



## Let Them Eat Fruit!

*Fruit associated with lower risk of diabetes and related complications*



It's National Diabetes Month. Instead of talking about what you can't have, let's talk about what you CAN have! A common misconception among people with diabetes is that fruit should be avoided due to its natural sugar content. New research published in *PLOS Medicine*, suggests that we should think again!

With the goal of better understanding how fruit consumption relates to diabetes and its complications, researchers at the University of Oxford, studied nearly 1/2 million adults in China. As part of the investigation, participants had anthropometrics and bloodwork tracked for seven years while food intake was measured by electronic survey. Researchers found that those without diabetes at the start of the study had 12% lower risk of developing diabetes when they had more fresh fruit in their diet. Among those with diabetes, higher fruit intake (>3 days/week) was associated with 17% lower risk of death and 13-28% lower risk of developing diabetes related complications.

While fruit does contain natural sugar, it is an important part of a healthy diet. We all need to practice portion control, and this may be especially important for people with diabetes, as fruit can raise blood sugar in some people. Fruits are a delicious way to get the essential vitamins and minerals needed by the body for proper immunity and optimal functioning.

If you want to start incorporating more fruit into your meals, try our [Tropical Turkey Chili](#). It's a fun twist on traditional and satisfying chili, lower in fat and has 3g of fiber per serving.

Remember: A rule of thumb for those with diabetes is when eating foods rich in carbohydrates, like fruit, to combine with protein and fat. For example, an apple with 2 TBSP peanut butter or our [Dole Tropical Parfait](#).

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## Veggies for Stress Control

*Moderate produce intake linked to lower stress levels*



According to the American Psychological Association, 75% of adults reported experiencing moderate to high levels of stress in the past month. With nearly half reporting that their stress has increased over the past year, it's even more important to understand strategies to reduce stress. As we learn more about the relationship between diet and mental health, we see that each bite can help improve how we feel both physically and emotionally.

A new longitudinal study, published in the *British Medical Journal Open*, observed over 60,000 Australians 45 years or older between 2006-2010. Each participant's psychological distress level was evaluated using a general anxiety and depression scale while produce consumption was calculated using a short questionnaire. Interestingly, characteristics such as being female, younger, having lower education and income, being overweight or obese, a current smoker and being sedentary were all associated with high levels of stress.

To boil it down, people who ate 5-7 servings of fruit and vegetables daily had a 14% lower risk of stress as compared to those who ate 0-4 servings daily. And when they looked at women specifically, benefits jumped to 23% lower risk of stress at 5-7 servings daily, as compared to those who consumed only 0-4 servings. Everyone in the study benefited from lower stress levels due to fruits and veggies, but it is especially important for ladies to keep in mind as they are prone to higher levels of stress.

If you're in need of some inspiration try some of our seasonal favorites! You can start your day with [Banana Breakfast Pudding](#) or take advantage of apple season with our [Rosemary-Apple Napoleons](#).

## Taste Buds Not So Sweet on Caffeine

*Caffeine may suppress taste of sweet foods*



So many of us start our day with a hot cup of caffeinated coffee, it wakes us up, warms us up and gives us an energy boost- or does it? A study published in *Journal of Food Science* found that participants reported the same levels of alertness after consuming either regular or decaf coffee suggesting that there may be a placebo effect to the simple morning ritual of enjoying a cup of coffee. They also observed that caffeinated drinkers rated their beverage as tasting less sweet over decaf.

The blinded study included 107 participants, divided into two groups. Upon each visit to the lab, groups sampled decaf coffee supplemented either with 200mg caffeine or a bit of quinine to provide a bitter property equal to caffeinated brew. Both groups had added sugar.

Remarkably, panelists who drank the caffeinated version, ranked their beverage as less sweet, despite both samples containing the same amount of sweetener. They also rated their energy levels on an alertness scale where they reported the same increase in alertness after trying both samples! Reaction time and hunger were also measured

without significant differences.

Caffeine interferes with adenosine receptors which are known to make us feel sleepy and relaxed. When the receptors are blocked, we have a feeling of alertness and a decreased ability to distinguish sweetness. You could look at this another way, for example, if you take too lumps in your coffee; you could switch to decaf and eliminate some of those added sugars! And not to worry, because this study demonstrated a strong placebo effect to coffee whereby the flavor and aroma produce feelings of alertness, you won't miss out on your morning pick me up!

Whether you're enjoying decaf or regular coffee, we think you should give our [Crumble Coffee Cake Squares](#) a try!

## Trade your Turkey for Tofurkey

*Switch to plant protein for protection from type 2 diabetes*



At a time of year when turkey is on everyone's brain- you may want to rethink that bird before preheating the oven! New research from the University of Eastern Finland looked at dietary patterns, protein sources and their association with type 2 diabetes. Their findings may have you reaching for a Tofurkey\* this year instead.

As published in the *British Journal of Nutrition*, investigators observed diets, height and weight of 2,332 healthy men (without diabetes), 42-60 years old. During the study period, diets were analyzed using food recall, portion picture books and visits with a nutritionist. Bloodwork and other measurements were taken at the start as well as at 4, 11, and 20 years from baseline. Over that time,

432 men were diagnosed with type 2 diabetes.

Average protein intake was 93g per day, or 13oz, coming mostly from dairy and meat followed by plant sources. Plant protein specifically was associated with a decreased risk of diabetes. Researchers were able to determine that replacing just 1% of animal protein in the diet with plant protein would result in 18% decreased risk of diabetes. An increased risk for diabetes was observed in those with a high intake of meat, specifically processed, and unprocessed red meat and white meat like chicken and poultry. They believe other compounds in these items are responsible for the correlation, as overall protein, animal, fish or dairy were not associated with risk.

Consider giving your Thanksgiving spread a makeover with these recipes: [Thanksgiving Avocado Toast](#) or [Cranberry Apple Stuffing](#).

\*Tofurkey is an American vegetarian turkey replacement made from a blend of wheat protein and tofu.

## Cocoa and Chocolate Delay Diabetes

*Moderate chocolate intake could curb diabetes and heart disease risk*



Research published in the *British Journal of Nutrition* gives us the green light to indulge in chocolatey goodness this holiday season. This cross sectional, observational study reviewed the diets of 1,153 people using a very specific food frequency questionnaire to suss out how many grams of chocolate they were consuming each day. On average, participants had 25g or about ¼ standard chocolate bar each day.

They found an inverse relationship between daily chocolate intake and liver enzymes and insulin levels. In other words, chocolate may be protective against insulin resistance, helping to diminish a well-established risk factor for cardiovascular disease. They saw the greatest insulin sensitivity in those that consumed 100g/day.

Chocolate is thought to have beneficial effects on heart health due to its polyphenol and flavonoid content. Cocoa is a more concentrated source of flavonoids per serving than other noted sources such as tea and red wine which are also rich in antioxidants. Remember that dark chocolate has more polyphenols and flavonoids than milk chocolate, and white “chocolate” has none! It’s just a blend of cocoa butter and sugar.

But beware! Before adding a full chocolate bar to your daily routine, think about your current diet. It’s recommended that no more than 10% of our daily calories come from foods high in sugar, fat and calories and low in nutrients, AKA discretionary calories. This means the average person consuming a 2000 calorie diet has a total of 200 calories for a splurge each day - but the average 100g chocolate bar has 556 calories! Adding that many additional calories to the diet would result in weight gain for most people and would add up to a lot of extra sugar and fat.

If you’re interested in the benefits that chocolate has to offer, try using cocoa powder more frequently in baking. Simply substitute a few tablespoons for flour in pancakes or add to a smoothie to get the benefits without the added calories from fat and sugar. The [Cocoa Acai Bowl](#) is one of our favorites!

## Mind Over Matter

*Calorie perception shown to affect intake at later meals*



Has your mind been playing tricks on you? Well, when it comes to hunger cues and food portions, it may be! Research presented at the British Psychological Society’s annual conference in September suggests that how filling you think a meal will be can affect how much you eat later in the day.

Researchers fed 26 participants breakfast on 2 occasions. Each time they were told that they were eating either a two or four egg omelet, but in reality, every omelet was made with three eggs. Feelings of fullness, lunch consumption, total daily calories and a hunger hormone called ghrelin were measured afterwards.

Participants reported to be significantly hungrier and consumed more calories at lunch (and throughout the day)

when they thought they had a two egg omelet for breakfast. Ghrelin levels behaved the same after each breakfast, suggesting that physical response to food was trumped by perceived memory for prior consumption. Meaning, that our expectations of how full we should feel after consuming a meal, are an important factor in food choices we make throughout the rest of the day.

The good news is that fruits and vegetables are always a good option to help you fill up without filling out. Try our [Turkey Vegetable Soup with Red Pesto](#) to help make those turkey leftovers disappear!

## FEATURED RECIPE

### Turkey Vegetable Soup with Red Pesto

#### *Ingredients:*

- 2 tablespoons extra-virgin olive oil
- 1 cup diced DOLE® Carrots
- 1 cup diced DOLE Onions
- 1 cup diced DOLE Celery
- 1 teaspoon chopped garlic
- 2-½ quarts low-sodium turkey or chicken broth
- Salt and cracked black pepper
- 4 cups cooked vegetables such as:
  - DOLE Mushrooms quartered or sliced,
  - DOLE Sweet Potatoes cubed,
  - DOLE Brussels Sprouts halved, green beans
- 2 cups shredded roasted turkey
- 1 can (15.5 ounces) cannellini beans, drained and rinsed
- Red Pesto (see recipe below)



*Makes:* 8 Servings

*Total Time:* 65 Minutes

#### *Directions:*

1. **HEAT** olive oil in 6-quart saucepot over medium-high. Sauté carrots, onions, celery and garlic for 5 minutes, stirring occasionally. Add broth, and season with salt and pepper. Bring broth to a boil, reduce heat and simmer for 10 minutes.
2. **ADD** cooked vegetables, turkey and cannellini beans. Simmer 15 to 20 minutes.
3. **DIVIDE** the soup between 8 soup plates. Spoon 2 tablespoons red pesto on top. Stir the pesto into soup.

**Red Pesto:** Combine 3 garlic cloves, ½ cup grated Parmesan cheese, ¼ cup packed basil leaves, ¼ cup pine nuts, ¼ cup tomato paste in food processor. Cover, blend until smooth. With the machine running, slowly add ¼ cup olive oil. Makes about ¾ cup.

# EDITORIAL TEAM

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