



#### Family and Community Health Sciences

#### **Cooperative Extension**

### **Current Food Trends**

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### Do you want to start or continue to work toward a healthier lifestyle? There are some trends that are expanding from last year and others that are new that can help you achieve your goals in our fast-paced world. Below are seven food trend predictions from USDA.

- Lower Sugar Versions of Products Due to the latest version of the Dietary Guidelines for Americans, the recommendation is for Americans to limit their consumption of added sugar to no more than 10 percent of calories (50 grams or 12.5 teaspoons/day for the average person). The American Heart Association recommend no more than 6 teaspoons or 100 calories a day of sugar for women and no more than 9 teaspoons or 150 calories a day of sugar for men. Sugar contains 4 calories per gram and there are 4 grams of sugar in each teaspoon. More foods and beverages with no sugar are artificially sweetened.
- Healthy and Convenient Food and Meals Convenience, quick to fix, healthy meals have paved the way for companies like "Blue Apron" that send the ingredients and directions to prepare several healthy meals each week. In addition, food companies are packaging pre-cooked whole grain pouches and grab and go salads as examples.
- Healthy Fat is OK As research continues on the benefits of fats in our diet, food manufacturers continue to incorporate unsaturated fats such as olive oil as a major ingredient in many dishes. Avocadoes, nuts, seeds, olives are all part of a healthy diet and we will find more food products and snacks such as cereals and bars that contain these ingredients.
- **Snacking Becomes Mealtime** As families struggle to spend time together, sit-down meals become once-in-a-while events and snacks replace meals. As snacks become more portable and packaged as individual servings, several items like a granola bar, yogurt and piece of fruit become a quick meal. Wholesome mini-meals need to contain foods from the dairy, protein, fruit, vegetable and whole grain food groups. Remember to keep any portable foods that need refrigeration in an insulated lunch bag with an ice pack.
- Environmental and Ethical Choices Consumer food concerns will go beyond sustainability to the ethical choices that food companies make. This includes farming practices, use of chemicals and pesticides, migrant worker and labor practices along with some companies "giving back" to the community to please consumers. Organic and regular food products sit next to each other on supermarket shelves. Some supermarkets ONLY sell organic foods to please their customer base.

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### Crazy for Quinoa:

## The "New" Grain on Everyone's Brain

Hope Nilson, 2017 Rutgers Dietetic Intern Karen Ensle Ed.D, RDN, FAND, CFCS, Preceptor & FCHS Educator, Union County

Quinoa has been cultivated and consumed in its native home in the Andes Mountains in South America for over 5,000 years. This seed, also considered a grain, is being grown and harvested by individuals of the surrounding geographical location – so why has it just recently become popular in the United States, and why are consumers in a craze over it?

Historically, quinoa was not mass-produced on large plantations. However, in the 1990's a series of projects linked the quinoa farmers of the Andes to United States importers. Through this relationship, quinoa was introduced to consumers in the United States and became more and more popular over time. In 2006, there was such an increase in demand for guinoa that the selling price

of quinoa tripled in price for the farmers. Quinoa has become so popular that the Food and Agriculture Organization (FAO) declared 2013 to be the "International Year of Quinoa," further contributing to the quinoa craze.

So why exactly are individuals getting so excited about this "new" grain? Quinoa is a seed from a non-cereal plant. Grains are seeds, usually from a cereal plant." A grain is a small, hard seed such as found in wheat, corn, rye, oats, rice or millet. The gathered seed of food plants such as cereal plants is different from quinoa. Americans believe quinoa to be a grain because it cooks and tastes very similar to some of the grains that we are used to consuming. This aspect of quinoa is great for individuals that follow a

gluten-free diet. As quinoa does not contain gluten, it has gained popularity as a replacement in various pasta dishes for individuals that follow this type of diet.

Quinoa has many health benefits that make it appealing to include in the diet. First, quinoa contains more protein per serving when compared to most other grains. Quinoa is also a complete protein, meaning that it contains all nine essential amino acids that our bodies need to obtain through the diet. Although other grains such as wheat, barley, and corn contain protein, they do not provide all of the essential amino acids, so they are not complete. In addition to protein, quinoa also has higher amounts of important minerals when compared to other grains. These minerals include calcium, phosphorus, magnesium, potassium, iron, copper, and zinc. Quinoa is packed with nutrients and can be included in the diet as a great source of protein and minerals that

In addition to a great nutritional profile, research indicates that quinoa may have a variety of health benefits. Quinoa is a prebiotic for the microflora in the gut, commonly referred to as the "good bacteria" in our bodies. Prebiotics help the "good bacteria" to grow to ensure that we have a healthy and functional digestive system. Quinoa is also relatively easy for the body to digest. This means that the body is able to absorb a high percentage of the nutrients provided by quinoa. Quinoa additionally may reduce the risk of various diseases and conditions because quinoa contains phytonutrients, specifically flavonoids, which act as antioxidants in the body. Flavonoids can also prevent against heart disease as they have been shown to reduce the risk of atherosclerosis, or the buildup of plaque in the arteries. Research indicates that individuals with diets high in flavonoids have lower overall cholesterol levels. Flavonoids may also be an important factor

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our bodies need to function.

### Crazy for Quinoa: The "New" Grain on Everyone's Brain - continued from page 2

inhibiting cancer cells. Studies have indicated a relationship between flavonoid consumption and the modulation of tumor cell division known as metastasis. Due to its flavonoid content, quinoa consumption has promising potential effects on health and disease. More large research studies need to be conducted in these areas.

Although quinoa may seem "new" to the United States, this seed has actually been cultivated in different parts of the world for thousands of years. Despite our recent discovery, quinoa still provides the same nutrients and health benefits to Americans as it did to the native people of the Andes. For some great ideas on how to incorporate quinoa into your diet, see the following recipes.

#### **Quinoa Recipes:**



From the USDA website: https://whatscooking. fns.usda.gov/recipes/child-nutrition-cnp/ mediterranean-quinoa-salad

#### Mediterranean Quinoa Salad:

- 1 cup Quinoa, dry
- 2 cups low-sodium chicken broth
- 2 tablespoons lemon juice
- 2 tablespoons red wine vinegar
- 1 teaspoon Fresh garlic, minced
- 1 1/2 tablespoons extra virgin olive oil
- 1/8 teaspoon ground white pepper
- 1/4 cup Fresh red bell peppers, seeded, diced
- 2 tablespoons Fresh green onions, diced
- 2 tablespoons Fresh red onions, peeled, diced
- 1/2 cup Fresh cherry tomatoes, halved
- 1/8 cup Black olives, sliced
- 2 tablespoons Feta cheese, crumbled
- 1 tablespoon Fresh parsley, chopped



From the USDA website: https://whatscooking.fns. usda.gov/recipes/supplemental-nutrition-assistanceprogram-snap/quinoa-and-black-bean-salad

#### Quinoa and Black Bean Salad:

- 1/2 cup quinoa (dry)
- 1 1/2 cups water
- 1 1/2 tablespoons olive oil
- 3 teaspoons lime juice
- 1/4 teaspoon cumin
- 1/4 teaspoon coriander (ground, dried cilantro seeds)
- 2 tablespoons cilantro (chopped)
- 2 scallions (medium, minced)
- 1 can black beans (15.5 ounce can, rinsed and drained)
- 2 cups tomato (chopped)
- 1 red bell pepper (medium, chopped)
- 1 green bell pepper (medium, chopped)
- 2 green chiles (fresh, minced, to taste)
- black pepper (to taste)

Oelke, E.A. et al. Quinoa. Alternative Field Crops Manual. https://hort.purdue.edu/newcrop/afcm/quinoa.html. Published 2017. Accessed January 31, 2017.

Quinoa: An In-Depth Guide. Body Ecology. http://bodyecology.com/articles/quinoa\_benefits\_guide.php. Published 2013. Accessed January 31, 2017.

Quercetin. University of Maryland Medical Center. http://umm.edu/health/medical/altmed/supplement/quercetin. Published October 2015. Accessed February 1, 2017.

Quinoa. The George Mateljan Foundation. http://www.whfoods.com/genpage.php?tname=foodspice&dbid=142. Accessed January 31, 2017.

Food Chemistry. Review on Dietary Flavonoid Kaempferol. http://www.sciencedirect.com/science/article/pii/S0308814612019176. Published June 2013. Accessed February 1, 2017.



Article Resources:

### What is Rutgers Cooperative Extension?

### Part 2 – The Start of Something Great... The Start of Extension



Rebecca Huber: Marywood University Dietetics Intern Luanne J. Hughes, MS, RDN: FCHS Educator, Gloucester County Kayla Wilson: Lenoir-Rhyne Dietetics Intern

In Part 1 of this series, we presented an overview of how land-grant institutions such as Rutgers, the State University of New Jersey, were designated. Next, join us as we look in-depth at Cooperative Extension, both nationally and in New Jersey.

#### Historically Speaking...The Link Between Extension & Land-Grant Universities

Cooperative Extension was established with approval of the Smith-Lever Act in 1914. The Smith-Lever Act was created to close the gap between education, resources and the public. It established a partnership between agricultural colleges and USDA, which today enables land-grant universities, such as Rutgers, to share research and education with consumers.

The Department of Agriculture Reorganization Act of 1994 merged the former Cooperative State Research Service and the former Extension Service into a single agency — the Cooperative State Research, Education, and Extension Service.

The 2008 Farm Bill established NIFA (National Institute of Food and Agriculture) to take the place of the Cooperative State Research, Education, and Extension Service. NIFA is responding to changing times and landscapes, addressing 21st century challenges such as:

- Food security
- Climate change
- Natural resource and environmental sustainability
- Sustainable energy
- Childhood obesity prevention
- Food safety

#### Extension Today...

Now, after more than one hundred years, there are approximately 3,000 Extension offices throughout the country. Services offered by Cooperative Extension include agriculture and natural resources, community and economic development, family and consumer sciences and 4-H youth development.

Each of New Jersey's twenty one counties hosts a Rutgers Cooperative Extension (RCE) office, supported by collaborative agreements between Rutgers, the USDA and individual County Boards of Chosen Freeholders.

#### **RCE...Serving New Jersey Consumers**

New Jersey is one of the most ethnically and religiously diverse states in the country. It boasts rural agricultural landscapes, but also heavily populated urban areas and sprawling suburbs. Such diversity creates a need for diverse services – which Cooperative Extension provides. Not every RCE office offers the same services. Rather, RCE and FCHS adapt programming to focus on local needs that are unique to the residents in each county. Each of RCE's three units – Agriculture and Resource Management, 4-H and Family & Community Health Sciences (FCHS) – works to provide research and education on a variety of issues within the community. In the next issue of Visions, we'll continue this series and take a look at how Rutgers Cooperative Extension and FCHS reflect the individual needs of the local community, while addressing issues of statewide relevance.



### Part 3 – Family and Community Health Sciences (FCHS) -The Best Kept Secret We Want You to Know

Kayla Wilson: Lenoir-Rhyne Dietetics Intern Luanne J. Hughes, MS, RDN: FCHS Educator, Gloucester County

**In Part 2** of this series, we explored the link between Cooperative Extension and how it impacts our communities today. For this next installment, we will look in-depth at the Family and Community Health Sciences (FCHS) portion of Rutgers Cooperative Extension and learn about the resources FCHS offers.

#### What is FCHS?

FCHS is one of the four parts of the Cooperative Extension model. The mission of FCHS is to promote health and wellness through education, research and collaboration with outreach in food, nutrition and healthy lifestyles. At FCHS, family (in all forms) is considered the cornerstone of a healthy society and, thus, the target of all of FCHS programs. The programs and resources that FCHS offers to the community vary county to county, based on need and applicability.

On a larger scale, all FCHS goals translate the larger overarching wellness goals of the National Institute of Food and Agriculture (NIFA). This includes addressing: childhood obesity, food safety and global food security and hunger. On the local scale, FCHS targets wellness programming to the diverse needs of each county's local needs.

#### What Does FCHS Do Within the Community?

FCHS achieves its' mission of promoting healthy families, schools and communities through the implementation of resources and programs throughout the state. Through leadership, collaborative efforts, research, science and evidence-based education, FCHS fosters a culture of health and wellness for New Jersey residents of all ages. FCHS outreach covers a broad area of consumer needs, which includes:

- Educational opportunities on nutrition and wellness for chronic disease prevention
- Professional development programs for teachers, nurses, school administrators and school nutrition professionals
- Worksite wellness programs and resources for local businesses and companies
- Resources for early care centers and schools to develop healthier school environments

To foster the needs of wellness in individual communities, FCHS offers education, research, and outreach through a variety of platforms that include:

- Online webinars, lessons, fact sheets and county newsletters
- Instructional cooking videos on YouTube and Vimeo
- Research and evidence-based curricula
- State-wide Visions quarterly newsletter https://njaes.rutgers.edu/pubs/visions/
- Workshops, presentations and classroom instruction
- Social networking platforms (Facebook, Twitter)
- Service on community councils and boards
- Participation on state-wide and local initiatives
- School garden and wellness support

#### How can I utilize the FCHS resources?

At FCHS, the ultimate goal is helping all of those within the community achieve health and wellness. FCHS has programs and resources for everyone...adults, youth, schools, community groups, even worksites. To learn more about what FCHS brings to thousands of New Jersey consumers each year, visit njaes.rutgers.edu/FCHS today and link to your local Cooperative Extension/FCHS office to access free state-wide resources.

In upcoming issues of *Visions*, we'll continue this series and showcase individual FCHS offices. We will highlight Family & Community Health Sciences Educators and learn about the programs and resources offered within local communities throughout New Jersey.

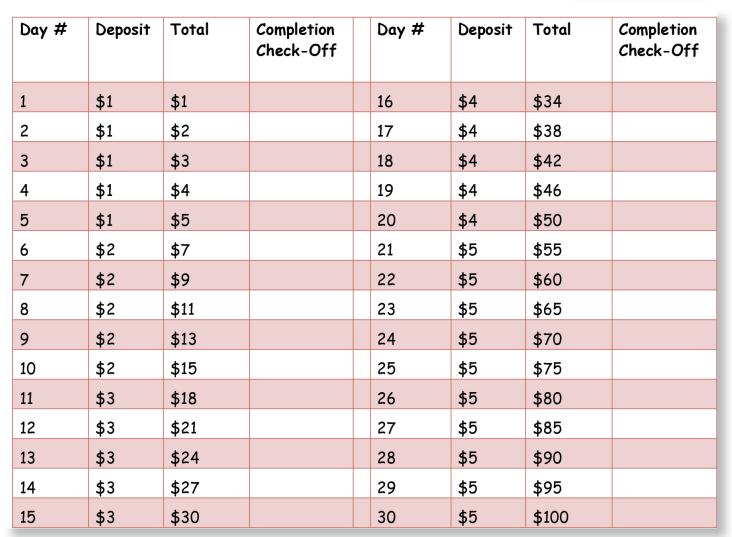


### Challenge Yourself to Save \$100 in 30 Days

Barbara O'Neill, Ph.D., CFP<sup>®</sup>, Financial Specialist, Rutgers Cooperative Extension



The goal of the 30 Days of Saving Challenge is simple: save \$100 in a 30-day time period through a series of gradually increasing deposits. As shown in the picture below, daily savings deposits start at \$1 a day and do not increase beyond \$5 a day. Once the monthly savings goal is reached, the Challenge can be repeated on a month-to-month basis for total annual savings of \$1,200. When the Challenge starts to feel "easy," it can be scaled up by doubling or tripling the daily savings amounts.





For a print copy of the 30 Days of Saving Challenge worksheet, see http://www.slideshare.net/BarbaraONeill/30-day-100-savings-challenge-0416





### Caffeine and Added Sugars - How much are you drinking?

Sarah Pattison, 2017 Dietetic Intern, Montclair State University

According to the Food and Drug Administration (FDA), 90% of people worldwide consume caffeine in one form or another. In the United States alone, 80% of adults drink caffeine every day and the average daily intake is about 200 mg<sup>1</sup>. To put this into perspective, 8 oz or 1 cup of coffee has approximately 100 mg of caffeine<sup>2</sup>. The 2015-2020 Dietary Guidelines recommend that individuals who regularly use caffeine consume no more than three to five 8 oz cups per day, or up to 400 mg of caffeine. If you drink more than 4 cups of caffeinated coffee a day (or the equivalent) and you're experiencing side effects such as: migraine headache, insomnia, nervousness, irritability, restlessness, frequent urination or inability to control urination, stomach upset, fast heartbeat, or muscle tremors, your body may be indicating this level is not healthy. An abrupt decrease in caffeine may cause withdrawal symptoms, such as headaches, fatigue, irritability and difficulty focusing on tasks. Cut back the amount of caffeine ingested daily. Fortunately, these symptoms are usually mild and are resolved after a few days.

So what does an 8 oz cup of coffee look like? At Dunkin Donuts, there are four sizes of hot beverages. A small size is 10 oz, medium is 14 oz, large is 20 oz and an extra large is 24 oz. On the other hand, a short or small size at Starbucks is only 8 oz, a tall size is 12 oz, grande is 16 oz and a venti is 20 oz. So it is easy to consume too much caffeine from large size beverage portions.

While an 8 oz cup of "black" coffee contains only 2 calories, many of us prefer to add various sweeteners or milks. This is where the calories can really begin to accumulate. The Dietary Guidelines recommend taking these added sugars into consideration as they tend to be hiding in these beverages<sup>3</sup>. For instance, 1 tablespoon of cream is about 50 calories, 1 tablespoon of sugar adds 48 calories and 1 teaspoon of honey or agave can add another 21 calories. Let's not forget about the sweetened specialty drinks such as mochas, lattes and the blended ice coffees. These beverages can yield approximately 200-500 calories per drink from added sugars.

Some people may choose to use sugar substitutes to avoid the excess sugar in caffeinated beverages. These "low calorie" sweeteners can add sweetness without contributing to extra calories. Additionally, they are at least 100 times more intense than regular sugar, so only a small amount is needed. The FDA has approved six non-nutritive sweeteners on the market and these include: acesulfame potassium, sucralose, neotame, advantame, aspartame and saccharin. You may know them as Sweet One, Splenda, Equal or Sweet N Low<sup>4</sup>. The seventh sugar substitute that you



http://www.health.harvard.edu/ staying-healthy/a-wake-up-call-on-coffee

Sweetener Name	Brand Names: Found in Stores
Acesulfame Potassium	Sunett
	Sweet One
Aspartame	Nutrasweet
	Equal
Neotame	N/A
Saccharin	Sweet 'N Low
	Sweet Twin
	Sugar Twin
Sucralose	Splenda
Stevia/Rebaudioside A	A Sweet Leaf
	Sun Crystals
	Steviva
	Truvia
	PureVia

http://www.diabetes.org/food-and-fitness/ food/what-can-i-eat/understandingcarbohydrates/artificial-sweeteners/

may be familiar with is stevia and the FDA has identified this product as generally recognized as safe for consumption.

Although it is known that sugar substitutes are safe for use in adults, there is limited research with regards to use in children. Thus, the American Academy of Pediatrics has no current recommendations for this age group. However, when it comes to children and caffeine, avoiding use altogether is encouraged. This includes caffeinated sodas and other beverages such as sports drink and teas. Because caffeine is distributed throughout the body including to the brain, studies have shown that consumption among children has been linked to harmful effects on the development of neurological and cardiovascular systems. As a result, it is advised that children primarily consume water, 100% fruit or vegetable juice or low-fat milk as part of a healthy eating pattern.

So the next time you stop into your local coffee shop for a caffeinated beverage, remember the caffeine and hidden calories and choose wisely.

#### References

Amercian Diabetes Association. Low Calorie Sweeteners. http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/understanding-carbohydrates/artificial-sweeteners/ Accessed January 27, 2017. American Academy of Pediatrics. Sweeteners and Sugar Substitutes. https://www.healthychildren.org/English/healthy-living/nutrition/Pages/Sweeteners-and-Sugar-Substitutes.aspx Accessed January 27, 2017. American Academy of Pediatrics. Kids Should Not Consume Energy Drinks and Rarely Need Sports Drinks, Says AAP. https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/Kids-Should-Not-Consume-Energy-Drinks,-and-Rarely-Need-Sports-Drinks,-Says-AAP.aspx Accessed January 27, 2017.



Johns Hopkins University. Caffeine has positive effect on memory, Johns Hopkins Researchers say. http://hub.jhu.edu/2014/01/12/caffeine-enhances-memory/ Accessed January 27, 2017. Harvard Medical School, School of Public Health. Ask the expert: Coffee and Health. https://www.hsph.harvard.edu/nutritionsource/2015/02/23/ask-the-expert-coffee-and-health-2/ Accessed January 27, 2017. Academy of Nutrition and Dietetics. Then and Now: How the Dietary Guidelines for Americans Changed from 2010 to 2015. http://www.eatrightpro.org/resource/news-center/in-practice/research-reports-andstudies/dga-then-and-now Accessed January 27, 2017. Amercian Diabetes Association. Low Calorie Sweeteners. http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/understanding-carbohydrates/artificial-sweeteners/ Accessed January 27, 2017.

### Current Food Trends - continued from page 1

• **Plants Primary on the Plate** – People are swapping animal foods for plant foods more frequently such as a soy burger instead of a beef, chicken or turkey burger. Plant-based options of meat products continue to increase on supermarket shelves. A new generation of faux meats including frozen entrees in supermarkets and plant options on restaurant menus are available.



• Portion Sizes are Important – Portion control in both what you eat and how much you eat helps to control calories. One way to break the habit of eating overly large portions is to form a new, smaller plate size habit. Some ways to limit portion size includes: using smaller plates, buying pre-packaged portions, preparing food ahead of time and/or sharing large menu items. Let your environment do the work for you and over time, small portions will become a habit.

**Try to incorporate some of the food trends described above into your lifestyle this year.** Also make sure that you increase your vegetable intake through consumption of salads, soups, main dishes and snacks that include green, yellow, red, orange, purple and white vegetables. Increase fresh fruits in your diet as well. Following these recommendations will ensure you get plenty of fiber, vitamins, and minerals that are essential for good health.