



Dole Diet Center

Go Mediterranean For Health

Mediterranean Diets Now Linked to Longevity, Improved Blood Flow, and Kidney Health



With New Year's resolutions on everyone's minds, January is the month of all things diet. Whether you overloaded on holiday cookies or remained true to your regimen of salads and smoothies, research points to one health-promoting diet plan no matter your weight loss goals. A Mediterranean diet rich in vegetables, fruits, nuts, legumes, whole grains, fish, and olive oil has been linked to longevity, improved blood flow, and kidney health.

In a recent study published in the *British Medical Journal*, researchers linked the Mediterranean diet to longevity by measuring telomeres (repetitive DNA sequences on chromosomes that protect genomic DNA). Telomere length is a marker of aging. Shorter length is associated with decreased life expectancy and increased rate of developing chronic disease. Length naturally decreases with age, but oxidative stress and inflammation can speed up the process. Research suggests telomere length, and therefore life expectancy, can be changed by modifying lifestyle factors like diet.

Using data from the Nurses' Health Study, researchers analyzed dietary patterns and measured telomere length in over 4,600 women ages 42 to 70 years. Participants completed a questionnaire indicating how often they ate certain foods, and then diets were scored 0-9, with higher scores going to diets closest to a traditional Mediterranean diet. Not surprisingly, researchers found younger women had longer telomeres, but they also noted greater adherence to a Mediterranean diet was associated with longer telomere length. For every one point change in diet score, the difference in telomere length corresponded with 1.5 years of aging. Therefore a three point increase in diet score represented 4.5 more years of life, a similar difference when comparing aging of smokers with non-smokers.

Researchers attribute the effect on telomere length with the Mediterranean diet's capacity to protect against oxidative stress and chronic inflammation. Interestingly, telomere length was not associated with any one particular nutrient-rich food. Effect on aging was only seen when the Mediterranean diet was eaten as a whole, suggesting the foods work synergistically to promote health and longevity.

Props to the Mediterranean diet don't end there. Two other recent studies point to additional health benefits of this nutrient-packed diet pattern. A study from the American Society of Nephrology found a one point increase in Mediterranean diet score was associated with a 17% lower risk of developing chronic kidney disease, and those who adhered most strictly to the diet saw a 50% lower risk. A study from the UK found a combination of eating a Mediterranean diet and exercising regularly resulted in improved blood flow in endothelial cells—cells in the inner lining of blood vessels—which could help reduce risk of developing heart disease.

You don't need to book a flight to Europe to reap the benefits of the Mediterranean lifestyle. Base your diet around a variety of vegetables and fruits; add legumes, nuts, and fish for protein; choose whole grains like quinoa and farro; and use olive oil for cooking and on salads. Want even more Mediterranean flavor? Try our [Tuscan Herb White Bean Soup](#). Packed with fiber and protein and low in saturated fat, this hearty

Hot News



BELIEVE THE GRAPEFRUIT HYPE

In this Issue

Dole Diet Center

- GO MEDITERRANEAN FOR HEALTH
- SPICE IT UP
- TIME TO STAY SLIM

Nutrition News Desk

- BELIEVE THE GRAPEFRUIT HYPE
- ANTI-BRAIN FOOD: TRANS FATS
- STRAIGHTEN OUT WITH YOGA

Featured Recipe



TUSCAN HERB WHITE BEAN SOUP

soup brings Tuscan flavor to the comforts of your own kitchen. No passport needed.

Spice It Up

Antioxidant Rich Spices and Herbs May Improve Heart Health



Protect your heart by flavoring food? It's not too delicious to be true. A recent report from *Nutrition Today* cites several studies exploring the health benefits of common herbs and spices most likely already in your kitchen. Spices and herbs not only add calorie- and sodium-free flavor to recipes, but pack potent antioxidants that may improve risk factors associated with cardiovascular disease.

In one small study, researchers tested the effect of a high-antioxidant spice blend on post-meal measures of metabolism and antioxidant capacity. Six healthy, overweight men were fed a 1,200 calorie meal on two separate occasions. The control meal consisted of a coconut chicken and white rice dish, cheese bread, and a dessert biscuit. For the test meal, researchers added a high dose of spices to the same items to create chicken curry, Italian herb cheese bread, and cinnamon biscuit. After each meal researchers analyzed participant blood samples. Researchers found the addition of spices resulted in 21% lower insulin levels, 31% lower triglyceride levels, and 13% higher antioxidant levels compared with levels after the control meal. Though the dose was high, spices used included black pepper, cinnamon, cloves, garlic powder, ginger, oregano, paprika, rosemary, and turmeric, all common flavorings likely stashed on your spice rack.

Different studies have focused solely on cinnamon. Though results have been mixed, one study found the addition of just 1, 3, or 6 grams of cinnamon per day—about 0.5 to 2.5 teaspoons—for 40 days resulted in a 7% to 30% decrease in total cholesterol, LDL cholesterol, and triglyceride levels in adults with type 2 diabetes. Other work has looked at just garlic. A meta-analysis of 39 clinical trials concluded raw garlic, garlic powder, garlic oil, and aged garlic extract might be effective in lowering total cholesterol by about 8%, which represents a 38% drop in risk of coronary events like heart attack and stroke.

More research is needed before any definite conclusions can be drawn, but the research suggests common spices and herbs might reduce inflammation and improve blood factors linked with heart disease. Not only do spices and herbs pack heart-promoting power, they're relatively common and affordable, and offer bold flavor without adding calories. Sprinkle cinnamon into oatmeal, grind fresh pepper onto salads, and use oregano or rosemary to flavor poultry and fish. Take advantage of minced garlic and black pepper in our [Mediterranean Bruschetta](#). The research might be limited, but it's a delicious "maybe" we're willing to bite into.

Time To Stay Slim

Eating Within a Specific Time Frame Might Help You Stay Healthier and Slimmer



Resolutions, resolutions. After a month (or two) of indulging in holiday treats, weight loss is the hot topic of January. We all know a combination of healthy eating and exercise is the key to dropping unwanted pounds, but research now suggests there could be more to weight loss than counting calories and steps. A recent study in the journal *Cell Metabolism* suggests limiting allowed hours for eating, regardless of calories and fat, could help keep you slimmer and healthier.

To determine the effect that time-restricted eating—that is, eating only within a specific time frame each day—has on weight and other health parameters, researchers evaluated mice under various conditions of diet. Mice were fed a normal, high-fat, or high-sugar diet, and were given access to food for 9, 12, 15, or 24 hours of the day. Different combinations of diet and time were tested.

Not surprisingly, mice on a high-fat diet gained weight. However, mice given access to food only 9 hours per day showed weight gain of 26%, while mice with 24-hour access gained 65%, even though calories were equivalent. In a different test on already obese mice given access to food at all hours of the day, switching to a 9-hour restricted diet resulted in 12% weight loss. Comparatively, obese mice who stuck with the freewill diet gained an additional 10.6%, even though calories between the groups stayed the same.

Researchers also tested modeling how most people typically eat—strict during the week and maybe not so strict on the weekends. Mice alternated between five days of 9-hour restricted eating (weekdays) and two days of all hours dining (weekends). These mice gained only 29% body weight compared with a 61% gain in mice that stayed in “weekend mode” seven days a week.

Investigators then went beyond weight and looked at other health parameters associated with obesity. Mice on the weekday/weekend diet pattern had 48% less body fat than all-hours eaters, and mice committed to the 9-hour restriction had 57% less fat. Restricted mice were also absent of inflammation in fat tissue and had 70% fewer triglycerides, lower cholesterol, and improved insulin resistance compared with all-hours eaters. Restriction also proved to help with fitness and endurance on treadmill runs.

What does this mean for humans? Don't indulge in the midday cake just yet. Managing calories is still an important element of successful weight maintenance, but perhaps this is another reason to forgo that midnight snack. In mice, restricting eating to only 9 hours per day was effective in counteracting some of the negative effects of obesity. Results also indicated time restriction could help prevent weight gain during indulgent dining (ahem, next holiday season). And lucky for us, the weekday plan was still effective with a little wiggle room on the weekends. Fill half your plate with fruits and vegetables, swap your afternoon cookie for a banana, and try to keep a regular eating pattern and time frame if your schedule allows. Time restriction isn't the magic key for weight loss, but it could be a step in the right direction.

Nutrition News Desk

Believe The Grapefruit Hype

Grapefruit Juice Might Help Prevent Weight Gain with High Fat Diets



Diet like it's 1939... or '79...or '89. Originally dubbed “The Hollywood Diet,” grapefruit has been an integral part of fad diets throughout the ages. Popularized for its low calories and alleged fat-burning power, grapefruit may be considered the stereotypical diet food likely to be found on any weight loss plan. But perhaps the grapefruit craze isn't so crazy after all. New research from the University of California, Berkeley suggests grapefruit juice might actually be beneficial for successful weight maintenance.

In the study, different groups of mice were offered freshly squeezed, pulp-free, slightly sweetened grapefruit juice or sweetened water, both providing 75 calories per cup, to drink with either a high- or low-fat diet. After 100 days of testing, mice that ate a

high-fat diet and drank grapefruit juice weighed 18.4% less than the mice on the same diet that drank sweetened water. Grapefruit juice drinkers also had 13% lower fasting blood sugar, 72% lower fasting insulin, and 38% lower liver triglycerides than the water drinkers, all signs of metabolic health.

These results sound promising, but go easy on the juicer. Though mice that drank grapefruit juice weighed less than those downing water, the water used in this study was sweetened and provided the same amount of calories as the juice. Mice drank what would be an equivalent of 3.5 to 4 cups of juice per day for a 150- pound person, which would amount to an additional 300 calories per day. We don't suggest swapping out all your daily water for grapefruit juice, but perhaps sipping a glass with your breakfast could help achieve your weight maintenance goals. Plus, grapefruit juice is an excellent source of vitamin C and is packed with the flavonoid naringenin, both powerful antioxidants that offer several health benefits.

Our advice? Include grapefruit juice in your diet, but count it as a serving of fruit and keep on drinking water to ensure calories stay in check. If possible, squeeze your own juice at home so you have control over freshness and sugar content. You can also utilize grapefruit juice in recipes, like in our [Garden Rainbow](#) vegetable plate. Using fresh grapefruit juice to create a light and flavorful vinaigrette, this vibrant dish could offer a slightly sweet crunch towards managing your weight.

Anti-Brain Food: Trans Fats

Trans Fat Linked to Diminished Memory in Men



Hold the fries! We now know the dangers of artificial trans fat—harmful fats found in processed baked goods, deep fried foods, frozen pizzas, coffee creamers, and other processed foods to help extend shelf life. They're made by hydrogenation, a process that turns liquid vegetable oils into solids. Trans fats have been shown to have a detrimental impact on heart health and are also linked to higher body weight. Just last year, the FDA began steps to remove trans fat from the “generally recognized as safe” (or GRAS) list for use

in food. Now, a new study has also linked trans fat consumption to diminished memory in adults.

Presented at the American Heart Association's Scientific Sessions 2014, the study included about 1,000 healthy adult men. Participants completed a dietary questionnaire from which trans fat intake was estimated, and a memory test, comprised of a series of 104 word cards, was administered. Men were asked to indicate if each word was new or if they had already seen it on a previous card. Researchers found among men under age 45, having a higher intake of trans fats correlated with worse performance on the memory test. For every additional gram of trans fat reported, men recalled 0.76 fewer words correctly. Men who ate the most trans fat showed a 10% decrease in memory compared to men who ate the least.

Researchers postulate that diminished memory with trans fat intake is related to oxidative stress and cell energy. Trans fats promote cell oxidation which may kill off important brain cells related to memory. Memory impairment could also be due to the energy-zapping effects of trans fats which can make brain cells less responsive.

Simply put, there is no place for trans fat in the diet. Until the FDA is successful in completely removing artificial trans fats from the food supply, eating a diet rich in vegetables and fruits is a good way to avoid this harmful ingredient. Choose healthy mono- and polyunsaturated fats from foods like avocados, nuts, and olive oils, and opt

for lean proteins like fish and legumes, as natural trans fats can be found in red meat products. When buying packaged products, check labels to ensure the food is free of trans fat and avoid foods that list partially hydrogenated oils or hydrogenated oils as an ingredient. We're getting close, but it isn't all gone yet.

BONUS: To give your memory an added boost, up the magnesium in your diet. In one study, extra magnesium in rats increased memory recall by a whopping 56%—thanks in part to a 142% growth in synaptic endings, increasing the speed of brain cell transmission by 160%. Try our [Mediterranean Vegetable Tart](#) made with spinach and artichokes, both excellent sources of magnesium, for a flavorful memory kick.

Straighten Out With Yoga

Yoga Could Help Strengthen Muscles and Spine for Scoliosis Sufferers



Chaturanga, shavasana, parivrtta utkatasana. No, we're not speaking in code, but if you're one of the 20.4 million people in the U.S. practicing yoga, you already knew that. This traditional Eastern discipline has gained steady popularity in recent years, welcoming ancient Sanskrit into household terminology and the revival of stretchy pants everywhere. Yoga is celebrated for its power to improve flexibility, aid in weight loss, increase strength, and lower stress levels. Now, a new study suggests a yoga pose as a beneficial

treatment for scoliosis.

For the study, researchers recruited 25 scoliosis (a condition in which the spine curves sideways) patients, ages 14 to 85 years from a private medical clinic in New York City. Doctors used x-rays to measure baseline spine curvature in all participants. Patients were then taught the side plank pose, or vasisthasana, which involves stacking one foot on the other; leaning one arm on the floor; and aligning the hips, shoulders, and arms while balancing on your side. Participants were instructed to perform the pose for 10 to 20 seconds daily for one week with their convex side facing downward in order to learn the pose. After the first week, patients were asked to hold the pose for as long as possible once daily.

After 6.8 months, x-rays indicated patients who held the pose daily—for anywhere from 50 seconds to four minutes—saw a 40.9% improvement in spine curvature, while those who practiced the pose only four days per week saw just 0.5% improvement. Results suggest this simple yoga pose could be effective in treating scoliosis. Doctors speculate the side plank pose strengthens back muscles along the convex side which might then strengthen the spine and reduce curvature.

Scoliosis affects six to nine million people in the United States, and when left untreated can result in pain, affect posture, impair physical function, and be detrimental to body image. However, surgery is costly and might involve wearing a brace that can restrict mobility and hurt self-esteem. Surgery typically brings a 44% to 59% reduction in spine curve. A simple daily yoga pose is a less expensive and more convenient method that can yield similar improvements. Yoga can also be applied as a home treatment and is not coupled with the stigmatism of a bracing treatment.

Consult your physician before beginning any treatment for scoliosis.

BONUS: Practice yoga to improve your mood. Previous research found a 20% reduction in tension anxiety scores, 10% less mood disturbance, and an 8% improvement in general outlook in teenagers who practiced yoga three times per week. Researchers from Boston University found that yoga novices enjoyed 240% higher mood scores after three months of practice.

Featured Recipe

Tuscan Herb White Bean Soup

Ingredients:

- 2 tablespoons olive oil
- 1 tablespoon minced garlic
- 1 medium DOLE® Onion, chopped
- 1 cup DOLE Carrots, peeled and sliced into rounds
- 2 teaspoons dried oregano
- 2 teaspoons dried basil, crushed
- ¼ teaspoon crushed red pepper flakes
- 1 container (32 oz.) vegetable broth
- 2 cans (15 oz. each) white beans, drained and rinsed
- 1 pkg. (4.5 oz.) DOLE Power Up Greens™ Baby Kale and Greens
- Salt and ground black pepper, to taste



Serves: 4-6

Prep Time: 45 min.

Directions

1. **HEAT** oil in large sauce pot. Add garlic, onion, carrots and herbs. Cook over medium-high heat until onion and carrots are just tender, about 8 to 10 minutes, stirring occasionally.
2. **ADD** vegetable broth and beans; bring to boil. Reduce heat; simmer uncovered for 15 to 20 minutes.
3. **ADD** baby greens and cook until just wilted, about 1 to 2 minutes.
4. **SEASON** with salt and pepper, to taste.

EDITORIAL TEAM

Dole Nutrition Institute / Lead Editor: Nicholas Gillitt, PhD

The material used as background for publications by the Dole Nutrition Institute (DNI) comes from peer reviewed medical literature, including basic laboratory studies and ongoing human clinical trials. Occasionally, we report on new discoveries, early-stage research of interest to the general public, acknowledging that such research is incomplete and findings are preliminary. The information from the DNI is not intended to replace expert advice, prescribed medications or treatment by a board certified medical doctor.

All Material 2015 Dole Food Company Inc.

Any reproduction without the express permission of Dole Food Company is strictly prohibited.
www.dole.com.