

### dialing down

INFLAMMATION

It's a buzzword linked to a wide range of ailments—heart disease, digestive issues, even wrinkles. But what is inflammation, and what can you do about it? Experts explain the dos, don'ts, whats, and whys.

all it a complicated relationship.

On the one hand, inflammation is good; in many instances, it serves as protection. "Inflammation is one of the body's ways of healing itself," says David Rakel, M.D., professor and chair of the department of family and community medicine at The University of New Mexico. When you accidentally slice your thumb while chopping veggies, for instance, your body kicks off an inflammatory process that directs white blood cells to the injury to fight bacteria and start tissue repair.

On the other hand, when we're chronically stressed, don't sleep well, and eat processed foods high in fat and sugar, our bodies also have an inflammatory response. But unlike a cut, these lifestyle factors can occur day after day, month after month, year after year, stoking the process for far longer than nature intended.

"When your body has an inflammatory response, it produces proteins researchers call the grenades of the immune system," Rakel says. A targeted grenade is helpful for fighting a tooth infection, but when those proteins continuously flow throughout the body, they "begin to destroy healthy cells in arteries, organs, joints, and other parts of the body and can trigger various ailments," Rakel says.

The good news is that certain foods and lifestyle habits can calm or prevent inflammation.

EAT 8 DRINK THESE

You really are what you eat.
Research shows these foods can help quell your body's inflammatory response.



RELAXING
WITH A CUP OF
TEA COMBINES
TWO MOVES
THAT CALM
INFLAMMATION.

#### dark yellow & orange veggies

A recent Journal of Nutrition study pinpointed golden-color vegetables—carrots, sweet potatoes, and squashes like butternut and acorn—as key in an anti-inflammatory diet. They're loaded with carotenoids, antioxidant plant pigments that help protect healthy cells.

#### coffee and tea

The antioxidants in these popular beverages fight cellular damage that can lead to inflammation. Green tea in particular is loaded with an anti-inflammatory compound (epigallocatechin gallate, or EGCG) known to have cardio- and neuro-protective benefits. A dash of cinnamon ups its antioxidant and anti-inflammatory benefits, says Amy Gorin, M.S., R.D.N., in New York City.

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#### olive oil

Olive oil is rich in oleic acid, a healthy fat that calms inflammation. Some studies have also likened its compound oleocanthal to ibuprofen.

#### beans & nuts

A mostly plant-based diet with whole foods helps prevent inflammation because it's high in fiber, antioxidants, and, in the case of nuts, healthy fats. Research shows beans and nuts are top sources of anti-inflammatory nutrients. Rakel uses the phrase "Roots,

Fins, Two Legs, Four Legs" to remember the order of protein sources from best to worst: roots (beans, nuts), fins (fish), two legs (poultry), and last four legs (beef and processed meats).

## dark leafy greens

Kale, collard greens, spinach, these nutritional darlings deliver concentrated doses of nutrients known to dampen inflammation, including vitamins A, C, and K. A little fat enhances absorption, so cook them in olive oil or drizzle with salad dressing.

# CHEERS TO YOUR HEALTH

Enjoy these drinks while getting a dose of anti-inflammatory foods and spices.

#### cayenne pepper mocktail

Combine 2 Tbsp. lime juice (from one medium lime), ¼ cup water, 2 tsp. pure maple syrup,

I fresh basil leaf, ½ tsp. cayenne pepper, and ice in a cocktail shaker. Cover and shake until very cold; strain into an ice-filled glass rimmed with cayenne salt. (For cayenne salt: Combine 2 tsp. coarse kosher salt and a dash of cayenne pepper. Rub a lime wedge



around rim; dip into



#### turmericginger tea

Combine 1-inch piece of fresh ginger, chopped; 1 tsp. ground turmeric; and ¼ tsp. fennel seeds in a teapot or heatproof pitcher. Using a muddler or the back of a wooden spoon, crush ginger against side of teapot. Add 4 cups boiling water, 4 lemon slices, and a cinnamon stick. Cover and let steep 5 minutes. Strain mixture into teacups or mugs and, if desired, serve with lemon wedges.

Serves 4.

#### berrygingergreen tea sipper

Add 4 green tea bags and 1½-inch piece fresh ginger, thinly sliced, to 4 cups water. Chill, covered, 6 hours or overnight. Remove and discard tea bags and ginger. In a food processor, puree 2 cups fresh raspberries until smooth. Press berries through a finemesh sieve; discard seeds. Stir raspberry puree, ¼ cup lemon juice, and 2 Tbsp. agave syrup into tea mixture. Serve in ice-filled glasses. Serves 4.



#### EAT UP

A MEDITERRANEAN-STYLE DIET HELPS REDUCE AND PREVENT INFLAMMATION. TURN TO PAGE 92 FOR RECIPES.



**SPICE IT UP** Many common spices—pepper, basil, oregano, ginger, cinnamon—have anti-inflammatory properties, but turmeric has been found to be particularly powerful. Turmeric's main active ingredient, curcumin, prevents certain molecules from entering cells and turning on genes related to inflammation. For maximum benefit, pair turmeric with black pepper to boost absorption and a healthy fat like olive oil. "The fat helps slow the rate at which the curcumin degrades, increasing the benefits," Gorin says

### MORE GOOD MOVES

Your everyday habits can impact inflammation. Put these on your priority list.

#### be active

During exercise your muscles release beneficial compounds that decrease overall inflammation. Research has found that just 20 minutes of walking on a treadmill was enough to prompt your body's calming response. Aim for 20 to 30 minutes of moderate exercise like walking most days of the week.

#### brush and floss

Gum disease is your body's inflammatory response to an overgrowth of bacteria in your mouth, which brushing and flossing regularly help prevent. And research suggests that people with gum disease may be more likely to develop other inflammatory conditions, including heart disease (gum disease can increase your risk of a heart attack by up to 50%), diabetes, and rheumatoid arthritis.

Brush twice daily, floss at least once, and see your dentist once or twice a year, more often if you have signs of gum disease, such as red, swollen, tender, or bleeding gums, or persistent bad breath.

#### manage stress levels

Constant stress can cause inflammation—in large part by putting your body in a constant fight-or-flight mode, which causes a physiological reaction that prompts an inflammatory

response. Though you can't control when stress hits, you can mitigate your body's response to it. Getting good sleep helps (sleep is a prime time when systems restore themselves so they're less vulnerable and reactive to the negative impacts of stress), as do exercise and meditation. Therapy may also be a powerful antidote:

New research in JAMA Psychiatry shows that cognitive behavioral therapy—talk therapy that aims to help you change patterns of behavior and thinking—may hold particular promise when it comes to calming system-wide inflammation.



EAT TO FEEL GOOD Find 111 delicious recipes using foods that fight inflammation. On sale at newsstands and magazine.store/ EatToBeat.

# YOUR HEART &

The foods and lifestyle moves that calm inflammation also protect your heart. That's because heart disease develops when the arteries supplying blood to the heart become blocked, and one root of those blockages is inflammation. The immune system perceives cholesterol as an invader and responds by releasing

white blood cells. Those cells become lodged in the coronary arteries and eventually turn into plaque, says Donna Arnett, Ph.D., dean of the University of Kentucky College of Public Health and past president of the American Heart Association. "With continued inflammation, the plaque can build up and rupture and cause a heart attack," Arnett says. Your best strategies for reducing cholesterol: a healthy diet of whole foods, regular exercise, and, if your doctor recommends them, statins to help control the numbers.

