



## The Acid-Alkaline Diet

*Balancing your body's pH for better health*

By Lisa Turner

You had low-fat yogurt, mango, and a cup of black tea with honey for breakfast. Lunch was a turkey-breast sandwich, and you snacked on grapes and organic peanuts. You're trying to eat healthy, so why don't you feel healthy? Why are you fatigued, sick, or unable to lose those last 10 pounds?

The truth may be that your "healthy" diet is not so healthy, after all, but rather it's filled with acidic foods like meat, sugar, white flour, tea, and dairy. Eating too many of these foods and not enough alkaline ones—vegetables, tubers, olive oil, quinoa—can cause an acid imbalance in your body. And that's a problem, says Christopher Vasey, ND, author of *The Acid-Alkaline Diet for Optimum Health* (Healing Arts Press, 2006).

"Our bodies need both acid and alkaline compounds to function properly," says Vasey. "An acid condition, or acid imbalance, means that the blood and cellular fluids in the body have an acidic pH [the relative proportion of acid to alkaline] and not enough alkaline compounds to balance them."

Chronically acidic blood, or acidosis, can cause a variety of conditions, including fatigue, foggy thinking, weight gain, and heartburn, and may increase the risk of Alzheimer's disease, according to research from Austria. Other studies link the condition to bone loss and increased levels of the stress hormone cortisol, while 2007 research published in *Alternative Therapies in Health and Medicine* found that acid imbalances elevate the risk of chronic diseases. A 2006 study published in the *International Journal of Oncology* and a 2010 review published in *Alternative Therapies in Health and Medicine* linked acidosis and chronic inflammation to an increased risk of cancer.

Many staples of the American diet—processed foods, meat, dairy, eggs, fish, corn, peanuts, chocolate, refined sugar, artificial sweeteners, wheat—are acidic. Alkaline foods balance acidic foods, but most of us don't consume enough alkalizing choices or participate in activities to reduce acidosis, such as exercise and stress management.

"Most people have a tendency toward overacidity," says Susan Lark, MD, author of *Eat Papayas Naked: The pH-Balanced Diet for Super Health & Glowing Beauty* (Silverback Books, 2005). "It's the unfortunate result of the typical American diet and lifestyle."

### Understanding your pH

A food is classified as acid or alkaline depending on its mineral content. Alkaline foods contain more alkaline-forming minerals, like calcium, magnesium, manganese, iron, and potassium, than acid-forming minerals, such as phosphorous, copper, and sulfur. Kale, for example, is alkaline-forming because it's rich in calcium and magnesium, while sodas are acid-forming because they're high in phosphorous.

The body's pH is measured on a scale of 1 (the most acid) to 14 (the most alkaline); neutral is 7. The optimal pH of blood is 7.2 to 7.4, or slightly alkaline. If that narrow range drops by as little as 0.2, your

body responds by trying to neutralize excess acid, pulling minerals from the blood. If blood doesn't contain enough calcium, magnesium, potassium, and other acid-buffering minerals, the body then draws on reserves in the bones or other tissues, such as the liver and heart, which can lead to serious medical problems.

### **Resolving the acid issue**

You can learn if you have an acid imbalance by using inexpensive pH test strips, available at most pharmacies. Over the course of a day, test the pH of your urine with the strips each time you go to the bathroom; calculate an average at the end of the day. Urine's optimal pH is around 7, says Vasey. A slightly more acid measure—6.5 to 6.7—is normal, too, and common if you've just consumed an acidic food like coffee. "But if it's lower than 6.5, day after day," he says, "you should start to worry."

If you're overly acidic, simple shifts in diet and lifestyle can restore balance. The first step is to reduce stress. "During a stress response, the muscles get tense and tight, breathing is shallow, and oxygen flow is reduced," Lark says. "Because oxygen is alkalizing to the body and carbon dioxide is acidic, when we're not inhaling and exhaling fully, we tend to become overly acidic."

Deep breathing reduces stress and increases the rate at which carbon dioxide is released from the body. Exercise also relieves stress and reduces acidity. Even simple activities like brisk walks or jumping jacks increase respiration and oxygenate blood, helping the body become more alkaline. Don't push it, though: Excess or overly intense exercise can cause a buildup of lactic acid in the muscles and create a greater tendency toward overacidity.

Still, diet has the biggest impact on pH. Most experts agree that a 7-to-3 ratio of alkaline-to-acid foods is ideal for optimal health and well-being. But choose your acidic foods wisely, says Michelle Schoffro Cook, ND, author of *The Ultimate pH Solution: Balance Your Body Chemistry to Prevent Disease and Lose Weight* (HarperCollins, 2008). Don't waste your acid allowance on unhealthy choices like coffee, soda, white flour, and sugar. Instead, choose nutrient-dense acidic foods, such as beans, nuts, whole grains, and fruit.

Not even sugar, salt, and meat are necessarily forbidden—just consume them in small amounts, preferably in an unprocessed form to reap the most of naturally occurring minerals. Choose organic when possible to decrease exposure to acid-forming pesticides, antibiotics, and hormones.

Some experts disagree on how to classify certain alkaline- and acid-forming foods. Such foods, known as weak acidics, include tomatoes, whey, and citrus fruits, contain a fair amount of acid but may be metabolized as alkaline in the body. (For a list of alkaline, acidic, slightly acidic, and weak acidic foods, see "Acid-Alkaline Shopping List")

"Acid production largely depends on individual metabolic differences," explains Vasey. "Some people are capable of oxidizing the acids in weak acidic foods to make them alkaline; some people are not. A lemon may be acid-forming for one person and alkaline-forming for another."

Learn your body's response to weak acidics by testing your urine with pH strips before eating a food, then measuring again two to three hours later. If your pH doesn't change, you may be able to oxidize the acids in that particular food. You can also try cutting out all weak acidics for a few weeks to see if you notice a difference in symptoms.

### **Ways to stay balanced**

Righting a pH imbalance may take months, depending on how long you've been acidic. Generally, though,

most people can expect to see improvements within a few weeks, says Vasey. If you're ready to embark on a more balanced approach to life, start with these simple steps.

1. **Clear your cupboards of highly acid-forming foods.** Get rid of the worst offenders: alcohol, table salt, white sugar, artificial sweeteners, coffee, soft drinks, refined and processed foods, trans fats, and white flour.
2. **Stock up on whole foods.** Vegetables are the most alkalizing of all foods, so just by focusing on this food group, you'll begin instantly to transform your pH. While other whole foods, like beans, nuts, seeds, and whole grains, tend to be more acid-forming than vegetables, they're far less acidic than processed foods and animal products.
3. **Eat fruit in moderation.** Fruit is nutritious but highly acid forming for most people. Limit your intake to one serving a day, especially at the beginning of your regimen, and stick to low-acid fruits, like avocados, grapefruit, peaches, apples, raspberries, and melons.
4. **Make lower-acid substitutions.** Replace white sugar with stevia or raw, unfiltered honey. Substitute coconut or almond milk for cow's milk. Replace sodas with sparkling water flavored with a splash of lemon juice.
5. **Don't try to change your diet overnight.** Start with a fifty-fifty ratio of acid to alkaline foods, or make one meal a day alkaline. Or begin by adding alkaline foods rather than eliminating acidic ones. Make the transition slowly, and you'll be more likely to stick with it.

It may not be the easiest diet to follow, but if you can stick to it, you should start to notice results in a few weeks. "Minor aches and pains will start to disappear, you'll sleep better and feel more energetic, your thinking will be clear and alert, and you may lose several pounds," says Cook. "That's usually enough to convince most people to stick with it for the long term."

### **Acid-Alkaline Shopping List**

**Alkaline foods:** Almonds, artichokes, asparagus, avocados, beets, broccoli, buckwheat, cauliflower, celery, cucumbers, flaxseed oil, green beans, leafy greens, lentils, millet, olive oil, onions, potatoes, pumpkinseeds, quinoa

**Slightly acidic foods:** Black beans, Brazil nuts, cantaloupe, chickpeas, dates, hazelnuts, nectarines, plums, sunflower seeds, walnuts

**Weak acidic foods:** Berries, citrus fruits, honey, tomatoes, vinegar, whey

**Acidic foods:** Alcohol, chocolate, coffee, dairy, eggs, most fruit, mayonnaise, peanuts, processed foods, refined vegetable oils, saturated fat, soft drinks, soy sauce, sugar, white flour

### **Quiz: Is Acid Your Problem?**

Fuzzy, foggy, or confused? You may be on an acidic overload. Answer the following statements on a scale of 1 and 5; 1 being "never" and 5 being "daily." Total your score to find out where you fall on the acid-alkaline continuum.

- \* I add sugar to tea, coffee, cereal, or other foods or drinks.
- \* I eat fried foods.
- \* I eat sweets and desserts.
- \* I drink soda, including diet soda.
- \* I eat fast food.
- \* I eat convenience-store snacks like packaged crackers or chips.
- \* I eat or drink dairy products.
- \* I eat processed, packaged foods, including sugar cereals, canned soups, and microwaveable meals.
- \* I eat red meat and/or pork.
- \* I eat chicken and/or fish.
- \* I eat baked goods that contain white flour and/or sugar.

- \* I smoke cigarettes.
- \* I drink alcohol.
- \* I take over-the-counter or prescription medications.
- \* I feel stressed about my life, job, or relationship.

**More than 60:** Danger zone. Your body is dealing with chronic, high levels of acid. The time for change is now.

**45 to 60:** Warning zone. You may already be experiencing pH-imbalance symptoms, such as fatigue, infections, inflammation, digestive problems, and allergies. Decrease your exposure to acidic foods and habits.

**30 to 44:** Adjustments needed. You probably live a fairly healthy lifestyle, but your diet may still be acidic. Even if you haven't started to experience symptoms, you are most likely acidic.

**15 to 29:** On your way. Your biochemistry is almost balanced, and you're giving your body a good chance of maintaining a slightly alkaline condition.

**Under 15:** pH Mensa. Very few people find themselves in this range. If this is you, congratulations! Keep up the good work.

Adapted from *The Ultimate pH Solution: Balance Your Body Chemistry to Prevent Disease and Lose Weight* by Michelle Schoffro Cook, ND (HarperCollins, 2008).

## **Warm Chickpea and Shallot Salad With Spinach Confetti**

Serves 4 to 6

- 1/3 cup extra-virgin olive oil
- 2 tablespoons lemon juice
- 1 large shallot, thinly sliced (about 1/2 cup)
- 2 small garlic cloves, pressed
- 2 tablespoons fresh rosemary leaves, minced
- 3 cups baby spinach leaves
- 4 cups cooked chickpeas, or 2 15-ounce cans chickpeas, rinsed well and drained
- 1 small red pepper, diced
- 1/4 cup minced fresh basil leaves
- Sea salt, white pepper, and paprika to taste

1. In a small bowl, combine olive oil, lemon juice, shallots, garlic, and rosemary. Let stand for 15 minutes to blend flavors.
  2. Meanwhile, stack spinach leaves on top of one another, and cut crosswise with a sharp knife into very thin, confetti-like strips.
  3. In a large saucepan, bring 4 cups of water to a full boil. Add chickpeas and red pepper, and cook for 2 minutes. Drain, and remove from heat.
  4. Add spinach confetti and basil to the chickpeas and red pepper, and toss until spinach is wilted.
  5. Add olive oil mixture, toss, and season with white pepper and sea salt. Transfer to a serving dish and garnish with paprika.
- Serve immediately.

*nutrition info per serving (6): 296 calories; 15 g fat; 2 g saturated fat; 0 mg cholesterol; 10 g protein; 33 g carbohydrates; 9 g fiber; 22 mg sodium*

## **Sweet Potato, Chard, and Yellow Pepper Terrine**

Serves 6 to 8

1 1/4 cup millet  
1 large sweet potato, chopped small  
1 small red onion, chopped  
2 1/2 cups low-sodium vegetable stock  
1/2 cup raw cashews  
2 tablespoons coconut oil, divided  
1 cup portobello mushrooms, thinly sliced  
1 head chard, lower stems removed and finely chopped, leaves chopped  
1 small yellow pepper, diced  
4 garlic cloves, minced  
1/4 cup minced fresh basil leaves, plus 5 whole leaves  
1/4 teaspoon nutmeg  
1/4 teaspoon white pepper

1. Combine millet, sweet potato, onion, and 2 cups stock in a pot. Boil, reduce heat, and simmer, covered, for 15 to 20 minutes until potatoes are almost soft. Add cashews. Cook for 5 minutes until millet is cooked and potatoes are very soft.
2. While millet is cooking, heat 1 tablespoon coconut oil in a skillet. Add mushrooms and cook over medium heat for 4 to 5 minutes until just soft. Remove from pan, and set aside.
3. In the same skillet, heat remaining oil, and cook chard stems with yellow pepper for 3 to 4 minutes until tender. Remove from pan, and set aside.
4. Add chard leaves to same skillet with 1 teaspoon water, and cook for 3 to 4 minutes until bright green. Stir in garlic and minced basil. Remove from pan, and set aside.
5. When millet is cooked, remove from heat, add nutmeg and white pepper, and mash. Season with salt and pepper.
6. Lightly grease a 9"x75" pan with coconut oil. Arrange whole basil leaves in a pattern on the bottom of the pan. Pack half the millet mixture into the pan, gently pressing down and smoothing the top. Add the mushrooms, chard stems and yellow peppers, and chard leaves in layers, pressing down between each layer and smoothing the top. Layer remaining millet over chard, pressing down firmly.
7. Let terrine stand, uncovered, at room temperature for 20 minutes. To unmold, gently run a lightly oiled butter knife around sides of pan. Invert pan onto a plate; tap top and sides of pan to loosen terrine, then carefully remove the pan. Serve immediately.

*nutrition info per serving (8): 144 calories; 7 g fat; 4 g saturated fat; 0 mg cholesterol; 4 g protein; 18 g carbohydrates; 3 g fiber; 147 mg sodium*

## **Creamy Cauliflower, Fennel, and Leek Soup With Almond Oil**

Serves 4

1 tablespoon coconut oil  
1 large leek, washed well and thinly sliced (reserve a few slices for garnish)  
2 medium stalks celery, finely chopped  
1 small fennel bulb, thinly sliced  
1 large head cauliflower, cored and chopped (about 5 cups)  
3 cups low-sodium vegetable broth  
1 cup unsweetened almond milk  
2 tablespoons almond oil  
1/4 cup fresh basil leaves, shredded, for garnish (optional)

1. Warm coconut oil in a saucepan over medium-low heat. Add leek, celery, and fennel; cook, stirring occasionally, until softened, 4 to 5 minutes.
2. Add cauliflower and broth. Cover and cook, stirring occasionally until cauliflower is soft, 15 to 20 minutes. Stir in almond milk, and remove from heat.
3. Purée soup in batches in a food processor or blender until creamy and smooth. Stir in 1 tablespoon almond oil.
4. Divide soup among four bowls; drizzle with remaining almond oil. Garnish with basil. Soup can be served hot or chilled.

*nutrition info per serving: 203 calories; 12 g fat; 3 g saturated fat; 0 mg cholesterol; 6 g protein; 22 g carbohydrates; 9 g fiber; 265 mg sodium*