Anti-Aging Breakthroughs
How to Add LIFE to Your Years—Instead of Just YEARS to Your Life!

SPECIAL REPORT by the UniScience Group®
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IS AGING INEVITABLE?

For years, anti-aging clinics claimed to help patients feel younger by simply replacing the hormones that normally decline with age. It sounded good – really good. But then, researchers found that some hormone replacement therapy—especially estrogen therapy—didn’t live up to the promises that had been advertised. Many people taking these synthetic hormones also began to experience unwelcome side effects, some with deadly consequences. Clearly, simply replacing the body’s natural hormones with a synthetic substitute wasn’t the key to turning back the clock.

The whole point of anti-aging medicine is to improve both the quantity and quality of life. It should enhance the intrinsic healing potential of the body and supplement those areas that are deficient.

In a perfect world, people should die only when their organs wear out. But the fact is that no one dies of old age. We die of heart disease, stroke, cancer, diabetes, osteoporosis and Alzheimer’s disease. Practicing hormone therapy without addressing these chronic diseases is like covering a gaping wound with a Band-Aid. True anti-aging needs to begin on a cellular level, where disease begins.

JOIN THE NEW YOUTH MOVEMENT

According to the 2008 CIA World Factbook, Americans can now expect to live 78 years. Of course, that’s just an
average. But, in light of remarkable breakthroughs in hormone modulation (not replacement), paired with preventative exercise and nutrition, it’s possible to slow – even reverse – the aging process.

When you are young, your body can fend off cellular death with naturally-produced antioxidants. But before you hit middle age, you can find yourself on the path toward disease and premature aging as free radicals overwhelm your natural antioxidant levels, causing cells to die faster than your body can replace them.

Working hand in hand with free radicals, advanced glycosylation endproducts (AGEs) occur when a protein and a carbohydrate (glucose) are linked in the wrong way. As a result, the protein becomes sticky and can adhere to the arteries, damage your eyes and kidneys, and affect your sex hormones. The more AGEs that are produced, the faster aging occurs.

But the most important factor in aging is the decline in natural hormones, especially human growth hormone. This growth hormone helps to regulate blood sugar levels and stimulates bone and cartilage growth. In preliminary studies, older adults given supplemental growth hormone have also lost fat while gaining muscle.

During one of these studies, men in their 70s and 80s added significant muscle mass and lost fat after six months of hormone treatment. These findings are especially encouraging since even a modest gain in muscle strength can reduce the rate of falls and fractures among seniors.

Supplementing human growth hormone as we age is a proven way to delay aging, improve your health and increase your zest for life. But, even though directly aug-
menting declining hormone levels can have a profound impact on your life, it can also make an incredibly deep dent in your wallet. Longevity medicine can be very expensive!

**DO YOUR HORMONES NEED A MAKEOVER?**

Our hormones play a critical role in good health and vitality. But, hormone levels decline as we get older, leaving the door open to accelerated aging. Fortunately, flagging levels can be bolstered by supplementing the nutrients your body needs to keep your hormones humming along. How can you tell if your hormones need a little nutritional help? Take the following quiz to find out.

*Compared to 10 years ago:*

Do you often feel tired?  □ Yes □ No

Do you experience mood swings? □ Yes □ No

Do you often feel anxious? □ Yes □ No

Do you feel lonely or isolated? □ Yes □ No

Have you lost interest in sex? □ Yes □ No

Do you have trouble sleeping? □ Yes □ No

Do you frequently forget things? □ Yes □ No

Do you have problems concentrating? □ Yes □ No

Are you more than 20% above your ideal weight? □ Yes □ No

Do you have less strength and endurance? □ Yes □ No

Do you often have aches and pains? □ Yes □ No
Is your total cholesterol over 200?  Yes  No

If you answer yes to any of these questions, your hormones likely need a boost!

**NUTRIENTS FOR A NEW YOU**

Fortunately, you can encourage your body to increase the amount of growth hormone it makes naturally – and encourage its release to the areas of the body where it is needed most. And it won’t cost you an arm and a leg.

Researchers have discovered that specific nutrients known as secretagogues can boost growth hormone levels and positively impact everything from heart health to your love life! The following nutrients have a proven track record for growth hormone production, as well as other anti-aging benefits—and the ability to help you achieve a longer, healthier life. Best of all, they don’t require a prescription!

**L-Arginine:** This amino acid is one of the most powerful tools for longevity. A precursor to nitric oxide (a compound in the body that relaxes blood vessels), studies show that arginine helps wounds heal, removes excess ammonia from the body and stimulates immune function. It also boosts heart health and is often used to treat congestive heart failure, hypertension and angina.

More importantly for people looking to turn back the clock, arginine promotes the secretion of several anti-aging hormones, including glucagons and insulin. It also stimulates your body to release the human growth hormone. Arginine appears to stimulate growth hormone by blocking the secretion of the growth-hormone inhibitor somato-
statin. Human growth hormone has been shown to slow and often reverse the aging process.

Arginine also improves exercise performance because it is one of the main ingredients that the liver uses to make creatine – the raw material for increasing your energy. If that weren’t enough, this multi-tasking amino acid also helps to restore sexual function in men with erectile dysfunction. In one clinical trial, researchers at New York University School of Medicine found that men who took 2,800 milligrams of arginine daily for two weeks had renewed sexual performance, specifically improved erection. The New York team believes that arginine works because, as a precursor of nitric oxide, it increases blood flow, which plays a key role in initiating and maintaining an erection.

**L-Ornithine:** Ornithine is a non-essential amino acid that is an important intermediate in the urea cycle, functioning along with arginine to rid the body of ammonia. Like arginine, ornithine supports the production of nitric oxide. Ornithine, therefore, not only supports detoxification pathways, but a healthy cardiovascular system as well.

Ornithine is similar in structure to arginine but, according to longevity authors, Dirk Pearson and Sandy Shaw, it has double the effectiveness of arginine at the same dosage. Animal research has suggested that ornithine, along with arginine, promotes muscle-building activity in the body by increasing levels of anabolic (growth-promoting) hormones like insulin and growth hormone.

Does ornithine have the same effect in humans? One controlled study reported greater increases in lean body mass and strength after five weeks of intensive strength training in athletes taking 1 gram per day each of arginine
and ornithine compared with a group doing the exercise but taking a placebo.

Ornithine also plays a role in helping the body repair itself. In clinical studies on people hospitalized for surgery, generalized infections, cancer, trauma or burns, supplementation with ornithine alpha-ketoglutarate (OKG) has been reported to produce several beneficial effects. A double-blind trial evaluated the effects of OKG supplementation in elderly people recovering from acute illnesses. Those who took 10 grams of OKG per day for two months had marked improvement in appetite, weight gain and quality of life compared with those taking the placebo. They also had shorter recovery periods, and required fewer home medical visits and fewer medications. And there were no ill effects from taking supplemental ornithine.

**Alpha-Ketoglutarate:** One of two ketones derived from glutaric acid, alpha-ketoglutarate is a key intermediate in the Krebs cycle. The Krebs cycle is a complex series of chemical reactions that convert nutrients into energy in the mitochondria. Without alpha-ketoglutarate, all the vitamins and minerals in our food wouldn’t do us a lick of good.

Alpha-ketoglutarate is created in the body, along with arginine and ornithine. But it can also be taken as a supplement. Taken orally, alpha-ketoglutarate is used to treat kidney disease, gastrointestinal disorders, bacterial overgrowth, intestinal toxemia, liver dysfunction and chronic candidiasis. It is also used for improving peak athletic performance, boosting amino acid metabolism in hemodialysis patients and for cataracts.

New evidence shows that, used topically, alpha-ketoglutarate can provide bonus anti-aging benefits. Researchers
in Korea recently investigated the effects of alpha-ketoglutarate on wrinkle formation in sun-damaged skin and found that long-term use boosted collagen formation in the connective tissues within the skin.

**L-Lysine:** This essential amino acid affects bone formation, height and genital function. Lately, however, it’s caused quite a buzz among longevity researchers after a study at the University of Rome found that the combination of 1,200 milligrams of lysine and 1,200 milligrams of arginine was ten times more effective at boosting human growth hormone than taking arginine alone. According to the researchers, pairing the two amino acids resulted in the release of biologically active hormones able to affect cell growth. It’s also thought that a combination of lysine and arginine may increase thymic hormone secretion in older people, partially reversing the immunodeficiency of aging.

Lysine helps thwart aging in other ways, too. It is concentrated in muscle tissue and is important in the absorption of calcium from the intestinal tract and in the formation of collagen. Collagen is an important body protein that is the basic matrix of connective tissue, skin cartilage and bone. There is some evidence that lysine may also help prevent osteoporosis through enhancing the absorption and utilization of calcium.

And then there’s heart health. Nobel prize winning scientist Linus Pauling discovered that a variant of LDL (bad) cholesterol called *lipoprotein(a)* has a receptor for lysine. He theorized that specific nontoxic substances called Lp(a) binding inhibitors, such as lysine, can prevent – and even dissolve – existing atherosclerotic plaque buildup in arteries.
**Gamma Amino Butyrate (GABA):** GABA is made in the brain from the amino acid glutamate with the aid of vitamin B6. Discovered in 1950, GABA is the most important and widespread inhibitory neuro-transmitter in the brain, and it helps balance stimulation like anxiety with calm. Taking supplemental GABA induces relaxation, pain relief and sleep. It also helps maintain immunity during times of stress.

GABA is found in high concentration in the hypothalamus, so it plays a significant role in hypothalamic-pituitary function. The pituitary gland is the master endocrine gland affecting all hormonal functions of the body including growth hormone. A study from the First Medical Clinic at the University of Milan in Italy showed that, in all of the subjects studied, plasma growth hormone levels were increased five-and-a-half fold 90 minutes after taking GABA. GABA’s growth hormone elevating effects are so significant, they are said to rival that of potent pharmaceutical compounds.

**L-Glutamine:** This is the most abundant amino acid in the body – and the most used, particularly during times of stress. The immune system and the gut practically live on glutamine. If the body does not produce enough glutamine, muscle loss and immune dysfunction can occur. The gut atrophies, meaning nutrients cannot be absorbed well.

Scientists at Louisiana State University in Shreveport showed that a surprisingly small oral dose of about 2 grams of glutamine raised growth hormone levels more than four times over that of a placebo. Even more exciting, age did not diminish the response, at least in this small study of volunteers, who ranged in age from thirty-two to sixty-four years.

Glutamine is a key to the metabolism and maintenance of muscle, the primary energy source for the immune sys-
tem and is essential for DNA synthesis, cell division and cell growth—all factors that are enhanced by growth hormone. It also crosses the blood-brain barrier into the brain, where it increases energy and mental alertness.

High blood levels of glutamine clearly translate into greater health. In a survey of thirty-three people over the age of sixty, those at the top of the scale of blood glutamine levels had fewer illnesses, lower cholesterol, lower blood pressure and were closer to their ideal weights than people with the lowest levels of glutamine. The low-glutamine subjects had higher rates of arthritis, diabetes and heart disease, while those who were high in glutamine reportedly felt great.

**L-Cysteine:** Yet another nonessential amino acid, cysteine is one of the few that contains sulfur. This allows cysteine to bond in a special way and maintain the structure of proteins in the body.

Cysteine performs a number of functions in the body. It is used to manufacture taurine and glutathione. Taurine is important because it plays a key role in central nervous system function. It also helps to regulate blood pressure, helps maintain good vision and eye function, and aides in thermogenesis (fat burning) and muscle building.

Glutathione is critical for immune system function because it is a powerful antioxidant that ensures healthy cellular function and nerve signal efficiency. While direct glutathione supplementation has proven ineffective at increasing cellular glutathione levels, boosting cysteine levels have proven effective for this purpose.

Cysteine helps strengthen the immune system in other ways as well. It is essential for T-cell production and im-
mune system activation. Cysteine is also a component of human hair and the hormone insulin. Plus, it can be converted into glucose (for energy production) when blood glucose levels are low and this conversion may enhance athletic endurance and prevent muscle breakdown.

**Melatonin:** Normally, the body secretes melatonin for several hours each night as we sleep. A key hormone in the anti-aging medicine chest, studies show that melatonin improves immunity, extends lifespan, regulates your sleep cycles and helps alleviate stress, depression, Seasonal Affective Disorder and jet lag. It may also benefit Alzheimer’s disease.

Melatonin’s biggest claim to fame is its ability to regulate the circadian rhythm and help people with insomnia to sleep. But melatonin is also a potent antioxidant that can easily cross cell membranes and the blood-brain barrier to absorb damaging free radicals. Research also shows that this hormone interacts with the immune system. Plus, some studies suggest that melatonin might be useful for fighting infectious disease, including viral and bacterial infections.

The problem is, melatonin levels decline gradually as we age and may be related to the sleep problems experienced by many seniors. Luckily, melatonin supplements can fill in the gap and stabilize out-of-kilter circadian rhythms. Plus, it is an extremely safe hormone. But, because melatonin impacts sleep cycles, it should only be taken at bedtime.

**L-Theanine:** Theanine doesn’t play a role in boosting growth hormone levels but it does deserve a mention because of its ability to ease stress and improve quality of life.
Theanine is an amino acid derivative of glutamine and believed to be the component of green tea that provides a relaxing and calming effect. Oral doses of 50 and 200 milligrams of theanine given to healthy volunteers promoted alpha brain wave production. Alpha waves are associated with a calm mental state.

Research shows that theanine improves cognition and mood when taken in combination with caffeine. It produces these effects by increasing the level of GABA, as well as the neurotransmitters serotonin and dopamine.

**Vitamin C:** This well-known antioxidant and immune enhancer is one of the most important nutrients. Along with being a powerful biological antioxidant, vitamin C is present in high concentrations in cells and extracellular fluids. Additionally, vitamin C plays an important role in a number of enzyme reactions for the generation of life-essential molecules. Yet, a decline in vitamin C levels is often seen with increasing age.

Vitamin C also has a direct impact on a variety of diseases. When Finnish researchers looked at studies involving nearly 300,000 people over 10 years, they found that taking more than 700 milligrams of C supplements daily reduced the risk of cardiovascular disease by 25 percent. High levels appear to lower the risk of bladder, esophagus, stomach and lung cancers. Studies also show that vitamin C may lessen Alzheimer’s risk by as much as 64 percent and helps to prevent age-related macular degeneration.

Yet, even with all those benefits, scientists are discovering new information on vitamin C all the time. The newest research is looking at vitamin C’s ability to influence growth and immunomodulation—which may have significant implications for longevity and health. While this research is in its early stages, it is extremely promising. But
you don’t need to wait for confirmed results to cash in on the benefits of vitamin C. Even relatively high doses (up to 10 grams) are safe since any Vitamin C not used by the body is shuttled out through the urine.

**Vitamin B6:** Vitamin B6 is the master vitamin for processing amino acids—the building blocks of all proteins and some hormones. Specifically, vitamin B6 helps make and take apart many amino acids and is also needed to make the hormones serotonin, melatonin and dopamine. But that’s just the beginning of vitamin B6’s benefits.

Among its most important roles is vitamin B6’s ability to boosts immunity. According to the USDA Human Nutrition Research Center on Aging, a vitamin B6 deficiency may contribute to compromised immunity common in the elderly.

Vitamin B6 acts like a natural diuretic and helps the body maintain a healthy sodium-potassium balance. It also helps control diabetes, reduces muscle cramps and aids in preventing atherosclerosis. And, this B vitamin helps protect against cancer and environmental pollutants.

Studies also show that vitamin B6 is useful in treating arthritis, skin disorders, asthma, carpal tunnel syndrome and gallstones. It has also shown promise for chronic fatigue syndrome.

While vitamin B6 is part of comprehensive B supplements, it can also safely be taken alone—up to 200 milligrams per day. Since vitamin B6 increases the bioavailability of magnesium, these nutrients are often taken together.

**Niacin:** Also known as vitamin B3, niacin’s biggest claim to fame is its ability modify unhealthy cholesterol levels.
Studies show that niacin lowers triglyceride and LDL cholesterol levels. It also decreases lipoprotein(a) and fibrinogen levels—two compounds implicated in coronary artery disease. But it’s most important job is increasing HDL (good) cholesterol levels.

Low levels of this key nutrient have been found in people suffering from dermatitis, dementia and diarrhea. There is some speculation that taking supplemental niacin can help treat these conditions. Niacin, in the form of niacinamide, has also been used to help alleviate osteoarthritis. Niacin is safe at low to moderate doses, although some forms can cause flushing. It should be overseen by a physician at doses over 1,000 milligrams.

**Alpha Lipoic Acid:** One way to ensure that your body is using insulin efficiently is with alpha lipoic acid (ALA). This multifunctional antioxidant has been used in Germany for over 30 years to improve the insulin response and to thwart free radicals that cause premature aging.

In one four-week study, the effects of ALA were evaluated to see whether oral treatment improves insulin sensitivity. Seventy-four patients with Type 2 diabetes were randomly assigned to receive either a placebo or 600 milligrams of ALA daily. The researchers found that ALA stimulated insulin activity, which safely lowered and stabilized glucose levels. It also made the patients more insulin sensitive and increased their glucose tolerance. More recently, Canadian scientists have discovered that ALA also helps lower blood pressure and reduces oxidative stress.

As an antioxidant, ALA switches off many fat- and water-soluble free radicals in the body and protects DNA. It also re-processes vitamins C and E and other antioxidants to make them more effective. But, don’t look to food for
your supply of ALA. Most foods contain only tiny amounts of this compound. Instead, take 50 milligrams of supplemental ALA daily.

**L-Carnitine:** L-carnitine is another supplement that can improve mental and physical health as we age because it contributes to energy metabolism and improves neurotransmitter function in the brain. In one recent study, centenarians given 2,000 milligrams of L-carnitine for six months experienced significant improvements in mental and physical fatigue and muscle mass. This amino acid works by helping to transfer fatty acids to the cell’s mitochondria for energy production. A study of 110 top athletes taking L-carnitine daily found that their endurance, strength and energy increased by six percent in just three weeks.

But that’s not all L-carnitine does. German scientists report that it also alters glucose metabolism and can reduce the risk of developing diabetes. And if the disease does develop, it is milder and comes on later in life.

Taking 250 milligrams daily works for most people. L-carnitine is particularly helpful for vegetarians since it is found in only small amounts in vegetables, fruits and legumes.

**Coenzyme Q10:** Often described as a “miracle nutrient,” CoQ10 is one of the most powerful and protective anti-aging antioxidants. Not only does it fight free radical damage, new evidence suggests that CoQ10 acts like an anti-inflammatory. But, CoQ10’s most critical role is to protect and create energy within the cells of the heart and skeletal muscles. Since the tissues in the heart demand an enormous amount of energy to function properly, you’ll find a greater concentration of CoQ10 in the heart than
anywhere else in the body. It’s so critically important to our cardiovascular system that low levels are implicated in virtually every form of heart disease, including atherosclerosis, congestive heart failure, angina and even high blood pressure.

Researchers are also discovering that CoQ10 can help a wide variety of ailments, including diabetes, breast cancer, kidney disease, Parkinson’s disease, muscular dystrophy and male infertility. Even everyday maladies can benefit from this multi-talented nutrient. In two clinical trials, CoQ10 reduced migraine frequency and severity. Dentists have also begun using topical CoQ10 to treat gum disease since this nutrient significantly reduces plaque, pocket depth and bleeding. Even wrinkles are getting the CoQ10 treatment!

Since our natural supply of this critical nutrient decreases as we get older, taking supplemental CoQ10 can help keep us energized and vibrant on a cellular level. Think of it as the spark that generates overall good health. To ensure that your body is getting all that CoQ10 has to offer, take at least 30 milligrams daily with a meal containing a small amount of fat to aid absorption.

**Magnesium:** Low magnesium levels contribute to insulin resistance and are a marker for Type 2 diabetes. But it’s also associated with many of the disorders found in people with metabolic syndrome.

In a recent examination of 22 research papers on diabetes, nearly half of all patients were magnesium deficient and a third more had sub-optimal levels. Even in seemingly healthy non-diabetic patients, low magnesium levels have been linked to insulin resistance, glucose intolerance and a high secretion of insulin.
Researchers are also finding that low magnesium levels are implicated in another metabolic syndrome marker: Hypertension. In one study of people with high blood pressure, patients who received magnesium for just four weeks showed a significant reduction in blood pressure compared to those who received a placebo. Magnesium may also have a positive effect on cholesterol and seems to prevent blood platelets from sticking together, both of which contribute to heart attacks and stroke.

The problem is, most of us don’t get enough magnesium. Since it’s difficult to get optimal amounts of this mineral from food alone, it’s important to take a magnesium supplement. To get the most from magnesium, take 250 to 350 milligrams of supplemental magnesium each day.

**Essential Fatty Acids:** All of us need healthy fats in our diet. Some, like omega-9 fatty acids, can be produced by the body itself. But other key fats—specifically omega-3s and 6s—must be obtained through the diet. All three types of healthy fats are critical to optimal health.

**Omega-3:** Omega-3’s, which are found in fatty fish and flaxseeds, have gotten a lot of press over the past decade — and with good reason. It turns out that every cell in our bodies needs omega-3 EFAs to thrive. Studies show that omega-3’s from fish oil promote heart health, discourage runaway inflammation, keep our brain in top form, protect against Alzheimer’s disease, guard against cataracts and age-related macular degeneration, help ensure healthy bones and boost immunity.

Yet, 80 percent of Americans don’t get enough omega-3s. To remedy this deficiency, it helps to eat fish twice a week and to include flaxseeds and flaxseed oil in your diet.
But to make sure you are getting a steady supply of omega-3s, it’s important to take a high-quality fish oil supplement every day.

**Omega-6:** The primary omega-6 essential fatty acids, linoleic acid (LA) and gamma linolenic acid (GLA), are found in many vegetable oils, including canola, soy and safflower oil. But, even though LA can be converted to GLA, this process is often times compromised. Why is this a problem? GLA plays an integral role in maintaining a healthy immune and inflammatory response, as well as hormone regulation. Because of this, it is important to take supplemental GLA to ensure that these functions have the nutritional support they need.

**Omega-9:** Unlike omega-3s and omega-6s, the omega-9 fatty acids are monounsaturated fats produced naturally by our bodies. They are also prevalent in kitchen staples like olive oil and canola oil. Olive oil has been proven to raise good cholesterol (HDL) and lower bad cholesterol (LDL). It also contains more antioxidants than any other oil. For those reasons, olive oil should be the *only* oil in your pantry.

**EAT TO STAY YOUNG**

You are what you eat. That’s why nutrition is one of the cornerstones of good health. Unfortunately, we live in an “anti-nutrition” culture, with an overabundance of processed foods, fast foods and food “products.” The Standard American Diet (S.A.D.) is high in saturated and trans fats, refined sugar, artificial sweeteners, sodium, preservatives, caffeine, pesticides and antibiotic-laced meats.

Our Western diet falls woefully short on fiber, fruits, vegetables, whole grains and healthy fats. These poor eating
habits have lead to rising obesity rates, which has been implicated in coronary heart disease, hypertension, osteoarthritis, sleep apnea, endometrial, breast and colon cancers, and other life-threatening illnesses. In short, our way of eating is killing us!

A healthy diet nourishes every part of the body, prevents disease and helps us live a long, energetic life. Instead of relying on the highly-refined, high fat, nutritionally-bereft foods typical on America’s dinner tables; focus on foods that pack a powerhouse of nutrition. Specifically, adopt a diet that emphasizes the following:

- Organic fruits and vegetables, including raw vegetables;
- Seeds and nuts;
- Omega-3 fatty acids in cold water fish and flaxseeds, as well as omega-9 fatty acids found in olive oil;
- Whole grains;
- Legumes, such as beans and lentils;
- Lean, free-range meat and poultry; and
- Organic low-fat dairy foods.

The Mediterranean diet has garnered a lot of attention over the past few years because of research indicating that populations living in the region and following a traditional diet have lower rates of heart disease and death. In a recent study of 22,000 Greeks eating a traditional Mediterranean diet, researchers found that the population experienced markedly lower rates of mortality, especially death from cardiovascular disease and cancer. The traditional diet is high in vegetables, fruits, legumes, nuts,
grains (particularly whole grains) and olive oil. It is low in saturated fat, meat and poultry, but moderate in yogurt and cheese. Fish intake is fairly high, and alcohol consumption is moderate (generally in the form of wine taken with meals).

A more radical way of eating, known as caloric restriction, is also in the spotlight among longevity researchers. In studies going back to the 1930s, mice and many other species subsisting on a severely calorie-restricted diet have consistently outlived their well-fed peers by as much as 40 percent. Now, researchers at the Salk Institute for Biological Studies have discovered the secret of how persistent hunger promotes long life and identified a critical gene that specifically links calorie restriction to longevity.

In calorie restriction, nutritional choices are very important. Calorie-poor, nutrient-dense foods such as vegetables are chosen over sugars, high carbohydrate items and other foods. Anyone using a calorie restriction diet should be well-educated on nutrition and have regular check-ups with their doctor. On average, the typical American consumes between 2,000 and 3,000 calories per day. Someone practicing calorie restriction may consume between 1,500 and 2,000 daily calories.

While more research needs to be done on how calorie restriction impacts human longevity, it has been shown to lower blood pressure, improve the function of heart, veins and arteries, and lower blood glucose levels.

**MOVE IT OR LOSE IT**

A wholesome diet is a powerful part of a healthy lifestyle, but it can’t boost longevity by itself. Exercise is also key. Yet only 16 percent of the U.S. population exercises on a regular basis. Whether it’s walking, lifting
weights at the gym or spending the day on the golf course or tennis court, regular physical activity can add years to your life and dramatically reduce your risk of disease.

The minimum amount of exercise you should get to improve or maintain good health is a half-hour of exercise five days a week. That’s the minimum. If you enjoy the benefits of physical activity, shoot for 60 minutes of exercise every day.

The best workout combines both aerobic (cardio) exercise and strength training (i.e., weight lifting or resistance exercise). Ideally, you should try to get 30 to 60 minutes of aerobic exercise at least five days per week and 30 minutes of strength training three days a week. Not only will this routine keep your weight down, your bones strong and your muscles toned, it can reduce the effects of free radical damage by increasing your circulating antioxidant levels.

Of course, there are other benefits from adopting a regular exercise routine. Increased stamina, better balance, an improvement in mood, more self-confidence, a boost in energy, better quality of sleep and an improved sex life are all attainable just by exercising. There isn’t a drug in the world that can provide that many life-enhancing benefits.

**STRESS LESS**

Many of us are overworked, over-scheduled and overstressed. The National Mental Health Association estimates that 75 to 90 percent of all doctors’ visits are related to stress. Extended stress is associated with insomnia, hypertension, heart disease, ulcers and irritable bowel syndrome, to name just a few.

Studies have shown that people who meditate on a regular basis have higher DHEA and melatonin levels, a 30 to
50 percent reduction in cancer and heart disease, lower blood pressure and oxidative load, reduced AGEs, and a prolonged life expectancy – up to 10 additional years!

Of course, there are times when long-term stress relief isn’t practical—times when you need to control acute stress, now! For an instant stress break, find something to laugh at. Recent studies have shown that laughter increases the body’s tolerance to stress, improves immunity and lowers blood pressure. Another quick way to decompress is through progressive muscle relaxation. Simply take a few deep breaths, exhaling slowly. Then mentally scan your body. Notice spots that feel tense or cramped and quickly loosen up these areas. Let go of as much tension as you can. Rotate your head in a smooth, circular motion once or twice. Roll your shoulders forward and backward several times. Let all of your muscles completely relax. Take another deep breath and exhale slowly. You should feel relaxed.

SLEEP MORE

To age successfully, it’s important to get a good night’s sleep. The greatest human longevity is found among those who average seven to eight hours of sleep a night. Even losing sleep for a few nights can increase your stress hormone levels, interfere with your metabolism and cause memory problems. Lack of sleep can also cause a variety of ailments ranging from loss of energy to depression. Chronic sleep deprivation can compromise your immune system and make you more susceptible to infections.

Here are some tips to help you get a good night’s sleep. First, try to exercise at least five hours before you plan to go to bed. It’s also important to limit caffeine to the morn-
ing hours since it can linger in your system for up to 12 hours. When you do go to bed, adopt a routine to let your body know that it is time to relax – a warm bath, soothing music or a glass of warm milk often does the trick. And make sure your bedroom is as quiet and as dark as possible to encourage melatonin production.

### LONG IN THE TOOTH

Most of us don’t make the connection between good dental care and heart disease. But some new studies have found that patients with gum disease and tooth decay are at an increased risk for heart disease.

In one study, Dr. Pirkko J. Pussinen, from the University of Helsinki, looked for antibodies to two common types of dental bacteria in the blood of 1,163 men. Antibodies are chemicals produced by the body to fight infection and are an indirect way of determining whether a particular bug is present. Men with antibodies to the dental bacteria were 50 percent more likely to have heart disease than men without these antibodies. Gum disease has also been linked to higher LDL and total cholesterol. The lesson here is that brushing and flossing are important, not only for your smile, but for your heart. And regular visits to your dentist are essential.

### BREAK BAD HABITS

It should go without saying, but even some health-conscious people have bad habits they just can’t seem to break. But there aren’t any magic supplements or superfoods that will make up for smoking or overindulging in alcohol. These bad habits will undermine all of your other efforts and will shave precious years off your life.
Smoking kills an estimated 440,000 Americans every year. In fact, smokers cut an average of 14 years off their lives. And you aren’t just hurting yourself. The American Lung Association reports that nearly 50,000 non-smoking adults die every year from secondhand smoke. And yet, almost 25 percent of men and slightly more than 20 percent of women in the U.S. continue to smoke.

Yes, quitting is hard. But there are a number of ways to stop, including smoking-cessation programs, acupuncture, herbal extracts, homeopathy, Traditional Chinese Medicine (TCM) and even pharmaceutical drugs. Even if you have tried to quit in the past, try again. Eventually, you will find the method that will help you quit for good.

Alcohol, on the other hand, is a bit more ambiguous. A little can improve heart health and guard against stroke and the development of gallstones. But more than that increases the risk of liver disease, cancer and alcohol abuse.

While moderate amounts of alcohol are safe for most people, those with certain health conditions shouldn’t drink any alcohol, as even small amounts could cause problems. Don’t drink alcohol if you have a history of hemorrhagic stroke, liver or pancreatic cancer, evidence of precancerous changes in the esophagus, larynx, pharynx or mouth, or a family history of alcoholism.

LIVE LONG AND PROSPER

While we all inherit a set of unique genes from our parents that make us prone to certain diseases, the certainty of developing these health problems isn’t cast in stone. As you can see, there is much you can do to prevent disease and enhance both the quality and quantity of your life.
A growing number of scientists are beginning to suggest that it is possible for humans to live to 120! But it won’t happen by itself. Taking an active role in attaining and maintaining good health—using the tools in this booklet—can help you get there.


