



SCHOOL OF MEDICINE

Physical Medicine and Rehabilitation

WORDS ABOUT WELLNESS

Today's "Words about Wellness" is brought to you by:

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Plant Based Eating

"Eat Food. Not Too Much. Mostly Plants"¹ – Michael Pollan

These words, written by journalist Michael Pollan, author of several books including "The Omnivore's Dilemma," are simple, profound, and instructive. As we continue living through the global pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), there has, perhaps, never been a better time to eat more plants. Recent epidemics and pandemics, including the current one, have been caused by viruses transmitted to humans through contact with animals, both wild and domestic, and the production, sale, and consumption of animals (e.g. AIDS, Avian flu, SARS, MERS, Ebola, etc.).^{2,3,4} We are also learning that older adults and those with non-communicable underlying chronic conditions like hypertension, obesity, diabetes, and cardiovascular disease, which are all largely preventable and reversible through plant-based diets,⁵ are more likely to be hospitalized with complications from COVID-19.⁶ Lastly, with possible meat shortages and likely higher prices for meat, due to coronavirus outbreaks in meat packing plants, now is a good time to consider exploring a whole-food plant-based diet.⁷

My intention with this short piece is to provide a few actionable steps to help you and your family incorporate more plant foods into your diet, if you are not already, and provide some new ideas and inspiration for you. Simple changes in food choices can have tremendous impacts on one's health over time. I encourage you to become curious about food and learn about the profound benefits of whole plant foods on human health and the health of our planet.

The CDC recognizes four main drivers of chronic disease which include 1) Tobacco use and secondhand smoke; 2) Poor nutrition, including diets low in fruits and vegetables and high in sodium and saturated fats; 3) lack of physical activity; and 4) excessive alcohol use.⁸ If you avoid tobacco, limit or avoid alcohol, move your body daily, and consume a whole-food plant-based diet you will have a high likelihood of avoiding or delaying the onset of chronic disease and enjoying health and vitality for many years.

Here are some suggestions for incorporating more plant foods into your life.

- Add a serving of fruit to every meal or eat fruit as a snack between meals: choose a variety of colors for phytonutrient diversity: e.g., strawberries, oranges, apples, pineapple, bananas, mangos, and blueberries.
- Substitute whole grains for refined grains: e.g., brown rice instead of white rice, whole grain bread instead of white bread; whole grain tortillas instead of white flour tortillas; and include a serving of whole grains with each meal.
- Eat a salad every day with a variety of colorful vegetables. For dinner fill half the plate with vegetables.
- If you eat meat, think of it as a condiment or a side dish, not the main course. Consider meat substitutes: lentils, chickpeas, soybeans “edamame,” tofu, and various other legumes are excellent sources of protein and can be added to salads, soups, stews, and used as a side dish. Hummus (made with chickpeas) can be eaten with vegetables or whole grain pita bread and makes a great snack or lunch sandwich.
- Include nuts and seeds in your daily diet – a handful of nuts (walnuts, almonds, cashews) make a good snack; seeds like chia, flax, hemp, and pumpkin can be added to salads, oatmeal, and smoothies.
- Cook with herbs and spices for added antioxidant and phytonutrient content of meals.
- Drink green tea, herbal tea, black coffee, and water, instead of sugar-sweetened or artificially sweetened beverages.

Sample meal plan: I set out to provide the nutritional benefits with citations for all of the foods listed and then realized it’s beyond the scope of this short article: I have listed a few to give you the idea. I invite you to type any of these foods into PubMed and read about the incredible benefits they have to our health. Every year we learn more about specific compounds, mechanisms of action, and results from human clinical trials on plant-based functional foods.

Breakfast: Oatmeal with blueberries and ground flax seeds.

- Sample of nutritional benefits from this meal:
 - Blueberries contain anthocyanins, polyphenols, phenolic acids, and polysaccharides that enhance immunity, improve brain function and reduce cognitive decline, reduce inflammation, protect against cancer, diabetes, obesity, and heart disease, support lung function, and many other benefits.⁹
 - Oatmeal contains soluble and insoluble dietary fibers which support weight reduction, lower blood lipids, and control hyperglycemia.¹⁰

- Flaxseeds are rich in the essential omega-3 fatty acid ALA (alpha linolenic acid), lignans (a phytoestrogen), protein, and fiber and can reduce hypertension, lower blood glucose in subjects with type 2 diabetes and prediabetes, and exert protective effects against development of primary breast cancer and reduce risk of mortality in women who already have the disease.¹¹

Lunch: Salad with Romaine lettuce, kale, spinach, hemp seed hearts, garbanzo beans, quinoa, tomatoes, beets, cucumber, and shredded carrots, dressed with balsamic vinegar and olive oil.

Dinner: Brown rice, steamed Broccoli, steamed tofu with garlic, served with peanut sauce.

Mindful Eating: the parasympathetic division of our autonomic nervous system, the “rest and digest” side, controls digestion. Our breath is the bridge between the voluntary and involuntary functions of our nervous system. When we bring our attention to our breath, we can invoke relaxation. When we eat in a relaxed state, we support optimal digestion and nutrient assimilation. I love Thich Nhat Hanh’s simple mindful exercise before eating and encourage you to try it with your family as you sit down to a meal: We do this at my house and my family laughs at me, but it works! Simply say three times “breathing in, I calm my mind. Breathing out, I smile.”¹²

Resources: There are so many great resources out there for information, inspiration, and recipes on plant-based foods and meals: search whole-food plant-based on Instagram, YouTube, Pinterest, etc. I have listed a few books, movies, and websites below to get you started. Happy Eating!

Books:

- “How Not To Die” and “How Not to Diet” by Michael Greger, MD
- “Mastering Diabetes” by Cyrus Khambatta, PhD, and Robby Barbaro, MPH
- “The Longevity Diet” by Valter Longo, PhD

Documentaries

- “The Game Changers” <https://gamechangersmovie.com/>
- “Forks Over Knives” <https://www.forksoverknives.com/the-film/#gs.6h7548>

Websites

- “NutritionFacts.org” <https://nutritionfacts.org/>
- “Forks Over Knives” <https://www.forksoverknives.com/>

Get Started Guides:

- NutritionFacts.org <https://nutritionfacts.org/healthkit/>
- Fork Over Knives <https://www.forksoverknives.com/how-tos/plant-based-primer-beginners-guide-starting-plant-based-diet/#gs.6h7an4>
- Kaiser Permanente “The Plant-Based Diet” a healthier way to eat: https://thrive.kaiserpermanente.org/care-near-you/northern-california/santarosa/wp-content/uploads/sites/15/2015/09/New-Plant-Based-Booklet-1214_tcm28-781815.pdf

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