Slash Your Prostate Cancer Risk

Prevent Holiday WEIGHT GAIN

Olive Oil Helps Maintain Bone

Anti-Inflammatory Role of Pine Bark

Probiotics for Oral Health

Easy Methods to Curb Calorie Intake
NAD⁺ levels plummet with age but increase in response to nicotinamide riboside.

Optimized NAD⁺ Cell Regenerator™ combines 250 mg of nicotinamide riboside with resveratrol and other plant extracts.

For resveratrol to deliver functional results, it requires NAD⁺.

For those already taking resveratrol, we also offer NAD⁺ Regenerator™ that provides 250 mg of nicotinamide riboside.

* For pricing available to readers of this magazine, call 1-800-544-4440 or visit LifeExtension.com/NAD
REPORTS

40 DIETARY APPROACHES REDUCE PROSTATE CANCER RISK
The prostate glands of aging men often harbor malignant cells, but the right diet can prevent them from progressing to clinically-relevant prostate cancer.

55 OLIVE OIL PROTECTS AGAINST OSTEOPOROSIS
A human study shows that people consuming high levels of extra virgin olive oil have a 51% lower risk of bone fractures.

64 LINK BETWEEN GUM DISEASE AND AGING
Two oral probiotics boost gum health by rebalancing the oral microbiome to reduce plaque and bleeding gums.

76 50 YEARS OF CONSISTENT SCIENTIFIC FINDINGS
Pine bark extract provides a concentrated mixture of pro-cyanidins that have been shown to reduce risk of a host of vascular and inflammatory related conditions. New applications are being reported in the medical literature each year.

DEPARTMENTS

7 AS WE SEE IT: ANOTHER YEAR OF VINDICATION
A landmark 2018 Prostate Cancer Prevention Trial showed that the drug finasteride slashed prostate cancer risk by around 25%. There was no increase in deaths from aggressive prostate cancer, as had been argued by the medical establishment. Life Extension® has long advocated that aging men consider this class of drug to relieve benign prostate hypertrophy and reduce prostate cancer risk.

19 IN THE NEWS
Adequate omega-3 dose needed for benefits; testosterone deficiency widespread; vitamin D offsets many malnutrition effects; green tea helps dissolve arterial plaque.

75 SUPER FOODS: SWEET POTATO
The sweet potato, popular during the holidays, may help improve blood sugar levels and reduce oxidation.

87 ASK THE DOCTOR: DR. MICHAEL OZNER: CHOLESTEROL CRYSTALS: THE NEGLECTED HEART ATTACK RISK FACTOR
Cardiologist Michael Ozner, MD, explains how dangerous cholesterol crystals are formed deep inside arterial plaque and how research into omega-3 fatty acids and new medications may cut the risk of these crystals triggering a major cardiac event.

93 DR. MAN AND THE ART OF PLASTIC SURGERY
Plastic surgeon Dr. Daniel Man describes the many new weapons in his arsenal against the ravages of elements and time. Dr. Man believes plastic surgery today, along with a proper lifestyle, can act as an anti-aging treatment that runs more than skin deep.

97 AUTHOR INTERVIEW: HOW WE EAT WITH OUR EYES AND THINK WITH OUR STOMACH BY MELANIE MÜHL AND DIANA VON KOPP
In their new book, How We Eat With Our Eyes and Think With Our Stomach, Melanie Mühl and Diana Von Kopp explain how commercial forces manipulate us into buying and consuming foods we don’t really want and should avoid.
Personal Consultation with Life Extension
Blood Testing and Analysis
The Most Complete Line of Life Extension Supplements

Subscription or address changes to: LE Publications, Inc., P.O. Box 407198, Fort Lauderdale, FL 33340-7198, USA. Or phone us toll-free at: 1-800-841-5433. Canada Subscriptions:
of the businesses or the products and/or services that may appear in advertisements for non-Life Extension branded products or services contained in Life Extension magazine®

Take a look back at 2018

Connect with Life Extension on the Web!
Facebook.com/LifeExtension
For instant access to special offers and promotions, product news, and exclusive health and wellness information.
Twitter.com/LifeExtension
For up-to-the-minute health tips, breaking industry news, and the latest updates in medical research.

Customer care is available to take your calls 24 hours a day, 7 days a week.
Visit the Life Extension Nutrition Center Store
- The Most Complete Line of Life Extension Supplements
- Blood Testing and Analysis
- Personal Consultation with Life Extension Product/Wellness Specialist

Nutrition Center of Florida, Inc.
5990 North Federal Highway,
Fort Lauderdale, FL 33308-2633 • 954-766-8144
Monday-Friday 9 am-8 pm,
Saturday 9 am-6 pm, Sunday 11 am-5 pm

Published by LE Publications, Inc. All rights reserved. Published 13 times a year. Subscription rate: $40 per year in the United States. US $47 in Canada. US $60 in other countries. Mail subscriptions or address changes to: LE Publications, Inc., P.O. Box 407198, Fort Lauderdale, FL 33340-7198, USA. Or phone us toll-free at: 1-800-841-5433. Canada Subscriptions:

Life Extension Magazine is intended for informational purposes only. They are not intended to replace the attention or advice of a physician or other health-care professional. Anyone who wishes to embark on any dietary, drug, exercise, or other lifestyle change intended to prevent or treat a specific disease or condition should first consult with and seek clearance from a qualified health-care professional.

For up-to-the-minute health tips, breaking industry news, and the latest updates in medical research.
Visit the Life Extension Nutrition Center Store
- The Most Complete Line of Life Extension Supplements
- Blood Testing and Analysis
- Personal Consultation with Life Extension Product/Wellness Specialist

Nutrition Center of Florida, Inc.
5990 North Federal Highway,
Fort Lauderdale, FL 33308-2633 • 954-766-8144
Monday-Friday 9 am-8 pm,
Saturday 9 am-6 pm, Sunday 11 am-5 pm

Published by LE Publications, Inc. All rights reserved. Published 13 times a year. Subscription rate: $40 per year in the United States. US $47 in Canada. US $60 in other countries. Mail subscriptions or address changes to: LE Publications, Inc., P.O. Box 407198, Fort Lauderdale, FL 33340-7198, USA. Or phone us toll-free at: 1-800-841-5433. Canada Subscriptions:

Life Extension Magazine is intended for informational purposes only. They are not intended to replace the attention or advice of a physician or other health-care professional. Anyone who wishes to embark on any dietary, drug, exercise, or other lifestyle change intended to prevent or treat a specific disease or condition should first consult with and seek clearance from a qualified health-care professional.

For up-to-the-minute health tips, breaking industry news, and the latest updates in medical research.
Visit the Life Extension Nutrition Center Store
- The Most Complete Line of Life Extension Supplements
- Blood Testing and Analysis
- Personal Consultation with Life Extension Product/Wellness Specialist

Nutrition Center of Florida, Inc.
5990 North Federal Highway,
Fort Lauderdale, FL 33308-2633 • 954-766-8144
Monday-Friday 9 am-8 pm,
Saturday 9 am-6 pm, Sunday 11 am-5 pm

Published by LE Publications, Inc. All rights reserved. Published 13 times a year. Subscription rate: $40 per year in the United States. US $47 in Canada. US $60 in other countries. Mail subscriptions or address changes to: LE Publications, Inc., P.O. Box 407198, Fort Lauderdale, FL 33340-7198, USA. Or phone us toll-free at: 1-800-841-5433. Canada Subscriptions:

Life Extension Magazine is intended for informational purposes only. They are not intended to replace the attention or advice of a physician or other health-care professional. Anyone who wishes to embark on any dietary, drug, exercise, or other lifestyle change intended to prevent or treat a specific disease or condition should first consult with and seek clearance from a qualified health-care professional.

For up-to-the-minute health tips, breaking industry news, and the latest updates in medical research.
Visit the Life Extension Nutrition Center Store
- The Most Complete Line of Life Extension Supplements
- Blood Testing and Analysis
- Personal Consultation with Life Extension Product/Wellness Specialist

Nutrition Center of Florida, Inc.
5990 North Federal Highway,
Fort Lauderdale, FL 33308-2633 • 954-766-8144
Monday-Friday 9 am-8 pm,
Saturday 9 am-6 pm, Sunday 11 am-5 pm

Published by LE Publications, Inc. All rights reserved. Published 13 times a year. Subscription rate: $40 per year in the United States. US $47 in Canada. US $60 in other countries. Mail subscriptions or address changes to: LE Publications, Inc., P.O. Box 407198, Fort Lauderdale, FL 33340-7198, USA. Or phone us toll-free at: 1-800-841-5433. Canada Subscriptions:
Low-Cost Biologically Active B-COMPLEX

Enzymatically Active Vitamins

BioActive Complete B-Complex provides enzymatically active forms of meaningful potencies of each B vitamin.

This includes the pyridoxal 5'-phosphate form of vitamin B6 shown to protect lipids and proteins against glycation and the most biologically active form of folate called 5-methyltetra-hydrofolate (5-MTHF), which is up to 7 times more bioavailable than folic acid.*

For full product description and to order BioActive Complete B-Complex, call 1-800-544-4440 or visit www.LifeExtension.com

<table>
<thead>
<tr>
<th>BioActive Complete B-Complex</th>
<th>Item #01945 • 60 vegetarian capsules</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retail Price</strong></td>
<td><strong>Your Price</strong></td>
</tr>
<tr>
<td>1 bottle $12</td>
<td>$9</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$8 each</td>
</tr>
</tbody>
</table>


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.
Gustavo Tovar Baez, MD, operates the Life Extension Clinic in Caracas, Venezuela. He is the first physician in Caracas to specialize in anti-aging medicine.

Ricardo Bernales, MD, is a board-certified pediatrician and general practitioner in Chicago, IL, focusing on allergies, bronchial asthma, and immunodeficiency.

Mark S. Bezek, MD, FACP, FAARM, FAAEM, is board-certified in internal medicine, emergency medicine, and anti-aging/regenerative medicine. He is the director of Med-Link Consulting, which specializes in bioidentical hormone replacement therapy, natural alternatives, anti-aging, and degenerative diseases. He holds US patents for a multivitamin/mineral supplement, an Alzheimer’s/dementia compilation, and a diabetic regimen.

Thomas F. Crais, MD, FACS, a board-certified plastic surgeon, was medical director of the microsurgical research and training lab at Southern Baptist Hospital in New Orleans, LA, and currently practices in Sun Valley, ID.

William Davis, MD, is a preventive cardiologist and author of Wheat Belly: Lose the Wheat, Lose the Weight and Find Your Path Back to Health. He is also medical director of the online heart disease prevention and reversal program, Track Your Plaque (www.trackyourplaque.com).

Martin Dayton, MD, DO, practices at the Sunny Isles Medical Center in North Miami Beach, FL. His focus is on nutrition, aging, chelation therapy, holistic medicine, and oxidative medicine.

John DeLuca, MD, DC, is a 2005 graduate of St. George’s University School of Medicine. He completed his internal medicine residency at Monmouth Medical Center in Long Branch, NJ, in 2008 and is board-certified by the American Board of Internal Medicine. Dr. DeLuca is a Diplomate of the American Academy of Anti-Aging Medicine and has obtained certifications in hyperbaric medicine, pain management, nutrition, strength and conditioning, and manipulation under anesthesia.

Segey A. Dzugan, MD, PhD, was formerly chief of cardiovascular surgery at the Donetsk Regional Medical Center in Donetsk, Ukraine. Dr. Dzugan’s current primary interests are anti-aging and biological therapy for cancer, cholesterol, and hormonal disorders.

Patrick M. Fratellone, MD, RH, is the founder and executive medical director of Fratellone Associates. He completed his internal medicine and cardiology fellowship at Lenox Hill Hospital in 1994, before becoming the medical director for the Atkins Center for Complementary Medicine.

Carmen Fusco, MS, RN, CNS, is a research scientist and clinical nutritionist in New York City who has lectured and written numerous articles on the biochemical approach to the prevention of aging and degenerative diseases.

Norman R. Gay, MD, is proprietor of the Bahamas Anti-Aging Medical Institute in Nassau, Bahamas. A former member of the Bahamian Parliament, he served as Minister of Health and Minister of Youth and Sports.

Mitchell J. Ghen, DO, PhD, holds a doctorate in holistic health and anti-aging and serves on the faculty of medicine at the Benemerita Universidad Autonoma De Puebla, Mexico, as a professor of cellular hemapoetic studies.

Gary Goldfaden, MD, is a clinical dermatologist and a lifetime member of the American Academy of Dermatology. He is the founder of Academy Dermatology of Hollywood, FL, and COSMESIS Skin Care.

Miguelangelo Gonzalez, MD, is a certified plastic and reconstructive surgeon at the Miguelangelo Plastic Surgery Clinic, Cabo San Lucas.

Garry F. Gordon, MD, DO, is a Payson, AZ-based researcher of alternative approaches to medical problems that are unresponsive to traditional therapies. He is president of the International College of Advanced Longevity Medicine.

Richard Heifetz, MD, is a board-certified anesthesiologist in Santa Rosa, CA, specializing in the delivery of anesthesia for office-based plastic/cosmetic surgery, chelation therapy, and pain management.

Roberto Marasi, MD, is a psychiatrist in Brescia and in Piacenza, Italy. He is involved in anti-aging strategies and weight management.

Maurice D. Marholin, DC, DO, is a licensed chiropractic physician and board-certified osteopathic family physician. While training at the University of Alabama, he completed Fellowships in Clinical Nutrition and Behavioral Medicine. He is currently in private practice in Clermont, FL.

Prof. Francesco Marotta, MD, PhD, of Montepulciano Medical Center, Milan, Italy, is a gastroenterologist and nutrigenomics expert with extensive international university experience. He is also a consulting professor at the WHO-affiliated Center for Biotech & Traditional Medicine, University of Milano, Italy and hon. res. professor, Human Nutrition Dept, TWU, USA. He is the author of over 130 papers and 400 congress lectures.

Philip Lee Miller, MD, is founder and medical director of the Los Gatos Longevity Institute in Los Gatos, CA.

Michele G. Morrow, DO, FAAFP, is a board-certified family physician who merges mainstream and alternative medicine using functional medicine concepts, nutrition, and natural approaches.

Filippo Ongaro, MD, is board-certified in anti-aging medicine and has worked for many years as flight surgeon at the European Space Agency. He is considered a pioneer in functional and anti-aging medicine in Italy where he also works as a journalist and a writer.

Herbert Pardell, DO, FAAIM, practices internal medicine at the Emerald Hills Medical Center in Hollywood, FL. He is a medical director of the Life Extension Foundation.

Lambert Titus K. Parker, MD, an internist and a board-certified anti-aging physician, practices integrative medicine from a human ecology perspective with emphasis on personalized brain health, biomarkers, genomics, and total health optimization. He serves as the Medical Director of Integrative Longevity Institute of Virginia, a 501(c)3 Non-Profit Medical Research Institute. He also collaborates on education and research for Hampton Roads Hyperbaric Therapy.

Ross Pelton, RPh, PhD, CCN, is scientific director for Essential Formulas, Inc.

Patrick Quillin, PhD, RD, CNS, is a clinical nutritionist in Carlsbad, CA, and formerly served as vice president of nutrition for Cancer Treatment Centers of America, where he was a consultant to the National Institutes of Health.

Allan Rashford, MD, graduated from the University of Iowa Medical School. Upon completing medical training, he became chief of medicine at St. Francis Hospital in South Carolina, and he was later named president of the Charleston Medical Society.

Marc R. Rose, MD, practices ophthalmology in Los Angeles, CA, and is president of the Rose Eye Medical Group. He is on the staff of Pacific Alliance Medical Center, Los Angeles, and other area hospitals.

Michael R. Rose, MD, a board-certified ophthalmologist with the Rose Eye Medical Group in Los Angeles, CA, is on the staff of the University of Southern California and UCLA.

Ron Rothenberg, MD, is a full clinical professor at the University of California San Diego School of Medicine and founder of California HealthSpan Institute in San Diego, CA.

Roman Rozencwaig, MD, is a pioneer in research on melatonin and aging. He practices in Montreal, Canada, as research associate at Montreal General Hospital, Department of Medicine, McGill University.

Michael D. Seidman, MD, FACS, is the director of skull base surgery and wellness for the Adventist Health System in Celebration, FL.

Ronald L. Shuler, BS, DDS, CCN, LN, is involved in immunoncology for the prevention and treatment of cancer, human growth hormone secretagogues, and osteoporosis. He is board-certified in anti-aging medicine.

Paul Wand, MD, Fort Lauderdale, FL, is a clinical neurologist with specialty expertise in treating and reversing diabetic peripheral neuropathy and brain injuries from various causes.
Örn Adalsteinsson, PhD, is chairman of the Life Extension® Scientific Advisory board. He holds a master’s and doctorate from the Massachusetts Institute of Technology (MIT). He has specialized in human therapeutics including vaccines, monoclonal antibodies, product development, nutraceuticals, formulations, artificial intelligence, hormones, and nutritional supplementation. He has also authored articles and contributed to peer-reviewed publications and served as an editor for the Journal of Medicinal Food.

Richard Black, DO, is a dedicated nuclear medicine physician practicing as an independent contractor out of Cleveland, Ohio. Dr. Black is board certified in internal medicine and nuclear medicine, and is licensed to practice medicine in multiple states throughout the United States.

John Boik, PhD, is the author of two books on cancer therapy, Cancer and Natural Medicine (1996) and Natural Compounds in Cancer Therapy (2001). He obtained his doctorate at the University of Texas Graduate School of Biomedical Sciences with research at the MD Anderson Cancer Center, focusing on screening models to identify promising new anti-cancer drugs. He conducted his postdoctoral training at Stanford University Department of Statistics.

Aubrey de Grey, PhD, is a biomedical gerontologist and Editor-in-Chief of Rejuvenation Research, the world’s highest-impact peer-reviewed journal focused on intervention in aging. He received his BA and PhD from the University of Cambridge in 1985 and 2000 respectively. Dr. de Grey is a Fellow of both the Gerontological Society of America and the American Aging Association and sits on the editorial and scientific advisory boards of numerous journals and organizations.

Frank Eichhorn, MD, is a urologist specializing in prostate cancer for 10 years. He has a private practice in Bad Reichenhall, Germany, and is prostate cancer consultant at the Urologische Klinik Castrignius, Planegg, Munich. In his integrative approach to prostate cancer he works together with an international network of experts to improve treatment outcomes for prostate cancer patients with a special focus on natural and translational medicine.

Deborah F. Harding, MD, is founder of the Harding Anti-Aging Center. She is double board-certified in internal medicine and sleep disorder medicine. She also earned the Cenegenics certification in age management medicine. She is a faculty member of the new University of Central Florida Medical School.

Sandra C. Kaufmann, MD is a fellowship trained and board certified pediatric anesthesiologist as well as the Chief of Anesthesia at the Joe DiMaggio Children’s Hospital in Hollywood, Florida. She is the founder of The Kaufmann Anti-Aging Institute and the author of the book The Kaufmann Protocol: Why we Age and How to Stop it (2018). Her expertise is in the practical application of anti-aging research.

Steven B. Harris, MD, is president and director of research at Critical Care Research, a company that grew out of 21st Century Medicine in Rancho Cucamonga, CA. Dr. Harris participates in groundbreaking hypothermia, cryotherapy, and ischemia research. His research interests include antioxidant and dietary-restriction effects in animals and humans.

Peter H. Langsjoen, MD, FACC, is a cardiologist specializing in congestive heart failure, primary and statin-induced diastolic dysfunction, and other heart diseases. A leading authority on coenzyme Q10, Dr. Langsjoen has been involved with its clinical application since 1983. He is a founding member of the executive committee of the International Coenzyme Q10 Association, a fellow of the American College of Cardiology, and a member of numerous other medical associations.

Dipnarine Maharaj MD, MB, ChB, FRCP (Edinburgh), FRCPath, FACP
Dr. Dipnarine Maharaj is the Medical Director of the South Florida Bone Marrow Stem Cell Transplant Institute and is regarded as one of the world’s foremost experts on adult stem cells. He received his medical degree in 1978 from the University of Glasgow Medical School, Scotland. He completed his internship and residency in Internal Medicine and Hematology at the University’s Royal Infirmary.

Ralph W. Moss, PhD, is the author of books such as Antioxidants Against Cancer, Cancer Therapy, Questioning Chemotherapy, and The Cancer Industry, as well as the award-winning PBS documentary The Cancer War. Dr. Moss has independently evaluated the claims of various cancer treatments and currently directs The Moss Reports, an updated library of detailed reports on more than 200 varieties of cancer diagnoses.

Michael D. Ozner, MD, FACC, FAHA, is a board-certified cardiologist who specializes in cardiovascular disease prevention. He serves as medical director for the Cardiovascular Prevention Institute of South Florida and is a noted national speaker on heart disease prevention. Dr. Ozner is also author of The Great American Heart Hoax, The Complete Mediterranean Diet and Heart Attack Proof. For more information visit www.drozner.com.

Jonathan V. Wright, MD, is medical director of the Tahoma Clinic in Tukwila, WA. He received his MD from the University of Michigan and has taught natural biochemical medical treatments since 1983. Dr. Wright pioneered the use of bioidentical estrogens and DHEA in daily medical practice. He has authored or co-authored 14 books, selling over 1.5 million copies.

Xiaoxi Wei, PhD, is a chemist expert in supramolecular assembly and development of synthetic transmembrane nanopores with distinguished selectivity via biomimetic nanoscience. She has expertise in ion channel function and characterization. She founded X-Thera Inc., a company developing a radical new highway towards non-toxic, hyper-effective antifreeze agents to fight unwanted ice formation in regenerative medicine and reduce mechanical icing.
Boosts Brain Cell Regeneration & Supports Whole-Body Health

Taurine, a free amino acid, is “one of the most essential substances in the body.”¹ But as we age, taurine levels decline.

Research has found that taurine can promote new cell formation in the area of the brain associated with learning and memory.

Taurine also enhances neurites, tiny projections that help brain cells communicate with each other.

Past research has also shown the ability of taurine to maintain and support:²⁻⁸

- Cardiovascular health
- Insulin sensitivity
- Modulation of the immune system
- Regulation of the central nervous system
- Liver function
- Eye health
- Hearing function

References
In the May 2013 issue of this magazine, I reiterated Life Extension’s long-standing position that PSA screening and a certain drug class reduces prostate cancer incidence and death.¹

Up against me was the medical establishment that claimed the drug increased aggressive prostate cancer risk.² They also claimed there was no value to screening for PSA (prostate specific antigen).³

A renowned expert (Patrick C. Walsh, MD) said drugs like finasteride (Proscar®) increased aggressive prostate cancer.²

Dr. Walsh is a pioneer in identifying genetic characteristics of prostate cancer and “nerve-sparing” surgery. So when someone of the caliber of Patrick Walsh writes me a letter, I pay attention. That’s why in 2013, I let readers know there are differing viewpoints.

The FDA went so far as to mandate a “black box warning” on finasteride and similar drugs, stating they may increase aggressive prostate cancer incidence.⁴

My Response to the Critics

I responded to these allegations in the December 2013 edition of this magazine.⁵ In my rebuttal to Dr. Walsh and the FDA, I documented how drugs that lower PSA (like finasteride and dutasteride) not only help alleviate urinary symptoms related to benign prostate enlargement, but also reduce a man’s risk of developing prostate cancer. The evidence dating back to the 1994–2013 period was robust in my opinion.

In May 2018, at the annual meeting of the American Urological Association, the results of a long-term follow-up trial vindicated Life Extension’s position.⁶

Findings from the landmark Prostate Cancer Prevention Trial showed that finasteride slashed prostate cancer risk by around 25% with no increase in deaths from prostate cancer in men using this drug.⁷ A follow-up study showed similar results⁸ and led the principal investigator to state:

“These results are transformational… We have found an inexpensive, effective drug [finasteride] that can prevent [prostate cancer].”⁶

While the news media treated this as a major advance, the reality is that over 100,000 American men may have needlessly died of prostate cancer because of the failure of the medical establishment and FDA to accurately interpret published scientific findings dating back to 2003 and earlier.⁷
This year, about 165,000 American men will be diagnosed with prostate cancer, and around 29,000 will die from this malignancy.9

The number of men diagnosed is artificially low because of an erroneous position taken in 2012 by the United States Preventive Services Task Force that argued against routine PSA screening.3,10

By recommending against low-cost PSA blood tests, hundreds of thousands of men will develop advanced prostate cancer that is difficult to cure.

In 2017–2018, the United States Preventive Services Task Force backtracked on its 2012 recommendation against PSA screening. Their new suggestion is that men aged 55–69 should make an individual decision about routine screening in consultation with their physician.11

While this represents a partial vindication of our position, we disagree that early diagnosis of prostate cancer should be limited to men aged 55–69 years.

Prostate cancer risk begins around age 40, and this is when men should have their first PSA blood test.12

We don’t write off men over age 69, and we urge these men to have annual PSA blood tests to ascertain prostate cancer risk and take steps to reverse the course of early stage disease using nutritional and drug interventions.

Prostate Cancer Prevention Diet

As we have written for decades, the most effective way of reducing one’s risk of prostate cancer is by healthy diet.13-16

Simply stated, avoid meat, dairy, refined sugar, eggs, most starches, and foods cooked at high temperatures. Following a Mediterranean-type diet may reduce prostate cancer risk up to 48%.17-19

Published scientific findings continue to validate our position on the striking role of diet and prostate cancer.20-27

The article on page 40 of this month’s issue provides an update to our 2013 report about foods that increase prostate cancer risks and those that reduce it.

5-alpha reductase is the enzyme that causes testosterone to convert to dihydrotestosterone that stimulates both benign and malignant prostate cell proliferation.28-30

Generic drugs like finasteride or dutasteride inhibit 5-alpha reductase and thereby reduce dihydrotestosterone levels.7,30,31

A rapid effect of these drugs is the impact on the size (volume) of the prostate gland. Both medications are capable of shrinking an enlarged (benign) prostate gland by as much as 25%.32

In May 2018 the results from a large clinical trial were announced. The findings showed that finasteride markedly reduced prostate cancer risk.33

We urge all men to follow healthier dietary patterns and consider 5-alpha reductase inhibitors to further reduce their prostate cancer risk, as I’ve done for the past 18 years or so.
Bill Falloon’s PSA Blood Test Results

Years 2003 to 2018

<table>
<thead>
<tr>
<th>LAB RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name</td>
</tr>
<tr>
<td>FALOON</td>
</tr>
<tr>
<td>WILLIAM</td>
</tr>
<tr>
<td>Date of Birth</td>
</tr>
<tr>
<td>XX/XX/1954</td>
</tr>
</tbody>
</table>

Tests | Results | Units | Reference Interval | Lab |
|------|---------|-------|--------------------|-----|

PROSTATE SPECIFIC ANTIGEN

<table>
<thead>
<tr>
<th>Total PSA</th>
<th>Results</th>
<th>Units</th>
<th>Reference Interval</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>&lt; OR = 4.0 NG/ML</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Personal Triumph Using PSA Testing

I was traveling to meet a new oncology group in April 2003 when I called Life Extension’s Blood Lab to see if my most recent test results were ready. I asked Life Extension to fax these results to my hotel. What came out of that fax machine was beyond shocking. My PSA had shot up to 1.4 ng/mL—it had always been below 1.0 ng/mL. (See a copy of lab reports on this page.)

My reaction was a controlled panic. As far as I was concerned, there were early stage tumor cells lurking in my prostate gland that had to be eradicated. I’d seen too many cases where PSA jumps to 1.4 ng/mL and quickly moves up to the danger ranges (above 2.4 ng/mL).

All plans were cancelled that night as I searched computer databases to identify every single nutrient and lifestyle change that had ever been shown to reduce PSA levels. I noted each nutrient, extrapolated a human-equivalent dose, and then took a quadruple-amount of almost every anti-cancer ingredient.

Just some of the quadruple-dose nutrients I took included:

- Milk thistle extract
- Green tea extract (decaffeinated)
- Curcumin
- Vitamin D
- Cruciferous vegetable extracts (like I3C)
- Gamma tocopherol
- Genistein (soy) extract

I made sure to take the prescription drug metformin on a consistent basis, slashed my consumption of red meat, and vowed to stay on this ultra-high dose regimen until there was a reversal of my PSA. As supporters have seen from the blood tests I have previously posted, my PSA has stayed around 0.5 ng/mL—a more than 60% reduction compared to fifteen years ago (when I was 16 years younger).

I am convinced that had I not had regular PSA blood tests and used the findings to alter my dietary and nutrient-drug intake that I would be dealing with serious prostate issues now that I have turned age 64.

As you can see from my most recent blood test below, my PSA dropped to 0.5 ng/mL in 2018 from 1.4 ng/mL in 2003. If I had not checked my PSA regularly, I might very well have prostate cancer now. It runs in my family.
How PSA Fuels Prostate Cancer

PSA is more than a blood marker of prostate disease.

In prostate cancer, excessive levels of PSA (an enzyme) degrade structural barriers, allowing the expansion and escape of prostate cancer cells or colonies.52 Dihydrotestosterone stimulates prostate cell propagation.28

Drugs that lower dihydrotestosterone and PSA (like finasteride) thus reduce the odds that a man will contract prostate cancer by around 25%.8

Combining a healthy diet, certain supplements, and a 5-alpha reductase inhibitor is the most intelligent approach a man over age 40 can take to protect against the miseries of prostate cancer treatments and potential death from the disease.

The Latest Human Study

A study titled the Prostate Cancer Prevention Trial looked at 18,000 trial participants over a median follow-up of 16–18 years.

The findings revealed men taking finasteride had a 21% to 29% reduced rate of developing prostate cancer.8

Finasteride is a drug that blocks the 5-alpha reductase enzyme.53 Dutasteride blocks two different forms of 5-alpha reductase and is more potent (and more expensive).54,55

Data for the follow-up analysis of the Prostate Cancer Prevention Trial took five years to gather. It corroborates previously published findings showing that finasteride reduces prostate cancer risk.6

During this time, we at Life Extension fought against mainstream medicine ignorance that claimed PSA screening to be useless and drugs like finasteride to be dangerous. The new (2018) publications show the opposite to be true.

The implications were not overlooked by experts at American Urological Association 2018 annual conference in San Francisco.56

According Joseph Smith, MD, editor of the Journal of Urology, this Prostate Cancer Prevention Trial is “one of the most powerful and important cancer prevention trials ever conducted…”6

The doctors who conducted this long-term trial lamented how the FDA’s misguided “black box warning” had the lethal impact of causing most men to fear using 5-alpha reductase inhibitors.33,57 This in turn caused many to needlessly develop prostate cancer.

According to Ian J. Thompson, MD, the principle investigator of this landmark Prostate Cancer Prevention Trial:

“This discovery could benefit tens of thousands of men each year in the United States by identifying a drug that can safely and effectively prevent prostate cancer.”33

It was back in 2003 that a study published in the New England Journal of Medicine showed a 25% reduction in prostate cancer incidence using the 5-alpha reductase inhibitor over a 7-year period.7 The new data from the Prostate Cancer Prevention Trial (2018) shows this risk reduction extends to at least 16 years!8

Evidence from this Prostate Cancer Prevention Trial found that men using the drug had improved detection of prostate cancer, improved detection of high-grade cancers, and no increased risk of high-grade prostate cancer death.6
This same information is what we published in the December 2013 issue of this magazine. By shrinking the size of the prostate gland, which occurs with 5-alpha reductase inhibitors, it is easier to detect high-grade prostate cancers at an earlier, curative stage.

Nutrients That Reduce 5-Alpha Reductase

While we advocate that men over age 40 consider drugs like finasteride, sexual side effects sometimes manifest. A side benefit to drugs that inhibit 5-alpha reductase is increased hair growth in those with male pattern baldness.

A number of our readers, however, don’t like taking prescription drugs despite favorable evidence spanning back to year 1993.

This prompted us to investigate plant-based nutrients that provide prostate benefits in a milder way than prescription drugs.

An article on page 40 of this issue describes nutrients that have demonstrated promising prostate cancer risk reductions in published scientific studies. Most readers of Life Extension Magazine® already take many of these nutrients.

Too Many Needless Cancers

Data published by the New England Journal of Medicine in 2003 confirmed the prostate cancer-risk reduction effects of 5-alpha reductase inhibiting compounds.

Mainstream medicine misinterpreted these findings showing reductions in prostate cancer occurrence in men taking finasteride.

How to Reduce the Price Of 5-Alpha Reductase Inhibitor Drugs

The ingredient cost of generic finasteride and dutasteride is virtually nothing. Inefficient regulations pertaining to FDA approval of generic drugs cause them to cost more than they should.

At American pharmacies, finasteride costs between $9 and $86 for 30 5 mg tablets. Dutasteride costs between $15 and $168 for 30 0.5 mg capsules.58

Those with urinary symptoms of benign prostate enlargement may have most of this cost covered by their insurance as long as they have a doctor’s prescription.

One might achieve desired benefits, while reducing the cost (and sexual side effects), by taking just 3–4 tablets a week of either drug.

Alternative-day dosing is not unique to 5-alpha reductase inhibitors. One study showed every-other-day dosing of a statin drug produced equivalent results in lowering cholesterol while providing some cost savings.59

One way of assessing the optimal dose of a 5-alpha reductase inhibitor drug is to have a baseline PSA blood test, try taking either finasteride or dutasteride three times a week, and then have a follow-up PSA blood test in 45 days.

Look for at least a 25% reduction in your PSA level to determine if 3–4 tablets/capsules a week of a 5-alpha reductase inhibitor drug is working for you.

Life Extension offers PSA blood tests for only $31. Until December 15, 2018, we are including a comprehensive CBC/Chemistry Panel with a PSA blood test for only $39 (a $66 value at our normal low prices).

Please refer to the next page to see all the tests in our comprehensive CBC/Chemistry Profile.

To order this PSA with CBC/Chemistry Panel (Item Code LC100081) for only $39, call 1-800-208-3444 (24 hours).
The tragic result may be over 500,000 needless prostate cancer cases in American men that necessitate surgery, radiation, chemo, and androgen-deprivation therapies.

About 100,000 American men may have perished from prostate cancer because of the FDA’s erroneous black box warning that caused physicians and patients to fear drugs like finasteride and dutasteride.

Readers of Life Extension Magazine learned the scientific facts decades ago.

Hard data we provided enabled men to make informed choices as to whether to consider natural approaches and/or drugs that are now proven to reduce risk of prostate cancer.

Conventional medicine is waking up to the value of PSA blood testing to identify early changes that are often reversible with existing approaches that include diet, nutrients, and certain medications.

For longer life,

William Faloon, Co-Founder
Life Extension Buyers Club

References


(References continued on page 14.)
Early PSA Blood Testing Saves Lives

A PSA blood test can identify prostate tumors long before they become life threatening.
New imaging techniques can enable removal of suspicious lesions without serious side effects.
Life Extension offers PSA blood tests for only $31.
As a special incentive, we are including a CBC/Chemistry Panel with every PSA blood test for only $39. This special offer ends December 15th, 2018.

Life Extension’s CBC/Chemistry Panel + PSA
Provides all these tests for just $39:

**Lipid Profile:**
- Total cholesterol • Triglycerides
- HDL cholesterol • LDL cholesterol (calc.)
- VLDL cholesterol (calc.)
- Total cholesterol/HDL ratio
- Estimated Coronary Heart Disease risk

**Blood Sugar:**
- Glucose

**Liver Function:**
- Alkaline phosphatase • LDH (lactate dehydrogenase)
- AST (aspartate aminotransferase)
- ALT (alanine transaminase)
- Total protein • Albumin • Globulin
- Albumin/globulin ratio • Bilirubin

**Electrolytes and Minerals:**
- Sodium • Potassium • Chloride
- Calcium • Phosphorus • Iron

**PSA**
(prostate specific antigen)

**Kidney Function:**
- Uric acid
- BUN (blood urea nitrogen)
- Creatinine • BUN/creatinine ratio
- eGFR (estimated glomerular filtration rate)

**Complete Blood Count:**
- Red blood cell count
- Hemoglobin
- Hematocrit
- MCV (mean corpuscular volume)
- MCH (mean corpuscular hemoglobin)
- MCHC (mean corpuscular hemoglobin concentration)
- RDW (red blood cell distribution)
- White blood cell count
- Immune Cell Differentiation Count
- Platelet count

You can place your order by calling 1-800-208-3444 or log on to LifeExtension.com/PSACOMBO
You’ll be sent a list of drawing stations in your area along with a pre-paid requisition. You can walk into the drawing station nearest you at your convenience.
Our price for all these tests is about 50% less expensive than commercial labs, and you get your results back fast. You also have free access to our Wellness Specialists to help review your results.

To order this PSA blood test with CBC/Chemistry Panel (Item LC100081) for only $39, call Life Extension today at 1-800-208-3444 or order online at LifeExtension.com/PSACOMBO.


48.农业 Outlet, Clinical practice. *Cancer*. Available at: https://www.swog.org/.


Super Bio-Curcumin® features a patented extract from turmeric root that absorbs up to 7 times better than standard curcumin.

Advanced Bio-Curcumin® contains the same optimal potency of curcumin with the added benefits of ginger and additional turmeric extracts.

Suggested dose for either Bio-Curcumin® formula is one capsule or softgel daily for otherwise healthy individuals.

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

Bio-Curcumin® and BCM-95® are registered trademarks of Dolcas-Biotech, LLC.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
Power Up Your Passion

SEXUAL HEALTH SUPPORT FOR MEN

A ginger-like root extract found in new Male Vascular Sexual Support promotes blood flow and supports sexual response.

Each capsule provides 100 mg of KaempMax™, which is super-standardized Kaempferia parviflora.

For full product description and to order Male Vascular Sexual Support, call 1-800-544-4440 or visit 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.
PROSTATE HEALTH

The best way to keep You in the picture.

Ultra Prostate Formula was created to help maintain prostate health. It contains a dozen standardized ingredients to:

• Support healthy urination
• Promote healthy prostate function
• Encourage healthy prostate cell division

Ultra Prostate Formula is a unique comprehensive standardized-ingredient prostate-health supplement.

For full product description and to order Ultra Prostate Formula, call 1-800-544-4440 or visit www.LifeExtension.com

AprèsFlex® is a registered trademark of Laila Nutraceuticals exclusively licensed to PL Thomas–Laila Nutra LLC. HMRlignan™ is a trademark used under sublicense from Linnea S.A. Lyc-O-Mato® is a registered trademark of Lycored Corp. Albion® is a registered trademark of Albion Laboratories, Inc. Graminex® is a registered trademark of Graminex 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.
FREE Unlimited Shipping

4% Back on Purchases

ALL YEAR LONG

☑️ $50 Bonus Credit

Use now or save for later.

☑️ Worry Free

No auto-enrollment. Cancel anytime.

Join Premier Today! Only $49.95 per year.

Visit LifeExtension.com/JoinPremier • Call 1-888-210-7256 toll-free
Use Code YRX801A.

LifeExtension®

Premier service is good for a full 12 months from the date of purchase or renewal and can only be renewed 6 months after the date of your last Premier purchase or renewal. Redeem LE Dollars to purchase virtually anything we sell, including products, lab tests, and sale items — and even to pay shipping fees! — at the rate of 1 LE Dollar equal to $1 U.S. dollar at checkout. FREE unlimited standard shipping (3 to 5 business days) to any mailing address within the United States, excluding U.S. territories. Also includes discounts on non-standard shipping and shipping outside of the U.S. international customers can join Premier for $59.95.
Omega-3 Fatty Acid Dose May Have a Significant Impact on Potential Benefits of Supplementation in Diabetics

The largest recent summary of clinical trials of omega-3 fatty acid supplementation in patients with diabetes found that it has multiple beneficial effects that reduce risk for cardiovascular disease, including improvement of blood lipid profiles, reduction of inflammatory markers, and better control of blood sugar.

Other meta-analyses on the subject have failed to demonstrate a benefit, leading to disagreement over whether omega-3 supplementation truly has a protective effect.

However, an expert commentary published in *Cardiovascular Diabetology* suggests that those studies that have failed to find a benefit may have suffered from inadequate dosing of the omega-3 fatty acids, diluting the benefits seen in other studies with higher doses.*

The authors suggest that trials utilizing daily doses below 1,000 mg were inadequate to show a benefit. They propose that consistent benefits in reducing risk factors for heart and blood vessel disease will be found only with dosing of 2,000 mg or higher.

**Editor’s Note:** While awaiting the results of ongoing trials utilizing higher doses of omega-3s, there is reason to believe that dose has an important impact on the potential benefits of supplementation. Intake of over 2,000 mg daily of EPA/DHA appears most likely to have a significant protective effect against cardiovascular disease.

Widespread Testosterone Deficiency and Disease Risk

A recent study documents a high prevalence of testosterone deficiency in a sample of U.S. men, which was associated with a greater risk of multiple diseases.*

The study included 2,161 men enrolled in the 2011-2012 National Health and Nutrition Examination Survey.

“Previous studies used clinical cohorts that were not reflective of the current male population in the United States,” said lead author Mark Peterson, PhD, MS.

There was a significantly greater risk of having two or more chronic conditions (type II diabetes, arthritis, cardiovascular disease, stroke, pulmonary disease, high triglycerides, high cholesterol, hypertension or clinical depression) among testosterone-deficient men in the same age groups who were not deficient.

Editor’s Note: “We also found a large dose-response relationship between the age-specific low total testosterone and moderate total testosterone levels and multimorbidity, even after adjusting for obesity and muscle strength capacity,” Dr. Peterson added. “Which means that men should be concerned about declining total testosterone, even if it has not reached a level to warrant a clinical diagnosis.”

Vitamin D Aids Malnourished Children

Recent trial findings suggest that treating malnourished children with high-dose vitamin D supplements could improve weight gain and language and motor skill development, all of which are adversely affected by poor nutrition.*

The trial included 185 severely malnourished Pakistani children between the ages of six and 58 months who were treated with a high-energy diet for eight weeks. At two and four weeks the children received 200,000 IU of vitamin D3 or a placebo.

At the end of the trial, children who had received vitamin D gained an average of 0.57 pounds more than those in the placebo group. The vitamin D-treated group also had fewer members with delayed motor, language, and global development.

“High-dose vitamin D significantly boosted weight gain in malnourished children,” concluded lead author Javeria Saleem.

Editor’s Note: “This is the first clinical trial in humans to show that vitamin D can affect brain development, lending weight to the idea that vitamin D has important effects on the central nervous system,” announced senior author Adrian Martineau of Queen Mary University of London. “Further trials in other settings are now needed to see whether our findings can be reproduced elsewhere.”

Green Tea Could Benefit Arteries

A report in the Journal of Biological Chemistry suggests that the green tea compound epigallocatechin-3-gallate (EGCG) could help dissolve atherosclerotic plaque associated with heart attack and stroke.*

The compound is currently under investigation for its ability to reduce amyloid plaque in the brain, which is associated with Alzheimer’s disease.

Researchers at Lancaster University and the University of Leeds found that EGCG binds to the amyloid fibers of apolipoprotein A-1 (apoA-1), which can form amyloid deposits in arterial plaques like those that occur in the brains of Alzheimer’s patients. These deposits enlarge plaque and make it less stable, which increases the risk of cardiovascular events.

The binding of EGCG to apoA-1 amyloid fibers results in the conversion of the fibers to smaller soluble molecules that are less damaging.

Editor’s Note: “The findings of this round of studies are very encouraging,” commented report coauthor Professor Sheena Radford, who is the Director of the Astbury Centre for Structural Molecular Biology at the University of Leeds.

FLORASSIST® GI WITH Phage Technology combines six strains of probiotics, along with four types of phages that work within hours, not days.

The addition of phages is designed to remove unwanted bacteria in the intestines to make room for the beneficial probiotics.

The suggested daily serving of one liquid vegetarian capsule of FLORASSIST® GI with Phage Technology provides:

- **Probiotic Blend** • 15 Billion CFU**
  - *L. acidophilus* La-14
  - *B. lactis* Bl-04
  - *L. paracasei* Lpc-37

- **TetraPhage Blend** • 15 mg **
  - LH01 - Myoviridae
  - LLS - Siphoviridae
  - T4D - Myoviridae
  - LL12 - Myoviridae

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

* Colony Forming Units at time of manufacture. ** Daily Value not established.

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.
Mega Green Tea Extract provides powerful antioxidant effects throughout the body.

Each 725 mg capsule of **Mega Green Tea Extract** is standardized to **98% polyphenols** that provide **326 mg** of **EGCG** to:

- Protect against DNA damage and oxidative stress¹
- Support healthy blood sugar levels²
- Enhance heart health³
- Boost brain function⁴
- Support strong bones⁵
- Maintain healthy cholesterol levels already within normal range⁶

Each cost-effective bottle lasts over **three months**!

---

References

Note: **EGCG** is the acronym for **epigallocatechin gallate**, which is the polyphenol in green tea that has demonstrated the most robust health benefits.
“D”-fend Your Health

VITAMIN D3
Systemic Support for Youthful Cell Function, bone health, and supporting normal insulin and blood-sugar levels.

For full product description and to order Vitamin D3, call 1-800-544-4440 or visit www.LifeExtension.com

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$10</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$6.50 each</td>
</tr>
</tbody>
</table>

Item # 01713 • 5,000 IU • 60 softgels

Caution: Individuals consuming more than 2,000 IU/day of vitamin D (from diet and supplements) should periodically obtain a serum 25-hydroxy vitamin D measurement. Do not exceed 10,000 IU per day unless recommended by your doctor. Vitamin D supplementation is not recommended for individuals with high blood calcium levels.

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.
**WELLNESS CODE™**

**Whey Protein CONCENTRATE**

Maintain Healthy Lean Muscle Mass

**Wellness Code™ Whey Protein Concentrate**

is derived from grass-fed, free-range cows living in New Zealand, not treated with growth hormone.

With a variety of amino acids for those who wish to:†

- Help maintain lean muscle mass,
- Support healthy immune function,
- Promote anabolic metabolism.

Available in **chocolate** and **vanilla** flavors.

**Wellness Code™ Whey Protein Concentrate (Vanilla Flavor)**

Item #02260 • 500 grams

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$30</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$22.50 each</td>
</tr>
</tbody>
</table>

**Wellness Code™ Whey Protein Concentrate (Chocolate Flavor)**

Item #02261 • 640 grams

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$30</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$22.50 each</td>
</tr>
</tbody>
</table>

**References**


Contains milk.

Notice: Use this product as a food supplement only. Do not use for weight reduction.

For full product description and to order Wellness Code™ Whey Protein Concentrate, call 1-800-544-4440 or visit www.LifeExtension.com

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
Kenyan Tea Crystals deliver 2-3 times more polyphenols than other popular green teas.*

Just open a packet of Kenyan Purple or Green Tea Crystals, pour, and add hot water! No steeping!

Responsibley extracted using environmentally friendly PhytoClean™ technology.

For full product description and to order Kenyan Purple or Green Tea Crystals, call 1-800-544-4440 or visit www.LifeExtension.com

*Compared to Lipton and Tetley tea. PhytoClean™ is a trademark of Mazza Innovation, Ltd.
For some people, the holiday season is notorious for overeating and consuming the wrong kinds of foods. This is when people put on a few extra pounds they never seem to shed.1-4

These extra few pounds build up year after year. After a few holidays, suddenly your clothes don’t fit, and the pounds don’t come off.

This weight gain is not just unattractive—it’s harmful. Over time, excess weight becomes its own organ, spewing out inflammatory compounds that inflict systemic damage. The list is long of the diseases that can result from just a few extra pounds.

While dieting is difficult and good intentions often fail, recent research has found that less restrictive dietary programs, such as intermittent calorie restriction, may be as effective as calorie counting, providing the same degree of weight loss along with other health benefits, but in a program that is easier to stick to.

Scientists at Life Extension® have developed and studied an intermittent calorie restriction nutrition program that aims to help avoid holiday weight gain. The program utilizes intermittent calorie restriction, with the added benefit of supportive nutrients to help make adherence easier and maximize beneficial outcomes.

The goal of this study was to prevent weight gain during the holiday season where unhealthy overeating is the norm.

The results of this study showed that participants on the intermittent calorie restriction program did not gain weight and experienced a modest amount of weight loss. In addition, this nutrition program demonstrated other benefits, including improved lipids.5
The Advantages of Intermittent Caloric Restriction

Traditional weight loss diets limit the number of calories an individual can eat each day. When adhered to, these diets can result in weight loss and improved health. However, this requires counting calories for everything one ingests, every day.

These restrictive diets often fail because compliance is poor. Typical low-calorie “diets” drastically change the types and amounts of food an individual is accustomed to eating. As a result, overweight people often give up their good intentions and return to their previous dietary habits.

Studies published in 2018 uncover an approach that only restricts dietary intake part of the time. Findings from these studies show they can be as effective as continuous caloric restriction for weight loss, while being easier to adhere to. Rather than restricting food intake all day and every day, these intermittent calorie restriction programs only restrict food intake on some days, allowing individuals to eat as they usually do on the other days of the week.

There are several versions of intermittent caloric restriction diets. Variants of what’s known as the “5:2 diet” have become increasingly popular with people seeking safe and easy weight loss along with some of the benefits of calorie restriction. A growing body of medical literature supports the efficacy of these diets.

These 5:2 programs restrict caloric intake on just two days of the week, allowing one to eat normally (both in types of food and in quantity) on the other five days. Most people find this simplified calorie restriction easy to follow.

Weight Loss & Other Health Benefits of Intermittent Caloric Restriction

Clinical studies have proven that various forms of intermittent caloric restriction not only result in weight loss, but also yield other positive health effects.

The amount of weight loss observed in 5:2 programs is comparable to that seen in those who follow a traditional full-time caloric restriction diet. For example, a group of randomized obese subjects were put on a 5:2 intermittent diet or a continuous caloric restriction for six months. Both groups lost significant weight compared to their baseline, with a similar degree of weight loss in each group. Those on the intermittent calorie restriction diet lost an average of 14 pounds.

Intermittent Calorie Restriction Nutrition Program

Having observed this trend in the medical literature, scientists at Life Extension set out to improve upon existing calorie restriction programs, particularly to help people avoid the insidious holiday season weight gain that plagues so many people.

The intermittent calorie restriction program utilizes the calorie restriction approach of two consecutive days of limited calories (730 calories/day) and five days of normal eating. In addition, it aims to improve upon that basic concept in two ways:

1. Provide a healthy balance of protein, fats, and carbs in tasty protein shakes to make the work of calorie counting on the two calorie-restricted days per week easier, improving adherence.

2. Provide a specific blend of nutrients that help maintain adequate nutrition, reduce cravings, and increase metabolism.

In a pilot study conducted at the Life Extension Clinical Research Center, the goal was to see if this 5:2 program could limit weight gain during the holiday season. This particular study was not designed as a weight loss study. Overweight adults were randomized to a nutrition program with nutrient shakes and supplements for two consecutive days, followed by five days of regular eating. The control group ate in their usual way, with the addition of a daily multivitamin for a period of 52 days over the winter holidays.
Omega-3 fatty acids are also an important component of a healthy diet and support healthy cardiovascular and nervous system function.\textsuperscript{16-21} Cardioprotective effects of omega-3 fatty acids include reduction of triglycerides and prevention of cardiovascular disease.\textsuperscript{21-24}

Coenzyme Q10 is an important cofactor for a healthy metabolism. It helps to optimize cellular utilization of nutrients and energy supply.\textsuperscript{25,26}

Another approach to help stimulate the metabolism and optimize our nutritional program is to activate AMPK, an important regulator of cellular metabolism. Gynostemma pentaphyllum is an herb that has been found to have many beneficial properties, including AMPK stimulation and anti-obesity effects.\textsuperscript{27-30}

On average, individuals in the control group who ate their regular way did not lose meaningful weight, while those in the nutrition program lost a modest amount (average 2.9 pounds) of weight. If extended for six months, as was done in the 2018 published study,\textsuperscript{9} greater weight loss would possibly occur. However, the focus of this study was to limit holiday weight gain which was successfully achieved.

In addition, subjects on the nutrition program saw increases in beneficial HDL cholesterol levels and reduced levels of triglycerides. These changes indicate a reduction in cardiovascular and metabolic risk. (It is challenging to boost beneficial HDL as people age.)

People in the control group who continued on their normal diet and did not have the advantage of the nutrition program saw their risk factors change for the worse. Their total cholesterol, LDL cholesterol, and fasting insulin all increased significantly.\textsuperscript{5}

**Supporting Caloric Restriction: Nutrients to Help Maximize Benefits**

The nutrition program was designed to build upon the benefits that have already been demonstrated with other intermittent calorie restriction diets. In particular, an assortment of nutrients and supplements have been carefully selected to support the weight-management program.

Any nutritional program that limits calories should be carefully designed to ensure an adequate intake of key essential nutrients, including minerals, vitamins, and metabolic supporting blocks. A daily multivitamin can help provide many basic minerals and essential vitamins.
Calorie restricted diets have been shown to have healthy effects on the beneficial microorganisms that reside in the digestive tract. \(^\text{39}\) Intake of a prebiotic supplement can help support gastrointestinal health and promote the growth of healthy bacteria in the gut. \(^\text{40,41}\)

Finally, curcumin, a compound found in turmeric root, is a potent anti-inflammatory that helps boost the body’s defenses. Curcumin has been found to have many health benefits, including support for weight loss. \(^\text{42-44}\)

**Summary**

For many people, the winter holiday season is a time to enjoy good food with good company. Unfortunately, it is also often associated with significant weight gain, which can contribute to the development of obesity and risk for many chronic diseases.

Restriction of calorie intake is associated with many health benefits beyond weight loss alone. However, continuous calorie restricted diet programs are often burdensome and difficult to stick with, resulting in failure and rebound weight gain.

Intermittent calorie restriction, where dietary intake is only restricted on some days of the week, has been shown to provide the same level of benefit, leading to weight loss as well as reduction of other risk factors associated with chronic disease.

A newly designed nutrition program aims to optimize this intermittent calorie restriction approach, providing additional dietary and nutrient support to improve adherence and prevent weight gain during the winter holiday season.

Extracts of clove bud and maqui berry have further metabolic supportive functions. They have both been found to help support healthy glucose metabolism and maintain normal levels of blood sugar following meals. \(^\text{31-35}\)

Another important factor to consider for any nutritional program that limits calories, even intermittently, is the risk for food cravings and snacking that can sabotage the diet.

Even though calorie intake is only limited on two days out of the week in the nutrition program, any period of calorie restriction can potentially cause unhealthy food cravings. Cravings are a notorious problem for people following diets that restrict food and calories, and irresistible urges to snack have sabotaged many weight loss plans. Supplements that have been found to provide appetite suppressant effects can be useful in this context.

Extracts of the herb saffron and some types of beans have been found to be helpful in controlling cravings as they can contribute to satiety, or the feeling of fullness after a meal, thus reducing cravings and the chance of snacking. \(^\text{36-38}\)

**The Many Health Benefits of Calorie Restriction and Intermittent Fasting**

In addition to aiding in weight loss, which reduces risk for chronic disease, evidence supports several other health benefits influencing many different body systems and the risk for age-related and chronic disease. Some of the notable effects that have been reported include:

- Improvement in memory in elderly subjects \(^\text{45}\)
- Reduced risk for cancer and improved efficacy of cancer treatment \(^\text{46}\)
- Improvement in blood lipid profiles, including decreased triglycerides and LDL cholesterol levels and increased HDL cholesterol \(^\text{9,11,14,47}\)
- Improved blood sugar control with improved levels of insulin and glucose, including among those with type II diabetes \(^\text{15,48}\)
- In addition to weight loss and improved blood lipid and glucose control, caloric restriction appears to offer several other benefits to overall heart and metabolic health, reducing the risk of atherosclerosis and heart disease \(^\text{12,47,49}\)
- Improvement in normal gut flora, an important marker of health \(^\text{39}\)
References


The plant compounds in **AMPK Metabolic Activator** help boost AMPK, a cell enzyme that mitigates mechanisms of aging and promotes vascular function while helping reduce belly fat.

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

ActivAMP® is a registered trademark of Gencor.

This supplement should be taken in conjunction with a healthy diet and regular exercise program. Individual results may vary and are not guaranteed.
Indulge without the bulge!

Intermittent Fasting is as Easy as

The holiday season is a time to enjoy family and friends. Plus, there’s usually lots of mouthwatering food. But you don’t have to let weight gain spoil your party.

The 2:5™ by Life Extension® Nutrition Program lets you enjoy the holiday season without the worries of weight gain!

This program should be taken in conjunction with a healthy diet and regular exercise program. Individual results are not guaranteed, and results may vary. Consult your physician or health care professional before making any dietary or fitness modifications. The Wellness Bars and 2:5 LE Plan Kits are not for sale outside the USA. Not for sale to wholesalers.
The 2:5 Plan

Wellness Shakes™
(Chocolate & Vanilla Flavors or a Combination)
32 shakes

Wellness Bars™
(Chocolate Brownie & Cookie Dough Flavors or a Combination)
36 bars

AMPK Metabolic Activator 60-day supply

Optimized Saffron with Satiereal® 60-day supply

Glycemic Guard™ 60-day supply

Advanced Appetite Suppress 60-day supply

Chocolate, Brownie Flavor Item #25CHOC
Vanilla, Cookie Dough Flavor Item #25VAN
Combination Flavor Item #25COMBO

Bonus
FREE
- 2:5 program booklet
- Shaker
- Pillbox

Retail Price: $504
Special Price: $299.99
SAVE OVER 40%

Enjoy your holiday meals — without the guilt! Order today!
1-800-544-4440 • www.LifeExtension.com

52-day Intermittent Fasting

It’s simple:

2: DAYS ENJOY BARS & SHAKES
Two days a week — reduce your calorie intake with LE’s specially designed macronutrient blend of shakes and bars (730 calories a day).

5: DAYS EAT WHAT YOU WANT!
The other five days — enjoy your normal diet (including your holiday favorites).

DAILY SUPPORT
Take daily Life Extension supplements to promote a healthy weight and satiety.

There’s no need to starve yourself or feel deprived! The 2:5 by Life Extension Nutrition Program is a healthy and tasty way to manage your weight during the holidays.

Under $6 a day!

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
Mitochondrial dysfunction is linked to accelerated brain aging.

CoQ10 energizes aging cells and enhances mitochondrial function.

Shilajit works with CoQ10 to increase cellular energy.

Super Ubiquinol CoQ10 combines the energy-activating power of *shilajit* into a formula that’s more potent than a stand-alone CoQ10.

For full product description and to order Super Ubiquinol CoQ10, call 1-800-544-4440 or visit www.LifeExtension.com

MAINTAIN YOUTHFUL MITOCHONDRIAL ACTIVITY

with

CoQ10

Retail  Your
Price  Price
1 bottle $62  $46.50
4 bottles $39 each

Super Ubiquinol CoQ10
Item #01426 • 60 softgels

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.
GET A QUICK PROTEIN & ENERGY BOOST!

The new Wellness Bars™ and Wellness Shakes™ provide two delicious ways to:

• Promote satiety, boost energy
• Support lean muscle mass
• Support intermittent fasting days

Ideal for breakfast on the go, mid-afternoon snack, pre/post-workout fuel, or anytime you have those hunger pangs.

Each Wellness Bar™ contains 12 grams of whey protein and 12 grams of fiber, balanced with healthy fats and carbs. Non-GMO, gluten-free, and just one gram of sugar. Cookie Dough or Chocolate Brownie flavor.

Each serving of Wellness Shake™ contains 12 grams of healthy protein (pea protein, whole-grain brown rice protein, chia protein, and flaxseed protein). Plus 6 grams of fiber, balanced with healthy fat and carbs. Non-GMO, dairy-free, and only one gram of sugar. Vanilla or Chocolate flavor.

For full product description and to order Wellness Bars™ or Wellness Shakes™, call 1-800-544-4440 or visit www.LifeExtension.com

Wellness Bars™
Item #02146 • Chocolate Brownie (12 bars)
Item #02147 • Cookie Dough (12 bars)
Retail Price is $32 • Your Price is $24

Wellness Shakes™
Item #02219 • Vanilla (656 g)
Item #02220 • Chocolate (648 g)
Retail Price is $50 • Your Price is $37.50
4 bottles are only $34 each

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
The prostate gland of aging men often harbors isolated colonies of cancer cells.

Natural defense systems can prevent these malignant cells from progressing to clinically relevant disease.

Unhealthy foods can fuel existing prostate cancer cells, allowing them to proliferate and spread to other body parts.

In this article, we provide guidelines for what to eat and what to avoid.

These dietary guidelines are applicable to men seeking to reduce their prostate cancer risk.

They also reveal startling data showing the deadly impact of certain foods in those who harbor prostate cancer cells, which is the majority of men over age 65.¹
Foods That Help Prevent Prostate Cancer

Prostate cancer affects one in six men. Men who regularly consume certain foods have sharply lower rates of prostate cancer. By boosting intake of these beneficial foods, men can reduce their prostate cancer risk.

Walnuts

Walnuts are low in carbohydrates and rich in beneficial fatty acids, polyphenols, and gamma tocopherol. This may explain why research has shown that walnuts have the potential to inhibit prostate cancer cells, lower PSA (prostate-specific antigen) levels, and reduce the size of prostate tumors.

In a study published in the Journal of Medicinal Food, whole walnuts or walnut oil slowed the growth of prostate cancer in mice. The same study found that walnuts lowered levels of IGF-1 (insulin-like growth factor 1), a hormone that has been associated with prostate cancer.

In human research, walnuts were shown to improve biomarkers related to prostate and vascular health in older men.

Flaxseeds

The lignans in flaxseeds are believed to protect against cancer, including hormone-dependent malignancies.

These lignans are converted in the intestine into beneficial enterolactones, which then enter the bloodstream. Men with higher enterolactone levels are less likely to have prostate cancer than those with the lowest levels.

Studies have confirmed that flaxseed supplementation lowers PSA levels and reduces the proliferation of prostate cancer cells. And in a clinical study of men with prostate cancer, supplementation with flaxseed reduced tumor proliferation in as little as 30 days.

Cruciferous Vegetables

When researchers conducted a review of the effects of cruciferous vegetables on prostate cancer, they concluded that "Cruciferous vegetable intake is related to the decreased risk of prostate cancer." (Examples of cruciferous vegetables include broccoli, cabbage, cauliflower, and kale.)

A later study found that—among the various vegetables—broccoli and other cruciferous species are most closely associated with reduced cancer risk, including prostate cancer. This is thought to be due to their abundance of compounds known as glucosinolates and their breakdown products, such as isothiocyanates.

Cruciferous vegetables also contain several potent compounds that have individually shown promise in inhibiting prostate cancer cells. These include indole-3-carbinol, 3,3'-diindolylmethane, and phenethyl isothiocyanate, better known as I3C, DIM, and PEITC, respectively.

FOODS THAT HELP PREVENT PROSTATE CANCER
Pomegranate Juice
Consuming pomegranate juice has protective actions against prostate cancer, including inhibiting tumor cell proliferation, cell cycle, invasiveness, and angiogenesis.29,30
In one study, pomegranate juice (8 oz. daily) treatment in men with rising PSA after surgery or radiotherapy resulted in a delay in PSA doubling time (the time it takes PSA levels to rise).30
A review study found that three components of pomegranate juice, luteolin, ellagic acid, and punicic acid, exhibit inhibitory effects on prostate cancer growth, angiogenesis, and metastasis.31

Coffee
A meta-analysis involving 455,123 subjects found that drinking four or more cups of coffee daily was associated with a reduced risk of overall prostate cancer and specifically fatal and high-grade prostate cancer.32
Another study found that men who drink over six cups of coffee daily, including decaffeinated coffee, have an 18% lower risk of prostate cancer and a 60% lower risk of lethal prostate cancer, compared to non-drinkers.33

Beneficial Dietary Factors
The following broad food choices have been shown to inhibit prostate cancer:
• The Mediterranean diet,34-36
• High fiber intake,37 and
• Eating foods with a low glycemic index.38

Cold-Water Fish
Higher blood levels of omega-3 fatty acids have been demonstrated to correspond to a lower risk of developing prostate cancer.19
These omega-3 fatty acids include DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid) and are found in cold-water fish such as tuna, sardines, herring, mackerel, halibut, and salmon.20
EPA suppresses the formation of an omega-6 fatty acid called arachidonic acid by inhibiting the enzyme delta-5-desaturase.21 It also inhibits a substance (called uPA) believed to play a role in the spread of prostate cancer.22

Cooked Tomatoes and Tomato Sauces
A 2018 meta-analysis concluded that consuming tomatoes, cooked tomatoes, and tomato sauces was associated with reduced prostate cancer risk. The greater the tomato consumption, the greater the risk reduction.23
Tomatoes are rich in lycopene, the carotenoid pigment that gives them their bright red color, which is known to inhibit the growth of prostate cancer cells.24
Higher blood lycopene levels have been consistently tied to reduced prostate cancer risk.25 And above-average lycopene consumption has been associated with a 59% reduction in the risk of dying from aggressive prostate cancers.26
Lycopene has several anti-cancer mechanisms, including inhibiting inflammation and reducing oxidative stress in prostate tissue.27
Lycopene is better absorbed from tomatoes when cooked and when consumed with fat, such as extra virgin olive oil.28
diagnosed with prostate cancer, consuming whole milk was associated with a 117% increased risk of progression to fatal disease.44 This last finding illustrates the critical role of limiting milk consumption after prostate cancer has been diagnosed, as the next three studies45-47 further drive home. In men already diagnosed with prostate cancer, researchers reported that patients who drank the most whole milk had a 74% increased odds of aggressive prostate cancer, compared to non-drinkers.45 And in a study of men with non-metastatic prostate cancer, those who consumed over four servings of high-fat milk weekly showed a 73% greater recurrence risk (defined as prostate cancer death, bone metastases, biochemical recurrence, or secondary treatment).46 This increased risk was associated with just four servings of high-fat milk per week. Compare that to a study on prostate cancer patients who drank three or more servings of high-fat milk per day. These patients had a jarring 510% greater risk of dying from their prostate cancer compared to men consuming less than one daily serving.47

Eggs

Studies show that consuming eggs is associated with increased prostate cancer risk.40,41 One study found that men who consumed 2.5 or more eggs per week had a startling 81% increased risk of lethal prostate cancer compared to those who consumed less than half an egg per week.40 Researchers who studied men treated with radical prostatectomy for prostate cancer reported that those in the top 10% of egg consumption had almost double the chances of developing high-grade prostate disease, compared to men in the bottom quartile.42

Milk

Consuming low-fat milk and cheese increases the risk of prostate cancer by 6% and 9%, respectively. Similar risks accrue from high intakes of total milk and dietary calcium (but not from calcium supplements).43 One study found that consuming skim or low-fat milk was associated with increased risk of low-grade prostate cancer, while whole milk was associated with greater risk of fatal prostate cancer. And in men already diagnosed with prostate cancer, consuming whole milk was associated with a 117% increased risk of progression to fatal disease.44 This last finding illustrates the critical role of limiting milk consumption after prostate cancer has been diagnosed, as the next three studies45-47 further drive home. In men already diagnosed with prostate cancer, researchers reported that patients who drank the most whole milk had a 74% increased odds of highly aggressive prostate cancer, compared to non-drinkers.45 And in a study of men with non-metastatic prostate cancer, those who consumed over four servings of high-fat milk weekly showed a 73% greater recurrence risk (defined as prostate cancer death, bone metastases, biochemical recurrence, or secondary treatment).46 This increased risk was associated with just four servings of high-fat milk per week. Compare that to a study on prostate cancer patients who drank three or more servings of high-fat milk per day. These patients had a jarring 510% greater risk of dying from their prostate cancer compared to men consuming less than one daily serving.47

Processed and Overcooked Meat

All meat cooked at high temperatures, including fish, generates dangerous carcinogens.48 Men with a high intake of red meat cooked at high temperatures, pan fried, or well done had a higher risk of advanced prostate cancer.49
For example, one study showed that consuming ground beef is associated with a 130% higher incidence of aggressive prostate cancer. The more well-done the meat, the greater the risk.50

A separate study showed that higher consumption of hamburgers, processed meats, grilled red meat, and well-done red meat increased risk of advanced prostate cancer (but not localized disease).51

This study corroborated others associating processed meat and red meat—especially when cooked at high temperatures, with increased incidence of advanced prostate cancer.49

High-Risk Dietary Factors

Studies indicate that diets high in omega-6 fats and saturated fats are associated with significantly greater prostate cancer risk.52-54

Summary

Eating the wrong foods markedly increases an aging man’s risk of developing prostate cancer, seeing it spread, or dying from the disease. Conversely, many specific foods have been shown to reduce the risk of developing prostate cancer.

Following the dietary guidelines outlined in this article could save countless men’s lives every year.

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

References can be found on page 48.
A to Z Supplement Guide for Prostate Cancer Prevention

Dietary changes can help aging men avoid the biological effects that allow prostate cancer to take hold. For those who want additional protection, the following is the full range of supplements that can prevent and attenuate prostate cancer.

**APIGENIN**

In a mouse study, administering the powerful plant flavonoid apigenin inhibited the volume of prostate cancer cells by as much as 59%.

**BETA-SITOSTEROL**

A study on prostate cancer cells showed that the phytosterol known as beta-sitosterol decreased cancer cell growth by 24% and increased apoptosis four-fold.

**BORON**

Men with the highest boron intake have lower chances of prostate cancer, compared to men with the lowest intake.

**BOSWELLIA**

The purified extract of the flowering plant genus *Boswellia* can selectively inhibit inflammatory factors (the 5-LOX enzyme and TNF-alpha), which makes it an important nutrient in preventing prostate cancer.

**COENZYME Q10**

Coenzyme Q10 has been shown to inhibit prostate cancer cell growth by 70% in vitro, which suggests that it may boost survival in patients with prostate cancer.

**CRUCIFEROUS VEGETABLE EXTRACT**

Phytochemicals derived from cruciferous vegetables have shown promise in inhibiting prostate cancer in experimental models.

**CURCUMIN**

Curcumin induces apoptosis, interferes with the spread of cancer cells, and regulates inflammatory responses through the master regulator *nuclear factor-kappa B (NF-kappa B)*, a protein complex that controls the transcription of DNA.

**DELPHINIDINS**

Delphinidin is an anthocyanidin (a plant pigment that gives fruits and vegetables their deep red, purple, and blue colors). Data show that delphinidins induce apoptosis in human prostate cancer cells, possibly by inhibiting the master regulator NF-kB (*nuclear factor kappa B*).

**FISH OIL**

The omega-3 fatty acids EPA and DHA found in fish oil supplements can help reduce the production of arachidonic acid-derived tumor-promoting byproducts in the body, which in turn may help prevent prostate cancer.

**GAMMA-LINOLENIC ACID (GLA)**

GLA inhibits the production of a substance (uPA) believed to play a role in the invasiveness and spread of prostate cancer cells.

**GAMMA-TOCOPHEROL (VITAMIN E)**

Men with the highest gamma-tocopherol levels were found to have a five-fold reduction in the risk of developing prostate cancer.

**GINGER EXTRACT**

Ginger phytochemicals inhibit the proliferation of human prostate cancer cells.

**GRAPESEED**

A study found that men who supplemented with any amount of grapeseed extract reduced their prostate cancer risk by 41% compared to men who didn’t take the supplements. And men who consumed high amounts of grapeseed over 10 years experienced a 62% reduction in prostate cancer risk.

**GREEN TEA EXTRACT**

Laboratory research with cultures has long suggested that green tea catechins, including epigallocatechin-3 gallate (EGCG), may inhibit the growth of cancer cells. A double-blind placebo-controlled trial tested whether men with pre-malignant prostate lesions who consumed a green tea catechin supplement would progress to full-blown cancer. After one year, only 3% of men in the green tea group progressed to cancer, while 30% did so in the placebo group—ten times as many!

**INOSITOL HEXAPHOSPHATE (IP6)**

Inositol hexaphosphate or IP6—a phytochemical found in cereals, soy, legumes, and other fiber-rich foods—profoundly reduced the size of prostate tumors in mice genetically modified to develop metastatic prostate cancer.
**LYCOPENE**
Clinical research shows that lycopene supplements may inhibit the growth of prostate cancer.76

**MELATONIN**
Melatonin has been found to have anti-proliferative actions against prostate cancer cells.77,78

**MILK THISTLE**
In animal research, the silibinin in milk thistle was found to exert cancer-fighting effects against an advanced form of human prostate tumor cells.79,80

**MODIFIED CITRUS PECTIN**
When prostate cancer patients took a modified citrus pectin preparation for 12 months, 70% experienced an increase in PSA doubling time—an indication of slower disease progression.81

**N-ACETYLCYSTEINE (NAC)**
Lab research demonstrated that NAC—a metabolite of the amino acid cysteine—has a high potential to reduce the spread of human prostate cancer cells and to suppress the growth of primary and secondary tumors.82

**POMEGRANATE EXTRACT**
In an *in vitro* study, scientists found that a standardized extract of pomegranate had dose-dependent apoptotic (inducing cell death) effects against prostate cancer cells.83

**QUERCETIN**
Quercetin produces a 69% reduction in the growth of highly aggressive prostate cancer cells, more than a 50% upregulation of tumor-suppressor genes, and a 61%-100% down-regulation of cancer-promoting oncogenes.84

**REISHI EXTRACT**
In studies on prostate cancer cells, this mushroom extract was shown to greatly interfere with androgen receptor function and prostate cancer cell development.85

**RESVERATROL**
In one study, four days of resveratrol treatment resulted in an 80% reduction in PSA levels in prostate cancer cells.86

**SAW PALMETTO**
Emerging evidence suggests that saw palmetto has biological activity in prostate cancer cells and may defend against prostate cancer.87

**SELENIUM**
Supplementation with selenium reduces the risk of prostate cancer by up to 63%.88,89

**SOY ISOFlavones**
The prostate cancer risk in men with the highest circulating levels of the soy isoflavones genistein and daidzein is reduced.90

**VITAMIN C**
An *in vitro* study on human prostate cancer cells found that vitamin C inhibits cell division and growth (through the production of hydrogen peroxide, which damages the cancer cells). The study author concluded that ascorbic acid is likely a potent anti-cancer agent for prostate cancer cells.91

**VITAMIN D**
Higher vitamin D levels are associated with a greater likelihood of survival after prostate cancer diagnosis.92

**VITAMIN K**
In one study, men with the highest intake of vitamin K2 were 63% less likely to develop advanced prostate cancer.93

**WATERCRESS EXTRACT**
Watercress contains high amounts of a compound called *phenethyl isothiocyanate* that inhibits the proliferation of prostate cancer cells and their ability to form tumors.94

**ZEAxANTHIN**
Men in the highest quartile of plasma zeaxanthin had a reduced chance of developing prostate cancer, compared to those in the lowest quartile.95

**ZINC**
Supplementation with 15 mg of zinc daily reduces the risk of advanced prostate cancer.96
STAY STRONG & YOUNG

Muscle Strength & Restore Formula provides ingredients that can enhance muscle strength while helping reduce loss of muscle mass that occurs with normal aging. It contains:

- **HMB (Beta-hydroxy beta-methylbutyrate)**: increases and preserves muscle mass in adults of all ages.
- **Vitamin D3 (1,000 IU)**: supports muscle strength and performance.

Mix one scoop with approximately 8 oz. of cold water or other beverage, preferably a protein shake, and drink once daily or as recommended by a health practitioner.

Uses of CaHMB and Vitamin D are licensed under U.S. Patent Nos. 8,418,288, 9,259,438, 9,539,224 and 9,707,241.

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.
It’s not easy to get in five servings of vegetables a day—and even if you do, cooking can destroy many of the protective compounds found in broccoli, Brussels sprouts, cauliflower, and celery.

**Triple Action Cruciferous Vegetable Extract** combines vital plant extracts that have been shown to protect cellular DNA.

The formula provides optimal potencies of cruciferous extracts like I3C (Indole-3-carbinol) and DIM (di-indolyl-methane) to favorably modulate estrogen metabolism,¹-⁵ along with apigenin.

For full product description and to order **Triple Action Cruciferous Vegetable Extract**, call 1-800-544-4440 or visit www.LifeExtension.com

---

**Triple Action Cruciferous Vegetable Extract**
Item #01468 • 60 vegetarian capsules

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle $24</td>
<td>$18</td>
</tr>
<tr>
<td>4 bottles $16.50 each</td>
<td></td>
</tr>
</tbody>
</table>

**Triple Action Cruciferous Vegetable Extract with Resveratrol**
Item #01469 • 60 vegetarian capsules

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle $32</td>
<td>$24</td>
</tr>
<tr>
<td>4 bottles $22.20 each</td>
<td></td>
</tr>
</tbody>
</table>

---


These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
MEDITERRANEAN POLYPHENOL EXTRACT BLEND

Mediterranean Whole Food Blend provides standardized extracts of:

- Grape (seed)
- Olive (leaf)
- Pomegranate (fruit)
- Black walnut
- Pecan
- Artichoke (fruit)
- Lentil (bran)

(Daily dose is 3 capsules)

For full product description and to order Mediterranean Whole Food Blend, call 1-800-544-4440 or visit www.LifeExtension.com

Retail Price | Your Price
-------------|-------------
1 bottle     | $44         | $33
4 bottles   | $30 each

The PhytoClean™ Method is a patented bioactive extraction method.

CAUTION: If you have gallstones or a biliary tract obstruction, do not use this product. Do not take if pregnant or lactating.

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.
Are you on the best path to stay healthy?

With so many supplements out there, how can you know which ones are best for you? Discover if you’re on the right track to stay healthy with the Life Extension® Supplement Guide!

Learn more at:

LifeExtension.com/SuppGuide
Pomegranate Complete combines extracts from the whole fruit, flower, and seed oil to support system-wide health.

It augments these polyphenols with other pomegranate plant compounds to help ease inflammation and combat age-related metabolic changes.

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

POMELLA® extract is covered under U.S. Patent 7,638,640 and POMELLA® is a registered trademark of Verdure Science, Inc.

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.
Olive Oil Reduces Osteoporosis Fractures

Osteoporosis does not affect just women. As many as 45% of men have detectable bone loss on scans and 20% of American men over 50 will suffer an osteoporosis-related fracture.1-3

Fractures, especially hip fractures, are associated with increased all-cause mortality among older individuals.4

Extra virgin olive oil (and its key polyphenol, oleuropein) helps prevent two underlying causes of osteoporosis:

- **Inflammation** and **Oxidative Stress**

Olive oil also helps maintain the delicate balance between the breakdown and rebuilding of bone.5-8

A new study has shown that people who consume the most extra virgin olive oil have a **51% lower risk of fractures** than those who consume the least.9

BY JOHN REEVES
Cut Osteoporosis Fracture Risk in Half

It has long been known that people living in the Mediterranean basin countries have a lower risk of fractures associated with osteoporosis.\(^9\)

What has not been known is what specific aspect of the Mediterranean lifestyle was responsible for that lower fracture risk.

One particular staple of the Mediterranean diet—extra virgin olive oil—has numerous properties that make it a potential candidate for bone health.

Aware of these properties, researchers in Spain conducted a study, as part of the important PREDIMED trial of the Mediterranean diet, to determine whether or not extra virgin olive oil contributes to the lower fracture risk experienced by people living in the Mediterranean basin.

The PREDIMED study randomly assigned study subjects to one of three diets:\(^9\)

- A Mediterranean diet supplemented with **extra virgin olive oil** (about 1¾ oz./day),
- An identical Mediterranean diet supplemented with **nuts** (just over an ounce/day), and
- A standard low-fat diet (control).

For this study within a study, 870 participants between 55–80 years old from one of the PREDIMED centers were followed and observed for the incidence of osteoporotic fractures.

PREDIMED subjects completed food frequency questionnaires to record their actual dietary intakes, and they were specifically asked about their intake of total, common, and extra virgin olive oils.

There was one particular factor that made a significant difference in fracture risk: **extra virgin olive oil**.

The people whose total consumption of extra virgin olive oil was in the upper one-third had a 51% lower risk of fractures, compared with those who consumed the least.\(^9\)

There are different types of olive oil. The highest quality is **extra virgin olive oil**, made from the first pressing of fresh olives. “Regular” or common olive oil, is refined oil or solvent-extracted oil made from the leftovers of olive pressing.

In this study, **only extra virgin olive oil** protected against osteoporotic fractures, and then only in those who consumed the most of it.

This says a great deal about extra virgin olive oil’s intrinsic ability to fight the major underlying contributors to osteoporosis.

One of the key factors is inflammation.

**Combatting the Underlying Causes of Osteoporosis**

Excessive inflammation has destructive effects throughout the body. In bones specifically, it disrupts the balance between the cells that break down bone (osteoclasts) and those that build up new bone (osteoblasts).
In the presence of chronic inflammation, osteoclasts work overtime, while osteoblasts are effectively laid off. As a result, bone breaks down faster than new bone is formed—creating a dangerous imbalance that leads to osteoporosis.\(^\text{10,11}\)

Recognizing that osteoporosis is in large part an inflammation-driven disease opens the door to exploring therapies that are capable of quelling chronic inflammation—rather than focusing only on mineral metabolism or other more bone-specific pathways, as is the case with many prescription osteoporosis drugs.\(^\text{11}\)

That’s where extra virgin olive oil comes in.

**Olive Oil’s Key Ingredient**

Extra virgin olive oil is an ideal candidate for reducing inflammation throughout the body because of its rich supply of bioactive plant compounds called polyphenols.

Polyphenols protect the plants that produce them, helping them adapt to the often-harsh conditions under which they grow.

Polyphenols also have protective benefits for human cells, tissues, and organs—including bone.

One particular polyphenol, oleuropein, appears responsible for many of extra virgin olive oil’s bone-protective effects.\(^\text{7,12}\)

Lab studies show that extra virgin olive oil and oleuropein have properties that contribute to its beneficial impact, including:

1) Inhibiting enzymes that make pro-inflammatory signaling molecules (cytokines).\(^\text{5}\)

2) Reducing oxidative stress in tissues.\(^\text{5}\)

3) Stimulating proliferation of bone-forming osteoblasts, helping to restore the balance of bone absorption and formation in favor of stronger bones.\(^\text{7,8}\)

In other words, oleuropein may help prevent some of the root causes of osteoporosis, while helping to restore balance between the buildup and breakdown of bones.

**Extra Protection for Postmenopausal Women**

While osteoporosis impacts women and men, women are especially vulnerable because of changes to their bodies during menopause.

During menopause, the drop in estrogen, progesterone and other hormones rapidly decreases bone mineral density (an early sign of osteoporosis). An overlooked destructive mechanism that can occur during menopause is increased inflammation.\(^\text{13}\)

Oleuropein can put a stop to that dangerous cascade.

This was seen in a study of female rats whose ovaries were surgically removed to simulate the abrupt drop in estrogen levels at menopause. As expected, inflammatory changes quickly occurred, which led to decreased bone mineral density.\(^\text{6}\)

But when the rats were treated with oleuropein, markers of inflammation subsided and bone loss was significantly reduced.\(^\text{6}\)

This study indicates that oleuropein from extra virgin olive oil could help prevent the types of changes that increase the risk of osteoporosis in menopausal women.
Choosing the Best Olive Oil

The studies mentioned in this article specifically used extra virgin olive oil.

This is the oil that comes from the first, gentle, “cold” pressing of the fresh olive fruits. Other extraction methods using higher-pressure and higher-temperature pressings can destroy the delicate polyphenol compounds, depriving the oil of much of its pleasant taste as well as its health-giving benefits.

Extra virgin olive oil is the only type of olive oil that reliably contains the highest concentrations of oleuropein and other beneficial compounds.

Summary

Osteoporosis increases the risk of suffering from a fracture, which can be especially dangerous for older individuals.

A recent study found that people who consume the most extra virgin olive oil have less than half the risk of experiencing an osteoporosis-related fracture compared to those who consumed the least.

Lab and animal studies show that extra virgin olive oil can combat the inflammation and oxidative stress that contribute to osteoporosis. It also boosts the activity of beneficial bone-forming osteoblast cells.

Maturing individuals should consume about 1 to 2.3 ounces of extra virgin olive oil daily as part of their diet. Olive fruit polyphenols can also be found in certain dietary supplements.

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

References

HIGHLY PURIFIED
FISH OIL

YOUR CHOICE OF HIGHLY-CONCENTRATED FORMULAS:

<table>
<thead>
<tr>
<th>Formula Description</th>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Omega-3 Fish oil EPA/DHA with sesame lignans and olive polyphenols</td>
<td>$32</td>
<td>$24</td>
</tr>
<tr>
<td>1 bottle</td>
<td>4 bottles</td>
<td>$21 each</td>
</tr>
<tr>
<td>Item # 01982 • 120 softgels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Omega-3 Fish oil EPA/DHA with sesame lignans and olive polyphenols (Enteric-coated for sensitive stomachs)</td>
<td>$34</td>
<td>$25.50</td>
</tr>
<tr>
<td>1 bottle</td>
<td>4 bottles</td>
<td>$23.25 each</td>
</tr>
<tr>
<td>Item # 01984 • 120 enteric coated softgels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Omega-3 Fish oil EPA/DHA with krill, astaxanthin, sesame lignans, and olive polyphenols</td>
<td>$45</td>
<td>$33.75</td>
</tr>
<tr>
<td>1 bottle</td>
<td>4 bottles</td>
<td>$31.50 each</td>
</tr>
<tr>
<td>Item # 01985 • 120 softgels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For full product description and to order Super Omega-3, Enteric Coated Super Omega-3, or Super Omega-3 Plus, call 1-800-544-4440 or visit www.LifeExtension.com

#1 Omega-3 EPA/DHA Products
4-Time Winner! *

Highest Independent 5-star rating: International Fish Oil Society. For over nine years, IFOS™ certification mark is a registered trademark of Nutrasource Diagnostics, Inc.


These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
YOUR BONE HEALTH ... NOW BOOSTED

Bone Restore with Vitamin K2 combines skeletal-strengthening nutrients in one highly absorbable formula.

For full product description and to order **Bone Restore with Vitamin K2**, call 1-800-544-4440 or visit LifeExtension.com

Note: Those taking the anticoagulant drug Coumadin® (warfarin) should use Bone Restore without vitamin K2.

Fruitex B® and OsteoBoron® are registered trademarks of VDF Futureceuticals, Inc. U.S. patent #5,962,049. DimaCal® and TRAACS® are registered trademarks of Albion Laboratories, Inc. Malate is covered by U.S. patent 6,706,904 and patents pending.

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.
California Estate Organic Extra Virgin Olive Oil is American grown and lab-tested to be extremely high in polyphenols—over 800 mg per kg—as well as organic, authentic, and unadulterated.

This unfiltered extra virgin olive oil is:
- Cold-extracted at a small family farm in Yolo County, California, within hours of harvesting,
- Made entirely from green olives, handpicked to avoid bruising,
- Rich in distinctive and fruity flavor,
- Documented to have an exceptionally high content of potent polyphenols.

**California Estate Organic Extra Virgin Olive Oil**
Item #02008 • 500 ml

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$33</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$22.50 each</td>
</tr>
</tbody>
</table>

For full product description and to order California Estate Organic Extra Virgin Olive Oil, call 1-800-544-4440 or visit www.LifeExtension.com
Metabolically Active FOLATE
Supports Cardiovascular Health

Folate helps maintain homocysteine levels within the normal range, thereby promoting cardiovascular health. Folate also supports neurotransmitter synthesis—which in turn helps maintain cognitive abilities.

However, not everyone has sufficient activity of the enzyme required to convert folate to its biologically active form, 5-methyltetrahydrofolate, or 5-MTHF. 5-MTHF requires no enzymatic conversion to become metabolically active—providing maximum support for both cardiovascular and cognitive health.

Optimized Folate provides metabolically active 5-MTHF folate in 1,000 mcg or 5,000 mcg strengths.

Optimized Folate (1,000 mcg)
Item #01939 • 100 vegetarian tablets

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$15</td>
</tr>
<tr>
<td></td>
<td>$11.25</td>
</tr>
<tr>
<td>4 bottles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$10 each</td>
</tr>
</tbody>
</table>

High Potency Optimized Folate (5,000 mcg)
Item #01913 • 30 vegetarian tablets

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$18</td>
</tr>
<tr>
<td></td>
<td>$13.50</td>
</tr>
<tr>
<td>4 bottles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$12 each</td>
</tr>
</tbody>
</table>

References

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

Caution: Do not use this product if treated with methotrexate, fluorouracil, phenytoin, phenobarbital, primidone, or levodopa prior to consultation with your personal physician.

Quatrefolic® is a registered trademark of Gnosis, S.p.A. Patent number 7,947,662.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
MacuGuard® Ocular Support provides lutein, trans-zeaxanthin, and meso-zeaxanthin to help maintain structural integrity of the macula and retina.1,5

Alpha-carotene is included based on new evidence that it helps support the macular pigment.1

People supplementing with saffron showed an improvement in vision as measured by them seeing an average of two additional lines on the eye chart commonly used by doctors to test vision.1

This formula provides the optimal dose of saffron along with cyanidin-3-glucoside to support healthy vision.4-8

MacuGuard® Ocular Support with Saffron

Item #01992 • 60 softgels
Retail Price is $25
Your Price is $18.75
4 bottles are only $17.50 each

Each bottle lasts for two months.

References:

For full product description and to order MacuGuard® Ocular Support, call 1-800-544-4440 or visit www.LifeExtension.com

LuteinPlus® and Mz® are registered trademarks of NutriProducts Ltd., UK, licensed under U.S. Patent 8,623,428.

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.
In spite of the best intentions to perform daily brushing and flossing, many people still end up with periodontal disease, often referred to as “gum disease.” The result can be deterioration of the gum and tooth loss.1 Periodontal disease doesn’t just stay in the mouth. It can spread pathogens throughout the body, resulting in more serious diseases.2-10

When the oral microbiome becomes unbalanced, it results in a weakened immune system of the oral cavity. This opens the door to gum disease caused by excessive growth of pathogenic oral bacteria. Gum disease further weakens our overall immune system.

Two unique oral probiotics have been identified that specifically target and improve gum health. In addition, they restore a healthy balance to the oral microbiome.

Clinical evidence demonstrated that these two probiotics can lead to a reduction in indicators of plaque buildup, gingivitis, bleeding gums, and pocket depth between gums and tooth roots.11,12

Improving gum health by taking these probiotics in lozenge form may lower the risk for a host of inflammatory diseases commonly associated with aging.
Oral Bacteria Threaten Whole-Body Health

Nearly half of all Americans over age 30 have periodontal disease,13 which is associated with disorders throughout the body,14 including cardiovascular, lung, kidney, bone, and Alzheimer’s diseases.5-10,15-23

Recent research has found that the mouth is “a potential reservoir for bacteria that can promote intestinal disease...”2,12

Periodontal disease afflicts over 70% of those aged 65 or over.13

Unhealthy teeth and gums can lead to disorders in virtually every part of the body. An underlying link is periodontal disease’s effect on the oral microbiome, the natural community of microbes living in the oral cavity.

When healthy, the oral microbiome supports and protects the delicate mucous membranes as well as the surface of the teeth themselves.

However, inadequate oral hygiene, as well as poor diet and lifestyle factors, drugs, and disease, can disrupt this delicate microbiome balance. The resulting microbial imbalance—often called dysbiosis—allows excessive growth of pathogenic (disease-causing) organisms in the oral cavity.

This in turn wreaks havoc on the normal immune system and creates a vicious cycle that can have disastrous effects on many body systems,24 causing diseases in parts of the body far removed from the mouth itself.25

To prevent these far-reaching effects, scientists conducted extensive research on probiotics, eventually identifying two strains of bacteria that can halt this process on two fronts:11,26,27

•  Streptococcus salivarius M18, which kills harmful oral bacteria and goes on to help rebalance the oral microbiome, and

•  Lactobacillus plantarum L-137, which boosts oral immune function and promotes healing.

The results are extremely promising. Let’s review the studies validating the striking benefits of these strains.

Periodontal Disease

While some bacteria protect our teeth and gums, other bacteria and microorganisms cause tooth decay and periodontal (gum) disease. They break down compounds from food called fermentable carbohydrates, producing byproducts such as lactic acid and other organic acids that promote enamel and dentin demineralization. This softening of the enamel then leads to the development of dental caries, or cavities.

Under certain conditions, harmful bacteria excrete a substance similar to glue that helps form a biofilm, commonly called plaque. This plaque is a living aggregation of various bacteria and fungi that attaches itself to the enamel surface of the tooth. Biofilm is at the root of dental disease.

Over time, plaque hardens and takes on various minerals, at which point it is called tartar. This is the hard coating that dental hygienists work to scrape off your teeth. Gingivitis occurs when dental plaque stimulates an immune response in the soft tissues surrounding the teeth, causing the gums to become inflamed, irritated, swollen, red, and often easily bleeding. Acting on the immune system, it increases inflammatory factors and reduces anti-inflammatory factors. Left untreated, gingivitis can progress to periodontitis, a condition in which certain bacteria destroy the supportive structures of the teeth, which may ultimately lead to tooth loss.

Worse, new science is showing that periodontal disease has far-reaching consequences that extend into most body systems, largely the result of inflammatory changes and other signaling pathway disruptions throughout the body. Gum disease is now associated with disorders of the brain, heart, lungs, kidney, liver, bone, and blood vessels—any of which may promote aging and shorten lifespan.5,7,19-23

Brushing mechanically breaks up the biofilm to some extent, and along with rinsing and flossing, helps to remove fermentable carbohydrates. However, there is more that can be done to fight what is, essentially, a bacterial enemy.

The good news is that rebalancing the oral microbiome can reduce bacteria-laden plaque, resulting in significant reductions in whole-body inflammation. This means that improving our tooth and gum health is vital not just for those oral structures, but also for the preservation of our health in practically all body systems.

Together, the two beneficial probiotic strains described in this article have been demonstrated to rebalance the oral microbiome and enhance oral immunity. Scientists have shown that this in turn inhibits periodontal disease and protects total-body health.
Scientists found that *Streptococcus salivarius M18* helps create a healthier oral environment, providing a simple strategy that could help prevent disease throughout the body by several mechanisms. Studies showed that this novel bacterium:

- Specifically colonizes the human mouth, resulting in reproducing colonies of this beneficial organism even after supplementation ends,\(^26,27\)
- Competes with harmful oral bacteria, thus supporting healthy teeth and gums,\(^27\)
- Generates abundant numbers of bacteria-suppressing weapons called *bacteriocins*, which function like antibiotics at the local level,\(^28-30\) to inhibit tooth and *gum disease*-producing organisms,\(^26,29-31\)
- Produces enzymes (*dextranase* and *urease*) that help break down dental plaque, a main cause of tooth decay and gum disease,\(^26\)
- Helps to generate a neutral oral *pH*, which helps balance the oral microbiome and cut disease risk,\(^26\) and
- Reduces the presence of pro-inflammatory cytokines (*IL-6*), breaking the infection-inflammation-infection cycle that accelerates gum disease and threatens the whole body.\(^26\)

To validate the effects of this strain on humans, scientists conducted several clinical studies. In one of these trials, they showed that 88% of *S. salivarius M18* recipients maintained plaque scores lower than their pretreatment values at the end of a three-month treatment period, compared with just 44% of placebo recipients.\(^26\)

Then, investigators set up a randomized, controlled trial to determine the impact of *S. salivarius M18* treatment on some of the most important clinical parameters of oral and gingival (gum) health.\(^12\)

They recruited men and women, aged 20–60 years, with moderate or severe gingivitis (gingival index score of 2 or 3) and moderate periodontitis (less than 6 mm probing pocket depth). For 30 days, half received no treatment, and half took lozenges of 200 million *S. salivarius M18* daily, after brushing. The lozenge group was observed for an additional 30 days after treatment to measure any lasting effect. There were dramatic improvements in the *S. salivarius M18* group.\(^12\)

---

**What You Need to Know**

**Oral Probiotic for Gum Disease**

- Cardiovascular, brain, kidney, and bone diseases and cancer are just some of the disorders that can occur as a result of periodontal (gum) disease.
- An unbalanced oral microbiome is critically involved in the development of periodontal disease.
- The bacterial strain *S. salivarius M18* has been documented to rebalance the bacterial populations of the mouth, inhibiting poor oral health.
- Scientists have also shown that a heat-treated form of the bacterial strain *L. plantarum* L-137 boosts oral immune function, reducing inflammation and promoting healing.
- These two probiotics, when taken as a daily lozenge, can work together to protect oral health and also promise whole-body benefits.
Scientists were able to demonstrate that, when heat-treated, the bacterium known as Lactobacillus plantarum strain L-137 can reverse infection-caused reductions in the oral immune system’s fighting ability.11

When the oral microbiome gets out of whack, this weakens the immune system of the mouth and gums, leaving us vulnerable to infections by bacteria that cause gum disease which further weaken the immune system, such as the bacterium Porphyromonas gingivalis, abbreviated as P. gingivalis.

P. gingivalis disrupts important immune factors known as interleukins. It downregulates protective interleukins called IL-12 and upregulates pro-inflammatory interleukins called IL-6. This creates a disease-promoting cycle that makes it nearly impossible for the body to heal itself.32-34

To make matters worse, natural IL-12 production decreases with aging, leaving a deficit in immune responses in the mouth.35 This allows organisms such as P. gingivalis to evade the immune system and become overgrown, ultimately causing gum disease.36

Searching for a way to block this spiral and boost local immune function, scientists finally demonstrated that, when killed by heat treatment, the bacterium L. plantarum strain L-137 increases production of the protective IL-12.11

Treating periodontitis patients with this immune-boosting bacterium aids in restoring the mouth’s natural, oral immune response, helping to heal diseased, inflamed gums. This treatment also helps prevent an array of diseases throughout the body that are strongly associated with periodontal disease.

In a paper published in 2018, scientists reported on a study undertaken in a rat model of metabolic syndrome. In this study, oral treatment with L. plantarum L-137 was shown to have anti-inflammatory effects on cardiac and adipose (fat) tissue. It reduced heart
dysfunction, the accumulation of subcutaneous fat mass, insulin resistance, and elevated circulating IL-6 concentrations—indicating powerful inflammation-suppressing effects.37

To validate the effects of this probiotic strain on gum status in periodontal disease, scientists conducted a double-blind, placebo-controlled, randomized trial that included 39 volunteers with chronic periodontitis. Half received placebo while the other half took a capsule containing heat-treated *L. plantarum L-137*.11

Then, over the course of 12 weeks, researchers measured the **pocket probing depth**,11 which is the distance from the gum line to the bottom of the tiny pocket between the gum and tooth root. In dentistry, an instrument called a periodontal probe is commonly used to measure the depth of this space. Normal, healthy gums have a pocket probing depth of **3 mm** or less. However, a depth of **4 mm** or more is clinically defined as periodontal disease.38

At the end of 12 weeks, researchers found that in teeth with an initial (baseline) pocket probing depth of **4 mm** or more, there was a **64%** greater improvement in pocket depth in those treated with *L. plantarum L-137* compared to placebo recipients.11

These results demonstrate that periodontal disease can be improved with oral *L. plantarum L-137*.

Considering the capacity of *S. salivarius M18* to restore balance to the oral cavity’s microbiome, these two probiotic bacteria—working together—represent powerful protection for oral health. And of course, healthy teeth and gums may help prevent a host of chronic diseases **throughout** the body.5,10

**L. plantarum L-137** and *S. salivarius M18* are now available in a single lozenge. This two-in-one lozenge makes it easy to quickly deliver targeted probiotics directly to the oral cavity. When combined with a regular routine of brushing and flossing, optimal oral health is well within reach.

**Summary**

Poor oral health, which is more common among older adults, is associated with a steep increase in the risk of an array of serious disorders throughout the body including cancer, as well as cardiovascular, brain, kidney, and bone diseases.

A major cofactor in the development of periodontal disease is an imbalance in the normal microbial community of the oral cavity.

Scientists have shown that the bacterial strain *S. salivarius M18* rebalances the bacterial populations of the mouth, crowding out harmful microbes.

Additionally, studies show that a heat-treated form of the bacterial strain *L. plantarum L-137* boosts oral immune function, reduces inflammation, and promotes healing.

These two probiotics are available together in a lozenge that, when taken daily, protects oral health and promises whole-body benefits, too.

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


ZINC ACETATE LOZENGES

FOR WINTER SEASON SUPPORT

Zinc stimulates the activity of about 300 enzymes and fortifies the immune system.

Taking the best zinc lozenge is important for maintaining the body's natural defense system during the cold season—and throughout the year.

Enhanced Zinc Lozenges is a special "ionic formula" that delivers on the original promise of seasonal immune support and comes in peppermint flavor.

Zinc Lozenges
Item #01961 • 30 vegetarian lozenges

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>$12</td>
<td>$9</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$6 each</td>
</tr>
</tbody>
</table>

For full product description and to order Enhanced Zinc Lozenges, call 1-800-544-4440 or visit www.LifeExtension.com

References

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.
Discover a European Secret for Beautiful Legs

Combat Unsightly Veins

European Leg Solution with certified Diosmin 95 helps your legs look and feel great by:1-4

- Supporting healthy blood flow.
- Maintaining healthy venous tone and elasticity.
- Safeguarding collagen suppleness.

European Leg Solution featuring Certified Diosmin 95
Item #01042 • 30 vegetarian tablets

Retail Price Your Price
1 bottle $20 $15
4 bottles $13.50 each

For full product description and to order European Leg Solution featuring Certified Diosmin 95, call 1-800-544-4440 or visit www.LifeExtension.com

References

Caution: If you are taking anticoagulant or antiplatelet medications, or have a bleeding disorder, consult your health care provider before taking this product.

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.
Maintaining good oral hygiene is important for overall health. Unfortunately, brushing and flossing may not be enough.

**FLORASSIST® Oral Hygiene** provides the beneficial *S. salivarius BLIS M18™* oral probiotic that colonizes the mouth and inhibits the growth of unwanted bacteria.²⁻³

This product also contains Immuno-LP20®.

Just one great-tasting mint cherry lozenge of **FLORASSIST® Oral Hygiene** a day maximizes oral hygiene by optimizing oral pH, easing inflammation, and supporting healthy bacterial colonization throughout the mouth.⁴⁻⁵

---

**Promote Oral Health with Targeted Probiotic Blend**

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

---

**FLORASSIST® Oral Hygiene**

Item #02120 • 30 lozenges

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$20</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$13 each</td>
</tr>
</tbody>
</table>

**References**


BLIS™ and BLIS M18™ are trademarks of Blis Technologies Limited and the subject of USA patent no. 7226590. Immuno-LP20® is a registered trademark of House Foods Group Inc.
Healthy Aging: It’s in Your DNA

Clinical evidence demonstrates that the nutrients in DNA Protection Formula help preserve healthy DNA by supporting the body’s defenses against environmental toxins.

Ingredients in DNA Protection Formula include:

- XanthoForce™ hops extract
- Watercress extract
- Chlorophyllin

DNA Protection Formula
Item #02270 • 30 vegetarian capsules

<table>
<thead>
<tr>
<th></th>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$20</td>
<td>$15</td>
</tr>
<tr>
<td>4 bottles</td>
<td></td>
<td>$13.50 each</td>
</tr>
</tbody>
</table>

For full product description and to order DNA Protection Formula, call 1-800-544-4440 or visit www.LifeExtension.com

XanthoForce™ is a trademark of Berg Imports, 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.
That mainstay of Thanksgiving dinners, the sweet potato, is a root vegetable that is only a distant relative of the regular potato. This flavorful tuber was brought to Spain from its native Peru around the year 1500, and from there Spanish and Portuguese explorers carried it to locations around the world, including the Philippines, China, and India. In the mid-1700s, the vegetable was dubbed the “sweet potato” in the American colonies in order to avoid confusion with the typical white “Irish” potato.

By itself, without the sugar and marshmallows that are often added to it in recipes, the sweet potato has a number of health benefits, such as...

Inflammation and Obesity
In vitro research has found that extracts from sweet potatoes have oxidant-reducing effects and may potentially fight obesity and inflammation.¹

Toxin Inhibition
One study found that purple sweet potato inhibited the detrimental effects of toxic chemicals such as pyridine and dimethylhydrazine, which can promote colorectal tumors. Tumors induced in rats by exposure to these substances were reduced by 5% with the introduction of purple sweet potato color (anthocyanins) from the vegetable.²

Diabetes
The sweet potato has a long history of use for diabetes in traditional medicine. But is there any scientific evidence to back up these folk practices? Apparently so. For example, one study instructed 140 patients with type II diabetes to supplement with a sweet potato preparation on a daily basis. After a period of three to five months, the subjects’ HbA1c levels were found to have moderately improved compared to placebo.³

There’s also evidence that edible sweet potato leaves taken from a Japanese variety of the plant may help regulate blood glucose concentration due to their polyphenol content.⁴ In a powdered form, this sweet potato leaf extract enhanced secretion of glucagon peptide-1 (GLP-1) in diabetic rats. GLP-1 prevents after-meal blood sugar spikes. After five weeks, blood sugar levels were lowered as well.

References
French maritime pine bark extract provides a concentrated mixture of procyanidins, or flavonoid compounds.

What distinguishes pine bark compounds is a remarkable number of human studies showing consistent findings.

Pine tree bark extract has demonstrated an array of health benefits over the past 50 years.¹

New applications of pine bark extract are still being discovered and reported in the medical literature each year.
Inflammation, Allergy, & Asthma

A key feature of pine bark extract is its ability to help control inflammation in the body.

Chronic inflammation plays an insidious role in most disease states.

Even low levels of persistent inflammation contribute to age-related diseases. Cancer, Alzheimer’s, autoimmune disease, and cardiovascular disease involve inflammation as one of their major causative factors.

Exposure to environmental toxins, diet, and the aging process contribute to chronic inflammation. Natural compounds found in French maritime pine bark extract function as a weapon against chronic inflammation.

In human immune cells, French maritime pine bark extract has been shown to significantly alter the gene expression of important components of the inflammatory process. It appears to reduce the expression of nuclear factor-kappa B, or NF-kappa B, which is involved in chronic inflammation and has been implicated in age-related disorders such as atherosclerosis.

A pooled analysis published this year found that French maritime pine bark extract significantly lowered the levels of C-reactive protein (CRP) in humans. C-reactive protein is a marker of inflammation. It is associated with both the presence of disease and increased risk for development of various conditions, including cancer.

This ability of pine bark extract to subdue inflammation makes it a candidate for treating allergic disorders. Allergy is an inflammatory overreaction to otherwise harmless stimuli, such as pollen and cat dander.

French maritime pine bark extract improves symptoms of hay fever and other forms of allergic rhinitis (itchy, runny nose) compared to placebo. The mechanism of this protection may in part be due to the fact that pine bark extract inhibits the response of mast cells. Mast cells initiate many allergic responses through their release of histamine that cause inflammation and allergic symptoms.

Asthma, a narrowing of the airways caused by inflammation, is often allergic in nature. Pine bark extract has been found to improve the control of this respiratory disorder, including in children. Compared to controls, patients using pine bark extract were able to reduce their use of steroids and rescue inhalers needed to prevent and treat asthma attacks. Pine bark’s mechanism of this protection appears to be the prevention of inflammation in human study subjects.

The Metabolic Syndrome Pandemic

As of 2012, more than one-third of all adults in the U.S. had metabolic syndrome, putting them at risk for chronic disease and mortality. The pervasiveness of these metabolic abnormalities is so troubling that clinicians and researchers alike consider it to be a pandemic.

An individual must have three of the five following conditions to be diagnosed with metabolic syndrome:

- Fasting glucose over 100 mg/dL;
- Blood pressure ≥130/85 mm Hg;
- Serum triglycerides ≥150 mg/dL;
- HDL cholesterol (“good cholesterol”) <40 mg/dL in men or <50 mg/dL in women (or drug treatment for any of the above);
- Waist circumference ≥40 inches in men or 35 inches in women (slightly lower measurements apply for Asian individuals)
The risk for cardiovascular disease, kidney disease, cancer, diabetes, and early death are significantly elevated in the presence of **metabolic syndrome**.¹⁹

Modern medicine’s answer to this problem often lies in prescriptions for multiple drugs to control each of these factors independently: statins to improve cholesterol levels, anti-hypertensives to lower blood pressure, various blood sugar–lowering drugs, and so on. French maritime pine bark extract has demonstrated a remarkable ability to improve many, if not all, of these metabolic abnormalities.

A study evaluated its use in individuals with metabolic syndrome.²⁰ A group of 64 adults with metabolic syndrome were given **150 mg/day** of pine bark extract and then compared to a control group. Improvements were observed in all aspects of the syndrome as follows:

- Fasting blood glucose (sugar) levels dropped by over **14%** on average.
- Waist circumference was reduced by more than **7%** on average.
- Triglyceride levels were decreased.
- HDL cholesterol levels (the “good” cholesterol) were increased.
- Blood pressure was lower.
- Plasma free radicals (a marker of oxidative stress in the body) were reduced by nearly **35%**.

Subsequent investigations have also found that individuals’ metabolic indices benefited from an extract of pine bark. Those treated benefited from an increase in HDL cholesterol, a decrease in LDL cholesterol, reduced glucose levels, and reduction in blood pressure.²¹,²²

These studies build upon evidence from prior clinical trials that have likewise observed a positive impact on markers of metabolic health.²⁰,²³,²⁴ Furthermore, French maritime pine bark extract’s impact on these factors has been shown to translate into a reduced risk for cardiovascular disease.

**Cardiovascular Disease**

Cardiovascular disease is the number one cause of death worldwide, responsible for almost one third of all deaths.²⁵ It includes a number of disorders that affect blood vessels.

Vascular occlusion is most commonly associated with heart disease, but it is also a factor in damage to many other organs and tissues as well, including stroke in the brain, kidney failure, and more.
French maritime pine bark extract protects against cardiovascular disease by several complementary mechanisms:

- Reduces inflammation as evidenced by its ability to reduce C-reactive protein levels.\textsuperscript{21,22}
- Improves the metabolic profile, helping to control metabolic syndrome and its individual elements, all of which are risk factors for cardiovascular disease.\textsuperscript{20}
- Reduces atherosclerotic plaque formation by altering pathways related to inflammation in artery walls, including reducing NF-kappa B pathways.\textsuperscript{5,6}
- Improves endothelial function, a measure of the health of blood vessels.\textsuperscript{26}

These findings demonstrate the ability of French maritime pine bark extract to improve cardiovascular health and interfere with the progression of atherosclerotic plaques.

In a large group of patients with blood vessel plaques followed over four years, 100 mg/day of pine bark extract slowed the growth of atherosclerotic plaques.\textsuperscript{27} Furthermore, it cut the number of cardiovascular events that required hospital admission by about half!

In addition to aiding blood vessel disease, French maritime pine bark extract appears to improve heart function. In healthy elderly subjects, 150 mg daily led to a significant improvement in left ventricular ejection fraction, a marker of the strength of the heart in pumping blood.\textsuperscript{28}

An Array of Health Benefits

In addition to the benefits already discussed, the applications of pine bark extract have a noteworthy breadth. From brain health to the common cold, there appears very little this natural product cannot do. While a complete list is not possible here, below is a summary of some of the other notable uses that have impressive support in the medical literature.

**Eye Health:** In humans, it shows promise in slowing the progression of eye disease and visual loss related to diabetes, one of the most common causes of poor vision and blindness in adults.\textsuperscript{29,30}

**Common Cold:** Compared to controls, sufferers of the common cold had milder symptoms and a shorter course of the illness when taking 100 mg pine bark extract daily.\textsuperscript{31}

**Athletic Performance:** Trained athletes randomized to pine bark extract versus placebo benefited from improved endurance, better performance, and less muscle cramping and post-exercise pain.\textsuperscript{32-34}

**Jet Lag:** Travelers experienced reduced symptoms of jet lag following pre-treatment with French maritime pine bark extract.\textsuperscript{35}

**Irritable Bowel Syndrome:** Symptoms of irritable bowel syndrome, including abdominal pain and bloating, were reduced with 150 mg of pine bark extract daily.\textsuperscript{36}
Ménière’s Disease and Tinnitus: Individuals suffering from Ménière’s disease experience debilitating bouts of vertigo, nausea, and tinnitus. Compared to controls, those treated with pine bark extract had fewer lost work days, improved blood flow in the ear, and improvement in symptoms, including reduced tinnitus. It also benefited individuals with tinnitus alone, reducing symptoms and improving blood flow.

Skin Health: Oral administration of pine bark extract can improve skin health. In one study, post-menopausal women experienced improved skin hydration and elasticity. Altered gene expression of enzymes responsible for maintenance of skin tissues was observed with treatment. In another experiment, patients with psoriasis benefited from improved control of symptoms with pine bark extract.

The applications of French maritime pine bark extract continue to impress based on new studies being published almost every month.

Summary

After 50 years of use and study, the breadth and quality of data supporting the health benefits of French maritime pine bark extract continues to grow. This blend of procyanidin flavonoids, capable of modulating oxidative stress and inflammation, offers improvement and prevention for myriad conditions and age-related changes.

Pine bark extract can deal a potent blow to conditions such as allergy and asthma. Furthermore, the reduction of inflammation may delay progression of age-related chronic disease and dysfunction.

Some of the most common causes of disease and risk for mortality, including metabolic syndrome and the various cardiovascular disorders, appear to be reduced with regular intake of pine bark extract at doses ranging from 100-200 mg per day.

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

References

N-acetyl-L-cysteine supports healthy levels of glutathione, a molecule utilized by all cells for protection against free radical damage and attacks from foreign compounds.

Caution: Those who supplement with NAC should drink six to eight glasses of water daily in order to prevent cysteine renal stones. Cysteine renal stones are rare but do occur.

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.
Optimized Ashwagandha Extract

Item #00888 • 60 veg. capsules

<table>
<thead>
<tr>
<th></th>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$10</td>
<td>$7.50</td>
</tr>
<tr>
<td>4 bottles</td>
<td></td>
<td>$6.75 each</td>
</tr>
</tbody>
</table>

Sensoril® is protected under US Patent Nos. 6,153,198 and 6,713,092 and is a registered trademark of Natreon, Inc.

Ashwagandha supports the regeneration of axons and dendrites, nerve cell components that support brain and nervous system function.

For full product description and to order Optimized Ashwagandha Extract, call 1-800-544-4440 or visit 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.
Pycnogenol® is a plant extract derived from French maritime pine bark. Its benefits are available in these three formulations:

**Arterial Protect**

Provides Pycnogenol® and standardized gotu kola leaf extract to help stabilize endothelial plaque and promote healthy blood flow throughout the body.

**VenoFlow™**

For those who sit for long periods while traveling or in the office, this proprietary blend of Pycnogenol® and nattokinase promotes healthy venous blood flow.

**Pycnogenol®**

Numerous published studies describe how concentrated extracts in Pycnogenol® help protect against multiple factors related to premature aging.

---

**Pycnogenol®**

French Maritime Pine Bark Extract

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$64</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$45 each</td>
</tr>
</tbody>
</table>

Item #01637 • 60 vegetarian capsules

---

**Arterial Protect**

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 bottles</td>
<td>$44</td>
</tr>
<tr>
<td></td>
<td>$29 each</td>
</tr>
</tbody>
</table>

Item #02004 • 30 vegetarian capsules

---

**VenoFlow™**

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>$52</td>
</tr>
<tr>
<td>4 bottles</td>
<td>$39 each</td>
</tr>
</tbody>
</table>

Item #02102 • 30 vegetarian capsules

---

**CAUTION:** Consult your healthcare provider before use of VenoFlow™ if taking medication (especially those affecting blood coagulation or blood pressure), being treated for a medical condition (especially bleeding disorders), under the age of 18, pregnant, or lactating.

For full product descriptions and to order Pycnogenol®, Arterial Protect, or VenoFlow™, call 1-800-544-4440 or visit www.LifeExtension.com

Pycnogenol® and Centelicum® are registered trademarks of Horphag Research. Use of this product may be protected by one or more U.S. patents and other international patents.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
A line of skin care products developed by renowned dermatologist Gary Goldfaden, MD
Developed Exclusively for Life Extension®

Retail  Your
Price  Price

1 tube  $24  $18
4 tubes  $15.60 each

Item #80171 - 0.5 fl. oz. bottle

Not tested on animals.
Keep out of reach of children.
For external use only.
Avoid contact with eyes.

Beautiful, Rejuvenated Lips

Keep your lips soft, moisture-rich, and firm with Vitamin C Lip Rejuvenator.

Olive fruit oil and beeswax provide a natural moisture barrier to improve hydration. Meanwhile, vitamin C promotes collagen production and zinc oxide provides skin protection.

For full product description and to order Vitamin C Lip Rejuvenator, call 1-800-544-4440 or visit www.LifeExtension.com
In recent years, our understanding of how cholesterol and the lipoproteins that carry it affect heart health has exploded.

New research reveals another way cholesterol can raise your risk of heart attack: by forming needle-like “cholesterol crystals” that are buried deep inside arterial plaque, with potentially devastating consequences.

In this exclusive interview, Michael Ozner, MD, one of the leading preventive cardiologists in America, explains how cholesterol crystals are formed, why we should worry about them, and how exciting new research into how EPA from omega 3 fatty acids and medications can help reduce the risk of suffering a major cardiac event caused by cholesterol crystals.
**LE:** Let’s start at the beginning. What are cholesterol crystals?

**MO:** In my books, I’ve written a lot about the dangers of having excess atherogenic lipoproteins in the bloodstream. These atherogenic lipoproteins, which carry and transport cholesterol and triglycerides, have been shown to dramatically increase the risk of a heart attack or vascular disease because they can penetrate the arterial wall and begin the formation of arterial plaques. This is the first step in the atherosclerotic disease process.

These atherogenic lipoproteins are known as apo B lipoproteins (apolipoprotein B), and when the apo B blood levels are elevated there is an increased risk of heart attack. When apo B particles get into the arterial wall, they can get trapped, oxidized, and engulfed by a type of immune system cell called a macrophage.

As macrophages gather at the site of an arterial wall injury, this begins the process of arterial plaque formation. As macrophages engulf cholesterol, they become foam cells and over time these foam cells and macrophages undergo cell death, or apoptosis. When they die, they release their inner contents, which include cholesterol. As more cells die, the atherosclerotic plaque becomes super-saturated with cholesterol, and that cholesterol eventually forms a crystalline structure called a cholesterol crystal. These crystalline structures have sharp points like a needle that are capable of piercing the atherosclerotic cap, which can lead to a plaque rupture, and a devastating cardiac event such as heart attack and sudden cardiac death.

**LE:** It sounds like this explains the mechanism of plaque rupture, or what’s happening right before the plaque ruptures. Are these cholesterol crystals implicated in all plaque ruptures, or is this just one risk factor?

**MO:** The concept of cholesterol crystals has been known for years, but now there is excellent new research helping us understand how they contribute to atherosclerotic disease. There are other mechanisms that can cause plaques to rupture, but this is an important part of it. A recent study by cardiologist George Abela of Michigan State University of 286 heart attack subjects in an emergency room found that 89% of the patients had cholesterol crystals, with 84% showing crystals large enough to be measured and analyzed.1

The mere presence of cholesterol crystals is a sign that a heart attack may be imminent since these crystals can pierce the fibrous cap of the atherosclerotic plaque, leading to plaque rupture. This means we may now have a way of identifying risk that a plaque may be about to rupture. But it’s important to understand this is just one way cholesterol crystals pose danger. In fact, there are two mechanisms by which they may pose a danger to your health.

**LE:** What’s the second one?

**MO:** The first I discussed was mechanical. The second has to do with the inflammatory milieu within cells. Cholesterol crystals increase inflammation within the plaque. They do this by activating the “inflamasome” within the macrophages, which in turn activates the inflammatory pathway and causes the release of IL-1 beta. This is an inflammatory cytokine that has been shown to increase vascular inflammation and the risk of plaque rupture.

So we have these two mechanisms, mechanical (crystals piercing plaques) and inflammatory, and both increase the risk of plaque rupture.

**LE:** Considering how dangerous they can be, is there a way to identify or measure cholesterol crystals?

**MO:** Unfortunately, it’s challenging right now to measure cholesterol crystals with a blood test. The study I mentioned earlier by Dr. Abela obtained material from within the coronary artery during the patient’s hospital stay. It was an invasive procedure that allowed them to examine the plaque and identify cholesterol crystals. Emerging non-invasive imaging modalities will potentially be able to accurately identify cholesterol crystals in human coronary arteries. A surrogate measure for cholesterol crystals might be testing for apolipoprotein B in the blood and fortunately the cost of this test has plummeted in recent years.

So, at this point in time, we can’t measure cholesterol crystals easily, but at least surrogate blood markers (like LDL and apolipoprotein B) can provide important information for those of us who are looking for ways to reduce the risk of heart attack and heart disease. We are learning more ways, both old and new, to decrease cholesterol within the plaques. When we reduce cholesterol within the plaque, we can decrease cholesterol crystal formation. If you think of a stable arterial plaque,
it has very little inflammation and cholesterol inside it. These plaques are much less likely to rupture than the unstable plaques with an active inflammatory milieu and increased cholesterol concentration.

**LE:** In other words, to reduce cholesterol crystals, it is necessary to reduce dangerous cholesterol as much as possible. Is there a better way to do that?

**MO:** Anything that lowers cholesterol will reduce cholesterol crystals. When it comes to reducing cholesterol, we always start with lifestyle. Start by reducing saturated and trans fats in your diet. Get regular exercise. Medically, statin therapy will reduce cholesterol as well. And there are some new and emerging ways we can reduce cholesterol crystals, one of which is by taking **omega-3 fatty acids**, specifically the omega-3 fatty acid EPA. Highly purified EPA has been shown to block cholesterol crystal formation within the cell membrane so it’s plausible we could use highly purified EPA to decrease the number of cholesterol crystals within plaque.

Further, we know that highly purified EPA, used on top of a statin, leads to increased plaque stability and plaque regression compared to the statin by itself. EPA (eicosapentaenoic acid) also lowers triglycerides and has a free radical scavenging and anti-inflammatory effect. There is continuing research on EPA, including the **Reduce It Trial**. This trial is looking at the role EPA plays in reducing elevated triglycerides in high-risk cardiac patients with well controlled cholesterol.

Topleine results of the Reduce-It Trial were reported September 2018 and showed a highly significant 25% reduction in major adverse cardiovascular events (e.g. non-fatal heart attack and stroke and cardiovascular death) in those randomized to statin plus EPA versus statin without EPA.

Therefore triglycerides are a potentially atherogenic blood lipid that can lead to vascular plaque development and increase the risk of heart attack. Lowering triglycerides with a heart-healthy diet (e.g. Mediterranean diet), regular exercise and triglyceride lowering medications if indicated can lower cardiovascular disease risk.

Outside of EPA, there are other new and novel approaches being studied. A few studies have looked at cyclohextrin, a sugar-like substance as a potential therapy. One study showed that cyclohextrin was able to dissolve cholesterol crystals and decrease inflammation within the plaque. It’s promising at this stage, but a large-scale clinical trial has not been done so we await final results.

Finally, the CANTOS trial is a groundbreaking trial that’s looking at **canakinumab**, an injectable drug that blocks the action of IL-1 beta. This trial showed a significant reduction in cardiovascular events among patients who had inflammation, as measured by high sensitivity C-reactive protein levels, and were given canakinumab. This is an expensive drug, but it showed that if we can inhibit IL-1 beta, we can reduce the risk of cardiovascular events.

In conclusion, reducing cholesterol crystals formation by following a healthy diet and lifestyle and utilizing medications, when needed to lower cholesterol and triglycerides and reduce inflammation, can translate into a reduction in heart attack risk.

**References**

Humans don’t manufacture vitamin C internally, so it must be obtained through dietary sources or supplements. Vitamin C is water soluble and needs to be constantly replenished.₁

Fortunately, a flavonoid known as dihydroquercetin functions as a vitamin C “supercharger” that helps maintain its concentration throughout the body.²,³

References

For full product description and to order VITAMIN C with Dihydroquercetin, call 1-800-544-4440 or visit 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.
MALE AND FEMALE BLOOD TEST PANELS

Unlike commercial blood labs that test only a few risk factors, Life Extension®’s Male and Female Blood Test Panels measure a wide range of blood markers that predispose people to age-related diseases. Just look at the huge number of parameters included in the Male and Female Blood Test Panels:

**MALE PANEL**

CARDIAC MARKERS
Apolipoprotein B (ApoB)
Homocysteine
C-Reactive Protein (high sensitivity)

LIPID PROFILE
Total Cholesterol
LDL (low-density lipoprotein)
HDL (high-density lipoprotein)
Triglycerides

METABOLIC PROFILE
Glucose
Hemoglobin A1c
Kidney function tests: creatinine, BUN, uric acid, BUN/creatinine ratio
Liver function tests: AST, ALT, LDH, GGT, bilirubin, alkaline phosphatase
Blood minerals: calcium, potassium, phosphorus, sodium, chloride, iron
Blood proteins: albumin, globulin, total protein, albumin/globulin ratio

COMPLETE BLOOD COUNT (CBC)
Red Blood Cell count including: hemoglobin, hematocrit, MCV, MCH, MCHC, RDW
White Blood Cell count including: lymphocytes, monocytes, eosinophils, neutrophils, basophils
Platelet count

CANCER MARKER
PSA (Prostate Specific Antigen)

HORMONES
Free and Total Testosterone
DHEA-S
Estradiol (an estrogen)
TSH (thyroid function)
Vitamin D (25-hydroxyvitamin D)

**FEMALE PANEL**

CARDIAC MARKERS
Apolipoprotein B (ApoB)
Homocysteine
C-Reactive Protein (high sensitivity)

LIPID PROFILE
Total Cholesterol
LDL (low-density lipoprotein)
HDL (high-density lipoprotein)
Triglycerides

METABOLIC PROFILE
Glucose
Hemoglobin A1c
Kidney function tests: creatinine, BUN, uric acid, BUN/creatinine ratio
Liver function tests: AST, ALT, LDH, GGT, bilirubin, alkaline phosphatase
Blood minerals: calcium, potassium, phosphorus, sodium, chloride, iron
Blood proteins: albumin, globulin, total protein, albumin/globulin ratio

COMPLETE BLOOD COUNT (CBC)
Red Blood Cell count including: hemoglobin, hematocrit, MCV, MCH, MCHC, RDW
White Blood Cell count including: lymphocytes, monocytes, eosinophils, neutrophils, basophils
Platelet count

HORMONES
Progesterone
Estradiol (an estrogen)
Free and Total Testosterone
DHEA-S
TSH (thyroid function)
Vitamin D (25-hydroxyvitamin D)

Retail price: $400 • Your Price: $269

To obtain these comprehensive Male or Female Panels at these low prices, call 1-800-208-3444 or log on to www.LifeExtension.com/labservices to order your requisition forms.

Then—at your convenience—you can visit one of the blood-drawing facilities provided by LabCorp in your area or at the Life Extension Nutrition Center in Ft. Lauderdale.

Blood testing 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.
Super R-Lipoic Acid is more bioavailable, stable, and potent, achieving 10-30 times higher peak blood levels. This unique sodium-R-lipoate can help you reach peak plasma concentrations within just 10-20 minutes of supplementation.

Suggested dose is one to two capsules daily.

CAUTION: If you are taking glucose-lowering medication, consult your health care provider before taking this product. Bio-Enhanced® is a registered trademark of GeroNova Research, Inc.
Wellness Profile

The skin is our largest organ. It’s also the only one we wear. That means it’s exposed to the same elements that can etch rocks and scorch the earth. Fortunately, the skin has remarkable regenerative qualities that allow it to survive pretty much anything Mother Nature can throw at it, except time.

Dermatologists and other experts widely agree that people can help preserve their skins’ youthful pliability by treating it right. And it’s not only the moisturizers and rejuvenating creams you put on your body but also the nutrients you put into it. For a large part, healthy skin comes from antioxidants, vitamins and minerals, and avoidance of UV exposure, cigarette smoke, and excessive alcohol ingestion. Other beneficial supplements include hyaluronic acid, collagen, and even probiotics.

“What’s good for your body is good for your skin,” declares Dr. Daniel Man, a leading plastic surgeon based in Boca Raton, Florida. “A healthy diet, exercise, sleep, sun protection, and making sure you have all of the right nutrients are important for keeping the skin healthy.”

Dr. Man and the Art of Plastic Surgery

BY GARY GREENBERG
“But even when we do all of this, or maybe we get a late start in taking good care of ourselves, we start showing the classic signs of aging—wrinkles, sagging skin, hair loss—and these things can make you want to see me.”

Plastic surgery is sometimes seen as vanity run amok, self-absorbed people desperately trying to cling onto their youth by shelling out big bucks for quick fixes. But it can also be an anti-aging treatment that Man says runs more than skin deep.

“When you feel better about the way you look, you feel better about yourself,” explains the Israeli-born surgeon. “It is good for self-esteem, makes you more confident, possibly with better success socially and in business. Plastic surgery not only changes appearance, it changes lives.”

Dr. Man talks about a teenage boy and his mom who recently came to see him because the youth suffered from gynecomastia, commonly called “man boobs.”

“Think how he must feel, not being able to take off his shirt without being embarrassed or teased, not swimming in a pool with friends, not playing sports, not going to the beach,” says Man. “Is plastic surgery a luxury for him?”

There has been an uptick in the condition, as Dr. Man says his male breast reduction clientele has jumped 40% in the past couple of years. Coincidentally, a new technology called J-Plasma makes the procedure relatively quick and painless. By combining the heat of radiofrequency (RF) and the coolness of helium gas, surgeons can tighten the skin during the fat removal process.

“It’s an amazing technology,” praises Man, who earned his medical degree in Israel and served his plastic surgery residency at the University of Louisville in Kentucky. “Under local anesthesia, you remove the fat through liposuction, then use radiofrequency heat to tighten up the skin and helium gas, which quickly cools down the radiofrequency.”

The end result is less collateral damage to tissue and a faster healing process.

“They can come here in the morning for the procedure, go home in the afternoon, and be at work the next day,” boasts Man. “I also use J-Plasma for the loose neck, love handles, belly fat, upper arm looseness, and other things. Patients spend a few days using a constrictive wrap, but there is very little downtime.”

Dr. Man is thrilled to have so many new weapons at his disposal in his war against aging. One is a hair replacement procedure called SmartGraft. Done in one day, it uses a circular saw to harvest “micro hair grafts” from the back of the head to be implanted in areas where hair has thinned. There is no scarring, and the implants eventually grow into thick, natural-looking locks.

For the ladies, breast enhancements have come a long way.

“A lot of women are concerned about their aging breasts, so we do a combination of augmentation and uplift,” says Man. “The newer implants are pear shaped rather than round and put under the muscle to make the breasts look more natural. The implants are silicone but highly cohesive so there is no worry about leakage.”

Fallen buttocks are another common problem, but this condition can often be treated with a patient’s own fat. Man removes belly blubber and injects it into the rear end to make it fuller and more rounded.

“We move the fat from where we don’t want it to where we’d rather have it,” he says.

Some of the procedures Man performs are have nothing to do with aesthetics. For women who have had multiple children or difficult deliveries, he uses RF to tighten the walls of the vagina. The painless procedure can help with incontinence as well as improve sexual satisfaction.

Of course, much of Dr. Man’s work is focused higher up, on the face. It includes the nonsurgical procedures, Skin Rejuvenation Peel and TriLift, which he claims can instantly make a person look 20 years younger. He’s also developed a facelift procedure in which the scars from the surgery are “hidden.”

Meanwhile, fillers are still popular for erasing crow’s feet and laugh lines, and they’re also better than ever.

“When we started with fillers many years ago, some would only last a few weeks or months,” recalls Man. “Now, they can last for years.”

He is also contributing to the advancements in the field with his
Wellness Profile

Just remember that if you ever go to see Dr. Man, or any other plastic surgeon, chances are it won’t be your last visit.

“I can turn back the clock, but I can’t stop it from ticking,” says Man, smiling. “Down the road, you will need more help. Life is ever changing.”

Daniel Man, M.D., is a board-certified plastic surgeon with a high-end private practice in Boca Raton, Florida. He is well known as one of the premier plastic surgeons in South Florida for his breakthrough procedures and treatment methods, as well as having patients from across the country who travel miles to undergo his treatments. To contact Dr. Man for a consultation, please visit www.drman.com

If you have any questions on the scientific content of this article, please call a Life Extension® Wellness Specialist at 1-866-864-3027.
Advanced Technology TO OPTIMIZE B12 ABSORPTION

Eligen B12™ helps maintain normal vitamin B12 levels. Eligen® Technology is designed to allow patients to absorb an oral B12 formulation independent of intrinsic factor, a protein required to effectively absorb B12.

Eligen B12™ uses an advanced patented carrier technology to optimize vitamin B12 absorption by chaperoning B12 through the gastric lining directly into the bloodstream within 30 minutes. This enables individuals who are unable to absorb vitamin B12 intestinally to use an oral supplement to help inhibit B12 deficiency.

BENEFITS AT A GLANCE:

- Optimizes B12 absorption, especially among individuals lacking intrinsic factor.
- Helps maintain consistent long-term and predictable healthy B12 blood levels with a single daily dose.
- Helps inhibit B12 deficiency.

ABOUT EMISPHERE

Emisphere is a drug delivery company that utilizes its proprietary Eligen® Technology to develop new oral formulations of therapeutic agents. Emisphere is currently partners with global pharmaceutical companies for the development of new orally delivered therapeutics. For more information, please visit the company’s website at www.emisphere.com.

Eligen B12 30 Tablets

Item Number: 53518   Retail: 45.99   Your Price: 34.49

For full product description and to order Eligen B12™, please call 1-800-544-4440 or visit 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.
Amazingly, studies show that the average person makes over 200 choices involving food and diet every day. But how many of these are rational, considered choices and how many are simply impulses driven by our mindless, subconscious urges? Furthermore, to what extent are external, commercial forces manipulating us into buying and consuming foods we don’t really want and would do well to avoid?

These and other questions are addressed in How We Eat With Our Eyes and Think With Our Stomach, a German bestseller that has now been published in English. Life Extension® sat down with authors Melanie Mühl and Diana von Kopp for a discussion touching on questions of food preference, the perils of shopping at the supermarket, and why most people perceive healthy food as tasting bad while junk food is considered delicious.

Melanie Mühl is a journalist whose blog Food Affair reaches hundreds of thousands of readers a month. Diana von Kopp is a psychologist who has long been fascinated with the impact food has on our brains and behavior.
LE: What is the basis for food preferences?

MM & DK: These foundations are already laid in the womb. Did you know that the sweeter the amniotic fluid, the more often the unborn baby swallows? Bitter compounds, however, are not so popular.

Once we’re born, the conditioning continues. Some of us turn into picky eaters, while others happily eat everything that’s put in front of us. Sooner or later we find ourselves on our first diet and realize: Darn, it’s not working! But why not? Because, in short, we are not rational eaters.

Pointing out the irrational way we often make choices, the behavioral psychologist Dan Ariely describes us humans as “pawns in a game whose forces we largely fail to comprehend.” And when we do, we systematically underestimate them. This is also true with food.

LE: What should people be aware of when shopping in the supermarket?

MM & DK: Every time we step through its doors we enter into a battle with our enemy, the supermarket corporation, whose motives are totally opposed to our own. While we hope to do our shopping quickly and efficiently, buying just the milk, bread, yogurt, pesto, apples, and leeks on our list, the supermarket owners would prefer we spend hours strolling slowly through the aisles and reaching for new products left and right, products that we neither need nor want. Which is why supermarkets use subtle psychological tricks to entice us. We think we can see through their schemes…but we’re wrong.

LE: For example?

MM & DK: In some supermarkets, vegetables are sprinkled with water to give them a shiny, fresher appearance, but in reality, this only makes them rot more quickly. What is true for vegetables applies to fruit as well. Bananas, for instance, have gone through a color-optimization process when planted.

The reason why the chilled aisles are located at the back of the store is that dairy products are among the most frequently bought items. So the consumer is made to walk past numerous other products—temptations. Expensive, branded products are placed at eye level. Cheaper ones are on the top and bottom shelves.

LE: How should we avoid buying the unhealthy, processed foods that the supermarket heavily promotes?

MM & DK: Know exactly what it is that you need to pick up and stick to the shopping list. In the fight against the manipulation machine that is the supermarket, a helpful defense is tunnel vision and grim determination—if that doesn’t seem to work, try putting on headphones and listening to music to keep you focused while you shop.

LE: Let’s discuss eating habits. How should you know when you’ve had enough to eat? Is it simply a matter of stopping when you feel full?

MM & DK: People who rely on the fullness signals sent from their stomach wall to their brains run the risk of eating more food than is good for them. Fortunately, our bodies have additional sources of information, such as the nutrient density of a food. An important hormone in this process is ghrelin. Released in the stomach lining, it sends signals to the brain, where it influences complex processes such as appetite, sleep, addiction, and satiety. When you are hungry, your ghrelin levels increase. When you take in food, the production of ghrelin decreases.

Carbohydrates lower your ghrelin levels particularly quickly, but the levels rise again soon after. Fats, on the other hand, lower ghrelin levels more slowly and keep them low for a longer period of time, which explains why a handful of nuts keeps hunger at bay for longer than a donut.
The problem is that it can take up to 20 minutes for hormone-driven fullness to reach the brain and give the order to stop eating—and 20 minutes is plenty of time to eat one, two, or even three too many high-energy snacks such as a Mars bar.

Generally, we eat as much as we’re used to eating. Or until we’ve cleaned our plate. A clean plate is one of the strongest cues of all: We trust that we will automatically feel full with the last mouthful and happily ignore the fact that we might feel satisfied before then.

At home we happily shuffle between the kitchen and the couch to replenish our plates with small portions. This means that we lose track of the amount of food we’re consuming. When we divert our attention from what and how much we’re eating to other things, such as watching television, we fall into the same trap. Participants in an experiment who played solitaire on a computer while eating felt less full afterward than the control group who concentrated on their meal, and the solitaire players felt hungry again sooner.

In any case, in order to regain control of your calorie intake, it’s advisable to eat mindfully. Not on the go, but at the table. In her book First Bite: How We Learn to Eat, Bee Wilson pleads for more mindfulness: “If we are going to change our diets, we first have to relearn the art of eating.” It is impossible, she explains, to develop a healthy relationship with food as long as we ignore the signals of our own bodies and instead listen to external cues such as portion size to tell us when we’re full.

LE: Why do people tend to assume that healthier foods generally taste bad while unhealthy foods taste good?

MM & DK: Researchers at the University of Texas found that the less healthy an item is portrayed to be, the better it is inferred to taste. Likewise, when we ask, “Why does junk food taste better than healthy food?” we’ve presupposed that junk food does in fact taste better.

The idea that unhealthy foods taste better than healthy ones is not only widespread, it’s also a tenet we’ve been taught since the cradle, along the lines of: “Eat all of your broccoli and you can have cheesecake for dessert.” How are children supposed to learn to love vegetables when we put it in their minds that eating carrots and sprouts is an irksome necessity to be endured in order to get to the good bit?

Countless studies have proved that the mere mention that a food we’re about to be served is “healthy” lowers our taste expectations. In that University of Texas study, volunteers were asked to rate the tastiness of a mango lassi (a blended drink popular in Indian restaurants). If they were told before they tried it that it was a healthy drink, then they were significantly more likely to give it a low rating. When its high calorie content was highlighted, however, the volunteers praised the drink for its taste.

The fact that we are genetically programmed to love sugar and fat doesn’t help matters—and the food industry benefits from it. They tamper with our food and cash in on our innate weakness.

LE: Is there any way to disrupt our taste expectations?

MM & DK: The answer is yes, and an effective way is through education. Researchers at the University of Kiel in Germany were able to show that the effect of the unhealthy = tasty intuition decreases the more health-conscious people are.
Nevertheless, if you believe that rationality wins over taste and think that you can promote a product simply by highlighting its health benefits, you’re mistaken. According to the researchers, “The impact of automatically activated taste associations can’t even be shifted by an augmented health awareness.” The assumption to be altered, i.e., that a certain food is healthy, can’t necessarily be expanded to mean that it’s tasty, too.

Yet, despite this new insight, there is no need to feel disillusioned. In France, surprisingly, the opposite of the unhealthy = tasty intuition applies: The French expect healthy foods to be the tastier option. Researchers at the University of Grenoble in France attribute this primarily to the fact that the French are highly conscious of quality. Instead of artificial flavorings, chefs in France tend to use more herbs and spices, fresh garlic, and shallots. They create salads from ingeniously combined ingredients, for example, lemon zest and cilantro with tomatoes chopped into tiny chunks, a technique that allows the flavors to unfold the instant they hit the tongue.

LE: Finally, what are some things we should consider when making food choices?

MM & DK: The first step to intuiting what’s good for you is being conscious of how specific foods affect your body. Taking inspiration from French cuisine and always cooking with fresh, bright ingredients should do the trick as well. Think about your expectations of a food’s nutrient content. Is that judgment based on what it looks like and how it’s presented? Its name? Packaging? Do you consider how many calories it has? Would you be surprised to learn that a chicken Caesar salad typically has over one thousand calories?

Think about the factors that help you determine which foods are “good” for you and which are “bad.”
GET RELIEF FROM FOOT, LEG & BACK PAIN

Kenkoh® Revitalizes and Rejuvenates Your Whole Body!
A clinical study in a Japanese school of medicine concluded that Kenkoh massage footwear improves circulation, reduces swelling around the legs and ankles, and improves energy levels and mood.

Kenkoh®
“The Original Japanese Massage Sandal”

LEM.DiscoverKenkoh.com
1-800-336-6657

THE Kenkoh MASSAGE SANDAL IS UNIQUELY DESIGNED TO STIMULATE THOUSANDS OF NERVE ENDINGS IN THE FEET

- Nerves corresponding to organs and tissues are concentrated in the soles of the feet.
- Stimulating these nerves daily helps improve overall health.
- Orthotic arch support alleviates foot pain.

Foot Reflexology Chart

Kenkoh® IS JAPANESE FOR HEALTH AND BEAUTY
Kyu-Kichi Yamanashi invented the Kenkoh massage sandal in Japan in 1962. He designed the unique foot bed to mimic two ancient healing techniques that saved his life: Aodake-Fumi (stepping on bamboo) and Sokushindo (Japanese reflexology), meaning “the path that leads to the heart.”
This blood 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.

For Our Local Customers: For those residing in the Ft. Lauderdale, Florida, area, blood-draws are also performed at the Life Extension Nutrition Center from 9:00 am to 2:00 pm Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is: 

5990 NORTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL, 33308-2633

Terms and Conditions
This blood 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.

ORDER
Call 1- 800-208-3444 toll-free or visit LifeExtension.com/LabServices.

DRAW
For blood tests, take your form to a local lab. Collect at home for saliva, breath, etc.

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 Nutrition Center from 9:00 am to 2:00 pm Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is:

5990 NORTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL, 33308-2633

Terms and Conditions
This blood 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.

1-2-3 EASY
How it works:

ORDER
Call 1- 800-208-3444 toll-free or visit LifeExtension.com/LabServices.

DRAW
For blood tests, take your form to a local lab. Collect at home for saliva, breath, etc.

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 Nutrition Center from 9:00 am to 2:00 pm Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is:

5990 NORTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL, 33308-2633

Terms and Conditions
This blood 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.

1-2-3 EASY
How it works:

ORDER
Call 1- 800-208-3444 toll-free or visit LifeExtension.com/LabServices.

DRAW
For blood tests, take your form to a local lab. Collect at home for saliva, breath, etc.

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 Nutrition Center from 9:00 am to 2:00 pm Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is:

5990 NORTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL, 33308-2633

Terms and Conditions
This blood 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.

ORDER
Call 1- 800-208-3444 toll-free or visit LifeExtension.com/LabServices.

DRAW
For blood tests, take your form to a local lab. Collect at home for saliva, breath, etc.

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 Nutrition Center from 9:00 am to 2:00 pm Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is:

5990 NORTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL, 33308-2633

Terms and Conditions
This blood 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.

ORDER
Call 1- 800-208-3444 toll-free or visit LifeExtension.com/LabServices.

DRAW
For blood tests, take your form to a local lab. Collect at home for saliva, breath, etc.

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 Nutrition Center from 9:00 am to 2:00 pm Monday through Saturday. Simply purchase the blood test and have it drawn with no wait! Our address is:

5990 NORTH FEDERAL HIGHWAY, FT. LAUDERDALE, FL, 33308-2633

Terms and Conditions
This blood 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.
### BLOOD TEST PANELS

<table>
<thead>
<tr>
<th>Panel Name</th>
<th>Code</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MALE LIFE EXTENSION PANEL</strong> (LC22582)</td>
<td></td>
<td>$269</td>
<td>CBC/Chemistry Profile - DHEA-S, PSA (prostate-specific antigen) Homocysteine, C-Reactive Protein (high-sensitivity), Apolipoprotein B (ApoB) Free Testosterone, Total Testosterone, Estradiol, TSH for thyroid function, Vitamin D (25-hydroxyvitamin D), Hemoglobin A1c</td>
</tr>
<tr>
<td><strong>MALE ELITE PANEL</strong> (LC100016)*</td>
<td></td>
<td>$575</td>
<td>CBC/Chemistry Profile - Free and Total Testosterone, Total Estrogens Estradiol, DHEA-S, Progesterone, Pregnenolone, DHT, FSH, LH, TSH, Free T3, Free T4, Reverse T3, Free and Total PSA, IGF-1, SHBG, HbA1c Vitamin D 25-OH, hs-CRP, Ferritin, Homocysteine, Hemoglobin A1c Apolipoprotein B (ApoB)</td>
</tr>
<tr>
<td><strong>MALE COMPREHENSIVE HORMONE PANEL</strong> (LC100010)*</td>
<td></td>
<td>$299</td>
<td>CBC/Chemistry Profile - DHEA-S, Estradiol, Total and Free Testosterone, PSA Pregnenolone, Total and Free Testosterone, SHBG, TSH, Free T3 This panel now includes Free T4 and Cortisol with no increase in price!</td>
</tr>
<tr>
<td><strong>MALE BASIC HORMONE PANEL</strong> (LC100012)</td>
<td></td>
<td>$75</td>
<td>DHEA-S, Estradiol, Total and Free Testosterone, PSA</td>
</tr>
<tr>
<td><strong>FEMALE LIFE EXTENSION PANEL</strong> (LC322535)</td>
<td></td>
<td>$269</td>
<td>CBC/Chemistry Profile - DHEA-S, Estradiol, Progesterone, C-Reactive Protein (high-sensitivity), Apolipoprotein B (ApoB) Vitamin D (25-hydroxyvitamin D), Homocysteine</td>
</tr>
<tr>
<td><strong>FEMALE ELITE PANEL</strong> (LC100017)*</td>
<td></td>
<td>$575</td>
<td>CBC/Chemistry Profile - Free and Total Testosterone, Total Estrogens Estradiol, Estrone, DHEA-S, Progesterone, Pregnenolone, Apolipoprotein B (ApoB) DHT, FSH, LH, TSH, Free T3, Free T4, Reverse T3, IGF-1, SHBG, HbA1c Vitamin D 25-OH, hs-CRP, Ferritin, Homocysteine, Hemoglobin A1c</td>
</tr>
<tr>
<td><strong>FEMALE COMPREHENSIVE HORMONE PANEL</strong> (LC100011)*</td>
<td></td>
<td>$299</td>
<td>CBC/Chemistry Profile - DHEA-S, Estradiol, Total Estrogens Progesterone, Pregnenolone, Total and Free Testosterone, SHBG, TSH, Free T3 This panel now includes Free T4 and Cortisol with no increase in price!</td>
</tr>
<tr>
<td><strong>FEMALE BASIC HORMONE PANEL</strong> (LC100013)</td>
<td></td>
<td>$75</td>
<td>DHEA-S, Estradiol, Total and Free Testosterone, Progesterone</td>
</tr>
<tr>
<td><strong>NMR LIPOPROFILE</strong> (LC123810)</td>
<td></td>
<td>$99</td>
<td>The NMR Lipoprofile® directly measures LDL particle size and number as well as HDL particle number, total cholesterol, and triglycerides. It also provides a calculation of one's risk of insulin resistance by assessing abnormalities in lipoprotein markers.</td>
</tr>
<tr>
<td><strong>WEIGHT LOSS PANEL-COMPREHENSIVE</strong> (LC100028)</td>
<td></td>
<td>$275</td>
<td>CBC/Chemistry Profile - DHEA-S, Free and Total Testosterone, Estradiol Progesterone, Cortisol, TSH, Free T3, Free T4, Reverse T3, Insulin Hemoglobin A1c, Vitamin D 25-hydroxy, C-reactive protein (high-sensitivity) Ferritin</td>
</tr>
<tr>
<td><strong>HEALTHY AGING PANEL-COMPREHENSIVE</strong> (LC100026)*</td>
<td></td>
<td>$249</td>
<td>CBC/Chemistry Profile - C-reactive protein (high sensitivity) Vitamin B12, Folate, Homocysteine, Vitamin D 25-hydroxy, Hemoglobin A1c TSH, Free T3, Free T4, Ferritin, Urinalysis, Fibrinogen, Insulin</td>
</tr>
<tr>
<td><strong>ADRENAL STRESS PROFILE — SALIVA</strong> (LC100070) **</td>
<td></td>
<td>$159</td>
<td>Check your red flags of adrenal imbalance. This panel contains Cortisol (v4), DHEA, SlaG.</td>
</tr>
<tr>
<td><strong>SIBO HOME BREATH KIT (LACTULOSE)</strong> (LC100063) **</td>
<td></td>
<td>$249</td>
<td>SIBO stands for small intestinal bacterial overgrowth. Research shows that up to 70% or more of those diagnosed with IBS have SIBO.</td>
</tr>
<tr>
<td><strong>COMPREHENSIVE THYROID PANEL</strong> (LC100018)</td>
<td></td>
<td>$199</td>
<td>TSH, Total T4, Free T4, Free T3, Reverse T3, Thyroglobulin Antibody (ATA), Thyroid Peroxidase Antibody (TPO)</td>
</tr>
<tr>
<td><strong>THYROID PANEL WITH REVERSE T3</strong> (LC100044)</td>
<td></td>
<td>$120</td>
<td>TSH, Total T4, Free T4, Free T3, Reverse T3</td>
</tr>
<tr>
<td><strong>OMEGA-3 INDEX COMPLETE</strong> (LC100066) **</td>
<td></td>
<td>$99</td>
<td>Beneficial for everyone taking omega-3/fish oil! You want to target a range of 8%-12% for optimal health.</td>
</tr>
</tbody>
</table>

*This test requires samples to be shipped to the lab on dry ice for customers using a Blood Draw Kit and will incur an additional $35 charge. If the customer is having blood drawn at a LabCorp facility, this extra charge does not apply.

**This test is packaged as a kit.

Blood tests available in the continental United States only. Restrictions apply in NY, NJ, RI, and MA. Not available in Maryland. Kits not available in Pennsylvania.

With Your Healthy Rewards, you earn LE Dollars back on every purchase you make — including blood tests! See [www.LifeExtension.com/Rewards](http://www.LifeExtension.com/Rewards) for details.
PRODUCTS

**Active Lifestyle & Fitness**

Creatine Capsules
Super Carnosine
Tart Cherry with CherryPURE®
Wellness™ Bar—Chocolate Brownie
Wellness™ Bar—Cookie Dough
Wellness™ Code Advanced Whey Protein Isolate Vanilla
Wellness™ Code Muscle Strength & Restore Formula
Wellness™ Code Plant Protein Complete & Amino Acid Complex
Wellness™ Code Whey Protein Concentrate Chocolate
Wellness™ Code Whey Protein Concentrate Vanilla
Wellness™ Code Whey Protein Isolate Chocolate
Wellness™ Code Whey Protein Isolate Vanilla
Wellness™ Shake—Chocolate
Wellness™ Shake—Vanilla

**Amino Acids**

Arginine & Ornithine Capsules
Arginine Omithine Powder
Branched Chain Amino Acids Carnosine
D,L-Phenylalanine Capsules L-Arginine Caps
L-Carnitine L-Glutamine
L-Glutamine Powder L-Lysine
L-Taurine Powder L-Tyrosine Powder Taurine

**Blood Pressure & Vascular Support**

Advanced Olive Leaf Vascular Support with Celery Seed Extract Arterial Protect

**Bone Health**

Bone Restore Bone Restore-Sugar Free Bone Restore with Vitamin K2 Bone Strength Formula with KoAct® Bone-Up™ Calcium Citrate with Vitamin D Dr. Strum’s Intensive Bone Formula Strontium Caps

**Brain Health**

Acetyl-L-Carnitine Acetyl-L-Carnitine Arginate Blast™
Cognitex Basics Cognitex Elite
Cognitex Elite Pregnenolone Cognizin® CD-P-Choline Caps DMEA Bitartrate (dimethylaminoethanol) Dose-Mind™ Focus Tea™
Ginkgo Biloba Certified Extract™ Huperzine A Lecithin Granules Memory Protect MiraGize™
Neuro-Mag® Magnesium L-Threonate Optimized Ashwagandha Extract PS (Phosphatidylserine) Caps Vinpocetine

**Cholesterol Management**

Advanced Lipid Control Cho-Less™

**Digestion Support**

CHOL-Support™ Red Yeast Rice Thealflavins Standardized Extract Vitamin B3 Niacin Capsules

**Energy Management**


**Fish Oil & Omegas**

OMEGA FOUNDATIONS® Clearly EPA/DHA OMEGA FOUNDATIONS® Mega EPA/DHA OMEGA FOUNDATIONS® Mega GLA with Sesame Lignans OMEGA FOUNDATIONS® Super Omega-3 EPA/DHA with Sesame Lignans & Olive Extract OMEGA FOUNDATIONS® Super Omega-3 Plus EPA/DHA with Sesame Lignans, Olive Extract, Krill & Astaxanthin OMEGA FOUNDATIONS® Provalin® Purified Omega™ OMEGA FOUNDATIONS® Vegetarian DHA Organic Golden Flax Seed

**Food**

California Estate Extra Virgin Olive Oil Kenyan Green Tea Crystals Kenyan Purple Tea Crystals Rainforest Blend Decaf Ground Coffee Rainforest Blend Ground Coffee Natural Mocha Flavor Rainforest Blend Ground Coffee Natural Vanilla Flavor Rainforest Blend Whole Bean Coffee Stevia Sweetener

**Glucose Management**

GlucoSIL™ with InSea2c and Crominex 3+ CoffeeGreen™ Green Coffee Extract Glycemic Guard™ Mega Benfotamine Tri Sugar Shield™

**Heart Health**

Aspirin (Enteric Coated) BioActive Folate & Vitamin B12 Caps

**Immune Support**


**Inflammation Management**

5-LOX Inhibitor with AprèsFlex® Advanced Bio-Curcumin® with Ginger & Turmerones Black Cumin Seed Oil Black Cumin Seed Oil with Bio-Curcumin® Boswellia Cytokine Suppressors™ with EGCG Serraflyzyme Specially-Coated Bromelain Super Bio-Curcumin® Zyflamend™ Whole Body

**Joint Support**

Arthrol-Immune Joint Support ArthroMax® Advanced NT2 Collagen™ & AprèsFlex® ArthrOMax® with Thealflavins & AprèsFlex® ArthroMax® Elite Fast-Acting Joint Formula Glucosamine/Chondroitin Capsules Krill Healthy Joint Formula MSM (Methylsulfonylmethane) NT2 Collagen™

**Kidney & Bladder Support**

Cran-Max® Cranberry Whol e Fruit Concentrate Optimized Cran-Max® with Ellrose™ Uric Acid Control Water-Soluble Pumpkin Seed Extract

**Liver Health & Detoxification**

Anti-Alcohol HepatoProtection Complex Calcium D-Glucarate Chlorella Chlorophyll European Milk Thistle Glutathione, Cysteine & C HepatoPro Liver Efficiency Formula N-Acetyl-L-Cysteine PectaSol® C® Silymarin SODzyme® with GlisODin® & Wolfberry

**Eye Health**

Astaxanthin with Phospholipids Brite Eves III Eye Pressure Support with Mirtogenol® MacuGuard® Ocular Support with Saffron MacuGuard® Ocular Support with Saffron & Astaxanthin Standardized European Bilberry Extract Tear Support with MaquiBright™

**Blood Pressure & Vascular Support**


**Bone Health**

Bone Restore Bone Restore-Sugar Free Bone Restore with Vitamin K2 Bone Strength Formula with KoAct® Bone-Up™ Calcium Citrate with Vitamin D Dr. Strum’s Intensive Bone Formula Strontium Caps

**Brain Health**

Acetyl-L-Carnitine Acetyl-L-Carnitine Arginate Blast™
Cognitex Basics Cognitex Elite
Cognitex Elite Pregnenolone Cognizin® CD-P-Choline Caps DMEA Bitartrate (dimethylaminoethanol) Dose-Mind™ Focus Tea™
Ginkgo Biloba Certified Extract™ Huperzine A Lecithin Granules Memory Protect MiraGize™
Neuro-Mag® Magnesium L-Threonate Optimized Ashwagandha Extract PS (Phosphatidylserine) Caps Vinpocetine

**Cholesterol Management**

Advanced Lipid Control Cho-Less™

**Digestion Support**

CHOL-Support™ Red Yeast Rice Thealflavins Standardized Extract Vitamin B3 Niacin Capsules

**Energy Management**


**Fish Oil & Omegas**

OMEGA FOUNDATIONS® Clearly EPA/DHA OMEGA FOUNDATIONS® Mega EPA/DHA OMEGA FOUNDATIONS® Mega GLA with Sesame Lignans OMEGA FOUNDATIONS® Super Omega-3 EPA/DHA with Sesame Lignans & Olive Extract OMEGA FOUNDATIONS® Super Omega-3 Plus EPA/DHA with Sesame Lignans, Olive Extract, Krill & Astaxanthin OMEGA FOUNDATIONS® Provalin® Purified Omega™ OMEGA FOUNDATIONS® Vegetarian DHA Organic Golden Flax Seed

**Food**

California Estate Extra Virgin Olive Oil Kenyan Green Tea Crystals Kenyan Purple Tea Crystals Rainforest Blend Decaf Ground Coffee Rainforest Blend Ground Coffee Natural Mocha Flavor Rainforest Blend Ground Coffee Natural Vanilla Flavor Rainforest Blend Whole Bean Coffee Stevia Sweetener

**Glucose Management**

GlucoSIL™ with InSea2c and Crominex 3+ CoffeeGreen™ Green Coffee Extract Glycemic Guard™ Mega Benfotamine Tri Sugar Shield™

**Heart Health**

Aspirin (Enteric Coated) BioActive Folate & Vitamin B12 Caps

**Immune Support**


**Inflammation Management**

5-LOX Inhibitor with AprèsFlex® Advanced Bio-Curcumin® with Ginger & Turmerones Black Cumin Seed Oil Black Cumin Seed Oil with Bio-Curcumin® Boswellia Cytokine Suppressors™ with EGCG Serraflyzyme Specially-Coated Bromelain Super Bio-Curcumin® Zyflamend™ Whole Body

**Joint Support**

Arthrol-Immune Joint Support ArthroMax® Advanced NT2 Collagen™ & AprèsFlex® ArthrOMax® with Thealflavins & AprèsFlex® ArthroMax® Elite Fast-Acting Joint Formula Glucosamine/Chondroitin Capsules Krill Healthy Joint Formula MSM (Methylsulfonylmethane) NT2 Collagen™

**Kidney & Bladder Support**

Cran-Max® Cranberry Whol e Fruit Concentrate Optimized Cran-Max® with Ellrose™ Uric Acid Control Water-Soluble Pumpkin Seed Extract

**Liver Health & Detoxification**

Anti-Alcohol HepatoProtection Complex Calcium D-Glucarate Chlorella Chlorophyll European Milk Thistle Glutathione, Cysteine & C HepatoPro Liver Efficiency Formula N-Acetyl-L-Cysteine PectaSol® C® Silymarin SODzyme® with GlisODin® & Wolfberry

**Eye Health**

Astaxanthin with Phospholipids Brite Eves III Eye Pressure Support with Mirtogenol® MacuGuard® Ocular Support with Saffron MacuGuard® Ocular Support with Saffron & Astaxanthin Standardized European Bilberry Extract Tear Support with MaquiBright™
<table>
<thead>
<tr>
<th>Category</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Longevity &amp; Wellness</strong></td>
<td>Alpha-Lipoic Acid</td>
</tr>
<tr>
<td></td>
<td>AppleWise Polyphenol Extract</td>
</tr>
<tr>
<td></td>
<td>Berry Complete</td>
</tr>
<tr>
<td></td>
<td>Blueberry Extract</td>
</tr>
<tr>
<td></td>
<td>Blueberry Extract with Pomegranate DNA Protection Formula</td>
</tr>
<tr>
<td></td>
<td>Enhanced Berry Complete with Acai</td>
</tr>
<tr>
<td></td>
<td>GEROPROTECT Ageless Cell™</td>
</tr>
<tr>
<td></td>
<td>GEROPROTECT Longevity A1™</td>
</tr>
<tr>
<td></td>
<td>Grapeseed Extract</td>
</tr>
<tr>
<td></td>
<td>Mediterranean Whole Food Blend</td>
</tr>
<tr>
<td></td>
<td>Mega Green Tea Extract (decaffeinated)</td>
</tr>
<tr>
<td></td>
<td>Mega Green Tea Extract (lightly caffeinated)</td>
</tr>
<tr>
<td></td>
<td>Optimized Fucoxanthin with Maritech 926</td>
</tr>
<tr>
<td></td>
<td>Optimized Resveratrox</td>
</tr>
<tr>
<td></td>
<td>Pycnogenol® French Maritime Pine Bark Extract</td>
</tr>
<tr>
<td></td>
<td>Resveratrol</td>
</tr>
<tr>
<td></td>
<td>RNA (Ribonucleic Acid)</td>
</tr>
<tr>
<td></td>
<td>Senolytic Activator</td>
</tr>
<tr>
<td></td>
<td>Super R-Lipoic Acid</td>
</tr>
<tr>
<td></td>
<td>X²R Shield</td>
</tr>
<tr>
<td><strong>Men's Health</strong></td>
<td>Male Vascular Sexual Support</td>
</tr>
<tr>
<td></td>
<td>Mega LycoPene Extract</td>
</tr>
<tr>
<td></td>
<td>PalmettoGuard® Saw Palmetto with Beta-Sitosterol</td>
</tr>
<tr>
<td></td>
<td>PalmettoGuard® Saw Palmetto/Nettle Root Formula with Beta-Sitosterol</td>
</tr>
<tr>
<td></td>
<td>Pome-T®</td>
</tr>
<tr>
<td></td>
<td>Prolax® Enhanced Sex for Men</td>
</tr>
<tr>
<td></td>
<td>Super MiraForte with Standardized Lignans</td>
</tr>
<tr>
<td></td>
<td>Triple Strength ProstaPollen™ Ultra Prostate Formula</td>
</tr>
<tr>
<td><strong>Women's Health</strong></td>
<td>Anti-Oxidant Facial Mist Hydrator</td>
</tr>
<tr>
<td></td>
<td>Anti-Oxidant Serum with Anti-Aging Rejuvenating Scalp Serum</td>
</tr>
<tr>
<td></td>
<td>Anti-Aging Rejuvenating Face Cream</td>
</tr>
<tr>
<td></td>
<td>Anti-Aging Rejuvenating Scalp Serum</td>
</tr>
<tr>
<td></td>
<td>Anti-Oxidant Serum with Blueberry &amp; Pomegranate Extracts</td>
</tr>
<tr>
<td></td>
<td>Anti-Oxidant Facial Mist Hydrator with Collagen Boosting Peptide Serum</td>
</tr>
<tr>
<td></td>
<td>Cucumber Hydra Peptidated Eye Cream</td>
</tr>
<tr>
<td></td>
<td>DNA Support Cream</td>
</tr>
<tr>
<td></td>
<td>Environmental Support Serum</td>
</tr>
<tr>
<td></td>
<td>Essential Plant Lipids Serum</td>
</tr>
<tr>
<td></td>
<td>Eye Lift Cream</td>
</tr>
<tr>
<td></td>
<td>Face Rejuvenating Anti-Oxidant Cream</td>
</tr>
<tr>
<td></td>
<td>Hair, Skin &amp; Nail Rejuvenation Formula</td>
</tr>
<tr>
<td></td>
<td>Hyperkeratosis Serum</td>
</tr>
<tr>
<td></td>
<td>Melanin Advanced Peptide Cream</td>
</tr>
<tr>
<td></td>
<td>Melatonin Cream</td>
</tr>
<tr>
<td></td>
<td>Mild Facial Cleanser</td>
</tr>
<tr>
<td></td>
<td>Multi Stem Cell Skin Lightening Complex</td>
</tr>
<tr>
<td></td>
<td>Neck Rejuvenating Anti-Oxidant Cream</td>
</tr>
<tr>
<td></td>
<td>Optimized Chromium with Cromines 3+ Sea-Iodine™</td>
</tr>
<tr>
<td></td>
<td>Se-Methyl L-Selenocysteine</td>
</tr>
<tr>
<td></td>
<td>Super Selenium Complex</td>
</tr>
<tr>
<td></td>
<td>Vanadyl Sulfate</td>
</tr>
<tr>
<td></td>
<td>Zinc Caps</td>
</tr>
<tr>
<td><strong>Minerals</strong></td>
<td>Boron</td>
</tr>
<tr>
<td></td>
<td>Extend-Release Magnesium</td>
</tr>
<tr>
<td></td>
<td>Ionic Selenium</td>
</tr>
<tr>
<td></td>
<td>Iron Protein Plus</td>
</tr>
<tr>
<td></td>
<td>Magnesium (Citrato)</td>
</tr>
<tr>
<td></td>
<td>Magnesium Caps</td>
</tr>
<tr>
<td></td>
<td>Only Trace Minerals</td>
</tr>
<tr>
<td></td>
<td>Optimized Chromium with Cromines + Sea-Iodine</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td>Potassium Iodide</td>
</tr>
<tr>
<td></td>
<td>Solarshield® Sunglasses</td>
</tr>
<tr>
<td><strong>Mood &amp; Stress Management</strong></td>
<td>Advanced Cortisol Balance</td>
</tr>
<tr>
<td></td>
<td>Enhanced Stress Relief</td>
</tr>
<tr>
<td></td>
<td>5 HTP</td>
</tr>
<tr>
<td></td>
<td>L-Theanine</td>
</tr>
<tr>
<td></td>
<td>SAMe (S-Adenosyl-Methionine)</td>
</tr>
<tr>
<td><strong>Multivitamins</strong></td>
<td>Children's Formula Life Extension Mix™</td>
</tr>
<tr>
<td></td>
<td>Comprehensive Nutrient Packs ADVANCED</td>
</tr>
<tr>
<td></td>
<td>Life Extension Mix Caps without Copper</td>
</tr>
<tr>
<td></td>
<td>Life Extension Mix Caps with Copper</td>
</tr>
<tr>
<td></td>
<td>Life Extension Mix Powder with Copper</td>
</tr>
<tr>
<td></td>
<td>Life Extension Mix Tablets with Extra Niacin</td>
</tr>
<tr>
<td></td>
<td>Life Extension Mix Tablets without Copper</td>
</tr>
<tr>
<td></td>
<td>Life Extension Mix Tablets</td>
</tr>
<tr>
<td></td>
<td>Once-Daily Health Booster</td>
</tr>
<tr>
<td></td>
<td>One-Per-Day Tablets</td>
</tr>
<tr>
<td></td>
<td>Two-Per-Day Capsules</td>
</tr>
<tr>
<td><strong>Nerve &amp; Comfort Support</strong></td>
<td>ComfortMAX™</td>
</tr>
<tr>
<td><strong>Personal Care</strong></td>
<td>Anti-Aging Rejuvenating Scalp Serum</td>
</tr>
<tr>
<td></td>
<td>Biotics</td>
</tr>
<tr>
<td></td>
<td>Dr. Proctor’s Advanced Hair Formula</td>
</tr>
<tr>
<td></td>
<td>Dr. Proctor’s Shampoo</td>
</tr>
<tr>
<td><strong>Probiotics</strong></td>
<td>Bifido GI Balance</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® GI Balance</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® GI with Phage Technology</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Heart Health</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Immune Health</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Mood</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Nasal</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Oral Hygiene</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Prebiotic</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Throat Health</td>
</tr>
<tr>
<td></td>
<td>Jarro-Dophilus® for Women</td>
</tr>
<tr>
<td></td>
<td>Theracurmin® Probiotics</td>
</tr>
<tr>
<td></td>
<td>TruFlora® Probiotics</td>
</tr>
<tr>
<td><strong>Skin Care</strong></td>
<td>Adult Blemish Lotion</td>
</tr>
<tr>
<td></td>
<td>Advanced Peptide Anti-Oxidant Serum</td>
</tr>
<tr>
<td></td>
<td>Advanced Growth Factor Serum</td>
</tr>
<tr>
<td></td>
<td>Advanced Hyaluronic Acid Serum</td>
</tr>
<tr>
<td></td>
<td>Advanced Lightening Cream</td>
</tr>
<tr>
<td></td>
<td>Advanced Peptide Hand Therapy</td>
</tr>
<tr>
<td></td>
<td>Advanced Triple Peptide Serum</td>
</tr>
<tr>
<td></td>
<td>Advanced Under Eye Serum with Stem Cells</td>
</tr>
<tr>
<td></td>
<td>All-Purpose Soothing Relief Cream</td>
</tr>
<tr>
<td></td>
<td>Amber Self MicroDerm Abrasion</td>
</tr>
<tr>
<td></td>
<td>Anti-Aging Face Oil</td>
</tr>
<tr>
<td></td>
<td>Anti-Aging Mask</td>
</tr>
<tr>
<td></td>
<td>Anti-Aging Rejuvenating Face Cream</td>
</tr>
<tr>
<td></td>
<td>Anti-Aging Rejuvenating Scalp Serum</td>
</tr>
<tr>
<td></td>
<td>Anti-Oxidant Serum with Blueberry &amp; Pomegranate Extracts</td>
</tr>
<tr>
<td></td>
<td>Anti-Oxidant Facial Mist Hydrator with Collagen Boosting Peptide Serum</td>
</tr>
<tr>
<td></td>
<td>Cucumber Hydra Peptidated Eye Cream</td>
</tr>
<tr>
<td></td>
<td>DNA Support Cream</td>
</tr>
<tr>
<td></td>
<td>Environmental Support Serum</td>
</tr>
<tr>
<td></td>
<td>Essential Plant Lipids Serum</td>
</tr>
<tr>
<td></td>
<td>Eye Lift Cream</td>
</tr>
<tr>
<td></td>
<td>Face Rejuvenating Anti-Oxidant Cream</td>
</tr>
<tr>
<td></td>
<td>Hyaluronic Facial Moisturizer</td>
</tr>
<tr>
<td></td>
<td>Hyaluronic Oil-Free Facial Moisturizer</td>
</tr>
<tr>
<td></td>
<td>Hydrating Anti-Oxidant Facial Mist</td>
</tr>
<tr>
<td></td>
<td>Hydromer®</td>
</tr>
<tr>
<td></td>
<td>Lifting &amp; Tightening Complex</td>
</tr>
<tr>
<td></td>
<td>Melatonin Advanced Peptide Cream</td>
</tr>
<tr>
<td></td>
<td>Melatonin Cream</td>
</tr>
<tr>
<td></td>
<td>Mild Facial Cleanser</td>
</tr>
<tr>
<td></td>
<td>Multi Stem Cell Skin Lightening Complex</td>
</tr>
<tr>
<td></td>
<td>Neck Rejuvenating Anti-Oxidant Cream</td>
</tr>
<tr>
<td></td>
<td>Optimized Chromium with Cromines + Sea-Iodine</td>
</tr>
<tr>
<td></td>
<td>Se-Methyl L-Selenocysteine</td>
</tr>
<tr>
<td></td>
<td>Super Selenium Complex</td>
</tr>
<tr>
<td></td>
<td>Vanadyl Sulfate</td>
</tr>
<tr>
<td></td>
<td>Zinc Caps</td>
</tr>
<tr>
<td><strong>Skin Care Collection</strong></td>
<td>Body Lotion</td>
</tr>
<tr>
<td></td>
<td>ComfortMAX®</td>
</tr>
<tr>
<td><strong>Supplements</strong></td>
<td>European Leg Solution Featuring Certified Diosmin 95</td>
</tr>
<tr>
<td></td>
<td>Hair, Skin &amp; Nail Rejuvenation Formula</td>
</tr>
<tr>
<td></td>
<td>LVHEROSIL® Life Extension Toothpaste</td>
</tr>
<tr>
<td></td>
<td>Venotone</td>
</tr>
<tr>
<td></td>
<td>Xylitol White Mouthwash</td>
</tr>
<tr>
<td><strong>Pet Care</strong></td>
<td>Cat Mix</td>
</tr>
<tr>
<td></td>
<td>Dog Mix</td>
</tr>
<tr>
<td><strong>Probiotics</strong></td>
<td>Bifido GI Balance</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® GI Balance</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® GI with Phage Technology</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Heart Health</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Immune Health</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Mood</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Nasal</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Oral Hygiene</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Prebiotic</td>
</tr>
<tr>
<td></td>
<td>FLORASSIST® Throat Health</td>
</tr>
<tr>
<td></td>
<td>Jarro-Dophilus® for Women</td>
</tr>
<tr>
<td></td>
<td>Theracurmin® Probiotics</td>
</tr>
<tr>
<td></td>
<td>TruFlora® Probiotics</td>
</tr>
<tr>
<td><strong>Sleep</strong></td>
<td>Bioactive Milk Peptides</td>
</tr>
<tr>
<td></td>
<td>Circadian Sleep</td>
</tr>
<tr>
<td></td>
<td>Enhanced Sleep with Melatonin</td>
</tr>
<tr>
<td></td>
<td>Enhanced Sleep without Melatonin</td>
</tr>
<tr>
<td></td>
<td>Fast-Acting Liquid Melatonin</td>
</tr>
<tr>
<td></td>
<td>Glycine</td>
</tr>
<tr>
<td></td>
<td>L-Tryptophan</td>
</tr>
<tr>
<td></td>
<td>Melatonin</td>
</tr>
<tr>
<td></td>
<td>Melatonin IR/XR</td>
</tr>
<tr>
<td></td>
<td>Optimized Tryptophan Plus</td>
</tr>
<tr>
<td></td>
<td>Quiet Sleep</td>
</tr>
<tr>
<td></td>
<td>Quiet Sleep Melatonin</td>
</tr>
<tr>
<td><strong>Vitamins</strong></td>
<td>Ascorbyl Palmitate</td>
</tr>
<tr>
<td></td>
<td>Benfotiamine with Thiamine</td>
</tr>
<tr>
<td></td>
<td>BioActive Complete B-Complex</td>
</tr>
<tr>
<td></td>
<td>Biotin</td>
</tr>
<tr>
<td></td>
<td>Buffered Vitamin C Powder</td>
</tr>
<tr>
<td></td>
<td>Fast-C with Dihydroquercetin</td>
</tr>
<tr>
<td></td>
<td>Gamma E Mixed Tocopherol Enhanced with Sesame Lignans</td>
</tr>
<tr>
<td></td>
<td>Gamma E Mixed Tocopherol/Tocotrienols</td>
</tr>
<tr>
<td></td>
<td>High Potency Optimized Folate</td>
</tr>
<tr>
<td></td>
<td>Isoflavones</td>
</tr>
<tr>
<td></td>
<td>Liquid Emulsified Vitamin D</td>
</tr>
<tr>
<td></td>
<td>Liquid Vitamin D</td>
</tr>
<tr>
<td></td>
<td>Low-Dose Vitamin K</td>
</tr>
<tr>
<td></td>
<td>Methylcobalamin</td>
</tr>
<tr>
<td></td>
<td>MK7</td>
</tr>
<tr>
<td></td>
<td>No Flush Nicacin</td>
</tr>
<tr>
<td></td>
<td>Optimized Folate (L-Methylfolate)</td>
</tr>
<tr>
<td></td>
<td>Pantothenic Acid (Vitamin B-5)</td>
</tr>
<tr>
<td></td>
<td>Pyridoxal 5'-Phosphate Caps</td>
</tr>
<tr>
<td></td>
<td>Super Absorbable Tocotrienols</td>
</tr>
<tr>
<td></td>
<td>Super K with Advanced K2 Complex</td>
</tr>
<tr>
<td></td>
<td>Vitamin E</td>
</tr>
<tr>
<td></td>
<td>Vitamin B6</td>
</tr>
<tr>
<td></td>
<td>Vitamin B12</td>
</tr>
<tr>
<td></td>
<td>Vitamin C with Dihydroquercetin</td>
</tr>
<tr>
<td></td>
<td>Vitamin D</td>
</tr>
<tr>
<td></td>
<td>Vitamin D3</td>
</tr>
<tr>
<td></td>
<td>Vitamin K2</td>
</tr>
<tr>
<td><strong>Weight Management &amp; Body Composition</strong></td>
<td>2:5 Foundational Support</td>
</tr>
<tr>
<td></td>
<td>2:5 LE Plan Chocolate</td>
</tr>
<tr>
<td></td>
<td>2:5 LE Plan Combo</td>
</tr>
<tr>
<td></td>
<td>2:5 LE Plan Vanilla</td>
</tr>
<tr>
<td></td>
<td>7-Keto® DHEA Metabolite</td>
</tr>
<tr>
<td></td>
<td>Advanced Anti-Adipocyte Formula</td>
</tr>
<tr>
<td></td>
<td>Advanced Appetite Suppress</td>
</tr>
<tr>
<td></td>
<td>AMPK Metabolic Activator</td>
</tr>
<tr>
<td></td>
<td>CalReduce Selective Fat Binder</td>
</tr>
<tr>
<td></td>
<td>DHEA Complete</td>
</tr>
<tr>
<td></td>
<td>Garcinia HCA</td>
</tr>
<tr>
<td></td>
<td>HCAActive Garcina Cambogia Extract</td>
</tr>
<tr>
<td></td>
<td>IntegraLean®</td>
</tr>
<tr>
<td></td>
<td>Mediterranean Trim with Sinetrol™ Xpur</td>
</tr>
<tr>
<td></td>
<td>Optimized Irvingia with Phase 3™ Calorie Control Complex</td>
</tr>
<tr>
<td></td>
<td>Optimized Saffron with Satiereal™</td>
</tr>
<tr>
<td></td>
<td>Super CLA Blend with Sesame Lignans</td>
</tr>
<tr>
<td></td>
<td>Waist-Line Control™</td>
</tr>
<tr>
<td><strong>Women's Health</strong></td>
<td>Enhanced Sex for Women 50+</td>
</tr>
<tr>
<td></td>
<td>Breast Health Formula</td>
</tr>
<tr>
<td></td>
<td>Femmenessence MacaPause®</td>
</tr>
<tr>
<td></td>
<td>Estrogen for Women</td>
</tr>
<tr>
<td></td>
<td>Menopause 731™</td>
</tr>
<tr>
<td></td>
<td>Menopause 731™</td>
</tr>
<tr>
<td></td>
<td>Menopause 731™</td>
</tr>
<tr>
<td></td>
<td>Progesta Care</td>
</tr>
<tr>
<td></td>
<td>Super-Absorbable Soy Isoflavones</td>
</tr>
<tr>
<td>ITEM No.</td>
<td>PRODUCT</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>01524</td>
<td>ACETYL-L-CARNITINE • 500 mg, 100 veg. caps</td>
</tr>
<tr>
<td>01974</td>
<td>ACETYL-L-CARNITINE ARGINATE • 90 veg. caps</td>
</tr>
<tr>
<td>01630</td>
<td>ADRENAL ENERGY FORMULA • 60 veg. caps</td>
</tr>
<tr>
<td>01807</td>
<td>ADVANCED APPETITE SUPPRESS • 60 veg. caps</td>
</tr>
<tr>
<td>02012</td>
<td>ADVANCED CORTISOL BALANCE • 30 veg. caps</td>
</tr>
<tr>
<td>01828</td>
<td>ADVANCED LIPID CONTROL • 60 veg. caps</td>
</tr>
<tr>
<td>00681</td>
<td>AHCC® • 500 mg, 30 caps</td>
</tr>
<tr>
<td>24404</td>
<td>AHCC® (KINOKO® PLATINUM) • 750 mg, 60 veg. caps</td>
</tr>
<tr>
<td>29275</td>
<td>AHCC® (KINOKO® GOLD) • 500 mg, 60 veg. caps</td>
</tr>
<tr>
<td>00457</td>
<td>ALPHA-LIPOIC ACID W/BICIN® • 250 mg, 60 caps</td>
</tr>
<tr>
<td>02207</td>
<td>AMPK METABOLIC ACTIVATOR • 30 veg. tabs</td>
</tr>
<tr>
<td>01509</td>
<td>ANTI-ADIPOCYTE FORMULA W/NIERATRIM® &amp; INTEGRAL LEAM® (Advanced) • 60 veg. caps</td>
</tr>
<tr>
<td>02420</td>
<td>ANTI-ALCOHOL HEPATOPROTECTION COMPLEX • 60 veg. caps</td>
</tr>
<tr>
<td>01625</td>
<td>APPWILSE • 600 mg, 30 veg. caps</td>
</tr>
<tr>
<td>01039</td>
<td>ARGININE &amp; ORNHININE • 500/250, 100 caps</td>
</tr>
<tr>
<td>00038</td>
<td>ARGININE/ORNHININE POWDER • 150 grams</td>
</tr>
<tr>
<td>01624</td>
<td>(L)-ARGININE CAPS • 700 mg, 200 veg. caps</td>
</tr>
<tr>
<td>02004</td>
<td>ARTERIAL PROTECT • 30 veg. caps</td>
</tr>
<tr>
<td>01617</td>
<td>ARTHROMAX® W/THEAFLAVINS &amp; APRÉSFLEX® 120 veg. caps</td>
</tr>
<tr>
<td>02238</td>
<td>ARTHROMAX® ADVANCED NT2 COLLAGEN® &amp; APRÉSFLEX® 60 veg. caps</td>
</tr>
<tr>
<td>02138</td>
<td>ARTHROMAX® ELITE • 30 veg. tablets</td>
</tr>
<tr>
<td>01404</td>
<td>ARTHRO-IMMUNE JOINT SUPPORT • 60 veg. caps</td>
</tr>
<tr>
<td>01533</td>
<td>ASCORBYL PALMITATE • 500 mg, 100 veg. caps</td>
</tr>
<tr>
<td>00888</td>
<td>ASHWAAGANDHA EXTRACT (Optimized) • 60 veg. caps</td>
</tr>
<tr>
<td>01805</td>
<td>ASIAN ENERGY BOOST • 90 caps</td>
</tr>
<tr>
<td>01066</td>
<td>ASPRIN® • 81 mg, 300 enteric coated tablets</td>
</tr>
<tr>
<td>01923</td>
<td>ASTAXANTHIN WITH PHOSPHOLIPIDS • 4 mg, 30 softgels</td>
</tr>
</tbody>
</table>

**SUBTOTAL OF COLUMN 1**

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each</th>
<th>1 Unit Each</th>
<th>4 Unit Each</th>
<th>10 Unit Each</th>
<th>QTY</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01945</td>
<td>B-COMPLEX (BioActive Complete) • 60 veg. caps</td>
<td>12.00</td>
<td>9.00</td>
<td>8.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>00920</td>
<td>BENEFITAMINE W/ THIAMINE • 100 mg, 120 veg. caps</td>
<td>19.95</td>
<td>14.96</td>
<td>13.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>00925</td>
<td>BENEFITAMINE (Mega) • 250 mg, 120 veg. caps</td>
<td>30.00</td>
<td>22.50</td>
<td>20.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01266</td>
<td>BERRY COMPLETE • 30 veg. caps</td>
<td>21.00</td>
<td>15.75</td>
<td>14.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01496</td>
<td>BERRY COMPLETE (Enhanced) • 60 veg. caps</td>
<td>29.00</td>
<td>21.75</td>
<td>19.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>00664</td>
<td>BETA-CAROTENE • 25,000 IU, 100 softgels</td>
<td>11.75</td>
<td>8.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01622</td>
<td>BIFIDO G BALANCE • 60 veg. caps</td>
<td>20.00</td>
<td>15.00</td>
<td>13.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01873</td>
<td>BILBERRY EXTRACT • 100 mg, 90 veg. caps</td>
<td>36.00</td>
<td>27.00</td>
<td>24.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01512</td>
<td>BIOACTIVE MILK PEPTIDES • 30 caps</td>
<td>18.00</td>
<td>13.50</td>
<td>12.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL OF COLUMN 2**
### COSMESES

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each $</th>
<th>1 Unit Each $</th>
<th>4 Unit Each $</th>
<th>10 Unit Each $</th>
<th>QTY Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>80105</td>
<td>ADULT BLEMISH LOTION • 1 fl. oz</td>
<td>74.50</td>
<td>55.88</td>
<td>49.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80157</td>
<td>ADVANCED PEPTIDE ANTI-OXIDANT SERUM • 1 fl. oz</td>
<td>53.00</td>
<td>39.75</td>
<td>34.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80165</td>
<td>ADVANCED GROWTH FACTOR SERUM • 1 fl. oz</td>
<td>65.00</td>
<td>48.75</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80170</td>
<td>ADVANCED HYALURONIC ACID SERUM • 1 fl. oz</td>
<td>45.00</td>
<td>33.75</td>
<td>29.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80154</td>
<td>ADVANCED LIGHTENING CREAM • 1 oz</td>
<td>65.00</td>
<td>48.75</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80155</td>
<td>ADVANCED PEPTIDE HAND THERAPY • 4 oz</td>
<td>46.00</td>
<td>34.50</td>
<td>28.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80152</td>
<td>ADVANCED TRIPLE PEPTIDE SERUM • 1 fl. oz</td>
<td>65.00</td>
<td>48.75</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80140</td>
<td>ADVANCED UNDER EYE SERUM W/STEM CELLS • 33 fl. oz</td>
<td>49.00</td>
<td>36.75</td>
<td>31.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80137</td>
<td>ALL-PURPOSE SOOTHING RELIEF • 1 oz</td>
<td>53.00</td>
<td>39.75</td>
<td>34.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80139</td>
<td>AMBER SELF MICRODERMARASION • 2 oz</td>
<td>49.00</td>
<td>36.75</td>
<td>31.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80158</td>
<td>ANTI-AGING FACE OIL • 1 fl. oz</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80118</td>
<td>ANTI-AGING MASK • 2 oz</td>
<td>72.00</td>
<td>54.00</td>
<td>47.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80151</td>
<td>ANTI-AGING REJUVENATING FACE CREAM • 2 oz</td>
<td>65.00</td>
<td>48.75</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80153</td>
<td>ANTI-AGING REJUVENATING SCALP SERUM • 2 fl. oz</td>
<td>46.00</td>
<td>34.50</td>
<td>29.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80134</td>
<td>ANTI-OXIDANT SERUM W/BLUEBERRY &amp; POMEGRANATE EXTRACTS • 1 fl. oz</td>
<td>33.00</td>
<td>24.75</td>
<td>23.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SUBTOTAL OF COLUMN 3

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each $</th>
<th>1 Unit Each $</th>
<th>4 Unit Each $</th>
<th>10 Unit Each $</th>
<th>QTY Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>80133</td>
<td>ANTI-OXIDANT FACIAL MIST HYDRATOR • 2 fl. oz</td>
<td>32.00</td>
<td>24.00</td>
<td>22.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80156</td>
<td>COLLAGEN BOOSTING PEPTIDE SERUM • 1 fl. oz</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80169</td>
<td>CUCUMBER HYDRA PEPTIDE EYE CREAM • 5 oz</td>
<td>38.00</td>
<td>28.50</td>
<td>26.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80141</td>
<td>DNA SUPPORT CREAM • 1 oz</td>
<td>49.00</td>
<td>36.75</td>
<td>31.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80167</td>
<td>ENVIRONMENTAL SUPPORT SERUM • 1 fl. oz</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80108</td>
<td>ESSENTIAL PLANT LIPIDS SERUM • 1 fl. oz</td>
<td>74.95</td>
<td>56.21</td>
<td>49.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80163</td>
<td>EYE LIFT CREAM • 0.5 fl. oz</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80123</td>
<td>FACE REJUVENATING ANTI-OXIDANT CREAM • 2 oz</td>
<td>69.50</td>
<td>52.13</td>
<td>45.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80109</td>
<td>HYALURONIC ACID FACIAL MOISTURIZER • 1 oz</td>
<td>58.00</td>
<td>43.50</td>
<td>38.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80110</td>
<td>HYALURONIC ACID-FREE FACIAL MOISTURIZER • 1 oz</td>
<td>58.00</td>
<td>43.50</td>
<td>38.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80138</td>
<td>HYDRATING ANTI-OXIDANT FACE MIST • 4 fl. oz</td>
<td>39.95</td>
<td>29.96</td>
<td>28.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80103</td>
<td>LIFTING &amp; TIGHTENING COMPLEX • 1 oz</td>
<td>74.50</td>
<td>55.88</td>
<td>49.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80168</td>
<td>MELOTONIN ADVANCED PEPTIDE CREAM • 1 oz</td>
<td>38.00</td>
<td>28.50</td>
<td>26.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80114</td>
<td>MILD FACIAL CLEANSER • 8 fl. oz</td>
<td>59.00</td>
<td>44.25</td>
<td>38.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80159</td>
<td>MULTI STEM CELL SKIN TIGHTENING COMPLEX • 1 fl. oz</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80122</td>
<td>NECK REJUVENATING ANTI-OXIDANT CREAM • 2 oz</td>
<td>64.00</td>
<td>48.00</td>
<td>42.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80150</td>
<td>RENEWING EYE CREAM • 1/2 oz</td>
<td>65.00</td>
<td>48.75</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80142</td>
<td>RESVERATROL ANTI-OXIDANT SERUM • 1 fl. oz</td>
<td>46.00</td>
<td>34.50</td>
<td>29.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80166</td>
<td>SKIN FIRMING COMPLEX • 1 fl. oz (2 units $34.50)</td>
<td>53.00</td>
<td>39.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80112</td>
<td>SKIN LIGHTENING SERUM • 1/2 fl. oz</td>
<td>85.00</td>
<td>63.75</td>
<td>56.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80130</td>
<td>SKIN STEM CELL SERUM • 1 fl. oz</td>
<td>74.00</td>
<td>55.50</td>
<td>51.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80164</td>
<td>SKIN TONE EQUALIZER • 1 oz</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80143</td>
<td>STEM CELL CREAM W/ALPINE ROSE • 1 oz</td>
<td>66.00</td>
<td>49.50</td>
<td>43.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80148</td>
<td>TIGHTENING &amp; FIRMING NECK CREAM • 2 oz</td>
<td>39.00</td>
<td>29.25</td>
<td>26.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80161</td>
<td>TRIPLE ACTION VITAMIN C CREAM • 1 oz jar</td>
<td>59.00</td>
<td>44.25</td>
<td>39.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80162</td>
<td>ULTIMATE MICRODERMARASION • 8 fl. oz</td>
<td>39.00</td>
<td>29.25</td>
<td>26.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80160</td>
<td>ULTRA EYELASH BOOSTER • 0.25 oz (2 units each $39)</td>
<td>59.00</td>
<td>44.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80116</td>
<td>ULTRA LIP PLUMPER • 1/3 oz</td>
<td>64.00</td>
<td>48.00</td>
<td>42.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80101</td>
<td>ULTRA WRINKLE RELAXER • 1 fl. oz</td>
<td>89.95</td>
<td>67.46</td>
<td>59.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80113</td>
<td>UNDER EYE REFINING SERUM • 1/2 fl. oz</td>
<td>74.50</td>
<td>55.88</td>
<td>49.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80104</td>
<td>UNDER EYE RESCUE CREAM • 1/2 oz</td>
<td>74.50</td>
<td>55.88</td>
<td>49.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80171</td>
<td>VITAMIN C LIP REJUVENATOR • 0.5 fl. oz</td>
<td>24.00</td>
<td>18.00</td>
<td>15.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80129</td>
<td>VITAMIN C SERUM • 1 fl. oz</td>
<td>85.00</td>
<td>63.75</td>
<td>56.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80136</td>
<td>VITAMIN D LOTION • 4 oz</td>
<td>36.00</td>
<td>27.00</td>
<td>25.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80102</td>
<td>VITAMIN K CREAM • 1 oz</td>
<td>79.50</td>
<td>59.63</td>
<td>52.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80149</td>
<td>YOUTH SERUM • 1 fl. oz</td>
<td>65.00</td>
<td>48.75</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SUBTOTAL OF COLUMN 4

**RECEIVE 25% OFF THE RETAIL PRICE OF ALL PRODUCTS**

**TO ORDER CALL: 1.954.766.8433 or 1.800.544.4440**

**TO ORDER ONLINE VISIT: www.LifeExtension.com**

**DECEMBER 2018**
<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each</th>
<th>1 Unit Each</th>
<th>4 Unit Each</th>
<th>10 Unit Each</th>
<th>QTY Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>30747</td>
<td>DIGEST RC®</td>
<td>19.95</td>
<td>14.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02021</td>
<td>DIGESTIVE ENZYMES (Enhanced Super)</td>
<td>22.00</td>
<td>16.50</td>
<td>15.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02022</td>
<td>DIGESTIVE ENZYMES W/PROBIOTICS (Enhanced Super)</td>
<td>28.00</td>
<td>21.00</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01631</td>
<td>D, L-PHENYLALANINE</td>
<td>18.75</td>
<td>14.06</td>
<td>12.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01540</td>
<td>DMAE BITARTRATE</td>
<td>18.00</td>
<td>13.50</td>
<td>11.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02270</td>
<td>DNA PROTECTION FORMULA</td>
<td>20.00</td>
<td>15.00</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01931</td>
<td>DOG MIX • 100 grams powder</td>
<td>18.00</td>
<td>13.50</td>
<td>11.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02006</td>
<td>DOPA-MIND™</td>
<td>44.00</td>
<td>33.00</td>
<td>28.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00321</td>
<td>DR. PROCTOR S ADVANCED HAIR FORMULA • 2 oz</td>
<td>39.95</td>
<td>29.96</td>
<td>24.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00320</td>
<td>DR. PROCTOR S HAIR SHAMPOO • 8 oz</td>
<td>24.95</td>
<td>18.71</td>
<td>16.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00207</td>
<td>ENDOTHELIAL DEFENSE POMEGRANATE COMPLETE • 60 softgels</td>
<td>68.00</td>
<td>51.00</td>
<td>46.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00997</td>
<td>ENDOTHELIAL DEFENSE W/OLIGODIN® • 60 veg. caps</td>
<td>54.00</td>
<td>40.50</td>
<td>36.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02200</td>
<td>EPA/DHA (Clearly) • 120 softgels</td>
<td>30.00</td>
<td>22.50</td>
<td>20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01937</td>
<td>EPA/DHA (Mega) • 120 softgels</td>
<td>20.00</td>
<td>15.00</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02033</td>
<td>ESOPHACOL™</td>
<td>60 chewable tablets</td>
<td>12.00</td>
<td>9.00</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>01737</td>
<td>ESOPHAGEAL GUARDIAN (Berry flavor) • 60 chewable tablets</td>
<td>36.00</td>
<td>27.00</td>
<td>24.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01894</td>
<td>ESTROGEN FOR WOMEN • 30 veg. tabs</td>
<td>30.00</td>
<td>22.50</td>
<td>20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01042</td>
<td>EUROPEAN LEG SOLUTION DIOXIM 95</td>
<td>20.00</td>
<td>15.00</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01706</td>
<td>EXTRAORDINARY ENZYMES • 60 caps</td>
<td>26.00</td>
<td>19.50</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02008</td>
<td>[CALIFORNIA ESTATE] EXTRA VIRGIN OLIVE OIL • 600 ml (16.9 fl. oz)</td>
<td>33.00</td>
<td>24.75</td>
<td>22.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01514</td>
<td>EYE PRESSURE SUPPORT W/MIRTGENOL® • 30 caps veg.</td>
<td>38.00</td>
<td>28.50</td>
<td>25.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00965</td>
<td>FAST-ACTING JOINT FORMULA • 30 caps</td>
<td>39.00</td>
<td>29.25</td>
<td>27.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01717</td>
<td>FAST-C® W/DIHYDROQUERCETIN • 120 veg. tabs</td>
<td>26.00</td>
<td>19.50</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01064</td>
<td>FEMMESSENCE MACAPUASE® • 120 veg. caps</td>
<td>34.99</td>
<td>26.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01825</td>
<td>FLORASSIST® BALANCE • 30 liquid veg. caps</td>
<td>32.00</td>
<td>24.00</td>
<td>21.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02125</td>
<td>FLORASSIST® GI W/PAGE TECHNOLOGY • 30 liquid veg. caps</td>
<td>33.00</td>
<td>24.75</td>
<td>22.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01821</td>
<td>FLORASSIST® HEART HEALTH • 60 veg. caps</td>
<td>32.00</td>
<td>24.00</td>
<td>21.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02124</td>
<td>FLORASSIST® IMMUNE HEALTH • 30 veg. caps</td>
<td>26.00</td>
<td>19.50</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02000</td>
<td>FLORASSIST® MOOD • 60 caps</td>
<td>33.00</td>
<td>24.75</td>
<td>22.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02208</td>
<td>FLORASSIST® NASAL • 30 veg. caps</td>
<td>36.00</td>
<td>27.00</td>
<td>24.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02120</td>
<td>FLORASSIST® ORAL HYGIENE • 30 lozenges</td>
<td>20.00</td>
<td>15.00</td>
<td>13.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02203</td>
<td>FLORASSIST® PREBIOTIC • Strawberry flavor, 60 chewable tabs</td>
<td>20.00</td>
<td>15.00</td>
<td>13.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01920</td>
<td>FLORASSIST® THROAT HEALTH • 30 lozenges</td>
<td>20.00</td>
<td>15.00</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02212</td>
<td>FOCUS TEA™ • Spearmint flavor, 14 stick packs</td>
<td>20.00</td>
<td>15.00</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01913</td>
<td>FOLATE HIGH POTENCY (Optimized) • 5,000 mcg, 30 veg. tablets</td>
<td>18.00</td>
<td>13.50</td>
<td>12.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01939</td>
<td>FOLATE (Optimized) • 1,000 mcg, 100 veg. tablets</td>
<td>15.00</td>
<td>11.25</td>
<td>10.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01842</td>
<td>FOLATE + VITAMIN B12 (BioActive) • 90 veg. caps</td>
<td>12.00</td>
<td>9.00</td>
<td>8.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01544</td>
<td>FORSKOLIN • 10 mg, 60 veg. caps</td>
<td>16.00</td>
<td>12.00</td>
<td>10.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01513</td>
<td>FUCOIDAN W/MARITECH® 925 (Optimized) • 60 veg. caps</td>
<td>36.00</td>
<td>27.00</td>
<td>24.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02070</td>
<td>GAMMA E MIXED TOCOPHEROL/TOCOTRIENOLS • 60 softgels</td>
<td>40.00</td>
<td>30.00</td>
<td>27.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02075</td>
<td>GAMMA E MIXED TOCOPHEROL/WEHNANCS SESAME LIGNANS • 60 softgels</td>
<td>32.00</td>
<td>24.00</td>
<td>21.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01394</td>
<td>GARLIC (Optimized) • 200 veg. caps</td>
<td>24.95</td>
<td>18.71</td>
<td>15.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL OF COLUMN 5**
<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>YOUR PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>00200</td>
<td>LECITHIN • 16 oz granules</td>
<td>18.00 13.50 12.00</td>
</tr>
<tr>
<td>02355</td>
<td>LIFE EXTENSION MIX™ • 240 tablets</td>
<td>74.00 55.50 48.00 42.00</td>
</tr>
<tr>
<td>02357</td>
<td>LIFE EXTENSION MIX™ W/EXTRA NIAIN • 240 tablets</td>
<td>74.00 55.50 48.00 42.00</td>
</tr>
<tr>
<td>02354</td>
<td>LIFE EXTENSION MIX™ • 360 caps</td>
<td>78.00 58.50 50.00 44.00</td>
</tr>
<tr>
<td>02356</td>
<td>LIFE EXTENSION MIX™ POWDER • 12.7 oz</td>
<td>80.00 60.00 54.00 50.00</td>
</tr>
<tr>
<td>02365</td>
<td>LIFE EXTENSION MIX™ W/O COPPER • 240 tablets</td>
<td>74.00 55.50 48.00 42.00</td>
</tr>
<tr>
<td>02364</td>
<td>LIFE EXTENSION MIX™ W/O COPPER • 360 caps</td>
<td>78.00 58.50 50.00 44.00</td>
</tr>
<tr>
<td>01608</td>
<td>LIVER EFFICIENCY FORMULA • 30 veg. caps</td>
<td>18.00 13.50 12.00</td>
</tr>
<tr>
<td>01639</td>
<td>5-LOX INHIBITOR W/APRÈSFLÈX™ • 100 mg, 60 veg. caps</td>
<td>22.00 16.50 15.00</td>
</tr>
<tr>
<td>01678</td>
<td>L-LYSINE • 620 mg, 100 veg. caps</td>
<td>9.00 6.75 6.00</td>
</tr>
<tr>
<td>00455</td>
<td>LYCOPENE (Mega) • 15 mg, 90 softgels</td>
<td>35.00 26.25 22.50</td>
</tr>
<tr>
<td>01992</td>
<td>MACUGUARD® OCULAR SUPPORT W/SAFFRON• 60 softgels</td>
<td>25.00 18.75 17.50</td>
</tr>
<tr>
<td>01993</td>
<td>MACUGUARD® OCULAR SUPPORT W/SAFFRON &amp; ASTAXANTHIN • 60 softgels</td>
<td>44.00 33.00 30.00</td>
</tr>
<tr>
<td>01459</td>
<td>MAGNESIUM CAPS • 500 mg, 100 veg. caps</td>
<td>12.00 9.00 7.50</td>
</tr>
<tr>
<td>01682</td>
<td>MAGNESIUM (CITRATE) • 160 mg, 100 veg. caps</td>
<td>13.00 9.75 8.50</td>
</tr>
<tr>
<td>02107</td>
<td>(EXTEND-RELEASE) MAGNESIUM • 60 veg. caps</td>
<td>13.00 9.75 8.75</td>
</tr>
<tr>
<td>01820</td>
<td>MALE VASCULAR SEXUAL SUPPORT • 30 male caps</td>
<td>24.00 18.00 16.00</td>
</tr>
<tr>
<td>01908</td>
<td>MEDITERRANEAN TRIM WITH SINETROL™-XPUR 60 veg. caps</td>
<td>18.00 13.50 12.00</td>
</tr>
<tr>
<td>02199</td>
<td>MEDITERRANEAN WHOLE FOOD BLEND • 90 veg. caps</td>
<td>44.00 33.00 30.00</td>
</tr>
<tr>
<td>01668</td>
<td>MELATONIN • 300 mcg, 100 veg. caps</td>
<td>7.00 5.25 4.50</td>
</tr>
<tr>
<td>01983</td>
<td>MELATONIN • 500 mcg, 200 veg. caps</td>
<td>18.00 13.50 12.00</td>
</tr>
<tr>
<td>00329</td>
<td>MELATONIN • 1 mg, 60 caps</td>
<td>5.00 3.75 3.47</td>
</tr>
<tr>
<td>00330</td>
<td>MELATONIN • 3 mg, 60 veg. caps</td>
<td>8.00 6.00 5.16</td>
</tr>
<tr>
<td>00331</td>
<td>MELATONIN • 10 mg, 60 veg. caps</td>
<td>28.00 21.00 18.00</td>
</tr>
<tr>
<td>00332</td>
<td>MELATONIN • 3 mg, 60 veg. lozenges</td>
<td>8.00 6.00 5.16</td>
</tr>
<tr>
<td>02234</td>
<td>MELATONIN (Fast-Acting Liquid) • 2 fl. oz (Citrus-Vanilla)</td>
<td>12.00 9.00 8.25</td>
</tr>
<tr>
<td>02201</td>
<td>MELATONIN IR/XR • 60 caps</td>
<td>12.00 9.00 7.50</td>
</tr>
<tr>
<td>01787</td>
<td>MELATONIN TIMED RELEASE • 300 mcg, 100 veg. tabs</td>
<td>12.00 9.00 8.25</td>
</tr>
<tr>
<td>01788</td>
<td>MELATONIN TIMED RELEASE • 750 mcg, 60 veg. tablets</td>
<td>8.00 6.00 5.25</td>
</tr>
<tr>
<td>01786</td>
<td>MELATONIN TIMED RELEASE • 3 mg, 60 veg. tabs</td>
<td>12.00 9.00 8.25</td>
</tr>
<tr>
<td>02101</td>
<td>MEMORY PROTECT • 36 day supply</td>
<td>24.00 18.00 16.00</td>
</tr>
<tr>
<td>02204</td>
<td>MENOPAUSE 731™ • 30 tablets</td>
<td>36.00 27.00 24.00</td>
</tr>
<tr>
<td>01536</td>
<td>METHYLCOBALAMIN • 1 mg, 60 veg. lozenges (vanilla)</td>
<td>9.95 7.46 6.00</td>
</tr>
<tr>
<td>01537</td>
<td>METHYLCOBALAMIN • 5 mg, 60 veg. lozenges (vanilla)</td>
<td>32.00 24.00 18.75 17.25</td>
</tr>
<tr>
<td>00709</td>
<td>MIGRA-EZZÈM™ (Butterbur) • 60 softgels</td>
<td>33.00 24.75 22.00</td>
</tr>
<tr>
<td>01522</td>
<td>MILK THISTLE (European) • 60 softgels</td>
<td>34.00 25.50 22.50</td>
</tr>
<tr>
<td>01922</td>
<td>MILK THISTLE (European) • 120 softgels</td>
<td>28.00 21.00 18.75</td>
</tr>
<tr>
<td>01925</td>
<td>MILK THISTLE (European) • 300 softgels</td>
<td>44.00 33.00 30.00</td>
</tr>
<tr>
<td>01940</td>
<td>MIRAFORTE W/STANDARDIZED LIGNANS(Super) • 120 veg caps</td>
<td>62.00 46.50 42.00</td>
</tr>
<tr>
<td>01867</td>
<td>MITOCONDRIAL BASICS W/POQ• 30 caps</td>
<td>40.00 30.00 27.00</td>
</tr>
<tr>
<td>01868</td>
<td>MITOCONDRIAL ENERGY OPTIMIZER W/POQ• 120 caps</td>
<td>68.00 51.00 45.00</td>
</tr>
<tr>
<td>00065</td>
<td>MK-7 • 90 mcg, 60 softgels</td>
<td>28.00 21.00 18.75</td>
</tr>
<tr>
<td>00451</td>
<td>MSM (Methylsulfonylmethane) • 1,000 mg, 100 caps</td>
<td>14.00 10.50 8.96</td>
</tr>
<tr>
<td>02221</td>
<td>MUSCLE STRENGTH &amp; RESTORE FORMULA • +94.2 grams powder</td>
<td>38.00 27.00 24.00</td>
</tr>
</tbody>
</table>

**SUBTOTAL OF COLUMN 7**

| N | 01534 | N-ACETYL-L-CYSTEINE • 600 mg, 60 veg. caps | 14.00 10.50 9.25 |
| 02144 | NAD+ CELL REGENERATOR® NICOTINAMIDE RIBOSIDE 250 mg, 30 veg. caps | 48.00 call for pricing |
| 02148 | NAD+ CELL REGENERATOR® W/RESVERATROL (Optimized) 30 veg. caps | 54.00 call for pricing |
| 01603 | NEURO-MAG™ MAGNESIUM L-THREONATE • 90 veg. caps | 40.00 30.00 27.00 |
| 02032 | NEURO-MAG™ MAGNESIUM L-THREONATE 93.35 grams • Tropical Punch Flavor | 38.00 28.50 26.00 |
| 02090 | NITROVASC™ • 30 veg. caps | 18.00 13.50 12.00 |
| 01903 | NK CELL ACTIVATOR™ • 30 veg. tablets | 45.00 33.75 31.50 |
| 00373 | NO FLUSH NIAIN • 800 mg, 100 caps | 19.00 14.25 12.75 |
| 02231 | NTZ COLLAGEN™ • 40 mg, 60 small caps | 34.00 25.50 22.00 |

**SUBTOTAL OF COLUMN 8**

**DECEMBER 2018**

**RECEIVE 25% OFF THE RETAIL PRICE OF ALL PRODUCTS**
### Item No. | Product | Retail Each | 1 Unit Each | 4 Unit Each | 10 Unit Each | QTY Total
--- | --- | --- | --- | --- | --- | ---
01441 | Progibest-Care® | 4 oz cream | $36.39 | $27.29 | $25.72 | |
0229 | Prostate Formula (Ultra) | 60 softgels | $38.00 | $28.50 | $26.25 | 24.00 |
01909 | Prostatopollen® Triple strength | 30 softgels | $28.00 | $21.00 | $18.75 | |
02281 | Protein Concentrate (Whey) | 640 grams | $30.00 | $22.50 | $19.95 | |
02260 | Protein Concentrate (Whey Vanilla) | 500 grams | $30.00 | $22.50 | $19.95 | |
02246 | Protein Isolate (Advanced Whey Vanilla) | 454 grams | $30.00 | $22.50 | $19.95 | |
02243 | Protein Isolate (Whey Chocolate) | 437 grams | $30.00 | $22.50 | $19.95 | |
02242 | Protein Isolate (Whey Vanilla) | 403 grams | $30.00 | $22.50 | $19.95 | |
02127 | Protein (Plant) Complete & Amino Acid Complex | 15.87 oz | $34.00 | $25.50 | $23.00 | |
01812 | Proviron® Purified Omega-7 | 30 softgels | $27.00 | $20.25 | $18.00 | |
01676 | PS Caps (Phosphatidylserine) | 100 mg, 100 veg. caps | $44.00 | $33.00 | $30.00 | |
01209 | Pumpkin Seed Extract | (Water-soluble) | 60 veg. caps | $12.00 | $9.00 | $8.00 |
01637 | Pycnogenol® French Maritime Pine Bark Extract | 100 veg. mg, 60 caps | $64.00 | $48.00 | $45.00 | |
01217 | Pyridoxal 5'-Phosphate | 100 mg, 60 veg. caps | $22.00 | $16.50 | $14.85 | |
### Q. R
02302 | Quercetin (Bio) | 30 veg. caps | $12.00 | $9.00 | $8.00 | |
01309 | Quercetin (Optimized) | 250 mg, 60 veg. caps | $22.00 | $16.50 | $15.00 | |
02169 | Rainforest Blend Ground Coffee | 12 oz. bag | $13.00 | $9.75 | |
02173 | Rainforest Blend Ground Coffee | Natural Mocha | 12 oz. bag | $15.00 | $11.25 | |
02172 | Rainforest Blend Ground Coffee | Natural Vanilla | 12 oz. bag | $15.00 | $11.25 | |
02171 | Rainforest Blend Whole Bean Coffee | 12 oz. bag | $13.00 | $9.75 | |
02170 | Rainforest Blend Decaf Ground Coffee | 12 oz. bag | $14.00 | $10.50 | |
01030 | Red Yeast Rice (Bluebonnet) | 600 mg, 60 veg. caps | $18.00 | $13.50 | |
00605 | Regimint | 60 enteric-coated caps | $19.95 | $14.96 | $12.66 | |
01708 | Reishi Extract Mushroom Complex | 60 veg. caps | $30.00 | $22.50 | $20.25 | |
01448 | Rejuvenex® Body Lotion | 6 fl. oz | $24.00 | $18.00 | $14.85 | $12.75 |
01621 | Rejuvenex® Factor Firming Serum | 1.7 oz | $65.00 | $48.75 | $37.50 | |
01220 | Rejuvenex® Ultra | 2 oz | $39.95 | $29.00 | $23.00 | $19.25 |
00876 | Rejuvenex® Ultra | 2 oz | $39.95 | $29.00 | $23.00 | $19.25 |
02210 | Resveratrol | 100 mg, 60 veg. caps | $32.00 | $24.00 | $21.00 | |
02230 | Resveratrol | Optimized | 60 veg. caps | $45.00 | $33.75 | $30.00 | |
00889 | Rhodiola Extract | 250 mg, 60 veg. caps | $14.00 | $10.50 | $9.00 | |
01900 | Ribogen™ French Oak Wood Extract | 200 mg, 30 veg. caps | $36.00 | $27.00 | $24.75 | |
00972 | (D) Ribose Powder | 150 grams | $27.50 | $20.63 | $18.56 | |
01473 | (D) Ribose Tablets | 100 veg. tabs | $32.00 | $24.00 | $21.00 | |
01208 | R-Lipoic Acid | (Super) | 240 mg, 60 veg. caps | $49.00 | $36.75 | $33.75 | |
00070 | RNA Capsules | 500 mg, 100 caps | $17.95 | $13.46 | $12.12 | |
01432 | Saffron W/Satireal® (Optimized) | 60 veg. caps | $36.00 | $27.00 | $24.00 | |
02175 | SAMe (5-Adenosyl-Methionine) | 200 mg, 30 enteric coated tablets | $25.00 | $18.75 | $16.50 | |
02176 | SAMe (5-Adenosyl-Methionine) | 400 mg, 30 enteric coated tablets | $36.00 | $27.00 | $24.00 | |
<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each $</th>
<th>QTY Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01917</td>
<td>TRANQUIL TRACT™ • 60 veg. caps</td>
<td>52.00</td>
<td>34.50</td>
</tr>
<tr>
<td>01468</td>
<td>TRIPLE ACTION CRUCIFEROUS VEGETABLE EXTRACT • 60 veg. caps</td>
<td>24.00</td>
<td>16.50</td>
</tr>
<tr>
<td>01469</td>
<td>TRIPLE ACTION CRUCIFEROUS VEGETABLE EXTRACT • 60 veg. caps</td>
<td>32.00</td>
<td>22.20</td>
</tr>
<tr>
<td>02030</td>
<td>TRIPLE ACTION THYROID • 60 veg. caps</td>
<td>36.00</td>
<td>24.00</td>
</tr>
<tr>
<td>01803</td>
<td>TRI SUGAR SHIELD™ • 60 veg. caps</td>
<td>36.00</td>
<td>24.00</td>
</tr>
<tr>
<td>01386</td>
<td>TRUFIBER™ • 180 grams</td>
<td>32.95</td>
<td>24.71</td>
</tr>
<tr>
<td>01389</td>
<td>TRUFLORA™ PROBIOTICS • 32 veg. caps</td>
<td>42.95</td>
<td>32.21</td>
</tr>
<tr>
<td>01722</td>
<td>L-TRYPTOPHAN • 500 mg, 90 veg. caps</td>
<td>33.00</td>
<td>24.75</td>
</tr>
<tr>
<td>01723</td>
<td>Tryptophan Plus (Optimized) • 90 veg. caps</td>
<td>32.00</td>
<td>21.75</td>
</tr>
<tr>
<td>02317</td>
<td>TWO-PER-DAY CAPSULES • 60 caps</td>
<td>13.95</td>
<td>8.50</td>
</tr>
<tr>
<td>02314</td>
<td>TWO-PER-DAY CAPSULES • 60 caps</td>
<td>24.00</td>
<td>16.00</td>
</tr>
<tr>
<td>02316</td>
<td>TWO-PER-DAY TABLETS • 60 tablets</td>
<td>12.90</td>
<td>7.50</td>
</tr>
<tr>
<td>02315</td>
<td>TWO-PER-DAY TABLETS • 120 tablets</td>
<td>23.00</td>
<td>15.50</td>
</tr>
<tr>
<td>00326</td>
<td>L-TYROSINE • 500 mg, 100 tablets</td>
<td>13.50</td>
<td>11.33</td>
</tr>
</tbody>
</table>

**MY PRICE**

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each $</th>
<th>QTY Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01921</td>
<td>URIC ACID CONTROL • 60 veg. caps</td>
<td>24.00</td>
<td>16.50</td>
</tr>
<tr>
<td>00213</td>
<td>VANADYL SULFATE • 7.5 mg, 100 veg. tablets</td>
<td>15.00</td>
<td>9.38</td>
</tr>
<tr>
<td>02102</td>
<td>VENOFLUX™ • 30 veg. caps</td>
<td>52.00</td>
<td>36.00</td>
</tr>
<tr>
<td>00408</td>
<td>VENOTONE • 60 caps</td>
<td>18.95</td>
<td>12.00</td>
</tr>
<tr>
<td>01327</td>
<td>VINPOCETINE • 10 mg, 100 veg. tablets</td>
<td>18.00</td>
<td>10.50</td>
</tr>
<tr>
<td>00372</td>
<td>VITAMIN B6 NIACIN • 500 mg, 100 caps</td>
<td>7.65</td>
<td>4.99</td>
</tr>
<tr>
<td>02028</td>
<td>VITAMIN B5 • 500 mg, 100 veg. caps (Pantothenic Acid)</td>
<td>14.00</td>
<td>9.00</td>
</tr>
<tr>
<td>01535</td>
<td>VITAMIN B6 • 250 mg, 100 veg. caps</td>
<td>12.50</td>
<td>8.25</td>
</tr>
<tr>
<td>00361</td>
<td>VITAMIN B12 • 500 mcg, 100 lozenges</td>
<td>8.75</td>
<td>5.44</td>
</tr>
<tr>
<td>01634</td>
<td>VITAMIN C W/DIHYDROQUERCETIN • 1,000 mg, 60 veg. tablets</td>
<td>10.00</td>
<td>6.75</td>
</tr>
<tr>
<td>00927</td>
<td>VITAMIN C W/DIHYDROQUERCETIN • 1,000 mg, 250 veg. tablets</td>
<td>30.00</td>
<td>20.00</td>
</tr>
<tr>
<td>00084</td>
<td>VITAMIN C POWDER (Buffered) • 454 grams</td>
<td>29.00</td>
<td>19.00</td>
</tr>
<tr>
<td>01736</td>
<td>VITAMIN C-MAGNESIUM CRYSTALS (Effervescent) • 180 grams</td>
<td>20.00</td>
<td>13.50</td>
</tr>
<tr>
<td>01753</td>
<td>VITAMIN D3 • 1,000 IU, 90 softgels</td>
<td>7.00</td>
<td>5.45</td>
</tr>
<tr>
<td>01751</td>
<td>VITAMIN D3 • 1,000 IU, 250 softgels</td>
<td>12.50</td>
<td>8.44</td>
</tr>
<tr>
<td>01713</td>
<td>VITAMIN D3 • 5,000 IU, 60 softgels</td>
<td>10.00</td>
<td>7.50</td>
</tr>
<tr>
<td>01718</td>
<td>VITAMIN D3 • 7,000 IU, 60 softgels</td>
<td>14.00</td>
<td>9.45</td>
</tr>
<tr>
<td>01758</td>
<td>VITAMIN D3 W/SEA-IODINE™ • 5,000 IU, 60 caps</td>
<td>14.00</td>
<td>9.38</td>
</tr>
<tr>
<td>02244</td>
<td>VITAMIN D3 LIQUID • 2,000 IU, 1 fl. oz, unflavored</td>
<td>28.00</td>
<td>18.75</td>
</tr>
<tr>
<td>02232</td>
<td>VITAMIN D3 LIQUID • 2,000 IU, 1 fl. oz, mint flavor</td>
<td>28.00</td>
<td>18.75</td>
</tr>
<tr>
<td>02040</td>
<td>VITAMINS D AND K W/SEA-IODINE™ • 60 caps</td>
<td>24.00</td>
<td>16.50</td>
</tr>
<tr>
<td>01863</td>
<td>VITAMIN E (Super) • 400 IU, 90 softgels</td>
<td>28.00</td>
<td>18.00</td>
</tr>
<tr>
<td>01936</td>
<td>VITAMIN K2 (Low dose) • 45 mcg, 90 softgels</td>
<td>18.00</td>
<td>12.00</td>
</tr>
</tbody>
</table>

**W**

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>PRODUCT</th>
<th>Retail Each $</th>
<th>QTY Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01902</td>
<td>WAIST-LINE CONTROL™ • 120 veg. caps</td>
<td>42.00</td>
<td>28.50</td>
</tr>
<tr>
<td>02146</td>
<td>WELLNESS™ BAR • Chocolate Brownie • Box of 12 Bars</td>
<td>32.00</td>
<td>24.00</td>
</tr>
<tr>
<td>02147</td>
<td>WELLNESS™ BAR • Cookie Dough • Box of 12 Bars</td>
<td>32.00</td>
<td>24.00</td>
</tr>
<tr>
<td>02220</td>
<td>WELLNESS™ SHAKE • Chocolate • 656 grams</td>
<td>50.00</td>
<td>34.00</td>
</tr>
<tr>
<td>02219</td>
<td>WELLNESS™ SHAKE • Vanilla • 648 grams</td>
<td>50.00</td>
<td>34.00</td>
</tr>
</tbody>
</table>

**SUBTOTAL OF COLUMN 11**

**SUBTOTAL OF COLUMN 12**

* These products are not 25% off retail price.
** Due to license restrictions, this product is not for sale to customers outside of the USA.
*** Due to license restrictions, this product is not for sale to Canada.
† Due to license restrictions, this product is not for sale to customers outside of the USA and Canada.
‡‡ These products are not 25% off retail price. Due to license restrictions this product is not for sale to customers outside of the USA.
+++ The Wellness™ Bars and 2:5 LE Plan Kits are not for sale to customers outside the USA.
## ORDER SUBTOTALS

<table>
<thead>
<tr>
<th>Subtotal Column 1</th>
<th>Subtotal Column 2</th>
<th>Subtotal Column 3</th>
<th>Subtotal Column 4</th>
<th>Subtotal Column 5</th>
<th>Subtotal Column 6</th>
<th>Subtotal Column 7</th>
<th>Subtotal Column 8</th>
<th>Subtotal Column 9</th>
<th>Subtotal Column 10</th>
<th>Subtotal Column 11</th>
<th>Subtotal Column 12</th>
</tr>
</thead>
</table>

## ORDER TOTALS

**Subtotal of Columns 1 - 12**

<table>
<thead>
<tr>
<th><strong>POSTAGE &amp; HANDLING</strong></th>
<th>Any size order, in the U.S. includes Alaska &amp; Hawaii</th>
<th><strong>$5.50</strong></th>
</tr>
</thead>
</table>

**C.O.D.s (ADD $7 FOR C.O.D. ORDERS)**

- UPS OVERNIGHT add $16, UPS 2nd DAY AIR add $7. For Puerto Rico, US Virgin Islands, add $7. CANADA UPS EXPRESS Flat rate $17.50, UK Flat rate $25 USD. ALL OTHER INTERNATIONAL AIR WILL BE ADDED.

## GRAND TOTAL

(MUST BE IN U.S. DOLLARS)

---

**PLEASE MAIL TO:** Life Extension

P.O. Box 407198 • Ft. Lauderdale, Florida 33340-7198

Or Call Toll Free 1-800-544-4440 • Fax: 866-728-1050

---

**Prices subject to change without notice.**

Please notify Life Extension of any address change.
Neuro-Mag® Magnesium L-Threonate was specifically formulated by MIT scientists to be uniquely absorbable by brain and nerve cells.

Your Brain Health Is in Your Hands

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.
7 ANOTHER YEAR OF VINDICATION
A landmark 2018 Prostate Cancer Prevention Trial showed that the drug finasteride slashed prostate cancer risk by around 25%.

40 DIETARY APPROACHES SLASH PROSTATE CANCER RISK
The prostate gland of most aging men harbor malignant cells, but the right diet can prevent progression to clinically relevant prostate cancer.

64 LINK BETWEEN GUM DISEASE AND AGING
Two oral probiotics boost gum health by rebalancing the oral microbiome to reduce plaque and bleeding gums.

55 OLIVE OIL PROTECTS AGAINST OSTEOPOROSIS
A human study shows that people consuming extra virgin olive oil have a 51% lower risk of bone fractures.

76 50 YEARS OF CONSISTENT SCIENTIFIC FINDINGS
Pine bark extract provides a mixture of procyanidins that reduces the risk of vascular and inflammatory related conditions.

28 PREVENT HOLIDAY WEIGHT GAIN
A clinically tested intermittent nutrition program prevents holiday weight gain while reducing vascular risk markers.