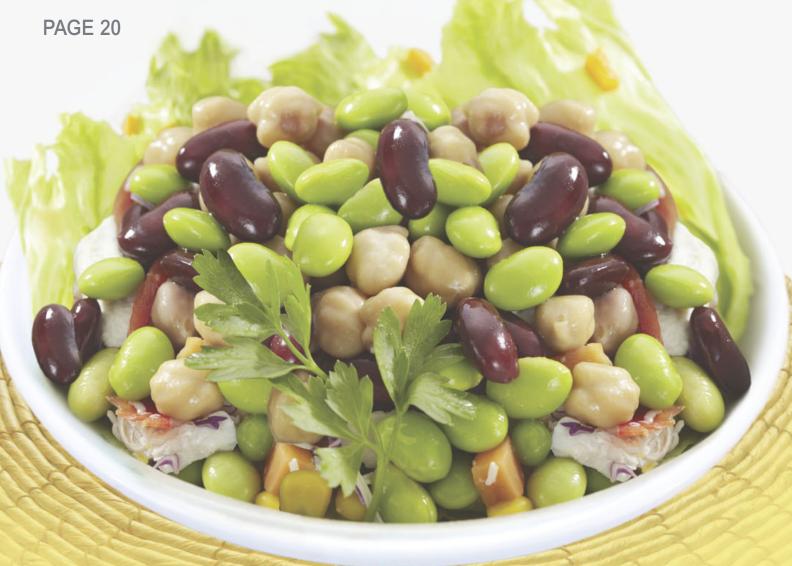
# the art of . Ground Journal Support of the art of . MARCH/APRIL 2012

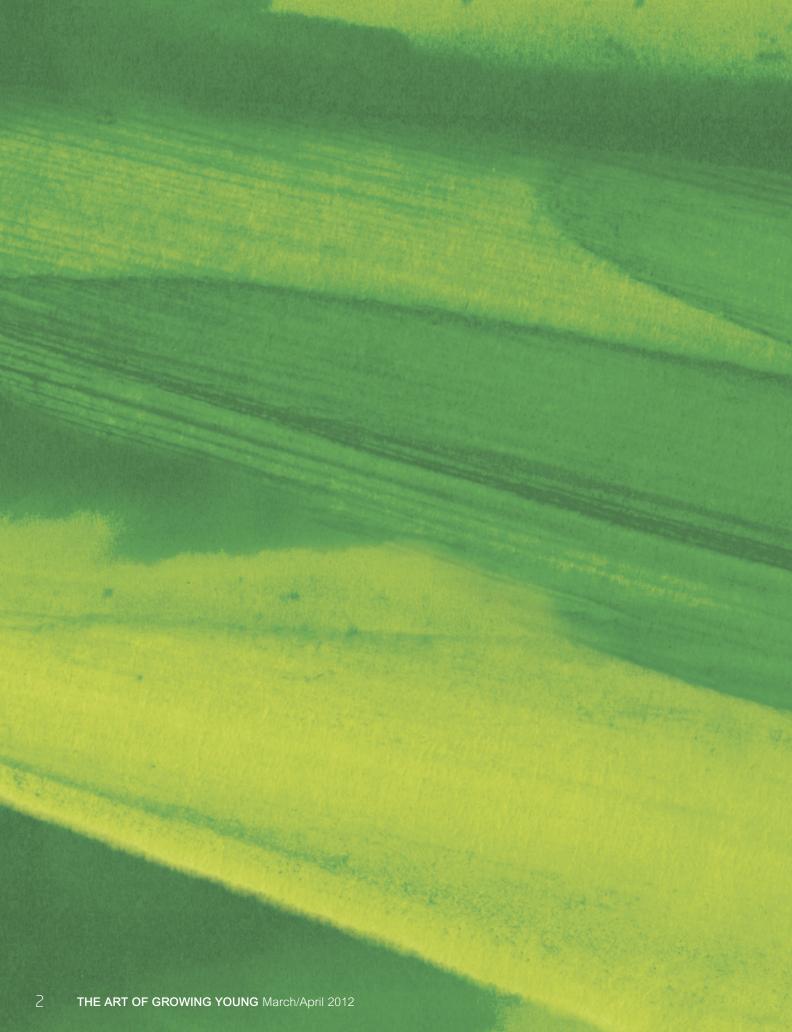
## Why Fiber Matters More Than You Think



Eating For Your Eyes
PAGE 22

What is Healthy Aging?
PAGE 26

Kick the Fast Food Habit PAGE 28



### Contents

- 4 From the Editor
- 5 Nutritional News

#### **Fitness**

6 20 Ways to Make Time for Fitness

#### Lifestyle

Create the You That You Will Be Happy With the Rest of Your Life

#### **Nutrition**

14 Sugar Shock

#### Herbs & Supplements

Why Fiber Matters More Than You Think

#### Family Health

- 22 Eating For Your Eyes
- 24 Migraine Management Part 2
- What is Healthy Aging?
- 28 Kick the Fast Food Habit
- 31 Ask the Expert



# Lifelong Learning



"I strongly believe that in order to stay as healthy and happy as possible, we must all engage in lifelong learning because there will always be something new and helpful to learn."

I like to consider myself a lifelong learner. For me, graduating from college, or even medical school, was not the end of my education. In many ways, it was only the beginning. I strongly believe that in order to stay as healthy and happy as possible, we must all engage in lifelong learning because there will always be something new and helpful to learn. One of the ways I personally continue my education is simply by reading. Books, journals, newspapers, magazines, blogs—one of the great aspects of modern culture is that we can be exposed to new information everywhere we look if we choose. I read something not long ago that I want to share with you.

Researchers at Duke University Medical Center recently published a paper detailing a new discovery that may finally tell us how our DNA is affected by stress. In their study the researchers observed that chronic stress caused adrenaline-like compounds to trigger DNA damage. Since DNA is the very foundation of what we are (our "book of life"), damage to it can have repercussions all over the body.

We've known for some time without a doubt that stress is damaging to the body, but now we have a better understanding of how it works. In time, we can use this to help figure out more and more helpful ways of dealing with stress in order to avoid the negative consequences. Whether that becomes specialized diets containing specific antioxidants or a new outlook on stress-relieving activities, such as biofeedback or practiced relaxation techniques, only time, and more research, will tell.

As far as we have already come, nutritional science is really only in its infancy, which means there is so much more to learn. Ten years ago many doctors hardly thought about nutrition and diet as a means of staying healthy. In ten more years, there is no telling how important food and nutritional supplements may become, because we are constantly learning. I know that I look forward to learning about the new discoveries ahead of us, then looking for ways to apply them to my own life. I hope all of you do the same, because the more we know about how our bodies work, the healthier we can all be.



#### Chickpeas

Fill up on chickpeas to avoid the afternoon munchies. Whether you consume them as a creamy hummus or a hearty salad topper, adding more garbanzo beans to your daily diet may help reduce cravings for unhealthy afternoon snacks. Chickpeas are very rich in fiber, which helps to aid healthy digestion and promote feelings of fullness.



#### Larger Forks

People who have trouble with overeating may find using larger utensils can actually help. Surprisingly, a recent study conducted at an Italian restaurant found that when people used larger forks, they actually ate less. The belief is that bigger forks trick people's minds into thinking that they have eaten more than they actually have. Whatever the reasoning, larger forks and bigger spoons may be one simple way to help cut a few calories out of a meal.





#### Pistachios

Nuts make a great high-energy snack, but many people avoid them because they think nuts contain too many calories. Pistachios may be a welcome exception to this thinking. A new study has found that fat in pistachios is not readily absorbed by the intestinal tract, which means the body does not absorb all the calories. So the next time you need an energy-rich pick-me-up, grab a handful of pistachios.

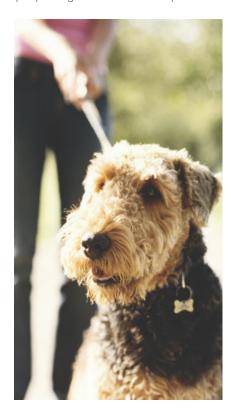


#### Hard-Boiled Eggs

Another low-calorie snack with newly discovered benefits is a hard-boiled egg. Researchers at the University of Alberta recently discovered that eggs are rich in antioxidants. With protein to chase away hunger and antioxidants to help protect against damaging free radicals, hard-boiled eggs are the perfect 70-calorie snack.

#### Need a physical or mental boost?

Turn to your four-legged friend. According to recent research, owning a pet is beneficial to people in numerous ways, including improved self-esteem, better physical conditioning and improved health and happiness when compared to people who don't have pets. Pets offer love and companionship, as well as exercise opportunities such as regular walks that many people might not otherwise experience.





## 20 Ways to Make Time for Fitness

For a lot of us would-be exercisers, the hardest part of getting physical is taking that first step. Here are twenty little hints that will help you make time for fitness and excuse-proof your exercise plan.

#### 1. Don't Look For Instant Results

Burning off a pot belly doesn't happen overnight. Focus on how good you feel right after a workout rather than how you look in the mirror. It won't take too long before you see a difference too – just be patient.

#### 2. Work Smart

Find an activity that works both your upper and lower body at the same time such as step aerobics, swimming or cross training. You'll boost your calorie burn without feeling like you're working any harder.

#### 3. Cut Out One TV Show a Night

Cutting out watching one TV show a night will instantly give you a half hour of time to get physical. That's three and a half hours every week that instead of sitting on the couch doing nothing, you are actively burning calories.

#### 4. Walk the Dog

Man's best friend is the perfect exercise companion. Instead of letting your pooch out the back door to do his business, take him for a thirty minute walk around the neighborhood. You will both get much-needed exercise and your doggie will love you for it.

#### 5. Shift Your Focus

We attract into our lives what we focus on. Instead of focusing on feeling bad that you skipped a workout session, concentrate on

all the times you did exercise and how great you felt afterward. This way of thinking is guaranteed to help you keep a positive focus on including regular physical activity in your life.

#### 6. Try the Couch Potato Workout

Whenever you are in front of the television, make the most out of commercials. During commercial breaks do sit-ups, push-ups, jumping jacks, squats, lunges or any other quick movements you can think of. It's a simple way to add a little extra physical activity and it will keep you from going to the kitchen for a snack.

#### 7. Use a Calendar

Print out a monthly calendar and display it somewhere prominent. Cross out every day that you exercise with a thick, black marker. Cross out every day that you don't with a red one. Pretty soon you will find that you don't like seeing many red Xs and that will motivate you to work out more.

#### 8. Be an Active TV Watcher

Put a stationary bike, treadmill or elliptical machine in front of the television. Don't let yourself watch your favorite shows unless you are using the workout machine. Time flies when your mind is distracted by shows you like and before you know it, you will have gotten in an hour of good activity.

#### 9. Socialize On the Move

Grab a few friends and turn a gab-fest into a walking conversation. A group of good friends walking around the neighborhood for half an hour while catching up is the perfect motivation to get moving and get talking.

#### 10. Enlist a Partner

Having a workout partner is strong motivation for both people who want to get fit. You will be far less likely to skip a workout if it means letting down a friend. The same goes for your workout buddy.

#### 11. Bring the Family

Get the whole family involved with a group outing. Biking, hiking, skiing and other similar activities get the body moving and let the family bond. It also helps show children that a healthy lifestyle can be a fun one, which will in turn make them far more likely to grow up into active adults.

#### 12. Ditch Your Ride

The more often you walk or ride a bike instead of taking a car, the healthier your life will be. Short trips to the store, the deli, a friend's house or any other destination made under your own power instead of your car's add up quickly into your daily workout quota.

#### 13. 15 Minutes Earlier/Later

If you can set your alarm for fifteen minutes



### REAL NRGTM

Specifically Formulated to Help Support Safe, Convenient Energy



Real NRG is a great tasting alternative to coffee or soda. Simply mix Real NRG with water or your favorite juice to create a delicious drink. Real NRG is the drink for anyone who needs a healthy pick-me-up — day or night.

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.



earlier and then go to bed fifteen minutes later in the day, you've just created a half our of time you didn't have before. Whether you turn that into two fifteen minute exercise routines or one thirty minute workout, you now have the time to get moving.

#### 14. Master Micro Workouts

There is no reason your daily workout must take place in a single chunk of time. A series of quick, intense workouts throughout the day are just as effective. Try doing just five minutes of calisthenics

when you first wake up, between meetings, before lunch, after dinner and any other point in the day you find the time. At the end of the day you will find it added up to a complete workout.

"Get the whole family involved with a group outing. It also helps show children that a healthy lifestyle can be a fun one, which will in turn make them far more likely to grow up into active adults."

#### 15. Stay Hydrated

Becoming dehydrated during the day can take a serious bite out of your workout time. When your body doesn't have enough water your exercise routine will be less effective and probably a few minutes shorter because you will feel tired faster. Drink lots of water during the day so when the time comes to get active you will be ready.

#### 16. Be Flexible

If you can't make it to the gym before work, go afterwards. If you miss your daily run on Monday, try to make Tuesday's just a little longer. Understand that no matter how hard you try, there will be times you miss workouts. Be flexible and do your best to make up for them when you can.

#### 17. Don't be Flexible

On the other hand, some people find sticking to a strict routine is more helpful. There is nothing wrong with this method either, just be sure your strict daily routine includes time for physical activity.

#### 18. Just Five More Minutes

Adding just five more minutes onto the end of a workout will push you a little farther but won't take up much more of your time. At the end of the week, the time will add up to a whole other workout you wouldn't have gotten in.

#### 19. Make Chores More Challenging

Turn daily chores into workouts by doing housework at a faster pace. Don't linger between chores, push mow instead of using a

rider, wear wrist or ankle weights while dusting—there are many little ways to turn an ordinary cleaning task into a good workout.

#### 20. Don't Stop Starting

Everyone runs into times during their life when things get so busy they stop their normal exercise routine. That's just a part of life. The important thing is to never stop starting a new routine. As long as you have the drive to get going again, you will be just fine.

### Feature Article

# A Path Out of Depression

"A handful of nuts still provides the same monounsaturated fats for energy and protein that promotes feelings of fullness."





Food and mood are deeply connected. The foods you eat today can play a big role in how you feel tomorrow. For many people who have trouble with mood, changing to a healthier diet may be an important step in finding a path out of depression. Reducing the amount of modern convenience foods you eat and adopting a more hunter-gatherer style of diet can help some people escape the blues.

Diet affects mood in multiple ways. First, a healthy diet will simply give your body the fuel and nutritional tools it needs to better deal with the stresses of daily life. A diet that doesn't provide adequate energy will leave you feeling tired and sluggish, which can quickly make a mildly stressful situation at work feel a whole lot worse. And the problem can snowball until you're in a bad mood at home. On the other hand, if your diet leaves you feeling energized and mentally alert, you will be much better equipped to deal with stressful situations and your mood will be affected less.

But diet and mood are linked at an even deeper level. Multiple studies have found connections between mood and nutrition. One such study on omega-3 fatty acids found that the participants with the lowest amounts of the heart- and brain-healthy unsaturated fatty acids were more likely to report symptoms of depression and view the world through a negative outlook. Additional studies have linked omega-3s to other mood disorders including bipolar disorder and schizophrenia.

And you don't have to dig much deeper into the research to understand the connection. One of the most obvious examples is a significant portion of the brain is comprised of lipids. Those exact same lipids are found in many cold water fish. Doesn't it seem to make

sense that consuming these lipids could help the brain function better and improve mood?

Modern convenience foods are often refined to the point where they scarcely contain any nutritional value. These foods tend to not just fail to give your body the support it needs, but also overload it with sugars and fats that can leave you feeling physically and emotionally drained.

To avoid this problem look at what our ancestors ate. Fast food restaurants weren't around a hundred years ago, let alone a thousand. Hundreds of thousands of years ago humans subsisted on a vastly different diet. In large part, this is the diet our body's still function best on. Our hunter-gatherer ancestors foraged for wild plants and hunted animals that weren't overfed corn-based diets full of antibiotics and growth hormones.

This type of diet had a much different effect on their bodies than modern diets have on ours. Diets full of wild nuts and berries were rich in protein and monounsaturated fat, as well as antioxidants. Blueberries, raspberries and other berries are rich in antioxidants and important phytonutrients. They are also full of important amino acids, vitamins, minerals and fiber. A handful of nuts still provides the same monounsaturated fats for energy and protein that promotes feelings of fullness.

A handful of mixed nuts and berries is an energy-rich snack full of mood-boosting nutrition that our hunter-gatherers once took for granted.

Non-genetically modified fruits and vegetables eaten as close to straight from the field as possible offer similar benefits. Full of nutrition for promoting a good mood and containing no chemicals or faux-food ingredients, these fruits and vegetables are easily found at local roadside stands, farmers markets and grocery stores that specialize in locally grown and organic produce.

While our hunter-gatherer ancestors ate a diet rich in fruits, vegetables, nuts, berries and other vegetation they found, they also ate whatever animals they could hunt. This included fish from nearby lakes and rivers and wild game such as buffalo, deer, fowl and other animals.

The one thing all these meats have in common is they contained no growth hormones or unnatural chemicals, and they were just as physically active as our ancestors who hunted them. Because there were no ranchers or farmers trying to make money off of ever larger and healthier-looking livestock, the animals they ate consumed only fresh, natural foods. That meant an omega 6 to omega 3 ratio nearly as healthy as fish.

While it's no longer possible to eat the same diet as our ancestors, we can come close with a healthy diet full of fresh fruits, vegetables, grains and legumes, grass fed lean meats, and low in saturated fats and sugar. Following these guidelines will help ensure your mind and body are supplied with the nutritional support they need to boost your mood.

Emulating a hunter-gatherer diet also requires that you try to avoid foods that contain high amounts of saturated fat (especially trans fats), sugars, refined foods and manmade chemicals. If you look at a nutritional label and see a list of ingredients that you have trouble pronouncing, it's a good bet that our ancestors never ate it. Eating out at fast food restaurants and eating junk foods on the go can be detrimental to your mood because these foods don't just lack the nutritional support you need, they contain ingredients that can actually depress your mood.

We often tend to look at a healthy diet as a tool for staying physically healthy. But diet does more for your body—it helps to keep your mood elevated. The next time you find yourself in a slump, look at our hunter-gatherer ancestors for a path toward a better mood.



### Create the You That You Will Be Happy With the Rest of Your Life

Do you like who you are? That's a very deep question and hopefully the answer is yes. However, most of us could think of something we would like to change. Maybe you think you are too impatient. Or you would like to work on being more empathetic. Fortunately, everyone has the capacity to change for the better. You are going to have to live with yourself for a long time, why not take the time to make the self that you will be happy with for the rest of your life?

To be truly happy with yourself, you must first understand exactly what it is that will make you happy. Every person has a unique outlook on what makes them happy. What is yours? You may look at the people around you for guidance or to gain understanding, but at the end of the day, only you know what will make you happy. Take joy in your individuality and don't worry if you find that things that make you happiest in life are not the same as your friends or family.

The first step to creating the you that you want to be is to spend a few minutes every day thinking about the things that make you happy in life. Focus on the way you live your life. What actions, experiences, things and relationships truly make you happy? And, what makes you unhappy? If you take an honest look at your life, you may realize that you are doing things because you see other people doing them, not because they make you feel good.

Spend these few minutes focusing on the happiness that you want to attract into your own life. You may need to acknowledge unpleasant parts of your life that will simply have to remain in your life. Understand you may not be able to change everything, but also know that you don't need to dwell on the negative. If you shift your focus onto the positive aspects of your life, there isn't anything you can't accomplish.

After you've spent a week or two reflecting every day on what you want to be, it's time to start taking action to become that person. There are many right ways and a few not-so-right ways to accomplish this. The most important thing is to keep a positive focus.

For example, let's say that you have discovered helping people is something that makes you happy and you wish to do more of it. But money is tight so it's hard for you to donate money or goods to the local shelter. Don't dwell on how little you have to give. Instead, focus on the many immaterial things you have to give. Shelters, churches and other community organizations are always looking for volunteers to help in countless ways. So instead of getting discouraged because you couldn't give money, you kept a positive outlook and now you are able to touch the lives of others by giving your time at a soup kitchen.

It's so important to keep a positive focus while becoming the person you want to be because we attract into our lives the things we focus on. Constantly dwelling on reasons why you can't do something will guarantee you are never able to do it. However, a positive attitude that focuses on finding solutions will never fail.

Another key part of creating a happier you is to maintain your health. No matter what it

is that makes you happy, being overweight and ill will make attaining that happiness harder. Disease and poor diet can be very detrimental to mood. Conversely, a healthy diet, regular physical activity, stress-relieving activities and a good outlook all boost mood. A good mood and a healthy body go hand in hand. Each makes the other stronger and easier to attain.

Finally, understand and believe that you deserve to be happy. If you don't believe that, you may unconsciously sabotage your own happiness. This goes back to focusing on the things you want in life in order to attract them.

Happiness is hard to define because it means many things to many people. A lot of people are not even aware of how happy they are until they sit down and purposefully take stock of their lives. A lot of people also incorrectly believe that happiness is just a form of luck; some people are lucky enough to be happy and others are not. Happiness is hard to define but most people are aware of whether they are happy or not. This couldn't be further from the truth. Everyone on earth has the capability to be happy. It only takes a little thought and the right frame of mind to create the person you will be happy with for the rest of your life.

# Nutrition 14 THE ART OF GROWING YOUNG March/April 2012



Supermarket bread, cereal, mayonnaise, peanut butter, ketchup and spaghetti sauce all share one common ingredient. Can you guess what it is? Sugar! The sweetener has crept into prepackaged foods of all kinds—often in unlikely places and under unrecognizable names. This is a major problem because even relatively health-conscious people are finding it harder to avoid a high-sugar diet.

Although small amounts of sugar can have their place in a generally healthy diet, too much of it is bad for the body. And it doesn't take a whole lot to be too much. Sugar, especially refined forms such as table sugar (sucrose), has a relatively simple chemical structure that the body rapidly breaks down and absorbs. This causes a spike in blood sugar levels that leads to a quick burst of energy often followed by prolonged dull, sluggish feelings. More than that, an influx of

sugar into the bloodstream also triggers the release of insulin. The body uses insulin to keep blood-sugar at safe levels, but it also promotes fat storage.

Chronic high-sugar intake has been linked to a variety

of illnesses, including diabetes, cardiovascular disease, tooth decay and many others. The most obvious and prevalent impact of a high sugar diet is weight gain. As sugar has become a more common ingredient in premade foods, waistlines have vastly increased.

A single 12-ounce can of soda can contain 10 teaspoons (40 grams) of sugar. That's bad enough, but portion sizes are growing bigger and bigger. A 64-ounce fountain drink from a movie theater or a convenience store contains over 53 teaspoons of sugar. That's almost 2 cups of sugar! Would you put 10

teaspoons of sugar into a cup of coffee? Would you consciously consume 2 cups of sugar in one sitting? Probably not! But that is the problem, we are not aware of what we are consuming. And food manufacturers are not helping either.

The food industry also tries to hide sugar by giving it different names. A few common terms used to conceal how much sugar a food contains are molasses, honey, sorghum, corn

"Chronic high-sugar intake has been linked to a variety of illnesses, including diabetes, cardiovascular disease, tooth decay and many others."

syrup, high fructose corn syrup, glucose, fructose, lactose, dextrose, sucrose, maltose. The term sugar in food almost exclusively refers to sucrose, which is a fully refined form that offers virtually no benefit to a healthy diet.

Be especially wary of low-fat versions of your favorite foods. When fat is removed, flavor is lost. Something must be put back into the food to make it taste good. Often, the solution is to add more sugar. Salad dressings are particularly bad offenders in this area. If you read the label of a low-fat version of your favorite salad dressing you will most

likely be surprised to find out how much sugar it contains compared to the non-low-fat version. A far healthier option is to make your own dressings. Vinaigrettes are delicious and surprisingly simple to make. Just combine a small amount of olive oil, your favorite gourmet vinegar and some fresh herbs.

Reduced-fat cookies are another offender that replaces fat with sugar. You really wouldn't want to eat your favorite cookie without all

the fat and butter used to make it. It just wouldn't taste good. The easiest way to put good flavor back in is to add more sugar. Sugar and fat together are the fast track to obesity, even if the fat is "low".

When it comes to premade food, remember less fat doesn't necessarily mean healthy. Always read labels carefully because sugar hides in unlikely places, not just in candy bars and soda pop. Flavored yogurts, hamburger buns, marinades—start looking for sugar on food labels and you might be surprised.



# What Is a Nutrient?

If you take an active interest in your health, you probably read the nutritional information labels on the foods you buy. But have you ever stopped to think really hard about what that information really means? Have you looked beyond the fat grams and carbohydrate amounts listed and wondered what exactly is a nutrient and how does it interact with your body? Have you ever considered that perhaps you should be eating more foods that DON'T HAVE a nutrition label (such as fruits and vegetables)?

The answers lie in nutritional science, a branch of science devoted to the investigation of the metabolic and physiological reactions in the body in response to the foods you eat. While doctors and scientists know a lot about nutrition, there is still much to learn because nutritional science is a relatively young branch of science. We discovered the first micronutrient (vitamin A) just 80 years ago. Mathematics, on the other hand, has been around since as far back as written records exist, with rigorous mathematical arguments appearing in ancient Greek writings.

Just 30 years ago we were still using carotenoids only as food coloring. But as nutritional science advanced, it began to interact with molecular biology, biochemistry, genetics and other branches of science. These sciences overlap in many areas as they are all, to some degree, interested in metabolism and metabolic pathways. This overlap has helped to rapidly advance nutritional knowledge. So even though nutritional science may still be in its infancy, there is a huge knowledge base to draw from when considering dietary choices.

So just how far has nutritional science come since its development? To begin with, we have an answer to the question, what is a nutrient? Simply put, nutrients are chemicals that the body needs to function. They can be classified chemically as either organic or inorganic substances. Chemically speaking organic compounds contain carbon, hydrogen and nitrogen and sometimes other elements. Good examples of these nutrients include carbohydrates, fats and proteins. Inorganic substances make up quite a few of our nutrients as well, and many of them are classified as minerals such as calcium, magnesium, zinc and others. But these are really just categories—there are many types of each.

Nutrients come from foods. As foods are processed more and more away from their natural state, more and more of their micronutrient content is eliminated. For example, whole

wheat contains three components, the endosperm (protein and starch), the germ (protein and vitamins) and bran (fiber). When wheat is turned into what we call processed white flour, the germ and bran are removed, leaving only the endosperm. Two thirds of the wheat's nutritional value is now gone. Going one step further, if you buy food made from white flour, such as packaged bread or cereal, not only have important nutrients been stripped out already, but unhealthy ingredients such as sugar and fat, artificial flavoring and colorings, as well as preservatives have frequently been added.

The difference in micronutrient content between a meal prepared at home and a meal bought pre-made is immeasurable. The healthiest diets are comprised of fresh, whole foods. Of course, diets consisting primarily of fruits and vegetables are the healthiest. But even less healthy options such as red meat contain more nutrition in less processed forms. Fresh cuts of meat from free range,

### FUSIONS REDTM

Ultra Concentrated Fruit Blend



**Fusions Red is made from a highly concentrated "super fruit" blend** (Sour Cherry, Pomegranate, Concord Grape, Black Cherry, Goji, Mangosteen, Açai and Sea Buckthorn) providing you with a powerful boost of natural antioxidants. Developed with our proprietary cold process concentration technology, Fusions Red is unique because it allows for the naturally occurring phytonutrients to remain intact, delivering a full complement of those phytonutrients in a highly bioavailable form.

- 100 percent all natural and processed without chemical solvents.
- This breakthrough product is a perfect complement to other Life Plus products such as Joint Formula and Lyprinex.
- Contains key antioxidants
- All vegetable, including capsule delivery system.
- Great for kids too! Delicious chewable capsule that can also be squeezed on foods.
- Helps maintain muscle comfort; take 1-2 before and/or after workouts.

Proprietary cold process concentration technology, giving you the best that nature has to offer.

♦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.



"A diet based on whole fruits and vegetables is

considered nutrient rich because it contains a high

quantity of micronutrients, macronutrients,

phytonutrients and other compounds that the body

needs to function properly."

grass fed, organic beef, for example, is a healthier choice than a fast-food hamburger that comes from mass-produced, corn-fed beef.

The list of nutrients already discovered is in the thousands. Calcium, folic acid, iron, biotin, copper, niacin, magnesium, vitamin A and vitamin D—these are just a small handful of the more common nutrients. Since nutritional science is still so new, there are countless more nutrients, especially what are called micronutrients, waiting to be discovered, which leads to yet another reason why it's important

to consume a variety of whole foods in your diet. Scientists have already observed the way many nutrients work together in the body. They have seen that nutrients almost always work best when they are consumed with other nu-

trients. But if there are nutrients still waiting to be discovered, there is no telling how important their effects are in relation to other nutrients.

When two nutrients work together, they provide more protection than the sum of their two wholes. For example, calcium and vitamin D are both good for bone health on their own, but when they can interact with each other, they offer even more protection. Then when magnesium is added, further synergy is created. The easiest way to describe synergy is with the equation: 1 + 1 = 6 or more. However, often when it comes to many antioxidants, the equation could be as much as 1 + 1 = 20!

The synergistic relationship between antioxidants is one of the most important nutritional discoveries made so far. Antioxidants such as

vitamin C, carotenoids, full spectrum vitamin E (all 8 members of the vitamin E family), alpha lipoic acid, and OPCs each have their own value, but they are many times more effective at protecting against free radical attacks when combined with other antioxidants, all used together.

These relationships can become even more important for health as we age because free radicals tend to collect in the body over time. Free radicals cause damaging chain reactions often referred to

as oxidative stress. Ordinarily, one antioxidant will neutralize one free radical. But when antioxidants are able to work together, they can replenish one another, granting the ability to continue to neutralize free radicals almost indefinitely.

This "antioxidant network" helps to protect against oxidative stress before it takes its toll on the body.

A diet based on whole fruits and vegetables is considered nutrient rich because it contains a high quantity of micronutrients, macronutrients, phytonutrients and other compounds that the body needs to function properly. The nutrients in food are used by the body for everything it does. From healing a cut, to building lean muscle mass, to circulating blood, to walking, to digesting foods—your body's ability to function is directly related to the nutrients in your diet.

### Herbs & Supplements



# Why Fiber Matters More Than You Think

Fiber supplements have become very popular over the years for helping to promote healthy digestion, cleansing and regular bowel movements. While fiber

certainly is important for helping to keep the digestive tract moving regularly, it has many other benefits to offer the body.

Dietary fiber is divided into two major categories: soluble and insoluble. Both types are widely found in whole fruits, vegetables, grains and legumes. Often a single plant will contain both forms, though the amounts of each may vary. A food rich in soluble fiber may only contain trace amounts of insoluble fiber, and vice versa.

There is overlap in the functions and benefits of both types of fiber. Soluble fiber is known for its ability to help maintain healthy cholesterol levels in the body to a much greater extent than insoluble fiber is capable. But diets that are higher in insoluble fiber correlate better with protection from heart disease. Soluble fiber appears to help maintain healthy blood sugar levels, and yet almost paradoxically, diets high in insoluble fiber are associated with protection from diabetes.

Even going beyond the difference between soluble and insoluble, not all fiber is the same. Several types of fiber have unique properties, notably psyllium (Plantago ovata) seed and husk, flaxseed meal, maltodextrin soluble fiber (also known as resistant maltodextrin), guar gum, and marine alginate. Psyllium and flaxseed are predominantly insoluble fiber, whereas resistant maltodextrin, guar gum and alginate are predominantly of the soluble fiber type. Specific blends of these types of fiber are often incorporated into quality nutritional products.

As fiber passes through the digestive tract mostly undigested, it binds with fats and toxins such as pesticides, herbicides and other contaminants that are accidentally consumed. Because fiber is not absorbed into the body, anything that it binds with will be excreted as waste. In this way fiber helps to facilitate the removal of these kinds of toxins and unwanted fats from the body. It's for this helpful waste removal action that certain pharmaceutical medications should not be taken at the same time as dietary supplements containing soluble fibers. Fiber can't tell the difference between wanted and unwanted chemicals so absorption of these medications may be reduced.

Similarly, there is some worry that fiber can interfere with the absorption of minerals. This may be true for some grain derived bran types of fiber that contain phytic acid, but there are many fiber sources where this is not a concern, such as psyllium and flax seed.

Both soluble and insoluble fiber help to hydrate the stool and relieve constipation, though insoluble fiber is considered more effective in this regard. Fiber provides bulk that stimulates smooth muscles in the intestinal and colon wall to move the contents through in a timely manner, which results in a healthy waste elimination time.

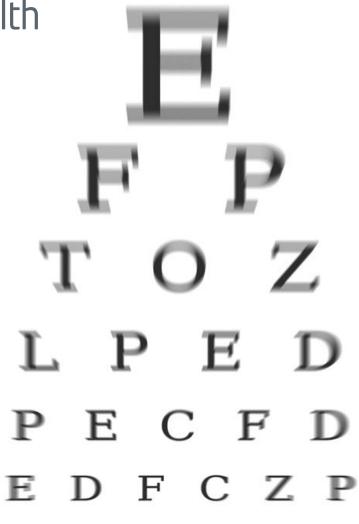
Fiber also helps aid in digestion by promoting healthy gut flora in the digestive tract. These microorganisms are crucial for healthy digestion because they aid in breaking down certain nutrients into forms that the body can use and help maintain a healthy intestinal pH balance.

Despite its many health benefits, many people still do not consume anywhere near enough fiber. The generally accepted amount by many experts is 25 to 35 grams per day; however, others believe that more is better. People in earlier societies consumed as much as 5 times this amount. Actually one of the reasons that diets rich in fresh fruits and vegetables is so worthwhile is because of the fiber they contain.

One reason that fiber consumption is so poor these days is because of the influx of prepackaged foods. Cereal producers found that if they took whole grains, removed the fatty acid-containing germ, removed the fibercontaining hull, puffed the starch and coated it, they could sell a lot more product and their products would have a much longer shelf life. Cereal isn't the only offender. Breads, pastas, cakes, cookies—nearly any premade, flourbased food bought in a grocery store has had the healthy fiber removed.

There are many reasons fiber is important for health. This plant-based nutrient is necessary for your digestive tract to function optimally. Without fiber, the process of breaking down, absorbing life-sustaining nutrients, and eliminating waste and toxins would simply not be very efficient.

Family Health







# Eating For Your Eyes

Sunsets, paintings, starry nights, the faces of our loved ones—our eyes allow us to experience so much beauty in the world, yet often we don't give a single thought to preserving this powerful sense. Eating for your eyes is a simple way to help ensure clear, healthy vision late into life so you don't miss any of the amazing sights on this planet.

Glaucoma, cataracts and age-related macular degeneration (AMD) are three of the most common reasons for vision impairment; each becomes more of a threat as we age. In addition to negatively impacting vision, they all have one thing in common: they can be affected by the foods and nutrients we take into our bodies.

Glaucoma is a leading cause of blindness everywhere, affecting over 60 million people throughout the world. In many cases, glaucoma appears to be caused by fluid and pressure buildup in the eye. Several recent studies have shown that increasing vitamin C intake can significantly aid in helping the body maintain healthy intra-ocular pressure.

Magnesium may also help eye health by balancing calcium levels, which helps to maintain healthy relaxation of the arteries and improve blood flow. In one study, people who were given oral magnesium supplements, showed improvement in blood supply and visual field after just four weeks. Spices, nuts, cereals, coffee, tea, and vegetables—especially green leafy vegetables such as spinach, chard, and kale—are all rich sources of magnesium.

Cataracts are caused by damage to the transparent protein of the lens in the eye, which causes it to cloud over. People with cataracts often describe the condition as similar to looking through a piece of waxed paper.

Cataracts are more likely to occur in people who have diabetes, who smoke, or who are exposed to excessive sunlight. Each of these three risk factors causes free radicals to accumulate and increases oxidative stress in the eyes. If the amount of free radicals exceeds

the amount of antioxidant capacity in the body's reserves, cataract-inducing damage can occur.

If free radicals accumulate in eye tissue, then it's no surprise that there is an increasing amount of evidence that people who have higher dietary intake of antioxidants have lower levels of oxidative stress and, consequently, a lower risk of cataract formation.

Antioxidants are found in nearly every fruit and vegetable, but no two antioxidants are exactly alike. Eating a diet that contains a wide variety of fresh fruits, vegetables, and spices will help ensure that your body receives not only a constant supply of antioxidants, but also a wide variety of the free-radical fighters for maximum protection. A few of the most potent antioxidants are vitamin C, which can be found in most citrus fruits; vitamin E, which can be found in nuts, green leafy vegetables, lycopene, the red colored carotenoids found in watermelon, guava and tomatoes; and OPCs, which are found in berries and many other edible plants, where it is concentrated in the seeds, barks and roots, as well as in many culinary herbs and of course, in dietary supplements.

AMD is one of the leading causes of blindness in people over the age of 55. It results from deterioration of the central portion (macula) of the retina.

Many doctors now believe that the best way to help fight against developing AMD involves a comprehensive approach that involves regular physical fitness activities, eating a nutritious diet, abstaining from smoking and protecting against excessive ultraviolet light exposure. One reason this approach is becoming more

popular is because studies are finding that high intake of saturated fat and cholesterol is associated with an increased risk of developing macular degeneration.

A study conducted by researchers at Harvard University found that people who ate diets highest in lutein and zeaxanthin (members of the carotenoids family, particularly rich sources of which are marigold flowers and certain peppers) had a nearly 60 percent decrease in risk of macular degeneration. In another, unrelated double-blind study, people with established intermediate or advanced AMD who took vitamins C, E, carotenoids and zinc experienced 25 percent less risk of progression of their AMD over a 6 year period, compared with those who were given a placebo.

Eating a diet that is based primarily on a variety of fresh fruits and vegetables can help safeguard against three of the most common vision impairments—glaucoma, cataracts and age-related macular degeneration (AMD). If your diet does not contain adequate amounts of nutritional ingredients, dietary supplementation of trace elements, a wide variety of antioxidants and vitamins may be helpful in improving overall metabolic and vascular functioning, which play key roles in ocular health.

## Family Health Migraine Management Part 2 "Yoga, meditation, aromatherapy, massage, exercise—there is no right or wrong activity as long as it helps you calm down and you can feel your stress levels lowering." 24 THE ART OF GROWING YOUNG March/April 2012



### Migraines are crippling headaches that can put a person out of commission for an entire day or more. In the first

half of the article we learned about common migraine triggers. Now let's explore possible techniques to lower your risk of developing migraines, such as focusing on nutrition, keeping a food diary, tracking patterns and reducing stress.

Stress may be among the most common migraine triggers. Busy lives, demanding careers, too many appointments in one day, trying to stretch finances, juggling family schedules—modern living is full of stress. Too much stress can be bad for anyone, but for some people it manifests as a migraine. Whether it's due to a big fight or just a particularly hectic day, if stress is your migraine trigger you may find headaches always seem to come at the worst possible time.

If stress is the most common migraine trigger, it is also one of the easiest to manage if you know how. But it's a two-step process. First you must learn to listen to your body and feel when stress is building up to the point where it causes a headache. Look back at past headaches you have experienced. What was happening in your life just prior to that point and how did you feel?

After you have an idea of how much stress is too much, you can try different stress management techniques until you find one that calms you down enough to prevent a headache. For some people deep breathing exercises will be enough. Other people may find a brief workout to be helpful. There are nearly as many stress-busting activities as there are causes of stress. Yoga, meditation,

biofeedback, soothing music, aromatherapy, massage, exercise, petting your dog—there is no right or wrong activity as long as it helps you calm down and you can feel your stress levels lowering.

Food allergies are another trigger that affects many migraine sufferers. A few of the more common ones are alcohol, especially red wine; chocolate; pork; monosodium glutamate (MSG), which is in virtually all processed foods, often in disguise; and caffeine. But nearly any food can be a trigger. Since we seldom eat just one food at a time it can be hard to pinpoint just which ingredient is the culprit. If you suspect your migraines may be due to diet, the most efficient way to figure out just which food is triggering them, is to start a food journal. Keep track of which foods you've eaten in the three-day period prior to developing a migraine.

Keep a log of everything you eat for a few weeks. Be as specific as possible. After a little while you will start to see patterns. Headaches will tend to occur after certain foods. Once you see this pattern, it's as easy as avoiding those foods. If you eat a diet rich in whole foods that you prepare yourself, this will be easier. However, if your diet consists primarily of store-bought, premade food, it

may be more difficult to pinpoint the exact ingredient because these foods tend to have long lists of ingredients, many of which are man-made. Many of the ingredients in these prepared foods are chemicals like preservatives, flavor enhancers, and coloring agents. Switching to a diet based on foods that you prepare from scratch can help avoid these chemicals and faux foods that are so prevalent in processed and fast food.

There are also certain foods and supplements that may be beneficial to add to your diet, regardless of whether or not your headache trigger is diet related. Co-Q-10, is one of a number of natural nutrients and common dietary supplements that, has shown promise in several studies for helping to reduce migraine frequency. Other nutrients which have shown similar abilities include magnesium, B-complex vitamins, omega-3 fatty acids, and an herb known as FeverFew. The soothing scent of lavender (*Lavandula*) has also been used to aid with migraines.

If you find that intense physical activity is your migraine trigger, there are many low-impact activities that will provide your body with a regular physical workout without causing a headache. It's a common belief that walking 10,000 steps in a day is equivalent to a workout routine. If you can walk to the corner store instead of taking a car and switch from the elevator to the stairway, you can easily get the 10,000 steps you need to help maintain your body while avoiding headachecausing intensive exercises.

One final tip for avoiding migraines: focus on the times you are headache-free rather than worrying about when your next one will occur. We tend to attract into our lives the things that we focus on. This even applies to headaches. Enjoying the times in between headaches when you feel good and are able to experience the joys around you will attract more of these pleasant feelings into your life.

Migraines can strike when you least expect them and leave you in bed while your friends and family are out enjoying the day. However, if you learn to recognize your triggers and adapt your lifestyle to avoid them it's possible to spend less time in bed and more time out living your life.



# What is Healthy Aging?

The human body changes as it ages. That is a fact of life. It's how we deal with those changes that makes a difference. If your body is healthy and prepared for each phase of life, you will find the aging process to be much less stressful. It can actually be rewarding.

Healthy aging encompasses many aspects. Good nutrition, regular exercise, positive attitude, proper focus, good friends, etc.—it's impossible to say that any one of these is more important than another, because all these facets work together to help you stay younger in body and spirit. There is no single magic cure that will prevent you from aging. So instead of trying to put all your focus into just one area, practice the Art of Growing Young in all areas of your life.

There are isolated pockets around the world where people tend to live longer and stay healthier. These healthy, extremely long-lived individuals, don't just exist, they truly live and enjoy life. It's a stark contrast to the depictions of the elderly people most of us are familiar with. Elderly people full of vigor and vitality tend to share several important traits: they make healthy decisions, eat healthy diets, stay physically active and remain connected socially.

Healthy aging requires proper nutritional support at every phase of life. As the body ages, its nutritional needs change. For one thing, the body's metabolism tends to slow with age, meaning your meals need to be smaller and less calorie-rich. A diet comprised chiefly of fresh fruits and vegetables will help with this. So will avoiding foods full of saturated fats and empty calories such as fatty cuts of meat and junk foods.

This diet will also give the body access to a variety of antioxidants, which become even more important as we age because free radicals can accumulate over time. When they build up, internal damage can occur. In fact, scientists are now finding that many of the negative aspects of growing old may actually be due in large part to oxidative stress from free radicals. For example, free radicals can

accumulate in the skin and cause damaging chain reactions that break down the tissues responsible for skin's smoothness and elasticity. This can lead to more wrinkles and dull looking skin.

Healthy aging also requires regular physical activity. It is a fact that the more physical activity you get as you age, the more mobile you will be. Unattended muscles, connective tissues and bones become weak. This compromises strength and balance. It doesn't take much effort to prevent or reverse muscle loss. Just a half hour of exercise a day, most days of the week is plenty for many people to prevent loss of muscle tissue associated with aging and a sedentary lifestyle. And, the exercises you choose do not have to be rigorous. Walking, swimming, and water walking are all very low-impact exercises that have great benefits for an older body. Water walking and swimming are especially beneficial to elderly people who have been out of shape because water adds resistance for a better workout and it has buoyancy to help with balance, take stress off joints and prevent falls.

Staying mentally active is also important for healthy aging. Just as muscles atrophy without use, so does cognitive function. A lifestyle that is full of repetition and lacking in mental stimulus is bad for an aging brain. On the other hand, a lifestyle that is filled with new experiences and activities that challenge the brain such as regular game nights with friends, afternoon crossword puzzles, new hobbies and opportunities for learning, are wonderful ways to keep the brain active. The results of these activities on cognitive function are just like lifting weights for muscles.

Eating fresh fish can also help protect the brain. Cold water fish such as salmon, sardines,

herring, and mackerel are rich in the brainhealthy omega-3 acids, DHA and EPA. There has been an explosion of research particularly regarding DHA in the past several years and much of it has linked higher intake of DHA to reduced risk of developing dementia, Alzheimer's disease and other neurodegenerative disorders. This is most likely because a significant portion of brain tissue is comprised of DHA, and a diet that contains ample amounts of this healthy fat seems to help prevent many of the changes associated with neurodegenerative disorders from forming in the brain.

A similar and equally important facet of healthy aging is staying socially connected. Human beings are social creatures. Companionship fills a special place in our hearts and makes us feel needed. Whether you make an effort to find new friends, join a social club, host game nights or find any other activity that regularly brings people into your life, filling the need for companionship is vital for healthy aging.

Changing lifestyles are a part of the human existence. The choices you make today will affect the ones you make tomorrow. However, no matter how you have lived your life in the past, it is never too late to make a change for the better. Adopting a healthier lifestyle today will make the aging process easier tomorrow. It's never too late to start living healthy!

By adjusting your lifestyle to take care of your mental, physical and nutritional needs, the second half of your life can be as enjoyable as you want it to be. If you take the right steps, the aging process will be a healthy one that is full of friendship, mentoring and happiness.





For the first time in nearly two hundred years children may have a shorter life expectancy than their parents. According to research published in *The New England Journal of Medicine*, the poor diet and nutritional habits our children are adopting could shorten their life spans by as much as five years.

One of the biggest contributors to this sobering possibility is an increase in the dependence on junk foods and fast food restaurants around the world. The problem with many fast food restaurants is two-fold. First, the foods tend to be full of saturated fats and sugar, while providing too few micronutrients, and at the same time containing all kinds of chemical additives. Second, they are cheap and convenient. Unfortunately, after a long day of work, it really is often easier to buy burgers for the family from a drive through window than it is to go home and make a meal from fresh wholesome ingredients. In fact, many young adults have grown up without ever really learning HOW to cook! But with waistlines growing and this disturbing new research, isn't it worth the little extra effort it takes to avoid eating these non-foods? Here are a few tips for kicking the fast food habit for good.

Don't go cold turkey. Fast food dependence can be nearly as hard to break as an alcohol or cigarette addiction. In some ways, it can even be more challenging. We have to eat, and busy lifestyles don't leave a lot of time for finding healthy options. The convenience of being able to stop at a drive through on the way home is very tempting. If you eat from fast food restaurants often, wean yourself of the habit slowly. Eat one less takeout meal every week until you're free of the habit. Also consistently relying on frozen premade dinners, or other processed foods creates a very similar type of problem.

Not only is gradually cutting down less daunting mentally, but it will also help give you time to adjust to making more meals at home and packing snacks and lunches in the morning. Preparing more foods at home may take a little longer than you're used to, but it costs less and provides much more nutritional support. If you can spend a few hours over the weekend making several large meals, then you can freeze them for later and you won't need as much time after work during the week.

Speaking of packing snacks and lunches, keep a stash of healthy foods in your desk at work to quell cravings before they become too much. A handful of nuts and fresh or freeze dried berries is an energy-rich snack that packs enough protein to ward off a serious case of the munchies. Natural, low-fat granola bars are helpful too, but be careful—many of these are also highly processed foods with a lot of sugar and chemical additives, being marketed as "all natural." A small snack eaten just before getting into your car or even on the way home is often enough to keep you from pulling over to get something unhealthy.

If you find you can't kick a craving for a certain favorite fast food meal, try making homemade versions of your favorite fast foods. There are websites devoted to creating the perfect athome recipe versions of fast food menu items. Anything you make at home will be a healthier alternative and you can tweak the recipe to make it even better.

When you first begin the process of kicking the fast food habit, it can be very helpful to change your normal driving routes. If stopping at a drive through on the way to work has become something you automatically do without even thinking about it, taking an alternate route to work will make the habit a whole lot easier to break. Taking it one step further, you can plan a route that doesn't involve passing by any unhealthy restaurants.

For many people, eating fast food meals is such a "normal" part of their lives that they can hardly picture a life without it. But with just a little preparation and foresight, it's entirely possible to completely kick the fast food habit. Once you have, you will probably notice you have more energy and feel happier. Moreover, it will teach your children that they don't need to make fast food a part of their own habits, which can help ensure that they live long, happy, healthy lives.



OThese statements have not been evaluated by the Food and Drug Administration.

This product is not intended to diagnose, treat, cure or prevent any disease.

## What are vasodilators and why are they important?

A vasodilator is anything that helps blood vessels to dilate when increased blood flow is needed. The most common time that the body does this is during exercise. Physical activity puts a strain on the body, especially muscle tissue. This strain generates an increased need for oxygen and nutritional support. Since these things are circulated throughout the body by the bloodstream, the more dilated the blood vessels are, the more oxygen can be sent to the places it's needed. One common vasodilator is nitric oxide, a simple gas that the body generates from L-arginine to dilate blood vessels and keep blood platelets from sticking together. L-arginine is found in a wide variety of dietary sources, including animal proteins, dairy products, buckwheat, chickpeas, nuts and many other foods.





#### Can antioxidants help lung health?

Because free radicals can enter any part of the body, antioxidants that help protect against oxidative stress can be of benefit to virtually any body part, including the lungs, which are one of our organs that are attacked heavily because of so many air-borne free radicals in our environment. Free radicals enter the body through numerous ways, some are even created during natural, and healthy processes within the body. However, one major way we accumulate free radicals today is through pollution. Pollution in the air from smog, secondhand smoke, aerosol sprays and other sources send free radicals directly into the lungs. Antioxidants such as vitamins C and E, carotenoids, alpha lipoic acid and OPC's can help prevent oxidative damage to the delicate lung lipids caused by these environmental pollutants. One important point is that taking large doses of single antioxidants (especially synthetic ones), such as beta carotene or vitamin E, while eating a low antioxidant diet, and under high oxidative stress (such as smoking), can be a recipe for disaster. The first study which gave large doses of beta carotene to smokers who were eating antioxidant-poor diets, actually found an increased, rather than decreased incidence of lung cancer. Antioxidants function as a network, so it is important to have many of them in your diet.

Are men more prone to heart disease than women?

Heart disease is often seen as primarily a threat to men. This is absolutely not true. The American Heart Association concluded that heart disease has killed more women than men each year since1984 and is "the number one killer of women in the United States", even more than breast cancer, or even all cancers combined. Both men and women can benefit from living a heart-healthy lifestyle that includes regular physical activity, stress reducing activities and a low-fat diet rich in fresh fruits and vegetables. In addition to these staples of healthy living, it also helps to know the difference between good fats and cholesterol and bad fats and cholesterol. Since the war on fat began about 30 years ago, we have been conditioned to believe that all fat and cholesterol is bad for the body. This is misleading and potentially unhealthy. Fats such as omega-3 fatty acids and the monounsaturated fats from nuts and olive oil are actually very good for the body. The former are found in coldwater fish such as sardines, salmon and mackerel. Similarly, the difference between good (HDL) and bad (LDL) cholesterol is the difference between eating foods that increase the risk for cardiovascular disease and eating foods that help lower the risk. Increasing consumption of soluble fiber and fish oil, while reducing intake of saturated fats and alcohol, and exercising regularly will both help reduce LDL levels and increase HDL levels. And that's something that both men and women can benefit from.





OThese 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.

