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Evidence-Based Eating Guide:

A Healthy Living Resource from
Dr. Greger & NutritionFacts.org

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Why Nutrition Matters

Most deaths in the United States are preventable, and they are related to what we eat.[1] The number one cause of death in America is the American diet.[2] Many people assume that our manner of death is preprogrammed into our genes. High blood pressure by fifty-five, heart attacks at sixty, maybe even cancer at seventy, and so on... But for most of the leading causes of death, the science shows that our genes often account for only 10-20% of the risk at most.[3] For example, when people move from low-risk to high-risk countries, their disease rates almost always change to those of the new environment.[3] New diet, new diseases. But the reverse is also true. If we're eating the Standard American Diet and switch to a diet higher in whole plant foods, such as fruits and vegetables, this can lead to fewer diseases.

Adhering to just four simple healthy lifestyle factors can have a strong impact on the prevention of chronic diseases: not smoking, not being obese, getting a half hour of exercise a day, and eating healthier — defined as consuming more fruits, veggies, and whole grains, but less meat. Those four factors alone were found to account for 78% of chronic disease risk. Maybe it's time we stop blaming genetics and focus on the risk factors that are directly under our control.[4] We have the power. It turns out a more plant-based diet may help prevent—and in some cases even help treat or reverse—every single one of our fifteen leading causes of death, including high blood pressure, heart disease, diabetes, and more.

The inspiration for my work all started with my grandma. I was just a kid when my grandmother was diagnosed with end-stage heart disease and sent home to die. She already had so many bypass surgeries, and was so scarred up inside that there was nothing more the surgeons could do. Confined in a wheelchair with crushing chest pain... her life was over at age 65.

Then, she heard about this guy, Nathan Pritikin, one of our early lifestyle medicine pioneers, and what happened next is chronicled in Pritikin's biography. My grandma was one of the "death's door people." She arrived in a wheelchair. "Mrs. Greger had heart disease, angina, and claudication; her condition was so bad she could no longer walk without great pain in her chest and legs. Within three weeks, though, she was not only out of her wheelchair but was walking ten miles a day."[5]

As I grew older, I began to understand the significance of her near-miraculous recovery. As soon as we stop eating the artery-clogging foods that contribute to heart disease, our bodies can start to heal themselves. I made it my life's mission to educate millions about evidence-based eating. I hope that I can do for your family what Pritikin did for my family.

On my non-profit website, NutritionFacts.org, I strive to read through every issue of every English-language nutrition journal in the world—so busy folks like you don't have to. There are videos on more than 2,000 health and nutrition topics — all free, no ads, no products to sell — with new videos and articles uploaded every day on the latest in evidence-based nutrition. It's the tool I wish I had in medical training.

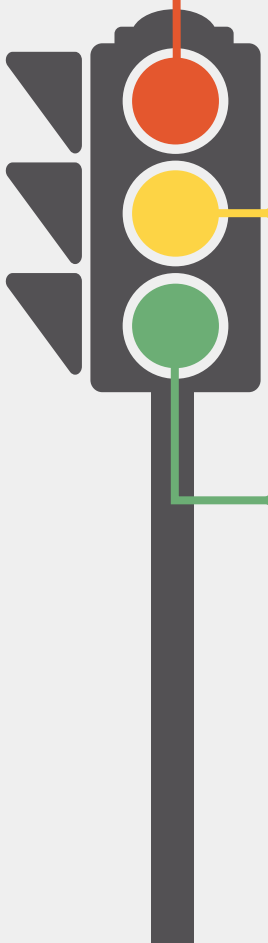
For those of us who grew up eating the Standard American Diet (SAD), starting to eat healthfully can be a big shift — I know it was for me. Thankfully I was able to escape SAD's clutches before any overt health problems arose, 29 years ago. Looking back, I view that as one of the best decisions of my life. Eating healthier is easier than you think, it's inexpensive, and it just might save your life.

Yours in evidence-based nutrition,

Michael Greger, M.D. FACLM
Founder, NutritionFacts.org

Dining by Traffic Light

The healthiest diet is one that maximizes the intake of foods-as-grown—whole, plant-based food—and minimizes the intake of processed and animal-based foods. The Dining by Traffic Light System can help you crowd your diet full of healthful options, while minimizing the foods that contain less healthful components like sodium, added sugar, trans fat, saturated fat, and cholesterol. Just as on the road: Green Light foods mean "go," Yellow Light foods mean to "use caution," and Red Light means to "stop and think before putting it in your mouth."



Red Light Food

Ultra-processed foods and processed animal foods. *E.g.,* cookies, chips, candy, soda, hot dogs, bacon, lunch meat, sausages, and oil.

Ideally, these foods should be avoided. Just like running red lights in the real world, you may be able to get away with it once in a while, but you wouldn't want to make a habit out of it.

Yellow Light Food

Processed plant foods and unprocessed animal foods. *E.g.,* bread, steak.

Ideally, Yellow Light foods should be minimized. The preferred role of Yellow Light foods is to maximize the intake of Green Light foods.

Green Light Food

Unprocessed plant foods—closest to how they come in nature. *E.g.,* whole grains, beans and legumes, nuts, seeds, fruits, vegetables, as well as herbs and spices.

Unprocessed plant foods tend to have more protective nutrients, whereas processed foods tend to have disease-promoting factors. For the Traffic Light System, think of "unprocessed" as nothing bad added, nothing good taken away.

Eat as many Green Light foods as you can, as little Yellow Light foods as you can, and ideally avoid Red Light foods, at least on a daily basis. Think of eating junk as eating for entertainment. You don't go on a roller coaster for transportation, but for amusement. Junk food can take your taste buds for a thrill ride too, but just like it would be unhealthy to live on a roller coaster all the time, it's unhealthful to live off of Red Light junk. Save it for a special occasion.

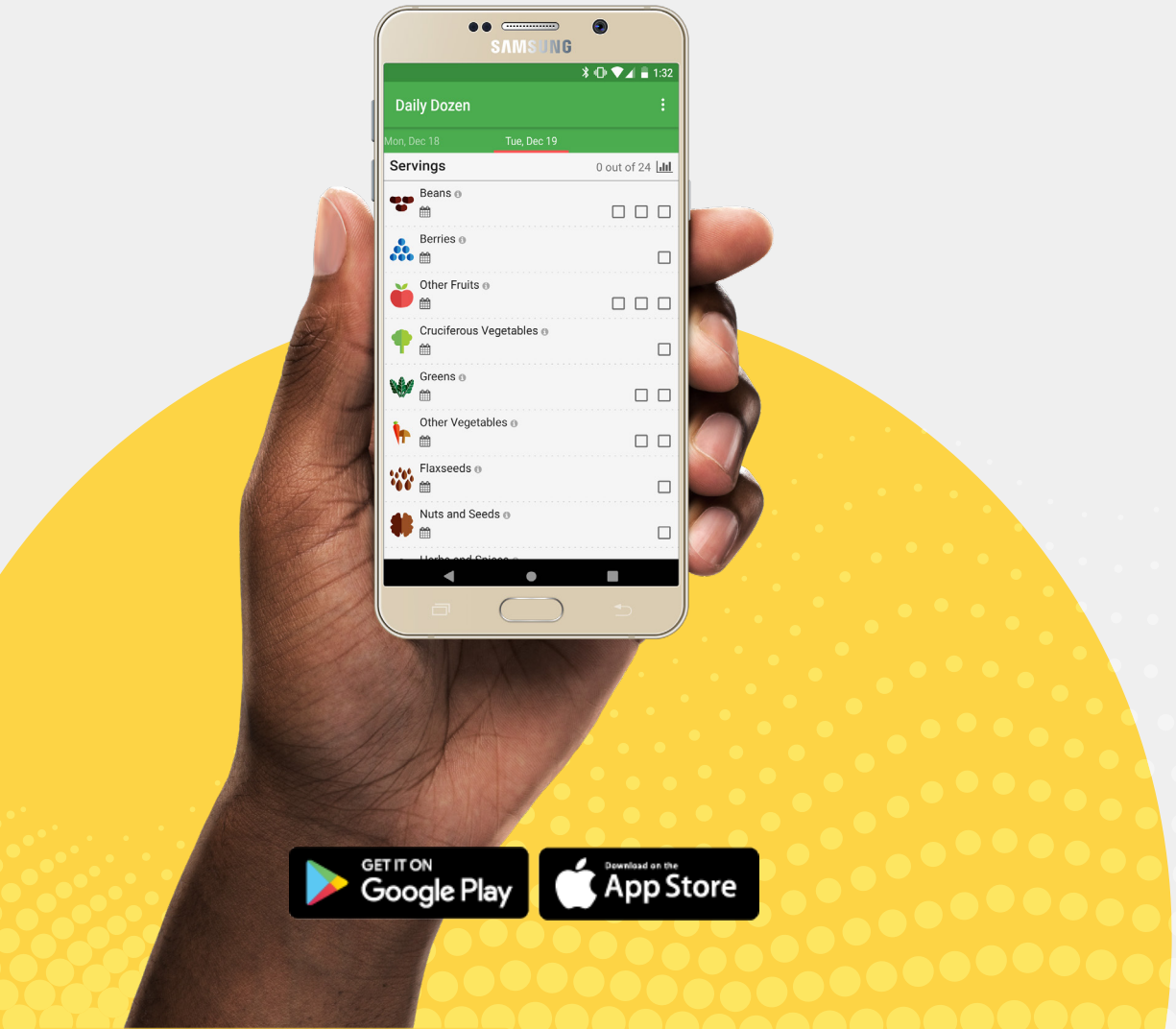
> **The problem with all-or-nothing thinking is that it keeps people from even taking the first steps.**

If the thought of never having another pepperoni pizza turns into an excuse for not making the first steps towards eating healthy, focus on just scaling back on the pizza. It's really what we eat on a daily basis that has the greatest impact on our overall health. What you eat on special occasions is insignificant compared to what you eat day in and day out. Your body has a remarkable ability to recover from sporadic insults as long as you're not habitually poking it with a fork. So rather than thinking black and white or all-or-nothing, focus on crowding out less healthful options with more healthful, Green Light foods.

Check out NutritionFacts.org for a video on "Dining by Traffic Light"

Dr. Greger's Daily Dozen

Download the free app and start tracking your daily servings.



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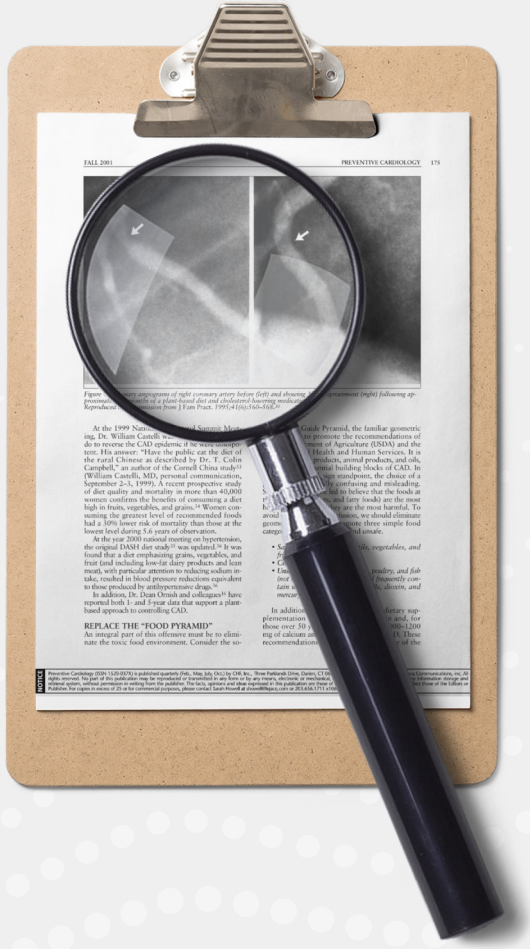
> There is only one way of eating that's ever been proven to reverse heart disease in the majority of patients: a diet centered around whole plant foods.

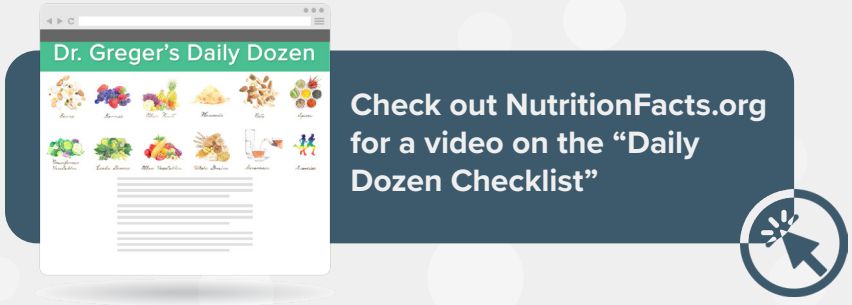


The Daily Dozen Checklist

Dr. Greger's Daily Dozen was developed based upon the best available balance of evidence. Rather than being a meal plan or diet in itself, it is just to be used as a checklist to inspire you to include some of the healthiest of healthy foods in your diet. It may appear to be a lot of boxes, but it's easy to check off a bunch at one time (see the sample meal plans on page 11 and 12).

The checklist can help you think about how you can improve the nutrient density of your meals. Ask yourself, can I add some flax or walnuts to this? Could I add some beans or greens to this meal? The checklist might also help you to design a more balanced meal. Please understand that this strategy is *one* way to do it rather than *the* way to do it.

The Daily Dozen is just meant to serve as an aspirational minimum. Feel free to add even more Green Light foods throughout your day! Athletes, growing adolescents, pregnant and nursing women, and active people may need to add more foods to their Daily Dozen meal plan to meet appropriate caloric needs. If you're concerned about meeting appropriate needs, consider working with a registered dietitian.



Everything we should ideally strive to fit into our daily routine for optimal health and longevity.

- **Beans** ✓✓✓
  Servings: 3 per day
  ½ c. cooked beans, ¼ c. hummus
- **Berries** ✓
  Servings: 1 per day
  ½ c. fresh or frozen, ¼ c. dried
- **Fruit** ✓✓✓
  Servings: 3 per day
  1 medium fruit, ¼ c. dried fruit
- **Cruciferous** ✓
  Servings: 1 per day
  ½ c. chopped, 1 tbsp horseradish
- **Greens** ✓✓
  Servings: 2 per day
  1 c. raw, ½ c. cooked
- **Vegetables** ✓✓
  Servings: 2 per day
  ½ c. nonleafy vegetables
- **Flaxseed** ✓
  Servings: 1 per day
  1 tbsp, ground
- **Nuts & Seeds** ✓
  Servings: 1 per day
  ¼ c. nuts, 2 tbsp nut butter
- **Whole Grains** ✓✓✓
  Servings: 3 per day
  ½ c. hot cereal, 1 slice of bread
- **Spices** ✓
  Servings: 1 per day
  ¼ tsp turmeric
- **Exercise** ✓
  Once per day
  90 min. moderate or 40 min. vigorous
- **Beverages** ✓✓✓✓✓
  Servings: five, 12 oz per day
  water, green tea, hibiscus tea

Download Dr. Greger's Daily Dozen app and start tracking your daily servings.

GET IT ON Google Play Download on the App Store

Tips for including more Daily Dozen foods

Beans: add to soups, chili, burritos, salads, and sauces. Blend with spices to make spreads for sandwiches or dips for vegetables. Puree beans with vegetables to make thick soups.

Berries: toss them into smoothies, oatmeal bowls, and salads. Cranberries and blueberries pair great with whole grain-based dishes, like a quinoa and kale salad.

Other Fruits: use in smoothies, salads, oatmeal bowls, or whole grain-based salads. Blend frozen bananas for a delicious Green Light version of ice cream. Bake apples with cinnamon.

Cruciferous Vegetables: toss into soups, salads, pasta dishes, and more! Red cabbage works well in tacos. Add broccoli and kale to your favorite pasta dish. Try roasted Brussels sprouts in your salads.

Greens: add to just about any meal or snack: smoothies, soups, stews, pasta dishes, and sandwiches. If two cups of raw kale is intimidating to you, chop it and cook it down.

Other Vegetables: use in soups, salads, stews, smoothies, sandwiches, and more! Dip bell peppers, carrot sticks, jicama, or cooked asparagus into guacamole or toss veggies into a smoothie.

Flaxseed: mix ground flax seeds in with oatmeal, smoothies, homemade salad dressings, or just sprinkle it on top of your meals.

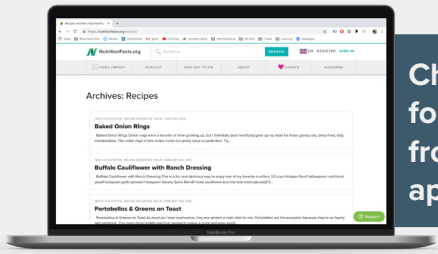
Nuts and Seeds: use in oatmeal, salads, smoothies, and pasta dishes. Cashews, sunflower seeds, and tahini can be made into creamy dressings or sauces.

Herbs and Spices: Add ¼ tsp of turmeric to your smoothies, oatmeal, or any savory dish. Blend it with cashews, pitted dates, and water for an adventurous drink. Use it in curries and soups.

Whole Grains: mix up your morning routine with a bowl of buckwheat or quinoa. Add whole intact grains, such as barley, buckwheat, quinoa, farro, oat groats, or millet to soups and salads.

Beverages: the healthiest beverages are water, green tea, or an herbal tea called hibiscus.

Exercise: walking, running, biking, swimming, rowing, aerobics, dancing, martial arts, competitive sports, yoga. Find a safe activity you enjoy, and go do it!



Check out NutritionFacts.org for free recipes! Everything from dips to desserts, and appetizers to dinner dishes.

Sample menus for checking off the Daily Dozen

Here are some meal and snack ideas to help you check off all the boxes on the Daily Dozen. Feel free to add even more Green Light foods to meals and snacks or to modify suggestions to meet your individual needs.

Marked recipes* are available for free on NutritionFacts.org/recipes and are also included with dozens more in the *How Not to Die Cookbook.*

Sample One:

Breakfast: Morning Grain Bowl*

Lunch: Black Bean Burger* with a tomato, ⅓ cup avocado, ½ cup bell peppers, ½ cup red cabbage, ½ cup cooked sweet potatoes, and 1-2 cups leafy greens (such as kale, arugula, or mixed greens)

Snack: 1 orange with ⅓ cup roasted chickpeas

Dinner: Smoky Black-Eyed Peas* with ½-1 cup cooked quinoa and ½ cup of cooked broccoli

Snack: Banana Nice Cream* (1 banana with ½ cup berries)

Sample Two:

Breakfast: ½-1 cup cooked oatmeal with 1 tablespoon almond butter, ½ cup berries, 1 medium banana, 1 tablespoon ground flaxseed, and water as needed for thinning

Snack: Fresh fruit (e.g. mango, melon, cherries, berries)

Lunch: 2-3 corn tortillas with 1-2 cups chopped kale, ½ cup bell peppers, ½ cup diced tempeh, and ⅓ cup diced avocado. Cook the veggies and tempeh with salt-free taco seasonings

Snack: One medium orange and 3 cups air-popped popcorn

Dinner: 2 oz lentil pasta (1 cup cooked), ½-1 cup broccoli, 1 cup chopped collards, ½ cup tomatoes, ¼ teaspoon turmeric, 2 tablespoons cashews, 1 tablespoon nutritional yeast. Cook the veggies with salt-free seasonings. Blend the cashews with water, turmeric, nutritional yeast, and spices of choice. Pour over the noodles. The sauce on this is much easier to blend when prepared for 4 servings.

(Serving sizes for Sample Two are for one person. To make leftovers or food for others, multiply the ingredients by 4 to make 4 servings.)

Nutritional Considerations and Common Nutritional Concerns

Do those who avoid meat get enough nutrients? To find out, researchers looked at a day in the life of 13,000 people all across America. They compared the nutrient intake of those who ate meat to those who didn't. The study found that, calorie for calorie, those eating meat-free diets were getting higher intakes of nearly every nutrient: more fiber, more vitamin A, more vitamin C, more vitamin E, more of the B vitamins — thiamin, riboflavin, and folate — as well as more calcium magnesium, iron, and potassium. Furthermore, many of the nutrients that are so rich in plant-based diets are among the very ones that most Americans normally don't get enough of—namely, vitamins A, C, E, not to mention fiber, calcium, magnesium, and potassium. At the same time, people who avoided meat also ingested fewer harmful substances, such as sodium, saturated fat, and cholesterol.[6]

Calcium: Kale, collards, broccoli, bok choy, soybeans, tempeh, figs, tahini, almonds, navy beans, chickpeas, black beans, unsweetened fortified soymilk, calcium-set tofu
Note: spinach, chard, and beet greens are all very healthy foods, but stingy with their calcium (and may increase the risk of kidney stones if cups a day are eaten).

Iron: Whole grains, beans, dark green leafy vegetables, dried fruits, nuts, and seeds. Pair plant-based sources of iron with Vitamin C-rich foods (citrus, bell peppers, broccoli, tropical fruits) to help boost iron absorption.

Protein: Anyone who doesn't know how to get their protein on a plant-based diet doesn't know beans! Legumes are plant protein superstars. Whole grains, nuts, seeds, and even vegetables also contribute (for example, 1 cup of raw broccoli has about 2.5 g of protein).

That said, because of the way we live in our modern world, there are important shortfalls that need to be corrected. For example, vitamin B12 is not made by plants; it's made by microbes that blanket the earth. But in this sanitized, modern world, we now chlorinate the water supply to kill off any bacteria. While we don't get much B12 in the water anymore, we don't get much cholera either—that's a good thing! Similarly, we evolved to make all the vitamin D we need from the sun, but most of us are no longer running around naked in equatorial Africa. You may be covered up, inside, at a high northern latitude and therefore need to supplement your diet with this "sunshine vitamin."

Required:

B12 2,000 mcg (µg) cyanocobalamin once each week (or at least 50 mcg daily), ideally as a chewable, sublingual, or liquid supplement taken on an empty stomach.
Note: Those over 65 years of age should take at least 1,000 mcg (µg) cyanocobalamin every day.
or
Servings of B12-fortified foods three times a day (at each meal), each containing at least 190% U.S. "Daily Value" on its label.*

Consider:

Vitamin D 2,000 IU supplemental vitamin D3 (D3 may be preferable to D2).
or
15-30 minutes of midday sun (15 for those with lighter skin; 30 for those with darker skin), but this depends on latitude.*

Omega 3 250 mg daily of pollutant-free (yeast- or algae-derived) long chain omega-3's (EPA/DHA).

Iodine For those who don't eat seaweed or use iodized salt, a 150 mcg daily supplement (especially important for pregnant women)
Note: Hijiki (hiziki) should not be eaten due to high arsenic levels and kelp should be avoided as it tends to have too much iodine.

*Please see NutritionFacts.org Optimum Nutrition and the Vitamin B12 topics page for more details. Check out The Vegetarian Nutrition Dietetics Practice Group for more info on Calcium and Protein.

Put It Into Action

You've now learned tips for healthy eating, reviewed Dr. Greger's Daily Dozen checklist, and have an idea of how to put together a day of eating with the sample menus. So, how do you put all of this information into action, day after day?

Start simple.

Kaiser Permanente's three-step method for transitioning your lifestyle may be helpful.

1. Think of three dinner meals you already enjoy that are plant-based, like pasta and marinara sauce that could easily be tweaked to whole-grain pasta with some added veggies.

2. Think of three meals you already eat that could be adapted to become a Green Light meal, like switching from beef chili to five-bean chili or beef and cheese tacos to bean and veggie tacos.

3. Discover new options. Borrow cookbooks from the library, or simply Google "whole-food, plant-based recipes" and see the thousands that pop up. Choose three that you can make right away.

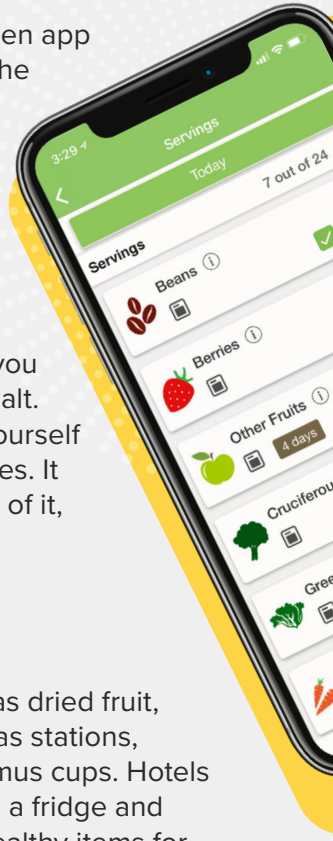
Woohoo! You now have a nine-meal dinner rotation, and you're off! After that, moving on to breakfast and lunch is easy.

Ditch the oil.

For sautéing, use water or salt-free vegetable broth. For baking, swap in applesauce, banana, beans, or pumpkin puree.

Use Dr. Greger's Daily Dozen checklist.

Hang the list on your fridge or use the free Daily Dozen app available for both iPhones and Androids. Try taking the Daily Dozen Challenge and commit to completing all the boxes in one day. See how often you can do this until the changes become healthy habits! Eat out with confidence.



You may live in a place with a lot of plant-based restaurant options, but if not, just do some planning ahead. Call the restaurant and ask if they can make you a vegetable dish. Ask the server to hold the oil and salt. Most restaurants are happy to oblige. Or just build yourself a hearty meal with a salad and selection of side dishes. It may feel awkward at first, but once you get the hang of it, dining out can be a breeze.

Travel prepared.

Pack healthy snacks for the road or plane ride such as dried fruit, nuts, chopped veggies, and fresh fruit. Nowadays, gas stations, airports, and rest stops even have fresh fruit or hummus cups. Hotels usually offer fruit and oatmeal. If your hotel room has a fridge and you are near a grocery store, stock the fridge with healthy items for your trip. If your travel is really hectic or you can't eat optimally, just do the best that you can and get back to your healthy habits when you get home.

Gather resources.

The *How Not to Die Cookbook* is a great place to start. You'll also find recipes on NutritionFacts.org and the NutritionFacts.org social media pages. Gather recipes on the web and start cooking!

Set some healthy goals.

Think of healthy eating as an experiment. Sign up at 21daykickstart.org and try it out for three weeks and see how you feel, how your palate shifts, and even how your cholesterol and other lab results change. Healthy eating tastes better and better the longer you stick with it. Set three goals to keep yourself on track. Make these goals SMART (specific, measurable, achievable, relevant, and timely). For example, "I will complete the Daily Dozen at least 5 days a week for 1 month, and I will track my progress in the Daily Dozen app."

Goal One:

Goal Two:

Goal Three:

Other Notes:

_____

_____

_____

_____

Keep track of your progress and share your success with friends, family, and co-workers! Consider submitting a testimonial on NutritionFacts.org (nutritionfacts.org/testimonials).

Stay educated and connected.

Subscribe to NutritionFacts.org's free newsletter, videos, blogs, and podcast to stay on top of the latest evidence.

Check out the books: *How Not to Die*, the *How Not to Die Cookbook,* and *How Not to Diet.* *All proceeds Dr. Greger receives from his books go to charity.

Find us on social media: @nutrition_facts_org on Instagram, @nutritionfactsorg on Facebook, and Twitter @nutrition_facts.

Follow the hashtags for inspiration: #DailyDozen #HowNotToDie #DailyDozenChallenge #NutritionFactsOrg.

Conclusion

There is only one way of eating that's ever been proven to reverse heart disease in the majority of patients: a diet centered around whole plant foods. If that's all a whole-food, plant-based diet could do — reverse the #1 killer of men and women — then shouldn't that be the default diet until proven otherwise? And the fact that it can also be effective in preventing, treating, and arresting other leading killers would seem to make the case for eating this way overwhelming. Please give it a try. It could save your life.

> **Every time we put something in our mouth, it's a lost opportunity to put something even healthier in our mouth.**

We only have about 2,000 calories in the calorie bank to spend every day, so to maximize our nutrient purchase, we want to eat the most nutrient-dense foods. A healthy lifestyle is not about perfection, but about the continuum of healthy living. Work to include more nutrient-dense, disease-fighting foods on your plate everyday!

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