

# Department of Nutritional Sciences

## Student Newsletter

Fall 2017

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## But First, Coffee...

Maria Martinez  
Didactic Program in Dietetics, Senior

Second only to water in consumption, coffee is a widely beloved and vital part of most Americans' daily routine. It is nearly impossible to drive down any widely-used city road without catching a glimpse of a Starbucks, Dunkin' Donuts coffee, or other coffee shop. In fact, Starbucks alone sells almost 700 million cups of coffee, or coffee beverages, annually, and this statistic hardly begins to account for the number of cups brewed and consumed in homes and offices throughout the nation. Due to its widespread consumption in the states, it's natural to wonder the impact this beverage has on health. Often, Americans are inclined to believe that this cherished beverage is harmful; however, research from a multitude of studies hints at many long-term benefits of moderate coffee consumption.

For instance, coffee consumption has been linked to improved glucose metabolism and insulin sensitivity. In other words, coffee can actually be protective against the development of Type II diabetes. Antioxidants found in the beverage possess an anti-inflammatory property and have the ability to activate transport proteins responsible for this protective benefit. This means that even consumption of decaffeinated coffee, which has a significantly lower level of caffeine than regular coffee, provides this same perk. More impressively, consistent moderate consumption of coffee has also been associated with lower risk of death due to cardiovascular disease. Specifically, one study discussed in an article published by *The Journal of the American College of Cardiology* showed that drinking moderate amounts of coffee (>1-2 cups/day) significantly lowered rates of coronary heart disease in both men and women. Additionally, two large studies have shown that consumption of coffee can decrease the risk of suicide and depression. Specifically, one study revealed that for every cup of coffee consumed by someone on a regular basis, their risk of suicide decreased by 13%. Finally, and more

obviously, drinking caffeinated coffee can benefit individuals by increasing alertness and improving athletic performance, most especially in high-intensity exercise.

Aside from this, many of the risks once associated with coffee have been shown to be false by many recent studies. For instance, it was once believed that coffee could chronically increase blood pressure leading to detrimental cardiovascular effects. Studies have now shown that there are no clinically significant long-term effects of coffee consumption on blood pressure for regular consumers. Increased blood pressure is a short-term effect for non-habitual coffee drinkers. Habitual consumers experience a negligible effect on blood pressure.

This is not to say that coffee does not, unfortunately, have some detrimental effects. For instance, some individuals experience anxiety, trouble sleeping, and headaches after drinking caffeinated coffee. Additionally, heavy coffee drinking (>6 cups/day) can negate the positive benefits seen with moderate consumption. Additionally, coffee can interfere with the absorption of key minerals, specifically calcium, zinc, and iron, making it important to consume dairy and iron sources separately from coffee.

Despite this, overall, consumed in moderation, coffee can be a beneficial component of a healthy diet. Thus, luckily for Americans, the beloved morning "cup of joe" can continue to be part of morning routines.



## Farm-to-the Fort

Sydney Barnard  
Food Management, Senior

These roasted carrots on your plate must have been grown on a farm, meaning you're eating farm-to-table, right? Well, although we imagine someone unrooting these carrots at a white picket fenced farm with chickens and cows roaming the pastures alongside rows of variously colored fruits and vegetables, the odds are slim of tracing the carrots on your plate back to this farm. Today, the term "farm-to-table" enters the scene to restore this rare fantasy farmland most people falsely assume as the birthplace of their produce. The term farm-to-table is loosely interpreted to mean that the food found on your table came from an identifiable farm in a local area without passing through a storefront, market, or distributor. One of the goals of the farm-to-table concept is to merge the gap found between the American family dinner table and the farm.



This new concept revitalizes the scenery of the pastoral past when people would travel to nearby farms to pick up a basket of seasonal, sustainably-raised fruits, vegetables, eggs, meats, and herbs. Farm-to-table offers a chance to experience the white-picket fenced farm experience described above because it focuses on establishing a relationship with the farmer.

Whether a family, a small market, or a restaurant, the farmer and the seller work hand-in-hand to provide quality ingredients.

How could you find farm-to-table restaurants within a season-lacking North Texas? There are several ambitious chefs and restaurants in the DFW area yearning to offer this trendy new experience. Katie Schma opened Local Foods Kitchen off Hulen Street, offering an ever-evolving seasonal menu of local farm ingredients. The Salmon Sandwich paired with a Hello Dollie for a sweet treat offers the perfect example of how local, farm-to-table foods impact color, texture, and taste. Molly McCook opened Ellerbe Fine Foods on Magnolia Street to bring farm-to-table into the high-end food market. Her relationships with many local farmer partners contributes to her detailed and perfected menu. Cafe Modern, found in the Museum of Modern Art here in Fort Worth, is known as the DFW birthplace of farm-to-table. Chef Denise Shavandy prepares from-scratch meals using local, sustainably raised ingredients each day for first-time visitors to the museum as well as those returning to sink their teeth into the Wild Mushroom Grilled Cheese. The quality of food found at these farm-to-table restaurants makes regulars of nearly every customer that walks into the doors. After you ditch the mysterious carrots sitting on your plate and visit one of these Fort Worth locations, you'll be biting into flavors you never knew existed no longer imagining the farm these ingredients came from, but now fully knowing the hand that feeds you.

## Spice Up Your Diet!

Claire Sorrels

Didactic Program in Dietetics, Senior

Spices are used abundantly in the cuisines of many other cultures; however, the American diet tends to fall short in this category. The amazing health benefits of adding spices to the diet are well worth taking that extra second to sprinkle them into a meal. Turmeric, ginger, and cinnamon are three of the healthiest spices: keep reading to find out why!

Turmeric, commonly referred to as “the healthiest spice in the world,” is most well-known for its anti-inflammatory properties. This spice naturally contains a compound called curcumin, which has the ability to significantly lower inflammation levels in the body, leading to decreased risk of most of the common Western chronic diseases such as cancer and hypertension. Another amazing benefit of turmeric is that it boosts levels of brain hormones that increase the growth of new neurons and fights various degenerative processes in the brain. Last but not least, turmeric is extremely high in antioxidants, helping the body fight off free radicals and slowing down the aging process! How could you not want to add turmeric into your diet now? My favorite way to incorporate this powerful spice into my diet is by adding it into stir fry or curry, sprinkling some into smoothies, or even mixing it with warm milk to make a turmeric latte!

Upset stomach? Indigestion? Ginger is your answer! Ginger has been proven to treat and prevent various types of nausea and also has the ability to increase optimal digestion, which

can be beneficial for anyone who experiences indigestion or stomach discomfort. The easiest way to consume ginger for these benefits is through tea. Ginger also adds a lot of flavor to stir-fries, soup and marinades. Along with turmeric, ginger also has extremely high anti-inflammatory and antioxidant levels due to its primary component, gingerol, and is a superstar spice to add to your life!

Got a sweet tooth? Make sure to add some cinnamon! Cinnamon has the capability to lower blood sugar, and coincidentally it pairs perfectly with sweet treats. Due to its ability to increase sensitivity to insulin, cinnamon is effective in controlling Type 2 Diabetes, one of the most common chronic conditions in the United States. Along with both turmeric and ginger; cinnamon also has skyrocketing anti-inflammatory and antioxidant levels. When buying cinnamon, make sure to look for “Ceylon cinnamon,” as it has the highest levels of these health-promoting properties.

Spices provide us with a wide variety of health benefits and are so easy to incorporate into the diet. Simply by sprinkling these three super-spices into meals, we can reduce inflammation, increase antioxidant levels, promote brainpower, improve digestion, and lower blood sugar levels. What an easy and tasty way to improve our health.



## Sit Down, Eat Up!

Eliana Buss  
Nutrition Major, Sophomore

Between striving for that elusive 4.0 GPA, having a social life, and staying fit, who has time to actually sit down and eat with friends or family anymore, right? While it may seem impossible to have time to slow down in this crazy life, here are three good reasons why this should be a priority in every student's life.

Did you know studies have shown that students who take the time to eat a meal among friends and family are more likely to make As? As crazy as it might seem, the act of taking time out of one's day to eat with others helps to establish a network of support both socially and psychologically that reduces outside stressors which can inhibit academic performance. Having a routine meal time also helps establish a schedule that can be easily planned around increasing the chances of academic success for students.

Another benefit from taking a step back to eat a meal in the company of others is it decreases the incidence of anxiety and depression. Mealtimes with friends serves as built-in social time, where students get a chance to unwind and engage in small talk that could lead to discussion of bigger issues in life.

One of the most basic needs of humans- outside of food, water, and shelter- is interaction with other humans. If everyone has to eat, why not do it with friends?

Lastly, when people eat together they can be less likely to over-eat, and more likely to eat healthier foods. This is because meals eaten with company are generally consumed more slowly due to conversation between friends, which allows more time to fill up. Also, when people eat "convenience foods" rather than meals, they are generally higher in fat and calories, lower in vital nutrients, and less filling. While it may seem like a hassle to slow down, it can actually help you maintain a healthy weight!

To conclude, instead of grabbing a protein bar to-go or going to the BLUU alone to do some last-minute studying, be intentional about slowing down to enjoy the company of your loved ones over a hot meal! Not only is it good for your physical health, it is a break from the craziness of life to be social and relax for a short period of time.



## Shake Up Your Post Workout Meal!

Callie Juetten  
Nutrition Major, Sophomore

Pre- and post-workout nutrition is essential when attempting to maximize your energy around a workout. It has become very common to see how people sip a protein shake following a workout, as it is argued that the post-workout window is the most optimal time to intake an adequate source of protein to aid in recovery and muscle protein synthesis. Therefore, is this protein shake necessary to adequately help your body recover? Protein shakes are not the only option when choosing a post-workout meal or snack. Strength and endurance training stress the body in terms of inducing muscle soreness, extra sleep, and an increased appetite. Exercise depletes the muscle's energy resources, causing minor damage and requiring repair. Exercise breaks down muscle carbohydrate stores and muscle protein structures. The body is signaled to rebuild, and without proper protein and carbohydrate refueling, the building process cannot take place. Post workout nutrition is essential in this process. A post-workout meal high in carbohydrates is necessary to refuel muscle carbohydrate energy stores. The standard recommendation is 30 grams of carbohydrate to speed up muscle carbohydrate replenishment without gaining excess fat. Post-workout carbohydrate sources include fruits, white rice, potatoes, and other simple carbohydrates. Simple carbohydrates are ideal as the absorption is not slowed by the presence of fiber. After exercise, the body decreases its rate of protein synthesis and increases protein breakdown. Post workout protein recommendation is 15 grams to achieve a positive protein

balance. Protein sources include protein powder (whey, pea protein, brown rice protein), chicken, egg whites, and fish. The post-workout meal should be relatively low in fat because the consumption of fats slows down the processing of carbohydrates and protein present in the meal. The post workout meal should be solely designed to rapidly deliver carbohydrates and proteins to depleted muscles. Consuming this meal 1 hour as opposed to 3 hours following a workout is ideal because the recovery window decreases the longer the body must wait for rebuilding in the form of food. Do not underestimate the power of food. A balanced meal post workout is essential in aiding in recovery and helping the body rebuild.



# The Power of Plant Based

Greg Carr

Coordinated Program in Dietetics, Senior

As the world becomes more health and environmentally conscious, plants are gaining ground in our diets. Eating more plants can help you live healthier, longer, conserve environmental resources, and prevent disease.<sup>1,2</sup> So let's explore plant-based diets and how you, the average reader, can apply them—and enjoy it!

## What is a Plant-Based Diet?

Plant-based diets are just that: diets based on plant foods. Being plant-based means focusing on vegetables, unrefined grains, nuts, legumes, seeds, fruits, and fewer animal products. Don't think of plant-based diets as a deprivation diet—the food is delicious, filling, and satisfying. You can go as far as you want: from simply reducing meat intake to going fully vegan. Vegetarians and vegans have on average lower rates of heart disease, hypertension, cancer, diabetes, all-cause mortality, and a lower BMI.<sup>1</sup>

## What About Protein?

Getting adequate, complete protein from non-meat sources is as easy as supplanting meat with quinoa, or having beans and rice instead of meaty chili. Quinoa is higher in protein than most other grains, and contains all essential amino acids.<sup>3</sup> Quinoa is also high in lysine, which is usually lacking in plant foods.<sup>4</sup> Beans, peas, lentils, hummus, buckwheat, and soy are also excellent sources of protein.<sup>3</sup>



## Where Do Most Go Wrong?

If you do not eat enough nutritious foods and you consume excessive amounts of plant protein powders and processed “vegetarian” foods, and then feel tired and weak, plant-based dieting may not be for you. Protein powders can be useful, but consuming them at every meal is not the solution. Focus instead on eating a variety of fruits and vegetables, unrefined grains, legumes, and a few nuts and seeds.

Some may also give up fatty foods, then feel tired from eating a low-fat diet, thinking they're protein deficient. You can replace the fat lost in animal products with healthy fats such as olive oil, avocados, nuts and seeds, flaxseed oil, and chia seeds, among other sources. Be cautious with “fake meat” products, which can be high in sodium and chemical derivatives.

You may also rely heavily on nut butters (peanut, almond, etc.) for protein and fat, then notice your complexion goes haywire. This is due to their high content of omega-6 fatty acids, which can cause acne.<sup>5</sup> Instead, focus on lentils, quinoa, peas, beans, whole grains, soy, and other plant foods low in omega-6 fatty acids. Consuming walnuts and hemp, chia, and flaxseeds can add omega-3s and fiber into your diet, as well as flaxseed oil, to reduce inflammation. If you still need more protein for your highly active lifestyle or other needs, you may consider using a plant-based protein powder.

## Nutrients of Concern

Vegans and some vegetarians may be deficient in certain vitamins and minerals, particularly vitamin B12, vitamin D, zinc, iron, omega-3 fatty acids, iodine, and calcium. Look up the nutrient content of the common foods you eat ([ndb.nal.usda.gov](http://ndb.nal.usda.gov)) to determine your intake compared to the recommended dietary allowance (RDA). Look up foods high in the nutrients you are low in, and see if you can add them to your diet.

Plant-based eating is simply focusing more on plant foods and less on animal foods. It is a nutritious way to get a plethora of nutrients, it's more sustainable, and it can fit any budget. Try eating more plants in your next meal, and consider talking to the campus dietitian ([lauren.swonke@tcu.edu](mailto:lauren.swonke@tcu.edu)) if you need a little help!



## A Summer in Peru

Grace Williams

Didactic Program in Dietetics, Senior

This summer I traveled to Urubamba, Peru for a Nutrition and Natural Medicine program. This is a two-week program, created “for those interested in gaining a better understanding about food as medicine, plant-based medicine, alternative medicine and nutrition.” We attended many workshops, including understanding the mindbody as one connected entity and how to use specific aromatherapy essential oils to treat certain ailments.

We also had a vegan cooking class and superfood lesson, preparing traditional Peruvian dishes. The cooking class was one of my favorite workshops, because the food was absolutely delicious! We used Tarwi beans in the ceviche instead of fish. Tarwi beans are a complete protein and can reduce the risk of heart disease and cancer. We also made an Aji de Gallina dish, using shiitake mushrooms instead of chicken, served on a bed of quinoa. For dessert, we had a raw cocoa bean no-bake cookie topped with mango cream sauce (using cashew milk). The superfoods we learned about included maca, an ancient Incan root used in hormone balance and infertility. It tasted great in smoothies with cacao beans, banana, almond milk and chia seeds. We also used coca leaves to prepare a tea/lemonade drink. This one drink provided our entire recommended calcium intake for the day. We also learned how to sprout lentils, quinoa, seeds, etc. Sprouting helps increase the amount of vitamin C and B-vitamins. Sprouting lentils also produces a liquid called rejuvelac. Rejuvelac is a probiotic which reduces inflammation and is a plant-based source of B12. We also used the rejuvelac to make vegan cheese, which we fermented overnight and ate the next morning.

On the fourth day we went to the Andean Natural Medicine clinic. Immediately when we walked into the clinic, the nurses had us bandaging people with broken limbs, rubbing herbs on patients, and assisting in re-locations of dislocated joints. The main "doctor" or "profé" named Mariano was a wonderful explainer/teacher. Even though he only spoke in Spanish he really wanted us to understand and made sure we were constantly involved in the treatments. His homemade mixtures of herbs and plants were meant for re-calcification of bones and to decrease inflammation. These recipes have been passed down in his family for generations.

We also had a four-day course about nutrition in general and different detoxes. The workshop was run by a couple. They had an extremely holistic approach to everything, believing that certain emotions were directly related to specific organs and foods. I learned a lot, not just about nutrition and detoxes but about how to interact with people who have completely different beliefs from my own.

Working in the field of nutrition and dietetics, there are going to be many people with different opinions and beliefs about certain things. This trip not only taught me so much about nutrition and natural medicine, but it also helped me be a better communicator with people who are different from myself.



# Adopt a Traditional Mediterranean Diet

Stephanie Cowart  
Nutrition Major, Junior

## What IS the Mediterranean Diet?

The Mediterranean Diet is one of the healthiest diets known to man. This diet is currently a modern dietary food pattern recommended by the USDA and is the traditional diet which came from the eating and social patterns of regions encompassing Greece, Italy, Turkey, and Spain. The Mediterranean diet is not only a tasty and fun way to eat, drink, and live, but it has been proven by numerous studies to reduce chronic disease, maintain a healthy weight, and promote longevity. Inhabitants of the Mediterranean nourish themselves with a diet high in fiber from fruits and vegetables, incorporate quality fats and proteins, and enjoy a glass of wine with their meals. Additionally, there is an emphasis on the importance of leading an active and social lifestyle. Following this diet can not only prevent disease and help in weight management, but can improve your overall life.

## Foods Incorporated in the Mediterranean Diet

The Mediterranean diet is a whole foods plant-based diet full of antioxidants and essential nutrients, vitamins and minerals which include: Vegetables, legumes, fruits, nuts, cereals and whole grains, fish (preferably fatty fish due to omega-3 fatty acids), healthy unsaturated fats and oils, herbs and spices, and moderate amounts of dairy, red meat, and alcohol (preferably red wine).



## Tips to Following the Traditional Mediterranean Diet

Incorporating the Mediterranean diet to your daily life can be easier than you think. Here are some tips to start eating and living like those in the Mediterranean:

1. Add vegetables to foods you already eat.
2. Add legumes to your diet as a main dish, side dish, or snack.
3. Avoid foods which include refined grains, trans fats, processed meats, and highly processed foods.
4. Consumed whole fruits-not juice-in order to get the fiber and nutrients, and choose heart healthy oils such as olive, sesame, canola, and peanut oil more often
5. Choose to eat dark leafy greens, legumes, seafood, walnuts, flaxseed, and grass-fed meats to get calcium rather than indulge in too much dairy.
6. Make sure cereals and whole grains have “whole” grain listed at the top of the ingredient list.
7. Consume a glass of red wine with a meal such as during dinnertime surrounded by friends.
8. Be active! Aim for at least 30 minutes of physical activity per day. This can be something simple such as walking your dog.
9. Make it important to schedule times to gather around the table and eat meals with family and friends regularly.

# The Three Best Hummus Recipes You'll Ever Make

Lexi Endicott

Coordinated Program in Dietetics, Junior

Hummus is one of those words that you can throw out there, and you're sure to catch someone's interest. This delicious Mediterranean spread has revolutionized the way that we approach veggie platters, sandwiches, and wraps. Not only is hummus delicious, but it also offers some incredible health benefits. Monounsaturated fats contributed by olive oil can decrease levels of bad cholesterol in the blood. Chickpeas and tahini make it a complete protein which is beneficial for vegetarians. The high fiber content contributes to satiety, and helps stabilize blood sugar levels.

Spread it on a sandwich, dip some veggies in it, or make it into a creamy dressing, and you're sure to satisfy your senses. Below, you will find three tried and true recipes for homemade hummus. Keep it simple with a humble lemon hummus; go seasonal with a pumpkin spice hummus, or get exotic with a Moroccan-spiced roasted carrot hummus. Whip up one of these recipes before a party, and you're sure to please a crowd!

## Humble Lemon Hummus

### Ingredients

2 c. chickpeas  
¼ c. tahini  
¼ c. olive oil  
Zest and juice of 1 lemon  
Salt and pepper to taste

### Directions

1. Rinse and drain chickpeas.
2. Combine all ingredients in a food processor and blend until smooth.



## Pumpkin Spice Hummus

### Ingredients

1 (15 oz.) can chickpeas, drained and rinsed  
2/3 c. canned pumpkin  
1 Tbsp. tahini  
1 Tbsp. coconut oil  
1/4 c. agave  
2 tsp. pumpkin pie spice

### Directions

1. Combine all ingredients in a blender or food processor and blend until smooth.
2. Enjoy with tortilla chips, graham crackers, or straight out of the bowl!



## Moroccan Spiced Roasted Carrot Hummus

### Ingredients

3 extra large carrots  
3 garlic cloves, unpeeled  
4 Tbsp. olive oil  
1 (15 oz.) can kidney beans, drained and rinsed  
1/4 c. tahini  
1/2 tsp. salt  
1/2 tsp. cumin  
1/2 tsp. ginger  
1/4 tsp. cinnamon  
1/4 tsp. cayenne  
1/4 tsp. dried cilantro  
1/4 tsp. crushed red pepper  
1/4 tsp. pepper  
2 buds of cloves  
1/4 c. water  
Fresh cilantro, for topping

Editor:

Colleen Coffey

Didactic Program in Dietetics, Senior

Texas Christian University

Department of Nutritional Sciences

Annie Richardson Bass Building, Room 1201

TCU Box 298600

Fort Worth, TX

Office: 817.257.7309

Fax: 817.257.5849

Email: [nutrition@tcu.edu](mailto:nutrition@tcu.edu)