

Nutrition News

Brought to you by the Student Nutrition Association of University of California, Davis. Winter 2010



~Dietetic Internships~ What are YOUR Plans?

By Jackie Huff

As I walk into my 8 A.M. Nutrition class, a sigh of relief seems to hover over the heads of my classmates. They're talking, laughing, and that tinge of anxiety has left their eyes. Maybe it's because the rain is becoming less frequent or spring break is approaching, but I'm almost certain it's because February 16th, the deadline for the 2010 Dietetic Internships, has past.

The preparation, compilation, and deadlines for the internship were demanding, and the statistics didn't look that good either. Just this past year, 48 UC Davis students applied for the 2009 internship rounds, and only 35% were placed, forcing the remaining students to wait another year to apply. Now those remaining applicants are potentially applying this year with us, along with graduate students who have a year's worth of experience in comparison. We should not be discouraged, however! We have had many resources at our fingertips, from the countless application seminars we've attended to the encouragement of our professors who are leaders and innovators in the field of dietetics. UC Davis has provided us with many exciting internship opportunities, as well as volunteering opportunities specifically in nutrition and food service. Just saying that we are members of the UC Davis student nutrition association says something about our desire to be contributors in the world of nutrition and dietetics.

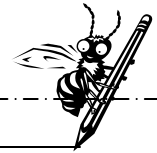
We all knew that you needed to start early and follow the timeline given by the nutrition advising office. Attention to detail is important, and you should definitely ask for letters of recommendation prior to the winter holiday. Ultimately, however, I feel that it is about how confident you are in your



qualifications and if you could present that confidence and talent on paper. We needed to show the directors of the internships that we wanted to be accepted to their internship and that what we will learn in their program will allow us to achieve our life goals.

During my experience, I found the most challenging part of the application process to be describing myself and why I wanted to apply. I spent many nights thinking about why I originally became interested in nutrition, what led me to change my major from biochemistry to clinical nutrition, and why I wanted to become a dietitian. I personally feel that a career move like this should not be taken lightly, and I wanted to make sure I knew what I wanted and why I wanted it.

Whether you've applied for a dietetic internship, applying for graduate programs, preparing to join the work force, or studying hard in class, it is important to know what you want out of life and what will make you happy. Once you figure that out, it will be easy to translate your career goals to the programs, employers, or whoever comes your way. So, good luck with all your endeavors, and have a great rest of the winter quarter!



Inside This Issue:

- What's in Season? *Hearty Eating in Winter* p.2
- *Survive the Sick Season* p.3
- Health and Fitness: *When the Going Gets Cold* p.4
- Nutrition & Weight Loss: Why diets don't work! p.5
- Cook Book Review: *Cook Yourself Healthy!* p.6
- Winter Snacks, Sudoku, and Fun Recipes p.7~p.8

Hearty Eating in Winter

By Sara Najafi



"It is important to eat fruits and vegetables that are in season because it is better not only for your health but the environment as well."



It may be winter, but a variety of colorful fruits like oranges and kiwi are in season!

Farmers Market
Winter Schedule:

Nov 4 ~ March 10
Wednesdays 2-6 pm

There's still time!
Check one out before it's over!

Think that nothing good can grow in the winter? Stuck on how many different ways you can use potatoes and onions? Well that ends now! It's true that winter produce may not have all the vibrant colors and flavors that spring and summer produce offer, but there are still plenty of great options. Some fruits that are in season now are avocados, bananas, blood oranges, grapefruit, kiwi, and mangos. As for vegetables, there are artichokes, beets, brussel sprouts, cabbage, carrots, onions, leeks, rutabaga, squash, various greens, and turnips. And this is only naming a few. For a detailed list of which fruits and veggies are in season, a great website to check out is: www.sustainabletable.org/shop/eatseasonal.

It is important to eat fruits and vegetables that are in season because it is better not only for your health but the environment as well. Produce that is grown out of season requires many types of chemicals to promote their otherwise unlikely growth. By purchasing seasonal foods, we are ensured that there are far fewer chemicals being put into our bodies. As for the environment; since in-season crops do not need to be shipped from miles away where many are grown under ideal climate conditions, tons of emissions are saved from polluting the air. The best part is that many of these can be found at our local farmers markets. Luckily for UCD students, farmers markets are made very accessible. There are weekly farmers markets even in winter on Wednesdays 2-6 pm (Nov 4 thru March 10). In spring and fall there is even the east quad farmers market so you can pick up some groceries while on your way to your next class! Farmers Markets are a lot of fun and are a great way to support local farmers. So buy seasonal and local foods!

I myself recently experimented with some recipes using winter veggies. I lack quite a bit in the culinary department, but I came up with a hearty soup that even I can manage. These portions are enough to feed at least 5. But it tastes good even as leftovers so once you make some you do not have to cook for a few days!

Ingredients:

- 2 Sweet potatoes
- 1 Small turnip
- 2 rutabagas
- 1 yellow onion
- 1 cup black eyed peas
- 2.5 cups lentils
- 1 small pumpkin



Directions:

1. Gather ingredients
2. Bake pumpkin separately (use fork to test when done)
3. Grate rutabaga, sweet potatoes, and turnip
4. Chop onion finely and fry in a pot with EVOO (Add turmeric for flavor and color)
5. Add ALL the ingredients in the pot
6. Add a dash of salt and pepper
7. Pour in about three cups water and let them all cook together for an hour
8. ENJOY!



Survive the Sick Season

By Julianne McCarthy

Why is it that people seem to get sick more often when cold weather comes around? The months of October through March are recorded as being the peak of the common cold season. Let's explore what some experts believe increase our risk of getting the sniffles during these months, and see what we can do to avoid them.

One element ascribed to the cold-weather cough is the fact that people tend to spend more time huddled indoors in closer proximity to one another. This allows germs, bacteria, and viruses to be transferred more readily because of their reduced traveling distance and their increased exposure time.



Another hypothesis is the decrease in sunlight during these cold months. Sunlight stimulates your body to produce vitamin D. In many locations, the months of November through February do not provide enough sunlight to create adequate amounts of vitamin D, causing some people to be unknowingly deficient. Vitamin D helps maintain a healthy immune system by increasing the ability of macrophages to destroy bodily intruders, and by strongly stimulating potent anti-microbial peptides. These anti-microbial peptides can be found in the following components of your natural defense system: neutrophils, monocytes, natural killer cells, and respiratory tract lining. In the respiratory tract, they protect the lungs from infection (Cambridge University Press). So,

when your levels of Vitamin D wane, so does your immune system.

A third explanation is that many people are mildly infected with a sickness, but show no symptoms. The cold weather is thought to bring out this dormant sickness because very cold temperatures cause pronounced constriction of blood vessels in the nose. During constriction, white blood cells (part of the immune system) aren't getting the warm blood supply they need to survive, which inhibits their ability to ward off infection. This inhibition allows the virus to get stronger, ultimately leading to an emergence of symptoms (Common Cold Centre at Cardiff University).

One last proposed contributor is that the cold weather may cause a drop in tissue permeability, leading to reduced plasma mobility. Complement proteins suspended in the plasma, such as C3 proteins, act to disable, destroy, or tag foreign matter for destruction, and thus greatly aid our immune systems. Constant exposure to cold constricts the pathways of the complement proteins, restraining their performance, which allows the intruder a higher chance of establishing an infection.

With these sick-inducing circumstances laid out, we can counter these seasonal culprits! Thoroughly washing hands and conscious use of hand-sanitizers will reduce your exposure to rhinoviruses and other bacteria when you are crammed indoors.



Could the cold season be caused by the lack of sun, the cold weather, or huddling indoors in close proximity with others? Whatever it is, maintaining health with proper nutrition *can* help fight the cold!

Increasing your Vitamin D intake should boost your germ-fighting abilities. Fish is an excellent source of naturally occurring Vitamin D. Half a fillet of halibut delivers 1224IU of this vitamin; that's 306% of your DV! Halibut is a white, flaky fish with a dense, firm texture. It has a less fishy taste, which is appealing to those who are skeptical about diving in. Try the tasty and easy halibut recipe on page 8—it requires no measuring!). In the U.S., many cereal products, milk and some juices are fortified with Vitamin D. There are a couple forms of Vitamin D that your body can use, but Vitamin D3 is utilized best by our bodies. Also, keeping yourself warm might be an obvious option to avoid getting sick. Try the delicious hot drink recipe also on page 8 to get that warm, cozy feeling!

Go to the last page for fun recipes to try!

Sources:

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2. Dowling HF, Jackson GG, Spiesman IG, Inouye T (1958). "Transmission of the common cold to volunteers under controlled conditions. III. The effect of chilling of the subjects upon susceptibility". American journal of hygiene 68 (1): 59-65. PMID 13559211.
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5. Mothers 'were right' over colds, BBC News, 14 November 2005
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When the Going Gets Cold

By Chris Page



Throughout much of our history, humans were required to expend much energy on the quest for adequate nutrition. Health complications associated with overconsumption of macronutrients were few and far between. For those of us living in the developed world, times sure have changed. For most of us, the effort involved in procuring an energy dense meal equates to little more than a few strides, a reach into the wallet, and an outstretched hand to pay the cashier. Furthermore, if we are anything like most of earth's creatures, our body adapts to seasonal cycles. In other words, we want to move around less when it's cold and rainy. In terms of physiology and survival this makes sense, as homeostasis is a kicker, but in terms of the modern American diet, we need to be wary of our wintery ways. Less energy expenditure than ever before, meals dense in kilocalories, and wet, cold weather can affect us in cumulative fashion. And by cumulative, I'm not talking GPA. I'm talking excess pounds, musculoskeletal fragility, and atherosclerosis. Now enough of the scary talk - I think we can all agree that these are important reasons to ensure long term health by getting more exercise.

When it's cold and wet outside, the gym may be the best place in town to get more physical activity. In my experience, I have noticed that most people care about getting exercise and like the way they feel afterward. However, many people get tired of doing the same old thing or are intimidated by the gym environment. Knowing how to responsibly incorporate principles of cardiovascular endurance, muscular strength, and flexibility can provide focus and limitless options to fill one's time at the gym¹. I believe that approaching exercise with a purpose can serve as a motivational tool and promote adherence to lifelong exercise. Applying the SMART principles (Specific, Measurable, Attainable, Relevant, Time-based) to exercise goals is a great way to stay on track². For more on exercise programming, there are great resources available at larger bookstores and Internet providers, such as those from the American College of Sports Medicine and Human Kinetics publishing. A certified personal trainer can also be a great educational and motivational resource, regardless of fitness level.

For the beginner, a great place to start is by approaching exercise with a game plan that includes at least 2 days of total body strength training for 60 - 90 minutes per day that targets all major muscle groups in 10-12 exercises, and 2-3

days in between featuring at least 20 minutes of sustained cardiovascular exercise and flexibility training. On strength training days, try to branch out and use machines never tried before. On each machine there is information posted that explains muscle groups targeted and provides instructions on performing the exercise properly.

Cold and wet winter days at UC Davis can make attending class a chore, let alone getting enough exercise. Fortunately, we can take advantage of modern wonders such as climate control and large indoor spaces that allow us temperate places to exercise. The truth is we could all use a little extra motivation, regardless of the season. Knowing why we need more exercise is seldom enough to stick with a program. However, as with anything we set out to do, simply the act of getting there and starting is usually enough to accomplish the mission, and the hormonal and musculoskeletal response to exercise will make sure our body and mind feel glad we did. Having a plan and purpose to our exercise will also provide that extra push we need to get moving.

Chris Page is a personal trainer at the UC Davis ARC with the Department of Campus Recreation, Fitness and Wellness.

References

¹ American College of Sports Medicine (2010). Resource Manual for Guidelines for Exercise Testing and Prescription (7th ed.). Philadelphia: Lippincott Williams & Wilkins.

² American Council on Exercise (2003). ACE Personal Trainer Manual (3rd ed.) San Diego: American Council on Exercise

Stalled in Your Weight Loss Efforts?

By Martin Bernardino

That's not unheard of. The early weeks of any weight loss regimen go by pretty smoothly. Soon to follow, however, will be the inevitable halt in progress.

Anecdotally, people have reported a stagnation in weight loss for several weeks despite lowering their energy consumption and increasing their physical activity. I can attest to this. It is a very discouraging phase during anyone's diet that can cause one to give up. The common culprit implicated in this problem is that the metabolism has sensed prolonged energy restriction and adapted by slowing down drastically. This idea of "starvation mode" is not true. More on this later.

On the flip side, the same people have reported giving up on their diet, binging for a few days, and magically experiencing resumed weight loss after stepping onto the scale. This is not an uncommon event, and it can confuse the heck out of people. What is going on here? Has the metabolism sped up again?

First, although it is true that the metabolism will slow down in response to a sustained calorie deficit, it never completely slows down to the point that further weight loss



becomes impossible. In fact, a study by Pavlou and his team showed that men who dieted on a meager 1000 calories daily lost around 25 pounds in 12 weeks [1]. No problem with weight loss there, even after considering a deficit that would be too stark for both men and women. Clearly, the body must still abide by the basic rules of thermodynamics.

If a slowed metabolism isn't the main culprit, then what is? Although researchers have not set out to specifically answer this paradox of weight loss, there is a large body of evidence pointing to a likely explanation.

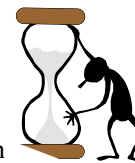
If you're familiar with the Minnesota Starvation Experiment, you'll appreciate the similarity between the subjects examined in the study and individuals trying to lose weight. The subjects were instructed to follow an 1800-calorie diet coupled with exercise [2]. The early weeks of the program yielded consistent weight loss. As the weeks progressed, the weight loss would alternate between periods of complete stagnation and periods of sudden and substantial weight loss. These would occur several weeks apart. Upon being allowed to return to normal eating, the subjects still experienced weight loss on subsequent days. During this time, they also more frequently urinated.

The probable explanation, then, is that water retention is proportional to the severity of the diet, which stresses the body. Indeed, psychological stress has been shown to decrease sodium excretion (meaning

more water retention) in pre-hypertensive men [3]. How does this apply to dieting? Prolonged dieting lowers levels of serotonin, the feel-good hormone, and dopamine. Ever felt horrible and cranky when dieting? In addition, increased levels of the hormone cortisol usually accompany dieting as well. One of cortisol's functions is as an anti-diuretic (causing water retention). Instinctively, most people will opt to eat less and exercise more in the hopes of jump-starting their weight loss again. Unfortunately, more water is retained as a way to compensate.

Not coincidentally, severe starvation is associated with a clinical condition known as dietary edema, or swelling of the body due to water retention [4]. It isn't far-fetched to say that many people go overboard with their regimens, eating less and doing more. These people are at highest risk of experiencing the burden of water retention that is masking their weight loss, which is certainly happening. And this is a big problem because arguably the hardest aspect of any diet is the behavioral component; if the individual is discouraged, his or her adherence falls apart.

As a final note, a simple before and after body fat test will prove to you just how much weight loss you've truly accomplished, since water registers as lean body mass. So, unless you are mentally strong and can take the extra water, take it easy on the dieting!



Sources:

- 1) "Exercise as an adjunct to weight loss and maintenance in moderately obese subjects."
<http://www.ajcn.org/cgi/reprint/49/5/1115.pdf>
- 2) "They starved so that others be better fed: remembering Ancel Keys and the Minnesota experiment."
<http://www.ncbi.nlm.nih.gov/pubmed/15930436>
- 3) "Psychological stress induces sodium and fluid retention in men at high risk for hypertension."
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- 4) "A concept of starvation edema."
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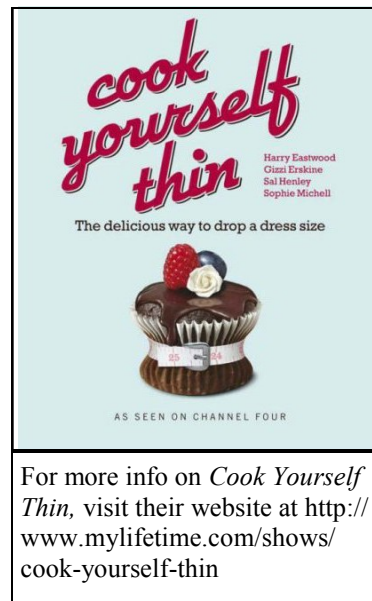
Cook Yourself Healthy!

By Emily Elliot

One of my favorite things to do as a Nutrition Enthusiast is to find healthy cooking alternatives. I especially like to discover ways to use healthier ingredients in my favorite dishes that might otherwise be considered “calorically high” or “unhealthy.” If you’re like me, then I have found the perfect cookbook for you! I was flipping through the TV channels one day, and I came across a cooking show called, “Cook Yourself Thin.” The show was about three professional chefs who helped one woman reach her goal to lose one dress size. Now, this may seem like a “diet” show, but in actuality, all that the chefs did was take the woman’s favorite dishes and altered some of the ingredients in them, which resulted in the dishes having less calories and fat. The chefs demonstrated that by simply substituting a few of the in-

gredients in a recipe with healthier alternatives, they can reduce the calorie and fat content of that dish.

When I found out that the show released a cookbook, named after the series, *Cook Yourself Thin*, I knew that I had to have it. As a result, this cookbook has become one of the best purchases I have made. My favorite recipe is called “Cauliflower Mashed Potatoes,” which involves the substitution of a large quantity of butter and potatoes from a traditional mashed potato recipe for a cauliflower puree. If you are thinking that putting cauliflower in your mashed potatoes sounds unappetizing, trust me, it is better than the real deal! Some other dishes in the cookbook include vanilla cupcakes with zucchini, chocolate brownies made with butternut squash, and Caesar salad with the dressing made from Greek yogurt.



For more info on *Cook Yourself Thin*, visit their website at <http://www.mylifetime.com/shows/cook-yourself-thin>

This cookbook might be called *Cook Yourself Thin*, but really, it is all about cooking yourself healthy.

Cauliflower Mashed Potatoes

- ½ Large head cauliflower, broken into florets (about 8 cups)
- ½ Cup nonfat buttermilk
- 1 Pound Yukon Gold potatoes, peeled and cut into ½ thick cubes
- ½ - ¾ Cup low-fat milk
- 1 Tablespoon butter
- Salt
- Pepper
- 2 Scallions, chopped (optional)



Directions:

1. Place the cauliflower in a steamer basket, set over boiling water, cover, and steam for 15 minutes.
2. Transfer the cauliflower to food processor, and add the buttermilk and ¼ cup of the milk. Puree until very smooth, about 2 minutes.
3. Meanwhile, place the potatoes in a saucepan, add cold salted water to cover about 2 inches, bring to a boil, reduce heat, and simmer until tender, about 15 minutes.
4. Drain the potatoes, return to the saucepan, and heat over medium heat for 1 to 2 minutes to dry. Mash the potatoes with a potato masher. Add the cauliflower puree, ¼ cup of milk, 1 teaspoon salt, and ¼ teaspoon pepper.
5. Stir to blend. Heat over medium-low heat, adding more milk as needed for a creamy consistency. Stir in butter and scallions, and cover to keep warm.



Sudoku - Fruits & Veggies!



Artichoke, Butternut Squash, Nectarine, Okra, Mandarin, Apricot, Asparagus, Bok Choy, Grapefruit

	Nectarine	Apricot	Okra	Asparagus	Grapefruit		Artichoke	
Mandarin		Okra						Apricot
		Butternut Squash		Nectarine		Asparagus		
				Mandarin	Okra		Butternut Squash	
Nectarine		Mandarin		Butternut Squash		Okra		Artichoke
	Butternut Squash		Asparagus	Bok Choy				
		Grapefruit		Apricot		Artichoke		
Apricot						Grapefruit		Butternut Squash
	Mandarin		Nectarine	Grapefruit	Artichoke	Apricot	Okra	

Created by Emily Elliot

EASY

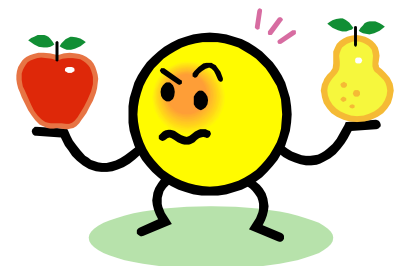
Top Ten Winter Snacks to Keep You Hearty and Healthy!

By: Brittany Huynh



It's hard to avoid the feelings of excessive fatigue, illness, and stress associated with winter. A lot of us get a bad case of "munchies" during this time of year, and we often end up eating foods that satisfy our cravings. This, however, may end up worsening our health. With this in mind, the following is a list of ten snacks/drinks that is aimed to help stave off those not-so-beneficial cravings and keep your body happy:

1. Hot Cocoa
2. Tea (green, white, or black)
3. Oranges
4. Dried cranberries
5. Whole-grain Toast topped with peanut butter and apple slices
6. Nuts (a handful would be a great amount)
7. Yogurt sprinkled with granola
8. Oatmeal topped with banana slices
9. Baby Cut Carrots (dipped in low-fat dressing if desired)
10. Bell Pepper Slices (dipped in low-fat dressing, if desired)



Fight off those munchies with a healthy snack!

Mexican Baked Halibut

(from pg 3)

- 1 ½ lbs. halibut
- 1 cup salsa
- 1 cup shredded sharp cheddar cheese
- ½ cup coarsely crushed tortilla chips
- 1 avocado - peeled, pitted and sliced
- ¼ cup sour cream



Directions:

Preheat oven to 400 degrees F. Lightly grease one 8X12 baking dish. Rinse fish fillets under cold water, and pat dry with paper towels. Lay fillets side-by-side in the prepared baking dish. Pour the salsa evenly over the top of the fish and sprinkle with shredded cheese. Top with crushed tortilla chips. Bake, uncovered, in the preheated oven for about 30 minutes, or until fish is opaque throughout and flakes with a fork. Serve topped with sliced avocado and sour cream (if desired).

Hot Tea Hottie

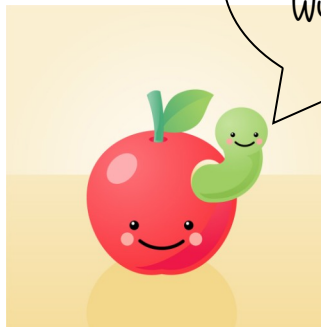
- 4 cups all natural apple juice
- 3 cups pineapple juice
- 2 cups cranberry juice
- 2 Chai tea bags
- 2 orange spice tea bags



Directions:

In a large pot, or crock pot, combine all juices. Simmer for 5 minutes. Add tea bags, allowing the string to hang over the sides of the pot. Cover with lid. This will keep the tea bags in place. Simmer for another 3-5 minutes, depending on how strong you want the tea and spice flavor. Makes about 12 servings.

We're on the Web!
Check us out at:
www.snaatucd.com



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Are YOU interested in Health and Nutrition?

If you are interested in getting the scoop on current nutritional issues, meeting new people with similar interests, discovering more options for a nutrition major, or getting involved in community service, come to one of our meetings!

Contact us at: snaucd@gmail.com