Plant-based Culinary Inspiration

Author, The Plant-Powered Diet and Plant-Powered for Life
Editor, Environmental Nutrition
Nutrition Editor, Today's Dietitian
Blogger, The Plant-Powered Blog
SharonPalmer.com

My Plant-Powered Journey

I come from a long line of farmers.

Images: My father’s family farm, Sharon Palmer, RDN

My Plant-Powered Journey

My mother grew up on a farm, too.

Images: Sharon Palmer, RDN
My Plant-Powered Journey

Even when we lived in the city, we had a vegetable garden.

Image: Sharon Palmer, RDN

My Plant-Powered Journey

I grew up in a vegetarian home, and helped grow food, too.

Image: Sharon Palmer, RDN

My Plant-Powered Journey

I became a dietitian!

Image: Loma Linda University, Sharon Palmer, RDN
My Plant-Powered Journey

And now, we all love plant-powered eating!

Images: Athens taverna, my organic vegetable garden in LA, the whole family in Seattle, Sharon Palmer, RDN

Plant-Powered Eating for Optimal Health

• Plant-based diets associated with a variety of health benefits including healthy weight, optimal health and longevity.

• Everyone can benefit from adopting whole-foods, plant-based eating strategies.

• This presentation provides current research relating to plant-based diets, defines what a plant-based diet really is, and helps develop strategies for implementing plant-based eating and meal planning.

Arugula Pizza from Plant-Powered for Life

“Fall in love with plants and they will love you back,” Sharon Palmer, RDN, Plant-Powered for Life

There are 40,000 edible species of plants on the planet, each with the power to nourish and help heal our bodies; each plant has its own story. There are 25,000 types of tomatoes alone!

Images: Santa Rosa Heirloom Festival, Sharon Palmer, RDN
Plant-based Eating is Breaking News

Eat food. Not too much. Mostly plants.
Michael Pollan
In Defense of Food

Plant-Based Diet: Hits Best Diet List

"Plant-based diets are good for the environment, your heart, your weight and your overall health. U.S. News defines plant-based as an approach that emphasizes minimally processed foods from plants, with modest amounts of fish, lean meat and low-fat dairy, and red meat only sparingly."

US News
Best Diets in 2017
Expert Panel
Even 2015 Dietary Guidelines: Going More Plant-Based

*Focused on plant-based diet patterns:
  • Mediterranean
  • US Healthy Diet Pattern
  • Vegetarian
*Limit Saturated Fat
*Eat more fruits and vegetables
*Include more pulses

Even 2015 Dietary Guidelines: Going More Plant-Based

Image: Farmers Market in Pasadena, CA, Sharon Palmer, RDN

Rise of Meatless Monday

Showing Support:
• Organizations, hospitals, schools, universities, restaurants, and more
• Stars lining up, from Oprah to James Cameron
• Key influencers, including Michael Pollan
• Chefs, like Mario Batali, in all of his 14 restaurants

How Many Plant-Based Eaters?
The Vegetarian Resource Group Poll

2016, nationwide survey of 2,015 adults (aged 18 and over)

3.3% of U.S. adults vegetarian (about 9 million adults), 1% vegan
Highest among 18-34 years old (5.3%)
About half of vegetarians are vegans (about 1.7% population)
37% always or sometimes eat meals without meat, fish, or poultry when eating out

How Many Plant-Based Eaters?
The Vegetarian Resource Group Poll

2016, nationwide survey of 2,015 adults (aged 18 and over)

3.3% of U.S. adults vegetarian (about 9 million adults), 1% vegan
Highest among 18-34 years old (5.3%)
About half of vegetarians are vegans (about 1.7% population)
37% always or sometimes eat meals without meat, fish, or poultry when eating out
Definition of Plant-Based Diets

- **Vegan**: No animal foods
- **Lacto-Ovo Vegetarian**: No animal flesh, but allows for dairy and eggs
- **Pescatarian**: No animal flesh, except for fish and seafood
- **Semi-Vegetarian or “Flexitarian”**: Small amounts of animal foods

Plant-Based Eating Has it All

One eating style with so much power:
- Environmental benefits
- Health benefits
- Animal welfare benefits
- Solution for feeding a growing population

Plants are Part of Indigenous, Traditional Diets

**Common Features:**
- Local whole grain
- Local legumes
- Seasonal cultivated and foraged fruits and vegetables
- Seeds and nuts
- Minimally processed
- Low use of animal foods
Environmental Benefits of Plant-Based Eating

Carbon footprint: compared to non-vegetarians, lower by 20% semi-vegetarian; 24% pescetarian, 28% lacto-ovo, 42% vegan (AHS-2)

Cauliflower in my garden, LA Sharon Palmer, RDN

Barilla Double Pyramid

Carbon Footprint

Arttech.co.uk
To produce one pound of beef is 1,799 gallons of water; one pound of pork takes 576 gallons of water. As a comparison, the water footprint of soybeans is 216 gallons; corn is 108 gallons.

Plant-Powered Eating Has Health Benefits

Appropriately planned vegetarian, including vegan, diets are healthful, nutritionally adequate, and may provide health benefits for the prevention and treatment of certain diseases... appropriate for all stages of the life cycle... more environmentally sustainable than diets rich in animal products... Vegetarians and vegans are at reduced risk of... ischemic heart disease, type 2 diabetes, hypertension, certain types of cancer, and obesity. Low intake of saturated fat and high intakes of vegetables, fruits, whole grains, legumes, soy products, nuts, and seeds (all rich in fiber and phytochemicals) are characteristics... that produce lower total and low-density lipoprotein cholesterol levels and better serum glucose control.

Position, Academy of Nutrition and Dietetics, 2016

What's So Great About Whole, Minimally Processed Plant Foods?

High in the “good” stuff:
- fiber
- vitamins
- minerals
- healthy fats
- phytochemicals
- low glycemic carbs

Low in the “bad” stuff:
- saturated fat
- dietary cholesterol
- sodium
- toxins (nitroso compounds, heterocyclic amines, polycyclic aromatic hydrocarbons, glycation end products formed in cooking, curing, processing meats)
Phytochemicals Galore

- Filled with thousands of phytochemicals
- Most Americans fall short
- Get our “colors” from yogurt and cheese puffs

Many Health Benefits of Plant-Based Diets

- Longevity
- Healthier Weight
- Lower Oxidative Stress and Inflammation
- Reduced Risk of Heart Disease
- Reduced Risk of Type 2 Diabetes
- Lower Risk of Cancer
- Healthy Gut/Immune System
- Brain Protection

Longevity

- EPIC study, more closely adhered to plant-based diet, longer lifespan (Public Health Nutr, 2007)
- Vegetarians: 12% lower risk of dying over the study period compared to meat eaters (vegans 15% lower) (JAMA Intern Med, 2014)
- Diets with higher amount of protein from plants linked with lower mortality (Am J Kidney Dis, 2015)
- High animal protein linked with increased mortality; sub plant protein lower mortality (JAMA Intern Med, 2016)
Plant-Powered Foods

Images: Farmers market in Pasadena, Sharon Palmer, RDN

Healthier Weight

• 2013 report: patients assigned to vegan or vegetarian diet lost significantly more weight over 2 months than those omnivorous diet — about 3% of body weight compared with a 2% loss.

• EPIC study, BMI fish eaters, vegetarians, and particularly vegans lower than meat eaters (Int J Obes Relat Metab Disord, 2013) Example: 55 year old male or female vegan weighs 10 pounds less than non-vegetarian of similar height

• Vegan diet most effective in weight loss among 5 diet patterns, vegetarian, pescatarian, semi-vegetarian, and omnivorous (Nutrition, 2015)

• Meta-analysis: Med diet may be useful for weight reduction (Metab Syndr Relat Disord, 2011)

• Review: Flexitarian diet weight and metabolic benefits (Front Nutr, 2017)

Anti-Inflammatory Foods Are Yummy!
Lower Oxidative Stress & Inflammation

- Studies show high intake of whole plant foods, such as fruits, vegetables, whole grains, nuts, tea, coffee, red wine and olive oil, decreases levels of oxidative stress and inflammation, which are associated with the development of chronic disease (Am J Clin Nutr, 2006, J Am Coll Cardiol, 2006)
- In Adventist Health Study II, vegetarian diet linked to lower CRP levels, a marker of inflammation (EHP (NIEHS), 2011)
- Framingham Heart Study, higher intakes of anthocyanins and flavonols linked with reduction in oxidative stress biomarkers (Am J Clin Nutr, 2015)

plant-based eating

- The risk of hospitalization or death from heart disease is 33% lower in vegetarians than in people who eat meat and fish, according to a British study (Am J Clin Nutr, 2013)
- Meta-analysis, 25% reduced risk of ischemic heart disease with vegetarian and vegan diet (Crit Rev Food Sci Nutr, 2016)
- Several studies show heart benefits, possibly due to lower inflammation, oxidative stress, blood pressure, LDL levels (Am J Clin Nutr, 2009)
- Veg diet linked with more favorable CVD biomarkers, vascular function (Int J Cardiol, 2017)

Reduced Risk of Heart Disease
Lower Risk of Type 2 Diabetes

- Red meat linked with higher risk type 2 diabetes, but when one serving swapped for nuts every day, decreased risk by 21%, substituting whole grains reduced risk by 23% (Am J Clin Nutr, 2011)
- Meat-eaters significantly higher risk of developing diabetes, compared with people who avoided meat (Nutrients, 2014)
- Vegetarian diet patterns linked with lower MetS, and lower risk of developing type 2 diabetes (Br J Nutr, 2015)
- Review from Canadian Diabetes Association: Plant-based diets beneficial in management of type 2 diabetes (Can J Diabetes, 2016)

Enjoy Heritage Plant Foods!

![Image: Heirloom Expo, Santa Rosa, CA Sharon Palmer, RDN]

Lower Risk of Cancer

- Meta-analysis, 8% reduced risk of total cancer with vegetarian and vegan diet (Crit Rev Food Sci Nutr, 2016)
- Plant foods linked with protection against mouth, pharynx, esophagus, stomach, lung, pancreas, and prostate cancer; in particular, high fiber plant foods may protect in digestive cancers (AICR)
- Study linked plant-based diet to 28% lower breast cancer risk (Am J Epidemiol, 2011)
- Vegetarians 22% lower risk colorectal cancer (JAMA Intern Med, 2015)
World Cancer Research Fund
Cancer Prevention Recommendations

- Be as lean as possible without becoming underweight.
- Be physically active for at least 30 minutes every day.
- Limit consumption of energy-dense foods.
- Eat more of a variety of vegetables, fruits, wholegrains, & pulses such as beans.
- Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats.
- Limit alcoholic drinks
- Limit consumption of salt & avoid moldy grains and cereals.
- Don't use supplements to protect against cancer.
- It is best for mothers to breastfeed exclusively for up to 6 months and then add other liquids and foods.

Healthy Gut & Immune Function

Increasing evidence fiber-rich, plant-based diet promotes healthy gut microbiota, linked to immune support and digestive health

- Vegan gut profile: reduced pathobionts, increased protective species (Nutrients, 2016)
- EPIC study, lower rate of hospital admissions, risk of death from diverticular disease in vegetarians (BMJ, 2011)
- Med diet beneficial for gut microbiota (Gut, 2015)

Plant-Powered Foods

Images: Charleston farmers market, Sharon Palmer, RDN
Brain Function

- Chronic inflammation and oxidative stress lead to development of Alzheimer’s
- Adherence to Mediterranean, plant-based diet linked with lower risk of AD (Arch Neurol, 2009)
- 7 Dietary and Lifestyle guidelines to reduce risk of AD:
  - Minimize saturated and trans fat
  - Eat plant-based foods
  - Consume 15 mg vitamin E from foods each day... (Neurobiol Aging, 2014)

Pike Place Market, Seattle

Plant Foods Are Yummy!

Adventist Health Study-2

- 96,000 adults
- 5 diet patterns (non-vegetarian, semi-vegetarian, pescetarian, lacto-ovo vegetarian, vegan)
- Showed overall linear relationship: BMI, HTN, Type 2 Diabetes, elevated total cholesterol, CRP, insulin, overall cancer, mortality, carbon footprint

Image: Hollywood farmers market, Sharon Palmer, RDN
Developing a Plant-Based Eating Style

Include more plant proteins:

- Legumes (beans, lentils, and peas)
- Whole soy foods (tofu, tempeh, soy milk)
- Nuts and nut butters (almonds, walnuts, hazelnuts, pecans, pistachios, macadamias, Brazil nuts, peanuts)
- Seeds and seed butters (sunflower, sesame, hemp, chia, pumpkin)
- Whole grains (quinoa, oats, brown rice) can be good protein source (up to 11 g protein per cup, i.e. Kamut)
- Vegetables, such as peas, spinach, broccoli (can contain up to 6 g protein per cup)

Plant-Based Food Doesn't Have to Taste Awful!

- So much innovation out there!
- Chefs are making plant-based cool
Warning: Food Photos Ahead!

I'll be sharing some of my favorite photos of plants

Think Beyond Labels

• Don’t need to call it “vegan”
• Celebrate plants, local foods, regional foods, ethnic traditions
• Small plates
• Veggie burgers
• Sustainable, healthful “green” option

Take Advantage of Trends

• Farm to table
• Root to stem
• Fermented foods
• Ancient grains, seeds
• Spices and herbs
• Ethnic food trends: ramen, pho, Indian
• Sustainability, health
Join the Meatless Monday Bandwagon!

- Website has ideas, recipes, tips, food service toolkits
- Great for hospitals, universities, employee feeding programs, schools

Plan Your Menu Around Plants

Instead of planning your menu around meat, plan it around plants.
- Plan around seasonal vegetables, whole grains, and pulses

Recipe Swap: Turning Classics into New Favorites

Burgers, sushi, tortilla soup, lasagna, spaghetti, ravioli, meatballs, tacos, tostadas, grilled sandwiches, crab cakes...
Create a Good Start: Veg Breakfast

- Think beyond eggs and bacon
- Whole grain porridges
- Ancient grains and seeds in baked goods
- Farmers market breakfast
- Small plates
- Ethnic dishes: breakfast tostada, ful medames, Asian noodles with veg, English beans, Med olives, tomatoes, cucumbers

Use Meat as a Seasoning

Cut down on animal food intake while pushing plants by using meat as a flavoring in dishes instead of main event.

- Stir-fry dishes
- Pasta dishes
- Stews
- Casseroles
- Entrée salads

Utilize Plant-Based Staples

Many plant-based foods like beans and whole grains are shelf-stable, convenient, and economical—they are the backbone of meals.

- Use a variety of whole grains, beans, nuts, nut butters, spices, healthy oils on hand
- Combine with fresh, seasonal foods
Try Something New Once a Week

Plan at least day a week to try a new vegetarian recipe.

- Look through websites, cookbooks, blogs
- Creative ideas out there!

---

Keep it Simple

Not every menu item has to involve hours of prep:

- Black bean burritos
- Vegetarian chili
- Hummus pita sandwich
- Tofu tacos
- Veggie burger

---

Try Plant-Based Dairy Products

Try more plant-based alternatives for milk, yogurt, and cheese.

- Sauces
- Cereals
- Beverages
- Desserts
Think “yes”!
Don’t dwell on what you can’t cook with, think about what you can cook with!
- 40,000 edible plant species on the planet!
- Think of the possibilities!

References
References