

SDFSA NEWSLETTER

Outstanding Advisor

On behalf of SDFSA, we would like to thank our Outstanding Advisor, Dr. Lisagor, for all of her dedication, compassion and patience. Dr. Lisagor has served as the SDFSA advisor for the past four years. She has made a tremendous impact on SDFSA and has contributed to the organization's many accomplishments. The success of SDFSA would not be possible without her valuable insight. Therefore, we bestow the award of outstanding advisor to our admirable advisor, Dr. Lisagor! Words cannot describe how appreciative we are of all that she does. Thank you Dr Lisagor!



President's Message



Dear Fellow Students, SDFSA Members, Faculty, and Alumni,

It has been my privilege serving as the President for the 2007-2008 term for Student Dietetic and Food Science Association. My experience as a leader has taught me the skills needed to lead the way to accomplishment and has given me a sense of purpose, priority, and dedication.

This past year, we have combined efforts and collaborated as a team to achieve our common desired goals of SDFSA. We began the year by participating with Colleges Against Cancer club on campus to bring to students awareness about breast cancer. The Dietetic Internship Symposium was a tremendous success because of its diverse representation of internship programs and,

of course, the hard work by SDFSA. We had students attending the event from as far away as Fresno to receive the knowledge needed to select the right internship for them. For National Nutrition Month we collaborated with Providence Saint Joseph Medical Center to promote healthy habits and nutrition information to employees, families and community. Also, for the first time we set up a booth on campus to educate the CSUN community on the benefits of good nutrition and the importance of taking steps to set a healthy lifestyle. Along with the symposia, our very hard-working vice-presidents have done wonders in coordinating Nutrition Lecture Series. In the Spring semester, we invited Senator Alex Padilla to educate the students on the legislative process. Due to our excellent fundraising, we raised a significant amount of money and have allocated two

\$250.00 scholarships to SDFSA members Sarah McOsker and Jessica Salisbury. Another exciting accomplishment for SDFSA has been our website. We have successfully created a professional website (Thank you, Pat Spencer!) on the CSUN server. Also, SDFSA was nominated Outstanding Organization through CSUN's Matador Involvement Center, and deservedly so! And our lovely and well admirable Advisor Dr. Lisagor was nominated for the Outstanding Advisor Award. Lastly, we had our 2nd annual Iron Matador cooking competition, which Lisa Calanni coordinated and planned excellently. Congrats to our Iron Matador winners Angela Bowie and Jill Latham!

As the President of SDFSA, I would like to thank the members, officers and faculty for their support. SDFSA has demonstrated the concept of teamwork and has fulfilled the vision of the organization. It has

been an exciting and successful journey for all of us.

Sincerely,

Anna Abulyan
SDFSA President

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Advisor's Message

If you don't like the way the world is, you change it. You have an obligation to change it. You just do it one step at a time. - Marian Wright Edelman, 1939-

Do you suppose Ms. Edelman knew that she was describing what SDFSA knows and does so well? Actually, our legacy is that we often take *many* steps at a time and, in so doing, accomplish much.

Kudos to our SDFSA offi-

cers and members, all of whom work so hard in putting together all of our incredible events and modes of communication. (For a glimpse of what we do, check out our website at <http://www.csun.edu/sdfsa>). SDFSA is clearly a most

outstanding student organization!

It is a privilege to be associated with such an impressive group! You are changing the world! Bravo!

Dr. Terri Lisagor,
Faculty Advisor

Post Exercise Recovery Nutrition By Mareena George

Carbohydrate loading before a strenuous workout is a common practice amongst athletes. Fueling your body 2 to 3 hours prior to exercise will provide energy to working muscles, maximize blood sugar and glycogen stores, and minimize hunger during the workout. But what happens when this fuel runs out?

When the body runs out of blood glucose, it will resort to glycogen stores. Glycogen is the storage form of glucose, found in the liver and muscles. When the glycogen stores run out the body will begin to convert fat and muscle into glucose for energy.

Since your body is using up large amounts of glucose during exercise, it is important to re-fuel your body after an intense workout. Research continues to suggest that post-exercise nutrition has a number of positive effects. Recovery nutrition has been linked to enhanced performance in future exercise, lower injury risk in future exercise, promotion of positive energy balance, and appetite control during meals

(Kundrant & Rockwell).



Important factors that play a role in recovery nutrition are the intensity and frequency of the subsequent exercise. The more intense the workout, the more important it is to replenish the body. The goal of post exercise nutrition is to restore depleted glycogen stores, replenish fluids and electrolytes, and assist in the repair and adaptation of muscles (Kundrant & Rockwell).

Recommendations for recovery nutrition are listed below:

Fluids: In the case of fluids, 3 cups (24 ounces) of water should be consumed for every pound lost during exercise. This should take place within 2 hours following the workout. A sports drink such as Gatorade can be beneficial to help restore lost electrolytes.

Carbohydrates: Within 30 minutes following the workout 0.5 grams of carbohydrate per kilogram of body weight should be consumed. A total of 1.5 grams of carbohydrate per kilogram of body weight should be consumed within *two* hours following the workout. It is preferred to use carbohydrates with a high glycemic index such as simple carbohydrates.

Protein: It is recommended to consume 10-20 grams of protein within 30 minutes following exercise.

By following the above recommendations, athletic performance will be enhanced, helping you to perform at your best.

Source:

Kundrant, Susan, and Rockwell, Michelle, *Sports Nutrition Playbook*. Nutrition on the

Move, Inc. 2007.

Upcoming Events

Career Symposium

4/26/2008

8:00am- 4:30pm

Nobbs Auditorium

LAST SDFSA Meeting (*Election of Officers*)

5/6/2008

7:00am- 8:00am

SQ 112

CPK Fundraiser

5/5/2008

Northridge Fashion Center

DPD Orientation

5/7/2008

6:30- 8:00pm

SQ 134

Acai Claims Too Good to be True? By April Stahl

Have you ever caught yourself in line at Jamba Juice, or maybe Whole Foods reading a label and stumble across an ingredient called acai? I know I have. I will also confess that I pronounce it like it's spelled. A word of advice, it is pronounced Ah-SAHee, oops. This amazing berry, from the Brazilian rainforest, has become all the hype recently. And why you ask? Acai is said to be packed with anthocyanins, in fact 10 times as much as red grapes and red wine (Rossi, 2006). And you know what that means, you got it, antioxidants.

Acai is a purple grape-sized multi-stemmed palm. As it ripens it turns from a green to dark purple color. The berry contains one seed



covered by a thin layer of edible pulp. This fibrous fruit's popularity can be traced back the eastern Amazon, where it is one of the most naturally abundant species (Lichtenthaler et al., 2005). It is widely found in the northern part of South America. With a chocolate berry flavor, this fruit is mostly used in a milk shake like beverage. Claims of improved health have increased the berry's popularity in both urban Brazil and the rest of the world. So as I and others have wondered, are the claims legitimate?

Since the berry is very fragile it has only been readily available out-

side of Brazil for about the last 7 years. Research is very limited on its health benefits. In my attempts to gather accurate information, I found pages and pages on acai from Google, but very limited research from legitimate sources. In one study, published in the *International Food Sciences and Nutrition* in 2005, researchers sought to understand and evaluate acai's antioxidant capacities. Their findings concluded that in comparison with recently studied European fruit and vegetables, the acai samples (minus the white variety) did exhibit high antioxidant capacity against peroxy radicals (Lichtenthaler et al., 2005). They found that the purple acai's peroxy radical scavenger capacity was in the same class as the lingonberry and beetroot juice.

In 2006, The University of Florida published research that indicated that the acai berry triggered a self-destruct response in up to 86% of leukemia cells tested (Nordlie, 2006). While this study was only a cell-culture, its results are promising.

From what I was able to find, the berry is usually sold as a pulp puree for approximately \$1.25 per oz. I tried to compare it with lingonberry or beetroot juice, both of which seem harder to find. I believe you can make beetroot juice, but the lingonberry seems to be a more regional berry and not easy to come by in California.

The frozen acai root is 43 calories per ounce. The pulp is considered to have a high nutritional content, with 50%

stemming from lipids and 10% from protein (Lichtenthaler et al., 2005). It is considered to be rich in oleic acid and I also discovered that acai's calcium content is relatively high (22.7mg per ounce compared with 39.53 mg per ounce of non-fat milk).

While there are a few studies supporting acai's antioxidant power, there has never been a published study documenting that people consuming acai are healthier than those who do not (Liebman & Schardt, 2008). Now I'm not saying that the berry does not have its benefits, but I am left wondering if it can live up to all the hype. My take home from this article is that when there is more information on websites trying to sell me something, then in published documents, I've got to wonder if I too have been charmed by all the marketing campaigns. Now that I have presented you with my research, I will leave it in your hands to decide. And incase you have not had the opportunity to try acai, I will leave you with a smoothie recipe to try it for yourself.

References

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Acai Smoothie

Ingredients:

- 1 1/4 c. plain or vanilla soymilk, or almond milk
- 3/4 c. Orange juice
- 3/4 c. Acai juice
- 1 large mango, peeled, seeded and cut into chunks
- 1 c. fresh or frozen blueberries

"...there is more information on websites trying to sell me something, then in published documents, I've got to wonder if I too have been charmed by all the marketing campaigns"
-April Stahl

Iron Matador By Lisa Calanni



Iron Matador chefs, Jessica Ruiz and Carlen Wellman strike a pose!

I can still smell it now! The residual aromas from SDFSA's Second Annual Iron Matador Competition, which took place Saturday, April 5th, 2008! Like the Food Network's Iron Chef, our fearless fellow nutrition and food science students rolled up their sleeves and took on the challenge of preparing their dishes with our added secret ingredients!

Back when the event was just an idea, we realized what a great opportunity it would be to promote SDFSA to nutrition and food science students, to encourage membership, and to have a little fun! Like last year, we had three teams, each consisting of two participants. One week before the event, we asked each team to submit three recipes to the planning committee; one for an appetizer, one for a main entree, and one for a dessert. We had all of the necessary ingredi-

ents available the day of the competition. Moments before the competition began, we threw in three surprise ingredients that each team had to find a way to incorporate into any or all of their dishes. Each team then presented their dishes to each of the three judges for evaluation based on a grading rubric. All of the food prepared that was not plated for the judges was put out for the spectators to enjoy! And we did just that!

We were so honored and excited to have such a great panel of judges, including Bray Stubblefield, a nutrition and food science student and SDFSA board member, our dear Professor Deidre Larkin, newly retired after 18 years of teaching at CSUN, and Suzanne Bogert, Director of the Los Angeles Regional Network for a Healthy California through the district's Department of Public Health Nutrition Program.

On behalf of SDFSA, I would like to congratulate our chefs and express our deepest appreciation for their time, enthusiasm, and participation! First Place went to Jill Latham and Angela Bowie! Our other participants were Carlen Wellman and Jessica Ruiz (our vegan competitors!), and Vaughn Sulukyan and Armen Hovsepiyan.



Thank you to all who attended and brought friends and family to support us. And a HUGE THANK YOU to all of the SDFSA members for making this event possible and such a success! I can't wait to taste what they cook up next year!

A Consumer's Guide to "100 Calorie Packs" By Louise Bales

Major food corporations such as Hershey's, Hostess, and Nabisco are trying to meet a demand of consumers who are attempting to eat healthier. One of the major marketing gimmicks targeting this group of consumers is portion sizing unhealthy snack foods into seemingly harmless 100-calorie packs. These 100 calorie packs serve a good purpose as portion control for those who crave these unhealthy foods, but surely there are better options for the busy indi-

vidual who chooses these foods out of convenience. Perhaps more people would make healthier choices if only they knew how easy it is?

Here are some convenient and healthy "100-calorie" snacks:

- A large piece of fresh fruit: Apples and oranges are good choices because they are easier to transport than softer, more delicate fruits.
- Pre-packaged carrots

and celery with low-fat ranch or a tablespoon of peanut butter.: These are found in the produce section in most major grocery stores.

- Low fat string cheese: Most grocery stores sell an individual serving for about \$0.75.
- 4-8 ounce serving of low or non-fat yogurt
- Trail mix in individual 100-calorie packs: Found at Trader Joes and Costco

- Hard boiled eggs: These can be found in the deli section of the grocery store. One large egg has about 75 calories. If you only eat the egg white (17 calories) also have a low-fat string cheese. Or have two egg whites and a medium sized piece of fruit (about the size of a tennis ball).



Brandia's Tex Mex Tofu Lasagna Recipe By Brandia Tomlin



INGREDIENTS

- 1 Tbsp. olive oil or water
 - 2 cloves garlic (minced) or 1 tsp. already prepared minced garlic
 - 1 14 oz. pkg. tofu drained and cubed
 - 1 ½ 1.25 oz. taco seasoning packets
 - 1 28 oz. can tomato puree *
 - 1 16 oz. package mixed veggies or 8 oz. corn and 8 oz. peas
 - 7-8 corn tortillas cut into strips
 - 1 cup soy jalapeno jack cheese (plain soy jack is fine)
 - 1 cup soy cheddar cheese
 - 1 cup low fat ricotta cheese*
 - 1 cup fresh cilantro
 - 1 7 oz. can mild green chilies
- Jalapeños and salsa to garnish (optional)

DIRECTIONS

Sauté tofu, onion and garlic in water or if you prefer oil, stir in the seasoning packets.

When the onions begin to soften add the tomato sauce, frozen veggies and fresh

tomatoes (if you decided to add them), mix well. Bring the mixture to a medium

boil, reduce heat and simmer for approximately 15 minutes. Line the bottom of a

9x13 casserole dish with two of the 7 tortillas, (I am never accurate w/ this, I use as

many as I need. However, it is usually 6-8 tortillas depending on the size of pan I do

have handy.) layer ½ the tomato tofu mixture, top with ½ the cheeses, and follow

with the cilantro and green chilies. Repeat the process with the remaining

ingredients, ending with the last two tortillas. Bake at 350 until cheeses melt.

Approximately 30-45 minutes. This recipe serves about 8-9 depending on appetite.

*Any flavor soy cheese can be used. It depends entirely on what you prefer.

*I like to use fresh tomatoes. I don't measure how much I use, I simply hold back on the tomato sauce. During the summer I love color, I add the yellow, purple, and red tomatoes with finely chopped zucchini.

*By adding the low fat ricotta cheese the recipe is no longer Vegan.

RD's, Guardians of the Twenty-First Century

By Yelena Nisnevich

Education is a very important part in every profession but it plays an especially vital role in human health-related professions. I strongly believe that scientific advances of the twenty-first century will redefine the roll of dietitians. What in the past appeared as a promising possibility today we face as a frightening reality. A sim-

ple box of cereal on our breakfast table has a list of ingredients longer than the NASA instructions on building a space shuttle.

In the nineteenth century, Charles Darwin and Gregor Mendel's discoveries moved biological science to a higher level, but unintentionally opened a Pandora's Box, and our

dinner today is served by bioengineers. What is on the menu? We have tomato salad, made from genetically modified tomatoes, that can stay fresh and juicy for a very long time, and bioengineered canola oil that has the chemical composition of olive oil; reduced-fat pork chops from pigs that were injected with growth hormones; corn that



Continued on page 6...

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has been bioengineered to produce a toxin that could kill possible pests; and finally, bread that has been enriched to the point where a college degree is required to pronounce its ingredients. Care for a dessert? Here are banana muffins that will provide you with a sweet dose of vaccination.

Is it really as good as it tastes? Is it safe for the consumer? Who can guard us? Who can warn government agencies about the possible dangerous side effects of these new, "smart" foods? Who can close this Pandora's Box? These guardians are us: highly educated registered

dietitians, who can apply their knowledge of the physical, biological, and social sciences to the study of foods and nutrition. The higher the education we receive in these subjects, the better guardians and peoples' advocates we will become.

Garlic

By Pat Spencer



When we follow the vegetable garlic from farm to fork here is what we find.

Like the tulip, garlic is a bulb found as the root of

the plant. It was not until the 1980's when seed production occurred that garlic was considered a domesticated crop (3). Garlic is available year round in the store, but if you want to grow this in your garden or grow it as a school project it is best to plant the cloves in the fall and harvest them the following June.

We know very little about the early types of garlic cultivated. About 1,000 years ago when garlic was grown in southern Europe the two subgroups, softneck and hardneck, were identified. The softneck is the most common garlic found in our stores. It has soft center leaves that can be easily bent and used in garlic braids. Hardneck garlic has a hard central seed stalk called a "scape" and tend to deteriorate more quickly than the softneck (4).

Garlic seasonings found for purchase may be garlic flakes that are freeze-dried minced garlic, garlic salt made of refined salt mixed with garlic, or powdered garlic that often has MSG and salt added. Oil can be flavored with garlic. It is best to buy ready-made as home-

made garlic oil carries the risk of a minimal amount of soil left on the garlic clove. This has the potential to cause Clostridium botulinum toxin to grow in the anaerobic environment of the oil (4).

The most popular form of garlic is a head with many small cloves wrapped in a parchment-like membrane. When shopping we find a pure white garlic head with a sharp flavor, a Mexican variety that has a pale pink color more strongly flavored, or elephant garlic apple-sized and mild (1). These garlics provide wonderful flavor for many dishes. It is sometimes used as a seasoning in a mirepoix, a mixture of onions, carrots and celery added to a stock to enhance its flavor and aroma.

Garlic eating contests with willing participants are not easy to find with this pungent aromatic vegetable. The raw garlic tissue is odorless, but the cutting of this tissue liberates the enzyme alliinase, breaking down the substrate alliin into allicin. It has been confirmed that the odor of garlic boosts the flavor of MSG or umami taste in food. Umami is the name for our fifth taste, savory, and a Japanese word meaning "delicious" (5).

The odor created by the reaction is stopped or reduced when the garlic is cooked, destroying the enzyme with heat. The lipid soluble flavor has a long hang-time in the body, staying in the bloodstream, lungs and pores of the skin for up to 48 hours. This is an internal odor, not just orally, that can be reduced with the help of a special mushroom called Agaricus

bisporus (5).

Now that we have grown, purchased, cooked and eaten our garlic, let us look briefly at another part of the science of this vegetable. The product allicin from the enzyme reaction mentioned earlier is an unstable molecule and rapidly breaks down into many sulfur compounds. One of these compounds called diallyl sulfide was studied at the National Chung-Hsing University in the Republic of China to determine its effect on the liver cells of rats. It was found to be beneficial to the detoxification and anti-oxidation of hepatocytes or liver cells (2).

Consuming this wonderful vegetable is helping our liver do its job of detoxification. Diallyl sulfide is inactivating free radicals giving us a positive antioxidant effect (2). Using garlic for flavor and to season our food provides us an additional medicinal benefit, so let's buy, cook and eat more garlic!

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Mangosteen: Superfruit of just a lot of hype?

By Amanda Margoles

For about three years now I have been hearing people mention Mangosteen as the fruit, if consumed regularly, would prevent you from ever getting sick or even getting cancer. Now these people were not any sort of health professionals or registered dietitians for that matter, so why do they believe so much in the preventative capabilities of a fruit that has not even had enough studies conducted on it?

The species *Garcinia mangostana* was named in honor of Laurent Garcin, an 18th century French explorer and plant collector. Mangosteen is a tree grown in a tropical climate, believed to have originated in the Sunda Islands, which include Borneo, Sumatra, Bali, and the Moluccas, which are located on the Australian Plate, lying east of Sulawesi (Celebes), west of New Guinea, and north of Timor. The fruit consists of the rind, or exocarp, which is a deep reddish purple color when ripe. This part of the fruit is inedible. The inner and edible part to the fruit is called the aril and it is white. The aril has a fragrant scent to it and is sweet tasting.

Mangosteen has received many claims as being labeled a functional



food, or “superfruit.” The rind contains xanthenes and tannins which are polyphenolic acids that protect the fruit by giving it an astringent taste. Xanthenes are being promoted as, “killing cancer” and “stopping inflammation” by many websites and advertisers, among other claims. The aril, the inner part, does not contain any pigmentation and has not been shown to be a good source of antioxidants or xanthenes. The inedible part to the fruit, the rind, is what has all the health benefits that are being advertised to us.

The company XanGo, LLC was founded in 2002 and was the first company to market a beverage based on mangosteen, XanGo® Juice. In 2007 the company reported \$425 million in annual revenue and total sales exceeding \$1 billion since 2002. On their website (www.xango.com) they state that the ingredients of the beverage do consist of the aril and the rind, but because of the bitterness of

the rind they add other “natural fruit juices,” and do not state what these are. We therefore cannot determine the proportions of mangosteen to these other juices in the mixture.

In 2006 the FDA wrote a letter to XanGo, LLC notifying them that their health claims had not been tested nor verified, and that the claims they were making were that of a drug. The website now has a disclaimer on every page saying that their statements have not been approved by the FDA and the product is not intended to diagnose, treat, cure or prevent any disease.

As consumers, and as professionals in the nutrition field, we need to be aware of health claims made by companies and advertisers who do not have the proper research or scientific evidence to prove the benefits of their product. More and more research is being done on Mangosteen and hopefully one day we will be able to trust in its anti-cancer effects.

FDA link:
http://www.fda.gov/foi/warning_letters/archive/g6031d.htm

Are Organic Foods the Best Choice?

By Dulce Osnario

According to the U. S. Department of Agriculture, certain fruits and vegetables, even after being washed, still contain much higher levels of pesticide residue than others. The Environmental Working Group (EWG) has categorized the most contaminated fruits and vegetables as the “dirty dozen.” The EWG is a research and advocacy organization based in Washington, D.C. Consumers should not be concerned about fruits and vegetables such as bananas, corn, or mangoes that have the least contamination. If you have been puzzled by what organic really mean, and what do labels that refer to organic mean, I will briefly answer these questions.

What organic means:

Animals have *not* been treated with: growth hormones, antibiotics, or feed made from animal byproducts.

Animals must have been fed organic feed for at least a year.

Animals must have access to the outdoors.

Food hasn't been genetically modified, or irradiated.

Fertilizer does not contain synthetic ingredients or sewage sludge.

Produce hasn't been contaminated with synthetic chemicals used as pesticides, herbicides, or germ-killing radiation.

What the labels mean:

“100% Organic”: Product must contain 100 percent organic ingredients.

“Organic”: At least 95 percent of ingredients are organically produced.

“Made with Organic Ingredients”: At least 70 percent of ingredients are organic. The remaining 30 percent must come from the



USDA's approved list.

“Free-range” or “Free-roaming”: Applied to chicken, eggs and other meat products from animals given access to the outdoors. The rule states only that outdoor access be made available for “an undetermined period each day.” By the U.S. government standards.

“Natural” or “All Natural”: Does *not* mean organic. There is no standard definition for this term except with meat and poultry products. (USDA defines “natural” as not containing any artificial flavoring, colors, chemical preservatives, or synthetic ingredients). The claim is not verified, the manufacturer decides whether to use it.



Other organic foods worth considering:

- Milk
- Beef
- Poultry

Choosing these organic alternatives will reduce the risk of exposure to potential toxins found in the feed of non-organically raised animals. These foods contain *no* growth hormones, and antibiotics that have been linked to increased drug-resistance bacteria in humans. They are often very expensive, costing 100 percent more than conventional products. Poultry is controversial; according to the article “Certified Organic” organic poultry were actually more likely than conventional ones to carry campylobacter, a pathogen that causes severe diarrhea.

Seafood

The USDA does not have organic certification standards for seafood. Manufacturer and producers are allowed to make their own organic claims. Wild or farmed fish can be labeled organic, despite the presence of contaminants such as mercury, dioxins, DDT and PCBs.

What can you, as the consumer do to make wise decisions to protect yourself?

Produce

Purchase local grown, in season fresh produce such as in a local farmers market. These have no added chemicals to prevent mold from growing, such as in the case of imported foods. When long storage and long-distance shipping are not required, fewer pesticides are used.

Trim tops and the very outer portions of celery, lettuce, cabbages, and other leafy vegetables that may contain the bulk of pesticide residues. Peel and cook when appropriate, even though some nutrients and fiber are lost in the process.

Eat a *wide variety* of fruits and vegetables.

Purchase only fruits and vegetables that are subject to USDA regulations. Produce imported from other countries are not grown under the same regulations as enforced by the USDA. Examples are strawberries and cantaloupes from Mexico.

Wait until just before preparation to wash or immerse your produce in clean water. When appropriate, scrub with a brush. Experts at the University of California-Berkeley report that this removes nearly all insects and dirt, as well as bacteria and *some* pesticide residues. Special soaps or washes are not needed and

DIRTY DOZEN		CLEANEST 12	
Buy These Organic		Lowest in Pesticides	
WORST	Peaches	Onions	BEST
	Apples	Avocado	
	Sweet Bell Peppers	Sweet Corn (Frozen)	
	Celery	Pineapples	
	Nectarines	Mango	
	Strawberries	Sweet Peas (Frozen)	
	Cherries	Asparagus	
	Lettuce	Kiwi	
	Grapes (Imported)	Bananas	
	Pears	Cabbage	
	Spinach	Broccoli	
	Potatoes	Eggplant	

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ENVIRONMENTAL WORKING GROUP

could be harmful to you, depending on their ingredients. Read the label! Cold water is perfectly fine.

Choose organic when possible to reduce exposure to potentially harmful chemicals.

Meats/poultry/fish:

Trim the fat from meat, and fat and skin from poultry and fish. Residues of some pesticides concentrate in animal fat.

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Balsamic Glazed Salmon Fillets

Recipe Provided By Parisa Toutian

A glaze featuring balsamic vinegar, garlic, honey, white wine and Dijon mustard makes baked salmon fillets extraordinary.

DIRECTIONS

Preheat oven to 400 degrees F (200 degrees C). Line a baking sheet with aluminum foil, and spray with non-stick cooking spray.

Coat a small saucepan with non-stick cooking spray. Over medium heat, cook and stir garlic until soft, about 3 minutes. Mix in white wine, honey, balsamic vinegar, mustard, and salt and pepper. Simmer, uncovered, for about 3 minutes, or until slightly thickened.

Arrange salmon fillets on foil-lined baking sheet. Brush fillets with balsamic glaze, and sprinkle with oregano.

Bake in preheated oven for 10 to 14 minutes or until flesh flakes easily with a fork. Brush fillets with remaining glaze, and season with salt and pepper. Use a spatula to transfer fillets to serving platter, leaving the skin behind on the foil.

Servings per Recipe: 2



INGREDIENTS

- 2 (5 ounce) salmon fillets
- 1-1/3 cloves garlic, minced
- 1 teaspoon white wine
- 1 teaspoon honey
- 1 tablespoon and 2-1/4 teaspoons balsamic vinegar
- 1-1/4 teaspoons Dijon mustard
- 1 teaspoon chopped fresh oregano

NUTRITION FACTS:

(Amount per Serving)

Calories: 289

Total Fat: 15.8g

Sodium: 237mg

Dietary Fiber: 0.1g

Cholesterol: 84mg

Total Crabs: 6.1g

Protein: 28.7g

Caffeinate Me By Kathryn Lee

It's about 10:00 PM and you just sat down at your desk to start working on a class assignment. You're exhausted. You had classes in the morning, work in the afternoon, and even managed to squeeze in a 30 minute work out. On top of that, you got practically no sleep the night before because you were working on a group project. All you want to do is sleep! But the assignment needs to be completed, so rather than sleeping you search for something to chase away that feeling of fatigue - caffeine.

Caffeine is found in coffee, tea, chocolate, many soft drinks, energy drinks, and certain medications. It has many



effects on the body's metabolism, including stimulating the central nervous system (Medline, 2008). As a result, it helps to increase alertness, provide a temporary energy boost, and enhance your mood. The stimulating effects of caffeine can be felt as quickly as 15 minutes after it is consumed. Once in the body, caffeine will

persist for several hours before it is eventually eliminated in urine (Medline, 2008).

According to the Center for Science in the Public Interest (2008), up until about ten years ago, the only foods with added caffeine were soft drinks. The Food and Drug Administra-



tion limited those caffeinated drinks to 48 mg of caffeine per 8-ounce serving. Compare that to an 8-ounce cup of brewed coffee which has an average of 133 mg of caffeine. But that was ten years ago - now supermarket shelves and convenience stores have been inundated with all types of energy drinks that contain more than 5 times the amount of caffeine than in an average soft drink! In addition to beverages, food manufacturers have begun to caffeinate just about anything—candy bars, mints, chewing gum, and even beer. This is caffeine heaven for those who want a quick energy boost; however, the downfall is that the FDA does not require

companies to list caffeine on their labels or menus (Nutrition Action Health Letter, 2008). Therefore, how do you know how much caffeine you're consuming?

There is no nutritional need for caffeine in the diet. For most people, two to three 8 ounce cups of brewed coffee (200 to 300 mg of caffeine) per day is not harmful. However, excessive caffeine can lead to anxiety, restlessness, tremors, excessive urination, nausea, vomiting, and most importantly, difficulty sleeping (MayoClinic, 2007). Most adults need at least seven to eight hours of sleep per night, but for a sleep-deprived student, caffeine is a savior—it helps them manage their way through hours and hours of endless studying. But this temporary “pick-me-up” will only mask sleep deprivation. Chronically losing sleep can cause impaired memory, lack of concentration, mood swings, and poor performance at work and school—all of which a student is trying to avoid!

The best advice is to limit caffeine consumption to no more than 200 to 300 mg per day. Caffeine is habit-forming and can be especially challenging to stop or decrease the amount that is consumed, while trying to stay awake when studying for an



Caffeine Content of Common Products

Product	Amount of Drink	Amount of Caffeine (mg)
Coffee, Generic Brewed	8 oz	Range: 102-200
Coffee, Generic Decaf	8oz	Range: 3-12
Starbucks Brewed Coffee (Grande)	16 oz	320
Tea, Brewed	8 oz	Range: 40-120
Tea, Decaf	8 oz	5
Coca-Cola, Pepsi, Mountain Dew, Dr. Pepper	12 oz	35-55
Red Bull Energy Drink	8.3 oz	80
Monster Energy	16 oz	160
Propel Invigorating Waters	20 oz	50
Hershey's Special Dark Chocolate Bar	1 bar-1.5 oz	20
NoDoz	1 tablet	200
Excedrin	2 tablets	130

adopt new caffeine habits. Be an educated consumer and find out how much caffeine is in foods and beverages that you consume—you may be consuming more than you think. Or, gradually reduce the amount of caffeine consumption. You may even want to consider replacing caffeinated beverages with their decaffeinated counterparts as they often times look and taste the same. If you are like most adults, caffeine is part of your daily routine. And most often this does not pose any harmful health problems. But be mindful of those situations where you may want to cut back on consumption.

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Nephrolithiasis

By Bertha Gomez

Nephrolithiasis is one of the most painful urological disorders (1). Nephrolithiasis is another name for "kidney stones". Kidney stones have been known to exist for centuries. Doctor's may take x-rays, blood or urine tests to help detect any possible kidney stones. Our kidneys are two hard working, bean shaped organs that sit on each side of the spinal cord. Each kidney consists of about 1 million functioning units called nephrons. The nephrons are like the machinery of the kidneys that do the actual purification and filtration mechanism of the blood, removing undesirable substances from the blood plasma such as toxins, metabolic waste, and any excess ingested water. It filters about 200 quarts of fluid every 24hrs. They also regulate the acidity of the blood by excreting alkaline salts (4). To add to our long list, our kidneys also help make vitamin D become active to promote strong and healthy bones. They help maintain a normal blood pressure in our bodies. Last but not most certainly not least, they also control the production of red blood cells.

The first thing that comes to mind when I think of a kidney stone is an actual pebble that I would normally find in the middle of the road. Kidney stones are actually a hard mass developed from crystals that separate from the urine within the urinary tract (1). Kidney stones are rigid and they differ in size. They can measure from as big as golf balls to as tiny as a grain of salt (2). Some symptoms of kidney stones are severe pain in the lower abdomen or in the area of the kidneys, nausea and vomiting, cloudy or foul smelling urine, blood in the urine, and/or blocked flow of urine (3). According to the National Kidney Foundation, some factors that can contribute to stone formation are: too little fluid intake, chronic urinary tract infection, misuse of certain medications, and limited activity for several weeks. Other causes include some metabolic diseases, family or any previous kidney stone history, age and sex, and both a high protein



and high calcium diet. Kidney stones are most prone in men between the ages of 20 to 40. Calcium stones along with oxalate or phosphate compose a kidney stone. Calcium stones are the most seen cases.

Fortunately, kidney stones can pass out of the body without any medication or surgery. It is recommended to avoid any dairy products, any calcium supplements including antacids which may be calcium based, foods high in oxalates such as rhubarb, spinach, strawberries, chocolate, nuts, tea, and beets. Drinking lost of fluids, especially water is best (1). All in all, since our kidneys are two of the hardest working organs, it is vital that we take proper care of them to prevent diseases such as nephrolithiasis.

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Persian Pomegranate Soup (Aash-e Anaar)

Recipe Provided By Tamana Seyed- Kazemi



Ingredients:

Basmati or long-grain rice, 200 grams
 Herbs (parsley, mint, coriander, spring-onion ends), 1 kg
 Ground lamb or beef, 500 grams
 Split peas, 3 spoons
 Pomegranate paste, one glass
 Marjoram, 2 spoons
 Mint, one spoon
 Onions, 4 large
 Cooking oil
 Salt
 Black Pepper

Directions:

Peel and slice two onions and fry in oil until slightly golden. Add 4-5 glasses of hot water, split-peas, salt and pepper and cook over low heat for about 10 minutes. Wash rice and add to the aash. Cook for another 15-20 minutes.

Peel and grate two onions. Add to meat with salt and pepper and mix well. Shape into small balls and add to the aash. Wash herbs, chop finely, add to the aash, and cook for another 15-20 minutes. Add in pomegranate paste and marjoram (if fresh marjoram is used, it should be finely chopped). Mix well and cook for a few more minutes.

Fry mint in oil for a few minutes (if fresh mint is used, it should be finely chopped before frying). Add mint on top of the aash and serve.

Servings: 4

The Sweet Benefits of Honey

By Betty Agazaryan

“The health benefits of honey are making it an even more popular sweetener.”

-Betty Agazaryan

With all the medicinal alternatives available today, there is one that is actually as healthy as it is tasty; this option is honey. It is most commonly used as a sweetener; however, its health benefits are frequently overlooked. Recent studies have created a buzz around the benefits of honey, leading to greater acceptance of its advantages and an increase in its consumption.

Honey is created in the digestive system of the honeybee. Initially, the bee consumes pollen col-

lected from flowers. Enzymes found in the bee's digestive system (invertase, amylase, and catalase) are used to convert the pollen into honey. This natural sweetener contains many minerals such as iron, copper, manganese, calcium, and phosphorus which are beneficial to human health.

Although some scientists and nutritionists believe otherwise, recent scientific research has confirmed some of the ancient medicinal beliefs about the benefits of honey. Honey is

best known for its antibacterial properties. It naturally contains potassium which can dehydrate bacteria leading to its termination. This treating aspect of honey can be used internally as an antimicrobial treatment in the stomach and intestinal areas. In addition, it can be used externally as an antiseptic to infected wounds. Another beneficial aspect is its antioxidant properties which are provided through phenolics and flavonoids. These antioxidants are of nutraceutical

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value, which aid in the removal of free radicals from the body. Oligosaccharides, another naturally occurring ingredient in honey, increase colonic bacteria that aid in the reduction of cholesterol. Honey, like many other carbohydrates, is also known to be an effective source of energy. These are just some of the health benefits of honey.

Honey can greatly differ in nutritional value

based on the source of floral pollen the honeybee feeds on. Certain physical characteristics of honey can determine its beneficial value, for example, darker colored honey contains higher levels of antioxidants. This is one thing to keep in mind when shopping for honey.

The uniquely sweet taste of honey made it a desirable treat, but now the health benefits are making honey an even more

popular sweetener. So remember, the next time you pick up the sugar bowl to sweeten your tea, you can be nutritious and sweet if you use honey as an alternative.

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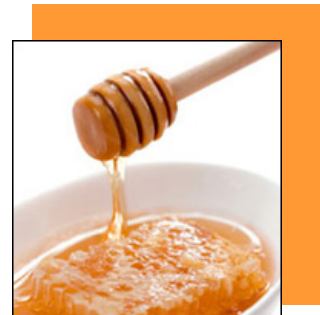
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Foods of the Future

By: Lorraine Perrone

An emerging field in food science is functional foods, also known as nutraceuticals. As defined by the Institute of Food Technologists, functional foods are, "Foods and food components that provide a health benefit beyond basic nutrition." Functional foods provide more than simply the necessary nutrients for growth and maintenance. They serve as a means to prevent disease and further increase health. Some examples of functional foods would include fruits, vegetables, whole grains, fortified or enhanced foods, and dietary supplements. For example, anthocyanins found in berries and red grapes are thought to contribute to maintenance of heart health.

One may wonder, why are functional foods a big deal? Well, imagine having your favorite snack, only now it's fortified with nutrients to prevent disease! Functional foods are a growing commodity in society due to the public's in-

creased interest in health and wellness. Although we are living in a society where the risk of heart disease, diabetes, cancer, and other diseases are growing, for many people there also exists an increased desire to become informed about nutrition and wellness. With healthcare costs on the rise, people are looking for ways to prevent the diseases that are prevalent in our society today, rather than having to deal with them once they develop.

As we further our understanding of functional foods, a rising field called nutrigenomics or "personalized nutrition" has come into play. Nutrigenomics uses the human genome to create a diet tailored to an individual's needs. Scientists are able to see what nutrients an individual's body requires and in what amounts. They are also able to tell us what diseases they may be more prone to. It is believed that with this information, a person can be given a diet

which gives them the best chance to lead a long and full life. People could lead healthier lives and the risk of disease would be lowered thanks to this preventative approach.

Unfortunately, we are still in the beginning stages of understanding the complexities and nuances of how to best exploit the field of nutrigenomics. It's a science that is still undergoing a great amount of research before it becomes commonplace in our lives. The broader focus here, however, is uncovering the potential that an individualistic approach to nutrition can have. General nutritional guidelines have served us well, but in the future you just might be able to know exactly what your body wants you to feed it!

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"Functional foods provide more than simply the necessary nutrients for growth and maintenance."

- Lorraine Perrone



The Importance of Snacking in Older Americans

By Vilma Hernandez

While the obesity epidemic has been a reason of concern and attention in our society within a particular age group, a recent study showed that older adults, 65 and over, are underweight. This age group would benefit by increasing their energy intake through snacking 2 times a day in addition to their 3 daily meals. The study showed that older adults do not consume the required daily minimum amount of calories, which results in an involuntary weight loss and a deficiency in vital that the body needs for optimal health (Wellman, Nancy, S, 2007).

A recent study comparing energy intakes of individuals between 25 and 70 years old showed a decline of 1,000 to 1,200 calories per day for men, and a decline of 600 to 800 calories per day for women. This large reduction of energy intake is associated with various factors linked with the aging process. One of these factors is the physiological changes the body undergoes, such as altered sensations of hunger, thirst, taste and flavor. The economic factor was also linked to the decrease of energy consumption because many older adults cannot afford to buy food (Zizza, Claire, A.,

Tayie, Francis, A., and Lino, Mark, 2007).

Another group of older adults, between the ages of 60 and 90, were given a revised Meals-on Wheels program, which consisted of 3 regular meals in addition to 2 daily snacks. This group was compared to a second group that



consumed 3 regular meals with the same number of calories and no snacks. The results of the study showed that the first group had a 15% increase in calories in addition to a reversal of weight loss when compared with the second group that only consumed their 3 daily meals (Zizza et al., 2007).

These studies are of great significance because a decrease in consumption of nutrient dense meals leads to inadequate intake of vital micronutrients, carbohydrates, protein,

and fat. Additional studies have shown that undernourished older adults are more likely to become ill, disabled, unable to take care of themselves, or even die. Many of them end up in nursing care programs (Wakimoto, P., Block, G, 2001).

Longevity is about adding healthy years to life and being able to enjoy them with minimal discomfort, pain or illness. As future registered dietitians we need to be able to recognize the dietary patterns within this age group as well as the contributing factors that affect them. In this manner, we will be able to create an effective meal plan for older Americans that will prevent unintentional weight loss, provide the nutrients they need to improve or maintain their health, get more energy to perform day to day activities and keep their much treasured independence and self-reliance.

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Note From the Editors

We want to thank everyone who wrote an article for the SDFSA Newsletter. We appreciate the time and energy everyone put into making this newsletter a great success. A special thanks to Dr. Lisagor, not only for her time and energy spent on SDFSA matters, but for being a shining example of what a mentor should be! Great job SDFSA! Keep up the outstanding work!

Your SDFSA editors,

Louise Bales & Mareena George



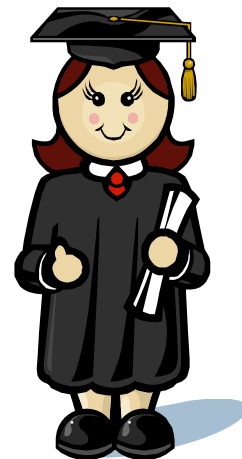
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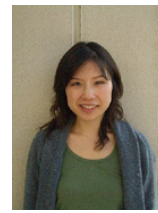
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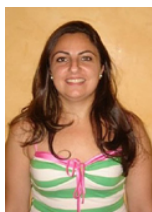
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