

March 2014

Dole Diet Center

Get Your Green On

Vegetarian Diets = Longer Life, Less Heart Disease



There's an old Irish saying: "I drink to your health when I'm with you; I drink to your health when I'm alone; I drink to your health so often, I'm starting to worry about my own." While one may be forgiven for indulging on St. Patrick's Day, you'll live longer if you "put on the green" year round by adopting a more vegetarian diet.

Two new studies highlight the health benefits of herbivore habits. The first, published in the *American Journal of Clinical Nutrition*,

compared coronary disease rates among carnivores and vegetarians, and found that plant-based diets conferred significant protection. The Oxford University study followed roughly 45,000 subjects for nearly two decades, looking at a variety of factors, from age, to activity levels, educational backgrounds, and of course lifestyle habits including dietary patterns. Vegetarians were a third less likely to suffer heart attacks severe enough to land them in the hospital or an early grave. They also enjoyed lower body mass indices (BMIs), lower blood pressure, and lower cholesterol—correlating with lower risk of cancer, stroke and Alzheimer's, in addition to better heart health.

Such results may help explain the findings of the second study, published in the *Journal of the American Medical Association*, which linked lower death rates with vegetarianism. Researchers reviewed dietary habits of more than 70,000 Seventh-day Adventists, and found that vegetarian diets were associated with lower all-cause mortality, particularly among men. Some variations of plant-based diets offered more longevity benefits than others. For example—when looking at all-cause mortality alone, pesco-vegetarians had the lowest risk, followed by vegan, lacto-ovo and semi-vegetarians.

These findings add to the mounting body of research on the longevity benefits of leaning green. Did you know, for example, that vegetarian women weigh less than their carnivorous peers? Or that lower meat consumption correlates with up to 40% lower risk of colorectal cancer? Statistics are one thing, but seeing is believing: Watch our interview with seventy-something vegetarian vixen Mimi Kirk, and you'll have ample incentive to favor produce over deli on your next supermarket trip! What to do with all those luscious fruits and vegetables? Try our featured recipe, Gardener's Basket with Apple Cider Dijon Vinaigrette.

Freeze Please!

Better Broccoli? Heart-Warming News on the Frozen Front



March is frozen food month! Okay, before you yawn with excitement, here's why you should celebrate: Scientists have just discovered a natural way to add the antioxidants back into frozen broccoli. While fresh broccoli, steamed or lightly zapped in the microwave, largely retains its robust vitamin content and powerful antioxidant profile, some consumers opt for frozen for convenience. The trade-off is that processing interrupts the formation of

Hot News



BANANA BUFF STUFF

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Featured Recipe



GARDENER'S BASKET WITH APPLE CIDER DIJON VINAIGRETTE

sulforaphane, a compound which activates the body's own antioxidant defense systems, reducing disease risk, even in the face of genetic predisposition.

"Whenever I've told people that frozen broccoli may not be as nutritious as fresh broccoli, they look so downcast," remarked Elizabeth Jeffrey, Ph.D., author of the study recently published in the *Journal of Nutrition*. But with an overriding spirit of scientific inquiry—and ingenuity—Jeffrey discovered a "workaround" that will allow food companies to preserve both the convenience, and potential cancer-fighting qualities, of frozen broccoli. The first step was not so surprising: slightly lower the temperature for blanching (needed to suspend the over-ripening that could spoil the vegetable). It's the second step that really does the trick: Jeffrey dosed the broccoli with a dusting of daikon radish. While the amount was invisible to the eye and undetectable to the palate, it had a dramatic antioxidant impact. Not only did the radish treatment protect sulforaphane formation, the combination helped bolster benefits even after the broccoli was cooked!

Why might this be? Though dismissed as a nutrition zero, radishes actually belong to the heroic family of cruciferous vegetables – keeping company with not just broccoli, but cauliflower, Brussels sprouts, cabbage and kale. Indeed, radishes may prove a particularly hearty source of these protective compounds: In one basic study, radish extract appeared immune to the ravages of certain toxins damaging to male reproductive function.

For now, we recommend cruising the produce aisle to add fresh broccoli -- plus a cornucopia of other nutritious veggies, salads and fruit from nature's bounty – to your shopping cart. We like broccoli in stir fries, pureed in soups, shredded, even grilled! For something different, try our featured recipe, Garden Vegetable Coleslaw.

Pill Popping? Pointless

More than Wasted Money, Multis & Supplements Could Pose Harm



"The message is simple: Most supplements do not prevent chronic disease or death, their use is not justified, and they should be avoided." The very bluntness of this statement from the authors of a study published by the American College of Physicians speaks volumes, as academic language is often couched in qualifiers like "may" and "might." Clearly the editors who reviewed the most recent research on supplement use were exasperated, as repeated warnings of inefficacy—and even dangers—of supplement use doesn't seem to

deter the half of the American population popping one vitamin pill or another.

The first of three studies, all published in the *Annals of Internal Medicine*, was a review of three trials of multivitamin and 24 trials of single or paired vitamins involving over 400,000 participants. The results: No clear evidence of a beneficial effect on mortality, heart disease and cancers. Second to bat was also a bust: No difference was found between male multivitamin and placebo takers in terms of memory and cognitive function monitored over a dozen years. Third strike and you're out: A trial involving over 1,700 male and female heart patients found that multivitamin use did next to nothing to prevent recurring heart attacks.

Such findings confirm what David Murdock, Chairman and owner of Dole Food Company, has been saying for years: You can get all the vitamins and minerals you need from a plant-based diet. The fact that he is still running the world's largest fresh produce company at his age is living proof! Indeed, Mr. Murdock even gets his vitamin D naturally—from good old, Southern Californian sunshine. While that is the exception, particularly in much of the snowbound country, the same editorial review concluded that "current widespread use of [vitamin D pills] is not based on solid evidence that benefits outweigh harm."

So, what should you do? Ditch the pills and frequent the produce aisle, where Mother Nature provides a natural "medicine cabinet" in the form of fruit and vegetables

Nutrition News Desk

Banana Buff Stuff

Ten Fun Facts About Your Favorite Fruit



- 1. Bananas beat out the competition: Up to 90% of Americans peel and eat this delicious, nutritious fruit at least monthly. Most North Americans and Europeans consume what is known as the dessert banana, which is eaten fresh and is very sweet. By contrast, the majority of the world population consumes the plantain.
- 2. The Cavendish banana consumed here in the states is named for William Cavendish (1790-1858), 6th Duke of Devonshire. He went bananas for bananas found in West Africa, then tried to replicate them on his English country estate. Traders eventually took bananas to Latin America, where they flourished and still supply most of the fruit consumed here in the U.S.!
- 3. Botanically, the banana fruit is a berry. Bananas have tiny vestigial seeds which sometimes can be seen as black dots or specs within the actual fruit. This makes life easier on infants and teeth...but considerably harder on farmers, as bananas barely form viable seeds, rendering the fruit practically sterile. Now to make matters more interesting, the plant on which bananas grow is technically not a tree but an herb.
- 4. Flour made from bananas has excellent nutrition properties relative to normal flours and is substituted for regular wheat flour in some parts of the world. As banana flour has no gluten, it is a good swap for people with gluten intolerance, especially for those with celiac disease.
- 5. Even with three natural sugars—sucrose, fructose and glucose—bananas pack a paltry 100 calories beneath the peel. But this alone isn't why the "Morning Banana Diet" became all the rage in Japan and elsewhere: Satiating effects of bananas' prebiotic fiber, in addition to fat-burning vitamin C makes them a satisfying staple of successful weight-loss regimens.
- 6. Given the roughly 100 million tons of bananas grown annually around the world, there's an enormous supply of banana peels that are going to waste...when they could be going to treat waste. Brazilian scientists from the Universidade Federal de Sao Carlos found that dried, pulverized banana peels purified heavy metals from contaminated water better than other conventional methods. For example, banana peels were 200-300% more effective at absorbing copper than peanut husks, sawdust, bentonite (a clay) or perlite (volcanic glass).
- 7. While banana peels were once regarded as little more than the punch line of a clichéd joke, they're now being investigated for previously unimagined benefits. For example, researchers are exploring the potential of banana lectin called BanLec to provide natural, topical protection against HIV.
- 8. Many people don't know of all the scientific brainpower buzzing at the North Carolina Research Campus, where eight universities have joined forces to study fruit and vegetables alongside Dole researchers. Indeed, the Dole Nutrition Research Lab, led by Dr. Nick Gillitt, has become a font of nutrition knowledge about bananas. Data from the Dole lab has shown that the peel from one medium-size banana has higher polyphenolic antioxidant value than a cup of blueberries!

- 9. Going bananas may help kids breathe easier. Children who ate just one banana a day had a 34% less chance of developing asthmatic symptoms, according to one British study. After gathering dietary data on over 2,500 youngsters, ages 5 to 10, they found that banana eaters were one-third less likely to encounter breathing problems like wheezing.
- 10. Bananas vs. Tummy Bugs? A study examining the effect of a dietary intervention with young children suffering from severe gastrointestinal distress brought on by bacterial infection found that those given two bananas/day along with antibiotics had 60% less symptoms such as diarrhea after five days compared to those just given antibiotics alone.

Banana Bonus: If you look upon bananas as a breakfast food, here are some ideas for exploring banana benefits in unexpected ways... you can grill them. You can turn them into luscious nutritious desserts with the Yonanas[®]. You can also add them to salads... to salsa... even make a soup!

Heart Health On The Line

Could High Mercury Fish be Toxic to Your Ticker?

ATHEUNE TO

For years, research has been reeling in good news on the myriad benefits of eating fish – chief among them, protection against heart disease. But casting a wider net has brought up a new cardiovascular concern, linking high mercury intake with a higher heart attack risk.

A study published in the prestigious New England Journal of Medicine looked at levels of both mercury and DHA (an omega-3 fatty acid

important to maintaining normal heart rate, blood pressure and triglyceride levels) among heart attack patients from eight European countries and Israel, comparing them against a control group. The results made our heart skip a beat: Mercury levels were 15% higher among those who'd suffered their first heart attack and those in the top 20% of mercury intake had a 116% higher chance of a first heart attack than those in the lowest 20% of mercury intake. But don't forgo fish, the top 20% in DHA intake had a 41% reduced risk for first heart attack compared to those in the lowest 20% of intake.

It's also important to put mercury worries into context – frequent consumption of other animal proteins, particularly those high in artery-clogging saturated fat, like red meat and whole dairy, are linked to higher risk of multiple ailments. For example, high meat consumption is linked to a 30-40% higher risk of colorectal cancer. So, what to do? We recommend that in order to derive maximum benefits and minimum risk from fish, aim to make fish one-third of your monthly protein intake.

This equates to about 20 seafood/fish entrees a month. If this seems like a lot, consider that Dole's Chairman and Owner, David H. Murdock, eats fish at least 60 times a month—and has tested normal mercury levels. How? He opts for low-mercury varieties—as well as lots of tropical fruit, which research suggests may block mercury absorption.

See the chart below to find out which fish you can eat more or less frequently and which you should avoid.

Monthly Frequency:	Fish:
4+	Black sea bass, wild Alaskan salmon, canned light tuna, albacore tuna (U.S. & Canada), skate, monkfish, rainbow trout (farmed), snapper, halibut
2-3	Yellow fin tuna, grouper, Chilean sea bass, blue crab, wild oysters
1-2	Orange roughy, wild salmon (Washington), flounder, farmed Atlantic salmon, lingcod, rockfish
Avoid	Shark, swordfish, tilefish, bluefish, King mackerel, Bluefin tuna, marlin

At Dole Headquarters, our employee cafeteria serves up fish every day, as part of our Employee Wellness Program. Here's a perennial favorite we all love: Salmon Patties with Black Bean and Pineapple Salsa.

Keep Your Peace, Or Say Your Piece?

When Bottling Disagreements Makes for Marital Misery



If you've ever spent much time around the kind of person who always has to be right, you may have faced the dilemma: Should you contradict them, even though it may lead to a stressful argument, or should you simply smile and nod for the sake of "keeping the peace"? Those of us that are more conflict averse may lean toward the latter tactic, but a marital satisfaction experiment found that letting one partner "be right" made the other partner miserable.

The pilot study published in the *British Medical Journal* measured quality of life at the outset of the experiment, then assigned the role of "yes man" to the husband, while the wife was not informed of the intervention. The New Zealand researchers were testing the hypothesis: Would always having your partner agree with you make you happy—or would life become more agreeable for the one doing the agreeing. The couple's quality of life indices were fairly aligned on day one (his 7 to her 8). While the wife's happiness score budged but a mere half point (to 8.5) she became increasingly critical, demanding and insufferable—so much so that the husband's score plummeted all the way down to 3. Indeed, the experiment had to be halted half-way through because of this severe adverse outcome.

While the limited scope of the pilot study makes it hard to draw any general conclusion, it is interesting to place it in context of previous research. For example, researchers found that men who demonstrated a need to be right, to dominate conversations and interrupt interlocutors had a 22% higher all-cause mortality risk over one two-decade study. Another investigation found that men demonstrating a high degree of machismo—characterized by controlling, sexist, anti-social behavior—scored lower on the Satisfaction with Life Scale. Another study from the University of Baltimore found that men with a dominant personality had a 47% higher risk of heart disease. By contrast women's increased risk correlated with more passive aggressive displays of anger, such as sarcasm or making faces.

The takeaway? Don't take it to extremes. Bowing and scraping will simply encourage bossy behavior in your mate... while always being right, far from providing an edge on happiness, may actually indicate underlying physiological issues which can undermine your health.

Featured Recipe

Gardener's Basket With Apple Cider Dijon Vinaigrette Ingredients

- 1 package DOLE® All Natural Perfect Harvest Kit, dressing divided
- 1 cup fresh asparagus tips (1-inch pieces)
- 1 cup broccoli florets
- 1 cup baby carrots with tops, scrubbed
- 1 cup cauliflower florets
- 1 small daikon, peeled and diagonally cut into 1/4-inch slices
- 1 cup cherry, grape or teardrop tomatoes
- 1 cup small red radishes, with tops if possible, scrubbed
- 1 cup whole small DOLE Green Onions, trimmed



Serves: 4

Total Time: 30 min.

Directions

- 1. In a medium bowl, toss the DOLE All Natural Perfect Harvest Kit ingredients with 1/3 of the dressing.
- 2. On a large, long platter, arrange the salad and vegetables.
- 3. Pour remaining dressing into a small bowl and serve alongside platter for vegetable dipping.

Chef Tip: Take advantage of seasonality and swap in veggies that are at their peak. Tasty produce alternatives are green beans, snap peas, DOLE® Celery Hearts, zucchini and yellow squash.

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