

Department of Nutrition and Dietetics, University of North Florida

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SNDA *Updates*

As the fall school semester comes closer and closer, the new officers of SNDA are working hard to ensure the 2016-2017 school year is one to remember! Come August, we will announce the meeting dates and events that we have planned for the upcoming school year. We look forward to meeting everyone and if you have any questions or suggestions for us, please contact the President, Dwayne Swinton, anytime via email at

dswinton123@gmail.com

We hope everyone is having a great summer and are looking forward to another great year!



The Truth *About Sugar*

Arlo Taylor

Sugar is a touchy word in the health and fitness world. Cynthia Kenyon, a famous molecular biologist once said, "Sugar is the new tobacco". This was said a bit after noticing that her experimental worms had a shorter life span when given small amounts of sugar. She then started a low glycemic index diet as well as a no sugar diet (except dark chocolate). Mrs. Kenyon may follow a strict diet, but if one has no medical problems, it is not necessary to follow similar diets. Sugar is not as unhealthy as many people believe it to be.

For years, people say that sugar is a nutritional evil and should not be ingested but there is no proof that sugar causes problems. Just like almost every food out there, too much sugar will cause health problems in the long run but being scared of sugar is an unhealthy way of thinking. Chemically speaking, all sugars will break down into simple forms to be used by the human body.

What the average American doesn't realize is the amount of sugar they are ingesting every day. According to dosomething.org, "only 3 in 10 Americans believe that all sources of calories play an equal role in weight gain". Americans also eat 31% more packaged food than fresh food. In the

last 50 years, portion sizes and caloric intake also increased significantly. Just from this, it is safe to say that the increase in obesity and other health problems come from the increased amount of calories (which do not come from fresh food).

The American Heart Association recommends the average person to only ingest about 150 calories of extra sugar for men and 100 calories for women per day. One thing to notice is that this is for the average person. For athletes and other people who participate in intense exercise, it is okay to increase caloric/sugar intake. A study by Neil D. Clarke and Michael J. Duncan found that given a certain amount of orange flavored carbohydrate solution, badminton athletes tend to have less fatigue as well as increased accuracy in their shots. This experiment also included caffeine in the solution so the caffeine also helped the athlete. Another study done by Ana Peinado, Miguels, Rojo-Tirado, and Pedro Benito concluded that increased carbohydrate (sugar) diets help athletes with muscle soreness, fatigue, and athletic performance. These are just a few studies that show how eating sugar helps with athletic performance and weight maintenance.

Although sugar is not evil (especially because it is in almost every carbohydrate containing food), not every sugar is created equal. Having more complex carbohydrates is definitely important. Fruits, vegetables, and whole grain bread tend to give the complex carbohydrate image and white sugar tend to give the simple carbohydrate image. It takes longer for complex carbohydrates to break down to its simplest forms of sugar but they also contain phytonutrients, antioxidants, and other micronutrients that help keep the body healthy. There are also studies done on natural sugars and lab-made sugars where lab-made sugars tend to make the body store more fat cells. In

the end, that is why the American Heart Association recommended only eating 100-150 calories of added sugar per day. Sugar will always be “sugar”, but this does not mean an athlete should gobble down snicker bars during an intense workout. Instead, eating a banana and a small salt infused candy (very popular in Japan) would be a much better option.

What readers should take away from this is that athletes should not shy away from sugar and calories. Registered Dietitian Angela DuFour claims that, “diet histories reveal that 50 percent of athletes are not getting enough total energy, with the majority of the

deficit coming from carbohydrates (CHOs)”. As athletes, eating a little bit more added sugar than the average person will not compromise their health, and eating more fruits, vegetables and healthy grains is definitely recommended. With sugars, it is all about moderation. If an athlete ate too much sugar the past three days, cut some out for at least 3 days. At the end of the week, it will even out. The same goes for the average person. Athlete or not, moderation is the key to a healthy lifestyle.



Student *Spotlight*

This month, I had the privilege of talking to the new assistant director of Lend-A-Wing, Dawn Dragone. During this interview, Dawn informs us on the services Lend-A-Wing has to offer and how the student body can become more involved to assist in such a great organization!

Sara Boyd

SB: For readers who are not aware, can you explain what Lend-A-Wing is and why it is important to the student's at UNF?

DD: Our mission: "The Pantry is staffed by UNF students for UNF students; dedicated to serving the basic needs of the students at the University of North Florida. Items may include food and hygienic supplies, provided anonymously and at no cost to the student. Through this service we help foster continued academic success and increase retention for students in need." We are located in Hick's Hall Bldg 53 Room 1202, right across the hall from One Stop.

SB: How can students utilize all of the great benefits Lend-a-Wing has to offer?

DD: Follow us on Facebook to stay up to date on our current hours, drives, and events. I'd also suggest stopping into the Pantry regularly if possible! Students are able to come in and shop for up to 5-6 pounds (varies by semester) of free food every day that we are open. In addition to food, we have toiletries, gently used housewares and school supplies, and name brand business professional and casual clothing from Ozzie's Closet which we recently acquired from Career Services. We also have a partnership with Ogier Gardens to provide fresh and organic produce to students at the Pantry. We post the dates we have produce on Facebook so check often to make sure you get some while we have it!

SB: When did you know you wanted to take on the role as the Assistant Director of Lend-A-Wing and what has been your biggest challenge?

DD: I initially got involved with Lend-A-Wing as a volunteer in the Spring 2016 semester to fulfill a class requirement for Community Nutrition. It didn't take long for me to fall in love with it. I was raised in a single parent home and I dealt with food insecurity growing up. My family received a lot of help from local churches and community groups similar to Lend-A-Wing. Those acts of generosity and kindness have stuck with me all these years later and I will never forget the impact it made on my life. I had been looking for a way to get more involved on campus and I knew right away Lend-A-Wing was where I belonged. While I have only been in my new position for a couple months, my biggest challenge has been tackling the issue of campus awareness. Many students and faculty simply do not know that we even exist. We are working very hard to spread the word about what Lend-A-Wing is and what it offers so that we can help as many students as possible.

SB: During the next year as Assistant Director, what do you hope will be accomplished and why?

DD: Aside from raising overall awareness on campus to help reach more students who can benefit from Lend-A-Wing's services, I would like to use Lend-A-Wing as a means of educating students about proper nutrition and promote both a healthier lifestyle and mindset, even on a tight college student budget. As a Nutrition student and future Registered Dietitian (hopefully!), I want to use any means I have available to see that become a reality for my peers. There is a huge need on this campus, from homelessness and food insecurity to general lack of nutrition education. I want to be a part of helping meet that need.

SB: Are you currently planning any special events that students and faculty members can look forward to in the upcoming Fall2016 semester?

Yes! We will be hosting monthly themed food drives throughout the Fall semester. They are as follows:

July – “Grains of Freedom” ...breakfast cereals, oatmeal, granola bars, pasta, rice, crackers, etc.

August – “Set To Soar” ...school supplies

September – “Reach For The Fruit” ...canned/package fruit

October – “Dare To Care” ...snacks/convenience foods

November – “Meat The Need” ...canned meats/proteins

December – “Fill Our Cups With Season's Good Cheer” ...hot & cold beverages/drink mixes

We will have fun and informative nutrition-based workshops to coincide with many of these monthly drives for any students and faculty interested in attending. Additionally, we are excited to be partnering with the Athletics Department at some of the home games against JU in September and October. We will announce our most needed food items closer to game time and the first 200 people that come to the game with one or more of those items will receive free goodies like t-shirts, foam fingers, water bottles, and reusable bags!

SB: What are some ways that students can become involved with Lend-A-Wing and help people in need?

Come into the Pantry or over to the Ogier Gardens and volunteer. There's always work that needs to be done behind the scenes and we can use all the hands we can get! If you have the means, we always gratefully accept donations. If you're unsure what to give, you can use our current drives as a general guideline or email me at lawa-dir@unf.edu and I will be happy to suggest some much needed items! Lastly, SPREAD THE WORD! You never know who might need the help. The more students that know about Lend-A-Wing, the better!



Nicaraguan *Cuisine*

Marla Morgan

From arroz con pollo (Puerto Rico), to bandeja paisa (Colombia), to enchiladas (Mexico), Latin cuisine encompasses a giant repertoire of variety. Think: Central America, South America, Puerto Rico, and Spain. That means 21 countries and hundreds of variations of food!¹ As a Latin American with TONS of Latinos in my family, I have had the privilege of experiencing a variety of authentic cuisine from several countries. Writing about all Latin cuisine would probably take up this entire edition of *NutrInews* (which in my opinion would be very cool!); therefore the focus of this article will be on cuisine from a less popular country: Nicaragua.

Located in Central America, Nicaraguan cuisine shares similarities with cuisine from Mexico, Honduras, and Guatemala.² Similar dishes include variations of rice and beans, tamales, and corn tortillas. Staples items for Nicaraguans are rice, beans, meat, an array of vegetables, and corn tortillas. Corn is essential in the diet of Nicaragu-

ans. It has had a huge influence on the Mayan, Quiche, and Inca civilizations. In fact, several legends exist about it: Quetzalcoatl, a mythical figure and hero and guide to Mesoamerican people, placed corn on the lips of the first man and woman so that they may “work and think.”² Corn has since developed to become the root of many Nicaraguan dishes. It can be found incorporated into dishes exclusively or as a mixed ingredient. Examples include chilotes (baby corn), corn tortillas, nacatamales, albondigas (dumplings), buñuelos with honey, perrerreque, rosquillas, hojaldras, viejitas, relLENas, Jinotegan pupusas, pozol, pinolillo, chichi, and tiste.³ As you can see, this is a lot!

I had the pleasure of interviewing my grandparents and mother which are all natives of Nicaragua. They were able to elaborate on typical dishes and beverages. Flavor is a big thing in Latin American cooking and each country or region has its own flavor that distinguishes it from others. According to my family, typical Nicaraguan flavors include mint, cilantro, chili peppers, tomatoes, onions, garlic, achiote, and ancho chili peppers. I was so lucky to be educated on Nicaraguan cuisine by true Nicaraguans. After all, what better information than from those who have actually lived and experienced it?! The following list comprises meals they thought of upon me asking: What is typical Nicaraguan cuisine?:

- o Gallopinto, commonly eaten for breakfast, is a dish made of rice



and beans. What makes this unique is that the beans specifically have to be small red beans, also known as Central American beans. The rice and beans are first cooked separately and then cooked in the same pot until the flavors mix and the texture becomes crisp.⁴ I attached a recipe since this is so simple, yet flavorful and easy to make. This dish pairs well with a fried egg, sweet plantains, white bread, and coffee. Voilà! Breakfast.

- o Various meat & vegetable stews are common to eat in Nicaragua. More specifically, *sopa de mondongo* is a popular stew that consists of cow stomach and vegetables. Very important to Nicaraguans, it is believed that this dish has healing powers. It is commonly served with tortillas and avocado.⁵
- o Nacatamales: We're all familiar with Mexican tamales. But did you know that many countries have their own variations and that hundreds exist? Nacatamales are distinct in that they are made of corn dough, are larger, and are steamed in banana leaves.⁶ They are popularly enjoyed during the holidays and big events,⁷ but according to my Grandma they can be eaten once a week, usually on the weekend. I remember eating these with my family in Guatemala and my grandpa requested black coffee and white bread. I stumbled upon several informative websites saying that yes, this is a thing. Nicaraguans LOVE eating their nacatamales along with black coffee (or coca cola) and white bread. See attached recipe.*
- o What about the beverages?! For that, I bring you to pinolillo, aka one of the tastiest drinks you will ever experience. Hailed as one of the most popular drinks in Nicaragua, citizens enjoy it so much that they often call themselves Pinoleros. Tradition-



ally it is served in a dried gourd shell. This beverage consists of cornmeal and cocoa.⁹ This is *the* thing to try. PLEASE see attached recipe, you will thank me!

- o Vigorón: Alright folks, so this one might sound strange, but trust me it is so delicious. In fact, it is one of my favorite dishes that I have listed. Vigorón, considered to be a “fast food” or snack, consists of boiled yucca and chicharron (crunchy pork rinds) covered in spicy cabbage slaw.⁸

This short list only touches the main points of Nicaraguan cuisine. My grandma went on to list several more dishes just as delicious (perrereque, almibar, platanos en Gloria, baho, guirilas, tiste, pupusas, cajeta, and chicha). I could go on all day about how incredible Nicaraguan cuisine is because it is just that good. Writing this article has made me quite hungry and I cannot wait to visit my family this weekend because they promised me some delicious vigorón!

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The Push for Pulses



By *Tara Kessinger*

What are they?

A pulse is an edible seed that grows in a pod. Pulses included all beans, peas and lentils such as: baked beans, red, green, yellow and brown lentils, chickpeas, garden peas, black-eyed peas, runner beans, broad beans (fava beans), kidney beans, butter beans, haricots, cannellini beans, flageolet beans, pinto beans, and finally borlotti beans.

Why should I include pulses in my diet?

Pulses are a great source of protein. They are also cheap, low in fat, a good source of fiber, vitamins, and minerals, and count toward the recommended five daily portions of fruits and vegetables. Pulses can be particularly important for people who do not get enough protein by eating meat, fish, or dairy products; however, pulses can be a healthy alternative for meat eaters also. Pulses can be added to soups, casseroles, and meat sauces for extra texture and flavor which can help reduce the amount of meat

in the dish to decrease saturated fat content and also trim the grocery budget.

As well as being a good source of iron, pulses are also a starchy food that add fiber to any meal. Eating a diet high in fiber is associated with a reduced risk of heart disease and type 2 diabetes. According to the United Nations' Food and Agriculture Organization, pulses should be eaten by people around the globe as part of a healthful diet to address obesity, as well as to prevent and help manage chronic disease. In addition to the nutritional benefits, pulses are a part of sustainable food production. Pulses come from plants that have nitrogen-fixing properties, which can contribute to increasing soil fertility and have a positive impact on the environment.

How do I cook pulses?

Typically, pulses are bought in either as a canned product or in dried in plastic packaging. Canned pulses have already been soaked and cooked; therefore, need only to be heated and added to any dish. To cut down on the amount

of sodium, be sure to rinse the pulses before adding them to your dish.

Dried pulses need to be soaked, rinsed, and cooked before they can be eaten. Cooking times vary depending on the type of pulse and how old they are, so follow the instructions on the packet or the recipe. Some dried pulses, such as kidney beans and soya beans contain natural toxins. Kidney beans contain a natural toxin called lectin, which can cause stomach aches and vomiting. Thankfully, lectin can be destroyed by proper cooking. When using dried kidney beans make sure to follow these steps (1) soak the dried beans in water for at least 12 hours (2) drain and rinse the beans, then cover them with fresh water, and (3) boil them vigorously for at least 10 minutes, then simmer the beans for 45-60 minutes or until desired tenderness. Soya beans contain the natural toxin that inhibits the digestive enzyme trypsin. Ingestion of this toxin can stop the proper digestion of foods. Again, like lectin, this toxin can be destroyed by cooking. Similar to lectin, the toxin in soya beans can be destroyed by following these three steps: (1) soak the dried beans in water for at least 12 hours, (2) drain and rinse the beans, then cover them with fresh water, and (3A) boil them vigorously for one hour, then simmer the beans for about two to three hours to make them tender.

How should I store pulses?

If you cook pulses and are not going to eat them immediately, cool them as quickly as possible and then put them in the refrigerator or freeze them in an air tight container. As with any cooked foods, do not leave cooked pulses at room temperature for more than one hour as this allows bacteria to grow and multiply, increasing the chances of food borne illness. If you keep cooked pulses in the refrigerator, eat them within two days. Frozen pulses can be stored for a long time; however, keeping pulses frozen for too long can affect their taste and texture.

The year of the pulses!

The year 2016 has been dubbed the International Year of Pulses by the United Nations. Because of their many health and nutritional benefits as well as their role in food sustainability and food security, pulses' popularity has been increasing rapidly worldwide. Yet, many have shied away from eating pulses regularly due to the unwanted abdominal side effects. Pulses are renowned for their effect on the bowels because they contain indigestible carbohydrates. To help with bowel issues, soaking and rinsing dry beans before cooking, and rinsing canned beans in water may help to reduce these hard to digest carbohydrates. Additionally, increasing your intake of pulses gradually may help the body adjust and you may find that these unwanted symptoms subside with time.



Gallopinto⁴

Ingredients

- 1 (16-ounce) bag dried small red or black beans
- Salt
- 7 garlic cloves, peeled
- 1/4 cup vegetable oil, divided
- 1 medium yellow onion, finely chopped (about 1 cup), divided
- 1 1/2 cups long-grain white rice
- 3 cups water or low-sodium chicken broth
- 1/2 green bell pepper, cored and seeded

Directions

For the beans: Spread beans out in a rimmed baking sheet. Pick out any debris and broken beans. Transfer beans to colander and rinse under cold running water. Place rinsed beans in a large pot and cover with cold water; water should cover beans about 3 inches. Let soak for 30 minutes.

Bring to boil over high heat. Reduce heat to medium and simmer beans for 30 minutes. Turn off heat, cover beans, and let rest 1 hour. Bring beans back up to boil over high heat. Add 2 teaspoons salt and garlic, reduce heat to medium, and simmer until beans are tender, 30 to 60 minutes.

For storing the beans, cool completely, transfer beans and some of the cooking liquid to quart-sized zipper-lock bags.

When ready to use, thaw out in refrigerator and heat on stovetop in saucepan or microwave.

For the rice: Heat 2 tablespoons oil in large heavy-bottomed saucepan over medium heat until shimmering. Add 2/3 of onion and cook, stirring, until softened and translucent, about 5 minutes.

Add rice and cook, stirring, until grains are shiny and evenly coated with oil, 2 to 3 minutes. Add water or broth and 1 1/2 teaspoons salt, increase heat to high, and bring to a boil. Place bell pepper on top of rice.

Boil rice without stirring until most of the liquid has evaporated and you can see small bubbles bursting on the surface of the rice. Immediately reduce the heat to the lowest setting, cover, and cook (do not stir, do not remove lid) for 15 minutes. Remove and discard bell pepper. Fluff rice with chopsticks or fork, then let cool and refrigerate for 1 day.

For the gallopinto: Heat remaining 2 tablespoons oil in large saucepan over medium-high heat until shimmering. Add remaining onion and cook, stirring, until softened and translucent, about 5 minutes.

Add rice and 2 cups beans to skillet and cook, stirring, until rice is evenly coated. Continue to cook, stirring, to allow flavors to meld and mixture to become slightly crisp, about 10 minutes. Cover and cook over low heat an additional 10 minutes.



Pinolillo⁹

Ingredients

- White cornmeal -- 1/4 cup
- Milk -- 2 cups
- Water -- 2 cups
- Cocoa powder -- 1/4 cup
- Sugar -- 3 teaspoons
- Cinnamon -- 1/2 teaspoon



Directions

1. Heat a heavy skillet over medium-flame. Spread the cornmeal evenly over the bottom of the skillet. Toast the cornmeal, stirring occasionally, until it is lightly browned and releases its aroma. Remove to a clean spice grinder or blender and process until it is ground to a fine powder.
2. Add all the ingredients to a blender and process until smooth and frothy.
3. Adjust sugar to taste and serve cold over ice. Any solids that settle to the bottom are eaten with a spoon.

Variations

- For a little spice, add a big pinch of cayenne pepper or ground chile piquín. Other spices sometimes added include ground allspice or ground cloves.
- Pinolillo can also be served hot. For a tasty pick-me-up, substitute coffee for the water.

Nacatamales⁶

***Note**, This is not the healthiest of recipes but you get the best flavor by using ingredients such as lard or shortening. Other ingredients can be substituted! (My grandma prefers using olive oil over lard or shortening).

Ingredients

Masa (Dough)

- Masa harina -- 6 cups
- Lard or shortening -- 1 cup
- Salt -- 1 tablespoon
- Sour orange juice (see variations) -- 1/2 cup
- Chicken stock or broth -- 4 or 5 cups

Nacatamal Filling:

- Pork butt, cubed -- 3 pounds
- Salt and pepper -- to season
- Rice, soaked in warm water for 30

minutes -- 3/4 cup

- Potatoes, peeled, sliced into 1/4-inch rounds -- 1/2 pound
- Onion, sliced into 1/4-inch rounds -- 1
- Bell pepper, sliced into 1/4-inch rounds -- 2
- Tomatoes, sliced into 1/4-inch rounds -- 2
- Mint -- 1 bunch

Assembly:

- Banana leaves, hard spine removed and cut into 10x10-inch rectangles -- 12 pieces
- Aluminum foil, cut into 10x10-inch rectangles -- 12 pieces



Directions

1. Place the masa harina, lard or shortening and salt in the bowl of an electric mixer. Blend on a low speed to incorporate the fat into the masa harina and give it a mealy texture. You may have to do this and the next step in two batches if your mixer bowl is not large enough to hold all the ingredients without overflowing.
2. With the mixer still on low speed, add the sour orange juice and enough chicken stock to make a soft, moist dough. It should be a little firmer than mashed potatoes. Increase the mixer speed to medium-high and beat for 2 to 3 minutes to incorporate some air into the masa and make it fluffier. Cover the bowl and set the masa aside to rest for at least 30 minutes.
3. Season the pork with salt and pepper. Drain the rice. Assemble all of your filling ingredients and assembly items on a large table or work surface. Gather family and friends to help in an assembly line.
4. Lay out a banana leaf square with the smooth side up. Place 1 cup of the masa in the middle of the banana leaf and, using wetted hands, spread it out a little. Put about 1/2 cup of pork on top of the masa and sprinkle 1 or 2 tablespoons of rice over the pork. Lay 1 or 2 slices of potato on top of the pork and then top with 1 or 2 pieces of onion, 1 or 2 pieces of pepper and a slice of tomato. Top it all off with a few mint leaves.
5. Fold the top edge of the banana leaf down over the filling. Bring the bottom edge of the banana leaf up over this. Then fold in both sides to make a rectangular package. Be careful not to wrap it too tightly or the filling will squeeze out. Flip the package over so it is seam side down.
6. Set the tamal in the middle of an aluminum foil square and wrap it up tightly the same way you wrapped up the banana leaf. Set aside and repeat with the remaining ingredients to make 10 to 12 nacatamales in total.
7. Add 2 or 3 inches of water to a tamalera or pot large enough to hold all the nacatamales. (You may have to use two pots if you don't have one big enough to hold the nacatamales in one batch.) Place a rack in the bottom or toss in enough wadded up aluminum foil to hold the nacatamales mostly out of the water. Add the nacatamales and bring to a boil over high heat. Cover tightly, reduce heat to low and steam for 4 to 5 hours. Add more water as needed to keep the pot from boiling dry.
8. Remove the nacatamales from the pot, take off their aluminum foil covering and serve hot. Each diner opens the banana leaf on his or her own nacatamal before eating.

Man-Made *Manipulation*

Jessica Glosson



How major food and beverage corporations are employing genetically engineered compounds to flavor products through taste bud manipulation.

The topic of artificial flavoring is nothing novel; components like sucralose, saccharin, aspartame, benzaldehyde, and sodium benzoate have been added to food and beverage products for years in order to enhance flavor and palatability while keeping calories and sugar contents at their bare minimum. However, products like Sweet’N Low, Splenda, and Equal have often been the subject of scrutiny. Concerns that these non-nutritive sweeteners (NNS) have the potential to induce cancer, promote weight gain, or even reduce the amounts of gut microflora within the intestines have spurred countless research studies and controversies on the safety of use of artificial flavoring products in food and beverage items.¹ Currently, the FDA regulates nonnutritive sweeteners and classifies them as “food additives” that are generally recognized as safe for human consumption.¹ Per the Academy of the Nutrition and Dietetics’ general consensus on the subject, “consumers can safely enjoy a range of nutritive sweeteners and nonnutritive sweeteners (NNS) when consumed within an

eating plan that is guided by current federal nutrition recommendations”.²

In the late 1990s, a company known as Senomyx was founded with the mission to create “a healthier way to flavor” food and beverage products through the use of genetically-created flavor “enhancers” that stimulate human taste bud function.³ Senomyx implemented its first flavor enhancing substance known as *Savorymyx* in 644¹ in a Nestle-owned bullion product. Since then, eight new flavor ingredients have been introduced and utilized by major food conglomerates: four sweet taste boosters, two savory boosters, one “bitter blocker” and one “cooling agent” comprise the flavor panel of products offered by the company thus far.³

Senomyx stands out in the world of artificial flavoring because their products have been genetically engineered to enhance the existing flavors of a food or beverage item by increasing the degree of taste bud stimulation that occurs upon ingestion of the specific food

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Nicaraguan Cuisine

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Contact Us

Have any Questions/Comments?

Please send all inquiries to:

Editor: Sara Boyd

(SaraBoyd3@gmail.com)

Co-Editor: Tara Kessinger

(tjz1973@comcast.net)

Faculty Advisor:

Dr. Alireza Jahan-mihan

UNFNutriNews@yahoo.com

