

eat to beat INFLAMMATION



Inflammation is at the root of many chronic diseases, but you can fight it with food. Arm yourself with knowledge, and then use these delicious, disease-fighting recipes from my cookbook, *Meals that Heal*, starting on page 83.

By Carolyn Williams, PhD, RD

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TYPES

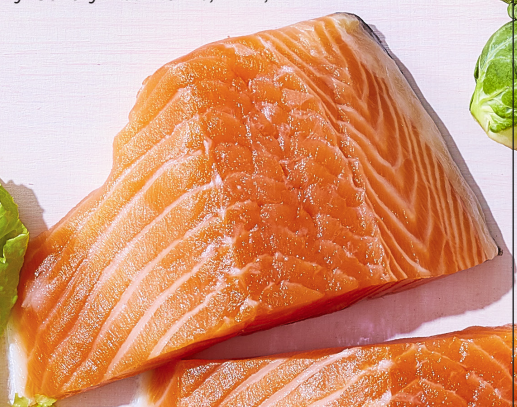
Inflammation is a natural response by the immune system. But there are two very different types.

“good”

ACUTE INFLAMMATION occurs when we get a cut, break a bone, or come into contact with a bacteria or virus. Symptoms like swelling, redness, or a fever may be bothersome, but these are signs the body is healing itself. The symptoms will go away in a few days.

“bad”

CHRONIC INFLAMMATION is triggered by a foreign body or irritant, such as chemicals, additives, and other compounds in the environment or in the food we eat. It can be triggered by stress and inadequate sleep, too. Symptoms are vague, and this inflammation doesn't go away on its own.



Foods can either calm inflammation

OR
contribute to it.

top 8
ANTI-INFLAMMATORY FOODS TO EAT

1. Leafy greens (romaine, arugula, spinach, kale)
2. Extra-virgin olive oil
3. Berries
4. Cruciferous vegetables (cauliflower, broccoli, kale, Brussels sprouts)
5. Fatty fish (salmon)
6. Green tea
7. Fermented and probiotic-rich foods (yogurt, kefir, kombucha, kimchi)
8. Nuts and seeds

top 8
PRO-INFLAMMATORY FOODS TO AVOID

1. Foods high in saturated and trans fats
2. Foods with added sugars and/or artificial sweeteners
3. Fried foods
4. Processed foods
5. Cured and processed meats
6. Alcohol in excess
7. Caffeine in excess
8. High omega-6 to omega-3 ratios (see "The Right Ratio" on page 85)

from subtle
TO SERIOUS

Think of initial chronic inflammation as a small fire in the body. It's localized and not yet severe. Poor food choices trigger inflammation that can result in slightly higher than normal blood sugar or blood pressure.

But just like how sparks from a small fire can create a second or third fire, this initial inflammation can increase the body's sensitivity, making it easier for irritants to result in inflammation in another area

of the body. Poor food choices, combined with stress and inactivity, can trigger inflammation in the form of weight gain, hypertension, and/or insulin resistance.

If these small fires aren't put out, more fires start, and they become one large systemic blaze. In the body, symptoms become more noticeable. If nothing changes, inflammation pushes the body to serious conditions, such as obesity, type 2 diabetes, and heart disease.



CHICKEN FRIED QUINOA

HANDS-ON 15 MIN TOTAL 25 MIN SERVES 4
SUBMITTED BY CAROLYN WILLIAMS

- 1½ Tbsp. sesame oil
- ½ lb. boneless, skinless chicken thighs, cut into ½-inch pieces
- ½ cup chopped red bell pepper
- ½ cup chopped green onion
- 2 garlic cloves, minced
- 1 tsp. minced fresh ginger
- 2½ cups cooked quinoa, cooled
- ¾ cup frozen shelled edamame, thawed
- 1 large egg, lightly beaten
- ¼ cup gluten-free, lower-sodium soy sauce or tamari
- Crushed red pepper (optional)

1. Heat 1 Tbsp. oil in a large skillet over medium-high heat. Add chicken; cook, stirring frequently, 4 minutes. Add bell pepper, green onion, garlic, and ginger; cook, stirring frequently, until chicken is no longer pink and vegetables are tender, about 3 minutes. Transfer chicken mixture to a plate and wipe skillet clean.

2. Heat remaining ½ Tbsp. oil in skillet over medium heat. Add quinoa and edamame; cook, stirring constantly, until thoroughly heated, about 2 minutes. Push quinoa mixture to one side of skillet. Add egg to opposite side of skillet and cook, stirring until scrambled, about 1 minute. Add chicken mixture and soy sauce to skillet; cook, stirring frequently, until heated through, about 1 minute. Sprinkle with crushed red pepper (if using).

HEALTHY QUICK GLUTEN-FREE

PER CUP: 316 CAL; 12G FAT (2G SAT); 22G PRO; 30G CARB (5G FIBER, 3G SUGARS); 732MG SODIUM

BERRY GREEN SMOOTHIE

HANDS-ON 5 MIN TOTAL 5 MIN SERVES 1
SUBMITTED BY CAROLYN WILLIAMS

- 1 cup frozen wild blueberries or mixed berries
- 1 (5.3- to 7-oz.) container plain low-fat Greek yogurt or plain soy yogurt
- ½ cup packed fresh baby spinach
- 2 Tbsp. fresh orange juice
- 2 Tbsp. water
- 1 ripe banana, sliced

Put all ingredients in a blender; cover and blend until smooth. Serve immediately.

HEALTHY QUICK GLUTEN-FREE

PER 2-CUP SERVING: 305 CAL; 3G FAT (2G SAT); 18G PRO; 54G CARB (8G FIBER, 23G SUGARS); 63MG SODIUM

25

The number of diseases and conditions connected to chronic inflammation.



SIGNS

SYMPTOMS

Speak with your doctor about chronic inflammation if you experience any of the following:

- Memory loss
- Joint pain
- Weight gain or inability to lose weight
- Above-normal blood sugar
- Hypertension (or prehypertension)
- Bloating, gas, or constipation
- High LDL, low HDL
- High triglycerides
- Fatigue
- New sensitivities to foods or the environment
- Headaches

LONG-TERM EFFECTS OF "BAD" INFLAMMATION

Unless it's calmed, low-grade, chronic inflammation takes a gradual toll on the body, damaging cells and overworking the immune system, which can lead to these health issues: heart disease, type 2 diabetes, dementia, cancer, osteoarthritis, and irritable bowel syndrome—to name just a few.



ZUCCHINI TACO SKILLET

HANDS-ON 15 MIN TOTAL 30 MIN SERVES 4
SUBMITTED BY CAROLYN WILLIAMS

- 1 tsp. olive oil
- ¾ lb. lean ground beef
- 1½ Tbsp. Taco Seasoning (recipe at right) or purchased salt-free taco seasoning
- ¾ tsp. kosher salt
- 1 (14.5-oz.) can no-salt-added fire-roasted tomatoes, with juices
- 1 (14.5-oz.) can no-salt-added black beans, rinsed and drained
- 1 cup fresh or frozen corn kernels (about 2 ears)
- ½ cup water
- 3 cups zucchini spirals
- 1½ oz. cheddar cheese, shredded (about ½ cup)
- ¼ cup chopped green onion

1. Heat oil in a large skillet over medium heat. Add beef; cook 4 minutes, stirring to break up lumps. Increase heat to medium-high. Add Taco Seasoning and salt; cook, stirring often, until meat is browned, about 2 minutes more. Stir in tomatoes, beans, corn, and water; bring to a simmer, stirring occasionally. Simmer until slightly thickened, about 5 minutes.

2. Stir in zucchini. Reduce heat to medium-low and cook, covered, until zucchini is just tender, about 3 minutes. Divide among 4 bowls. Top servings with cheese and green onion.

HEALTHY QUICK GLUTEN-FREE

PER 1¼-CUP SERVING: 345 CAL; 12G FAT (5G SAT); 29G PRO; 30G CARB (8G FIBER, 7G SUGARS); 527MG SODIUM

TACO SEASONING

HANDS-ON 5 MIN TOTAL 5 MIN MAKES ¾ CUP
SUBMITTED BY CAROLYN WILLIAMS

- ¼ cup chili powder
- 2 Tbsp. ground cumin
- 1 Tbsp. cornstarch
- 1 Tbsp. garlic powder
- 1 Tbsp. kosher salt
- 1 Tbsp. paprika
- 2 tsp. dried oregano
- ½ tsp. cayenne pepper

Stir together all ingredients in a small bowl. Transfer to a jar or airtight container. Store at room temperature up to 3 months.

QUICK GLUTEN-FREE

PER 1-TBSP SERVING: 22 CAL; 0G FAT (0G SAT); 1G PRO; 4G CARB (2G FIBER, 0G SUGARS); 428MG SODIUM

RECIPES FROM MEALS THAT HEAL: 100+ EVERYDAY ANTI-INFLAMMATORY RECIPES IN 30 MINUTES OR LESS BY CAROLYN WILLIAMS, PH.D., RD, FROM SIMON & SCHUSTER. © COPYRIGHT 2019 CAROLYN WILLIAMS



60%

Percentage of Americans with at least one health condition either caused by or aggravated by chronic inflammation.

THE RIGHT RATIO

Often labeled the "good" fat, unsaturated fats and oils contain both omega-6 and omega-3 fatty acids. But most Americans overconsume omega-6 and don't get enough omega-3. This skewed ratio, as well as the fact that omega-3 fatty acids reduce inflammation and prevent disease, is thought to be a contributor to inflammation.

Healthy fats and oils are made up of a blend of fatty acids, so choose good sources of omega-3, such as fatty fish, flaxseed, walnuts, chia seeds, and omega-3-rich eggs, daily. Then choose foods that have a higher proportion of omega-3s, like avocados, almonds, and oils from olives, avocados, canola, corn, and peanuts.

SHEET PAN HONEY-SOY SALMON, SWEET POTATOES, AND GREEN BEANS

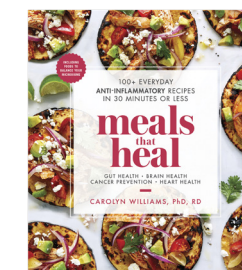
HANDS-ON 15 MIN TOTAL 45 MIN
SERVES 4 SUBMITTED BY CAROLYN WILLIAMS

- 1½ Tbsp. gluten-free lower-sodium soy sauce or tamari
- 3 Tbsp. olive oil
- 1 Tbsp. honey
- 1 Tbsp. fresh lime juice
- 2 cloves garlic, minced
- 4 (5-oz.) skin-on salmon fillets
- 1 lb. sweet potatoes, cut into ¾-inch cubes
- ½ tsp. kosher salt
- ½ tsp. black pepper
- 12 oz. fresh green beans, trimmed

1. Preheat oven to 400°F. Line a 13x18-inch baking pan with foil and coat with cooking spray.
2. Whisk together soy sauce, 1 Tbsp. oil, the honey, lime juice, and half of garlic in a large bowl. Add salmon and turn to coat.
3. Arrange sweet potatoes on prepared pan. Drizzle with 1 Tbsp. oil and sprinkle with ¼ tsp. each salt and pepper; toss to coat. Roast until potatoes are almost fork-tender, 20 to 25 minutes.
4. Meanwhile, toss green beans with remaining 1 Tbsp. oil and remaining garlic. Sprinkle with remaining ¼ tsp. each salt and pepper; toss to coat. Remove pan from oven, stir, and then push sweet potatoes to one end of pan. Arrange marinated salmon in center of pan, skin sides down. (Reserve marinade for sauce, if desired.) Spread green beans in remaining portion of pan. Roast until vegetables are tender and fish flakes, 15 to 17 minutes.
5. If desired, stir together reserved marinade and 3 Tbsp. water in a small saucepan. Bring to a boil. Reduce heat and simmer, uncovered, at least 5 minutes or until desired consistency. Serve with salmon and vegetables.

HEALTHY GLUTEN-FREE

PER SERVING (1 FILLET AND 1 CUP VEGETABLES): 438 CAL; 19G FAT (3G SAT); 32G PRO; 34G CARB (6G FIBER, 12G SUGARS); 513MG SODIUM



Meals that Heal

The recipes in my book (\$23 at amazon.com) make fighting and cutting inflammation easy and tasty!