How to Beat the Winter Blues

PAGE 8

Food Pairings That Boost Nutrition
PAGE 14

Healthy Aging at a Cellular Level
PAGE 16

Stress and Our Chromosomes
PAGE 28
## Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>From the Editor</td>
</tr>
<tr>
<td>5</td>
<td>Nutritional News</td>
</tr>
<tr>
<td>6</td>
<td>Fitness</td>
</tr>
<tr>
<td>6</td>
<td>Hydration 101</td>
</tr>
<tr>
<td>12</td>
<td>Lifestyle</td>
</tr>
<tr>
<td>12</td>
<td>Rightsize Your Worries – Don't Sweat the Small Stuff</td>
</tr>
<tr>
<td>14</td>
<td>Nutrition</td>
</tr>
<tr>
<td>14</td>
<td>Food Pairings That Boost Nutrition</td>
</tr>
<tr>
<td>20</td>
<td>Herbs &amp; Supplements</td>
</tr>
<tr>
<td>20</td>
<td>Olive Oil</td>
</tr>
<tr>
<td>22</td>
<td>Family Health</td>
</tr>
<tr>
<td>22</td>
<td>15 Ways to Make the New Year Your Healthiest Year Ever</td>
</tr>
<tr>
<td>24</td>
<td>Winter Skin Care</td>
</tr>
<tr>
<td>26</td>
<td>Foods That Fight Stress</td>
</tr>
<tr>
<td>28</td>
<td>Stress and Our Chromosomes</td>
</tr>
<tr>
<td>31</td>
<td>Ask the Expert</td>
</tr>
</tbody>
</table>

## Features

8   How to Beat the Winter Blues
16  Healthy Aging at a Cellular Level
I can hardly believe 2012 has already come and gone. The New Year marks the 7th anniversary of publishing this magazine. It’s fun to look back and see how much information we have covered. It feels like only yesterday I was brainstorming with a group of friends and coworkers, discussing the idea of what a magazine like this would be.

Throughout the years, I have had a wonderful time watching the staff grow and learn. It’s great to see people who are truly passionate about their work. I hope that you are growing and learning along with them. I know I certainly am; every issue that we compose presents new opportunities for me to focus on new facts or discover a new way of looking at health and wellness.

If you’re reading this magazine, the chances are pretty good that you are passionate about living a healthy and fulfilling life. This is the same attitude I see in the people who work so hard to bring the magazine to print. I believe that together we make up a group of like-minded individuals who, when armed with the right knowledge, can accomplish anything.

I look forward to the coming year and many more after that because every day new discoveries are made. It has been our goal to stay current with nutrition knowledge and develop the best methods to present information to you in a format that helps you improve your own life.

Our Art of Growing Young staff has been working for seven years to bring vital health and nutrition knowledge to you so you can stay up to date. Whether you have been with us from the beginning or you are just now reading your first issue, I hope you enjoy our magazine and find much happiness in the coming year.

Dwight L. Evilsizer, M.D.

Happy New Year!
Looking for a way to help protect your vision?

Set your sights on kidney beans. Kidney beans (as well as oysters, beef, poultry and pumpkin seeds) are rich in zinc, which helps transport vitamin A from the liver to the retina where it helps produce eye-protecting melanin.

Close Relationships

The old phrase “Take two pills and call me in the morning” may soon be replaced with “Make two friends and call me next week.” An analysis of 300,000 people recently discovered that having good-quality (not quantity) friends gave people a whopping 50 percent better chance of living longer than people without those close relationships. In some ways, not developing and maintaining close friendships can be as life threatening as an obese, sedentary lifestyle.

Increase the quality of your sleep

Restless nights may be due to digital distractions such as TVs, computers, etc. Banning cell phones, computers, tablets and televisions from the bedroom can help increase the quality of your sleep and reduce the amount of time it takes to fall asleep. These devices tend to get our minds racing, which makes falling asleep much harder. The blue spectrum light emitted by electronic screens also interferes with secretion of melatonin, the primary sleep hormone. For best results, enter your digital-free, darkened bedroom at least 30 minutes before your actual bedtime and spend that half hour winding down and mentally preparing for sleep.

Stay hydrated

to help keep the afternoon slump from affecting your life. Symptoms of dehydration (including lethargy) begin when just 2 percent of your body’s water volume is lost. This coincides with the beginning of feeling thirsty. Putting off a glass of water until you actually feel thirsty means you have waited too long and feelings of fatigue can double at this point. Keeping a water bottle at your desk or in your purse is a simple way to help stay hydrated and energized.
“The first trick to staying hydrated is to understand that when it comes to your daily water intake, the best drink is pure water.”
Humans cannot survive more than just a few days without water. The more active your lifestyle, the faster your body will lose water. But even people who are only moderately active could benefit from drinking more water.

Roughly three-quarters of the human body is composed of water. That’s an incredibly high amount when you stop to think about it. Where is all this water stored? Two-thirds of all the water in your body is intracellular fluid, meaning it is inside your body’s cells. The remaining third can be found in plasma, interstitial fluid, transcellular fluid and the contents of the organs. With so much water contained throughout the entire body, doesn’t staying hydrated seem even more important than ever?

The first trick to staying hydrated is to understand that when it comes to your daily water intake, the best drink is pure water. Other liquids such as teas, coffees, alcoholic beverages and caffeinated sodas all act somewhat as diuretics, meaning they can cause a loss in water by promoting excess urination. Juices labeled as 100 percent juice and zero-calorie sports drinks are better choices, but nothing is better for your body than fresh, clean water.

Some experts believe that because of a gradually decreasing thirst sensation, people become chronically and increasingly dehydrated at the cellular level from an early adult age. The older we get, the more this happens, which makes the effort to consume enough water even more important. The most common advice is that every person should consume eight 8-ounce glasses (about two quarts or two liters) of pure water every day. Active people and anyone who spends time outdoors in the summer should consume even more.

It is vital to stay hydrated while exercising or when exposed to high temperatures. But other times of your day can be just as important. For example, drinking a glass of water 20 to 30 minutes before eating can help control portions and aid in the digestive process. It’s also important to consume water before you exercise. By the time you begin to sweat, you may already be becoming dehydrated.

Considering the source of your water is important too. In the developed world most tap water is disinfected with chlorine or chloramines. These potent oxidants kill the bacteria and viruses responsible for many water-borne infectious diseases. Unfortunately, drinking chlorinated tap water means consuming residual chlorine and its by-products that can kill the beneficial bacteria living in our intestines as well as increase oxidative stress (free radicals) in the body. In turn, this places a greater demand on the body’s antioxidant reserves.

There are several methods to avoid these problems. Carbon-block filtration is the most popular and most cost-effective point-of-use purification method. From faucet adapters to “pour through” pitchers, these systems will remove chlorine from drinking water and improve its taste. There are also carbon-block filtration systems that are capable of removing lead and many other chemicals.

Health factors aside, many people don’t drink enough water simply because they don’t like the taste. After years of drinking sugary juices and sodas, water can taste too bland. For these people, a few drops of lemon or lime juice are often the only thing needed to add a little flavor and make water more palatable.

If you think you may be one of the many people who could benefit greatly from drinking more water, try this: Drink one medium-to-large glass of water as soon as you wake up; drink another 20 minutes before breakfast, lunch and dinner. And be sure to stay properly hydrated while exercising. Do this for several months and you will be able to clearly feel if any of your health problems may have been related to chronic cellular dehydration. If you begin to feel better, you’ll be a confirmed water addict for life.
“Sunlight is one of the best natural mood enhancers available because sunlight helps the body produce mood-enhancing vitamin D.”
The winter blues are not unique to you (although it’s easy to feel that way sometimes), and there is scientific evidence for why they occur. The two biggest factors are environmental and social. But both can be blamed on winter weather.

Sunlight is one of the best natural mood enhancers available because sunlight helps the body produce mood-enhancing vitamin D. There have been multiple studies over the past several years that link low levels of vitamin D in the body with gloomy moods. Looking at it from the other direction, higher levels of vitamin D can help keep a smile on your face and chase away the winter blues.

Getting enough vitamin D can be problematic during the winter because the days are so short and the temperature is so low, and the amount of vitamin D-creating ultraviolet light is much lower than in spring, summer and early autumn. We have fewer hours of daylight in which to be outside, and often we think it’s too cold to go outdoors. If you can spare 20 minutes outside during your lunch break with the sun shining on your face, you may notice a significant boost in your mood—even though winter sun does little to produce vitamin D in your skin, it does have other benefits to the brain, which are not yet well understood. Most people who live in nontropical parts of the globe need to rely on supplements to get adequate vitamin D in the winter. On days when the sun doesn’t shine, getting exposure to bright lights in the morning (10,000 lumens) for at least 30 minutes can significantly improve mood, especially in people prone to seasonal affective disorder (SAD).

It’s also important to note that in the latitudes where winter is coldest, the winter sun is lowest on the horizon, so the sun’s rays travel through a lot more of the atmosphere. Therefore, they contain less of the vitamin D-producing ultraviolet B (UVB) rays. To counteract this, you may need to spend a little more time outdoors with the sun shining on your face.

If you just can’t stand the cold weather, vitamin D can also be obtained from certain fortified foods and high-quality supplements. If you choose this route, keep in mind that more and more doctors and nutritionists are stating that the current accepted daily value of 400 IU per day of vitamin D is probably insufficient for most people. This can be especially true in the winter when we need all we can get of this mood-enhancing vitamin. Many experts are beginning to recommend at least 1,000 IU per day, and many suggest as much as 4,000 IU daily. The European Union recently raised the official upper safe level for vitamin D intake from 2,000 IU to 4,000 IU daily, though many vitamin D researchers suggest it should be 10,000 IU. Summer sunlight stimulates as much as 10,000 to 20,000 IU of vitamin D production in less than an hour of whole-body midday exposure without sunscreen.

The other major factor behind the winter blues is rooted in social practices. Cold weather and short days often keep us cooped up in our homes and offices. We tend to spend more time alone on the couch in front of the television and less time being physically active or with groups of friends.

We all know physical activity is good for the body, but did you know it is good for the mind and mood as well? Exercise causes the body to produce endorphins, which are natural chemicals that literally cause you to feel good. Even more amazing is that the more you exercise (within reason, of course), the more of these feel-good chemicals your body will produce. They add up quickly to boost your mood and get rid of the winter blues.
VITAMIN-E-COMPLEX
A top quality, focused Vitamin E solution

A simple, quality supplement that harnesses the natural potency of Vitamin E in helping to support and protect your cells from oxidative damage.◊ This product contains all eight isomers that make up the Vitamin E family.

◊ 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. Food supplements should not be used as a substitute for a diversified diet.
There are countless ways to exercise during the winter, both indoors and out. If you can make time for skiing, ice skating, snowshoeing or any other outdoor activity, you will also give your body exposure to mood-boosting sunlight. However, there are many indoor options as well, for when the temperature is just too cold.

In addition to boosting your mood, exercise also helps regulate sleep. And since lack of sleep is another major contributor to depressed moods, being more active in the daytime can help alleviate restless nights to leave you feeling alert and happy in the morning. A full night of deep, healthy sleep can do wonders for beating the winter blues.

Getting off the couch doesn’t just mean getting physically active, it also means spending time with positive-minded friends. It’s easy to succumb to negative feelings during the winter, often without realizing it. But optimistic feelings are just as influential in your life. Surrounding yourself with positive-minded people who motivate you, while at the same time moving away from negative, detrimental relationships, is one more way to keep depression at bay during the winter. As you find yourself focusing more and more on joy and the positive aspects in your life, you will quickly see more opportunities for happiness to come into your life.

One final way to help beat the winter blues is to make sure you are eating a healthy, well-rounded diet. The foods we eat can have a major impact on how we feel physically and emotionally. Unhealthy meals that are high in sugar and fat tend to make us feel sluggish and drowsy afterward. If you’re already feeling like you are experiencing the winter blues, these foods will only make those feelings worse. Conversely, healthy foods that supply longer-lasting, more stable energy will help avoid lulls in energy and keep you feeling energized and sharp.

Some foods offer a little extra benefit for dealing with mood. The B vitamin complex and omega-3 fatty acids are among the most beneficial. B vitamins play a critical role in producing the brain chemicals that affect mood. Vitamin B is found in abundance in meats such as turkey, tuna and liver but can also be found in whole grains, potatoes, bananas and yeast products. If your regular diet doesn’t provide enough vitamin B, it may be helpful to try a daily supplement (make sure it contains vitamin B-12).

Omega-3 fatty acids may be among the absolute most important nutritional factors in chasing away the blues. In recent years there has been an explosion of research into omega-3 fatty acids for their possible role in mental health and mood. Their best natural source is fresh fish, but you can also find omega-3s in some plant-based sources such as flax, kiwifruit and chia seeds. However, just like vitamin B, if your diet does not contain enough, you may find that supplementing helps to improve mood.

The cold weather and shorter days of winter do not mean you have to give in to feelings of sadness and depression. When you find your mood starts to drop, keep in mind that a little extra sunshine and an hour of exercise followed by a nutritious meal eaten in good company may be the perfect recipe for chasing away the winter blues.
“Keeping in the habit of using deep breathing, yoga, meditation, sports, music therapy or whatever other stress-reducing exercise you enjoy will be of great benefit during high-stress times.”
One of the worst characteristics of worry and stress is that they can completely overtake your life when they get out of control. Too much worry can be paralyzing; it can stop you from enjoying even the happiest moments of your life. One great way to keep worries from interfering with your life is to learn how to “rightsize” your worries and stop sweating the small stuff.

If you think of worry as a form of stress, you can see how it can be a negative force in your life. Worrying about putting food on the table for your family or about your grades in school may motivate you, but at the cost of added stress. Get into the habit of not “worrying” about issues but instead recognizing them as things that you do or don’t want in your life, and change your focus to the solution and the success associated with the solution.

The second step in rightsizing worries is figuring out what you can control. No matter how big or small your worry is, if there is truly nothing you can do to influence the situation, you should let go of that particular worry. For example, if you are worried about a meeting you will have with your boss in the morning but you have already done everything you can to prepare for it, then allowing yourself to worry will not help the situation. Worrying about it will only create more stress for you. Again, it is much better for your health to focus on the solution.

At times like this, you need to change your focus. Instead of worrying about the meeting, focus on having a nice evening with your family. Pay attention and hold on to the feelings of happiness you get out of their love. Soon you will be so focused on the joy around you that you will forget to worry about the meeting. Better still, when you do think about the meeting, your mind will be focused on positives, so the actual worry won’t feel nearly as strong.

As worries come throughout the day, always ask yourself: Can I do anything about this worry? If you answer “no,” you can safely let go of that particular worry. Eventually, this process will become second nature and worries will come and go before you realize you processed them.

Worries of all sizes often come at night as we try to fall asleep. The longer we focus on them, the bigger they feel and the harder it is to fall asleep. When this happens, it is once again time to change your focus. First, break the negative thought pattern by recognizing what it is. Allow yourself to acknowledge that you are feeling worried, but also realize that there is nothing you can do about it at this moment. Then consciously shift your thinking to something pleasant, such as a pleasant memory or an upcoming event that is sure to be filled with joy.

There will always be worries and stress in life. That is inevitable. The more you can right-size your worries, the better quality of life you will have. However, because there will always be some amount of worry, it is also very beneficial to adopt stress-reducing activities. During relatively calm periods of life, you may only need to do them once or twice a week. But keeping in the habit of using deep breathing, yoga, meditation, sports, music therapy or whatever other stress-reducing exercise you enjoy will be of great benefit during high-stress times.

Rightsizing your worries keeps you from overwhelming yourself with stress and negative thoughts. When you don’t sweat the small stuff, there is more room in your life for joy and happiness.
“The next time you want a truly bone-healthy snack that offers maximum nutritional value, try combining a calcium-rich, low-fat dairy product with nuts, oatmeal, fortified cereal or other foods that contain magnesium.”
The easiest way to define synergy is to say that with synergy, $1 + 1 = 6$ or more. In the case of many antioxidants, the equation is far greater. Perhaps as high as $1 + 1 = 20$!

For example, calcium and vitamin D are both good for bone health on their own, but when they interact with each other in the body, they offer even greater protection. When magnesium is added, further synergy is created and your bone health can improve greatly over a scenario when the nutrients are ingested separately. Furthermore, it is now known that supplementing just with large amounts of calcium alone can actually be detrimental, yet magnesium and calcium taken together support healthy bones.

The next time you want a truly bone-healthy snack that offers maximum nutritional value, try combining a calcium-rich, low-fat dairy product with nuts, oatmeal, fortified cereal or other foods that contain magnesium. Afterward, spend a few minutes out in the sun to ensure your body is able to produce the vitamin D needed to complete the synergistic relationship.

Spices are full of antioxidants capable of working together in the body to improve their abilities to quench free radicals. Properly pairing these spices can have massive synergistic effects. When an antioxidant quenches a free radical, it will either harmlessly decompose or it will borrow an electron from another antioxidant to replenish itself. If it does the latter, the antioxidant will be able to neutralize yet another free radical. Groups of antioxidants work together, lending each other electrons so they can continue to fight free radical attacks. These groups are known as networks, and the way they work together makes them exceptionally good at neutralizing free radicals in order to protect the body from many of the effects we associate with aging. This is one of the major reasons that the groups of antioxidants known as OPCs and polyphenols are so good for antioxidant protection – because of their multiple chain lengths, they inherently form an antioxidant network.

When cooking, use a wide variety of spices in your dishes to give your body a vast supply of antioxidant networks. Pairing these spice combinations with fresh fruits and vegetables will further boost antioxidant support. One of the best spices to use liberally is turmeric. It is relatively tasteless and is known as a major component in the Indian diet that promotes many aspects of good health.

Many vegans and vegetarians know the importance of pairing foods because they need to do this in order to consume all the essential amino acids necessary for protein synthesis in the body. While the protein in lean meats provides the full spectrum of amino acids required by the body to build and repair muscle tissue, there is no singular plant source for these amino acids. However, by combining foods from two or more incomplete proteins, a complete protein can be created. The amino acids that may be missing from one type of food can be compensated by pairing with another food that contains that missing amino acid. When these foods are eaten in combination at the same meal, you are giving your body all the essential amino acids it requires. Two of these combinations pair certain grains with legumes and high-quality (grass-fed) dairy with seeds and grains.

These are just a few examples of how to boost nutrition by combining complementary foods. The best and easiest way to ensure that your diet contains nutrition-boosting food pairings is to simply eat a wide variety of fresh fruits and vegetables, as well as lean sources of protein such as chicken and fish, dairy products (if you are not sensitive to them), and whole grains (if you are not overweight). Learning to pair your foods properly will introduce you to a whole new world of flavors and a whole new level of nutritional support.
Feature Article

“A few practices that work for almost everyone are listening to relaxing music, physical exercise and talking with friends.”
The process in which our cells age and eventually die, called senescence, is due to the shortening of chromosomal telomeres in our cells. Every cell in the human body contains chromosomes that store our DNA. On either end of every chromosome are molecules called telomeres that serve to protect the chromosomes from degradation caused by the loss of important base pairs of DNA sequences at their ends.

Every time a cell divides, a portion of the chromosome-protecting telomere is lost. Eventually the telomeres become too short to protect the chromosome, and the chromosome loses its ability to replicate. At this point, we can think of the cell as being too old, and it dies through a process called apoptosis. The human body uses telomerase enzyme to maintain a healthy length of the telomeres and to repair them when they get too short. However, eventual cell death is a natural process that happens to all cells except our long-lived stem cells, which live for many years, some perhaps for our entire lifetime. Intriguing studies today suggest that it is in fact possible to lengthen the life span of and repair damage within stem cells by activating the enzyme telomerase, which may even extend the life span of non-stem cells.

Due to the shortening of telomeres after cell division and the subsequent shortening from telomerase enzyme, the life span of a cell can be visualized as a windup clock. If you can keep a clock wound (in this case by providing the telomerase enzyme and avoiding damage), the clock will continue to function. Theoretically, cells may become essentially immortal and continue to replicate indefinitely, which in turn keeps the body young. However, if you are unable to keep winding the clock, it will eventually stop.

This metaphor is intriguing because it hints at some very exciting antiaging possibilities. But the truth of the matter is that we have no way to totally stop the aging process, but in the case of senescence and telomeres, we may have ways to slow it down. That could allow us to wind the clock a few more times before it stops ticking.

Even though the human body has functions that replenish telomeres in order to keep cells alive longer, emerging research is suggesting that other factors such as high levels of stress, poor nutrition, excessive environmental and dietary pollution, lack of sleep, and other factors can cause our telomeres to shorten prematurely.

Why are telomeres so important?

While replicating DNA, enzymes are not able to replicate the sequences at the ends of the chromosomes. That is why they often become shortened. Therefore the ends of the chromosomes need to be protected so the important information they contain does not get lost but is pasted onto the new cells generation after generation. Telomeres cap these end sequences and sacrifice themselves in order to protect the vital DNA. After replication, stem cells use telomerase enzyme to replenish the telomere cap.

The actual length of telomeres varies quite a bit from species to species. Simple yeast has around 300 base pairs, but humans can have thousands of base pairs, effectively giving them a much longer life span. When telomeres shorten to a length of three kilobases or less, they are considered “critically short” telomeres. Healthy young people have telomere lengths of eight to 10 kilobases. Telomere shortening in humans is thought to be responsible for many of the negative effects of aging we see. For example, shortened telomeres are currently thought to impair immune function and could be a factor in increasing the risk of developing dementia.

The process in which our cells age and eventually die, called senescence, is due to the shortening of chromosomal telomeres in our cells. Every cell in the human body contains chromosomes that store our DNA. On either end of every chromosome are molecules called telomeres that serve to protect the chromosomes from degradation caused by the loss of important base pairs of DNA sequences at their ends.

Healthy Aging at a Cellular Level

Just as humans have a natural life span, so does each of the trillions of cells in our bodies. While many people tend to think of aging as a process from the outside in (I see the changes of age on my skin, so my cells on the inside must be aging too), the opposite is more correct. We age visibly on the outside because of what is going on inside. As our internal cells age, it becomes more and more visible on the outside – the area we see physically.

Due to the shortening of telomeres after cell division and the subsequent shortening from telomerase enzyme, the life span of a cell can be visualized as a windup clock. If you can keep a clock wound (in this case by providing the telomerase enzyme and avoiding damage), the clock will continue to function. Theoretically, cells may become essentially immortal and continue to replicate indefinitely, which in turn keeps the body young. However, if you are unable to keep winding the clock, it will eventually stop.

This metaphor is intriguing because it hints at some very exciting antiaging possibilities. But the truth of the matter is that we have no way to totally stop the aging process, but in the case of senescence and telomeres, we may have ways to slow it down. That could allow us to wind the clock a few more times before it stops ticking.

Even though the human body has functions that replenish telomeres in order to keep cells alive longer, emerging research is suggesting that other factors such as high levels of stress, poor nutrition, excessive environmental and dietary pollution, lack of sleep, and other factors can cause our telomeres to shorten prematurely.

Why are telomeres so important?

While replicating DNA, enzymes are not able to replicate the sequences at the ends of the chromosomes. That is why they often become shortened. Therefore the ends of the chromosomes need to be protected so the important information they contain does not get lost but is pasted onto the new cells generation after generation. Telomeres cap these end sequences and sacrifice themselves in order to protect the vital DNA. After replication, stem cells use telomerase enzyme to replenish the telomere cap.

The actual length of telomeres varies quite a bit from species to species. Simple yeast has around 300 base pairs, but humans can have thousands of base pairs, effectively giving them a much longer life span. When telomeres shorten to a length of three kilobases or less, they are considered “critically short” telomeres. Healthy young people have telomere lengths of eight to 10 kilobases. Telomere shortening in humans is thought to be responsible for many of the negative effects of aging we see. For example, shortened telomeres are currently thought to impair immune function and could be a factor in increasing the risk of developing dementia. So anything we can do to slow shortening or actually to lengthen telomeres could help us stay healthier at a cellular level. In turn this can help safeguard against the effects of aging.
**We all like to keep fit - but fitness is about more than just muscles.** Our joints do all the hard work in carrying us around, so it’s important to look after them as part of our well-being. Joint Formula is designed to help support your joints for an active lifestyle and is a precise combination of minerals shown to support normal joints.°
One major factor in helping protect against premature telomere loss is stress management, because there are a great many stress factors that may affect telomere length. These can include stressful job situations, relationship or family problems, poverty, early childhood trauma, diet, fitness level, bad habits (such as drinking excessively and smoking), and much more. Even gender can play a role, as men tend to be less careful about managing stress and consequently tend to have shorter telomeres than women do.

Because there is growing scientific evidence that experiencing too many of these stress factors for too long can prematurely shrink the length of your telomeres, stress management activities and practices are becoming even more important than we previously thought.

Broadly speaking, consuming a healthy diet that is rich in fresh fruits and vegetables can help give you the nutritional support required for healthy stress management, which can be further enhanced by supplementing with a broad spectrum of micronutrients. When it comes down to it, it is simply easier to deal with stress when your body is properly fed and supported nutritionally. On the other hand, a poor diet that is filled with fats, sugars and manufactured foods will tend to make you feel worse both physically and mentally, which exacerbates stress.

Beyond diet, there are many ways to manage stress that could ultimately help protect your telomeres. From yoga to reading, meditation and sports, if you find an activity that helps shed stress and makes you feel good, use it. A few practices that work for almost everyone are listening to relaxing music, physical exercise and talking with friends. But the wonderful thing about antistress activities is there is no one right way to do it. Just find something that works for you and stick with it.

Our bodies have natural ways of replenishing telomeres and helping keep our cells healthy. But everything we can do to provide nutritional support, regular physical activity and stress reduction can further help promote healthy aging at a cellular level.
Herbs & Supplements

“Studies on olive oil have shown consuming the heart-healthy oil may also have favorable effects on cholesterol regulation.”
Due to the war on all fats that has been waged by misinformed diet gurus for the past 20 years, many people have the misconception that all fats and oils are unhealthy. While it certainly is true that you can have too much of a good thing, many fats and oils aren’t just not bad for you, they are actually good for your body. Olive oil is among the best of these healthy oils.

Research and studies have given us a vast amount of evidence suggesting that increasing the amount of monounsaturated fats (such as olive oil) in the diet while reducing the amount of saturated fats may help reduce the risk of developing coronary heart disease.

Olive oil is rich in monounsaturated fats, most notably oleic acid, an omega-9 fatty acid. Western diets tend to contain far too many sources of omega-6 fatty acids and not enough omega-3 fatty acids. A diet that utilizes olive oil can help replace some of these omega-6 fatty acids with olive oil’s omega-9s, which do not support inflammation as most of the omega 6 class does.

Whether it comes from olive oil or any other source, oleic acid is thought to be responsible for helping reduce blood pressure. It also works in the body to help keep cell membranes soft and fluid; this allows helpful anti-inflammatory substances to penetrate the cell membrane more easily.

Studies on olive oil have shown consuming the heart-healthy oil may also have favorable effects on cholesterol regulation. The effect is twofold. First, it may help control the body’s level of “bad” LDL cholesterol. At the same time, it appears to help to raise levels of “good” HDL cholesterol.

In addition to its omega-9 fatty acid content, olive oil also contains several antioxidants not present in other oils. Hydroxytyrosol is one of 30 phenolic compounds in extra-virgin olive oil, all of which are potent antioxidants. Oleuropein is another one that has properties that help regulate blood pressure and prevent the growth of breast cancer cells. These phenolic antioxidants are currently thought to be responsible for many of the health benefits attributed to olive oil.

Olive oil is also popular for uses outside of the kitchen. It is used by many fans of natural health remedies as a skin moisturizer, hair conditioner and earwax remover. It is also widely used as an ingredient in cosmetics and specialty soaps that are purportedly beneficial for dry, scaly skin. While extra-virgin olive oil is used in these practices, any grade olive oil can be used as a shaving oil for facial and body hair. For dietary consumption, however, extra-virgin – the first pressing of oil from the olives, which uses no solvents and then is not further processed – has the greatest health benefits.

Olive oil and other unsaturated oils have a shorter shelf life than other oils. This makes unsaturated oils prone to oxidation. When olive oil becomes rancid, it can produce toxic by-products and an unpleasant, bitter taste. In addition, olive oil has a relatively low smoke point. Once heated above 350°F (177°C), the oil’s unrefined particles are burned, which leads to oxidation and a deteriorated taste. For these reasons, olive oil (especially extra-virgin olive oil) is best consumed fresh and is best suited for uncooked dishes. It should be stored away from direct light and extreme temperatures.

Spain, Italy and Greece are the world’s top producers of olive oil, each with subtle differences in taste and aroma. Olive oil lovers may have a favorite brand or even a favorite region where their oil comes from. But no matter what country your favorite olive oil comes from, it will contain the healthy monounsaturated fats that work to help keep your body healthy.

For centuries, olive oil has been a kitchen staple, especially in Mediterranean countries. Its widespread use in these countries is thought by many health experts to be one of the principal reasons behind the relatively low incidence of heart disease associated with a Mediterranean diet.
The start of a new year always brings with it the promise of change. It’s also the time of year that many of us set new goals and make plans to better ourselves in the months ahead. Here are 15 tips to help make the coming year your healthiest one yet.

1. Wear a Pedometer
Experts recommend taking 10,000 steps every day. Ten thousand footsteps is roughly equivalent to a 30- to 60-minute workout, and once you start watching your pedometer, you will see how easy it is to hit the 10,000-step mark.

2. Set Smaller Goals
The easiest way to sabotage your New Year’s resolution is to make it too hard. Instead of deciding on one big goal, set several smaller ones. Each time you reach a goal, give yourself a small reward. As the rewards pile up, so will your confidence!

3. Discover Your “Why”
It’s fine to say you want to lose ten pounds this year, but if you truly understand why you want to lose that weight and focus on that reasoning, you will be much more likely to continue working toward it. Before settling on any resolution, ask yourself, “Why do I want to accomplish this?”

4. Eat Less
Western societies have seen a surge in meal sizes and waistlines at the same time over the past decade. Many of us don’t even realize that we are eating too much. Two tips to try in order to reduce the amount you eat are to use smaller plates when serving meals at home and to ask for a takeout box before you are served at a restaurant, so you can immediately set aside half of the meal for later.

5. Eat More
Eat smaller meals more often. Some people find that consuming four to five small meals a day is more helpful in terms of weight and appetite control than eating the traditional three larger ones. Small meals made up primarily of fresh fruits and vegetables may be a great way to get healthy and lose excess weight this year.

6. Find a Wellness Buddy
If you partner with a friend who has similar health and wellness goals, you will both be much more likely to reach your goals. Having a friend who counts on you (and whom you count on) keeps both people motivated, as you won’t want to let each other down. Positive-minded friends give lots of encouragement to each other!

7. Try Something New
Eating the same basic foods day after day can get monotonous, which can lead to lapses in healthy eating. Get out of your comfort zone with new and varied fruits and vegetables to keep your taste buds excited.

8. Stay Hydrated
A very basic, yet often overlooked, aspect of healthy living is to stay hydrated. Water helps your body process impurities in the foods you eat, helps prevent hunger pangs between meals, reduces the amount of calories consumed at meals, and helps keep you skin beautiful and vibrant. Drinking a glass of water 20 – 30 minutes before a meal also gets your whole digestive process in gear and causes you to eat a bit less too.

9. Avoid White
Most so-called white foods, such as bread, pasta, table sugar, starchy pastries and even potatoes, are primarily concentrated carbohydrates with high glycemic indexes. It is a good idea to avoid them or at least keep them only as minor contents of your diet.

10. Eat More Fish
There is a multitude of evidence showing that people who eat fish several times a week experience wonderful health benefits. This is likely due to the omega-3 fatty acids found in fish, particularly the omega-3 DHA, which is a health-supporting fatty acid that you need, yet it cannot be manufactured by the body.

11. Avoid Fad Diets
Popular fad diets advertise themselves as being miracles for your health and looks and to control your weight. But more often than not, they are empty promises. Understand that healthy eating and regular physical activity are the only real guaranteed ways to get healthy and lose weight.

12. Relax
When was the last time you set aside time for the sole purpose of relaxing? Most of us can’t even answer that question. Making regular time to relax in the coming year will help keep you feeling good in mind and body.

13. Quit Bad Habits
Make this New Year the year you finally quit at least some bad habits. It might be just one or several ... whether it’s smoking, drinking too much, focusing on negative thoughts or anything else, there is no better time than now to give it up.

14. Change Your Focus
One of the easiest and most powerful ways to experience a change for the better is to simply focus on the positive aspects of your life and let go of negative thoughts. Focusing on positive thoughts will attract more positive thoughts, people and experiences into your life in the coming year. A good way to do this is to remember to pay attention to your feelings, as they are a reflection of your thoughts.

15. Get in Touch With Yourself
Modern living is fast paced, and because of this, we often don’t realize a problem is coming until it is too late to prevent it. Spend time this year paying attention to your body. If your shoulders are tight, your body is probably telling you that you are stressed. Spend a few minutes every night before bed or first thing in the morning “listening” to your body in order to find out what it needs.●
The cold, dry months of winter can be harsh on your skin. Here are some important dos and don’ts for winter skin care that will help keep your skin supple and vibrant during winter.

**Don’t soak in a hot bath.**
There’s no denying that a long soak in a super hot bath is pure bliss during the winter. But the intense heat of the water (in a bath or shower) can break down the skin’s lipid barriers, which can lead to moisture loss. Warm water and less time in the tub are far better for your skin’s health. If you want to pamper yourself, keep the water temperature moderate, but add a little oatmeal or baking soda to the bathwater in order to help relieve dry, itchy skin.

**Do pay extra attention to your hands.**
Skin tends to be the thinnest on your hands. Consequently, it has fewer oil glands, which means it is harder to keep your hands moist and soft than it is other areas of your body. This is especially true during the dry winter months. To avoid itchiness and cracking, you may need to apply moisturizers more often during the day and always wear gloves when you go outside.

**Don’t sit next to an air vent.**
Your home’s heating system may keep the temperature comfortable, but it does so by blasting dry air out of the vents. Sitting next to one for extra warmth can further dry your skin. Using a humidifier to increase the moisture content of the air in your home can help remedy this problem.

**Do eat your fruits and vegetables.**
Fresh fruits and vegetables as well as nuts, seeds, olive oil and fish are loaded with the nutritional support your skin and the rest of your body needs to take care of itself. While the different antioxidants found in fruits and vegetables help protect against oxidative stress, other nutrients are used to repair and rebuild skin and other tissues on a cellular level. Two components of healthy skin as well as most body tissues are collagen and elastin. Collagen acts as both a glue and a lubricant in your skin, holding tissue together but also allowing fibers to slide smoothly over each other. Without collagen, your skin would be neither firm nor pliable. Elastin works similarly to make skin flexible and elastic. Without proper nutritional support as well as adequate fluid intake, your skin can appear much older than it actually is.

**Don’t underestimate the importance of water.**
Help keep your skin (and the rest of your body) hydrated by drinking enough water. Most people tend to drink less water during cold months. We simply don’t think about staying hydrated as much when we’re not exposed to the heat and sweat of summer. However, many people find that just increasing the amount of water they drink in the winter can quickly lead to healthier-looking skin.

**Do make time to pamper yourself.**
It might add a few minutes to your nightly routine, but making time to exfoliate, moisturize and maintain a healthy skin-care regimen will go a long way toward keeping your skin supple and vibrant. After taking care of your skin from the inside out with a diet rich in fresh fruits, vegetables and water, work from the outside in with gentle exfoliating soaps followed by all-natural creams and moisturizers.
This isn’t a new concept. Several years ago, the *Journal of the American Medical Association* published a study that found feelings of tension, frustration and sadness create negative physical reactions in the body. While this particular study focused on heart health, many other studies since then have found a critical link between stress levels and physical health. What is new and exciting is that seemingly every day more and more evidence comes out showing how certain nutrients can help physically protect the body from emotional stress.

Broadly speaking, eating healthy can indirectly affect your stress levels and mood simply by providing your body with the fuel and nutritional tools needed to better deal with the physical changes that stress creates in the body. The more able your body is to cope with stress, the better you will feel emotionally and physically. Conversely, modern convenience foods and refined foods exacerbate emotional stress issues. These foods, which are full of sugar and simple carbohydrates, cause a spike in blood sugar levels that can make you feel agitated and jumpy. The spike then gives way to a crash in blood sugar levels that can leave you feeling tired and irritable. Eating a healthy diet composed of fresh fruits and vegetables, good sources of protein, and healthy fats will give your body nutritional support and at the same time help ensure that you avoid this pattern of high and low energy that can make stress worse.

Even replacing soda, sports drinks and excessive amounts of coffee with fresh, pure water can help combat stress. Your body will simply feel better when it’s taken care of nutritionally, which will help you better deal with negative emotions such as stress. While this broad-spectrum nutritional support is great, there are also particular nutrients that doctors and scientists have observed that help to safeguard against stress in specific ways.

When you experience emotional stress, a chain reaction in the body can cause a significant spike in free radicals. Perhaps even more damaging to your body on a cellular level, the hormones cortisol and adrenalin (that mediate the body’s reaction to stress) can create a lot of highly reactive free radicals. Therefore, foods rich in potent antioxidants such as vitamins B, C and E are well known to help protect against the negative effects of stress. OPCs are an even more powerful yet lesser known antioxidant group. OPCs, or oligomeric proanthocyanidins, are found in high concentrations in grape seeds and pine bark. Consequently, OPC content in red wine is high because the seeds and skins are fermented along with the fruit.

Much like green tea, red wine, fruits and vegetables, cocoa contains powerful antioxidants. In this case, the stress-busting antioxidants are polyphenols. A 1.5-ounce piece of chocolate contains the same amount of polyphenols as a five-ounce glass of red wine. And dark chocolate comes with one added stress-reducing benefit: It can help improve your mood. In addition to its many antioxidants, chocolate contains several mood-enhancing chemicals, including phenylethylamine and serotonin, which help promote feelings of joy and happiness. If you turn to dark chocolate or red wine for combating stress, remember to consume in moderation. In these cases, there can be too much of a good thing.

Complex carbohydrates and fiber-rich foods can also help you deal with stress by stabilizing blood sugar levels. Slowing the rate at which sugar is absorbed into the bloodstream will provide you with a longer-lasting source of energy. This translates to more energy in the afternoons when you might normally be fighting to stay awake when you need to work.

Last, but certainly not least, omega-3 fatty acids are a wonderful tool for fighting stress. One recent study of omega-3 fatty acids found that people who had more of this brain-healthy nutrient in the body were less likely to report symptoms of depression. Omega-3 fatty acids, specifically DHA, are found in abundance in brain and nerve tissue. So it only makes sense that having more of it can help improve mood and fight against stress levels. DHA comes from cold-water fish such as salmon, sardines, herring and mackerel.

Eating healthy is often thought of as a way to stay physically healthy, but the truth is that a healthy diet will help protect you in mind, body and spirit. So the next time you feel your stress levels rising, exercise your diet and make sure you are getting enough of these important stress-fighting foods.

**Foods That Fight Stress**

People who continuously feel too much stress in their lives tend to have an increased risk of developing many health problems. From smaller problems such as muscle tension, headaches and irritability to much more serious issues including cardiovascular disease and cancer, high stress levels are affecting your body.
Chromosomes are organized structures of DNA and protein that are found in our cells. Every cell has 23 pairs of chromosomes, for a total of 46 per cell. A chromosome is a single, coiled-up piece of DNA that contains genes and regulatory elements. Chromosomes also contain DNA-bound proteins, which serve to package the DNA and control its functions.

Chromosomes are generally divided into two categories: autosomes and sex chromosomes (human cells contain 22 pairs of autosomes and one pair of sex chromosomes). Various genetic traits linked to a person’s gender get passed on through the sex chromosomes, while autosomes contain all the remaining genetic hereditary information. Autosomes and sex chromosomes perform cell division in exactly the same way.

On either end of chromosomes is a structure called a telomere. Telomeres act as buffers that prevent chromosomes from fusing to each other or losing important base pairs of DNA sequences at their ends. Every time a cell divides, a small amount of the telomere is lost. If the telomere becomes too short, the chromosome loses its ability to replicate. The cell then becomes “old,” and apoptosis (programmed cell death) occurs. At this point the cell dies, and its parts are recycled. While the body has functions that allow telomeres to replenish themselves, new research suggests that too much stress may prematurely shorten them, causing apoptosis to occur much sooner.

Telomeres naturally shrink as we age. Scientists attribute much of our natural aging process to this. However, new evidence suggests stress may increase the rate of this process, which can lead to premature aging.

A recent study conducted at the Finnish Institute of Occupational Health and published in the journal *PloS* analyzed telomeres in 2,911 people between the ages of 30 and 64. The startling results showed people who work in relatively stress-free environments had significantly longer telomeres than people who experience severe job stress. The study’s results concluded that working in a high-stress environment can make you old before your time on a cellular level. In turn this can cause you to experience illnesses associated with aging even while you remain relatively young.

The same techniques advocated for dealing with stress to alleviate symptoms such as headache, back pain, depression and sleep disturbances will also work to help protect against the damage to telomeres. In fact, a study has shown that an integrative program focusing on healthy diet and stress reduction activities was able to increase the activity of the telomerase enzyme, which is responsible for replenishing telomere length at the end of chromosomes.

While follow-up studies are currently looking at how much of an effect these activities actually have on telomere length, we can already see the benefits of combining stress reduction techniques such as exercise or meditation with a healthy diet and micronutrient supplementation that provides nutritional support to fight stress. This means that the hundreds of thousands of people around the world who already engage in healthy antistress practices are already helping their chromosomes. And for anyone who has yet to begin, it’s never too late to start practicing the Art of Growing Young in order to help protect their telomeres from excessive stress.

The facts are in, and the science is clear; too much stress is bad for our bodies. Too much stress in your life can contribute noticeably to headaches, muscle tension and mood swings. Less noticeable are the changes stress causes inside our bodies, such as on our cells and our chromosomes.
FY Skin Formula tablets provide a carefully selected mixture of key vitamins and minerals shown to support and maintain healthy looking skin. The blend of nutrients in this unique supplement is derived from a specific marine extract. In addition, FY Skin Formula contains Vitamin C known to support the formation of collagen, blood vessels and cartilages as well as Zinc, Vitamins D & E which contribute to the protection of cells from oxidative stress. FY Skin Formula is a great nutritional toolkit which may help you maintain a healthy looking appearance! It also contains 20 mg of hyaluronic acid per serving of 2 tablets.

Beauty begins from within!
Are blueberries still the best superfruit?

While blueberries are still one of the healthiest fruits you can enjoy, other berries are becoming popular for their excellent nutritional content as well. This new group of superfruits include wolfberries (goji; loaded with 11 essential minerals, 22 trace minerals, 18 amino acids and six essential vitamins); acai berries (packed with polyphenol content, fiber and antioxidants); elderberries (rich in nutrition and low in fat and calories); and cranberries (may prevent bacteria from attaching to the walls of the urinary tract). In general, berries are high in nutritional content and low in fat and calories. So the next time you want a nutritional boost loaded with flavor, grab a handful of your favorite berries and enjoy!

Does cold weather really make me sick?

Colds and the flu are seasonal diseases that come with winter, but they are not actually caused by the cold weather. The rise in illness has much more to do with both a lack of sunlight and indoor living conditions. During the winter months we are exposed to far less sunlight, so the body is not capable of producing as much vitamin D, which has been seen to help offer broad-spectrum protection against illnesses such as colds and flu. In addition, spending more time indoors with others simply increases the likelihood of germ transmission. To help minimize your chances of getting sick during cold winter months, take steps to ensure that you are exposed to as much sunlight as possible, have a good source of dietary vitamin D intake, and practice good hygiene habits such as washing your hands and keeping your work space and home clean.

Do I really need to drink eight 8-ounce (240 ml) glasses of water every day?

Maintaining proper hydration has many benefits for your body, but one of the major benefits of making sure you drink your eight glasses of water is that this prevents dehydration. When you feel thirsty, you are already slightly dehydrated and your body will have been experiencing the negative affects of this for some time. Continually drinking throughout the day helps to prevent this from happening. The answer is yes, you should always try to drink eight 8-ounce glasses of water every day. For more information, check out the Hydration 101 article on page 7.
Proanthenols® 100
Support your body in protecting itself from oxidative stress!◊

A high-quality formulation based upon 50 years of research, Proanthenols is built upon Real OPCs, concentrated extract from specific grape seeds and certain types of pine bark found in southern France.

This synergistic formula also includes Vitamin C, which is shown to contribute to the protection of cells from oxidative damage.◊

◊ 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. Food supplements should not be used as a substitute for a diversified diet.