



“Climate change, once considered an issue for a distant future, has moved firmly into the present.”
...National Climate Assessment, May, 2014

“We are the first generation to feel the impact of climate change and the last generation that can do something about it.” ... Gov. Jay Inslee, Washington

Summer 2014: Eating for Climate Change

Last month, a group of scientists from government, academia, and the private sector released *National Climate Assessment*, a report that outlines a disturbing list of potential challenges posed by climate change. The report suggests that future droughts and scorching heat will bring not only more wildfires to the Southwest but also withering damage to vital cash crops in the nation’s farming heartland. Meanwhile, torrential rains, damaging winds, and Sandy-type hurricanes are expected to drench, flood, and ravage the Northeast. The report concludes that if stringent policies are not soon put in place to curb greenhouse gases like carbon dioxide and methane, by the end of the century, sea levels may rise by as much as three to six feet (covering much of Southern Florida) while average temperatures could increase by 10 degrees or more.

No matter your age—whether you are young and perhaps dreaming about a future life complete with family and career, or a senior wishing the same for your children and grandchildren—on hearing this report, you may have felt the same initial sense of helplessness and hopelessness that I did. The global climate-change problem is so immense, we are left to wonder if the early actions of government and the private sector will grow soon enough and meaningfully enough to make a difference. But, rather than sitting idly by, there are ways we can find right in our own homes to try to conserve energy and in small ways work as individuals to conserve our environment.

Some Empowering Actions We Can Take

Because modern livestock production is a major source of the greenhouse gas, methane, one way we can try to slow global warming is to cut back on our consumption of animal products, shifting instead to more plant-based complete-protein combinations. For a discussion, please see the last newsletter, as well as the recipes for plant-based, complete-protein combinations at the end of this issue.

Another way to save energy in the kitchen is to organize refrigerator foods to keep open-door “searching time” to a minimum. After air conditioners, refrigerators are the greatest household consumers of electricity. Studies suggest that after opening the door for one minute, a refrigerator compressor must work fulltime for three minutes to return cooling to normal. [Also, to cut down on plastic bag pollution, try to remember to carry bags with you when you grocery shop.]

Another energy-saving idea, and our focus here, is to choose foods by their energetic “temperatures”—warming foods in winter/cold conditions, cooling foods in summer/warm climates. Aside from dressing appropriately for the season, we can use foods to help us acclimate to temperature extremes, thus saving on heating and cooling bills.

Choosing Foods to Set Our Internal Thermostat

There are many ways we can think about foods and use foods medicinally to our advantage. Foods have a taste or combination of tastes—sour, bitter, salty, pungent, and sweet—that affect different organ systems of the body. In addition, foods move energy in different directions within the body—upward, downward, outward, or inward, or a combination of these.

Foods also have thermal qualities. Once digested, a food can exert either a warming, neutral, or cooling, effect. As a result, we can choose foods to tweak our own internal thermostat so we rely less on the thermostats mounted on our walls.

A Thermal-Quality Food Quiz

So what foods are warming and which are cooling? At a barbeque smorgasbord on a hot summer evening, would you be best choosing a pork chop, a hamburger, or a chicken breast? What does adding salt do to the temperature of a food? Are any fruits warming? The answers might surprise you.

Take the quiz below, marking above each food a W or H (warming; hot); N (neutral); or C, CD (cooling; cold). Then, check your answers using the table on the page that follows. I hope this exercise helps to guide you in making wise choices—both for the seasons and your own metabolism: If you are always cold, to more warming foods; or, if you often feel too warm, to more foods that are cooling in nature.

Vegetables: asparagus, broccoli, carrot, celery, garlic, kale, mushroom, radish, watercress.

Hint: 1 is cold (CD); 4 are cooling (C); 1 is neutral (N); 2 are warming (W); 1 is hot (H).

Fruits: apple, banana, blackberry, blueberry, cherry, cranberry, grapefruit, fig, pineapple, strawberry.

Hint: 3 are cold (CD); 3 are cooling (C); 2 are neutral (N); 2 are warming (W).

Meat/Poultry: beef, chicken, duck, lamb, pork, turkey, venison.

Hint: 1 is cooling (C); 2 are neutral (N); 2 are warming (W); 2 are hot (H)

Fish/Shellfish: crab, lobster, salmon, sardine, shrimp

Hint: 1 is cold (CD); 2 are neutral (N); 2 are warming (W)

Dairy: Butter, cheese, eggs, yogurt

Hint: 1 is cold (CD); 2 are neutral (N); 1 is warming (W)

Using Familiar Foods to Adjust Your Internal Thermostat¹

Vegetables	Fruit	Grains	Beans/Legumes	Nuts/Seeds
Warming/Hot	Warming	Warming	Warming	Warming
Garlic (hot)	Blackberry	Oats	Black	Chestnut
Kale	Cherry	Quinoa		Coconut
Onion	Date		Neutral	Walnut
Parsnip	Peach	Neutral	Aduki	
Winter Squash		Corn	Chickpea	Neutral
Sweet Potato	Neutral	Rice	Kidney	Peanut
Watercress	Apricot	Rye	Lentil	Pistachio
	Coconut		Pea	Pumpkin
Neutral	Fig	Cooling		Sesame
Beet	Grape	Amaranth	Cooling	Sunflower
Cabbage	Papaya	Barley	Lima	
Carrot	Pineapple	Buckwheat	Mung	Cooling
Potato	Plum	Millet	Soy	---
Pumpkin	Raspberry	Wheat	Tofu	
Turnip		Wild Rice		
Yam	Cooling/Cold			
	Apple	Dairy	Meat/Poultry	Fish/Shellfish
Cooling/Cold	Banana (cold)	Warming	Warming/Hot	Warming/Hot
Asparagus (cold)	Blueberry	Butter	Chicken	Anchovy
Broccoli	Cranberry (cold)		Chicken Liver	Lobster
Cauliflower	Grapefruit (cold)	Neutral	Ham	Shrimp
Celery	Lemon/Lime (cold)	Cheese	Lamb (hot)	Trout (hot)
Chard	Mango (cold)	Eggs	Turkey	
Cucumber	Melon (cold)	Milk	Venison (hot)	Neutral
Lettuce	Orange			Oyster
Mushroom	Pear	Cooling/Cold	Neutral	Salmon
Radish	Rhubarb (cold)	Yogurt (cold)	Beef	Sardine
Seaweed (cold)	Strawberry		Pork	Whitefish
Spinach	Watermelon (cold)			
Tomato (cold)			Cooling	Cooling/Cold
			Duck	Calamari (cold)
				Crab (cold)

Major Herbs and Spices are all Warming or Hot, except for Marjoram, Mint, and Nettle.

Salt is Cold; Pepper is Hot.

Preparation/Cooking Techniques *Most Cooling*: Raw/Chilled; *Cooling*: Poached or Steamed. *Boiling* is Neutral. Progressively more warming, in order: *Stir-fried*; *Baked*; *Deep Fried*; and *Roasted/Grilled*.

¹ Table from my own studies, the Tao of Health and Daverick Leggett. See Reading Resources section of this newsletter.

Comments on the Table: If you don't know and have to hazard a guess about the temperature of a food, a good rule of thumb is that most vegetables, fruits, beans and grains—in other words, most plant foods that are high in antioxidants and fiber and low in fat—are neutral to cooling. Conversely, meat and poultry, nuts and seeds, and dairy—foods that are rich sources of protein and fat—are generally warming.

For vegetables, most bitter green vegetables are cooling, while sweet root and round vegetables tend to be neutral to warming. The majority of fruits are cooling, particularly those from the tropics, yet a few like blackberries and stone fruits such as cherries, dates, and peaches are warming. Of familiar grains and beans, oats, quinoa, and black beans are warming, with most others either neutral to cooling.

No major nuts or seeds are cooling; so, adding some to any dish is an easy way to add crunch, flavor, and warmth. If on a chilling winter night you need a warming meal with staying power, choose lamb, which is the warmest meat sold commercially. Fish and shellfish run the thermal gamut, with much to choose from. [If you are often cold, unrefined coconut oil (not listed on the table) is a medium-chain fatty acid that metabolizes rapidly, so it is an easy way to add warmth to any food.]

Dairy offers warming butter, cheese and milk which are neutral, and yogurt at the cooling end of the spectrum. Herbs and spices are generally warming to hot. Pepper is hot; salt is cooling.

Conclusion: Yogurt and banana on a bone-chilling night? Perhaps....because, of course, the weather/season is just one consideration when choosing foods by temperature. If in winter you live in an over-heated apartment or work in an over-heated office, you may feel better with cooling foods. Or, if you are inherently either warm or cold by nature, weather and the season may be less of a deciding factor when choosing foods. If your body runs warm, you may feel best throughout the year with yogurt and citrus, bananas, and other tropical fruits. The key point is to understand that foods have thermal properties and that they can be used to your advantage, so to try to eat in harmony rather than at cross-purposes to your biology and the seasons. If you are always cold or hot, check the foods you are eating to see if you want to tweak your diet. And, no matter the weather or the season, the right foods are the ones that make you feel your best. Above all, check in with how you feel.

Reading Resources:

Richard Craze, *Tao of Food*

Daverick Leggett, *Helping Ourselves, Guide to Chinese Food Energetics*

Henry C. Lu, *Chinese System of Food Cures*

Thomas Neuhaus, *Chinese Food: A Holist Therapy*

Paul Pitchford, *Healing with Whole Foods*

~~Plant-based, complete protein recipes follow~~

Plant-Based, Complete Protein Recipes

The following recipes from Diet from a Small Planet are simple, delicious, economical, and can be prepared in advance. They are flexible and can be adapted by your own creative additions.

Tabouli (serves 6)

4 cups boiling water
1 1/4 cup bulgur
3/4 cup white or garbanzo beans (1/4 cup uncooked)
1 1/2 cup minced fresh parsley
3/4 cup minced fresh mint leaves, or additional parsley
3/4 cup chopped scallions
3 medium tomatoes, chopped
1/2 cup or more lemon juice
1/4 cup olive oil
Salt and pepper to taste

1. Pour boiling water over bulgur, cover and let stand until light and fluffy, about 2 hours. Shake in a strainer and squeeze out excess water.
2. Combine bulgur with remaining ingredients and chill for at least 1 hour.
3. Serve on lettuce leaves.

Spanish Bulgur (serves two)

2 tablespoons olive oil
1 clove garlic, minced
1/2 cup chopped green onions
1/2 green pepper, diced
1 1/4 cups bulgur
1 cup cooked kidney or pinto beans (about 1/3 cup uncooked)
1 teaspoon paprika
Salt and pepper to taste
Dash cayenne pepper
1 #2 can of tomatoes

1. Heat oil and sauté garlic, green onions, green pepper, and bulgur until bulgur is coated with oil and onions are translucent.
2. Add beans, paprika, salt, pepper, cayenne, and tomatoes. Adjust liquids if needed.
3. Cover and bring to a boil, then reduce heat and simmer until liquid is absorbed and bulgur is tender, about 15 minutes, adding more liquid if necessary.

Oatmeal-Buttermilk Pancakes (6 servings; 18-24 four-inch pancakes)

½ cup water
½ cup instant dry powdered milk
1 tablespoon honey
2 cups buttermilk or milk with 1 tablespoon vinegar
1 ½ cups rolled oats
1 cup whole wheat flour
1 teaspoon baking soda
Salt (optional)
1 or 2 beaten eggs

1. Mix water, milk, and honey and stir in buttermilk and oats. If using whole oats, refrigerate overnight so the oats can soften.
2. Beat in remaining ingredients and cook on a hot griddle.

For even better results, allow mixture to stand 1 to 24 hours. If batter becomes too thick, add more milk or water.

Tofu Corn Bread (from *The Best of Jenny's Kitchen*)

1 ½ cups cornmeal
¼ cup whole wheat flour
1 teaspoon salt (optional)
1 ½ teaspoons baking powder
½ teaspoon baking soda
½ pound tofu
2 eggs
3 tablespoons oil
¼ cup honey, or to taste
1 cup low-fat milk

1. Preheat oven to 425 degrees F. Stir together cornmeal, flour, salt, baking powder, and baking soda.
2. In a blender, process tofu, eggs, oil, honey, and milk until smooth. Add to dry ingredients.
3. Pour into a greased and floured 9x9-inch baking dish and bake for 25-30 minutes.