

# LifeSource

M A G A Z I N E

ISSUE NO. 3

## The Power of a Plant-based Diet



**39** Health Benefits of Trusting God

**17** Shine on Vitamin D    **34** How to Improve your Brain Function



# Editorial

**F**or centuries, infectious diseases like smallpox, diphtheria, and tuberculosis have taken millions of human lives. With the achievements of medicine, science, improved sanitation, and an increased standard of living, numerous infectious diseases have been eradicated. Now we would expect a period of health, well-being, and longevity, however, more than ever our world is overcome with disease and suffering. At every step, we find both old and young searching for relief and a medicine that will remove their suffering.

Both the United States and other Western countries have been affected by degenerative-type diseases. Heart disease and strokes cause about 60% of the deaths in the Western world. The number of deaths from malignant diseases (cancer) is constantly growing, despite modern diagnostics and medications.

What has gone wrong? Why are we falling prey to these diseases when they are rare in the non-industrial countries? Research shows that most of the modern killer diseases—heart disease, stroke, diabetes, obesity, cancer—are largely lifestyle related. They are diseases of affluence—too much eating, too much drinking, smoking, and very little exercise. These lifestyle diseases are the result of our “Western diet” centered on meat, heavy in protein, high in fats and sugars.

The latest medical research shows that it is possible to prevent, arrest and even reverse most of the degenerative diseases by changing our lifestyle. That means we need to transition primarily to a plant-based diet, increase our physical activity, control our weight, practice self-control by eliminating fatal habits—tobacco, alcohol, and drugs. Combined with these lifestyle changes, we need to control stress by finding meaning in life, which would bring peace to our anxious hearts.

It is the rational duty of humanity to become acquainted with the Creator’s laws of health and to conform to them. The Bible reminds us: “How much better is it to get wisdom than gold! and to get understanding rather than silver” (Proverbs 16:16).

Where do we begin? In this magazine, you will discover the latest research on how you can incorporate simple health practices which fight disease into your life. Good health depends mostly on the choices we make—how we eat, how we drink, how much we exercise, whether or not we smoke, and how we handle stress. In the last article, you will learn how you can get willpower, and lasting success with your new lifestyle changes.



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# Table of Contents

04	The Power of a Plant-Based Diet
13	Making a Switch to a Plant-based Diet
16	Try our 30-Day Plant-Based Diet Challenge!
17	Shine on Vitamin D
21	How to Reverse Heart Disease
25	OMEGA-3s: Smart Fat for Your Body and Brain
29	Why Exercise Is the Best Medicine
34	How to Improve Your Brain Function
39	Health Benefits of Trusting God
43	Plant-Based Recipes



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# The Power of a Plant-Based Diet

Steve needed to go for a business trip, but he wasn't feeling well lately so he decided to go for a physical exam first. After reading his lab tests, the doctor told Steve, "I'm sorry to give you the bad news, but you have type 2 diabetes, high cholesterol, and hypertension." The doctor put him on four different medications and asked him to return in one month. Steve looked at the doctor in shock and disbelief. Why did he get these diseases when he was walking daily? Steve didn't want to take medications, but he had no choice.

Heart disease is the number one reason that we or our loved ones will die. Each minute one person dies of heart disease<sup>1</sup> in the U.S. causing 1,736 deaths per day. The second killer disease is cancer, causing 1,670 deaths each day.<sup>2</sup> What if that person is your loved one? What if it is you?

While these lifestyle diseases are thriving in the U.S. [See Table 1] and western countries, they're rare in much of the world. What are we doing to fall prey to heart diseases, cancer, stroke, diabetes and others? The number one cause of early death and disability in the U.S. is our diet.<sup>3</sup> The good news is that we can prevent most premature deaths and disability by changing our diet and other health practices.

## My diet is just fine

Someone may say, "I eat pretty healthy, just chicken and fish, little red meat with some starches and veggies." Others may say, "I'm a vegetarian and I eat no meat, chicken or fish. My diet is great." But are you sure your





Table 1

## Leading Causes of Death in the United States in 2017

Heart disease	647,457
Cancer	599,108
Chronic lower respiratory diseases	160,201
Accidents	169,936
Stroke	146,404
Alzheimer's disease	121,404
Diabetes	83,564
Influenza and pneumonia	50,672
Kidney disease	50,633
Suicide	47,173

The 10 leading causes accounted for 74.0% of all deaths in the United States in 2017.

CDC. Health United States. **Mortality in the United States, 2017.**

diet is healthy? You can be vegetarian and eating fried foods, chips, and doughnuts.

The U.S. Department of Agriculture developed a diet quality index to determine what percentage of calories people eat from nutritious, unprocessed plant foods. Sadly, most Americans have a score of only 11 out of 100.<sup>4</sup> The lower the score, the higher their risk of obesity, hypertension, high cholesterol and high triglycerides (fats from the food we eat that are carried in the blood). When elevated, they can cause heart disease.

Notice in Table 1 that 57% of our calories come from processed foods, 32% come from animal foods while only 11% come from whole grains, beans, vegetables, fruits, and nuts.<sup>4</sup> This type of diet is causing us to die from the killer diseases as shown above.

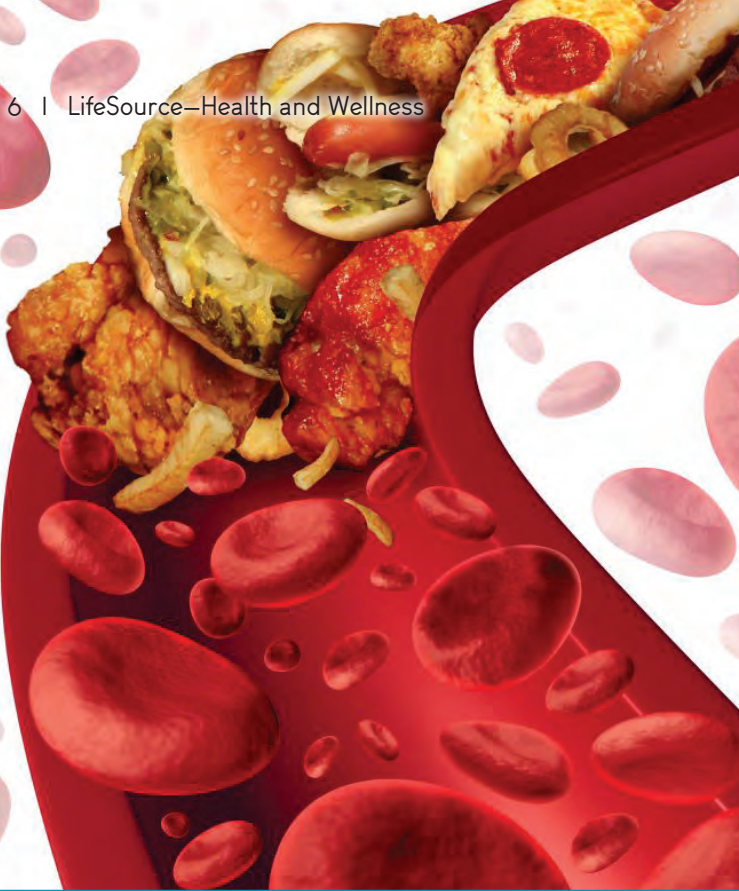
### One diet for every disease

Steve did some research and learned that by changing his diet he may be able to arrest his diseases. He went to see a registered dietitian where he learned that by adopting a plant-based diet he could arrest and even reverse his high blood pressure, diabetes, high cholesterol, and also lose weight. The moment of truth came when Steve learned that meat, chicken, fish, and dairy

foods are high in saturated fat and cholesterol. These animal foods were clogging his arteries and causing insulin resistance. The more saturated fat in the blood, the greater one's risk of developing type 2 diabetes.<sup>46</sup> On the other hand, whole grains, beans, fruits, vegetables and nuts are high in fiber, low in fat, and have no cholesterol. Steve was willing to give it a try.







## Defeat Heart Disease

Did you know that heart disease begins in childhood? Studies have found fatty streaks in the arteries of most American children 10 years and older.<sup>5</sup> Over time, the way most of us eat—animal products (meat, chicken, fish, dairy and eggs) with its saturated fat and cholesterol—we build up plaque in our arteries.<sup>6</sup> This buildup hardens and narrows our arteries so by the time we are 40, 50 and 60 they start killing us off.

Dr. Dean Ornish and Dr. Caldwell Esselstyn Jr. took patients with advanced heart disease and put them on a plant-based diet. To their amazement, as soon as their patients stopped eating the artery-plugging diet, their heart disease started to reverse. Plaque began to dissolve. Arteries opened up without drugs or surgery.<sup>7</sup>

This shows that our body can heal itself if we don't keep loading it with saturated fats, cholesterol-rich and processed foods. If you're thinking, "I'll eat whatever I want for now, later I'll change my diet." Watch out! A single fast food breakfast like Sausage McMuffin can harden your arteries just

hours after eating.<sup>8</sup> Then just as inflammation begins to lessen, it's lunchtime and you hit your arteries with another high fat meal.

## Lower Blood Pressure

Hypertension is the number one risk factor of death in the world. It kills 9 million people worldwide per year. One in three Americans has hypertension—nearly 78 million people.<sup>9</sup> Why so many deaths from this disease? High blood pressure contributes to death from many causes—heart attacks, heart failure, aneurism, kidney failure and stroke.

What if you are one of those 78 million people with high blood pressure? How could you lower it? You can begin lowering your sodium and increasing your fruit intake. Did you know that 4 million people die each year from eating too much salt?<sup>10</sup> Our body is designed to eat ten times less salt that we do. The American Heart Association recommends we should use less than  $\frac{3}{4}$  tsp. (1,500 mg) sodium daily. The average American consumes about 1  $\frac{1}{2}$  tsp. (3500 mg) daily;<sup>11</sup> three quarters of it comes from processed foods.

Plant-based diets are especially powerful in lowering blood pressure.<sup>11</sup> Research on 89,000 California Seventh-day Adventists showed that those who cut out all meat from their diet had a 55% lower risk of high blood pressure, while individuals who cut out all meat but ate fish had 38% lower risk of high blood pressure. Those who cut out all meat, fish, eggs and dairy from their diet had a 75% reduced risk of high blood pressure. A bonus for individuals who ate a completely plant-based diet was weighing 30 pounds less than the meat-eaters.<sup>13</sup>

Another study showed that eating 3 servings (1  $\frac{1}{2}$  cups) of whole grains per day has the same blood-pressure lowering effect as some medications, and that without side effects.<sup>14</sup> Eating both raw and cooked vegetables lowers blood pressure, but raw veggies are slightly more protective.<sup>15</sup>



The National Institutes of Health cite normal blood pressure to be below 120 mm Hg systolic and 80 mm Hg diastolic. Check your blood pressure regularly. If it's too high, talk to your doctor, but you can also take off the pressure by eating a plant-based diet. For most people, hypertension is a choice! You don't have to be part of the thousands who struggle with this disease.

### Live Longer

Loma Linda is the only Blue Zone in the United States where the greatest number of centenarians live. The majority of the people are Seventh-day Adventists. The vegetarians live 8-10 years longer. In addition to eating a plant-based diet, they exercise, don't smoke, keep the Sabbath day as a day of rest each week, and trust in God.<sup>16</sup>

### Combat Brain Diseases

Stroke and Alzheimer's are two serious brain diseases which cause almost 130,000 and 85,000 deaths in the U.S. each year.<sup>17</sup> Increasing evidence shows that both diseases can be prevented by a healthy diet.<sup>18</sup>

The Mediterranean diet, which is higher in vegetables, beans, fruits and nuts, and lower in meat and dairy, has been associated with a lower risk of Alzheimer's.<sup>19</sup> The protective elements? A high intake of vegetables and a lower ratio of saturated to unsaturated fats. A Harvard Women's Health Study found that a higher intake of saturated fat from meat, dairy, and processed foods was linked with a significantly worse course of cognition and memory. Women with the lowest intake of saturated fat had the brain function of women who were 6 years younger.<sup>20</sup>

Fiber to the rescue! Research shows that we can minimize our risk of stroke, colon and breast cancers, diabetes, heart disease, obesity and premature death by eating foods rich in fiber. Fiber is found in whole grain breads and cereals, in legumes (beans, lentils, peas) in vegetables

and fruits. We may reduce the risk of stroke by 7% just by adding one bowl of oatmeal and berries or a serving of beans per day.<sup>18</sup> Unfortunately, 97% of Americans don't get enough fiber in their diet.

We know that fiber helps control cholesterol and lowers blood sugar which can reduce plaque in the blood vessels of the brain. Why not be proactive and eat whole foods loaded with fiber daily—beans, fruits, vegetables and whole grains?<sup>18</sup>

Another simple dietary change is to increase our potassium intake by just 1,640 mg/day. This can reduce our stroke risk by 21%.<sup>21</sup> To achieve this goal, eat more fruits and vegetables. Berries and dark-green leafies have special antioxidant pigments that make them special brain foods. Eating foods rich in antioxidants may also help prevent stroke<sup>22</sup> by preventing the circulation of oxidized fats in the bloodstream, which





can damage the walls of the small blood vessels in the brain.<sup>23</sup> Plant foods are the best sources of antioxidants. On the average, they have 64 times more antioxidants than animal foods.<sup>24</sup> Increase your antioxidants by consuming a variety of fruits and/or vegetables, herbs and spices at every meal.

### Good for the brain and heart

Would you like to know how to decrease your risk for dementia in half? According to Dr. Michael Greger, dementia is more a disease of lifestyle than genetics.

Compared with those who eat meat more than four times a week, the dementia risk in people who have consumed vegetarian diets for 30 years or more is three times lower.<sup>25</sup>

Now there is an emerging agreement among scientists, "What's good for our hearts is also good for our heads."<sup>26</sup> No wonder that the 2014 "Dietary and Lifestyle Guidelines for the Prevention of Alzheimer's disease" state: "Vegetables, legumes (beans, peas and lentils), fruits and whole grains should replace meats and dairy products as primary staple of the diet."<sup>27</sup>

### Prevent Cancer

What would happen if you would put cancer

on a plant-based diet? Research shows that regular consumption of fruits and vegetables provides significant protection against cancer at many sites.

Dr. Dean Ornish and his team found that prostate cancer can be reversed and arrested from advancing with a plant-based diet and other healthy lifestyle choices. His team put their subjects either on the standard American diet or on the plant-based diet. They then dripped their blood on cancer cells growing in a petri dish. Amazingly, the blood of subjects who were on a plant-based diet for one year, was shown to fight prostate cancer almost 8 times better.<sup>28</sup>

Can a plant-based diet reverse breast cancer? Researchers did similar studies with women by putting them on a plant-based diet vs. the standard American diet. After just 14 days of healthy eating, the blood of women on the plant-based diet, significantly slowed down or stopped breast cancer cell growth. That's the power of the plant-based foods!<sup>29</sup>

How can we strike breast cancer stem cells which are the root of the cancer? Research has shown that sulforaphane in broccoli suppresses breast cancer stem cells<sup>30</sup> from forming tumors. One would have to eat ¼ cup broccoli sprouts per day<sup>31</sup> to get the concentration of sulforaphane in







the breast to suppress breast cancer stem cells. Sulforaphane is a powerful anticarcinogen and antibacterial compound that is formed when we eat broccoli and other cruciferous vegetables—cauliflower, bok choy, cabbage, kale, brussels sprouts, collard greens, turnips, and turnip greens.

### Defeat Diabetes

Diabetes is a serious disease that affecting almost 10% of Americans, (9.4%); one third of U.S. adults have prediabetes without knowing it.<sup>32</sup> If you don't have diabetes, a loved one or a friend may have it. The good news is that type 2 diabetes is almost always preventable, and often reversible with a plant-based diet and regular exercise. Losing weight, removing animal foods and fats from the diet, adding whole grains, beans, vegetables and fruits are the key elements to getting well.

In one study diabetics were asked to eat a 90% plant-based diet with lots of greens, other vegetables, beans, whole grains, fruits, seeds and nuts; they also restricted their animal foods and eliminated refined grains, junk food and oil. The results? They had a drop in their HbA1c from 8.2 to 5.8 in just 7 months.<sup>33</sup> (The HbA1c test shows your average blood sugar level over the past 2 to 3 months.)

### Athletes on a plant-based diet

The world-class athlete Lewis Hamilton had won the British Grand Prix on July

14, 2019, for a record-breaking sixth time while following a plant-based diet. People say, "Oh, I need my protein and that's why I could never go plant-based." Hamilton said: "I have plenty of protein in my diet and I've gained muscle, and I'm healthier and happier than I've ever been. I wish I did it sooner." A few hours after Hamilton's victory, Novak Djokovic, received a gold trophy as the world's No. 1 tennis player. He also eats plant-based. Plant-based foods promote a leaner body composition, promotes glycogen storage for endurance, improves blood flow and tissue oxygenation,





and reduces oxidative stress and inflammation for faster recovery.<sup>34</sup>

### Kidney disease

A plant-based diet is also best to prevent and treat kidney disease, which will affect about 1 in 3 Americans over age 64.<sup>35</sup> What is the cause of kidney disease? Researchers found that animal protein, saturated fat, junk food, trans fat and cholesterol in animal products are associated with impaired kidney function. Amazingly, studies show that people who get their protein from plant sources do not have kidney problems.<sup>36</sup> Protein from meat increases the acid

load, boosts ammonia production, and potentially damages sensitive kidney cells.<sup>37</sup>

### Maintain a healthy weight

Overweight and obesity are our nation's most pressing health problem, affecting two thirds of the adults,<sup>38</sup> 17% of our children and 21% of our adolescents.<sup>39</sup>

Researchers in the Adventist Health study looked at diets of five different groups and discovered that people on a vegan diet had the lowest body weight compared to meat eaters.<sup>40</sup> Why do vegans and vegetarians weigh less than meat eaters? Individuals who eat a healthy plant-based diet consume lots of fruits and vegetables, whole grains, beans and nuts which are loaded with fiber. Vegetables are especially helpful in weight loss as they are mostly water and fiber, thus being low in calories and high in volume. So, we can get satiety on a small number of calories.

### Positive emotions

Did you know that our diet can affect our brain chemistry? Research shows that peo-





## “Those who think they have no time for healthy eating will sooner or later have to find time for illness.”

—Edward Stanley

ple who eat plant-based diets experience significantly fewer negative emotions than omnivores and they also feel more vigorous.<sup>41</sup>

Many plant foods such as apples, berries, and onions and spices like cloves, oregano, cinnamon and nutmeg<sup>42</sup> contain phytochemicals that appear to naturally inhibit the MAO enzyme. (People with depression have elevated levels of MAO enzyme.)<sup>43</sup> Studies show that people who eat more fruits and veggies are happier, calmer, and more energetic. To have a positive impact on our emotions, an adult would have to eat 7 servings of fruit or 8 servings of vegetables per day. (1 serving is = ½ cup of fruits or vegetables, and 1 cup for raw salads. That is about 4 cups of fruits and/or veggies per day. If you are not eating that many fruit and vegetables, gradually add 2-3 per week until you achieve this goal.

While plant foods have phytonutrients that have a positive impact on our emotions, arachidonic acid, may negatively affect our mood by inflaming the brain. Studies suggest that people, who have higher arachidonic acid levels in the blood, may have a significantly higher risk of suicide and major depression.<sup>44</sup> The highest sources of arachidonic acid are found in chicken, eggs, beef, pork and fish.<sup>45</sup>

### A Plant-based diet is adequate

The Academy of Nutrition and Dietetics states that a plant-based diet is nutritionally adequate for all stages of life, and for athletes: “It is the position of the Academy of Nutrition and Dietetics that appropriately planned vegetarian, including vegan, diets

are healthful, nutritionally adequate, and may provide health benefits for the prevention and treatment of certain diseases. These diets are appropriate for all stages of the life cycle, including pregnancy, lactation, infancy, childhood, adolescence, older adulthood, and for athletes.”<sup>46</sup>

### How Steve did it

With all this scientific evidence supporting a plant-based diet, are you ready to take the plunge and try it for 30 days? Steve did. He started his new dietary journey by adding a variety of whole plant foods to his diet. Instead of cornflakes and milk for breakfast, he ate steel-cut oats with almond milk, sprinkled with ground flaxseeds, with two fruits.

For lunch, Steve started eating a large salad and a bean burrito instead of the chicken sandwich, chips and soda. At dinner time, half of Steve’s plate was covered with steamed broccoli and salad, a small piece of chicken and brown rice. Steve is now eating beans, peas or lentils every day. He is also enjoying 100% whole wheat bread, brown rice, quinoa, and whole wheat pasta instead of white rice and pasta. Every bite he takes is bursting with flavor. As his plate is filled with these healing high fiber foods, he notices he doesn’t have much room or taste for meat, chicken, and fish. He starts limiting animal products to three times a week. His portions keep getting smaller until he totally pushes them off his plate.

Six weeks later when Steve went for a follow-up visit to his doctor, his blood pressure and blood sugar were normal. His



total blood cholesterol dropped from 265 mg/dl to 120 mg/dl; he had lost 14 pounds and had more energy. The doctor took him off all the medications and said, “Your diet changes certainly made the difference. Stay with it, so you may enjoy an abundant life.” If Steve did it, you can do it also!

## The Creation Diet

In the very beginning, long before one research study was completed on the benefits of a plant-based diet, a loving Creator gave humanity the optimal diet for a healthy body, mind, and spirit.

**Rx:** “And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat” (Genesis 1:29). “Thou shalt eat the herb of the field” (Chapter 3:18).

Notice this is the same plant-based diet that scientists are now advocating. Our Creator made life simple by giving us

one diet to achieve optimum health, and to prevent and reverse lifestyle diseases. Don’t you think that He who created us in His image, knows what fuel is best for our optimum health?

Are you ready to try out the plant-based diet for just 30 days? The side effects you will experience are out of this world: more energy, lower blood sugar levels, lower blood pressure, lower cholesterol, lower weight, greater mental vigor and a more positive mood, to name just a few. If you get rid of your old diet completely, in about 8–12 weeks, your taste will adapt to the delicious plant foods and you won’t want to go back.

Are you thinking, “Sure, I’d love to do it, but I don’t have the willpower.” If you need motivation to change, ask the Creator. He says to you: “Behold, I am the Lord, the God of all flesh: is there any thing too hard for me? (Jeremiah 32:27). Then you’ll be empowered to follow His plan and say, “I can do all things through Christ who strengthens me” (Philippians 4:13, NKJV).

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# Making a Switch to a Plant-based Diet

By Liliane Balbach, M.S., RDN



## 1. Look at your current diet

Identify three vegetarian meals that you already enjoy. For example:

- Bean burritos
- Whole wheat pasta with marinara sauce
- Stir-fried vegetables with tofu
- Beans and rice.



## 2. Adapt your favorite meat-based recipes to be plant-based

- Make chili using beans, meat analogs or tofu instead of ground beef.
- Replace beef in spaghetti sauce with sautéed mushrooms, tofu, meat analogs, or sautéed vegetables.
- Make bean burritos with beans, brown rice, and roasted vegetables.
- Buy ready-made veggie burgers instead of hamburgers.
- Make split pea soup without using meat, chicken or beef broth.

## 3. Find new plant-based recipes

- Look for plant-based cookbooks at your library.
- Find many excellent plant-based recipes on the Internet.
- Get new ideas when eating out in vegan/vegetarian restaurants.
- Many international restaurants have delicious plant-based food.





## Useful Tips for Making the Switch

### 1. Cooking beans

You can make beans from scratch by soaking them overnight in water or you can use the quick-soak method. Both methods remove some of the indigestible sugars that cause flatulence.

- Place beans in a large pot and cover with 3 inches of water. Bring to a boil for 3 minutes. Cover and let it sit for 1 hour. Rinse well and place in fresh water. Cook as directed.

### 2. Time Savers

- Cook a larger batch of beans or lentils and freeze them for later use.
- Use canned cooked beans and nonfat refried beans.
- Buy pre-cut fresh or frozen vegetables.
- Buy quick-cooking brown, or wild rice, and barley.
- Eat organic foods when possible, especially corn, potatoes, vegetables, fruits, and soy products.

### 3. Texturized vegetable protein (TVP)

- Use texturized vegetable protein (TVP) as a ground beef replacer, in tacos, chili, and sloppy joes.
- Buy TVP in the bulk food section of some grocery stores or health food stores.

### 4. Egg Replacer

- Flaxseed gel – Mix 2 tablespoons freshly-ground flax seeds in 1 cup water. Boil for 20 minutes. Drain the flax seed in a strainer. Cool gel mixture before using.
- Chia seed gel – Mix 1 Tbsp. freshly ground chia seeds with 3 Tbsp. warm water.
- Tofu, 1 oz. mashed.
- Chickpea flour – Mix ¼ cup flour and ¼ cup water or non-dairy milk.
- Ener-G Egg Replacer.

### 5. Drink lots of water

(8–12 glasses per day) as your diet will be high in fiber. Drink water before your meals. It is best to avoid soda, juices and other sugary drinks.

### 6. Tools of the Trade

- Blender and food processor. Save money and purchase a Vitamix high-speed blender.
- Good chef's knife for cutting vegetables and fruits.
- A large pot and crockpot to cook beans.
- A non-stick frying pan.

**Wasn't that easy? With a few changes to your menu, you will have nine plant-based healthy meals. Enjoy!**

Meal Planning Made Easy  
Create Delicious Plant-based Meals

#### A. Breakfast

Fill ½ of your plate with fruit  
Fill ¼ of your plate with protein  
Fill ¼ of your plate with whole grains

Eat a handful of nuts and 2 tablespoons of ground flaxseed





## 2. Breakfast ideas

- Quinoa with fresh/frozen blueberries, soy or almond milk, ¼ cup walnuts, 2 tablespoons ground flax seed, 1 orange, 1 pear.
- Steel-cut oats with raisins, soy or almond milk, 2 tablespoons ground flax seed, 1 banana, 2 slices of cantaloupe.
- Whole grain waffles with peanut butter and applesauce, blueberry smoothie.

## B. Lunch and dinner

Fill ½ of your plate with vegetables

Fill ¼ of your plate with protein

Fill ¼ of your plate with whole grains – brown rice, quinoa, whole wheat pasta, millet

## 2. Lunch and dinner ideas

- Split soup, whole grain crackers, green salad
- Black beans and brown rice, steamed broccoli, green salad
- Baked potato with sautéed mushrooms and red bell peppers, vegan sour cream
- Vegan chili and green salad
- Vegan burgers or grilled Portobello mushrooms
- Vegetable, white beans or lentil soup



## Eating Out on a Plant-Based Diet

It's easy to eat out when you are eating plant-based. Most restaurants offer some meatless options. Many of them have dishes made with potatoes, pasta, rice, vegetables, and then there's always salad. Indian, Thai, and Chinese restaurants offer a variety of plant-based meals.

## Gradual Change or Cold Turkey?

Some people like to make the change to plant-based "cold-turkey" while others do it gradually. If you are changing gradually, eat about 2/3 of your calories from legumes, whole grains, fruits, and starchy vegetables daily. These starchy foods are high in fiber and will keep you full and satisfied, so you'll naturally eat less animal foods and processed foods that are making you sick. Most people who have transitioned from a meat-type diet to a plant-based program say how great they feel, and how much more they can accomplish in their day once they feel healthier.





# Try our 30-Day Plant-Based Diet Challenge!



Use the information, the recipes, and ideas in this magazine to try the plant-based diet for the next 30 days. Then see for yourself how much better you will feel!

What is your health challenge? Perhaps you have high cholesterol, high blood sugar, or high blood pressure. Maybe you need to lose weight and slow the progression of a certain cancer. Perhaps you would like to take fewer medications or you just want to prevent kidney problems, and gout. A plant-based diet can help with all those conditions. Try our 30-day challenge and notice the benefits.

A plant-based diet with a variety of legumes, whole grains, fruits, vegetables, nuts, and seeds provides all the vitamins, minerals, micronutrients, and phytochemicals necessary for life and health. Vitamin B12 isn't found in plant foods, so one needs to take a supplement. The best way to take B12 (Cyanocobalamin) is as a tablet of 250-500 mcg sublingually or as a liquid supplement of cyanocobalamin once a week. Fortified breakfast cereals and fortified nutritional yeast flakes have B12 added to them. It's interesting that in the Framingham Offspring Study, one in six meat-eaters (ages 26-83) were vitamin B12-deficient. The subjects with the highest B12 levels were those who took supplements and ate the most breakfast cereals, not those who ate the most animal foods.\*



Besides being good for your health a plant-based diet is good for the environment, it can taste good, it can be enjoyable and save you money!

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By Ophelia Gherman, M.D.

# Shine on Vitamin D

Vitamin D is known by a few flattering nicknames: the sunshine vitamin, the miracle vitamin, and the cure-all vitamin. In the past decade it's been the most talked about, tested, and sought-after vitamin. Although Florida and Queensland, Australia are nicknamed the sunshine states, and bottles of vitamin D are sold at every pharmacy, we don't have to go far to get a healthy dose of the sunshine vitamin. In fact, the production of vitamin D begins just several minutes after light from the largest star in the solar system penetrates the skin, the largest organ of the human body.

Vitamin D is a vitamin uniquely produced by our skin and multiple other organs. It is not only a vitamin but a pro-hormone, meaning it not only affects growth and nutrition but also cell function and action. Although most vitamins are sourced through the foods we eat, only vitamins K and D are produced inside our body.

## Sunlight

What is the origin of sunlight? The Bible says that on the fourth day, "God made two great lights; the greater light [sun] to rule the day, and the lesser light [moon] to rule the night" (Genesis 1:16). Who created the sun? "In the beginning was the Word [Son of God], and the Word was with God, and the Word was God. In him was life; and the life was the **light** of men. And the **light** shineth in darkness; and the darkness comprehended it not" (John 1:1, 4, 5). [Emphasis added.]

Sunlight is the fastest traveling source of energy, with an astonishing speed of 299,792 km/sec (186,282 miles per second) while impacting all creatures with a source of renewable energy, information, power, and nutrition. Solar power is so essential to life, that the creation of light was the catalyst of creation. Its close proximity to the

earth also makes the sun a gravitational force, keeping planet earth in balance. Thus, at the dawn of creation, light dispelled the darkness and splashed its vivid colors.

## Vitamin D deficiency

Throughout the decades, the sun's reputation has been tarnished as being anything but healthy and desirable. In fact, the medical and scientific community have berated direct contact with the sun at the risk of developing aggressive skin cancer. Unfortunately, decades later, skin cancer is still rampant, affecting over 3 million Americans per year, and now the majority of Americans also suffer from severe vitamin D deficiency! Worldwide, vitamin D deficiency has reached pandemic proportions.

Several factors that prevent adequate vitamin D from being produced include skin



pigmentation, age, geographic location, and chronic health disorders. People who live in northern latitudes or in areas of high pollution, who work indoors or at night, who overuse sunscreen, and are home-bound may be at risk for vitamin D deficiency. Those at greatest risk include adults 50+ years, pregnant and breastfeeding women, and those suffering from obesity, thyroid disorder, Crohn’s or Celiac disease.<sup>14</sup>

**Health Benefits Vitamin D**

Vitamin D has well-established effects on bone health, but mounting evidence shows it also helps to improve one’s mood, skeletal strength, weight loss, and lead to a reduction in certain cancers, asthma attacks, and autoimmune disorders. See Table 1. For vitamin D to be effective, it needs the support of other cofactors such as calcium, vitamin K, A, magnesium, zinc, phosphorus, and boron.

Osteoporosis is a condition in which bone mass is lost, resulting in reduced resilience and an increase in breaking bones. Currently, it is estimated that over 200 million people worldwide suffer from this disease with aging and post-menopausal women at the

highest risk. The most probable reason for this is that our skin produces less vitamin D through our skin and we lose more muscles, and bones tissue. The good news is we can slow this cycle by adopting regular physical exercise, stocking up on vitamin D, and reducing our calcium loss by eliminating meat and carbonated drinks from our diet.<sup>15</sup>

Multiple autoimmune disorders such as multiple sclerosis, lupus, rheumatoid arthritis, Crohn’s, diabetes mellitus type 1 and asthma are also associated with vitamin D deficiency. Autoimmune disease is an inflammatory process in which the body produces antibodies that attack its own body tissues. Low vitamin D levels have been shown to worsen multiple sclerosis, lupus, and rheumatoid arthritis while increased levels of vitamin D can help to decrease inflammation and therefore flare-ups. It is important to remember that vitamin D deficiency does not cause these autoimmune disorders and should not be expected to be a cure-all. As in most cases of inflammation, we now know, many other autoimmune disorders such as multiple sclerosis, and crohn’s, have less relapse when treated

Table 1	
Health Benefits of vitamin D	
Improved calcium absorption and bone health.	Lower risk of rheumatoid arthritis.
Better muscle function (improved speed, strength, and fall prevention).	Lower risk of type 1 diabetes.
Lower risk of cancer and certain lymphomas.	Lower risk of tuberculosis.
Improved cardiovascular health (helps in lowering high blood pressure and treating congestive heart failure).	Improved mental function. Lower risk of insomnia and fatigue.
Greater immune system function.	Lower risk of multiple sclerosis.
Prevention of pregnancy complications.	Lower risk of depression, schizophrenia.



with high doses of vitamin D as prescribed by one's medical provider.

The impact of sunlight is far-reaching, and it sources the brain with helpful neurotransmitters. Our eye-lenses detect sunlight and send messengers known as neurotransmitters into our brain to release happy hormones called **serotonin** and **dopamine** throughout our body, affecting our mood, memory, and energy. When bright sunlight is chronically absent, as in Scandinavia and Alaska, a disorder known as Seasonal Affective disorder (SAD) is quite common. These countries combat their lack of sunlight with "Light stations" situated on street corners. Some studies reveal that 100,000 IU of vitamin D may be helpful in treating SAD.

#### How to get adequate vitamin D

- The best way to obtain vitamin D is from daily, unprotected sun exposure.
- Aim at spending 5-30 minutes in the sun, according to the National Institutes of Health. See Table 2.
- Maximize sun exposure on your face, arms, legs, and back for optimal vitamin D production.

Your vitamin D production may vary based on one's skin color, age, the season, time of day, and your geographic location. Those with darker skin tones must spend more time exposed to the sun to make the same amount of vitamin D as those with lighter skin tones. Avoid long exposures to direct UVA radiation at midday and when in higher latitudes, as this causes sunburn and skin cell mutations leading to skin cancer.

People living in higher latitudes and in colder climates may require longer periods of time in the sun and should closely watch their vitamin D levels. Living in warm climates, however, is not a guarantee that your vitamin D levels will be adequate as pollution and extensive skin covering can interfere with sun exposure.

#### Dietary Sources of Vitamin D

There are two main forms of vitamin D that can be obtained from our diet: Plant foods like mushrooms provide vitamin D<sub>2</sub> (ergocalciferol) if they have been grown or exposed to sunlight. The amount of vitamin D found in mushrooms can range from 100 IU/100 grams–40,000 IU/100grams de-

Table 2

## Vitamin D from Sun Exposure

Skin Type	Vitamin D IU	Time
Fair skin	10,000 IU	10 minutes
Fair skin in a bathing suit	50,000 IU	30 minutes
Tanned	20,000 – 30,000 IU	30 minutes
Dark skin	8000-10,000 IU	30 minutes





pending on the length of sun exposure. You can boost the overall vitamin D2 levels in your mushrooms by setting them out in the sun for several hours. The second form of vitamin D is known as vitamin D3 (cholecalciferol) and it is found in animal foods like fish and egg yolks. Both forms of vitamin D are transformed into 25-hydroxy vitamin D, and then further activated into 1,25-dihydroxy vitamin D by our kidneys. The main difference between the two is that vitamin D3 lasts longer in our bloodstream. However, plant-based vitamin D such as mushrooms also provide anti-oxidants, fiber, and many other health benefits.

### Testing your vitamin D levels

The best indicator of your vitamin D status is a blood level of vitamin D 25(OH). See Table 3. We may prevent the depletion of vitamin D by getting adequate sunshine throughout the spring and summer. Otherwise, if your vitamin D is less than 50, you live far from the Equator, or you are unable to spend adequate time in the sun, it's best to find a vitamin D supplement that's right for you.

Vitamin D supplements come in different doses. For vitamin D deficiency it is safe to take between 2000-5000 IU vitamin D daily. If you have vitamin D insufficiency, your doctor may rec-

Table 3

Blood Levels of Vitamin D		
Blood Levels		Results
< 20 ng/ml	Deficient	Rickets in children and Osteomalacia
20-30 ng/ml	Insufficient	Adequate for bone and overall health
50-100 ng/ml	Healthy	
125+ ng/ml	Too High	Increased risk of heart disease and cancer

Table 3

ommend 50,000 IU injections weekly for several weeks. It's always best to follow up on how well you are responding to vitamin D therapy by getting periodic blood tests.

### Healing in His wings

In the Bible, the sun often represents the Son of God, but it also invokes the idea of health (Isaiah 58:8), vitality (Proverbs 4:18), and life (Malachi 4:2).

As we enjoy the warm rays of natural sunshine each day, let us ask Christ, the Son of righteousness to come into our hearts and to give us healing in every area of our lives: mentally, emotionally, physically and spiritually. "But unto you that fear my name shall the Sun of Righteousness arise with healing in his wings" (Malachi 4:2).

Do you need physical healing? Do you need healing in your family relationships? Are you overwhelmed with anxiety and worry? Do you have guilt that nothing can remove? Have you lost your connection with God? Christ, the Son of Righteousness wants to come into your life and fill you with His love amidst the chilling trials.

"The love which Christ diffuses through the whole being is a vitalizing power. Every vital part—the brain, the heart, the nerves—it touches with healing. By it, the highest energies of the being are aroused to activity. It frees the soul from the guilt and sorrow, the anxiety and care, that crush the life forces. With it come serenity and composure. It implants in the soul joy that nothing earthly can destroy—the joy in the Holy Spirit, health-giving, life-giving joy."<sup>13</sup>

As we bask in the warm canopy of the sun and reap the benefits of vitamin D, let us also faithfully study Christ's life and His word, so our hearts, minds, and souls may be transformed by His healing love.

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By Dragan Ivanov, M.D.

# How to Reverse Heart Disease



**H**eat disease and stroke are the most common causes of death in our country and in the Western world. Over 50% of people die from coronary heart disease and stroke. Since atherosclerosis is the common cause of these diseases, it is also the fight against aging and death.

Let's look at the meaning of the term atherosclerosis. "Athero" means layering or thickening of plaque in the blood vessel wall. This thickening leads to the narrowing of the arteries. "Sclerosis" denotes the loss of elasticity of the artery.

What plugs up our arteries? The main culprits are excessive amounts of fat and cholesterol which narrow, harden, and plug-up these blood vessels and make it difficult for oxygen and nutrients to be brought to the cells and organs. This process is called atherosclerosis. We can, therefore, say that atherosclerosis is aging of blood vessels and leads to premature aging and death of the entire organism.

What are the diseases caused by atherosclerosis? Ischemic heart disease, high blood pressure, stroke, muscle spasms, weakness, and loss of function in all organs, and premature aging of the entire body.

The risk factors for atherosclerosis are mainly: high blood cholesterol, high blood pressure, and smoking. Secondary risk factors include obesity, lack of physical exercise, elevated triglyceride (blood fat) levels, diabetes, stress, and type-A personality.

## Type A personality

In 1976 two cardiologists, Dr. Friedman and Dr. Rosenman, accidentally discovered type A behavior in their waiting room. They noticed that the chairs in the waiting room were worn out sooner than expected. When the upholsterer looked at the chairs, he noted, "There's something different about your patients. I've never seen anyone wear out chairs like this."

In contrast to most patients, who patiently wait, it seemed like cardiac patients couldn't sit still in their seats too long, and they wore out the armchairs faster than usual. These patients would sit on the edge of the seat and get up often. Friedman and Rosenman conducted research on their patients and labeled this behavior as a Type A personality. Their research showed that people with type A personality run a higher risk of heart disease and high blood pressure than type B personalities.

Type A individuals are likely to be very competitive, highly involved in work and tend to be "workaholic." They are easily wound up, tend to overeat, have high blood pressure, and have a constant sense of

urgency. Type A individuals are impatient with delays and try to do more than one thing at a time. They can get easily angry, envious, and may lack compassion.

We are born with clean, flexible arteries and they should stay that way throughout our lives. However, many who eat the Western diet are clogging up the arteries with cholesterol, saturated fat, and calcium.

### How can narrowed arteries be cleared of atherosclerotic plaques?

The good news is that atherosclerosis can be reversed by following a strictly plant-based diet and a regular aerobic exercise program. Narrowed blood vessels can be “cleared” of atherosclerotic deposits, blood flow can be improved, and the entire body is rejuvenated. These changes have been confirmed by looking at the blood vessels of the heart (coronary angiography) of Mrs. S. Z. before and after she started consuming a strictly plant-based diet.

### LDL and HDL cholesterol

LDL cholesterol is the “bad” cholesterol which enables extra cholesterol to build up in the blood. HDL cholesterol is the “good” cholesterol because it carries the cholesterol from the arteries loaded with fatty plaque to the liver for elimination. Lifestyle practices that increase HDL cholesterol are a plant-based diet, weight reduction, and regular exercise.

A plant-based diet is the best for reversing atherosclerosis. These foods are also helpful in lowering LDL-cholesterol: 2-3 cloves of garlic daily (4-5 times per week), onions, oats, oat bran, and pectin in apples for its cholesterol-lowering effects.

### A Case Study

Mrs. S. Z. is a 65-year-old retired businesswoman. She came in for an exam in February 2018. Her lab results are in Table 1:

Table 1

Blood Test	U.S.A. Blood Tests		Lab Results After 2 months on a Plant-Based Diet
	Mrs. S.Z's Blood Test Results mg/dl	Normal Range Blood Test Results mg/dl	Blood Test Results mg/dl
Total Cholesterol	278	less than 200	162
HDL Cholesterol	46	more than 39	62
LDL Cholesterol	197	less than 100	82
Triglycerides	280	less than 150	104
Total Cholesterol / HDL ratio	6.0	Females: 3.3 – 4.4 Males: 3.4-5.0	2.6
Glucose	124	65-110 mg/dL	88
Vitamin D	22 ng/mL	30-100 ng/mL	26

The Carotid doppler\* test showed Mrs. S. Z. had 80% stenosis (narrowing of the arteries).

\*(The carotid Doppler test, or carotid ultrasound, is a test that uses sound waves to detect the narrowing of your arteries or potential blockages caused by plaque. It helps determine if you are at risk of having a stroke and if the physician needs to prescribe preventative measures.)





**Mrs. S. Z's diagnoses**

It is always better to prevent disease than to arrest disease. But Mrs. S. Z. already had heart disease, 80% blockage of the arteries, high blood pressure, prediabetes, chest pain, high triglycerides (fats in the blood), and vitamin D deficiency. She wanted to change her risk factors by changing her lifestyle.

- 1. Atherosclerosis
- 2. Arterial stenosis (80% blockage of the arteries)
- 3. High arterial pressure
- 4. Angina pectoris
- 5. Glucose intolerance (prediabetes)
- 6. Hyperlipoproteinemia, type II a
- 7. Hypothyroidism
- 8. Vitamin D deficiency

**Therapeutic Prescription:**

After receiving her dietary prescription, Mrs. S. Z. started eating healthy, home-cooked meals that were totally plant-based. She ate legumes (beans), whole grains, vegetables, nuts, and fruits. She eliminated all animal foods from her diet. In addition, she followed this therapeutic prescription:

- 1. Dihydroquercetin (Taxifolin) – a natural flavonoid that's antioxidant and anti-inflammatory.
- 2. Evening primrose oil – 1 x 1300 mg at breakfast.
- 3. Red yeast rice – has monacolin K which lowers cholesterol.
- 4. Ginko Biloba – Standardized full potency. One tablet before breakfast.
- 6. Vitamin D3 – 5.000 IU once per day. Daily sun exposure for 30 minutes.

- 7. Garlic tincture: 3 x 25 drops per day.
- 8. Ground flaxseed – 2 tablespoons; ground sesame seeds; pumpkin seeds.
- 9. Garlic with lemon in the evening according to recipe below.
- 10. Drink lemon juice, grapefruit juice, and orange immediately upon arising.
- 11. Eat a handful of walnuts, almonds, or hazelnuts at breakfast daily.
- 12. Use a small amount of extra virgin, cold pressed olive oil in salads and add to food after cooking. Do not fry.
- 13. Eat raw carrots, 1–2 at lunch and after dinner.
- 14. Eat a strictly plant-based diet.
- 15. Go for a daily brisk walk for 60 minutes. (If you are over 40, get your doctor's clearance).

**Garlic with Lemon**

30 garlic cloves, pressed with a garlic press  
3 lemons with skin, ground or finely chopped

**Directions:**

- 1. Bring one quart of water to a boil. Cool. Add garlic and ground lemon to the water.



2. Bring to a boil. Cover and let it stand for 12 hours.  
.....
3. Strain through a cheesecloth and refrigerate.  
.....
4. Drink 4 oz. (100 ml) before meals every morning or evening for 40 days.

### Lab Results after 10 months on a plant-based diet .....

After following a strict plant-based diet for 10 months, Mrs. S.Z's Carotid Doppler Test showed that the arteries opened up (50% stenosis). Her total, LDL cholesterol "bad" cholesterol, HDL cholesterol "good" cholesterol, triglycerides (blood fats), glucose levels (blood sugar), C-reactive protein (CRP) (test for inflammation), and vitamin D3 were all within normal limits. See Table 1

Her hypertension normalized and she came off her medications. She had no more chest pain



and didn't get easily fatigued. She had no more cramping in her lower extremities and had much more physical and mental energy than 10 months before. This is the power of a plant-based diet! Try the 30-day plant-based diet challenge!

**A person is as old as their blood vessels. Atherosclerosis is a process that leads to premature aging of the blood vessels. By reducing atherosclerotic deposits, we rejuvenate the whole organism. The fight against atherosclerosis is, in fact, a struggle against premature aging and premature death.**

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By Gabriela Raileanu, M.D.



# OMEGA-3s:

## Smart Fat for Your Body and Brain

It does not matter if you are 35, 55, 85, or just a one-day-old baby. Whatever your age, height or weight, gender or nationality, you need omega-fats. These special fats have such wide-ranging health benefits that they are almost a miracle pill.

Almost all the fats our body needs can be synthesized from other carbohydrates, fats or proteins except linoleic acid (omega-3 fats) and linolenic acid (omega-6 fats). They must be supplied by our diet, and for this reason they are called "essential fatty acids." They can't be produced by our bodies.

What makes omega-3 fat so essential to health? This fat makes up the integral part of every cell membrane in our body—about 30 to 40 trillion cells.<sup>1</sup> Omega-3 fats promote normal growth and vision. They help prevent heart disease, stroke and may help with rheumatoid arthritis and other conditions. Omega-3s also regulate genetic activities and support immunity. Omega-3s also make substances that act like hormones and regulate blood clotting and inflammation.<sup>2</sup>

### Are you getting enough?

Unfortunately, our SAD (Standard American Diet) is very low in this critical fat. We are getting more than enough of the omega-6 fats (linolenic acid) from poultry, eggs, and most vegetable oils, but not enough omega-3 fats from walnuts and flax seeds and other sources. This imbalance increases inflammation resulting in an increased risk of blood clots,

depression, mania, dementia, arthritis, autoimmune diseases, and even cancer. However, people who have a lower ratio of omega-6 fats to omega-3 fats, reduce their risk of chronic diseases.<sup>3</sup> The average American diet has a 20:1 ratio of omega-6 to omega-3 fats. A ratio of 4:1 is good for health.

### Health benefits of omega-3 fats

Since omega-3 fats have such powerful health benefits, they are among the most studied nutrients in the world. Symptoms of omega-3 deficiency are manifested in fatigue, dry skin, poor memory, mania or anxiety, mood swings, arthritis, and poor circulation.<sup>4</sup> Let's look at the benefits of omega-3s for a healthy body and brain.

### 1 Improve memory, depression, anxiety and mental disorders

Omega-3 fat is highly concentrated in the brain and is an effective memory booster.<sup>5</sup> Studies show that people who consume omega-3s regularly are less likely to be depressed, while those who are already depressed may improve their depressive symptoms<sup>6</sup> and anxiety.<sup>7</sup>

Studies show that people with schizophrenia and bipolar disorder had low blood levels of omega-3s. By supplementing their diet with omega-3s they were able to improve their symptoms.<sup>8</sup> Dr. Neil Nedley, founder, and author of the widely acclaimed Nedley Depression and Anxiety Recovery program recommends that people with major depression



take 3000 mg. and those with bipolar disorder take 9000 mg. of omega-3 fats per day.<sup>9</sup> The Flax-Nut Sprinkle provides that amount.

## 2 Healthy pregnancy and infancy

Getting adequate omega-3s, in utero and infancy, is crucial for the growth and development of the child. Children who get enough omega-3s during their mother's pregnancy have higher intelligence, better communication and social skills, fewer behavior problems, lower risk of ADHD, autism, cerebral palsy, and other developmental problems.<sup>10, 11</sup>

## 3 Improve risk factors for heart disease

Studies show that omega-3s improve several heart disease risk factors, but they do not prevent heart attacks or strokes. Omega-3s may help blood not to clump together and thus prevent blood clots. They lower triglycerides, reduce blood pressure and heart rate, reduce inflammation,<sup>12</sup> and raise HDL (good) cholesterol levels.<sup>13</sup>

## 4 Macular degeneration

Research shows that people who supplemented their diet with omega-3s stabilize their macular degeneration over a 5-year period. Macular degeneration is one of the main causes of permanent eye damage and blindness in the U. S.<sup>14</sup>

## 5 Reduce ADHD symptoms in children

Children with ADHD have a behavioral disorder defined by inattention, hyperactivity,

and impulsivity. Studies show these children have lower blood levels of omega-3 fats compared to their healthy peers.<sup>15</sup> But children given adequate omega-3s in their diet, have improved attention and ability to complete tasks. They also have decreased hyperactivity, impulsiveness, restlessness and aggression.<sup>16</sup>

## 6 Fight autoimmune

In autoimmune diseases, our immune system mistakes healthy cells for foreign cells and starts to attack them. Research shows that if a child gets an adequate amount of omega-3 during the first year of life, he/she will have a reduced risk of many autoimmune diseases—type 1 diabetes, rheumatoid arthritis, ulcerative colitis, Crohn's disease, and psoriasis.<sup>17</sup>

## 7 Slow down mental decline

Studies show that high levels of omega-3s in the blood can help to slow or even reverse cognitive decline in some people suffering from dementia and even Alzheimer's disease.<sup>18</sup>

## 8 Good for your skin

Omega-3s are responsible for the health of the cell membrane which makes up the skin. These amazing fats also reduce premature aging of your skin and help protect it from sun damage.<sup>19</sup>

## 9 May improve joint and bone health

Research shows that omega-3s can improve bone strength and thus reduce the risk of osteoporosis.<sup>20</sup> While there is no evidence that high omega-3 levels can prevent arthritis, it appears that they can decrease inflammation caused by bone and joint pain.<sup>21</sup>

## 10 May help prevent some cancers

Studies show that individuals who have the highest intake of omega-3s in their diet have a significantly lower risk of colon,<sup>22</sup> prostate, and breast cancers.



## Sources of omega-3 fats

There are three omega-3 fats: EPA, DHA, and ALA. EPA (Eicosapentaenoic acid) and DHA (Docosahexaenoic acid) are found mostly in fish and algae. ALA (Alpha-linoleic acid) is found in walnuts, flax and chia seeds and other plant foods. The good news is that our body can convert the ALA from these plant foods and make enough EPA and DHA for optimal health.<sup>23</sup>

## How much do I need?

The dietary recommendations for the intake of linolenic acid (omega-3 fats) are 1.6 g per day for men and 1.1 g per day for women.<sup>24</sup>

## Is fish safe to eat?

While most people get their omega-3s from fish, many of them don't realize that fish get it by eating seaweed or phytoplankton. Atlantic salmon are the richest sources of because they come from cold water oceans where plants are highest in omega-3s.

Today many doctors recommend to their patients to consume fatty fish two or three times a week to get their omega-3 fats, but the question arises: Is fish safe to eat? Studies have shown that there are problems with fish consumption. Fish today is contaminated with various pollutants PCBs, dioxins, Pesticides like DDT, and heavy metals—mercury, lead, and cadmium—all of which have a negative effect on the neurochemistry of the brain and human health.<sup>25</sup> Pregnant women and children are most sensitive to these contaminants. Increased mercury poisoning is very harmful to the developing brains of the young.<sup>26</sup>

It is interesting how people are concerned about the quality of the water they drink. Most of us have our own purifying system or buy bottled water. However, a more important question should be: "Are the fish I'm eating coming from unpolluted waters?" Generally, whatever toxins are present in the water in small amounts will be 1,000 or 1 million times greater in the fat of the fish due to the effect of biomagnification (how contamination increases as you move up the food chain).<sup>27</sup>

## Fish supplements

Despite many claims that are made for fish supplements to cure disease, these supplements are

not recommended. Supplements of fish oil may raise LDL (bad) cholesterol, they may increase bleeding time, and interfere with wound healing and suppress immunity. Another problem is that fish oil supplements are made from fish skins and livers, which contain toxic concentrations of pesticides and heavy metals (mercury and others), and therefore are more concentrated in pills compared to fish itself.<sup>28</sup>

## What are the best sources of omega-3 fats?

The best sources of omega-3 fats are from plants. You can solve the fish and mercury dilemma easily by getting your omega-3s from a variety of plant sources. See [Table 1](#). The richest plant sources are found in flaxseeds, chia seeds, and English walnuts.

If you wish to get omega-3s from a pill, you can get your daily DHA/EPA from algae oil rather than fish oil which is free of toxic contaminants because it is manufactured without pollutant exposure.<sup>30</sup>

## Easy ways to add omega-3s to your diet

Which is better flax or chia seeds? Flax has 15 times more lignans than chia, which are believed to have anticancer effects. Before eating your flax or chia seeds, grind them in a coffee grinder to get the most benefit, and then refrigerate it. Whole flax can be stored at room temperature for one year, but once it is ground, it should be refrigerated immediately and kept for a few days. Here are some ways to include flaxseed in your diet:

- Add 2–3 tablespoons of ground flaxseed on your cereal.
- Eat a handful of walnuts per day.
- Make chia pudding.
- Make the "Flax-Nut Sprinkle" and add some to your cereal, yogurt or fruit salad each day.

Let us be thankful and celebrate the fact that our Creator has given us the "Creation diet" of Genesis 1:29 and 3:18 for health and disease prevention. This diet is adequate in every essential nutrient including omega-3 fatty acids. So, enjoy your flaxseeds, chia seeds, walnuts, and other plant foods rich in this miraculous fat which was designed for the health of your body and mind.

Table 1

Plant Sources of Omega-3 Fats <sup>29</sup>		
Food	Serving Size	Omega-3s (mg)
Spinach, fresh	1 cup	41
Blueberries	1 cup (30 mg)	86
Brussel sprouts, cooked	½ cup (78 g)	135
Avocado	1 whole (150 g)	221
Pecans	1 oz. (28 g)	276
Edamame, green soybeans	1 cup (28 g)	560
Canola oil	1 Tbsp. (14 g)	1280
Wheat germ oil	1 Tbsp. (14 g)	932
Walnuts, English	1 oz. (28 g)	2570
Chia seeds	1 oz. (28 g)	5006
Flaxseed	1 oz. (28 g)	6388
Flaxseed oil	1 Tbsp.	7196

### Chia or Flax Seed Egg Substitute

- 1 Tbsp. whole raw flax or chia seeds
- 3 Tbsp. water

#### Directions:

1. Grind the seeds in a coffee grinder or NutriBullet into a fine meal and place into a small bowl.
2. Mix in 3 Tbsp. water. Cover and place in refrigerator. Keep chia in fridge for 15 minutes, but 1 hour is better. This gives the egg replacer time to thicken.

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3. Leave flax seed in the fridge for 1 hour.
4. Once thickened, this recipe makes the equivalent of one egg substitute for your baked goods.
5. If you do a lot of baking, make some of these "eggs" in advance and store them in the fridge for up to one week.

### Passion Fruit Chia Pudding —Mariola Dumitru

- 1/2 cup chia seeds
- 1 cup passion fruit juice or pineapple juice
- 4 Tbsp. coconut sugar or maple syrup
- 1 cup full-fat coconut milk

#### Directions:

1. Place coconut milk and passion fruit in the blender (you can find passion fruit frozen in an International, Asian or Latin market).
2. If the juice is unsweetened, add coconut sugar, or another sweetener.
3. Blend coconut milk and passion fruit juice or pineapple juice. Pour in bowl.
4. Add chia seeds, mix with a fork. Refrigerate for a few hours until it thickens, and mix again. It is best to let it set overnight until it thickens. If you have time, it is better if it thickens overnight.
5. Pour into dessert glasses and decorate with fruit. Serve cold.





# Why Exercise Is the Best Medicine

By Frithjof Schwarz, M.D.

While visiting western Kenya as a medical missionary doctor, I had to travel long distances by car from one village to another to treat people. The country roads are usually narrow, sometimes dangerous and in disrepair. As you drive through the green hills of Africa, there are often cows, donkeys, and goats grazing in the grass. However, the main difference between the country roads of North America, Europe and Africa are the many people who are always walking on the road in Africa.

As they walk, the people often carry heavy bundles of luggage on their heads or backs. The people in Africa walk much more than we in the Western countries. School children may walk several hours to get to school. All this walking is more natural, and healthy for the body than is our way of modern life. We drive to work, then we sit at the office all day. We sit to eat our lunch, then we come home and perhaps plop on the sofa to relax and watch television.

## Inactivity, our problem

How active are we as a nation? Based on a government report, only 1 in 3 children in the U.S. are physically active every day. Only 1 in 3 adults receive the recommended amount of physical activity each week, while over 80% of adolescents do not get enough aerobic exercise to meet the guidelines for youth.

"It is estimated that in the U.S., 190,000 deaths per year are attributed to a lack of

regular physical activity." Physical inactivity is also a global health problem.

But what if you exercise daily yet have a sedentary job? Research shows that to be healthy we need to be active throughout the day. Individuals who sit for long periods have a two-fold increased risk for heart disease, diabetes and death. So, besides exercising regularly, we must also avoid sitting for long periods of time. If you have a desk job, get up every hour and go for a 5-minute walk. Take that project

to your coworker personally instead of sending an email.

## Health benefits of exercise

You know that physical exercise is good for you, but do you know how good it is? From protecting you from heart and blood vessels, to preventing diabetes and osteoporosis and improving your mood and cognition, exercise can improve the quality of your life. Exercise is better than a pill, for it targets many diseases at once, and it has no side effects.

### 1 Improves mood, stress and anxiety

Do you need to have your spirits lifted after a stressful day? Take a brisk 30-minute walk. Exercise has a positive effect on our mood and decreases feelings of anxiety and stress. After a single workout the “feel-good” neurotransmitters: serotonin, dopamine and norepinephrine are released and their effect lasts for at least two hours. Studies show that regular aerobic exercise reduces and treats depression as effectively as medications.

### 2 Controls weight and combats type 2 diabetes

Trying to lose or maintain a healthy weight? Both diet and exercise play a critical role in weight control. Many studies show that women who exercise regularly for 45 minutes 5 times per week significantly decrease their intra-abdominal fat levels. This type of fat is the most dangerous and leads to increased risk for insulin resistance, elevated cholesterol, high blood pressure, heart disease, diabetes, and certain cancers. Women who exercised 4–5 hours per week cut their risk of type 2 diabetes in half compared to sedentary women.

### 3 Lowers heart disease, hypertension, stroke

Hoping to prevent heart disease and stroke? Regular aerobic exercise can reduce LDL or “bad” cholesterol and boost your HDL or “good” cholesterol, plus decrease unhealthy triglycerides. To lower blood pressure, studies show we must do both aerobic and resistance exercises.

### 4 Lower your risk of cancer

Would you like to lower your risk for cancer? Research shows that regular exercise protects against cancer by improving the immune, pulmonary, and antioxidant defense systems. One large study showed that men who were the most physically fit had cut their cancer mortality rate in half compared to those who had the lowest fitness levels.

### 5 Improve brain health and memory

Aerobic exercise has immediate positive effects on the brain. Research shows that exercise that breaks a sweat improves memory, attention and concentration for the young, as well as for adults and seniors. It helps children with ADHD feel more peaceful and calm.

People who exercise regularly have improved attention function which depends on the prefrontal cortex. “Just one single workout can improve your ability to shift and focus attention, and that focus will last for at least two hours according to research done by Dr. Wendy Suzuki, neuroscientist from New York University.”

When we engage in regular exercise, scientists see an increase in the volume of the hippocampus—the part of the brain involved in memory and learning. Dr. Scott McGinnis, an instructor in neurology at Harvard Medical School says: “Even more exciting is the finding that engaging in a program of regular exercise of moderate intensity over six months or a year is associated with an increase in the volume of selected brain regions.”

### 6 Build strong muscles and bones

Would you like to maintain strong bones and reduce loss muscle as you age? Engage in regular physical exercise to reduce the loss of muscle and maintain your strength as you age. Research shows that people who do aerobics, muscle-strengthening and bone-strengthening exercises slow osteoporosis which comes with age.

### 7 Increase energy levels

Exercise has been shown to be a good energy booster both for those who are healthy or sick. Studies show that exercise has increased





the energy levels of people suffering from chronic fatigue syndrome, cancer, and multiple sclerosis.

**8 Relax and sleep better** People who exercise regularly have a more restful sleep, and a longer, deep restorative sleep. Deep sleep helps to control stress and anxiety, improves heart health, and boosts immunity.

**9 Lower risk of neurodegenerative diseases** If you'd like to preserve your mental abilities, the best way is to exercise daily. In one study researchers measured the total daily exercise of 716 older adults who had no Alzheimer's. After a 4-year follow-up, results showed that 71 of the subjects developed Alzheimer's, but those who exercised regularly had lowered their risk of developing Alzheimer's by 52%.

## How do I get started?

**Get a health clearance.** Starting a moderate exercise program is generally safe for most people.

However, if you've been inactive and are a male over 40, and a female over 50, get a doctor's clearance before starting a vigorous exercise program.

## Warm-up and cool-down

Begin and end your exercise session with an easy 5-minute walk to get your body warmed up. Cool down with a slow walk and stretching exercises.

## Aerobic Activity

Choose activities that use large muscle groups, that are rhythmic, and that you can maintain for prolonged periods of time such as walking, jogging, biking, swimming.

## Strength and Flexibility Exercises

It is important to include strength and flexibility exercises 2 – 3 times per week, for they have important health benefits that are different from aerobic exercise. Strength and flexibility exercises protect against back pain and injuries, maintain bone strength, improve the figure, and prevent loss of muscle mass and disability as we age.

## Frequency

The good news is that your exercise routine does not have to be done all at once. You can split it into two or three sessions per day.

## Intensity

Maintain the activity for 10 – 30+ minutes without undue fatigue. Do the talk test. If you can carry a conversation while you walk, then your pulse will be within normal limits. You should breathe deeply but not be out of breath when exercising. A moderate sweat indicates that you're receiving health benefits.

## Moderation

In Kenya many seniors have deformed spines and need to use walking sticks. I have also seen many suffering from pain and deformation of the knees and joints of the vertebral column. Why these people have arthritis and deformed joints when they walk so much? It's because they carry heavy weights.

## Physical Activity Guidelines for Adults and Children<sup>22, 23</sup>

Activity	Frequency	Intensity	Time
Adults Aerobic exercise – moderate Or Aerobic exercise – vigorous Or a combination of moderate and vigorous exercise.	5–7 days/week	Brisk walking, 3-4 mph / Biking, 10 mph / Swimming, moderate / Mowing lawn / Raking, hoeing garden / Canoeing, rowing 2-3 mph  Walking briskly uphill climbing stairs / Running, jogging / Biking, 12-16 mph / Swimming, fast crawl	150+ min. per week   115+ min. per week
For optimal health benefits and weight gain prevention	Daily	Brisk walking, 3–4 mph Biking, 10–12 mph Swimming laps Gardening: raking, hoeing, pushing lawnmower	60 min. daily moderate exercise
Strength and stretching exercises for legs, hips, back, abdomen, chest, shoulders, and arms free weights, machines, calisthenics		Push-ups, pull-ups, sit-ups Carrying heavy loads Heavy gardening: digging or hoeing	2–3 days per week
Children and adolescents Age 6-17	Daily	Aerobic exercise Muscle-strengthening and bone-strengthening exercise	60 min. of activity

So, we see that movement alone is not always enough; it must be the proper type of movement, done in moderation. Biking and swimming are good exercises that do not put stress on the joints. They increase strength, flexibility, and coordination.

**Where should we exercise?**

Research shows that exercising in nature has a powerful effect on mood and self-esteem. Exercising by rivers, streams, lakes, and by the ocean offers even greater benefits. So whenever possible, exercise outdoors among trees and plants—and if possible, near bodies of water.

While I was visiting a Christian sanitarium and lifestyle center in the U.S., I saw patients with depression being successfully treated with a plant-based diet, counseling and so-called “guided nature walks.” The patient went on these walks with a professional staff member and was engaged in uplifting posi-

tive conversation. Those brisk walks in nature had a soothing and stabilizing effect on the depressed mind.

**Keys to success**

To receive the health benefits of exercise for your body and mind, use these keys to success:

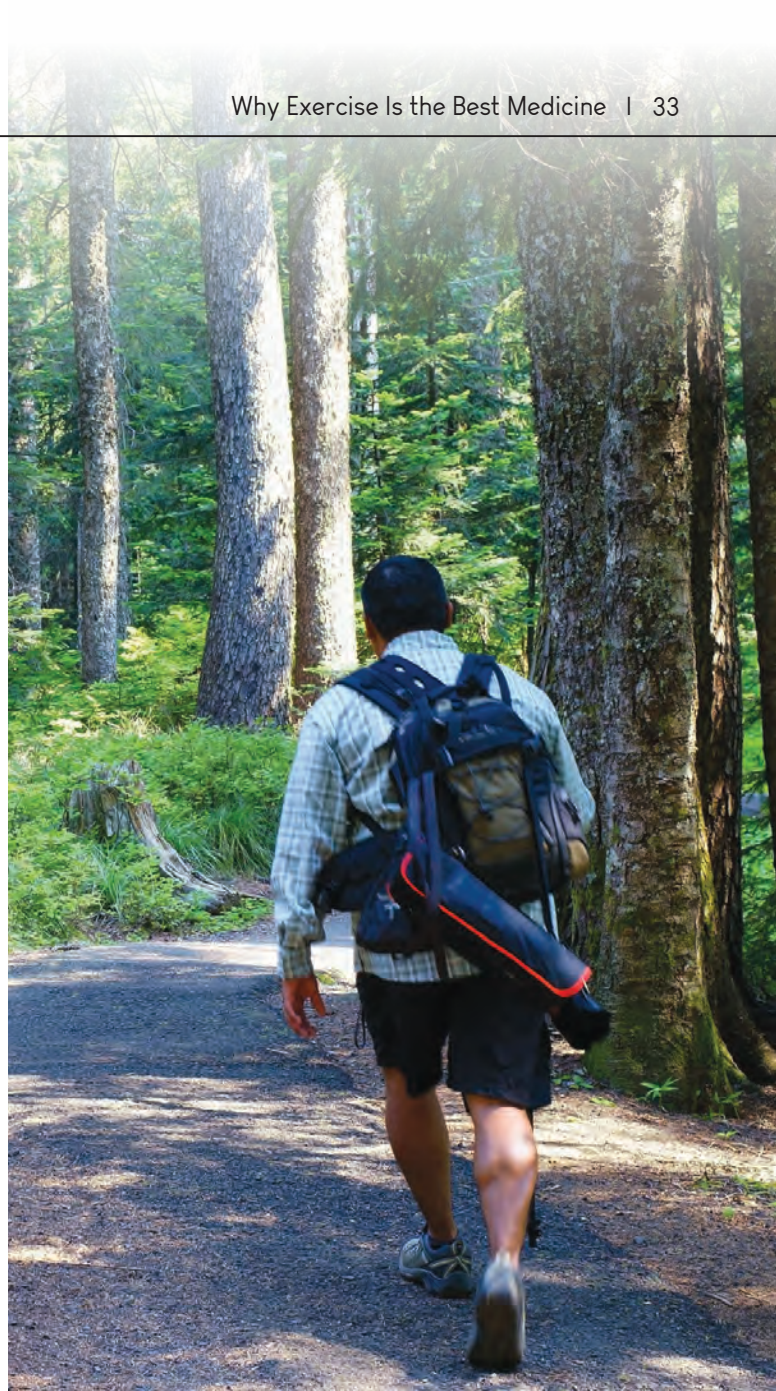
- 1. **Commit to exercise at least 5 days a week for 30-60 minutes** to optimize your chances of forming a life-long habit.
- 2. **Choose an exercise you enjoy.** Vary the type of exercise to make it more fun.
- 3. **Find an exercise partner,** a neighbor or your dog, and you will look forward to working out each day.



“All who can possibly do so ought to walk in the open air every day, summer and winter. A walk, even in winter, would be more beneficial to the health than all the medicine the doctors may prescribe.”<sup>27</sup>

Have you ever thought about who wakes you up each morning, keeps your lungs breathing, and your heart pumping? Where do you get the strength to get up and go to work and exercise each day? The Bible says, “For in him [Christ] we live, and move, and have our being” (Acts 17:28). Every breath we inhale, each throbbing heartbeat, and every step we take comes to us through the power of Christ, our Creator!

As you go for a brisk walk tomorrow morning, why not thank God for the life and health He has given you? Also, ask Him to help you stick to your exercise program. If you do, He makes a promise: “They that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall RUN, and NOT BE WEARY; and they shall walk, and NOT FAINT” (Isaiah 40:31).



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# How to Improve Your Brain Function

By Dragan Ivanov, M.D.

**B**rains rule the world and govern everything. The brain is the alpha and omega of all things. Everything begins and ends in the brain. The brain the source of our emotions, the organ of love, spirituality, and personality. A healthy brain makes it easier for these mental and emotional abilities to be included in our lives, while a damaged or compromised brain makes it much more difficult.

The quality of our brain's performance determines the quality of our lives: how happy we will be, how we will get along with others, how successful we will be at work, what will be the course of our life, and how it will end. A healthy brain is more deliberate, more playful, deeper, more romantic, more creative, and richer than an exhausted and compromised brain.

The good news: Our brain has the potential to function better! Genes are not destiny. We do not have to be permanent victims of our genetics and our past bad choices and actions. By improving our lifestyle, we can have a positive effect on the performance of our brain.

Numerous scientific studies have shown that a healthy, wise, and spiritual life improves all brain functions. It is a lack of knowledge and education about the brain that poses a great danger. For this reason, the wise man Solomon reminds us: "How much better is it to get wisdom than gold! and to get understanding rather to be chosen than silver!" (Proverbs 16:16).



**Would you like to change and improve your life? Begin with your brain!**







## 1. Daily habits that damage the brain

Our daily unhealthful lifestyle habits are the greatest obstacle to our success and happiness. Let's look at some of these habits that injure our brain and lead to premature aging and mental decline. According to psychologist Daniel Goleman (*Focus: The Driver of Excellence*), focusing our attention on the influx of text messages, e-mails, Facebook messages, poses a greater danger to our IQ and concentration than smoking marijuana. Add to that daily news, phone calls, tweets, blogs, and conversations over social networks, all of these overload our mental processes and lead to dizziness, fatigue, decreased concentration, and a decline in intelligence among children, youth, and adults. In today's fast-moving world, it is easy to become isolated, distracted and overwhelmed by information. Like a fatigued muscle, careful focusing of attention weakens over time, as stress develops to the point of mental exhaustion.

Therefore, when our mental energy supplies are used up, it is time for us to stop and learn how to restore an exhausted brain. It is wise that we regularly disconnect ourselves from the endless and dangerous inflow of information. Surfing the internet and watching television do not rest an overloaded brain. Likewise, a walk through a crowded city does not rejuvenate our brain, rather it makes it strained and fatigued. Only as we spend time in nature's green spaces can we refresh the brain, regenerate its ability to focus, and regain peace of mind. Yes, nature is where the Creator prepared for humanity to live: "And the Lord God planted a garden eastward in Eden; and there he put the man whom he had formed. And the Lord God took the man, and put him into the garden of Eden to dress it and to keep it" (Genesis 2:8, 15).

Although it is thought that "paying attention" is a lost skill, it is the key to satisfaction, productivity, and good relationships, both personal and professional. The ability to focus is what separates experts from amateurs and average performers from stars. It is precisely focus that plays an enormous role in succeeding in life. If we want to advance, acquire new knowledge and achieve success in a time of constant distractions, it is more

important than ever to learn how to sharpen our focus, writes Daniel Goleman, in his book: *Focus: The Hidden Driver of Excellence*.

In addition to damaging our brain processes, the uncontrolled use of electronic means of communication destroys face to face communication and interpersonal relationships. Social networks break up emotional connections. To be close to someone requires joint attention and a high degree of mutual focus on each other. Since we are daily flooded with media that draws away our attention, we now have a greater need to learn how to create warm interpersonal relationships. Our inability to resist checking our e-mails or Facebook and remain focused on the person who is talking to us, leads to a "rejection." According to psychologist Daniel Goleman, this gesture gives the other person the message, "I don't care" about what is happening here and now.

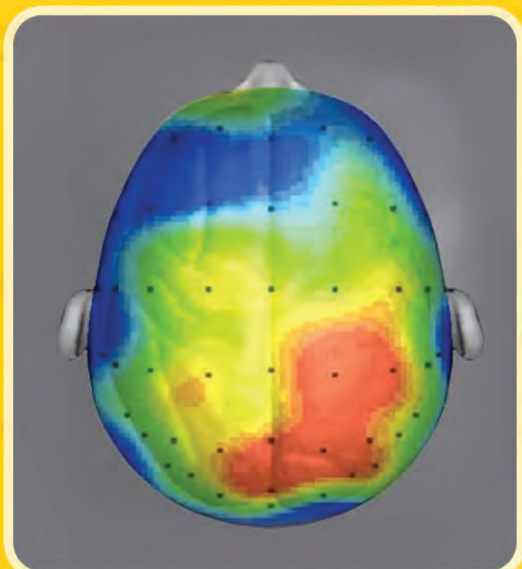
Electronic communication is an indispensable form of modern interaction, but instead of constantly checking our e-mail, it is far better to set aside a specific time during the day or week for that purpose. This will help us to devote the rest of our time to things that really matter and also save time. Our family members, friends, and other people are more important than all the messages in the world! No matter how much money we may have, and regardless of our degree of success, in the end, everyone discovers that what really matters are people! Why? Because we draw most of life's joys and happiness from our relationships with others.



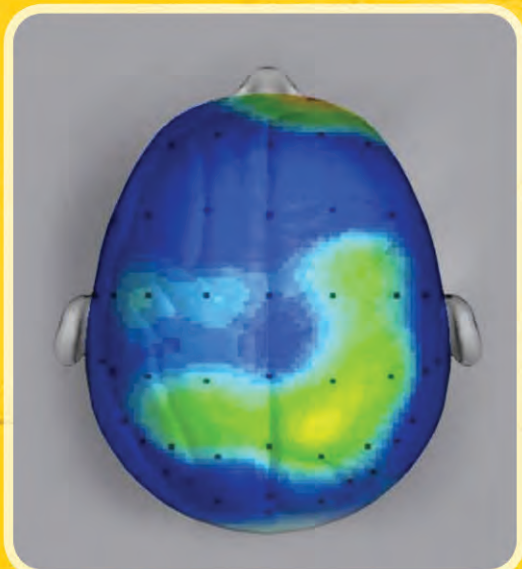
## 2. Physical activity

Engaging in daily physical activity for 30-60 minutes, to a large degree repairs the brain and improves brain function. Exercise increases the concentration of neurotrophic factor which regenerates damaged cells. During physical activity, there is an increased production of melatonin and endorphins, which have positive effects on our mental processes, feelings, and overall health. The best activity is aerobic exercise (walking, jogging, bicycling, swimming) which increases the heart rate and produces a good sweat. It is especially important to do aerobic exercise and then take a break and study intermittently. The combination





**1. Brain after 20 minute walk.**



**2. Brain after sitting quietly.**

of physical exercise with mental effort yields the best results and is the most powerful, and effective brain stimulator. Regardless of what is your age, physical activity will help keep your brain healthy. Without exercise, we become less intelligent, our brain ages prematurely, we gain weight, and certainly are less happy. From the first pages of the Bible, God commands modern man, "in the sweat of thy face shalt thou eat bread" (Genesis 3:19).



### 3. Sunlight

Sunlight and vitamin D stimulate brain activity and help create pleasant emotions. People who had higher blood levels of vitamin D showed a significant and sustained improved focus and speed in brain processing information. Maintaining an optimal level of vitamin D in the body by being daily exposed to sunlight, ensures optimum mental functioning. Sunlight and vitamin D help in the prevention and treatment of chronic fatigue, insomnia, anxiety, depression, Parkinson's and Alzheimer's disease, schizophrenia and premature aging of the brain.

Sunlight is also important for the synthesis of neurotransmitters—serotonin and melatonin. In addition to its many beneficial effects on the body, melatonin also improves the mental processes, especially memory, concentration, and mental endurance. Sunlight is also necessary for the synthesis of the antidepressant hormone serotonin—the hormone of happiness. Studies have shown that serotonin and melatonin play an important role in mental functions, especially in the frontal lobe. Lower levels of sun exposure were linked with three times higher risk of cognitive decline. Solomon message reaches us today, "Truly the light is sweet, and a pleasant thing it is for the eyes to behold the sun" (Ecclesiastes 11:7).



### 4. Effects of sleep

Every night we need to sleep for at least 7 to 8 hours. Adequate sleep of good quality is necessary for the regeneration of the brain and memory. During sleep, the brain sorts information received throughout the day and stores it for later use. If we do not get enough sleep, this process does not take place, resulting in forgetfulness and inability to remember what we need at a certain moment. Those who sleep insufficiently have a lower concentration, have difficulty focusing, and slower thinking. The accuracy of human memory decreases by about 25-30% due to lack of sleep alone.

Sleep is essential for the rejuvenation and regeneration of the brain. Insomnia is associated with depression. It is extremely important to fall asleep before midnight because melatonin is maximally synthesized between midnight and 3 am, provided that we are asleep at that time.



Avoid exercising before bedtime. This is the time to wind down and follow a bedtime routine which can help us relax and sleep well. Drinking lemon balm or passion flower tea, soaking in a warm bath, listening to relaxing Christian or Baroque music are some excellent activities to help you unwind in the evening. Having an attitude of thankfulness, reading the Psalms, talking to God in prayer, laying on Him all your concerns, problems and anxieties, will help you enjoy a good restful sleep.



## 5. Effect of alcohol

Alcohol is a neurotoxin that can cause brain damage. It reduces total blood flow through the brain, it inhibits primarily the frontal lobe and reduces the concentration of melatonin and other neurotransmitters involved in memory and learning. Contrary to popular belief, red wine is an unhealthy drink. Alcohol has a damaging effect on the brain even if it does not lead to inebriation. Even drinking one glass of wine poses a risk for the brain, especially in youth up to the age of 25. Alcohol is more toxic for women than men. "Look not thou upon the wine when it is red, when it giveth his colour in the cup, when it moveth itself aright. At the last it biteth like a serpent, and stingeth like an adder" (Proverbs 23:31, 32). "



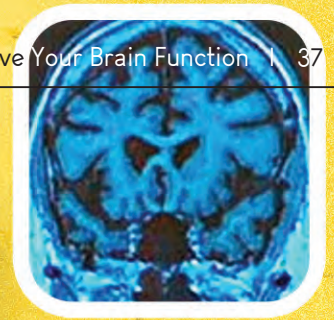
## 6. Effects of tobacco

Smoking leads to a reduction in oxygen concentration in the brain and weakens all mental processes, causing headaches, anxiety, depression, and increased irritability. Smoking is much more dangerous to the brain and overall health than neglecting regular personal hygiene—bathing and oral hygiene.



## 7. Effect of coffee

Coffee has numerous negative effects on the brain and the body. Coffee reduces blood flow to the brain causing dehydration. It disturbs sleep because it blocks adenosine—the substance that helps us to fall asleep; it lowers the concentration of melatonin, it causes stress, anxiety, and headache. Coffee drinking is addictive. If we want to stimulate our brain and encourage a pleasant mood, we can drink a glass of water with a spoon



• Alcoholic



• Normal

of honey or bee pollen and freshly squeezed lemon juice. It is a healthy drink that will stimulate the brain and the body without any side effects.



## 8. Effect of music

Studies have shown that listening, playing and singing Christian and Baroque music—Bach, Handel, Haydn, Mozart, Vivaldi, and others—recovers and strengthens the brain; it literally changes and improves its structure. While all music enters our brain through the emotional regions, only classical produces a positive effect on the frontal lobe, improves our emotional and mental state, and reduces cortisol concentration and stress. This type of music has a significant role in the treatment and prevention of anxiety and depression. It sets the mood for reflective thought, arousing us to ask ourselves: who am I, where do I come from, and where am I going. Music is unique in its ability to stimulate both the left and the right hemispheres of the brain.





On the other hand, syncopated music with a beat induces very little frontal lobe response, while causing a large emotional response with very little logical or moral interpretation. A study on mice, listening to 8 weeks of soft-rock, showed their memory had not come back 3 weeks after the music stopped. Permanent brain damage was seen, while classical music had no such negative effect. Music with a beat (rock and roll and similar type of music) can lead to depression, destructive behavior, and even suicide. Be careful when choosing your music.



## 9. Positive thinking

The key to being healthy is not only consuming a plant-based diet, doing daily exercise, having a healthy body weight, sleeping 8 hours, and going for regular medical checkups. Certainly, these are all critical for optimum health, but the other factor that is also important is the way we think and feel.

The apostle Paul invites us to transform our thoughts, and be not conformed to this world: but be ye transformed by the renewing of your mind, that ye may prove what is that good, and acceptable, and perfect, will of God" (Romans 12:2).

Thoughts are powerful! Our brain and body react to our every thought. Every time we think a thought, our brain releases chemicals called neurotransmitters. Depression is often the result of frantic, uncontrolled negative thoughts, and it doubles the risk of Alzheimer's disease. At the same time, depression pushes other people away from us and increases our isolation and loneliness.

Everyday negative, anxious, sad, or angry thoughts, like toxins, destroy brain cells and lead to a chemical imbalance in the brain, and to an unpleasant emotional state. When we think gloomy and anxious thoughts, the limbic system becomes very active and overheated. The result is melancholy, depression, anxiety, and panic attacks. Good and happy thoughts stimulate the release of endorphins and oxytocin which soothe the deep limbic system and help us feel good. We find the same prescription in the Bible, "Finally, brethren, whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report; if there be any virtue,

and if there be any praise, think on these things" (Philippians 4:8).

Our way of thinking is a habit. Thinking and talking about discouraging and depressing topics is a habit that comes from a lack of thought education. Most people think that thoughts appear all by themselves. What we must understand that it is our job to challenge and correct the negative words, thoughts, or images that pop up into our heads. These gloomy, negative thoughts are often the basis for the development of anxiety, depression, and other problems in life. The wise man Solomon says, "A merry heart doeth good like a medicine: but a broken spirit drieth the bones" (Proverbs 17:22).



## 10. Always do something new

Monotony deadens the brain, while a dynamic life filled with change and interwoven with challenges stimulates its growth. Therefore, always do something new. Avoid living on autopilot. Do not repeat the same actions day after day. Always try to be learning something new—a foreign language, how to play an instrument, a new skill or a new hobby. Make new experiences. Use those parts of the brain that you do not normally use, and that is how you will further develop existing talents and those brain structures that are already developed. Mental effort and exercises are the best way to keep the brain from premature aging and deterioration. The brain grows and develops when pushed beyond its usual limits. Use your brain or it will die!

The essence of brain development and that of the whole being is the balanced and harmonious development of all mental, physical and spiritual abilities.

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# Health Benefits of Trusting God

When Ashley was diagnosed with breast cancer, she turned to her faith to help her find meaning and encouragement during those difficult times. "This cancer has helped me to renew my spirituality and led me to trust completely in my Maker. I'm convinced God wants me to help more people," said Ashley. After six months of aggressive and often painful treatment, Ashley now feels well enough to return to work. In the little town she lives, she often counsels others facing their own cancer diagnosis and shares with them her journey of faith.

Spirituality has a strong effect on the treatment of lifestyle diseases like hypertension, heart disease, and even cancer by controlling stress and strengthening the immune system. We are spiritual beings whether we consider ourselves to be religious or not. That spiritual dimension of our humanity has to do with purpose and meaning in life.

## Spirituality and health

In the past few decades, the medical community has looked at the connection between spirituality and health. Did you know that one of the most consistent findings across racial groups is that spirituality intensely improves the quality of life? These positive benefits are achieved by exercising faith in God. They are described in Figure 1 by a Duke University researcher.<sup>1</sup>

## Faith in God Favors Good Health

1. Church attendance and private devotions strengthen a person's religious belief system.
2. A strong religious belief system has a significant positive influence on one's well-being when accompanied by a high level of religious certainty.





### 3. Individuals with strong religious faith report:

- ✓ greater personal happiness
- ✓ higher levels of life satisfaction
- ✓ fewer negative psychological consequences of traumatic life events

The authors state: "In contrast to the popular myth that Christian faith is bad for health the published research suggests that faith is associated with a longer life and a wide range of health benefits. In particular, faith is associated with improved mental health."<sup>2</sup>

Does everyone who says they have faith in God get the health benefits? The authors emphasized that "overall, the evidence suggests greatest benefit for those who are genuinely devoted to God, who are 'intrinsically religious,' whose faith alters their thinking, behavior and relationships."<sup>2</sup>

That's great news. So, should we then trust in God and go to church just so we can enjoy health benefits? The authors state: "Christians should not promote health benefits as the primary reason for coming to faith in Christ. Jesus came into the world to work a far deeper transformation in human lives than simply curing disease."<sup>2</sup> Beyond these benefits, God promises freedom from pain, fear, death, and eternal life with Him.

#### Going to church may help you live longer

Do people who attend church live longer? One large study showed that income and education had little impact on health, but regular church attendance was associated with a 7-year lon-

ger life expectancy, and 14 extra years for African Americans.<sup>3</sup>

A new study from Harvard T. H. Chan School of Public Health found that the women who attended church services more than once a week had a 33% lower chance of dying compared to women who never attended church. The researchers concluded: "Frequent attendance at religious services was associated with a significantly lower risk of all causes [of mortality] cardiovascular and cancer mortality among women."<sup>4</sup>

Another interesting study looked at nearly 4000 men and women and found that those who prayed and/or studied the Bible daily had consistently better blood pressure readings.<sup>5</sup>

#### Trust in God or social support?

We know that people who attend religious services also have social support from like-minded believers. So, one may say, "It's the social support that improves health, not trusting in God. I can just join a rotary club and get the same health benefits." A



Figure 1

Spirituality and Health		
Happiness and life satisfaction	Well-being, optimism, hope	Fewer hospitalizations
Purpose and meaning in life	Lower blood pressure	Less heart disease
Adapt better to bereavement	Less loneliness	Less depression and anxiety
Better mental health	Encouragement to follow a healthy lifestyle	Lower suicide rates
Less alcohol and drug abuse	Greater marital stability	Longer lifespan



study was conducted in two different Jewish farming communities to examine this question. The research compared 11 religious kibbutzim with 11 secular kibbutzim in Israel. The results strikingly demonstrated that there were nearly twice as many deaths among individuals in the secular group compared to the religious group.<sup>6</sup>

### In the beginning

According to the Bible, God, a loving, personal Supreme Being, made human beings in His own image: "So God created man in his own image, in the image of God created he him; male and female created he them" (Genesis 1:27). God endowed man with intelligence, a conscience, freedom of choice, and the capacity to know Him. The Creator developed a relationship with man and gave him meaning and purpose in life.

Happiness and well-being were assured to human beings only as they maintained a close relationship with their Creator. But this relationship was put on trial by a simple test. Tragically, the first man and woman failed the test. They listened to God's adversary and did exactly what God told them not to do. Once the first couple chose to disobey His explicit command, their human nature and the natural environment changed dramatically. They became sinners, alienating themselves from God and each other. As a result, all humanity became mortal and subject to disease.

### Why you can trust Him?

Have you wondered, "Can I trust God with my life? Does He care about us personally? God loves you and invites you to have a loving relationship with Him. He says: "Yea, I have loved thee with an everlasting love: therefore with lovingkindness have I drawn thee" (Jeremiah 31:3).

God poured out His love to us when He gave us all heaven in one gift—the gift of His Son Jesus Christ. "For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life. For God sent not his Son into the world to condemn the world; but that the world through him might be saved" (John 3:16, 17).

God loves us so much that He calls us His sons and daughters: "Behold, what manner of love the Father hath bestowed upon us, that we should be called the sons of God" (1 John 3:1).

He wants to be your personal Counselor, your mighty God, your heavenly Father, and your Prince of Peace. This is why the Bible says, "For unto us a child is born, unto us a son is given: and the government shall be upon his shoulder: and his name shall be called Wonderful, Counsellor, The mighty God, The everlasting Father, The Prince of Peace" (Isaiah 9:6).

You can have complete, unshakable confidence in God's wisdom, power, and goodness. And yes, you can completely entrust your life, your plans, your family, your possession and your friends and enemies into the hands of your Creator God, and unquestionably follow His will. It is His mission "to heal the brokenhearted, to preach deliverance to the captives, and recovering of sight to the blind, to set at liberty them that are bruised" (Luke 4:18; see Isaiah 61:1). Each of us needs some type of healing—physical, mental or spiritual. We've all been brokenhearted and need to be comforted; most of us have bad habits and addictions we need to break. Jesus came to give us the power to break them and to set us free!

### God is my Protector

"In God have I put my trust: I will not be afraid what man can do unto me" (Psalm 56:11).

### God is my Counselor

When you arrive at the crossroads of your life, when your vision is dim, and your prospects are grim, you can always place your trust in God.

"Trust in the Lord with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge him, and he shall direct thy paths" (Proverbs 3:5, 6).

### God is my compassionate Father

"Like as a father pitieth his children, so the Lord pitieth them that fear him. For he knoweth our frame; he remembereth that we are dust" (Psalm 103:13, 14).

### God is my source of strength

"Hast thou not known? hast thou not heard, that the everlasting God, the Lord, the Creator of the ends of the earth, fainteth not, neither is weary? there is no searching of his understanding. He giveth power to the faint; and to them that have no might he increaseth strength" (Isaiah 40:28, 29).



## “My son, forget not my law; but let thine heart keep my commandments: For length of days, and long life, and peace, shall they add to thee” (Proverbs 3:1, 2).

### God is my Prince of Peace

No need to worry and be anxious. We may take every worry and problem to God in prayer. We can believe that He hears us, then thank Him for answering us.

“Be careful [anxious] for nothing; but in everything by prayer and supplication with thanksgiving let your requests be made known unto God. And the peace of God, which passeth all understanding, shall keep your hearts and minds through Christ Jesus” (Philippians 4:6, 7).

### God is my Provider

“Therefore do not worry, saying, ‘What shall we eat?’ or ‘What shall we drink?’ or ‘What shall we wear?’ For after all these things the Gentiles seek. For your heavenly Father knows that you need all these things. But seek first the kingdom of God and His righteousness, and all these things shall be added to you” (Matthew 6:31-33, NKJV).

### Overcoming addictions

I had the opportunity to provide pastoral services to several former alcoholics and drug addicts. Prior to contacting me, these individuals were members of Alcoholics Anonymous (AA) and had been alcohol-free from 5–35 years.

Recently, I attended a local AA meeting to celebrate the 5-year sobriety of one of these individuals. That meeting was an unforgettable learning experience for me, not only because I rejoiced that my friend overcame his addiction, but also because of the testimonies I heard from him and others. They all stated that it was their trust in God or “Higher Power,” and fellowship with people who trusted in God, that helped them break free from their addiction. By trusting God one of these former alcoholics fully surrendered his life to God and was baptized this year. The other one, with the help of God, is preparing to do the same.

Trusting God brings wonderful results to people’s lives. It heals their emotional wounds, makes them free from addictions, restores their broken relationships,

brings relief from stress, worry, anxiety, and depression. Trust in God brings healing to the entire body and gives hope for the future. The Bible assures us of these results and scientific research confirm it.

But the most outstanding truth is that trust in God restores broken relationships between our heavenly Father and us, His wayward sons and daughters. Trusting God and believing in His Son, Jesus Christ, brings within our reach the ultimate prize—eternal life and a never-ending fellowship with Him!

### Begin trusting today

Have you been trying to make lifestyle changes or struggling to overcome addictions yet without much success? The good news is that you can make and maintain healthy lifestyle habits not by trying, but by trusting. To experience lasting changes, we must first realize how ineffective our efforts to fight the disease or addiction have been. Next, we must recognize that we have a serious health problem that may lead to deadly consequences. The third step is to learn how to trust. “Trust in whom?” We believe the only Higher Power worthy of our complete trust is God, the Creator of the universe. We invite you to put your trust in the God who created you in His image, who loves you, and who died for you (see John 3:16).

If your wish is to live a healthier, happier, purposeful life connect with your Creator by daily prayer, by reading the Holy Bible—His love letter to you—and by fellowshiping with like-minded believers. And by the way, step into a church this weekend and start experiencing the great blessings God has in store for your body, mind, and spirit!

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# Plant-Based recipes

## Garbanzo Soup I By Marline Balbach

**Serves**  
**10**

**Ingredients:**

3 cups garbanzos (chick peas)  
2 tablespoons oil or water  
1 tablespoon minced garlic  
1 large chopped onion

4 medium diced carrots  
6-10 stalks sliced celery  
4 bay leaves  
3 teaspoons salt

1 diced serrano pepper, or dash cayenne  
6 cups hot water  
¼ cup parsley

**Directions:**

1. Wash the garbanzo beans and soak in 10 cups of water overnight.
2. Next day throw out the water and rinse very well. Place beans in pot and cover with 2 inches of water.
3. Bring garbanzos to a boil and simmer 60-90 minutes till beans are soft. (If you are at higher elevations it takes longer to cook beans.)
4. While the beans are cooking, prepare the vegetables. Sauté onions and garlic in oil or water till transparent.
5. Add the carrots, celery, bay leaves, salt, and serrano pepper.
6. Stir. Cover and let cook for 5 minutes, mixing and checking not to burn. Keep covered.
7. Add 6 cups hot water. Bring soup to a boil. Turn down to simmer for 20 minutes till all the veggies are soft. Add cooked garbanzo beans and simmer for another 10 minutes. Taste for salt. Add parsley and serve.





# Red Lentil Soup I

By Marline Balbach

This heartwarming recipe is easy to make and packs a lot of healthy ingredients to keep you away from colds.

Serves  
8

**Ingredients:**

1 1/3 cups red lentils  
2 tablespoons light olive oil  
1 cup diced onion  
4 cloves minced garlic  
1/2 serrano pepper, shredded

7 cups hot water  
1 teaspoon fresh shredded ginger (optional)  
2 teaspoons sea salt  
2 bay leaves

2 cups chopped tomatoes or 2 tablespoons tomato paste  
2 medium sliced carrots  
1 cup diced celery  
1 teaspoon turmeric

**Directions:**

1. Wash red lentils and soak in water while preparing vegetables. Wash again, add to pot.
2. Sauté onion in olive oil for a few minutes. Stir and add ginger, 4 cloves minced garlic, serrano pepper and salt.
3. Add bay leaves, cumin, turmeric. Stir continuously.
4. Add chopped tomatoes or tomato paste, carrots, and celery.
5. Add soaked, washed lentils. Stir for a minute; then add 7 cups hot water. Bring to a boil. Simmer for 25 minutes till the lentils fall apart. Taste for salt.
6. Add chopped cilantro or parsley, and lemon wedges to garnish. Enjoy!



# Western Chili I

By Liliane Balbach

Serves  
6

**Ingredients:**

1 1/2 teaspoons olive oil  
1 1/2 cups chopped onions  
1/4 cup chopped green bell pepper  
3 cloves garlic, minced  
2 tablespoons chili powder, or to taste  
1/4 cup tomato paste  
1 1/2 teaspoons ground cumin

1/8 teaspoon dried oregano  
3/4 teaspoon sweet paprika  
3 cups Morningstar Farms Grillers Crumbles, thawed, or other meatless burger crumbles (optional)  
1 (15 oz.) (425gm) can black beans, drained

1 (15 oz.) (425gm) can red kidney beans, drained  
1 (15 oz.) (425gm) can pinto beans, drained  
1 (15 oz.) (425gm) can diced tomatoes  
1 tablespoon serrano peppers or mild chili  
1 1/2 cups water

**Directions:**

1. Sauté onions, bell pepper, and garlic, until tender, 4–5 minutes.
2. Stir in seasonings and crumbles (if using), and sauté for 1 minute.
3. Add the remaining ingredients and bring to a boil. Reduce the heat and simmer until the flavors are blended, 30–45 minutes.





# Scalloped Potatoes |

By Liliane Balbach

**Serves**  
12

**Ingredients:**

10–15 potatoes	2 tablespoons chicken-style seasoning
1 cup onion, chopped fine	1 1/2 cups cashews, washed in warm water
2 teaspoons salt or to taste	3 cups water

## Directions:

1. Peel and slice potatoes. Layer onions and potatoes in large glass baking dish.
2. Blend cashews with half the water till creamy. Add rest of water and seasonings.
3. Pour cashew mixture over potatoes in the baking dish. Make sure all potatoes are saturated with cream.
4. Bake covered for 45 minutes at 400°F (200°C).
5. Uncover and bake 15 more minutes.



# Quick Vegetable Quiche |

By Lidia Voncina

**Servings:**  
2 pies

**Ingredients:**

½ cup cashew pieces	½ teaspoon garlic powder	1 large chopped onion
1 cup water	2 tablespoons corn flour	2 cups chopped vegetables
1 lb. (453g) firm silken tofu	1 tablespoon lemon juice	
1 tablespoon onion powder	3 tablespoons chicken-style seasoning	

## Directions: | Filling:

1. Combine 2 vegetables (mushrooms, cauliflower, zucchini, carrots, leeks, asparagus, tomato, spinach). Chop. Set aside in a bowl.
2. Blend cashews with water until creamy.
3. Add tofu and blend again.
4. Add corn flour and seasoning. Blend a couple of minutes.
5. Mix cashew mixture with chopped vegetables.
6. Prepare your favorite pie crusts.
7. Pour filling into 2 pie shells. Top with tomato slices, or olives.
8. Bake in 375°F (190°C) oven for approximately 30–40 minutes or until golden brown.
9. You may freeze one quiche if you wish.



# Haystacks |

By Liliane Balbach

**Serves**  
4

**Ingredients:**

1 medium bag of corn chips	3 cups finely shredded lettuce	½ cup green onions
1 cup nacho cheese	1 ½ cups diced tomatoes	½ cup nacho cheese
4 cups cooked beans or refried beans	¾ cup nacho cheese sauce	
	½ black olives	

## Directions:

1. Place enough corn chips (crunched) to cover the bottom of a 9 x 13 glass baking dish.
2. Put nacho cheese on top of chips. Cover with beans.
3. Arrange shredded lettuce on top of beans. Cover with tomatoes, 1 cup nacho cheese.
4. Sprinkle chopped olives and green onions on top. Drizzle with ½ cup nacho cheese.



# Nacho Cheese I

## Ingredients:

1 cup washed raw cashews	1 tablespoon fresh lemon juice	½ teaspoon garlic powder
1 cup hot water	1 teaspoon onion powder	½ teaspoon paprika
2-ounce jar pimiento (or red bell pepper)	1 teaspoon salt	

## Directions:

1. Wash cashews. Process in blender in hot water until very smooth.
2. Add remaining ingredients and continue blending until very smooth.
3. Pour into saucepan and heat over medium-low heat, stirring constantly until thickened.

# Fettuccine Alfredo I

By Liliane Balbach

Serves  
8

## Ingredients:

1 lb. uncooked whole wheat pasta  
4 cups mixed vegetables, lightly steamed

## Cream Sauce:

1 cup raw cashews	2 teaspoons chicken-like seasoning	3 tablespoons cornstarch
4 cups water, divided	6 cloves garlic, minced	4 cups broccoli, cauliflower, carrots, red bell pepper
1 teaspoon salt to taste	1 onion, minced	

## Directions:

1. Cook 1-pound fettuccine pasta according to package directions.
2. Steam vegetables until crisp tender. Set aside.
3. Sauté onion and garlic in a little oil. Place 2 cups of water and all the ingredients into a high-speed blender. Blend on high for about 2 minutes until smooth.
4. Add remaining water to blender, and blend. Transfer mixture to a saucepan. Add onion and garlic.
5. Bring sauce to a boil, stirring constantly to prevent lumping. When it thickens, remove from heat.
6. Arrange cooked pasta in a casserole dish. Place steamed vegetable on top. Cover with cream sauce.



# Oat Burgers I

By Liliane Balbach

Makes  
16  
burgers

## Ingredients:

4 ½ cups water	¼ cup nutritional yeast flakes	1 ½ teaspoons dill seed
1 cup chopped onion	3 tablespoons olive oil	1 teaspoon oregano
½ cup finely chopped celery	2 garlic cloves, minced	1 tablespoon liquid hickory smoke (optional)
1 cup walnuts or sunflower seeds, ground coarsely in food processor	½ cup soy sauce or Bragg Liquid Aminos	4 ½ cups oats
	1 ½ teaspoons basil	

## Directions:

1. Bring water, soy sauce, seasonings, and onion to a boil. Add chopped nuts.
2. Lower heat to medium. Add oats. Cook for 1 minute.
3. Remove from heat and let sit for 15 minutes.
4. Form into patties using a ¼ or 1/3 measuring cup to measure and shape burgers.
5. Form into patties. Place on oiled cookie sheet.
6. Bake at 350°F (180°C) for 20 minutes. Flip and bake another 20 minutes.
7. Freezes well. Serve with wholewheat bun, vegan mayonnaise, lettuce and tomato.





# Quinoa Arugula Salad I

By Mariola Dumitru

**Serves**  
4

**Ingredients:**

1/2 cup cooked quinoa  
4 cups arugula  
1/4 cup chopped kalamata olives

1/2 cup steamed asparagus, chopped  
3 tablespoons chopped sundried tomatoes  
1/4 cup sliced red onions

3 tablespoons freshly squeezed lemon juice  
1 teaspoon olive oil  
Salt to taste

## Directions:

1. Wash arugula and place in salad bowl. Add olives, quinoa, asparagus, sundried tomatoes, and chopped onions.
2. Add lemon juice, salt and oil. Mix well and serve.

# Almond Cheese I

By Mary Lupulesku

**Serves**  
8

**Ingredients:**

2 cups almonds  
4 cups water  
1 1/2 cups water

1 1/2 teaspoons salt  
4 tablespoons lemon juice

## Directions:

1. Soak 2 cups of almonds in hot water overnight. pop off the skins.
2. Blend almonds with 4 cups water at high speed for a couple of minutes.
3. Add another 1 1/2 cups water and blend again. Pour this thick mixture in a pan and boil at low heat for 10 minutes, mixing continually not to stick to the bottom.
4. While mixture is boiling add salt.
5. Add lemon juice and turn off heat.
6. Cool down for 30-45 minutes.
7. Pour this mixture into a cheese cloth and let it strain for a few hours or overnight.
8. For faster results, soak almonds in boiling water for a couple of hours and follow the recipe.
9. Enjoy this delicious cheese!



# Chicken-Style Seasoning I

**Ingredients:**

2 cups nutritional yeast flakes  
1 1/2 tablespoons garlic powder  
1/4 cup onion powder  
1 1/2 tablespoons sea salt

2 tablespoons Italian seasoning  
1 teaspoon celery seed, ground  
2 tablespoons parsley flakes, dried  
2 teaspoons paprika or sweet pepper flakes

## Directions:

1. Put all ingredients in a food processor or blender.
2. Process until fine and well combined.
3. Store in glass jar.
4. Keep this seasoning on hand and you will make tasty recipes.
5. Delicious when used as soup stock, broth, in breading meal, or as seasoning.



# LifeSource

“You the individual, can do more for your own health and well-being than any doctor, any hospital, any drug, any exotic medical device.”

—Joseph Califano, former Secretary of HEW

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“If you don't take care of your body, where are you going to live?”

—Anonymous

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