosterol to promote healthy prostate function, healthy urine flow and more.



**Item #02029**  
60 softgels  
1 bottle **\$29.25**  
4 bottles \$27 each

AprèsFlex® is a registered trademark of PLT Health Solutions—Laila Nutraceuticals LLC. HMRlignan™ is a trademark used under sublicense from Linnea S.A. Lyc-O-Mato® is a registered trademark of Lycored Corp. Graminex® is a registered trademark of Graminex LLC.

For full product description and to order **Ultra Prostate Formula**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# Counting Sheep is So Passé

Sweet dreams, and  
no more sheep for you!

Immediate-release  
melatonin to help you  
get to sleep\*

Extended-release  
melatonin to help you  
stay asleep\*

With age, the body's nocturnal  
peak of **melatonin** declines, making it harder to  
fall asleep and stay asleep.

Take **Melatonin IR/XR** at night for  
better bedtimes.



For full product description and to order **Melatonin IR/XR**,  
call **1-800-544-4440** or visit **www.LifeExtension.com**

**Item #02201**  
60 capsules  
1 bottle **\$9**  
4 bottles **\$7.50** each



\*For occasional sleeplessness.  
CAUTION: Do not consume alcohol, drive or operate  
machinery after taking this product.

MicroActive® Melatonin is a registered trademark of BioActives LLC.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

"Great product."

Jack

VERIFIED BUYER

# Keep Your ENERGY UP

Occasional feelings of fatigue happen to everyone.

Scientists have found that an extract of **French oak wood** contains compounds that fight fatigue at the cellular level.\*

**EnergyGain™** formula contains a proprietary extract of French oak wood that can help promote healthy energy levels.

Item #01900

30 vegetarian capsules

1 bottle \$27

4 bottles \$24.75 each



Robuvit® is a registered trademark of Horphag Research. Use of this product may be protected by one or more U.S. patents and other international patents.

\* *J Agric Food Chem.* 2014 Jan 15;62(2):443-53.

For full product description and to order **EnergyGain™**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

HEART HEALTH AND MORE



Item #02302  
30 vegetarian capsules  
1 bottle \$9  
4 bottles \$8 each



# more QUERCETIN

UP TO 62 TIMES GREATER BIOAVAILABILITY\*

For years, researchers have worked to increase the bioavailability of the plant flavonoid, **quercetin**.

Now, **Bio-Quercetin**® formula with an innovative hydrogel delivery system is up to 62 times more bioavailable than unformulated quercetin.\*

And, it delivers up to 18 times more free **quercetin**.

For full product description and to order **Bio-Quercetin**®, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

\* Studied against powder *Sophora japonica* extract standardized to 98% quercetin.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



# What's Your ApoB Level?

Research<sup>1-6</sup> suggests that ApoB may offer deeper insight into heart disease risk—beyond the standard lipid profiles.

**Apolipoprotein B (ApoB)** directly contributes to arterial plaque buildup.<sup>2-5</sup>

Measuring ApoB levels gives an approximation of the total number of atherogenic particles in your blood. Higher **ApoB** translates into increased risk of arterial calcification,<sup>1-3</sup> heart attack,<sup>1,5</sup> and stroke.<sup>7,8</sup>

The ApoB blood test is available separately (QD005224) or as part of the **Male Panel Blood Test** (QD322582) or the **Female Panel Blood Test** (QD322535).



After you order and receive our form, you can visit a Quest Diagnostics facility at your convenience in your area or the **Life Extension Health & Wellness Market** in Ft. Lauderdale.

For a limited time, until July 13, 2026, this special offer costs just \$21. **Item # QD005224 • Sale price \$21**

For full product description and to order **ApoB Blood Test Special**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

**References:** 1. *JAMA Cardiol.* 2022;7(3):250-256. 2. *Nat Rev Cardiol.* 2025 Jun;22(6):399-413. 3. *J Am Heart Assoc.* 2018;7:e009778. 4. *Curr Opin Lipidol.* 2018 Feb;29(1):51-52. 5. *F1000Res.* 2017; 6: 134. 6. *Curr Opin Lipidol.* 2016 Oct;27(5):473-83. 7. *Ann Neurol.* 2022 Sep;92(3):379-389. 8. *Ann Neurol.* 2020 Dec;88(6):1229-1236.

Blood test services are available only in the continental United States and Anchorage, AK. Not available in Maryland. Restrictions apply for residents of MA, NY, NJ, RI, and PA.

\*The information provided from this calculation is provided FOR INFORMATIONAL PURPOSES ONLY. Many factors may impact your biomarker results and report, including transient factors such as an infection. Further, the report is based on statistical models that are still in development, and the value of any insights is not fully understood. This report is not a substitute for medical advice and is not intended to provide medical advice. The results should not be used to diagnose, treat, prevent, or cure any disease. Any health-related decisions informed by the test results you receive should be made with the consultation of a qualified, licensed, healthcare provider.

MAINTAIN YOUTHFUL

# Homocysteine Levels



**Item #02121**  
60 vegetarian capsules  
1 bottle **\$19.50**  
4 bottles \$17.50 each



## For Brain, Heart, and Hearing Health

Homocysteine Resist supports healthy levels of homocysteine, an unfavorable amino acid that can increase with normal aging.

Just one daily capsule of **HOMOCYSTEINE RESIST** provides:

5-MTHF (activated folate)	8,500 mcg <sup>o</sup>
Methylcobalamin (activated vitamin B12)	1,000 mcg
Pyridoxal 5'-phosphate (activated vitamin B6)	100 mg
Riboflavin (vitamin B2)	25 mg

<sup>o</sup>DFE (Dietary Folate Equivalents)

For full product description and to order **Homocysteine Resist**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

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# What is Saffron?

BY LAURIE MATHENA



Saffron has been used for over 2,500 years in traditional medicine for a variety of conditions.<sup>1</sup>

Preclinical research has shown that saffron contains natural compounds that may help protect cells, reduce inflammation and improve memory and mood.<sup>1</sup>

Emerging evidence from human studies suggests that these beneficial compounds may help support metabolic and cardiovascular health markers such as blood glucose,<sup>2,3</sup> cholesterol,<sup>4</sup> and blood pressure.<sup>5-7</sup>

Among its various benefits, two in particular stand out:

1. **Mood and emotional well-being** – There is clinical evidence for saffron's effects on improvements in mood and reduction in symptoms of depression and anxiety.<sup>1</sup> In one clinical trial, a standardized saffron extract increased satiety and reduced between-meal snacking versus placebo.<sup>8</sup>
2. **Visual and retinal health** – Saffron has been associated with improved visual function and support for retinal health in people with macular degeneration.<sup>9,10</sup>

## Saffron for Snacking Control

Snacking can sabotage even the most disciplined weight loss efforts. It adds extra hidden calories, disrupts blood sugar balance, and can contribute to insulin resistance, especially when it happens late at night.

One research study found that a particular saffron extract helped reduce snacking, cravings, and appetite—contributing to measurable weight loss in as little as eight weeks.

In a randomized, double-blind trial, 60 mildly overweight women took either this particular saffron extract (**176.5 mg**) or a placebo for eight weeks. By the end of the study, the saffron group experienced a **55%** decrease in snacking frequency and lost significantly more weight than the placebo group.<sup>8</sup>

## Saffron for Mood Balance

A systematic review of 12 randomized controlled trials evaluating saffron’s effects on psychological and behavioral outcomes reported improvements in depressive and premenstrual symptoms as a result of saffron extract consumption.<sup>1</sup>

Preclinical research suggests that saffron and its active compounds may help support mood by modulating brain pathways involved in mood, inflammation, and nerve protection. One way that saffron may help curb snacking is by supporting healthy serotonin levels in the brain.<sup>11</sup>



Dysregulation of this neurotransmitter has been linked to carbohydrate craving,<sup>12,13</sup> increased appetite,<sup>14</sup> less meal satisfaction,<sup>14-16</sup> and emotional eating.<sup>17</sup>

Saffron has shown effects on depressive symptoms comparable to some anti-depressants in certain studies, which could possibly help reduce emotionally driven snacking behaviors.<sup>1</sup>

## Better Eye Health

The macula is a small central part of the retina responsible for sharp, detailed vision directly in front of the eyes. **Age-related macular degeneration (AMD)**, the leading cause of vision loss in older adults, damages the macula and gradually reduces central vision.<sup>18</sup> The retina is critical for vision because it detects light and translates it into signals your brain can use. Generally, better retinal function is associated with better visual acuity.<sup>19</sup>

AMD develops over time due to aging, genetic factors, and environmental exposure, which cause inflammation and oxidative damage to retinal cells.<sup>18</sup>

While there is no cure for AMD, evidence shows that saffron may improve visual function in those with mild to moderate AMD.

Two ways saffron may accomplish this, as shown in several clinical trials, are by reducing inflammation and oxidative stress,<sup>6,20</sup> two key mechanisms involved in AMD pathophysiology.

Encouraging symptomatic improvement has also been demonstrated in clinical studies. For instance, in a double-blind, placebo-controlled, crossover trial, 100 adults with mild to moderate AMD took either **20 mg** per day of oral saffron supplementation or a placebo for three months. Those already taking “eye vitamins” continued taking them. Saffron supplementation resulted in improvements in “best-corrected visual acuity,” meaning



participants experienced improvement in vision even when using corrective lenses. The study also found improved retinal function, further confirming saffron's benefits to vision and the eyes.<sup>10</sup>

Another study reported that participants taking **20 mg** per day of oral saffron supplementation had improvements in visual acuity (sharpness of vision) after three months, with these changes remaining stable during follow-up over approximately 14 months.<sup>9</sup> This means that the observed visual changes were maintained over time in this study population, though the extent and consistency of such effects may vary.

These visual improvements make sense in light of saffron's benefits to retinal function, inflammation, and oxidative stress.<sup>6,10,20-22</sup>

## Summary

Saffron is a well-known spice with a variety of properties that have been studied for health-promoting effects. Saffron has been associated with effects on mood, impulse control, and appetite regulation, which may help reduce between-meal snacking, stress eating, and late-night cravings.

Saffron has also been associated with improvements in retinal function and it promotes better visual function in individuals with age-related macular degeneration.

Overall, current evidence suggests that saffron may help support both mood and long-term vision. •




If you have any questions on the scientific content of this article, please call a **Life Extension Wellness Specialist** at 1-866-864-3027.

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**Creatine & Acetyl-L-Carnitine Energy Plus** promotes healthy energy production and supports exercise performance and cognitive function.

Clinical studies show that:

- 5 grams of creatine increase both workout capacity and lean tissue mass\*<sup>1,2</sup>
- 2 grams of acetyl-L-carnitine support physical and mental energy, as well as cognitive function<sup>3</sup>

Each scoop of **Creatine & Acetyl-L-Carnitine Energy Plus** provides **5 grams of creatine** and **2 grams of acetyl-L-carnitine**. This unflavored powder has no added sugars. It can be mixed easily into a smoothie, shake, juice, or water.

\* When combined with a regular resistance training/exercise program.

For full product description and to order **Creatine & Acetyl-L-Carnitine Energy Plus**, call **1-800-544-4440** or visit **www.LifeExtension.com**



Item #02532 | Net Wt. 233 g (0.51 lb)

1 jar \$24.75 | 4 jars \$22 each

1. *J Int Soc Sports Nutr.* 2017;14(1):18. 2. *Open Access J Sports Med.* 2017;8:213-226. 3. *Curr Opin Gastroenterol.* 2023;39(2):125-128.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# Love the Sun?

Shield Your Skin from Within

"I now have peace of mind knowing I'm doing what I can to protect myself."

**Elaine**

VERIFIED BUYER



GLUTEN  
FREE

1  
DAILY

**Item #01938**

120 vegetarian capsules

1 bottle **\$33**

2 bottles \$30 each

Unique ORAL formula provides Polypodium leucotomos fern extract along with nicotinamide and red orange extract.

For full product description and to order SHADE FACTOR™, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

**CAUTION:** This product is not a substitute for topical sunscreens. Gastric disturbances may occur. Consult with your healthcare provider before taking this product if you have gout or liver disease.

Red Orange Complex™ is a trademark of Bionap S.r.l.

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# Sitting Too **LONG?**



**Item #02102**

30 vegetarian capsules

1 bottle **\$39.75**

4 bottles \$37 each

For those who find themselves sitting for long periods of time at the office, in daily commutes, or when traveling by plane, the proprietary blend of nutrients in **VenoFlow™** formula promotes healthy venous blood flow.

Just one capsule of **VenoFlow™** supplement provides **nattokinase** (providing 2,000 fibrinolytic units) and **procyanidins** derived from French maritime pine bark (Pycnogenol®).

For full product description and to order **VENOFLOW™**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)



**CAUTION:** If you are taking anticoagulant or antiplatelet medications, or have a bleeding disorder, consult your healthcare provider before taking this product.

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# Heart of the Mediterranean

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Omega-3 EPA/DHA Products!  
7 Time Winner!



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Our highest dose EPA/DHA omega-3 formula is made with Pure+™, a high-quality fish oil concentrate combined with krill oil, astaxanthin and olive extract that:

- Supports both cardiovascular and cognitive health
- Helps maintain already-healthy triglyceride and HDL cholesterol levels
- Promotes a healthy inflammatory response and whole-body health

Get to the heart of the matter with Super Omega-3 Plus EPA/DHA Fish Oil, Sesame Lignans, Olive Extract, Krill & Astaxanthin.

For full product description and to order **Super Omega-3 Plus EPA/DHA Fish Oil, Sesame Lignans, Olive Extract, Krill & Astaxanthin**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

Contains crustacean shellfish (krill), sesame.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

\*Product ratings based on results of the 2025 ConsumerLab.com Survey of Supplement Users. For more information, visit [www.ConsumerLab.com/survey](http://www.ConsumerLab.com/survey).

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D L Y A T B K U E H S N

M O K I Y E A C Y X M O Z O

COMPREHENSIVE

# EYE HEALTH FORMULA

## MACUGUARD® OCULAR SUPPORT PROVIDES:

- **Lutein, zeaxanthin, and meso-zeaxanthin** to help maintain structural integrity of the **macula** and **retina**.<sup>1-5</sup>
- **Saffron** to help support **vision** as demonstrated by doctors' eye exams.<sup>1</sup>
- **Alpha-carotene** to further help support **macular density**.<sup>1</sup>

For full product description and to order either of these **MACUGUARD®** formulas, call **1-800-544-4440** or visit **www.LifeExtension.com**

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4. *Free Radic Biol Med.* 2012;53(6):1298-307.
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**MacuGuard® Ocular Support with Saffron**

Item #01992 • 60 softgels  
1 bottle \$18 • 4 bottles \$17 each



**MacuGuard® Ocular Support with Saffron + Astaxanthin**

Item #01993 • 60 softgels  
1 bottle \$32.25 • 4 bottles \$29 each

"This is a great item for me."

**Martin**  
VERIFIED BUYER

Each bottle lasts for **two months**.

**MacuGuard® Ocular Support is available with or without astaxanthin.**



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# Say goodbye to “kitchen raids” and say hello to **Optimized Saffron**



People who struggle with weight loss often point to several issues that sabotage their efforts:

- Eating between meals,
- Grazing at night, and
- Constant desire to snack.

A proprietary extract of saffron was clinically studied to help support appetite control, feelings of hunger and help with weight management.\*

\* Nutr Res. 2010 May;30(5):305-13.

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Satiereal® is a registered trademark of INOREAL International patents pending.

**Item #01432**  
60 vegetarian capsules  
1 bottle **\$27**  
4 bottles **\$24 each**



This supplement should be taken in conjunction with a healthy diet and regular exercise program. Results may vary and individual results are not guaranteed.

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- 02023 Tart Cherry with CherryPURE®
- 02246C Wellness Code® Advanced Whey Protein Isolate Vanilla
- 02221 Wellness Code® Muscle Strength & Restore Formula
- 02127 Wellness Code® Plant Protein Complete & Amino Acid Complex
- 02261C Wellness Code® Whey Protein Concentrate Chocolate
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- 02243C Wellness Code® Whey Protein Isolate Chocolate
- 02242 Wellness Code® Whey Protein Isolate Vanilla

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- 01253 Branched Chain Amino Acids
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- 01671 D,L-Phenylalanine Capsules
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- 01532 L-Carnitine
- 00345 L-Glutamine
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- 01827 Taurine
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- 02320 NitroVasc™ Boost
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- 00956 Pomegranate Fruit Extract
- 02024 Triple Action Blood Pressure AM/PM
- 02102 Venoflow™

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- 02123 Bone Restore Calcium Supplement Chewable Tablet
- 02416 Bone Restore Elite with Super Potent K2
- 01727 Bone Restore Calcium Supplement w/ Vitamin K2
- 01725 Bone Strength Collagen Formula
- 01963 Calcium Citrate with Vitamin D
- 01506C Dr. Strum's Intensive Bone Formula
- 02417 Mega Vitamin K2
- 01476 Strontium Caps

**BRAIN HEALTH**

- 01524 Acetyl-L-Carnitine
- 01974 Acetyl-L-Carnitine Arginate
- 02419 B12 Elite
- 02510 Brain Fog Relief
- 01659 CDP Choline

- 02321 Cognitex® Alpha GPC
- 02396 Cognitex® Elite
- 02397 Cognitex® Elite Pregnenolone
- 01540 DMAE Bitartrate
- 02006 Dopa-Mind™
- 02413 Dopamine Advantage
- 01658 Ginkgo Biloba Certified Extract™
- 01527 Huperzine A
- 00020 Lecithin
- 02101 Memory Protect
- 00709 Migra-Eeze™
- 01603 Neuro-Mag® Magnesium L-Threonate Caps
- 02032 Neuro-Mag® Magnesium L-Threonate Powder
- 02520 Neuro-Mag® Magnewum L-Threonate Gummies
- 00888 Optimized Ashwagandha
- 01676 PS (Phosphatidylserine) Caps
- 02406 Quick Brain Nootropic®
- 01327 Vinpocetine

**CHOLESTEROL MANAGEMENT**

- 01828 Advanced Lipid Control
- 01910 CHOL-Support™
- 01304 Theaflavins Standardized Extract
- 00372 Vitamin B3 Niacin Capsules

**DIGESTION SUPPORT**

- 02412 Bloat Relief
- 02514 Easy Fiber
- 01736 Effervescent Vitamin C - Magnesium Crystals
- 02021 Enhanced Super Digestive Enzymes
- 02022 Enhanced Super Digestive Enzymes and Probiotics
- 02033 EsophaCool™
- 01737 Esophageal Guardian
- 01706 Extraordinary Enzymes
- 02533 Food Sensitivity Relief with Diamine Oxidase
- 02100 Gastro-Ease™

**ENERGY MANAGEMENT**

- 01628C Adrenal Energy Formula • 60 vegetarian capsules
- 01630C Adrenal Energy Formula • 120 vegetarian capsules
- 00972 D-Ribose Powder
- 01473 D-Ribose Tablets
- 01900 EnergyGain™
- 01544 Forskolin
- 01805 Ginseng Energy Boost
- 01869 Mitochondrial Basics with PQQ
- 01868 Mitochondrial Energy Optimizer with PQQ
- 01904 NAD+ Cell Regenerator™ • 100 mg, 30 veg capsules
- 02344 NAD+ Cell Regenerator™ 300 mg, 30 veg capsules
- 02348 NAD+ Cell Regenerator™ and Resveratrol Elite™
- 02555 NAD+ Cell Support NMN • 30 veg capsules
- 02558 NAD+ Cell Support NMN • 90 veg capsules
- 02556 Optimized NAD+ NMN w/Resveratrol Elite 30 vegetarian capsules
- 02559 Optimized NAD+ NMN w/Resveratrol Elite 90 vegetarian capsules
- 01500 PQQ Caps • 10 mg, 60 vegetarian capsules
- 01647 PQQ Caps • 20 mg, 30 vegetarian capsules
- 00889 Rhodiola Extract
- 02003 Thyroid Support Complex

**EYE HEALTH**

- 01923 Astaxanthin with Phospholipids
- 01514 Eye Pressure Support with Mirtogenol®
- 01992 MacuGuard® Ocular Support with Saffron
- 01993 MacuGuard® Ocular Support with Saffron & Astaxanthin
- 01873 Standardized European Bilberry Extract
- 01918 Tear Support with MaquiBright®

**FISH OIL & OMEGAS**

- 01937 Mega EPA/DHA
- 02218 Mega GLA Sesame Lignans
- 01983 Super Omega-3 EPA/DHA Fish Oil, Sesame Lignans & Olive Extract • 60 softgels
- 01988 Super Omega-3 Plus EPA/DHA Fish Oil, Sesame Lignans, Olive Extract, Krill & Astaxanthin
- 01982 Super Omega-3 EPA/DHA Fish Oil, Sesame Lignans & Olive Extract • 120 softgels
- 01985 Super Omega-3 EPA/DHA Fish Oil, Sesame Lignans & Olive Extract • 60 enteric coated softgels
- 01984 Super Omega-3 EPA/DHA Fish Oil, Sesame Lignans & Olive Extract • 120 enteric coated softgels
- 01986 Super Omega-3 EPA/DHA Fish Oil, Sesame Lignans & Olive Extract • 240 softgels
- 01812 Provinal® Purified Omega-7
- 01640 Vegetarian DHA

**FOOD**

- 02008 California Estate Extra Virgin Olive Oil
- 02170 Rainforest Blend Decaf Ground Coffee
- 02169 Rainforest Blend Ground Coffee
- 02171 Rainforest Blend Whole Bean Coffee

**GLUCOSE MANAGEMENT**

- 01503 CinSulin® with InSea2® and Crominex® 3+
- 01620 CoffeeGenic® Green Coffee Extract
- 02122 Glycemic Guard™
- 00925 Mega Benfotiamine
- 01803 Tri Sugar Shield®

**HEART HEALTH**

- 02530 Aged Black Garlic
- 02553 AmpliQ CoQ10™ • 50 mg, 60 vegetarian capsules
- 02554 AmpliQ CoQ10™ • 100 mg, 60 vegetarian capsules
- 01066 Aspirin (Enteric Coated)
- 01842 BioActive Folate & Vitamin B12 Caps
- 02531 Cardio Peak™
- 02121 Homocysteine Resist
- 02508 Omega-3 Fish Oil Gummy Bites
- 02018 Optimized Carnitine
- 01949 Super-Absorbable CoQ10 Ubiquinone with *d*-Limonene • 50 mg, 60 softgels
- 01951 Super-Absorbable CoQ10 Ubiquinone with *d*-Limonene • 100 mg, 60 softgels
- 01929 Super Ubiquinol CoQ10
- 01427 Super Ubiquinol CoQ10 with Enh Mitochondrial Support™ • 50 mg, 30 softgels
- 01425 Super Ubiquinol CoQ10 with Enh Mitochondrial Support™ • 50 mg, 100 softgels
- 01437 Super Ubiquinol CoQ10 with Enh Mitochondrial Support™ • 100 mg, 30 softgels

- 01426 Super Ubiquinol CoQ10 with Enh Mitochondrial Support™ • 100 mg, 60 softgels
- 01431 Super Ubiquinol CoQ10 with Enh Mitochondrial Support™ • 200 mg, 30 softgels
- 01733 Super Ubiquinol CoQ10 with PQQ
- 01859 TMG Liquid Capsules
- 00349 TMG Powder

**HORMONE BALANCE**

- 00454 DHEA • 15 mg, 100 capsules
- 00335 DHEA • 25 mg, 100 capsules
- 00882 DHEA • 50 mg, 60 capsules
- 00607 DHEA • 25 mg, 100 vegetarian dissolve in mouth tablets
- 01689 DHEA • 100 mg, 60 vegetarian capsules
- 02368 Optimized Broccoli with Myrosinase
- 00302 Pregnenolone • 50 mg, 100 capsules
- 00700 Pregnenolone • 100 mg, 100 capsules
- 01468 Triple Action Cruciferous Vegetable Extract
- 01469 Triple Action Cruciferous Vegetable Extract and Resveratrol

**IMMUNE SUPPORT**

- 02546 Bee Immune Propolis Capsules
- 02550 Bee Immune Propolis Spray
- 02302 Bio-Quercetin®
- 02433 Echinacea Elite
- 01961 Enhanced Zinc Lozenges
- 02425 Immune Packs with Vitamin C & D, Zinc and Probiotic
- 02005 Immune Senescence Protection Formula™
- 01681 Lactoferrin (Apolactoferrin) Caps
- 02426 Mushroom Immune with Beta Glucans
- 01903 NK Cell Activator™
- 01394 Optimized Garlic
- 01309 Optimized Quercetin
- 01811 Peony Immune
- 01708 Reishi Extract Mushroom Complex
- 01906 Standardized Cistanche
- 01561 Zinc Lozenges

**INFLAMMATION HEALTH SUPPORT**

- 01639 5-LOX Inhibitor with AprèsFlex®
- 02324 Advanced Curcumin Elite™ Turmeric Extract, Ginger & Turmerones
- 01709 Black Cumin Seed Oil
- 02310 Black Cumin Seed Oil and Curcumin Elite™
- 02467 Curcumin Elite™ Turmeric Extract 30 vegetarian capsules
- 02407 Curcumin Elite™ Turmeric Extract 60 vegetarian capsules
- 01804 Cytokine Suppress® with EGCG
- 02223 Pro-Resolving Mediators
- 56886 Restore Activ Joint, Muscle & Tissue
- 01203 Specially-Coated Bromelain
- 00407 Super Bio-Curcumin® Turmeric Extract

**JOINT SUPPORT**

- 02238 ArthroMax® Advanced NT2 Collagen™ & AprèsFlex®
- 00965 Fast-Acting Joint Formula
- 02430 Fast Acting Relief

- 00522 Glucosamine/Chondroitin Capsules
- 02420 Glucosamine Sulfate
- 02424 Joint Mobility
- 01600 Krill Healthy Joint Formula
- 02529 Lower Back Relief
- 00451 MSM (Methylsulfonylmethane)
- 02231 NT2 Collagen™

**KIDNEY & BLADDER SUPPORT**

- 00862 Cran-Max® Cranberry Whole Fruit Concentrate
- 01424 Optimized Cran-Max®
- 01921 Uric Acid Control
- 01209 Water-Soluble Pumpkin Seed Extract

**LIVER HEALTH & DETOXIFICATION**

- 01922 Advanced Milk Thistle • 60 softgels
- 01925 Advanced Milk Thistle • 120 softgels
- 02240C Anti-Alcohol Complex
- 01651 Calcium D-Glucarate
- 01571 Chlorophyllin
- 02402 FLORASSIST® Liver Restore™
- 02521 Glutathione
- 01541 Glutathione, Cysteine & C
- 01393 HepatoPro
- 01608 Liver Efficiency Formula
- 01522 Milk Thistle • 60 vegetarian capsules
- 01534 N-Acetyl-L-Cysteine
- 01884 Silymarin
- 02361 SOD Booster

**LONGEVITY & WELLNESS**

- 00457 Alpha-Lipoic Acid
- 02414 Bio-Fisetin®
- 02547 Bio-Luteolin™
- 01214 Blueberry Extract
- 01438 Blueberry Extract and Pomegranate
- 02270 DNA Protection Formula
- 02431 Essential Youth - L-Ergothioneine
- 02119 GEROPROTECT® Ageless Cell™
- 02415 GEROPROTECT® Autophagy Renew
- 02401 GEROPROTECT® Stem Cell
- 02211 Grapeseed Extract
- 02527 Healthy Aging Powder
- 00954 Mega Green Tea Extract (decaffeinated)
- 00953 Mega Green Tea Extract (lightly caffeinated)
- 02540 Mega L-Ergothioneine
- 01513 Optimized Fucoidan with Maritech® 926
- 02230 Optimized Resveratrol Elite™
- 01637 Pycnogenol® French Maritime Pine Bark Extract
- 02210 Resveratrol Elite™
- 02301 Senolytic Activator®
- 01208 Super R-Lipoic Acid
- 01919 X-R Shield

**LUNG HEALTH**

- 02512 Healthy Lungs

**MEN'S HEALTH**

- 02538 Hair Growth for Men
- 02549 Advanced Male Sexual Support
- 02209 Male Vascular Sexual Support
- 00455 Mega Lycopene Extract

- 02306 Men's Bladder Support
- 01789 PalmettoGuard® Saw Palmetto and Beta-Sitosterol
- 01790 PalmettoGuard® Saw Palmetto/Nettle Root Formula and Beta-Sitosterol
- 01373 Prelox® Enhanced Sex for Men
- 01940 Super MiraForte with Standardized Lignans
- 02500 Testosterone Elite®
- 01909 Triple Strength ProstaPollen™
- 02029 Ultra Prostate Formula

**MINERALS**

- 01661 Boron
- 02107 Extend-Release Magnesium
- 01677 Iron Protein Plus
- 02403 Lithium
- 01459 Magnesium Caps
- 01682 Magnesium (Citrate)
- 02535 Magnesium Glycinate
- 01328 Only Trace Minerals
- 01504 Optimized Chromium with Crominex® 3+
- 02309 Potassium with Extend-Release Magnesium
- 01740 Sea-Iodine™
- 01879 Se-Methyl L-Selenocysteine
- 01778 Super Selenium Complex
- 00213 Vanadyl Sulfate
- 01813 Zinc Caps

**MISCELLANEOUS**

- 00577 Potassium Iodide

**MOOD & STRESS MANAGEMENT**

- 02519 Ashwagandha Plus
- 02434 Calm-Mag
- 02312 Cortisol-Stress Balance
- 00987 Enhanced Stress Relief
- 02542 GABA
- 01683 L-Theanine
- 02175 SAMe (S-Adenosyl-Methionine)  
200 mg, 30 enteric coated vegetarian tablets
- 02176 SAMe (S-Adenosyl-Methionine)  
400 mg, 30 enteric coated vegetarian tablets
- 02174 SAMe (S-Adenosyl-Methionine)  
400 mg, 60 enteric coated vegetarian tablets
- 02429 Theanine XR™ Stress Relief

**MULTIVITAMINS**

- 02199 Children's Formula Life Extension Mix™
- 02354 Life Extension Mix™ Capsules
- 02364 Life Extension Mix™ Capsules without Copper
- 02356 Life Extension Mix™ Powder
- 02355 Life Extension Mix™ Tablets
- 02357 Life Extension Mix™ Tablets with Extra Niacin
- 02365 Life Extension Mix™ Tablets without Copper
- 02292 Once-Daily Health Booster • 30 softgels
- 02291 Once-Daily Health Booster • 60 softgels
- 02313 One-Per-Day Tablets
- 02317 Two-Per-Day Capsules • 60 capsules
- 02314 Two-Per-Day Capsules • 120 capsules
- 02316 Two-Per-Day Tablets • 60 tablets
- 02315 Two-Per-Day Tablets • 120 tablets
- 02428 Whole Food Multivitamin

**NERVE & COMFORT SUPPORT**

- 02202 ComfortMAX™
- 02303 Discomfort Relief
- 02544 Migra-Health™

**PERSONAL CARE**

- 02322 Hair, Skin & Nails Collagen Plus Formula
- 01278 Life Extension® Toothpaste
- 00408 Venotone
- 02252 Youthful Legs

**PET CARE**

- 01932 Cat Mix
- 01931 Dog Mix

**PROBIOTICS**

- 01622 Bifido GI Balance
- 02421 FLORASSIST® Daily Bowel Regularity
- 02125 FLORASSIST® GI with Phage Technology
- 01821 FLORASSIST® Heart Health
- 02250 FLORASSIST® Mood Improve
- 02208 FLORASSIST® Immune & Nasal Defense
- 02120 FLORASSIST® Oral Hygiene
- 02203 FLORASSIST® Prebiotic
- 01825 FLORASSIST® Probiotic Balance
- 02505 FLORASSIST® Probiotic Women's Health
- 02539 FLORASSIST® Probiotic Youthful Gut

**SKIN CARE**

- 02423 Daily Skin Defense
- 01938 Shade Factor™
- 02129 Skin Care Collection Anti-Aging Serum
- 02130 Skin Care Collection Day Cream
- 02131 Skin Care Collection Night Cream
- 02096 Skin Restoring Ceramides

**SLEEP**

- 01512 Bioactive Milk Peptides
- 01511 Enhanced Sleep without Melatonin
- 02234 Fast-Acting Liquid Melatonin
- 01669 Glycine
- 01722 L-Tryptophan
- 01668 Melatonin • 300 mcg, 100 vegetarian capsules
- 01083 Melatonin • 500 mcg, 200 vegetarian capsules
- 00329 Melatonin • 1 mg, 60 capsules
- 00330 Melatonin • 3 mg, 60 vegetarian capsules
- 00331 Melatonin • 10 mg, 60 vegetarian capsules
- 00332 Melatonin • 3 mg, 60 vegetarian lozenges
- 02201 Melatonin IR/XR
- 01787 Melatonin 6 Hour Timed Release  
300 mcg, 100 vegetarian tablets
- 01788 Melatonin 6 Hour Timed Release  
750 mcg, 60 vegetarian tablets
- 01786 Melatonin 6 Hour Timed Release • 3 mg,  
60 vegetarian tabs
- 01721 Optimized Tryptophan Plus
- 01445 Quiet Sleep Melatonin • 5 mg, 60 veg capsules
- 02502 Rest & Renew
- 02526 Serene Sleep

**VITAMINS**

- 01533 Ascorbyl Palmitate
- 00920 Benfotiamine with Thiamine
- 01945 BioActive Complete B-Complex
- 00102 Biotin
- 00084 Buffered Vitamin C Powder
- 02229 Fast-C® and Bio-Quercetin®
- 02075 Gamma E Mixed Tocopherol Enhanced with  
Sesame Lignans
- 02070 Gamma E Mixed Tocopherol & Tocotrienols
- 01913 High Potency Optimized Folate
- 01674 Inositol Caps
- 02244 Liquid Vitamin D3 • 50 mcg (2000 IU)
- 02232 Liquid Vitamin D3 (Mint) • 50 mcg (2000 IU)
- 01936 Low-Dose Vitamin K2
- 00373 No Flush Niacin
- 01939 Optimized Folate (L-Methylfolate)
- 01217 Pyridoxal 5'-Phosphate Caps
- 01400 Super Absorbable Tocotrienols
- 02334 Super K
- 01863 Super Vitamin E
- 02422 Vegan Vitamin D3
- 02028 Vitamin B5 (Pantothenic Acid)
- 01535 Vitamin B6
- 00361 Vitamin B12 Methylcobalamin
- 01536 Vitamin B12 Methylcobalamin  
1 mg, 60 vegetarian lozenges
- 01537 Vitamin B12 Methylcobalamin  
5 mg, 60 vegetarian lozenges
- 02228 Vitamin C and Bio-Quercetin®  
60 vegetarian tablets
- 02227 Vitamin C and Bio-Quercetin®  
250 vegetarian tablets
- 01753 Vitamin D3 • 25 mcg (1000 IU), 90 softgels
- 01751 Vitamin D3 • 25 mcg (1000 IU), 250 softgels
- 01713 Vitamin D3 • 125 mcg (5000 IU), 60 softgels
- 01718 Vitamin D3 • 175 mcg (7000 IU), 60 softgels
- 01758 Vitamin D3 with Sea-Iodine™
- 02040 Vitamins D and K with Sea-Iodine™

**WEIGHT MANAGEMENT & BODY COMPOSITION**

- 02479 7-Keto® DHEA Metabolite  
100 mg, 60 vegetarian capsules
- 02207 AMPK Metabolic Activator
- 02504 Body Trim and Appetite Control
- 02478 DHEA Complete
- 02506C Mediterranean Weight Management
- 01432 Optimized Saffron
- 02511 Thermo Weight Control
- 02509 Waistline Control™

**WOMEN'S HEALTH**

- 01942 Breast Health Formula
- 02537 Daily PMS Relief
- 02534 Estrogen Balance Elite
- 01894 Estrogen for Women
- 02541 Hair Growth for Women
- 02204 Menopause Relief
- 02319 Prenatal Advantage
- 02536 Sexual Health for Her
- 01649 Soy Isoflavones
- 02513 Women's Bladder Support

# ADVANCED Milk Thistle

ULTIMATE SUPPORT  
FOR YOUR LIVER



**Advanced Milk Thistle** contains standardized, top-grade ingredients of *silymarin*, *silybin*, *isosilybin A*, and *isosilybin B*, providing a full spectrum of liver-supportive compounds.

SILIPHOS® phytosome in **Advanced Milk Thistle** resulted in up to 3 times greater bioavailability compared to unformulated milk thistle extract.

Item #01922  
60 softgels  
1 bottle \$21  
4 bottles \$18.75 each



For full product description and to order **Advanced Milk Thistle**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

SILIPHOS® is a registered trademark of Indena S.p.A., Italy.

Life Extension's Advanced Milk Thistle has met ConsumerLab.com standards for ingredient and product quality for Milk Thistle in independent testing. More information at [www.consumerlab.com](http://www.consumerlab.com)



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

"Works well!"

Ana

VERIFIED BUYER

# A Bodyguard for your Brain



People tend to live longer in areas where lithium is abundant in the drinking water.\*

**Lithium** is a low-cost mineral that functions in several ways to support cognition and overall brain health.

Maintain healthy cognition with lithium—it's like a bodyguard for your brain!

\*European Journal of Nutrition. 2011;50(5):387-389.

(1000 mcg of lithium per tiny cap)

Item #02403 | 100 vegetarian capsules

1 bottle \$12 | 4 bottles \$10.50 each

Each bottle lasts 100 days.



For full product description or to order **Lithium**, call 1-800-544-4440 or visit [www.LifeExtension.com](http://www.LifeExtension.com)

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



# LIFE EXTENSION®

The Science of a Healthier Life®

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## IN THIS EDITION OF *LIFE EXTENSION MAGAZINE*®



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### 7 NEUTRALIZE A HARSH REALITY

An overlooked **blood test** provides an opportunity to reduce **heart attack** and **stroke** risks before cardiovascular events strike.

### 22 COST-EFFECTIVE METHOD TO BOOST NAD<sup>+</sup>

In controlled human trials, oral NMN supplementation significantly increased blood **NAD<sup>+</sup>** levels compared to placebo. **NMN** is a lower-cost way to boost **NAD<sup>+</sup>**.



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### 34 A GROWING THREAT TO YOUNGER ADULTS

**Colorectal cancer** is increasing in younger adults. **Life Extension** has long advocated for *earlier* screening along with intake of healthy nutrients to reduce this growing risk.

### 46 HOW MEN CAN REVERSE HAIR LOSS

In a clinical study, two **plant extracts** *increased hair growth* for **95%** of men with male pattern baldness, while in another trial, a third plant extract *decreased hair loss* by **29%**.



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### 56 BETTER WAY TO ASSESS CARDIOVASCULAR RISK

Recent studies show **ApoB** levels more accurately *estimate atherosclerotic disease* than LDL levels alone. Experts advise testing both **ApoB** and **LDL** to assess cardiovascular risk.

### 67 WHAT IS SAFFRON?

Compounds in **saffron** help *balance mood* and *improve eye health*. A saffron extract *decreased snacking* by **55%** and *promoted weight loss*.

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