



HEARTBEAT

A Publication of South Jersey Heart Group

Understanding the New Dietary Guidelines

“You are what you eat.”

It has become increasingly clear that the single major cause of poor health in our patients is poor diet, resulting in cardiovascular (CV) and metabolic diseases. Most physicians would agree that they have not been adequately trained and feel under-equipped to discuss nutrition and appropriate diet with their patients. However, emerging advances in evidence-based nutritional policy do give us a clearer guide for dietary priorities. In this *Heartbeat*, we will try to correct this disconnect and provide evidence-based dietary advice to share with your patients.

What Every Doctor Should Know

First, *all fats should not be feared*. The historical priority of reducing total fat, saturated fat and dietary cholesterol is outdated and incomplete.^{1,2} Estruch, the lead investigator of the PREDIMED trial, highlighted the importance of differentiating between different types of fat. Bad fat, “animal fat should be avoided,” he said, whereas good fat, “vegetable fats—extra virgin olive oil, nuts and fatty fish—should be recommended.”

Nuts (almonds, walnuts, hazelnuts—almost all) and seeds (flaxseed, pumpkin, hemp, chia) are full of unsaturated fatty acids (FA), omega-3 FA, fiber, vitamin E and other nutrients, which are good for heart health and promote satiety.

Fatty fish (salmon, mackerel, herring, trout, anchovies, sardines and albacore tuna), which are rich in omega-3 FA, are heart-healthy.

A study of middle-aged and older people found that higher levels of omega-3 polyunsaturated FA were associated with a lower risk for fatal cardiac events. The researchers

suggest that patients should be urged to include several servings of fatty fish in their diets each week.³ Data from fish oil supplements is mixed.

Avocados, a fruit with 77% of its calories coming from fat, and cold-pressed extra-virgin olive oil, have significant health benefits.

Second, *refined flour should be replaced with a diet rich in high-fiber whole grain foods*. These can lower risk of several chronic conditions, such as high cholesterol, coronary heart disease, obesity and type 2 diabetes, according to various studies, including a 2007 research analysis of 285,000 people published in *Nutrition, Metabolism & Cardiovascular Diseases*.

Why are whole grains so healthy? They have all three parts of the grain in its natural state: bran, a tough outer shell that contains most of the fiber; germ, a concentrated source of nutrients; and the endosperm, which provides most of the grain’s bulk. Processed or “refined” grains, such as



white flour or white rice, have the bran and germ stripped away, leaving just the starchy endosperm. But whole grains (amaranth, brown rice, bulgur, rye, quinoa, steel-cut oats, farro, wheat berries and wild rice) retain all those nutrients and fiber.

“Fiber has a glowing list of health benefits, [and] most Americans’ diets are woefully deficient in this life-giving form of carbohydrate,” says Ann Kulze, MD, a nutrition expert and author of *Dr. Ann’s 10 Step Diet*.

Third, *healthy diet patterns substantially reduce CV risk, while stabilizing long-term weight gain*. Weight-loss (calorie-restricted) diets are a totally different topic and not covered in this *Heartbeat*.

Fourth, *we should advocate for healthcare system improvements*. The incorporation and coordination of nutritional evaluation, behavior change methods and electronic health records that assess and monitor diet would help us to achieve better health for our patients.

Last, *we have to be familiar with major fads and misconceptions about diet*. Popular topics include gluten-free, organic, genetic modification, local, grass-fed, paleo, low-carb and vegan. Overall, these popular concepts often have a minor or uncertain influence on health, compared with the “big picture” of overall foods and diet patterns consumed. Presently, *a high-fat, Mediterranean diet is closest to an evidence-based nutritional diet that would be advisable for our patients*.

The focus should be on *increased* intake of fruits, nuts, vegetables, minimally processed whole grains, legumes (beans, lentils, peas), extra-virgin olive oil, seafood, yogurt; and *reduced* intake of sugar-sweetened beverages, foods rich in refined grains, starches and sugars, and processed (preserved) meats. (Table 1).⁴

The PREDIMED study, a five-year trial conducted in Spain that randomized participants to a Mediterranean diet supplemented with olive oil or nuts versus a low-fat control diet, has suggested numerous health benefits associated with the Mediterranean diet.^{5,6} These include better prevention of CVD and less weight gain compared with a low-fat diet, reversal of metabolic syndrome and decreased incidence of diabetes. The Mediterranean diet

has also been linked to improved cognition⁷ and lower risk of stroke.

“People should know that the Mediterranean dietary pattern is healthier than its comparators and should know the key components of this food pattern. The plan should be to increase the intake of the key foods (vegetables, fruit, nuts, fish, legumes, extra-virgin olive oil and red wine in

Table 1. Evidence-Based Dietary Priorities for Cardiovascular and Metabolic Health

EAT MORE	TARGET
Whole fruits; avoid juices	2 servings/day
Nuts, seeds	4 servings/week
Vegetables-including legumes-excluding white potatoes	4 servings/day
Minimally processed whole grains	3 servings/day, in place of refined grains
Fish, shellfish	2 or more servings/week
Dairy products (especially yogurt and hard cheese) and eggs	3-4 servings/week
Extra-virgin olive oil	2-6 servings/day
EAT LESS	
Refined grains, starches, sugars	No more than 1-2 servings/day, less if possible
Processed meats	Don't eat
Red meat (beef, pork or lamb)	Try to avoid; no more than 2-3 servings/week
Industrial trans fat (hydrogenated)	Don't eat
Sugar sweetened, power & energy drinks, fruit juices	Don't drink
Alcohol	No more than 1 drink/day for women; up to 2 drinks/day for men
Sodium	No more than 2000 mg/day

**Based on a 2,000 kcal/day diet. Servings should be adjusted accordingly for higher or lower energy consumption. Modified from Mozaffarian D. Dietary and policy priorities for cardiovascular disease, diabetes, and obesity: a comprehensive review. Circulation 2016 Jan 8.*



moderation), and decrease the intake of red and processed meat, soda drinks, whole dairy products, commercial bakery goods, and sweets and pastries. We ignore this evidence—including these results from the PREDIMED trial—at our own peril,” concludes Estruch, the lead author.

History: “A Plate Full of Politics”

In February 2015, the Dietary Guidelines Advisory Committee (DGAC) submitted its Scientific Report to the Secretaries of the U.S. Department of Health and Human Services (HHS) and U.S. Department of Agriculture (USDA).⁸ The Advisory Report helps to inform the federal government of the body of scientific evidence on topics related to diet, nutrition and health. The Advisory Report (AR) is not the Dietary Guidelines policy or a draft.

Subsequently, the HHS and the USDA released the *2015-2020 Dietary Guidelines* (DGs) in January of this year, which were supposed to be based on the outstanding scientific AR. For the first time, this edition cuts out the recommendation to limit total fat, opting instead to recommend limited saturated fat intake and limited added sugars. Overall, the document is a display of complete submission to special interests.

We are advised to limit our intake of saturated fat and sugar, but there is virtually no language indicating how to do that. Clearly, advice about eating less of anything conflicts with the special interests of the food and beverage industry, a business sector that federal agencies and their bosses in Congress don’t want to upset.

The report advises particular age groups of men and boys to cut back somewhat on meat intake, but all this does is highlight the abandonment of the recommendation in the DGAC Report that “less” meat was advisable to the general population for the sake of *people and planet alike*.

(Livestock is responsible for an estimated 18 percent of greenhouse gas; if everyone in the world became vegan, methane emissions would be reduced by 24 percent by 2050.)

Congress decided that sustainability (the climate effects) would NOT be included in these guidelines because it was beyond the mandate of the DGAC, yet the DGs explicitly, even in the executive summary, emphasize the importance of physical activity. You know we are entirely in support of this recommendation (see last *Heartbeat*). But how is this a “dietary” guideline?

Comments/Conclusions:

- This *Heartbeat* includes the important key points from the scientific DGAC (AR).
- Carbohydrates (refined grains, starches, sugar) are worse for CV health and weight than fats.
- Almost all processed salad dressings are bad.
- Processed vegetable oils frequently contain more omega-6 FA (possibly pro-inflammatory and not beneficial) versus omega-3 FA, which are anti-inflammatory. We recommend cold-pressed virgin olive, cold-pressed flaxseed, coconut or avocado oil.
- Eat more fatty fish, seeds, nuts, high-fiber whole grains and non-starchy vegetables.
- Meat consumption across the Western world has reached a level that is unsustainable both for people’s health and the planet. *We urge all to eat less meat.*



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