

Nutrition Action

OCTOBER 2011 \$2.50

HEALTH LETTER®
 CENTER FOR SCIENCE IN THE PUBLIC INTEREST

Eat Real, America!

“With the right food choices, physical activity, and not smoking, we could prevent about 80 percent of heart disease, about 90 percent of diabetes, and 70 percent of stroke,” says Walter Willett, chair of the nutrition department at the Harvard School of Public Health in Boston. “Those are the three pillars. They really do make a difference.”

The right food choices are simple: Eat less red meat, sweets, refined grains, and salt, and drink fewer sugary beverages. Replace unhealthy foods with vegetables, fruit, beans, and whole grains, and with smaller amounts of fish, poultry, and low-fat dairy. Those foods aren't just good for our health. They can also help protect the Earth.

Here's why—and how—to eat real.

Continued on page 3.


FOOD DAY
OCTOBER 24, 2011
JOIN US AT FOODDAY.ORG
40
CSPI • 1971-2011

Join Us on Food Day, October 24!



On October 24th, people in every corner of America will be celebrating Food Day. It will be a time for all of us to learn about food issues and to push for healthy, affordable food produced in a sustainable, humane way.

America's "food system" greatly needs that kind of attention. On the one hand, there's much to celebrate: more organic foods, farmers markets popping up everywhere, the near-extinction of trans fat, and more healthful fresh and packaged foods at supermarkets. Remember when yogurt, tofu, and brown rice were exotic?

On the other hand, think of the obesity epidemic and the thousands of avoidable heart attacks, strokes, and cancers that strike each year. Think of the all-too-frequent food-poisoning tragedies. Consider that people in many low-income communities have no convenient access to produce.

Meanwhile, the huge industrial-scale farms, which garner the bulk of farm subsidies, use enormous amounts of energy and water and pollute our land, rivers, and air with excess fertilizer and pesticides. Cattle feedlot operators and many poultry and hog farms also despoil the environment with mountains and cesspools of excrement, while housing the animals in torturous conditions. And the workers who plant and harvest much of our fruits and vegetables or process meat and poultry suffer miserable working conditions. (See the recent, terrific book *Tomatoland*.)

Numerous organizations are working hard to solve these problems, but I felt that it would benefit us tremendously to work together, building on one another's strengths—and educating everyone from kindergarteners to government officials. Food Day aims to

catalyze greater, faster progress by encouraging nutritionists to work with environmentalists to work with anti-hunger activists to work with food-justice advocates. CSPI created Food Day to advance the whole "food movement."

It's thrilling to see Food Day explode from an idea into a full-fledged national event. Some people will celebrate quietly with a potluck dinner at home with friends (and maybe talk about healthy diets). Others will join big gatherings or conferences in New York City (Union Square), Savannah, and on campuses from Stanford to Rhodes College to Yale.

Even some restaurants and businesses are involved. Thanks to Bolthouse Farms and Dole, the Food Day logo is on 11 million bags of carrots and 100 million bananas. The Food Network/Cooking Channel, Rodale Inc., and Epicurious.com are publicizing Food Day to their huge audiences.

Food Day has also been helped greatly by an advisory board of inspiring people. The board is co-chaired by Senator Tom Harkin of

Iowa and Rep. Rosa DeLauro of Connecticut, and includes the executive directors of the American Public Health Association, American Dietetic Association, and Farmers Market Coalition. It also includes Robert Lawrence, Marion Nestle, Alice Waters, and Walter Willett, whom we interview in this special Food Day issue.

I hope that you will host an event at your home, school, or house of worship, or join an event already planned in your community (see the map at FoodDay.org). You can also (commercialism alert!) buy a Food Day T-shirt, cap, or tote bag from the Food Day online store.

And remember: Eat real!

Michael F. Jacobson
Michael F. Jacobson, Ph.D.
Executive Director
Center for Science in the Public Interest

Food Day is a national grassroots campaign to:

- 1 Reduce diet-related disease by promoting safe, healthy foods
- 2 Support sustainable farms and limit subsidies to big agribusiness
- 3 Expand access to food and alleviate hunger
- 4 Protect the environment and animals by reforming factory farms
- 5 Promote health by curbing junk-food marketing to kids
- 6 Support fair working conditions for food and farm workers

The contents of NAH are not intended to provide medical advice, which should be obtained from a qualified health professional.

The use of information from Nutrition Action Healthletter for commercial purposes is prohibited without written permission from CSPI.

For permission to reuse material, go to www.copyright.com or call (978) 750-8400.

The Center for Science in the Public Interest (CSPI) is the nonprofit health-advocacy group that publishes Nutrition Action Healthletter. CSPI mounts educational programs and presses for changes in government and corporate policies.

Subscribe or renew.



STAFF

EDITORIAL

Michael F. Jacobson, Ph.D.
Executive Editor

Bonnie Liebman, M.S.
Director of Nutrition

Stephen B. Schmidt
Editor-in-Chief

Jayne Hurley, RD
David Schardt
Senior Nutritionists

Kate Sherwood
Culinary Director

Melissa Pryputniewicz, B.S.
Zahra Hassanali, M.Sc.

Emily Caras, B.S.
Project Coordinators

Jorge Bach
Art Director

CIRCULATION MANAGEMENT

Dennis Bass

Myriam Boucher	Debra Brink
Damon Dorsey	Louella Fennell
Greg Hildebrandt	James Nocera
Cecilia Saad	Chris Schmidt
Ken Waldmiller	

SCIENTIFIC ADVISORY BOARD

Kelly D. Brownell, Ph.D.
Yale University

Greta R. Bunin, Ph.D.
Children's Hospital of Philadelphia

Caldwell B. Esselstyn Jr., M.D.
Cleveland Clinic Foundation

Stephen Havas, M.D., M.P.H., M.S.
Northwestern University Medical School

Norman M. Kaplan, M.D.
Southwestern Medical Center
University of Texas, Dallas

JoAnn E. Manson, M.D., Ph.D.
Harvard Medical School

Susan Taylor Mayne, Ph.D.
Yale University

Julie Mares, Ph.D.
University of Wisconsin

J. Glenn Morris, Jr., M.D., M.P.H.&T.M.
Emerging Pathogens Institute
University of Florida

Susan B. Roberts, Ph.D.
USDA Human Nutrition Research Center
on Aging, Tufts University

Frank Sacks, M.D.
Harvard Medical School

Jeremiah Stamler, M.D.
Northwestern University Medical School

Regina G. Ziegler, Ph.D., M.P.H.
National Cancer Institute

Nutrition Action Healthletter (ISSN 0885-7792) is published 10 times a year (monthly except bi-monthly in Jan./Feb. and Jul./Aug.).

POSTMASTER: Send changes to *Nutrition Action Healthletter*, 1220 L Street, N.W., Suite 300, Washington, DC 20005.

Application to mail at Periodical postage rates approved at post office of Washington, DC, and at additional offices.

Subscriber Services

The cost of a one-year subscription or gift (10 issues) is \$24; two years are \$42.

For bulk subscriptions, please write for details. To change your address, send us your subscriber number and your old and new address. If you don't want us to exchange your name, send us your name and mailing-label information. Mail: CSPI, 1220 L Street, N.W., #300, Washington, DC 20005. Fax: (202) 265-4954. E-mail: circ@cpsinet.org. Internet: www.cpsinet.org.

Expiration date is in the upper center of your mailing label. Your subscriber number precedes the expiration date.

GUARANTEE! We'll give you 2 FREE ISSUES of *Nutrition Action* if there's ever a problem with your subscription.



EAT LIKE IT MATTERS

How diet can prevent disease



Walter Willett is chair of the Department of Nutrition at the Harvard School of Public Health and professor of medicine at the Harvard Medical School. He has published over 1,400 scientific articles on diet and disease. Willett spoke to Nutrition Action's Bonnie Liebman from Boston.

Q: Can food keep us healthy?

A: The foods we choose have a huge impact on our long-term health and well-being. We've learned that in the last few decades.

We've seen that, say, rates of heart disease in northern Europe are ten times higher than in southern Europe and that rates of cancer vary tenfold or more around the world. The foods we choose—along with physical activity and not smoking—are a major factor in those huge differences in rates of almost every disease that we look at, including heart disease, stroke, diabetes, and many cancers.

Q: What are the right foods?

A: Within that healthy market basket will be mostly plant foods. That means plenty of vegetables, but not potatoes, and plenty of fruit, but not fruit juices. It's aiming more for the more-intact, less-processed fruits and vegetables and for whole grains as opposed to refined grains. Those factors have an enormous influence.

And I should add healthy protein sources, which means a combination of plant-based foods like legumes and nuts and a modest amount of poultry, fish, and dairy. It's not necessary to be a vegan, but to move in the direction of plant-based choices.

Q: Is any plant-based diet good?

A: No. Just aiming for a plant-based diet alone doesn't cut it. If your plant-based diet is high in refined starch and sugar, that could be the worst possible diet.

Q: How much cancer can diet prevent?

A: Cancer is more complicated than heart disease, stroke, and diabetes. It's pretty clear now that diet's biggest impact on cancer is avoiding overweight and obesity, and they are almost entirely avoidable. Obviously, quantity of food is important. And choosing the right foods can help us control our calories and weight. It's the same market basket that's high in intact whole grains, fruits, and vegetables and low in sugar, sugary beverages, refined grains, potatoes, and red meat.

Q: And low in salt?

A: Keeping salt on the low side is definitely important for preventing heart attacks and strokes, but that tends to happen automatically if you eat fruits, vegetables, and whole grains that have been minimally processed.

You still need to pay attention because you can find whole grains even at places like Whole Foods that are extremely high in salt even though they are marketed as healthy. If you go the processed, prepackaged route, you run the risk of a high salt intake. But if you prepare your own intact foods, most of the time your salt intake will be low.

Q: Why limit red meat?

A: The evidence has now become very strong that keeping red meat low is one of the most important steps in creating a healthy diet. Replacing meat with almost anything is better, but replacing it with poultry will move you in the right direction and replacing it with fish or nuts—something with positive health benefits—is even better.

Red meat is high in unhealthy fats. And even lean cuts have unhealthy fats. So replacing them with unsaturated fats will move the risk of heart disease and diabetes in the right direction.



A Willett favorite. Whole intact grains like Kashi Pilaf beat breads, breakfast flakes, and other foods made from whole-grain flour.

Q: How does red meat affect diabetes?

A: We're not sure. There may be multiple factors in meat. Some evidence suggests that the heme iron increases risk. The link with diabetes hasn't been appreciated until recently, but now it's been seen in many studies.

Q: Does meat promote colon cancer?

A: Yes, particularly if it's processed red meat. So much happens in the processing that we're not sure what matters, but the evidence is quite strong.

Breast cancer does not seem to be related to red meat consumption during midlife and later, but we have seen a relationship with red meat consumed in early adult life and high school. So far we have the only prospective data on high school diet and breast cancer, so that needs confirmation.

Q: How much red meat is okay?

A: Like almost everything, it's frequency and amount that influence our risk. There's no sharp cutoff. It's like radiation. We can't say that there's any safe level.

But the large majority of the risk would be removed if everyone would cut back from the current average intake, which is about once a day, to once or twice a week in a moderate amount. A 20-ounce steak once a week is still a lot of meat.

Q: A serving should be three ounces?

A: Yes, three or four ounces cooked. That would be a huge step in the right direction for the vast majority of Americans who are eating red meat on a daily basis.

Q: What's wrong with refined grains?

A: They're problematic in two ways. Much of their vitamins and minerals and fiber have been removed in the refining process. For example, there's pretty good evidence that the magnesium that's removed has some protective effect for diabetes and heart disease.

Labels usually call the flour "enriched," and in parentheses you'll see a list of

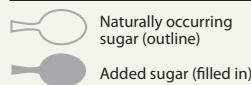


HOW SWEET IS IT?

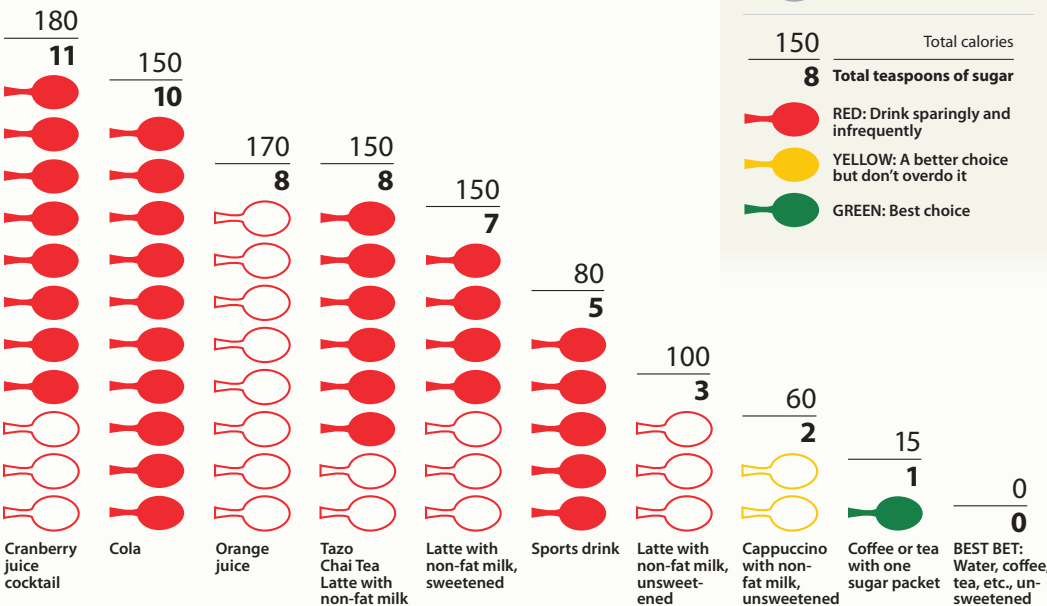
Calories and teaspoons of sugar in 12 oz.

FOOD DAY 2011

Key



150 Total calories
8 Total teaspoons of sugar



Number-one problem. To lower the risk of obesity, diabetes, heart disease, gout, and cavities, minimize sugary beverages, including juices.

vitamins that are added back. It should be called “depleted” flour. Or “depleted and partially restored.”

So there's a problem with what's lost, but also with what's created—which is a rapidly absorbed, high-glycemic form of carbohydrate that has clear adverse effects on the risk of diabetes, weight gain, and heart disease.

Q: A high-glycemic carbohydrate raises blood sugar rapidly?

A: Yes. The strongest evidence that glycemic index matters comes from the acarbose trial. Acarbose is a drug that inhibits an enzyme secreted by the intestine to split long-chain starches into their glucose building blocks. This drug inhibits the enzyme, so it's turning a high-glycemic-index carb into a low-glycemic-index carb.

The drug reduces the risk of heart disease and diabetes. From a physiological standpoint, it's the definitive study on glycemic index.

Q: Don't most foods—like hamburgers, pizza, and cookies—mix refined carbs with fat, which blunts the glycemic index?

A: If you add fat to refined carbs or potatoes, that will lower the glucose response. But you'll also lower blood sugar if you replace the high-glycemic carb with a low-glycemic carb like barley.

No matter what your diet, if you switch from a higher- to a lower-glycemic-index carb, you'll get the expected drop in blood glucose. That's why glycemic *load* matters. It takes into account the amount of carbohydrate as well as the glycemic index.

Q: Can you overdo whole grains?

A: You can always overdo foods. A key principle that's been documented in the last few decades is that if you are lean and active, you can tolerate more carbohydrate. If you're not, a high-carbohydrate diet can exacerbate insulin resistance.

What's interesting is that if you're really eating whole grains, you won't overeat them. I think of my Kashi pilaf as a paradigm because it's a blend of intact grains. We're not talking about whole-grain bread or Kashi breakfast cereals. I can tolerate only 30 to 40 percent of calories from intact grains because more causes gastrointestinal disturbances. The healthiest whole grains are self-limiting.

Q: What's wrong with sugars?

A: At this point, sugary beverages are the number-one problem in the American diet. They're the number-one source of calories on average. Sugary beverages are also the number-one sales item in terms of dollars in grocery stores, and a lot are consumed at McDonald's and other fast food places.

They're like cigarette smoking. They're only bad and they have no redeeming virtue. And the adverse effects are weight gain, diabetes, heart disease, gout, cavities, and maybe some cancers as well.

Q: Even fruit juice is a problem?

A: Yes. It's associated with a higher risk of diabetes. And you'd expect that because fruit juice has about the same number of calories per serving as Coke or Pepsi, and it will have the same metabolic effect. Some nutrients come along with fruit

juice, but there's a big metabolic price to pay for getting nutrients that you could get from foods that have fewer calories. And most people are getting those nutrients anyway, so two glasses of orange juice a day doesn't have many health benefits and has many harms.

Q: What benefits do fruits and vegetables provide?

A: The benefit for lowering the risk of cardiovascular disease is clear. Some of that is due to their potassium, which lowers blood pressure. That's proven.

But some is also likely due to their folic acid, antioxidants, and other micronutrients. Fruits and vegetables are a primary source of vitamins and many minerals. We don't understand all of their benefits. There may be some modest benefit for preventing some cancers, but a large benefit isn't there.

Q: Why do we need oils and nuts?

A: Replacing saturated fat or carbohydrate with unsaturated fat definitely lowers LDL cholesterol and triglycerides. And there's a huge amount of evidence that that will reduce the risk of heart attacks. It does seem that there's some added benefit of polyunsaturated fats above monounsaturated fats, but virtually all oils and nuts have some of both.

Q: With 120 calories in a tablespoon of oil and about 175 calories in just a quarter cup of nuts, isn't it easy to go overboard?

A: Of course. It's too much of a good thing. Eating a horrible diet and pouring oil on it is not a good idea, just like sprinkling bran on a horrible diet is not a good idea. If you consume nuts and oils as part of an overall healthy diet, it's easier to control calories, but that means *replacing* bad stuff with good stuff.

Q: The food industry keeps repeating that there are no good or bad foods.

A: I think we should be using the words good food and bad food liberally. That's what it's all about...replacing bad foods with good foods.

Q: And good food tastes good?

A: Putting good foods together and preparing them well can make a way of eating that's a pleasure, not a sacrifice. In fact, it's more interesting, enjoyable, and varied than the mainstream American diet. 🍌

A Day's Worth of Food

BY BONNIE LIEBMAN & KATE SHERWOOD

In the OmniHeart study, two diets—one higher in unsaturated fat and one higher in protein—cut heart disease risk the most. Here's a hybrid of the two diets with an environmental twist: no meat, poultry, or fish. (We used tofu instead.) The diet supplies roughly 2,100 calories (which may look skimpy if you typically eat more). It's low in saturated fat, added sugar, and salt but high in potassium, magnesium, and fiber. Grains are limited because most of the carbs come from fruits and vegetables.



BREAKFAST

You get whole fruit instead of juice and intact whole grains in the oatmeal (with a cup of added fat-free milk—shown here in a glass—and a sprinkling of pecans and dried apricots and cranberries). Unsweetened coffee or tea (not shown) is unlimited.

LUNCH & AFTERNOON SNACK

A generous serving of greens plus apple slices, grapes, just an ounce of cheese, just 2 tablespoons of walnuts, and vinaigrette make a filling main-dish salad. Snack on hummus and peppers (or other veggies) if you want an afternoon snack or an appetizer before dinner.



DINNER & EVENING SNACK

Stir-fried veggies and tofu over brown rice with a side of edamame makes a quick and easy dinner. Dessert is two *petite* cookies. A cup of protein-rich, fat-free plain Greek yogurt garnished with blueberries, sliced banana, and just ¼ cup of granola makes a perfect snack. If your yogurt (or breakfast cereal) is sweetened with sugar, that's your "Wild Card" (see below).

A DAY'S FOOD

Below are the OmniHeart study's targets for a day's worth of food.¹ The nutrient targets for a 2,100-calorie diet are: sat fat: 14 g / protein: 105 g / fiber: at least 30 g / potassium: 4,700 mg / magnesium: 500 mg / calcium: 1,200 mg / sodium: no more than 2,300 mg. Our day's worth of food (shown above) roughly matches those targets. ¹JAMA 294: 2455, 2005.

Vegetables & Fruit

11 servings per day

What's 1 serving?

- ½ cup cooked vegetables
- ½ cup raw vegetables
- 1 cup salad greens
- 1 piece fruit
- ½ cup fresh fruit
- ¼ cup dried fruit

Grains

4 servings per day

What's 1 serving?

- 1 slice bread
- ½ cup cereal, pasta, or rice

Low-Fat Dairy

2 servings per day

What's 1 serving?

- 1 cup milk or yogurt
- 1½ oz. cheese

Legumes & Nuts

2 servings per day

What's 1 serving?

- ¼ cup nuts
- ½ cup cooked beans
- 4 oz. tofu

Poultry, Fish, & Meat

1 serving per day

What's 1 serving?

- ¼ lb. cooked

Oils & Fats

2 servings per day

What's 1 serving?

- 1 Tbs. oil
- 1 Tbs. margarine or mayo

Desserts & Sweets

2 servings per day

What's 1 serving?

- 1 small cookie
- 1 tsp. sugar

Wild Card

1 serving per day of

- Poultry, Fish, & Meat
- OR Desserts & Sweets
- OR Oils & Fats
- OR Grains

Fewer Cows, More Vegetables

Too many food animals harms people and the planet



Robert Lawrence is the founding director of the Center for a Livable Future at the Johns Hopkins Bloomberg School of Public Health in Baltimore. Prior to that, he was the first director of the Division of Primary Care at Harvard Medical School and director of health sciences at the Rockefeller Foundation. Lawrence spoke to Nutrition Action's David Schardt from Baltimore.

Q: How does the way we produce our food affect the environment?

A: The most important impact of the industrialization of agriculture in North America is the progressive consolidation and concentration in the way we raise animals for human consumption.

In the United States, we now produce 9 billion animals for food every year: about 100 million hogs, 35 million head of cattle, and slightly more than 8 billion broiler chickens. That's 1 million broilers per hour, 24 hours a day, 365 days a year. Raising animals this way degrades our environment and consumes our resources.

Q: But doesn't it also provide much of our protein?

A: Yes, but in a very inefficient way. It takes about 7 pounds of grain to produce one pound of beef, and about 6.5 pounds of grain to produce a pound of pork. Even poultry, which is the most efficient animal, requires about 2.6 pounds of grain to produce one pound of meat.

Q: How does that tax our resources?

A: It contributes to the growing scarcity of water, for one thing. To grow the grain to produce one pound of beef requires 840 gallons of water. That's clearly not sustainable.

Water tables throughout the country are declining. Take the Ogallala aquifer under the Great Plains. It supplies about 30 percent of the nation's ground water used for irrigation, and it is being pumped down several feet a year.

Q: What other problems does it cause?

A: Concentration of animal waste. Our industrial agriculture system produces about one ton of animal waste solids—what's left of their excrement after the water has been removed—for every single person in this country. That's

40 times as much waste as humans produce. Animal waste, which was once a rich source of organic fertilizer, has now become a major polluter of surface water, soil, and air.

Q: How has our emphasis on producing meat affected farming?

A: We have lost diversity because of the large concentrations of row crops, particularly the corn and soybeans that feed the animals we eat.

As one example, in the mid-1950s there were more than 25 different commodities—things like potatoes, cherries, popcorn, oats, and plums—that were commercially viable in Iowa, meaning that they were grown in Iowa and either sold within the state or shipped out of state. Today, Iowa is reduced to essentially four: corn, soybeans, hogs, and cattle.

Q: Does that increase the need for long-distance transportation?

A: Yes. It means, for example, that the grain grown in the Midwest is shipped a thousand miles to the eastern shore of Maryland to feed the 500 to 600 million broilers that are produced on the Delmarva peninsula each year.

Q: And that requires more energy?

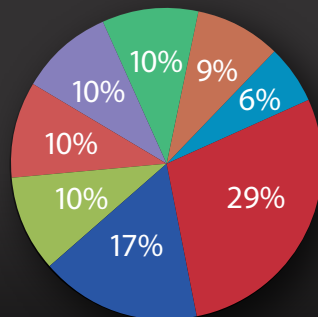
A: It does, and not just for transportation. We have also come to rely more and more on fossil fuels to produce synthetic fertilizers, pesticides, and herbicides.

The net effect is that we have compromised the resilience of our food system. Our heavy dependence on fossil fuels puts our nation at risk as the cost of energy goes up and the cost of food follows.

Q: What can consumers do?

A: Eat less meat. The U.S. Department of Agriculture estimates that the average adult American male consumes about 70 percent more protein every day

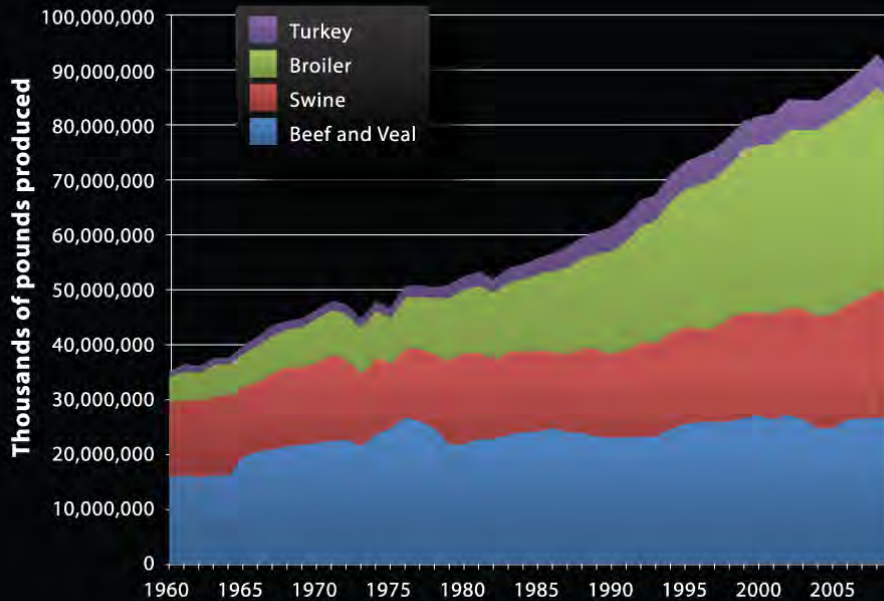
U.S. Greenhouse Gases from Food



Source: Center for a Livable Future.

Beef, pork, and dairy contribute far more greenhouse gases than grains, fruits, and vegetables.

Food Animal Production in the U.S. has been Transformed Over the Last 50 Years



Source: Center for a Livable Future.

Over the past half century, meat and poultry production has outstripped population growth by 50 percent.

than he needs. For women, it's about 25 percent more.

What's more, 67 percent of the dietary protein in the North American diet comes from animal sources, compared to a worldwide average of about 30 percent.

So not only are we eating more protein than we need, but we're eating more of our protein in the form of meat protein as opposed to high-quality vegetable protein.

Reducing the amount of beef, pork, and poultry that we consume would immediately ease our footprint on the environment.

That's a very tough message to sell to people, though, because culturally we have developed this taste for meat. And our biological evolution probably prepared us to enjoy eating fatty foods.

Q: Is that where Meatless Mondays come in?

A: Yes. The Meatless Monday campaign, which began in 2003, is a movement to cut meat consumption by going one day a week without eating meat. Its goal is to improve the health of people and the planet. The Bloomberg School of Public Health at Johns Hopkins University, where I work, has been the campaign's technical and scientific advisor since its beginning.

Q: What inspired Meatless Mondays?

A: One of the objectives of the Surgeon General's Healthy People goals for the decade 2000 to 2010 was to reduce the saturated fat in the American diet by 15 percent. And we thought that even a skilled nutritionist would have a difficult time figuring out how to cut back saturated fat by 15 percent over the 21 meals in a week.

It turns out that one day is about 15 percent of the week. So, since the biggest source of saturated fat in the U.S. diet is meat, Americans could go far toward meeting the Surgeon General's recommendation by going one day a week without meat.

You would also have to include one day a week without cheese and whole-milk dairy products, because they are the other major sources of saturated fat. But for simplicity's sake, we focused on the Meatless Monday concept. We picked Monday because studies suggest that people are more likely to stick with changes in behavior if they begin them on a Monday.

Q: What can people do beyond eating less meat?

A: They can buy more locally grown foods. That helps decrease our reliance on long-distance transportation and the fossil fuels that requires.

Locally produced foods are available at farmers markets, which are increasing dramatically in number.

We've also seen an encouraging increase in the number of small farming operations that participate in consumer supported agriculture, or CSAs.

Q: How do those work?

A: You buy a share, which helps the local farmer up front with the cost of seed and other inputs for their farm. Then the farmer provides you, on a weekly basis, with a certain amount of fresh fruits and vegetables for up to six or seven months, depending on the length of the growing season.

Q: How much can Meatless Mondays and farmers markets help?

A: They would not solve all of our problems, but they would be a big step in the right direction.

Q: How else does our industrial agriculture system harm our health?

A: It has led to a steady increase in processed foods, which are manufactured from relatively inexpensive fats and sweeteners like corn oil, soybean oil, and corn syrups.

For every one of those calorically dense but nutritionally weak processed food items, we're sacrificing the opportunity to eat fruits, vegetables, whole grains, and other whole foods that are rich in nutrients, lower in calories, and delicious.

Q: Don't processed foods sell because people want to eat them?

A: The food industry has used our evolutionary preference for fat and sugar very effectively by formulating processed foods that are high in fats, sugars, and salt.

It takes a conscious effort to stay on the perimeter of the supermarket, where the fresh fruits and vegetables and the dairy products and the whole foods are, and to avoid the center of the store, where the highly processed foods are displayed. 🍌



"I shop at farmers markets. I go every week religiously, and I feel deprived if I'm not able to."

Alice Waters, chef, author, and proprietor of the pioneering restaurant *Chez Panisse* in Berkeley, California, is a leader of the movement that believes that cooking should be based on the finest and freshest seasonal ingredients that are produced sustainably and locally. Waters spoke to Nutrition Action's David Schardt from Berkeley.

Q: Why does it matter where we buy our food?

A: When you know where your food comes from, you begin to understand the importance of everything you buy and put in your mouth. Now, there are obvious health consequences to what decisions you make, but the consequences that are really profound for me are about the provenance or origin of the food.

Q: What's wrong with not knowing where your food came from?

A: You could be buying food from people who don't care about the ecology of the land or from gigantic farms that exploit farm labor or from different parts of the world that have tainted the food. That's why I think that every decision about where we get our food is absolutely critical.

Q: Where does *Chez Panisse* get its food?

A: At the beginning, 40 years ago, I was really, really looking for taste. But I couldn't find it. So we ended up growing gardens in the back of my house. And once that flavor, that just-picked, ripe fruit, came into the restaurant, it woke us up to what we needed to do.

So we found the people who had the meats, the vegetables, all the things that

we wanted to buy. And we built this community of purveyors. We probably have 75 or 80 now. Some of them have just one peach tree. Others bring fruits and vegetables to the restaurant every other day from Sonoma.

Q: Where do you buy your own food?

A: I shop at farmers markets. When you buy food there and you give your money

one. You're thinking seasonality, you're meeting people who live in your community. You're giving your money directly to the greenbelt around the city and really having a significant environmental impact. It's the most aesthetic pleasure of my life. I go every week religiously, and I feel deprived if I'm not able to go.

Q: Who else benefits from shopping there?

A: The person who is interested in a kind of simplicity in what they're cooking. When you get a few tomatoes, they're so tasty you don't need to do anything to them. And it's possible to cook a meal in 10 minutes if you've been to the farmers market that day.

Q: In 1995 you helped start the Edible Schoolyard, a one-acre garden and kitchen classroom at a Berkeley middle school. What have you learned from that?

A: That when kids grow food and cook it themselves, they want to eat it. I'm talking about things like kale and garlic, not anything fancy. They like the empowerment, the care that's just part of working in nature, engaging with your family, cooking a meal, and sitting around a table eating it together.

Q: And that leads to healthier eating?

A: In a way, health is an outcome of living well. I think it's hard for people to change their diets. But it's not very hard to taste a ripe peach and want to go and get another one. 🍑



Alice Waters with middle schoolers from the Edible Schoolyard in Berkeley, California. "When kids grow food and cook it themselves, they want to eat it."

to a local farmer, you're supporting the people who are taking care of the land for the future of this planet. I feel like it's an investment in the future. It's supporting a way of life that's really, really important to me.

Farmers markets are multiplying so fast across the U.S. and Canada that I believe in most big cities it's possible now to find one open almost every day. This is the result of people wanting real food, not only fresh food, but ripe and tasty food.

Q: Are farmers markets more than just about buying food?

A: Yes. You receive what I call a delicious education about food when you walk into

To find the farmers markets closest to you, visit apps.ams.usda.gov/FarmersMarkets.

SAVING OUR SOIL

How to protect an ecosystem under attack



Prince Charles, “having myself tried to farm as sustainably as possible for some twenty-six years in England,” spoke before a conference on the future of food in Washington, D.C., last May. This is an abridged version of his address. The full speech can be found on the Prince’s Web site at www.princeofwales.gov.uk.

The world is gradually waking up to the fact that creating sustainable food systems will become paramount in the future because of the enormous challenges now facing food production.

I have no intention of being confronted by my grandchildren, demanding to know why on Earth we didn’t do something about the many problems that existed, when we knew what was going wrong.

This is the challenge facing us. We have to maintain a supply of healthy food at affordable prices when there is mounting pressure on nearly every element affecting the process.

In some cases we are pushing Nature’s life-support systems so far, they are struggling to cope with what we ask of them. Soils are being depleted, demand for water is growing ever more voracious,

and the entire system is at the mercy of an increasingly fluctuating price of oil.

As I see it, these pressures mean we haven’t much choice in the matter. We are going to have to take some very brave steps. We will have to develop much more sustainable, or durable forms of food production because the ways we have done

things up to now are no longer as viable as they once appeared to be.

So what is a “sustainable food production” system? For me, it has to be a form of agriculture that does not exceed the carrying capacity of its local ecosystem and which recognizes that the soil is the planet’s most vital renewable resource.

Top soil is the cornerstone of the prosperity of nations. It acts as a buffer against drought and as a carbon sink and it is the primary source of the health of all animals, plants, and people.

If we degrade it, as we are doing, then Nature’s capital will lose its innate resilience and it won’t be very long, believe you me, before our human economic capital and economic systems also begin to lose their resilience.

A genuinely sustainable form of agriculture, in my own view, is surely not dependent upon the use of chemical pesti-

cides, fungicides, and insecticides; nor, for that matter, upon artificial fertilizers.

Nor would you expect it to drink the Earth dry, deplete the soil, clog streams with nutrient-rich run-off, and create, out of sight and out of mind, enormous dead zones in the oceans.



“I have no intention of being confronted by my grandchildren, demanding to know why on Earth we didn’t do something.”

You would also think, wouldn’t you, that it might not lead to the destruction of whole cultures or the removal of many of the remaining small farmers around the world. Nor, presumably, would it destroy biodiversity at the same time as cultural and social diversity.

Genuinely sustainable farming maintains the resilience of the entire ecosystem by encouraging a rich level of biodiversity in the soil, in its water supply, and in the wildlife—the birds, insects, and bees that maintain the health of the whole system.

Sustainable farming also recognizes the importance to the soil of planting trees; of protecting and enhancing water-catchment systems; of mitigating, rather than adding to, climate change.

To do this it must be a mixed approach. One where animal waste is recycled and organic waste is composted to build the soil’s fertility. One where antibiotics are only used on animals to treat illnesses, not deployed in prophylactic doses to prevent them; and where those animals are fed on grass-based regimes as Nature intended.

We have to put Nature back at the heart of the equation. If we are to make our agricultural and marine systems (and therefore our economies) resilient in the long term, then we have to design policies in every sector that bring the true costs of environmental destruction and the depletion of natural capital to the fore and support an ecosystem-based approach. And we have to nurture and support the communities of smallholders and family farmers.

It is, I feel, our apparent reluctance to recognize the interrelated nature of the problems and therefore the solutions, that lies at the heart of our predicament and certainly on our ability to determine the future of food.

How we deal with this systemic failure in our thinking will define us as a civilization and determine our survival. 🍌

Buy Me!

How the food industry influences what we eat

Q: Why does the food industry try to influence what we eat?

A: Food companies are not social service agencies. They're businesses, and their job is to sell products. Once you understand that, everything else follows.

It's not that these people sit around a conference table trying to figure out, "How are we going to make our population fat?" It's more like, "How are we going to sell more products in an environment in which there's already too much food and way too many choices?"

Their job is to make you choose their product and not someone else's and, if possible, to eat more. The "eat more" message is an inadvertent consequence of the normal way of doing business.

Q: So healthy food isn't a priority?

A: No. And it's not only that food companies have to make a profit. If they're publicly traded, they have to grow their profits every 90 days. They have to report to Wall Street whether they've met their growth targets, and if they don't grow, they get in trouble. They have to grow or nobody will invest in them.

To use a couple of recent examples, Campbell's is putting salt back in some reduced-sodium soups because they weren't selling. And PepsiCo is getting killed by its investors because Pepsi was trying to sell healthier foods and the company isn't growing fast enough. I'm always reminding everyone that this is about business, not health.

Q: How do companies influence what we eat?

A: Advertising is the most obvious way. Food companies put hundreds of millions of dollars into it. There is no nationally advertised food product that has a budget of less than \$10 million a year, and that's way on the low end.

For a big company like Coca-Cola or PepsiCo, individual products can have \$150 million budgets. McDonald's



Marion Nestle is the Paulette Goddard Professor of Nutrition, Food Studies, and Public Health at New York University. She is the author of *Food Politics* and (with Malden Nesheim) *Why Calories Count: From Science to Politics*, which will be published in March. Nestle spoke to Nutrition Action's Bonnie Liebman from New York.

and PepsiCo—which owns Frito-Lay and Gatorade—each spends as much as \$1 billion a year.

And if you can't sell it here, you sell it there. This last quarter, McDonald's, Coke, and Pepsi all reported that the growth in their sales was overseas. It's too competitive here so they're moving hard into Third World countries, or "emerging markets," as they're now called.

Q: Just like the cigarette industry?

A: It's exactly like cigarettes in terms of marketing. But food is not tobacco. Cigarettes are very simple. There's one message: don't smoke and, if possible, put companies out of business.

No one is trying to put food companies out of business because everybody has to eat. The marketing is the same, but the issues are much more complicated.

Q: And it's not just advertising?

A: No. Companies also put foods into school vending machines and sports

facilities, and they use product placement in movies and TV shows. All are ways companies are trying to overcome the difficulty of trying to sell products in a hugely competitive environment where the marketing is so ubiquitous that no one even notices.

Q: Don't we see the marketing ploys?

A: Most of us don't. Part of marketing is for people to find it amusing or entertaining but not to notice it as marketing.

I learned that the hard way when I went to a conference of anti-smoking advocates at the National Cancer Institute in the early 1990s. They had slides of cigarette marketing to kids all over the world in the most remote, poverty-stricken places.

I was really astounded. It wasn't that I had never seen marketing. I had just never paid attention. An advertising executive explained that this is exactly what is supposed to happen. Advertising is supposed to slip below the radar of critical thinking. So then I started noticing it. And *Food Politics* was the outcome.

Q: Why do companies try to make their foods look healthy?

A: Research shows that if a product has something added to it that consumers think is healthy, it'll sell more easily. So companies put health claims on packages, and they put vitamins into anything they can, because they can market the foods as healthy.

Q: Companies have been adding vitamins to foods for some time.

A: Yes, but it's gearing up as regulatory agencies become laxer and



Emerging markets. TV ads like this one, which ran in the Philippines, have helped food companies increase profits in developing countries.



Anti-tax front. Americans Against Food Taxes, which paid for this TV ad, is funded by the beverage and supermarket industries. Advocates had suggested a 1-cent tax on 12 oz. sodas.

laxer about enforcing standards. Vitamins have gotten into foods like soft drinks and water.

Q: What influence does the food industry have behind the scenes?

A: Every food company has a lobbyist. Even though advocacy organizations have lobbyists too, the difference in resources is pretty staggering.

Company lobbyists meet with officials in federal agencies to make sure that the government doesn't say that people should be eating less of their products. And companies hire groups like the Center for Consumer Freedom to be their attack dog and to slam their critics.

There's a big attack on the science all the time. "Junk science" is the term that's used for anything industry's defenders don't like. They insist that unless you can absolutely prove that soft drinks, salt, saturated fat, or something else is harmful or leads to obesity, you can't criticize it.

Q: What public relations ploys does industry use?

A: Food companies say that what we eat is a matter of personal choice—that if your kids are fat, it's your fault; that nobody's forcing you to eat their products; that no one is forcing people to go to McDonald's or drink soda.

Just because the food industry spends more than a billion dollars a year in advertising and markets directly to kids doesn't mean you have to go there, they argue.

But parents say that they don't want to fight with their kids about food. More often than not, they give in and the marketers win.

Q: How do supermarkets influence what we eat?

A: Retailers aren't social service agencies either. No matter how valuable a role they play in a community, their job is to make money. And they won't be there if they don't.

Supermarkets all look alike because their marketing people all read the same research. And that research shows that you want products at eye level and at the ends of aisles and at the cash register. And companies pay supermarkets to get their products there. Companies also agree to advertise those products, so there's collusion to sell the most profitable products.

several friends along to share. Even then, you get too much.

Portion sizes are staggering. It's not that people are overeating a few calories a day. They're overeating hundreds or a thousand or more. The extra weight sneaks up on you.

Obesity is not a trivial issue. The entire society is going to be dealing with it for years to come, because people are going to need help. Someone's going to have to pay for that. It's much easier to avoid becoming overweight than

to lose excess weight.

Q: Why are we so susceptible to an environment that pushes us to eat more?

A: The physiological controls of food intake are better at getting people to eat more, not less. They're designed to make sure that you don't starve and that your brain has fuel all the time. They're much better at telling you when you're hungry and need to eat more than when you need to stop eating.

There's no evolutionary reason up until now for selecting for genes that tell you when to stop eating. So you're stuck with the physiology that makes you love eating and makes it hard to stop. That's also a barrier to personal responsibility.

Q: What's the answer?

A: Local and organic and seasonal foods are important because they give consumers a choice and they represent an explicit critique of the existing food system. Their popularity explains why mainstream companies are buying organic food companies, some of which sell organic, healthy-sounding chips, cookies, sodas, and other junk.

Q: So we should buy local and organic food?

A: Yes. There's not enough to feed everybody, but if everyone bought a little more organic food and food from farmers markets, it would make a big difference. Right now only a small fraction of the population is buying these foods. But the fraction is growing, and the food industry needs growth.

You don't need to shop at farmers markets all the time. The nice thing about farmers markets is that you're supporting local farmers and your community. I like it. You vote with your fork. 🍴

Q: Are most of them junk food?

A: Yes. If you've got a supermarket aisle that's 120 feet long and it's got nothing but chips and snack foods or sodas in it, you know those are profitable items.

Q: And you see the same aisles at health food stores?

A: Yes. They often sell healthy-looking or organic junk food. Some of their food is better—cold cereals that have no added salt, for example. But they also have huge sections of candy, chips, sodas, cookies, cakes, and other sweets.

Q: Is there anything else that's below the radar that's pushing us to eat unhealthy foods?

A: The food environment. There's inexpensive food available in large portions 24/7. If you want to make someone fat, give them food as close at hand as possible in the largest portions possible. That's what we do.

Research by Brian Wansink at Cornell shows that if food is in front of you, you'll eat it. And if it's within arm's reach or it's a large amount, you'll eat more.

If there's candy at the checkout counter at Staples, you'll pick up candy bars when you buy paper or toner. There's candy on the counter at CVS, Duane Reade, Walgreens, and other drugstores. It's there for a reason. To make you buy it on impulse.

And the cheaper and more of a bargain it is, the more people buy. Which is why it's not a good idea to have a two-liter soda that costs less than a two-liter bottle of water.

Q: What role do restaurants play?

A: Half our food dollar is spent there. And that means that restaurants are an enormous influence on what people eat. If you're worried about obesity, you can't eat in restaurants...or you have to bring



Slow Food

Chew more, eat less? After watching 16 lean and 14 obese men eat breakfast, researchers noted that the lean men took fewer bites than the obese men (4 vs. 5 per minute), and that the lean men chewed more per bite (21 vs. 17 times).

Then the scientists asked all the men to eat as much food as they wanted, and to chew each bite either 15 or 40 times. Whether lean or obese, the men consumed 12 percent fewer calories after 40 chews per bite than after 15 chews. What's more, roughly an hour after finishing a 670-calorie meal, blood levels of ghrelin (a hormone that stimulates appetite) were lower after 40 chews per bite than after 15 chews.

In another study, researchers fed 14 obese men and women with pre-diabetes a breakfast of orange juice and cream of wheat cereal either alone or with 225 calories of whole almonds (33 nuts), 225 calories of almond butter (2¼ tablespoons), or 190 calories of almond oil (about 1½ tablespoons). The participants felt more full for the rest of the day after eating the whole almonds than after eating the oil or butter (or the almond-free meal).

A third study found that students ate 40 percent fewer calories when offered pistachios in the shell than when they got shelled pistachios (125 calories vs. 210). And in a fourth study, students, faculty, and staff ate 18 percent fewer pistachios when researchers left the discarded shells on the desk all day than when they routinely removed the shells.

What to do: Eat whole foods, chew thoroughly, and don't whisk away your shells.

Am. J. Clin. Nutr. doi:10.3945/ajcn.111.015164. *Nutr. Metab.* 8: 6, 2011. *Appetite* 57: 414, 418, 2011.

Vitamin D & Melanoma

Vitamin D and calcium supplements may reduce the risk of melanoma in people who have a history of other types of skin cancer.

Investigators studied more than 36,000 postmenopausal women who were randomly assigned to take either a placebo or both vitamin D (400 IU) and calcium (1,000 mg) every day for seven years as part of the Women's Health Initiative.

Overall, the supplements had no impact on either non-melanoma (basal and squamous cell) or far deadlier melanoma skin cancers.

However, when the scientists looked only at women who had previously been diagnosed with non-melanoma skin cancers, those who took vitamin D and calcium had about half the risk of melanoma of the placebo takers. (The risk of melanoma is 2½ times higher in women with a history of other skin cancers.)

What to do: Shoot for the recommended daily allowances of vitamin D (600 IU up to age 70 and 800 IU if older) and calcium (1,000 mg up to age 50 for women and up to age 70 for men, and 1,200 mg if older). However, other studies suggest that it's the vitamin D that's key. For example, vitamin D curbs DNA damage in mice exposed to UV light.

Although these results are encouraging, they need confirmation because the numbers were small: only 24 placebo takers and 10 supplement takers with a history of non-melanoma skin cancer were diagnosed with melanoma. What's more, the trial wasn't initially designed to test the supplements on people who had had non-melanoma skin cancer.

J. Clin. Oncol. 29: 3078, 2011.

Isoflavones Flunk Out

Soy isoflavones (including genistein and daidzein) failed to prevent bone loss or hot flashes in one of the biggest studies done so far.

Researchers assigned 182 women (all had been menopausal for no more than five years) to take either 200 milligrams of a soy isoflavone tablet or a placebo every day. Women who consumed less than 1,000 mg of calcium a day were also given calcium and vitamin D supplements.

After two years, those who took the isoflavones had no higher spine or hip bone density than those who took the placebo. Surprisingly, more soy isoflavone takers (48 percent) than placebo takers (32 percent) reported hot flashes.

What to do: Don't expect soy isoflavone supplements to prevent hot flashes or bone loss. And so far, there isn't enough evidence to say that soy *foods* protect bones or prevent hot flashes either.

Arch. Intern. Med. 171: 1363, 2011.

Got a Cold? Just Believe.

Many people swear by cold remedies that flunk out in careful studies. That may be because of the placebo effect—that is, people feel better because they expect to.

Researchers assigned roughly 700 adults who had just caught a cold to get one of the following: (1) no pills, (2) a placebo blinded, (3) echinacea blinded, or (4) echinacea not blinded. ("Blinded" means that the participants didn't know what the pills were.)

Colds lasted about the same time (roughly 7 days) for each group. However, when the researchers just looked at the 120 people who had rated echinacea as an effective cold remedy when they entered the trial, colds were 2.6 days shorter in those who got the placebo—and 1.3 days shorter in those who got (blinded or unblinded) echinacea—than in those who got no pills.

What to do: "That's actually a huge difference," lead researcher Bruce Barrett, of the University of Wisconsin, told Reuters.

"No treatment out there has ever been shown to reduce the duration of colds." But the placebo effect is real. "What people believe about their medicines matters." 🍊

Ann. Fam. Med. 9: 312, 2011.



Don't Walk On By

10 foods to try

BY KATE SHERWOOD

The wider you cast your food net, the easier it is to eat a delicious plant-based diet, which is good for your health and for the planet. Here are 10 new candidates for your shopping cart. Odds are, you've walked past at least some of them for years. To get you started, we've included a basic recipe for each and some of the nutrients you can expect in a generous one-cup serving of each vegetable or grain.



RED LENTILS

Why try it

They're hearty, convenient, and cheap. They've got plenty of potassium, iron, and vitamin B-1. And every cooked cup contains a hefty 16 grams of protein and 9 grams of fiber. At 230 calories per cup, they'll fill you up without filling you out. And they cook up into a thick, satisfying stew in under 10 minutes. What more could you ask for?

While you're at it

French or brown lentils are ideal for salads since they keep their shape (if you don't overcook them). They take a bit longer to cook (15 to 25 minutes) because they haven't had their outer skins removed, but they deliver more fiber (16 grams per cup).

Start with Classic Red Lentils

Combine 1 cup of red lentils with 2 cups of water, 1 bay leaf, and 1 clove of garlic. Simmer until tender, 8 to 10 minutes. Remove the bay leaf and garlic. Stir in up to ½ tsp. of salt. Drizzle each serving with 2 tsp. of extra-virgin olive oil and a sprinkling of freshly ground black pepper. Makes three 1-cup servings.

PER SERVING—Cals: 310 / Sat Fat: 1.5 g / Protein: 18 g / Carbs: 40 g / Fiber: 9 g / Sodium: 330 mg



BABY BOK CHOY

Why try it

It lets you add a delicate Asian note and a new texture to soups and stir-fries. Bok choy is a type of cabbage with a mild, sweet flavor, crisp stems, and tender leaves. A cup of cooked bok choy is loaded with vitamins A and C and is surprisingly high in potassium, calcium, and iron...all for just 20 calories.

While you're at it

You can substitute other mild cabbages like savoy and Napa, but they have fewer nutrients than bok choy's leafy greens.

Start with Sesame Bok Choy

Stir-fry 1 lb. of sliced baby bok choy in a hot skillet with 1 Tbs. of peanut oil and 1 tsp. each of minced garlic and grated ginger. Cook until the leaves are wilted and the stems are crisp-tender, about 3 minutes. Drizzle with 1 tsp. each of reduced-sodium soy sauce and toasted sesame oil. Makes four 1-cup servings.

PER SERVING—Cals: 60 / Sat Fat: 0.5 g / Protein: 2 g / Carbs: 3 g / Fiber: 1 g / Sodium: 120 mg





TOFU

Why try it

Tofu goes from package to plate in no time—just cut, blot, and cook. A 4 oz. portion of firm tofu has 10 grams of high-quality vegetable protein but just 90 calories. The tofu that's packed in water in the refrigerator case has the best texture.

While you're at it

Tempeh (fermented soybean cake) is firmer and crumblier and has a stronger, sour flavor. Seitan (wheat gluten) is also firmer, but has a smooth, chewy texture and a mild flavor. Both can be high in sodium, though, so check the Nutrition Facts labels.

Start with Glazed Tofu

Whisk 3 Tbs. each of ketchup, balsamic vinegar, and orange juice with 1 Tbs. of reduced-sodium soy sauce, 5 cloves of minced garlic, and ½ tsp. of red pepper flakes. Cut a drained 14 oz. slab of firm tofu into 1-inch cubes and blot with paper towels. Sauté in a non-stick pan in 1 Tbs. of peanut oil until crisp on two sides, 3 to 5 minutes. Add the sauce and cook until it thickens, about 2 minutes. Makes three 4 oz. servings.

PER SERVING—Cals: 200 / Sat Fat: 1.5 g / Protein: 13 g / Carbs: 13 g / Fiber: 1 g / Sodium: 350 mg



ESCAROLE

Why try it

If you're looking for a salad with attitude, this broad-leafed form of endive is your green. Like the other members of the chicory family—radicchio, endive, Belgian endive, and frisée (curly endive)—escarole is on the bitter side. Use the pale inner leaves, which are more tender and less bitter, for salads. Save the tougher outer leaves to give character to soups, stews, and sauces. Escarole is rich in vitamin K and folate, but every cup of the raw green has just 10 calories.

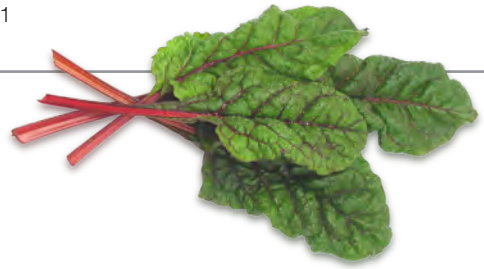
While you're at it

There's a whole world of crunchy salad greens out there. Give frisée a spin. Or Belgian endive. Or radicchio.

Start with Chopped Escarole Salad

Whisk together 3 Tbs. of mayonnaise, 1 Tbs. of balsamic vinegar, and ¼ tsp. of finely minced garlic. Toss with 8 cups of chopped inner leaves of escarole. Top with 2 Tbs. of shredded Parmesan cheese and season with freshly ground black pepper. Makes two 4-cup servings.

PER SERVING—Cals: 210 / Sat Fat: 3 g / Protein: 4 g / Carbs: 8 g / Fiber: 6 g / Sodium: 270 mg



SWISS CHARD

Why try it

It has an earthy flavor, with tender leaves and crisp, edible stems that can be white, red, or yellow. Unlike other cooking greens, chard doesn't take long to prepare. But like the others, it's packed with vitamins K and A and is an excellent source of vitamin C, magnesium, potassium, and iron. And each cooked cup has just 40 calories. Swiss chard's potassium helps offset its naturally occurring sodium.

While you're at it

Mature bunches of kale and collards can take up to an hour to cook. Look for quicker-cooking Tuscan kale (also called lacinato, black, or dinosaur kale) or watercress or young mustard greens.

Start with Savory Swiss Chard

Separate the stems and leaves from 1 lb. of Swiss chard. Thinly slice the stems and roughly chop the leaves. Sauté the stems and 1 sliced onion in 2 Tbs. of extra-virgin olive oil until tender, about 10 minutes. Stir in the leaves and cook until tender, 5 more minutes. Drizzle with balsamic vinegar to taste and season with freshly ground black pepper. Makes three 1-cup servings.

PER SERVING—Cals: 130 / Sat Fat: 1.5 g / Protein: 3 g / Carbs: 10 g / Fiber: 3 g / Sodium: 320 mg



CHICKPEAS (GARBANZO BEANS)

Why try it

With 13 grams of fiber and 15 grams of protein in each 270-calorie cup (plus a nice dose of folate, iron, magnesium, potassium, and zinc), chickpeas are superstars that you can eat right out of the can. Try tossing a handful into your next salad, soup, sauce, or sauté.

While you're at it

Black, navy, cannellini. All beans are good beans. Look for no-salt-added brands (Eden Organic is also BPA-free). Or soak dried beans overnight, then drain and simmer in plenty of fresh water for about an hour. One 15 oz. can of beans is about 1¾ cups. A pound of dried beans makes 6 to 8 cups cooked.

Start with Crispy Chickpea Salad

Toss 2 chopped red bell peppers and 1 drained 15 oz. can of chickpeas with 2 Tbs. of extra-virgin olive oil. Roast at 425°F for 20 minutes. Allow to cool slightly, then toss with 4 cups of arugula or baby spinach and 1 Tbs. of balsamic vinegar. Season with up to ¼ tsp. of kosher salt and freshly ground black pepper. Makes two 3-cup servings.

PER SERVING—Cals: 410 / Sat Fat: 2.5 g / Protein: 13 g / Carbs: 47 g / Fiber: 11 g / Sodium: 380 mg



ACORN SQUASH

Why try it

It's a snap to prepare and hard not to like. The orange flesh has a sweet, slightly nutty flavor, and its compact size means that a single squash comfortably serves two. Bonus: you can use a cut-in-half baked squash as a bowl for soup or for your favorite pilaf or other filling. And along with acorn squash's great taste comes a nice shot of fiber, magnesium, potassium, and vitamins B-1, B-6, and C.

While you're at it

Pretty much anything you can do with acorn squash you can do with other winter squashes like butternut, Hubbard, butternut, or banana.

Start with Roasted Acorn Squash

Cut an acorn squash in half and remove the seeds. Brush the inside with extra-virgin olive oil and season with freshly ground black pepper. Bake (cut side up) at 400°F until tender, about 35 minutes. Each pound of squash yields 2 cups.

PER 1-cup SERVING—Cals: 110 / Sat Fat: 0 g / Protein: 2 g / Carbs: 22 g / Fiber: 3 g / Sodium: 5 mg



BROCCOLI RABE

Why try it

Take a chance. You may love this pungent member of the broccoli family. (We do.) Once you've blanched your broccoli rabe—also called rapini, broccoli raab, and broccoli di rape—to remove some of its bitterness, you can turn it into a cold vegetable salad or quickly sauté or stir-fry it. Like all leafy greens, broccoli rabe is brimming with vitamins A, C, and K and is a good source of calcium, iron, and potassium.

While you're at it

Broccolini (a cross between broccoli and Chinese broccoli, with smaller florets and thinner stalks) is the perfect substitute. It has a sweeter broccoli taste with a hint of asparagus.

Start with Spicy Broccoli Rabe

Plunge 1 lb. of broccoli rabe into a large pot of boiling water. Boil for 3 minutes, then rinse well under cold water. Chop into 2-inch pieces. Sauté 8 cloves of thinly sliced garlic in 2 Tbs. of extra-virgin olive oil with ¼ tsp. of red pepper flakes for 30 seconds. Stir in the broccoli rabe and sauté until hot. Season with up to ½ tsp. of kosher salt. Makes four 1-cup servings.

PER SERVING—Cals: 110 / Sat Fat: 1 g / Protein: 4 g / Carbs: 7 g / Fiber: 1 g / Sodium: 95 mg



EDAMAME

Why try it

Instant texture. Instant nuttiness. Instant protein. You'll find bags of the delicious shelled soybeans in your supermarket's freezer section. Just thaw and they're ready to add to salads, stir-fries, soups, and grains. Each 190-calorie cup of shelled edamame supplies 17 grams of protein and 8 grams of fiber. And they're an excellent source of folate, vitamin K, and iron.

While you're at it

Frozen baby lima beans or fresh fava beans will work in most dishes. If your recipe has no Asian flavors (like soy sauce or toasted sesame oil), you also might be able to substitute chickpeas or black-eyed peas.

Start with Asian Edamame Salad

Toss 4 cups of salad greens with 1 cup of edamame, ½ cup each of grated carrot, sliced radish, sliced scallion, and sliced celery heart, and ¼ cup of sesame dressing. (*To make 1 cup of dressing: whisk together ⅓ cup each of canola oil and unsweetened apple sauce, 2 Tbs. each of reduced-sodium soy sauce and rice wine vinegar, and 1 Tbs. of toasted sesame oil.*) Makes two 4-cup servings.

PER SERVING—Cals: 280 / Sat Fat: 1 g / Protein: 13 g / Carbs: 23 g / Fiber: 11 g / Sodium: 270 mg



BULGUR

Why try it

Bulgur (steamed, dried, cracked whole wheat) cooks in just 15 minutes. Its mild, nutty flavor is a welcome change from rice or potatoes. A cup of cooked bulgur has 150 calories, 8 grams of fiber, and 6 grams of protein. Don't confuse it with "cracked wheat," which hasn't been pre-cooked and takes much longer to prepare, or with couscous, which is (typically refined) pasta.

While you're at it

Try whole wheat couscous or quinoa (which has become so popular that many indigenous people in the region of the Andes where it's grown can no longer afford to buy it). Or prepare a large pot of (slower-cooking) wheat berries, farro, or kamut and freeze it in small batches.

Start with Cilantro & Lime Bulgur

In a heat-proof bowl, cover 1 cup of bulgur with 1½ cups of boiling water. Cover and let stand for 15 minutes. In a large bowl, combine 1 cup of roughly chopped cilantro, 6 sliced scallions, 3 Tbs. of extra-virgin olive oil, 2 Tbs. of lime juice, and up to ¼ tsp. of salt. Toss with the bulgur. Makes four ¾-cup servings.

PER SERVING—Cals: 180 / Sat Fat: 1 g / Protein: 4 g / Carbs: 27 g / Fiber: 7 g / Sodium: 130 mg

The Center for Science in the Public Interest (CSPI), founded in 1971, is an independent nonprofit consumer health group. CSPI advocates honest food labeling and advertising and safer and more nutritious foods. CSPI's work is supported by *Nutrition Action Healthletter* subscribers and foundation grants. CSPI accepts no government or industry funding. *Nutrition Action Healthletter*, first published in 1974, accepts no advertising.

For information about CSPI's national Food Day, October 24, go to www.FoodDay.org

RIGHT STUFF

SPROUTING UP



They're the most hated vegetable in America, according to a 2008 survey (though kids apparently detest eggplant even more). They're the spinach of the post-Popeye generation (except no one thinks they'll make you strong). If you've got some time to kill, you can Google jokes about them.

Yet there are people who dare to love **Brussels sprouts**. Really.

True, sprouts can taste bitter. (To boost your odds of a bitter-free batch,

buy dark, tightly closed sprouts about an inch across with no yellowing or brown spots, use them within a day or two, and don't overcook them.)

But good Brussels sprouts are remarkable. It's not just that they're rich in lutein and vitamins C and K—all for just 60 calories per cooked cup. It's that they taste *fabulous*. Really.

For the simplest recipe, toss 1 lb. of Brussels sprouts with 2 Tbs. extra-virgin olive oil and 1/8 tsp. kosher salt, and roast at 425°F until well browned, about 35 to 40 minutes.

Or cut 1 lb. of sprouts in half lengthwise and steam until they're bright green and tender (about 5 minutes), then drizzle with mustard sauce (whisk together 2 Tbs. extra-virgin olive oil, 2 Tbs. orange juice, 1 Tbs. country Dijon mustard, and 1 Tbs. lemon juice).

Or sauté 1 lb. of sliced sprouts and 3 sliced shallots in a non-stick skillet in 2 Tbs. extra-virgin olive oil until lightly browned and tender.

Brussels sprouts may never be as popular as broccoli or carrots. But how can they, if some people never give them a chance?

Did you hear the one about the two Brussels sprouts and a carrot who walk into a bar?

FOOD PORN

TRANSWICH

"Founded on the strength of a generations-old family chocolate chip cookie recipe, the company eventually set the standard for gourmet cookie sales in shopping centers nationwide," says the **Great American Cookies** Web site.

Really? Did the family recipe include partially hydrogenated soybean and cottonseed oils, corn syrup, corn starch, mono & diglycerides, salt, artificial flavors, guar gum, polysorbate 60, potassium sorbate, phosphoric acid, and sodium benzoate? That's some of what Great American puts into the "xtra smooth icing" in its **Double Doozie** cookie sandwiches.

And what cookie sandwiches they are! Each **Original Chocolate Chip** Double Doozie donates 690 calories and half a day's saturated fat (11 grams) to your growing fat cells. That's more calories than you'd get in a Big Mac (540), except that the Double Doozie comes with 15 teaspoons of sugar. But wait! There's more.

Each also comes with 6 grams of trans fat. Health experts once considered advising people to eat no more than 2 grams of trans in an entire day, but the official advice is to eat even less.

And it's not just the Double Doozies. Nearly all of Great American's cookies have at least 1 gram of trans, and its brownies have 3 to 4 grams (along with 400 to 500 calories).

Most food companies—including cookie giant Mrs. Fields—have dumped their artery-clogging trans fat. But not Great American.

Guess that generations-old family recipe is just too hard to give up.

Great American Cookies: (877) 639-2361



dish OF THE MONTH

Curried Red Lentils

Sauté 1 diced onion in 2 Tbs. of canola oil until browned. Stir in 1 tsp. of curry powder and 1 cup of red lentils. Add 2 1/2 cups of water. Simmer until most of the liquid is absorbed, 10 to 12 minutes. Stir in up to 1/2 tsp. of kosher salt. Makes 4 cups.