Welcome to Summer!

Along with the imminent end of the semester, we are pleased to bring you another issue of the Healthy Balance filled with intriguing information. First, I would like to extend my thanks to everyone for their hard work during the spring semester. For those who will be taking the summer off to enjoy a vacation, have a blast; and those who will still be working or volunteering during the summer, keep up the good work. Our sympathy goes to all the LSUHSC students from Nepal and hope that their family and relatives are safe in the aftermath of the recent Earthquake.

In our previous issue, we explored the Ketone Diet, we continue the diet series by exploring DASH diet in this issue. Also included are delicious recipes you should give a try! We also explore the importance of Vitamin D and how we can change our diet to fight off depression.

Further in the issue, we explore strategies to plan more and worry less. Don’t forget to visit the wellness center and measure the results of your hard work in gym. Lastly, don’t forget that exercise has many benefits to the brain and body; so much so that it actually changes your genes. Remember to be fit, be healthy, and be balanced!

-Swarnim M Shrestha, Editor

Nepal Earthquake Relief Fundraiser

Times, the death toll has already surpassed 7500 and is expected to increase. There has been upward of 14,000 injuries, and many more are still missing, including foreigners who were traveling the country. As part of a recent push to promote inter-professional cooperation at LSUHSC, the Schools of Allied Health, Dentistry, Public Health, Nursing, Graduate Studies, and Medicine are partnering to raise funds to help the people of Nepal who are desperately in need. Fundraiser activities will include a cash prize Cornhole tournament, 50/50 raffle, tasty NOLA brews, and delicious McClure’s BBQ. This event is open to students, faculty, friends, and family. We strongly encourage all to attend. This event is also a wonderful opportunity before graduation to bring visiting family to an LSUHSC-sponsored fundraiser and show that the students of LSUHSC are actively supporting those devastated by this natural disaster. Several of our own students have family in Nepal. Please come and show your support of fellow LSUHSC students.

Admission is absolutely FREE.

When: Tuesday May 12th, 5:30-Close

Location: NOLA Brewing, 3001 Tchoupitoulas Street

For more information, please contact David Polhemus (dpolhe@lsuhsc.edu) or John Maxi (jmaxi@lsuhsc.edu).
The Sunshine Vitamin  
By Lauri Byerley, PhD

Did you know vitamin D (aka the sunshine vitamin) is one of many nutrients that are essential for our health? Vitamin D helps maintain strong bones, absorb calcium, and regulate the immune system. Also, Vitamin D may help protect against colon cancer.

Adults up to age 70 years need 600 IU per day. That seems like a small number, yet, many Americans do not get enough vitamin D daily. Is that you? Do you eat any of these vitamin D rich foods regularly: fatty fish (salmon, tuna, mackerel), beef liver, cheese, egg yolks, mushrooms, milk, breakfast cereals, and some brands of orange juice, yogurt, margarine, and soy beverages with added vitamin D? If not, you may not be getting enough vitamin D daily.

Our skin also produces vitamin D when exposed to sunlight. But remember, unprotected, extended sunlight exposure increases the risk of skin cancer. Tanning is not a healthy way to get your daily recommended vitamin D dose.

During the 19th century, rickets, the vitamin D deficiency disease, was an epidemic. With the fortification of milk and adequate sunlight exposure, medical care providers thought the epidemic was behind us. However, if you don’t eat foods containing vitamin D and you drastically limit your exposure to sunlight, then you may not be getting enough vitamin D. Vitamin D supplements can help, but remember, a supplement cannot make up for poor dietary habits.

However, one needs to be careful, excess vitamin D is not better. The upper limit for adults is 4000 IU/day. You want to be well below this mark. Remember, you only need 600 IU/day. Be sure to consult with your doctor before you start taking a vitamin D supplement.

For more information, check out these web resources: NIH, Mayo Clinic, Mayo Clinic

DASH away high blood pressure  
By Maggie Coleman

The DASH diet is designed to help reduce blood pressure through eating foods that are lower in sodium. DASH stands for Dietary Approaches to Stop Hypertension. The DASH diet calls for eating primarily fruits and vegetables, low-fat milk products, whole grains, seeds, nuts, fish, and poultry. These foods have less sodium, saturated fat, trans fat, cholesterol, and added sugar. Additionally, these foods contain more magnesium, potassium, calcium, protein, and fiber which help lower blood pressure. The DASH diet can be practiced at the standard level of sodium intake or the lower level of sodium intake. The standard version caps daily sodium intake at 2300 mg, while the lower level caps sodium intake at 1500 mg per day. However, it is recommended to talk with your doctor before lowering your sodium intake to 1500 mg per day. The American Heart Association recommends adults with hypertension, those over the age of 51, or of African descent, to limit daily sodium intake to 1500 mg per day (http://goo.gl/Mva6yt). The National Heart, Lung and Blood Institute suggests seasoning food with herbs, lemon, vinegar, wine, spices, or salt-free seasoning mixes to reduce sodium. Making these changes gradually increases the chance of maintaining the changes long term. Incorporate one extra serving of vegetables each day and replace afternoon snacks of chips with unsalted almonds. Eating two vegetarian meals per week is another good way to add more fruits and vegetables to your diet. Following the DASH eating plan along with other lifestyle changes can help prevent and control high blood pressure. To learn more, check out http://goo.gl/SxM94f.
I don’t know about you, but I’m ready for summertime. One of my favorite dishes is grilled kabobs, steak or chicken or veggies. Unfortunately, here in New Orleans I don’t have a grill. So, I’ve adapted this recipe I’ve used forever to be cooked in the oven and to be DASH diet friendly. There is plenty of flavor here, so you won’t even miss the salt. PS — I don’t usually measure. Most of this is to taste, so play around with the herbs and veggies to find what you like best.

**What you need:** 1lb chicken breast, 1 zucchini, 1 bell pepper, ½ red onion, 2 cloves garlic (minced), 1 pinch dried rosemary, 1 pinch dried oregano, 1 pinch black pepper, zest and juice of 1 lemon, ¼ cup olive oil, and Wooden skewers.

**What to do:** 1) Soak skewers overnight in a bowl of water. 2) Make the marinade: mix garlic, rosemary, oregano, pepper, lemon, and olive oil. 3) Cut chicken into 1 inch pieces, and marinate overnight, or at least 4 hours. 4) Pre-heat oven to 375°F. 5) Slice zucchini, bell pepper, and onion into thin, bite sized pieces (you can throw these into the marinade for about an hour if you want to up the flavor, I highly suggest this for the zucchini). 6) Assemble your kabobs however you deem appropriate. 7) Place on an oiled cookie sheet (you can also use aluminum foil here to cut down on clean-up). 8) Cook for 20-30 minutes turning every 10 minutes. 9) Serve with brown rice or potatoes and some steamed broccoli for a delicious summertime meal, minus the grill. For bonus summertime yummy points make up some fresh whipped cream and add to a bowl of berries for dessert.

I must admit that I am completely in love with my cast iron pan. I use it almost every day for making the best pan pizza, perfectly cooked steak, eggs and hash browns, or just roasting vegetables. Due to the versatility, here are some care tips to keeps your cast iron in beautiful shape and an idea for how to use it.

**How to season:** You should season your pan when you first buy it and then again as necessary if food starts sticking. 1) Place a sheet of aluminum foil on the bottom rack of your oven to catch drips. 2) Preheat oven to 350-400°F 3) Clean your pan with warm water, soap and a stiff brush or sponge, dry well. 4) Rub a neutral cooking oil (shortening or vegetable oil are traditional) around the inside and outside 5) Place the pot upside down on the upper rack and bake for an hour 6) Turn of heat and let the pan cool in the oven.

**How to clean:** Now we get to some controversy: I have seen people argue over the use of soap to clean a cast iron pan. What can everyone agree on? Regardless of how you get food off your pan, you definitely don’t want to leave water on it. After cleaning, immediately dry the pan, rub with some oil, and heat it up on the stovetop for about 10 minutes.

**What to cook:** Just about anything you want. The exception to this rule is very acidic foods like tomatoes. These foods are ok for a short amount of time, like to finish a dish, but you don’t want to be stewing tomatoes in your pan. Here’s a recipe that is perfect for the cast iron pan: Moroccan-Style Chicken Thighs. I serve mine with a salad and Naan for a delicious and filling meal.

**What you need:** 2lbs boneless, skinless, chicken thighs, 2 chopped garlic cloves, ½ cup chopped flat leaf (Italian) parsley, 2 tspsn ground cum- in, 2 tspsn paprika (try smoked to add a little more flavor), 1 tsp Kosher salt, and Oil for cooking (I used coconut).

**What to do:** 1) In the morning (or at least 2 hours before cooking), mix garlic, parsley, cumin, paprika and salt together in a bowl. 2) Add the chicken and toss to coat. 3) Cover and place in the refrigerator. 4) Preheat oven to 350°F. 5) Heat oil in your cast-iron or other oven-proof pan on the stovetop over medium heat. 6) Sear chicken thighs 1-2 minutes on each side. 7) Transfer skillet to oven and cook until chicken is cooked to an internal temperature of 165°F; about 15-20 minutes. **Adapted From:** Bon Appétit, July 2014.
Empower yourself: Worrying vs. Planning

By Lauren Garnier

“Worrying is a habit, and with time and practice, we can learn to develop new, healthier habits.”

School, work, family… all of the things that bring joy and success in our lives can also lead to anxiety and worry. How am I going to get my work projects done on time? Have I studied enough to perform well on this exam? Is everyone going to get along at the family dinner this weekend? Worry is defined by Merriam-Webster as “mental distress or agitation resulting from concern usually for something impending or anticipated.” Some professionals suggest that worrying can be helpful if it motivates you to take action or solve a problem. But if it still causes mental distress, how helpful can it be? It may be more sensible to differentiate worrying from planning.

Planning tends to be productive - it has a purpose or a goal that can lead to solutions. On the other hand, worrying is more likely to focus only on the negative options or worst-case scenarios. Worrying is a habit, and with time and practice, we can learn to develop new, healthier habits. One technique is to identify potentially worrisome thoughts as soon as they occur and ask yourself “Is this helpful?” If the answer is no, have a pre-determined strategy, such as a positive word, phrase or quote, to distract from those worrisome thoughts. If the thoughts are part of a planning process, jot down your solutions so you can refer to them if the worrisome thoughts persist. Having a plan empowers you to take action. As noted in a Chinese proverb, “that the birds of worry and care fly over your head, this you cannot change, but that they build nests in your hair, this you can prevent.”

For more information on managing worry, visit http://goo.gl/TXKPx or call the LSUHSC Campus Assistance Program at (504) 568-8888.

Fighting Depression through Diet

By Elena Khoutorova

Major depression disorder is considered to be one of the most common mental disorders in the U.S. About 16 million adults ages 18 and over have had at least one depressive episode in a year, representing 6.9% of all of the adults. Anti-depressants are the first-line therapy for depression, but many are unaware of the nutritional aspect of the treatment. When the diet of people with depression was observed, it was found to be deficient in omega-3 fatty acids, folic acid, vitamin B12, and magnesium. Omega-3s are important for normal brain cell function. Eicosapentaenoic acid (EPA) helps the body make more omega-3s. Researchers have determined that supplementing one’s diet with 1.5-2 g of EPA results in significant mood improvement. In addition, taking a daily supplement of 0.8 mg of folic acid or 0.4 mg of Vitamin B12 had also decreased the severity of depression. Other studies have revealed that patients who were given 125 – 300 mg of magnesium glycinate or taurinate with each meal and at bedtime led to recovery of depression in <7 days. Diets that are rich in fresh fruits, vegetables, low glycemic index carbohydrates, and fish will provide these necessary nutrients. However, it is seen that people suffering with depression mostly do not get enough of these nutrients. Thus, if being treated for depression, it would be advantageous for the patient to be supplemented with these nutrients in their diet as they seem to help fight against depression. Though there are many other factors that play a role in depression, addressing these common nutritional deficiencies has been found to greatly improve the state of depression in many individuals.

References:
We’ve been all been told that saturated fat will “clog our arteries” and increase cardiovascular disease risk. But is this warning supported by science? This hypothesis was begun with Ancel Keys, a physiologist from the University of Minnesota. In 1956, Keys launched the “Seven Countries Studies,” which showed a positive correlation between saturated fat intake and coronary heart disease. However, Keys excluded 14 out of the 21 countries which did not support his hypothesis. Thankfully, science is not so prone to researcher bias anymore. In 2010, a meta-analysis that followed ~350,000 subjects over 5 to 23 years showed no correlation between saturated fat intake and risk of cardiovascular disease or stroke. So, saturated fat may not cause cardiovascular disease. But, are there any benefits to eating them, aside from the delicious taste? Yes! Dietary supplementation with coconut oil, which is about ~90% saturated fat, has been shown to increase High-density Lipoprotein (HDL) and improve body composition in women. Lauric acid, butyric acid, and stearic acid, which are saturated fats found in coconut oil, dairy, and beef respectively, have been found to have antibacterial, anti-inflammatory, anti-viral, and anti-cancer properties. It seems that more research needs to be done to understand the risk of developing cardiovascular disease by consuming diet rich in saturated fats. However, these studies do suggest that you may enjoy a steak or a few slices of bacon guilt free every once in a while and, possibly, even enjoy a few health benefits! Keep in mind that the American Heart Association recommends limiting daily saturated fat intake to less than 16g for healthy adults; which is about equal to an 8 oz NY strip steak. Remember to keep balanced!

For references, please refer to the following source and links: Taubes, G. Good Calories, Bad Calories. Anchor Books, 2008; http://1.usa.gov/1zLMV2C; http://1.usa.gov/1JPyyxf; http://1.usa.gov/1H0iCYg; http://1.usa.gov/1H0iCYg; http://1.usa.gov/1ADZoAG; http://1.usa.gov/1FOTkuB; www.heart.org

How do you measure your fitness progress? Do you weigh yourself? Do you put on an old pair of jeans and say “Whew, they fit!”? Well, if you are looking for a more research based and accurate system, you can find it at the wellness center. We offer a 45 minute basic assessment that measures body composition, aerobic fitness, muscular endurance/strength, and flexibility. These tests are easily administered and you can use the results to make sure you are on track.

If you are looking for more advanced testing, we would like to introduce to you metabolic testing via HIT Lab. LSUHSC researcher and exercise physiologist Tim Allerton, MS, directs HIT lab. Mr. Allerton’s metabolic testing services assess VO2 Max and Resting Metabolic Rate (RMR). VO2 is the measurement of oxygen consumption and RMR refers to your body’s daily calorie burning ability at rest.

The wellness center will be collaborating with Mr. Allerton to bring you these advanced assessment tools in order to guide members to better their goal achievement. In addition to receiving a complete metabolic evaluation, a guided workout program can also be administered by the wellness center to help better attain goals.

Please join us at noon in the wellness center Thursday, May 28th, for a demo and to ask any questions that you may have. If you are unavailable to attend email me nbaron@lsuhsc.edu or Tim Allerton – taller@lsuhsc.edu with any questions.

Measuring success in Gym
By Nijel Baron
Exercise can prevent and treat high blood pressure, heart disease, and Type II diabetes. In fact, exercise and diet changes are actually more effective than metformin, a commonly prescribed medicine, in the treatment and prevention of diabetes\(^1\). But how does exercising actually manage to treat and prevent disease? As a matter of fact, exercising actually causes certain genes found in muscle and fat cells to be turned on or off. When these genes are turned on or off, muscle and fat cells burn more carbohydrates and fats, while also increasing the size of your preexisting muscle cells. These changes help the body respond better to changes in blood sugar levels after a meal, which prevents diabetes. Aerobic exercise and strength training result in different health benefits due to different sets of muscle cell genes being turned on or off. Aerobic exercise results in greater energy production, increased endurance, better cardiovascular health, and better blood sugar control. Strength training increases muscular growth and strength, increases lean body mass, and improves posture. To get the most health benefits from exercising, try a combination of aerobic exercises like running, walking, or swimming and strength training exercises like push-ups, pull-ups, or lifting weights. Let exercise be thy medicine! (Reference: Egan and Zierath, Exercise Metabolism and the Molecular Regulation of Skeletal Muscle Adaptation, Cell Metabolism Rev, 2012.)