NutriNews
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Graduate Student View

The Lunch Box

The Fad Finder

From the Academy

From our Faculty
In the News..........3

UNF DND News..........4

Fad Finder..........5-6

Alumni Reconnect..........7-8

Fruit of the Month Club..........9-10

The Lunch Box..........11-12

Fit and Fueled..........13-14

From the Faculty..........15-16
This Issue

The Supplement Shelf ........ 17-18

From the Academy .......... 19-20

Current Trends and Hot Topics .......... 21-22

The Graduate View .......... 23-24

Nutrition New .......... 25-26

Nutrition Comic .......... 27

References .......... 29-30

Contact Us .......... 30
In the News

By Tara Kessinger

Academy Supports Increased Funding for Domestic HIV/AIDS Funding

The Academy has signed on to a letter with our partners at the AIDS Budget and Appropriations Coalition asking members of Congress to support domestic HIV/AIDS funding in the appropriations process. The budget cuts proposed in the House and Senate appropriations bills eliminated or dramatically cut investments in important initiatives in which Academy member’s work, such as providing medical nutrition therapy for people living with HIV/AIDS.

Iowa RDNs Meet the Challenge with Parents

The Foundation is collaborating with the Iowa Department of Education for the third year through a U.S. Department of Agriculture Team Nutrition grant to implement a Meet the Challenge! project. Since last spring, five Iowa registered dietitian nutritionists have led parent workshops titled "Empowered Parents for School Wellness" in 20 schools. The workshop is designed to involve parents and caregivers in improving policies and practices related to school nutrition and wellness. Through the workshops, parents learn how healthy eating and daily physical activity are linked to academic success and the benefits of school meals on children’s health and learning. Ten schools received assistance from RDNs to improve their school wellness environment and apply for a USDA HealthierUS School Challenge award.

Academy Continues to Urge Congress to End Sequestration Cuts

The Academy has again signed on to a letter urging Congress to build on the Bipartisan Budget Act and stop the harmful effects of sequestration. The proposed budget cuts in both the House and Senate appropriations bills will harm programs that Academy members work on, such as programs supported by the Public Health and Prevention Fund. Therefore, the Academy and its’ partners in NDD United support a balanced approach to deficit reduction, ending the age of austerity.
—Thanks to the hard work of Professor Jennifer Ross and Professor Jackie Shank, UNF Nutrition and Dietetics Students have a new Food Fundamentals Lab Manual. Thank you ladies for your dedication to the students of UNF and our amazing DND program!

—Congratulations to our Nutrition Education Students and Community Nutrition students who were not only nominated for but will receive the 2015 Duval County Health Hero Award! Great job guys, and thank you for continuing to make a difference in our community!

—Check out Dr. Zhiping Yu’s article in the Florida Time’s Union Home/Life Section, tilted The Goods: Myths and Facts about Greek Yogurt! Another fabulous article written by our amazing DND staff. Congratulations Dr. Yu!

Fad Finder

By Michelle Mackie

Dieting through the Decades

What really is a fad diet?

Fad diets are typically defined as any weight loss plan or aid that promises dramatic results.1 They will usually ban a specific food group, be some odd combination of food, allow the dieter to eat unlimited quantities of a particular food, and/or have a celebrity spokesperson that you know is just full of it. Not to mention that most RDNs will cringe at the very mention of them. Furthermore, it is the Academy of Nutrition and Dietetics’ current position to avoid such diets entirely but why all the bad blood? The largest issue with these diets is one that most nutrition professionals can agree on, there is no magic cure, special pill, or super food that will alter your genetic code. When it comes to shedding unwanted pounds there’s no substitute for a healthy well-balanced diet. Secondly, these diets are rather hard to keep up with. Most are very restrictive and can even lead to over-consumption of calories later on. Lastly, a fad diet will typically be accompanied by a reassurance that you do not need to exercise to lose weight. What could be farther from the truth? According to the Academy, regular exercise is essential to maintaining a healthy weight, building muscle, and losing fat.1

The early years of fad diets (1820-1930)

Apple-cider vinegar and water, delicious! This is where fad diets are thought to have begun. All the way back in 1820, Lord Byron popularized the idea that drinking vinegar mixed with water was the perfect way to drop extra pounds and keep a trim figure.1 Then in 1825, the first low-carbohydrate diet surfaced thanks to Jean Brillat-Savarin.1 Since then, many diets have touted the benefits of restricting the consumption of carbohydrates and most also recommend increasing the consumption of proteins, just as Dr. Atkin did in 1994.1 And finally, one of the scariest fad diets of them all was launched by the Lucky Strike cigarette company back in 1925. They encouraged women to “reach for a lucky instead of a sweet,” banking on the appetite suppressing powers of nicotine to help women slim down.2 Granted this was before the dangerous effects of cigarettes was widely known but it still demonstrates how horribly misguided fad diets can really be.

Picking up the pace (1950-1996)

Just about the year 1950 fad diets began to pop up all over the place. It would appear that our culture began to favor women of a thinner shape and there was no shortage of quick-fixes available. Most notable of this time would be the Grapefruit Diet, otherwise known as the Hollywood Diet.1 The rules were simple, the dieter could eat as much grapefruit as they wanted and they were promised a body fit for the red carpet. This was also the year the Cabbage Soup Diet first made its appearance. Similarly promising that the key to a slim shape was to only consume cabbage soup, ick! Jumping to 1976 we see the emergence of the Sleeping Beauty Diet, where people were heavily sedated for several days in order to decrease the amount of times
they ate. There was also some belief that sleep had the ability to “regulate your metabolism and improve weight loss” but it is none too surprising that any solid evidence on the issue is nowhere to be found. Moving forward, 1985 brings about the introduction of the Caveman Diet which is also known as the Paleo Diet. It is based on the belief that if someone were to eat the way their ancestors did back in the Paleolithic Era, they would be at optimal health and even curb chronic diseases such as obesity, heart disease, and Type II diabetes. Lastly we see the Blood Type Diet, which is set of eating habits dictated by your blood type. For example, the diet states that people with the blood type A are best suited to eat a vegetarian diet.

More modern means (2000-2012)

How would you like to throw away your oven, toaster, microwave, and grill? If you choose to follow the Raw Food diet, you are required to! Well, it’s not a requirement to throw it away but it is a requirement that you do not use it. In the year 2000 people began to “un-cook” their food in order to help their meals maintain optimal nutrient levels. This diet excludes all food that have been held over 118 degrees, processed, modified, preserved, and/or sprayed with pesticides. It’s also a great way to save time in the kitchen! Then in the year 2005 the Cheater’s Diet was developed, where people were encouraged to keep a strict diet throughout the week and cheat on the weekends. And finally, the most recent diet craze according to the American Dietetic Association is the Wheat Free Diet. Where dieters are directed to avoid all sources of wheat in order to avoid what some call “wheat belly.” The basic belief is that wheat contains addictive chemicals that cause people to overconsume wheat products and therefore gain weight.

In conclusion, fad diets have been around for a while and we are sure to see some pretty interesting claims in the future. They can range from downright silly to dangerous, like the Cigarette Diet. It is important to keep a level head and consult the proper materials and professionals when it comes to losing weight. Be sure to check back next month where Fad Finder hopes to dive into some nitty gritty details on more popular dieting trends.

References on page: 29
TK: Please give us a little bit of information on your academic career such as where you got your undergraduate and graduate degrees, some information about some of the places you interned at, and what year you graduated.

CS: I attended UNF for both my undergraduate and graduate degrees in Nutrition. My graduate program was combined with the dietetic internship. I interned at numerous places including Flagler Hospital, YMCA, WIC, a low-income senior center, St. Vincent’s, and UNF for research.

TK: How soon after you graduated did you take the RD exam and how soon after the exam did you get a job?

CS: I started working as a dietitian in my final semester of graduate school. Many companies will hire you if they know you are eligible for the RD exam within 6 months. So, I graduated in December 2014 with an MS in Nutrition and Dietetics, but had started working in October at St. Vincent’s Clay County and MNT of Florida as a clinical dietitian. I took the RD exam in February, passing the first time (thank goodness). It was quite stressful knowing that all those years of school and internship had come down to one final test. I was a nervous wreck, but I had studied for months using many different resources and was well-prepared.

TK: Where are you working? And how did your degree prepare you for your job?

CS: I am now working everywhere, as I like to tell people. Actually, it just feels like I work everywhere. I have four PRN jobs: St. Vincent’s Clay County, MNT of Florida, Brooks Rehabilitation, and UNF. Beyond the basics of nutrition necessary for job function, my degree prepared me by teaching research skills to find reliable information, presenting me with case studies to develop critical thinking, and the importance of flexibility, teamwork and time-management.

TK: What are some of your responsibilities at your new job and do you feel you were adequately prepared for your job after graduation?

CS: Having different PRN jobs has allowed me the opportunity to continue experimenting, similar to internship, to find the area of dietetics that is best for me. At St. Vincent’s Clay County, I am a clinical dietitian and often get to do advanced level acute care practice in the ICU. At MNT, I am contract clinical dietitian. I had a temporary contract at a nursing home, which I loved. I have always had a passion for geriatrics and memory care. However, my main contract at MNT, is as a clinical dietitian at RMC, a prison hospital in Lake Butler, Florida. It’s a role I never saw for myself, but it has been a valuable learning experience to see such advanced stage diseases in a population often not considered worthy. I work hard not to know an inmate’s crime, so that I can practice without bias. I treat my prison patients with the same quality of care that would a patient in an outside hospital, because they are human beings in need of medical attention assigned to my care. At Brooks Rehabilitation, I work as a clinical dietitian in stroke, brain injury and spinal cord injury patients. The work at Brooks is about 50% clinical and 50% diet education. My newest job is an adjunct teaching position at UNF. I am teaching 2 sections of Food Fundamentals Lab. So far, I am really enjoying it. I have homeschooled my children for over 14 years, so teaching is something I truly love. During school, I was pretty sure I wanted to be a clinical dietitian, so I would have liked a stronger clinical experience in my internship, but overall, I must say I felt well-prepared. Since graduation, I have started on my
continuing education coursework necessary for license renewal. I enjoy being able to select courses that are relevant to my work and may be a particular weak area for me. I am constantly working to become a stronger, more knowledgeable dietitian. I want to help show other health professionals how important nutrition is and how valuable a smart is to the team.

TK: Tell us a little bit about your family and how you balanced school and family time and also how you balance your new career and family life.

CS: I must say, I don’t know that I balanced very well. I have three children. When I started back to school full-time they were ages 11, 9, and 7. At that time, my husband was overseas in Iraq for 15 months. I tried to get most of my undergraduate work done online, but when I had to participate in classes on campus, my parents and grandmothers would often babysit. By the time I graduated, they were 15, 13, and 12. It was a long, stressful few years. I mainly had to learn to live on less sleep and with a dirtier house. You just can’t do it all. I knew that school was short-term and high priority to me, so I focused and finished.

I am still learning this new balance between career and family, but it is a piece of cake, compared to grad school/internship and family balance. I find I actually have some free time these days to catch up on life.

TK: What is your favorite thing about your new career?

CS: I love seeing what a difference nutrition can make. I have seen severely malnourished patients improving. I have seen people with uncontrolled diabetes finally understand their diet. I have seen tube feeding patients tolerating a formula after trying multiple others. I laughed with patients. I have cried with patients. I have held family members’ hands when they make the final decision. I like it all: the nutrition triumphs, the patient interactions, and the daily challenges.

TK: What advice do you have for students who are going through the undergraduate experience in Nutrition and Dietetics and what advice do you have for the graduate students.

CS: When going through the undergraduate program, I would often see students get extremely nervous before a quiz or test. Being an older student, I have learned that nerves and anxiety never help during a test. I used to do the same thing in my earlier college days. I like to remind students, to just breathe and let it go. Calm your mind before the test, knowing that you have studied and you either know it or you don’t, but stress may actually cause you to do worse. If your mind is calm, you can comprehend the question and reason the answer with greater precision. When I took the RD exam, it was the most nervous I had been for a test in over a decade. For graduate students, I say, “no excuses”. If you want it, achieve it. Don’t whine or expect someone to give you good grades, good performance reviews, and a degree. If you are old enough to be in grad school, take charge of your life. Take charge of your education.
From the time we were kids, we’ve been told not to eat the fruit, or more particularly the berries, that we come across in nature. While this has been good advice, and I assume that no one here has been poisoned by berries with ill intentions, we have applied this advice to anything and everything. Does this simple piece of advice have us scared to pick the fruit off the trees in our own backyards? I think it does. With a little bit of education, we can conquer this fear and take advantage of the fruits that grow at our very doorstep.

Loquats, also known as Eriobotrya japonica, are all around us. These small fruits are oval, yellow and orange, and right before our eyes. While native to southeastern China, loquat trees are found all over Florida, producing fruit as far north as Jacksonville. Both the “Oliver” and “Wolfe” varieties of loquats grow generously throughout the state and begin to ripen in February. So next time you see that tree in your backyard sprouting these bad boys, know you’re in for some good pickings.

When deciding to pick your loquats, keep a few things in mind. Loquats are best when ripe, or when the area where the fruit meets the stem is completely yellow and orange. The skin should be slightly fuzzy, and the flesh may either be white or yellow. Its best to let the loquats ripen on the tree before you pick them. Once picked, loquats have a
very short shelf life. They do not store well, so keep them in the refrigerator and try to use them up within 10 days.2

At this point, you may be asking yourself: “how am I supposed to use them all up?” because chances are you’ve picked more than enough for a snack. Well the first option is to eat them raw. Start by rinsing your loquats with cold water to remove any dirt. Then remove the stem and cut the fruit in half to remove the inedible seeds. At this point, you may choose to remove the skin, but the loquat is edible with or without it.3 While this is the quickest way to eat a loquat, it most certainly is not the only way.

Loquats may be used in a variety of recipes. From pie fillings to sauce and desserts to dinners, the loquat is a jack-of-all-trades.1 When trying to use up a large quantity of loquats, a jam, jelly, or pie filling is a good way to go. These types of recipes will satisfy your sweet tooth while significantly extending the shelf life of the loquat. You may also choose to take the savory route and make a sauce out of these succulent fruits. Such a sauce can be added to chicken or vegetable dishes for a unique flavor that is sure to satisfy all.

To make loquat chicken, gather these ingredients:

- 6 large ripe loquats, peeled and pitted
- 1/2 cup water
- 1/2 cup orange juice
- 1/3 cup brown sugar
- 1 tablespoon ground ginger
- 1 teaspoon ground cinnamon
- 1/2 teaspoon lemon pepper
- 1/2 teaspoon smoked paprika
- 1/4 cup vinegar
- 1 tablespoon grapeseed oil
- 2 skinless, boneless chicken breast halves

Begin this foodie adventure by adding your loquats to a saucepan, stirring in the water, orange juice, and brown sugar. Bring this mixture to a boil and stir in the ginger, cinnamon, lemon pepper, and smoked paprika. Once you have stirred in the spices, reduce the heat to a simmer, allowing the loquats to become soft and break apart. This takes about 20 minutes. The sauce should begin to thicken. Once thick, add vinegar and simmer for 3 more minutes.

In a separate pan, pan-fry the chicken breasts over medium heat using grapeseed oil. Once cooked, cut the chicken into small pieces and return to the pan. Stir in the loquat sauce and serve.4

This recipe goes well with rice and sautéed vegetables, but may be combined with a variety of foods to create a unique and satisfying dish!

Recipe adapted from http://m.allrecipes.com/recipe/222994/loquat-chicken/print/?internalSource=sticky%20nav&referringId=222994&referringContentType=recipe&referringPosition=sticky%20nav%205

References on page: 29
Packing a lunch that will be safe for your child to eat is just as important as packing healthy foods. Young children are at a high risk for contracting a foodborne illness, food poisoning caused by bacteria, because their immune systems are still developing.

There are three important considerations when selecting foods for safety: type of food, temperature and time.

Type of food

Perishable food, including meat, poultry and eggs, must be kept cold at all times. Your child’s lunch could include perishable items (sandwiches, fresh fruit) and shelf stable items (crackers, packaged pudding, granola bars). Perishable items need to be kept chilled to reduce the risk of foodborne illness.

Temperature

Keep hot foods hot and cold foods cold. Harmful bacteria multiply rapidly in the "Danger Zone" - the temperatures between 40F and 140F. Perishable foods that won’t be kept refrigerated should be kept cold by using freezer gel packs or a frozen juice carton. If the lunch/snack contains

Time

Food can become unsafe to eat in just two hours if left at room temperature. Foods held at room temperatures above 90F can become unsafe in 1 hour.

Did you know?

-One in six Americans will get sick from food poisoning this year. Most of them will recover without lasting effects from their illness. For some, however, the effects can be devastating or even deadly. Serious long-term effects associated with several common types of food poisoning include: kidney failure, chronic arthritis, brain and nerve damage, and even death.

-Certain groups of people are more susceptible to foodborne illness. These groups include: children, pregnant women, older adults and persons with
chronic illnesses.

To be busy to plan lunch? Freeze peanut butter and jelly sandwiches to enjoy later. Because bread, peanut butter and jelly are all non-perishable, PB&J makes the perfect sandwich for school lunches.

-Use an insulated soft-sided bag if possible. It is best for keeping foods cold.

-Good hand washing, keeping the kitchen clean, and storing foods at the proper temperature can help reduce food poisoning. It is also important to wash your child’s ice packs and lunch box or bag inside and out every day.

**PB&J Apple Roll-Ups**

**Ingredients**

- 2 flour tortillas
- 2 tablespoons creamy peanut butter
- 4 teaspoons jam
- 1 apple, cut into thin wedges (remove apple skins)
- 1 teaspoon melted butter
- 2 teaspoons sugar
- 1/8 teaspoon ground cinnamon

**Directions**

- Microwave tortillas 10 seconds to soften.
- Spread each with a tablespoon of peanut butter and 2 tsp jam.
- Heat oven to 400°F.
- Place 2-3 apple wedges down the center of each tortilla.
- Roll up tortillas.
- Transfer rolls to baking sheet.
- Brush with melted butter.
- Combine sugar and cinnamon in a small cup.
- Sprinkle half of mixture on top of each roll.
- Bake 10 minutes or until golden brown.
- Let cool 5 minutes before eating.

Available at: http://www.food.com/recipeprint.do?rid=57097
New classes, new books, new friends, new goals; there are many new things about the beginning of another school year, and sometimes we start with the “New year, new you!” mentality. For those of us that want that ‘new you’ in speaks of a more healthy and fit body, be smart by staying conscious of food choices and commit to an exercise-included routine. Here at UNF we have a plethora of places to dine and we have many resources to help keep us physically fit. If you are interested in feeling better or looking better, now is a good time to start your journey!

**Campus Cuisine**

Like any restaurant or cafe, each one on campus has healthier options- the key is knowing what those options are. Dining locations on campus include the Osprey Cafe, The Boathouse, Einstein Bros Bagels, Chick-N-Grill, Papa John’s Pizza, Outtakes Quick Cuisine, Jamba Juice, Chick-Fil-A, Chop’d & Wrap’d, Starbucks Coffee, Ozzie’s Grille, and Pita Pit. Of course the most important aspect of the food you eat is its balance. By this, I mean that in order to get the most out of your meal is to make sure it is nutritionally valuable and in its content of fruits, vegetables, protein, dairy, grains, and portion size. For example, if you are interested in eating a filling meal, choose whole wheat grains instead of white or enriched. Add vegetables, they add flavor and nutrients. Opt out of fried food and choose grilled lean meats, like chicken or cold water fish. Also, choose fruit instead of sweets and drink water instead of sugary beverages. If you want a coffee drink from Starbucks, be aware of added sugars, creams, and flavors. Ask for fat-free milk, less caramel/mocha, and Splenda rather than sugar. Try the small or regular size instead of the larger options. As for salads, they're...
great, but easily misunderstood. A bed of romaine or spinach instead of iceberg lettuce will nourish your body with many more vitamins and minerals. A variety of vegetables make your meal more filling and nutritionally valuable. Added croutons, cheeses, meats, and dressings can quickly mask a potentially healthy meal with unnecessary ingredients. When choosing a dressing, know that bleu cheese, cesar, and ranch have the highest fat content. Light and fat-free options are almost always available and are the healthier choices, but Italian dressing and balsamic vinaigrette are lighter options as well.

For more helpful information pertaining to foods and nutrition, visit www.dineoncampus.com/unf and click on the "Total Health" tab.

**UNF Fitness**

The University of North Florida makes it simple and welcoming to incorporate fitness into a student's agenda. The Student Wellness Complex is a "state-of-the-art comprehensive wellness facility houses the largest fitness center in northeast Florida, as well as a 34-foot climbing wall, and 1/8 mile indoor track. Three indoor group fitness rooms plus an outdoor group fitness balcony provide plenty of space for a wide assortment of group exercise classes. No matter the students’ fitness level, interests, or abilities, there is something for everybody."¹ The group fitness classes can provide much motivation, "Our program has a huge variety of classes including Zumba, Kickboxing, Yoga, Spin, Flirty Girl, and Sweat Shop Circuit, to name a few. Drop in and participate at any time. No experience necessary and suited for all levels."¹ Intramural Sports "offer all currently enrolled, A&S Fee paying UNF Students (and UNF Faculty and Staff) the opportunity to participate in a variety of team, dual, and individual sports ranging from flag football and basketball to indoor soccer and volleyball to name a few. Intramural Sports is a great way to meet new people and stay active at the same time. Whether you enjoy structured leagues or informal activities, this is the place for you."¹

Club Sports "is advised by the Coordinator for Club Sports and housed in the Recreation office. These clubs are recognized student organizations under the Club Alliance Agency of Student Government and advised through Campus Recreation. Sport Clubs exist to promote and develop interest in a particular sport activity. Interests may be competitive, recreational, instructional or any combination of the three."¹ co Adventure "involves several different areas, including gear checkout, outdoor trips, outdoor clinics, the Odyssey IV high and low challenge course, 5 miles of Wildlife Sanctuary nature trails, environmental education programs, birthday parties, John Golden Pavilion rentals, summer Eco Camp and the UNF Organic Gardens and Orchard. Eco Adventure is located in building 54 and Lot 100, near parking services."¹

The Osprey Challenge [ropes] Course "emphasizes transformation through character development, adventure, and challenges of mind, body and spirit to better understand the value and responsibility as an individual, group and community."¹ Choose Walking whenever you can. From the parking lots or dorms to class takes about 10 minutes to walk, so it’ll be closer to 30 minutes per day of walking, which can “reduce the risk of cardiovascular disease in both men and women – heart attacks, strokes – by 35 – 50% , reduces the risk of developing diabetes, lower and regulate blood sugar, up to 50% decrease in onset of dementia and Alzheimer’s, up to 48% decreased anxiety, 30-45% less depression, decreased bone loss and increased bone density. A 150lb man/woman burns 100 calories per mile walked (the average walked mile takes 20 minutes.)"²

My Fitness Pal, found on the www.dineoncampus.com/unf website, has tools to help track calories and nutrients consumed, fitness goals, recipes, and energy expenditure.

If you are interested in a better functioning body and brain, set goals, make changes, stick to a routine, and use the resources UNF has provided for you to achieve your best you! Be conscious of your food choices on campus and incorporate exercise into your daily agenda. Start this new school year off with your right foot first, right into good health!

References on page: 30
The Mediterranean Diet has been getting a lot of attention in the news and in research due to the findings of health benefits associated with eating the traditional Mediterranean diet. That is one reason why the nutrition faculty have been excited to offer a study abroad in Italy where students have the opportunity of meeting and interacting with one of the original researchers of the Seven Country Study. The Seven Country study authors were the first to identify the health benefits associated with eating Mediterranean. We were privileged to have Dr. Adalberta Alberti speak to our students and talk about her research on the Mediterranean diet. She was an author of the seminal article in Nutrition Today Journal in 2005 where the Mediterranean Diet Temple pattern of eating was first introduced (shown above). Our students traveled to Umbria and Tuscany in this 16 day program which was an analysis of how social, psychological, historical and cultural factors impact food, nutrition, and society in Italy. Students learned about the Italian food system and how the Mediterranean diet affects societal health. The course included lectures, discussions and experiential learning excursions in Italy where students visited the sites of food production and talked with the producers of olive oil, wine, fruits and vegetables, ancient grains, bread, chocolate, salami, prosciutto, truffles, and mozzarella and pecorino cheese.

Students also participated in daily Italian language lessons and nightly cooking demonstrations with Italian cooks and learned to prepare dishes from classic Umbrian and Tuscan cuisine. They helped prepare our dinners and converted the recipes used by Italian cooks into American metrics. During the day, they traveled to hill towns specializing in particular foods and learned about the nutritional benefits of the Mediterranean diet and differences in the Italian food culture compared to our food culture.
Inositol is a collective term that refers to nine different stereoisomers that are considered to be the B8 Vitamins. That being said, these vitamins are not actually true vitamins. They are considered to be what is known as pseudovitamins. Pseudovitamins are compounds that have vitamin-like qualities and properties but are not considered essential and do not result in deficiencies.1 The most common stereoisomer that ‘inositol’ refers to is the stereoisomer myo-inositol. This is the stereoisomer that is responsible for most of the positive effects on the body from supplementation. You can get inositol through your diet in most foods but whole grains and citrus are thought to contain the highest concentration of inositol.1 You can also buy the laboratory version of inositol in supplemental form at nutrition stores. It is a safe compound to take as a supplement because the only adverse side effects come from taking it in very high doses and even then, those side effects most fall under mild gastrointestinal distress.1

Inositol is theorized to work with the body to help balance chemicals in the body thus providing aid to certain diseases and disorders.2 Inositol supplements can be taken to assist with mental disorders like depression, anxiety, OCD, ADHD, Alzheimer’s disease, schizophrenia, and autism. It can also play a role in the treatment of PMS/PMMD, PCOS, high blood pressure, insulin resistance, and a skin condition called psoriasis. Inositol has also been found to be useful in aiding with hair growth as well as female fertility.1,2

Inositol is thought to alleviate symptoms of and assist in the treatment of many different mental disorders. A meta-analysis published in Human Psychopharmacology concludes that the studies included in their analysis provided little evidence that inositol helped patients with anxiety disorders and/or depression. The authors
state that their study included a relatively low number of studies so that should be taken into consideration when reading the overall conclusion of the meta-analysis. However, an article published in European Neuropsychopharmacology reviewed several other studies and came to the conclusion that inositol does have a beneficial effect on patients suffering from depression, panic disorders and OCD. This article also concludes that inositol is not beneficial for patients suffering from Alzheimer’s, autism, ADHD or schizophrenia.\(^4\)Along the lines of OCD, an article published in Progress in Neuropsychopharmacology and Biological Psychiatry discusses the use of nutraceuticals for OCD management. This article concludes that there is some preliminary evidence supporting the claim that inositol can help patients with OCD. It also states that there needs to be more research done on this claim before it can be truly deemed credible.\(^5\)

Inositol is also thought to help with female fertility. An article published in the Journal of Ovarian Research discusses inositol’s effect on females that are not responding properly to their In-Vitro Fertilization (IVF). This study involves the myo-inositol isomer of inositol. It concludes that myo-inositol has a positive effect on these patients through participating in oocyte maturation and competence. This study also referenced previous studies done on inositol and female fertility which came to similar conclusions.\(^6\)

Premenstrual Syndrome (PMS) is another disorder that inositol is thought to alleviate. An article published in Human Psychopharmacology discusses myo-inositol’s role in the treatment of premenstrual dysphoric disorder (PMDD). PMDD is basically a worse form of PMS and is classified as a mood disorder that some women suffer from on the last week of their menstrual cycle. This study concludes that myo-inositol proves to be valuable in the treatment of PMDD.\(^7\)

The last disorder to be discussed is Polycystic Ovarian Syndrome (PCOS). The research behind inositol’s use in the treatment of PCOS is the strongest and most promising of all other research done on inositol. The research is so promising that more research is being done on with isomer is more effective rather than is inositol effective at all. The two isomers that are commonly used in the treatment of PCOS are the myo-inositol isomer and the D-chiro-isomer. A meta-analysis published in Gynecological Endocrinology reviews studies that uses myo-inositol isomer as a treatment. This meta-analysis concluded that myo-inositol positively effects women suffering from PCOS through improving insulin sensitivity of target tissues as well as reducing insulin plasma levels, improving hormonal function.\(^8\) Another study published in Gynecological Endocrinology compared the use of myo-inositol and D-chiro-inositol in the treatment of PCOS. This article concludes that both isomers proved to be functional and beneficial in PCOS patients through improving ovarian metabolism and function. This study did not determine which isomer was better in therapy because each isomer proved to be better at one aspect of therapy compared to the other and vice versa.\(^9\) They should both be used in therapy so the patient experiences the best possible results. Finally, a study published in The Journal of Clinical Pharmacology studies the combined myo-inositol and D-chiro-inositol treatment for patients with PCOS. This study concludes that the combination therapy proves to be greatly effective in PCOS patients. It also stresses the importance of maintaining a balance of the isomers in the body during the treatment.\(^10\)

In conclusion, the pseudovitamin inositol seems to be a great supplement to take if you are suffering from depression, anxiety, OCD, PMS/PMDD, or PCOS. You should talk to your doctor before deciding to add this supplement to your treatment to ensure that you take the proper dosage and that it will not interfere with other medications. Further research needs to be done on inositol before any of these claims can be put into the books but the current research is very strong and promising.

References on page: 29
Foods provide a vast array of nutrients and other substances necessary to sustain life and health. Knowing the composition of foods helps professionals and consumers plan menus and prepare foods that meet nutrient needs. With the increased awareness of nutrition and the foods we consume, along with the relationship to our individual health, our data-driven lives are increasing our need for access to more information.

The Need for Calculation

It is not uncommon for cookbooks, newspaper food columns, recipe blogs and food magazines to provide nutrient information for published recipes. Nutrient information for foods served in schools, colleges and universities, corporate dining facilities, health clubs and other venues is easy to find. Because consumers expect readily available nutrition information, demand has grown for food and nutrition professionals to provide it. This work must be done as accurately and as professionally as possible.

Software is the most important tool in conducting nutrient analysis. Many nutrient calculation programs are pre-populated with ingredient data and allow the user to adjust for cooking and processing rather than making these calculations manually. Most allow for generating a variety of reports, including Nutrition Fact Panels, ingredient statements and allergen information. To choose the software that best suits individual needs, consider cost, capabilities and compatibility. Visit the websites of major software companies, download their demo versions and try analyzing some recipes.

Standardized recipes, commonly used in large-scale food production, play a critical role in accurate nutrient analysis. While these can vary in format and content, a standardized recipe will specify the exact amounts of ingredients, the type of cooking equipment and the preparation method required for consistency. Without detailed and specific standardization, analyzing the nutrient content of a recipe is impossible.

Use Nutrient Calculation Resources

Access to nutrient data is necessary if the software database doesn’t have all of the ingredients from the recipes. The USDA National Nutrient Database for Standard Reference is the major source of food composition data in the United States. The Food and Agriculture Organization of the United Nations has established INFOODS – the International Network of Food Data System — a worldwide network of food composition experts aiming to improve the quality, availability, reliability and use of food composi-
tion data. A directory of international food composition databases — a great resource when working on international recipes. Because food composition can vary greatly around the world, it is best to use the database of the "home" country when analyzing recipes. Nutrient data can also be found from ingredient suppliers or food manufacturers. To ensure a recipe is most representative of the food being served and to obtain accurate nutrient values, use unrounded ingredient information from suppliers.

**Necessary Skill Set**

It's essential to have a nutrition background when conducting nutrient calculation, since it's not just a matter of plugging in numbers and producing data — it requires analyzing results with a strong understanding of nutrition. This is in addition to a basic comprehension of culinary techniques, which helps to correctly interpret culinary terms in the recipe and make sound judgments about moisture or fat addition or loss. Attention to detail, solid math skills and a desire to work with data are important. Lastly, an understanding of regulations provides guidance for rounding nutrient data, interpreting menu labeling regulations or requirements for making claims — such as gluten free — so stay current with both proposed and executed changes to recommendations and laws.

Visit these resources for more information on nutrient calculation:

- Academy of Nutrition and Dietetics' online certificate of training program, "Restaurant Menu Labeling: The Impact on the Environment of Nutrition and Dietetics"
- International Network of Food Data Systems (INFOODS)
- "It All Adds Up: Nutrition Analysis Software Can Open the Door to Professional Opportunities" from the Journal of the Academy of Nutrition and Dietetics
- USDA National Nutrient Database for Standard Reference
Hot Topics and Current Trends

5:2 Intermittent Dieting

By Lexi Rossow

With all these diets fads constantly pushed into the public’s face, diet duplications were bound to happen. And when it did, it happened across the ocean, with two diets based on the same concept, with the same risks and benefits.

In August 2012, doctor and journalist Michael Mosley introduced to the BBC audience a diet called, “The Fast Diet,” explaining that for two days per week if you eat ¼ of what you usually eat per day (what should be on average 2000 calories for women or 2500 calories for men) then you can lose weight, keep it off, and eat whatever you want. This Fast Diet also claims to possibly decrease chances for heart disease, stroke and cancer, as most healthy diets do. In addition to these possible positive responses, the Fast Diet also could lower levels of insulin.

Then, in November 2012, the 5:2 Diet Book was published by Kate Harrison based on the same concept as the Fast Diet: for two days a week, eat ¼ of what you would eat on the other five days. Her diet claims to have the some possible healthful side effects as the Fast Diet does.

So, if there are two authors who created diets on this idea, does it work? And why does it sound like just a fancy way of starving yourself for two days? Isn’t starving yourself a bad idea?

It is! Sustaining a long-term caloric restriction causes your body to go into “adaptive thermogenesis,” or, better known as “starvation mode.” Adaptive thermogenesis is the scientific term for when your body slows down your metabolic rate to conserve as much energy as possible. You may be lowering your food intake to lose weight, but to your brain and your body, the lower amount of food you are feeding yourself means that it’s time to fight to survive and hold onto every calorie it’s given. (In other words, love handles aren’t excessive weight, they are actually extremely important saddle bags of energy to get you through a famine, according to your brain.) Creating a habit of getting into adaptive thermogenesis also could lead into eating disorders,
such as anorexia.

So why would the 5:2 Diet or the Fast Diet work if you are putting yourself into adaptive thermogenesis twice a week?

According to the 5:2 Diet, Harrison warns about those “Who shouldn’t fast?” on her FAQ page. She explains that women breast feeding or pregnant, children, teens, or those with a history of eating disorders should not do this diet, or those with medical conditions that cannot support the fasting, including Type 1 and 2 Diabetes.

In further explanation, giving your digestive system two days of rest actually benefits your body more than hurts it, as long as you don’t go to the extremes with either feasting or fasting.

Our ancestors have been fasting and feasting for different periods of time for hundreds of years, so it’s also natural, according to Harrison. Plus, you never go a day with absolutely nothing to eat—like our ancestors actually did—because 500 or 600 calories can still be eaten on the fast days, depending on gender.

The Academy of Nutrition and Dietetics warns about intermittent fasting for athletes, elite or amateur, or extremely active persons. Quick depletion of energy after prolonged fasting causes headaches, fatigue and nausea, which could cause mental stress where there does not need to be. Intermittent fasting can be achieved if an extreme balanced diet is performed during the eating periods, so that your body has enough nutrients to push through without complete depletion. Your diet during the eating periods should be critically filled with fruits, vegetables, lean protein and low-fat diary.

Overall, intermittent dieting (which is the basic term to explain the concept shared between the Fast Diet and the 5:2 Diet) has potential health benefits as well as wary conditions of a gateway diet for eating disorders. If the intermittent dieting stays controlled to only two days a week, nutritious foods are included in the diet on all the days and eating patterns on the five non-fasting days stays in a healthy 2000 or 2500 caloric range, than maybe it is a good idea to give your digestive system a break a couple days a week.

References on page: 30
Graduate Student View

Lindsey received her Bachelors from the University of Florida in Food Science & Human Nutrition in June 2013. She went on to a post-baccalaureate program at UNF where she completed the courses to apply for a dietetic internship and received a second bachelors in August 2014, which led her to the MS/DI program at UNF. Now a year later, she is in her final semester and looking forward to graduation in December! Through the MS/DI program she has had the opportunity to intern at so many great sites around Jacksonville and is preparing to continue her internship rotations in Gainesville, FL in the fall for her specialty rotation. After graduation, she would like to work with children and eventually obtain her CDE to focus on diabetes education.

By Tara Kessinger

TK: Lindsey, what influenced your decision to choose a career in nutrition and dietetics?

LP: While I was at UF I was in an honor society, Alpha Epsilon Delta, which provided exposure to many aspects of the health care field. Through this organization I became involved with a non-profit summer camp organization for kids with Type 1 diabetes. I have volunteered with Florida Diabetes Camp for 6 years now and still feel the same inspiration as I did my first year! I love working with kids and diabetes and found a career that allows me to do so!

TK: As a graduate student, what undergraduate classes do you feel prepared you the most for graduate work? And which undergraduate classes prepared you the most for your work as an intern?

LP: MNT and Advanced Nutrition were helpful for the Metabolism graduate class and clinical nutrition classes. The nutrition education and counseling classes have been very resourceful for the internship portion. As foreign as the concept of theories and counseling techniques seemed at the time in undergrad, they are particularly relevant when putting counseling techniques to practice!

I don’t think there is any one class that can fully prepare you as an intern, especially since we spend a semester in each concentration so you have to be extensively prepared in all areas. I would recommend keeping track of your food service textbooks and notes; they came in handy for many projects during the food service rotation. Also invest in a good clinical handbook; it is a lifesaver!

TK: What have you found, being both a student and an intern, to be the best way to manage your time between school, work, projects, and maintaining some sort of social life?

LP: I use a planner religiously and make a lot of to-do lists. Having a list I can check off with due dates helps
me plan my week! Each semester the types of assignments have changed demanding various amounts of time. I feel I am the most productive when I get out of my house and go to the library or Starbucks to concentrate solely on schoolwork. Mondays after class tend to be my bigger homework days.

TK: As you have been through one year of graduate work and also through quite a few internship rotations, what has been your favorite experience so far?

LP: I would say the community rotations have been the most exciting since my schedule has included so many new sites! I had a wonderful experience at the outpatient VA clinic for 3 weeks. I have just finished up a 4-week rotation at WIC in Clay County. I was so excited to bring 5 fellow interns to diabetes camp with me at the end of summer. This semester was exciting because I surprised myself and found many different settings that I enjoyed working in.

TK: Getting into an internship program is very competitive, what advice do you have for students who are looking to go the RD route and apply for internships/graduate programs?

LP: I believe in using your unique volunteer, leadership, work, and personal experiences to highlight your strengths and appealing qualities. No applicant is the same and you can always make yourself stand out! I also believe it is important to research each program you are applying to and make sure it is a good fit for you based on their program concentration, curriculum, program structure, etc. You can also use information about the program to highlight why you are a good fit for their program.

Lastly, make sure you double, triple, and quadruple check your applications and essays to make sure all the information is correct and there aren’t any typos!

TK: What do you do to have fun and decompress?

LP: In the spring semester I had the opportunity to move home to St. Augustine where I have been able to spend a lot more time with my family. I have learned to appreciate the comforts of a home-cooked meal and having supporters to come home to and talk about my day. I look forward to seeing my dad and grandparents daily. On the weekends I do the best I can to designate time to catch up with friends and see my horse as often as possible! Exercise is also a great study break; I try to be as active as I can on the weekends!

TK: After graduating from UNF’s MS/DI program, what are your career plans?

LP: After graduation I plan to apply for a clinical position. I would like to transition to a pediatrics position and focus on diabetes education working towards my CDE over the next few years. I would like to also teach at a university as well to stay in the academics realm of dietetics. My long-term career goal is to go back to school for my PhD and become a professor/Internship Director!

TK: Looking back, do you have any advice for the upcoming students in the Nutrition and Dietetic Program?

LP: A piece of advice I was given in undergrad was “apply when you feel you are the most competitive.” This is so true! If it is right for you, you can make your application so much stronger by taking time off and strengthening your application by adding valuable experiences. This may not be for everyone and it is definitely possible to be competitive right out of undergrad. Again, everyone has their own unique experiences and application. I believe it is very helpful to seek advice from previous interns or take the time to meet with a prospective program director and ask what they look at most, what they think stands out the most, what sort of things are immediate deal breakers, etc. Essentially, interview the interviewer so you can find out if you are a good fit for that program!
Scientists Discover the Key to How Obesity Gene Works

Scientists from MIT and Harvard University published a recent discovery in the New England Journal of Medicine Wednesday regarding a gene related to obesity. The gene, called FTO, when faulty causes the body to take energy from food and stores it as fat instead of burning it for fuel. The FTO gene works as a master switch affecting two other genes that control the burning of energy in the body. During their research in mice and human cells, they found that there is hope that the faulty gene can be reversed. One experiment cited in the journal found that by blocking the faulty FTO gene, mice were 50% leaner than other mice while being on a high-fat diet. This new discovery will hopefully lead to new drugs or other treatments that can be used to help treat obesity. This new information may dispute the fact that obesity is caused only by over eating or not exercising. There is no indication on how long it will take for a new drug to be on the market to treat the FTO gene, as it must undergo rigorous testing to ensure it does not affect other metabolic processes in the body. This discovery, while significant, does not explain all obesity. The gene was only found in 5% of black people and 44% of Europeans. Clearly there are more genes involved in obesity than just the FTO gene.

Low-level Arsenic Exposure Before Birth Associated with Early Puberty and Obesity in Female Mice

A recent study by the National Institute of Environmental Health Sciences (NIEHS) found that mice exposed to low levels of arsenic in utero displayed an early onset of puberty, and were then obese as adults. The arsenic was administered through drinking water at 10 parts per billion, which is currently the maximum allowable amount for drinking water as determined by the U.S. Environmental Protection Agency. The study by NIEHS looked at three groups of pregnant mice. The control group received no arsenic in their water, while the other two groups contained 10 parts per billion or 42.5 parts per million of arsenic respectively. The mice were given the treatments of arsenic ten days after fertilization to birth. This time frame is similar to the middle of the first trimester to birth in humans. The experiment was performed on three separate batches of mice, and all three batches had similar results. At both 10 parts per billion and 42.5 parts per million, female rats experienced puberty at an earlier onset than normal mice, and both the males and females showed weight gain as they aged. The biological process responsible for these results is still unknown, yet these experiments indicate the importance of maternal food and drink intake and its effects on offspring.
Two Non-surgical Bariatric Treatments for Obesity Approved by FDA

Gastric bypass surgery was once considered a high risk procedure. The risk has significantly declined, however the procedure is painful and leaves the patient with significant scarring. Two new endoscopic procedures were recently approved by the FDA (July 29th and August 7th of this year) as new treatments for obesity. The first is an intragastric balloon. The balloon is inserted through the mouth into the stomach while the patient is under sedation. The intragastric balloon can be done as an outpatient procedure and is minimally invasive. The second procedure uses saline-filled balloons in the stomach to help patients eat smaller amounts and make them feel full. They are inserted endoscopically, and typically removed within six months. Both of these procedures have shown to be effective in weight loss and should only be used as part of a multidisciplinary program in the management of obesity.

Hunker in the Bunker

Bunker mentality has recently been shown among professionals who deal with the problem of rising obesity rates. Public health professionals feel righteous that they are using the best strategies, but are threatened by big food and big soda. Both sides feel they are right. Recently in a study dealing with obesity rates in Philadelphia public schools, a report suggested that the prevalence of obesity is declining, however some of the initial reductions were reversed at a later time. Unfortunately the study design was flawed. Height and weight measurements were not standardized, and students shifting from one school to another created an inconsistent sample. However the hope that the obesity procedures are working keep the health professionals going. On the other hand, this week Coke almost apologized in the Wall Street Journal for "creating confusion and mistrust". The article indicated that mistakes had been made, however there was no actual apology. Views of those not in the bunker suggest that failed policies should be reviewed to determine why they did not work, to ensure they do not repeat the same mistakes in upcoming policy. While neither right nor wrong, clearly more work needs to be done to make progress in the fight against obesity.
NutriNews Comic

It's a bit CHEESY!

AMOUNT OF FOOD YOU EAT OUT OF A BOWL vs. AGE

- Grad School
Meet UNF’S New 2015-2016 MS/DI Interns

Best of Luck Ladies and Gentlemen!
Fad Finder: Dieting Through the Decades


The Supplement Shelf: Inositol


The Fruit of the Month Club: Loquats

Fit and Fueled: Start School, Start Smart


Hot Topics and Current Trends: Intermittent Dieting, The 5:2 Diet


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