



# Wellness Matters

A fresh look at health, nutrition and food safety brought to you by Nancy Gal, UF/IFAS Extension Agent IV



To sign up for this newsletter [click here.](#)

OCTOBER 2014 | VOLUME 5, ISSUE 4

## Timely Tips

### Have You Had Your Flavonoids Today?

Do you know there are many more substances in our food besides vitamins, minerals, protein, fat, carbohydrate and water that are beneficial for good health? Flavonoids, a group of naturally occurring plant chemicals, generally known as phytochemicals, have been shown by some researchers to have health benefits. There are greater than five million flavonoid compounds that exist in plants. Flavonoids can be found in fruits, vegetables, grains, bark, roots, stems, flowers, tea and wine. Those that are found in food are classified into six groups. The six groups are: flavonols, anthocyanidins, isoflavones, flavan-3-ols, flavones and flavonones. Some function as antioxidants in the body. Antioxidants protect our cells from oxidative stress that can cause cell damage. Research has shown a connection between oxidative stress and health problems such as heart disease, stroke, high blood pressure, Parkinson's disease, Alzheimer's disease, lung diseases, arthritis and muscular dystrophy. Fruits and vegetables are our main dietary sources of flavonoids and are rich in antioxidants. Take a closer look at flavonoids on page 4; Check out the different types, rich food sources and their health benefits.

Fruits and Vegetables are rich in flavonoids ~ Another reason to eat a plant-based diet.

#### INSIDE THIS ISSUE:

*Timely Tips*  
Have You Had Your Flavonoids Today? 1

*Upcoming Events* 1-2

*News You Can Use*  
UF/IFAS Nutrition Research in Marion County 2

*Produce Picks*  
Edamame 3

*Cuisine Corner*  
Colache - Mexican Dish 3

*A Closer Look ...*  
Food Sources and Health Benefits of Flavonoids 4

*Holiday Buffets ~*  
Tips To Keep Food Safe 5

#### UPCOMING EVENTS

Diabetes Support Group  
Mt. Moriah Baptist Church  
Oct. 2, Nov. 13, and Dec. 11  
2:00 p.m. - 3:30 p.m.  
For information, call May Stafford,  
R.N. at 352-629-3782

The New Food Label  
Forest Public Library  
October 13  
11:00 a.m. - NOON  
Call 352-438-2540 to register.

[Facts about Antioxidants](#); [Facts about Flavonoids](#)  
UF/IFAS Extension  
[Flavonoids—Phytochemical Information Center](#)  
Produce For Better Health Foundation



## UPCOMING EVENTS

### ServSafe® Food Manager's Training and Exam

UF/IFAS Extension Marion County  
2232 NE Jacksonville Rd.  
Ocala, FL 34470

Nov. 6  
8:45 a.m. - 4:00 p.m.

Pre-registration required.  
Call 888-232-8723  
Cost: \$110 for class & exam  
\$165 for class, book & exam

### Holiday Food Safety

Forest Public Library  
Nov. 3  
11:00 a.m. - NOON  
Call 352-438-2540 to register.

### Healthy Holiday Eating for People with Diabetes\*

Auxiliary Center  
Nov. 14  
9:00 a.m. - 10:30 a.m.

### Holiday Food Safety\*

Collins Resource Center  
Dec. 15  
9:00 a.m. - 10:30 a.m.

Munroe Regional Medical Center  
Prestige 55 Program \*  
Please call 352-671-2153 for more information and to register.

## News You Can Use

### Interested in Participating in UF/IFAS Nutrition Research? *Look What's Happening in Marion County ...*

In recent months, Dr. Wendy Dahl, and students from the Food Science and Human Nutrition Department at the University of Florida/IFAS have been taking nutrition research into Marion County communities and more studies are planned. This research initiative is in collaboration with Nancy Gal, UF/IFAS Extension Agent who is coordinating efforts in the county. One study that is currently being conducted is exploring nutritional risk, chewing and swallowing problems, and handgrip strength in adults over the age of 60 years. This study is being carried out at all Marion Senior Services congregate meal sites. In 2015, the researchers will be

exploring the role of increasing fiber through group education on wellness of individuals with chronic kidney disease, a condition that affects more than one in 10 Americans. Planning is also underway to explore the health effects of high protein diets in older adults.

## Nutrition Research

## University of Florida

Nutrition Education Study Volunteers Needed



- You will receive dietary education involving ways to increase your fiber consumption to the recommended daily amount
- Purpose: determine the effectiveness of a community education program on fiber intake, uremic symptoms and quality of life in individuals with chronic kidney disease
- Study length: 10 weeks
- Compensation will be provided

Approved by  
University of Florida  
Institutional Review Board 02  
Protocol # 2013-U-0820  
For Use Until 09/9/2015



Please call 352-263-9136

## Nutritional Value edamame

1/2 cup frozen, prepared

|           |         |
|-----------|---------|
| calories  | 95      |
| protein   | 8 g     |
| fat       | 4 g     |
| carb      | 8 g     |
| fiber     | 4 g     |
| folate    | 241 mcg |
| potassium | 338 mg  |
| sodium    | 5 mg    |

Key:

|     |                     |
|-----|---------------------|
| g   | grams               |
| mg  | milligrams          |
| mcg | micrograms          |
| IU  | International Units |

### Never had Edamame?

Below are easy instructions for basic preparation.

#### Ingredients:

fresh green soybeans in the pod water

#### Directions:

1. Clean the pods by placing in a colander; remove dirt and debris and rinse several times under running tap water.
2. Boil for about five minutes.
3. Drain the beans and cool them under running water.
4. **DO NOT EAT THE POD— ONLY THE BEAN IS EDIBLE.**
5. Gently squeeze the pod to remove the beans.

**FIRST COOK** the pods before removing the beans. It is very difficult to expel the beans from the raw pod.

## Produce Picks

Edamame is a large-seed soybean (legume) that grows in pods. It is from the same species as field soybeans, but has been specifically bred to produce larger seeds with different characteristics for fresh consumption. Actually, it is an immature or “fresh” soybean, commonly known as a “green vegetable soybean.” Edamame has a soft, smooth consistency with a slight sweet flavor. After brief cooking, it is ready to eat. In contrast, mature soybeans are hard and must be properly rehydrated by a longer cooking process to soften the beans before eating. Edamame is an excellent source of plant protein and very popular among vegetarians and non-vegetarians. In addition to being nutrient-dense, edamame is easier to digest than mature soybeans. This is appealing for many people that can't tolerate other types of legumes. Quick and easy to prepare, edamame goes well in a variety of dishes. Starting with roasted garlic edamame spread, to Greek-style edamame salad, an entrée of chicken and edamame couscous and finally dark chocolate coated roasted edamame for dessert. Try the recipe below for a delicious blend of edamame and vegetables.

## Cuisine Corner

### Colache~ A Mexican Zucchini Dish

#### Ingredients:

- 1 Tbsp. vegetable oil
- 1 small onion, chopped
- 2 medium zucchini, chopped in ½ inch cubes
- 2 cups frozen corn or fresh corn kernels removed from the cob
- 1 cup shelled *EDAMAME*
- ½ cup water
- 2 medium tomatoes, chopped
- 1 ½ tsp. dried oregano
- ½ tsp. salt and ¼ tsp. pepper

1. Heat the oil in a large nonstick frying pan over medium heat. Sauté the onion until soft, but do not brown.
2. Stir in the zucchini, corn, edamame and water. Cook, stirring occasionally, until the zucchini and corn are almost tender. If necessary, add a little more water.
3. Stir in the tomatoes and season with the oregano, salt and pepper. Cook just long enough to heat through. Serve hot.

Makes 4 cups -1/2 cup servings

Per serving : 90 calories, 4 g protein, 13 g carbohydrate, 3 g fat and 3.4 g fiber

[National Soybean Research Laboratory/ University of Illinois at Urbana –Champaign](#)



## ~Flavonoids~

### Common Food Sources

#### Flavonols:

kale, onions, broccoli  
apple, with skin



#### Anthocyanidins:

blueberries  
sweet cherries  
cranberries  
red cabbage



#### Isoflavones:

edamame  
soynuts and soy milk



#### Flavan-3-ols:

black tea, brewed  
blueberries  
dark chocolate  
red wine



### General Information About Flavonoids

#### Flavonols

- Most abundant flavonoid found in food.
- May reduce risk for heart disease.
- Found in small amounts primarily in fruits and vegetables.

#### Anthocyanidins

- These substances are responsible for the red, blue and purple color in many fruits and vegetables.
- They are potent antioxidants that help guard the body from free radicals. Free radicals harm healthy cells.
- Anthocyanidins neutralize free radicals which helps reduce oxidative stress on the body and cell damage.
- The anthocyanidin content of fruits and vegetables is greatest in fresh and raw selections of these foods.

#### Isoflavones

- Are found primarily in soybeans and soy products.

#### Flavan-3-ols

- They are potent antioxidants, as are anthocyanidins, and may have heart health promoting properties.

#### Flavones and Flavanones

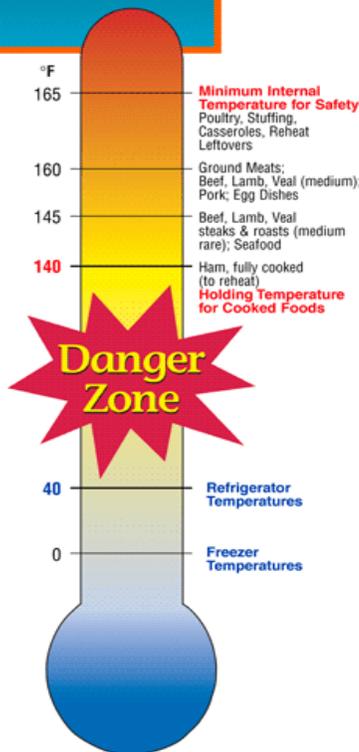
- Both of these compounds have been classified as types of flavonoids, however more research needs to be done concerning their potential health benefits.

*While research continues to investigate the potential health effects of flavonoids, consuming fruits and vegetables (many naturally contain flavonoids) also have important vitamins and minerals and are part of a healthy diet.*

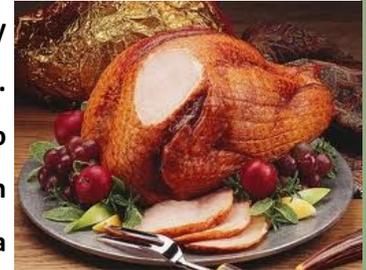
# Holiday Buffets

Buffet-style meals work well with a small intimate group or a large crowd. They offer a more creative dining experience for the guest and tend to be easier for the host.

Harmful bacteria can grow rapidly in the "Danger Zone."



The holiday season is peak time for entertaining. Buffet-style meals are popular because of the variety of foods and opportunity for both adults and youth to “create their own plate” based on personal preference. With so many different cuisines ~ buffets not only satisfy your appetite, but can be a fun experience. And for guests with special dietary needs, a buffet offers an assortment of food choices that usually includes acceptable options, especially if the host is notified prior to the meal. With so many people being more health-conscious, buffet-style meals let people choose their favorite foods in the portions they want without being stuck with little or nothing to eat. While “food buffets” are a fun way to serve meals to family and friends, it does require a watchful eye on safe food handling to prevent it from turning into a “germ buffet.” Some microorganisms, such as bacteria, viruses, parasites and fungi can cause foodborne illness. You can’t see, taste or smell these microorganisms. However, if they get on food and the conditions are just right for them to grow and multiply they can cause illness. No matter the occasion or how it is served, food must be handled properly to reduce risk of foodborne illness. So, while you are planning the menu for your next buffet, consider not only what you will be serving, but how you will serve the food to keep it safe.



## Food Safety Tips for Buffets

- ◆ Before placing on the buffet table, maintain proper temperature of both cold and hot foods. Cold food should be kept refrigerated at 40 °F or lower and hot food in the oven at 140 °F or higher.
- ◆ Cold food platters that will be on the buffet table for more than two hours should be placed on ice to keep cold to maintain refrigerator temperature.
- ◆ Hot foods must be maintained at 140 °F or higher while on the buffet table. Make sure the food warmers are able to maintain adequate temperature.
- ◆ Use a food thermometer to monitor food temperatures.

Respect the Danger Zone:  
Practice the Two-Hour Rule

- ◆ The danger zone is the temperature range between 40 °F and 140 °F at which microorganisms grow most rapidly.
- ◆ Discard all perishable food left out at room temperature for more than two hours unless kept cold or hot.

# Meet the Agent

**Nancy Gal, Family and Consumer Sciences Agent IV, has been on the faculty of the University of Florida/IFAS Extension in Marion County since 1987. She teaches health, nutrition and food safety to adults and youth ~ promoting wellness and disease prevention. Her areas of specialty include type 2 diabetes, pre-diabetes, cardiovascular disease, weight management, and food safety. Nancy is well known for her diabetes education programs and has served on the Florida Diabetes Advisory Council and Florida Alliance for Diabetes Prevention and Care. Her professional accomplishments include international, national and state recognition for her work with Dr. Linda Bobroff, UF/IFAS Extension Nutrition Specialist, on the development of the UF/IFAS Extension's [Take Charge of Your Diabetes](#) program.**

## **What is Extension?**

**Extension is a partnership between state, federal and county governments to provide scientific knowledge and expertise to the public. The University of Florida, together with Florida A&M University, administers the Florida Cooperative Extension Service.**

**University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) is a federal, state, and county partnership dedicated to developing knowledge in agriculture, human and natural resources, and the life sciences, and to making that knowledge accessible to sustain and enhance the quality of human life.**

**At the University of Florida, Extension is located in the Institute of Food and Agricultural Sciences (IFAS) and is called UF/IFAS Extension. The College of Agricultural and Life Sciences (CALS) and the Florida Agricultural Experiment Station are also located at Extension.**



**[UF/IFAS Extension Marion County](#)  
2232 NE Jacksonville Road  
Ocala, Florida 34470  
352-671-8400**