BOILER PUMP

THE OFFICIAL NEWSLETTER OF PURDUE SPORTS PERFORMANCE

Issue #6: April 2014

In This Issue:

Real Talk: Leadership

Coach Carlisle's Leadership Topic of the Month:

Challenge

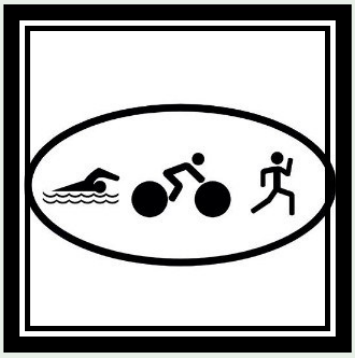
Challenge at least one of your teammates today. Positively push them and yourself to make the most of your workout or practice. See if you can both improve your times in conditioning. Offer to help if there is anything they want to work on. Good leaders consistently invite, inspire and sometimes implore others to greatness.

www.championshipcoachesnetwork.com

APRIL STAFF TRIVIA QUESTION

Test your knowledge of your sports performance staff!

(Or just take your best guess!)



Which Purdue Sports Performance coach has participated in sprint triathlons in the past?

A. Coach Kane Thompson

B. Coach Sam Craven

C. Coach Christina Specos

D. Coach Molly Binetti

MARCH TRIVIA QUESTION ANSWER

Who was the first undefeated NCAA men's basketball champion?

A. Wisconsin in 1943

B. Kentucky in 1949

C. Indiana in 1953

D. San Francisco in 1956

SOCHI 2014

Sports Science Report

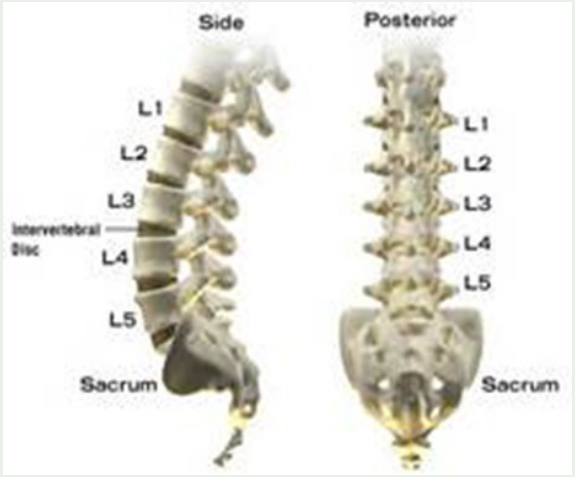
Low-Back Breakdown

Most of us have had issues with our low backs at some point in our lives, whether it is aches, soreness, or an injury. Much stress is placed on the low back as it is the center piece for our entire body. The stress increases tremendously in athletics as more complex and larger bouts of effort are demanded by our bodies. But the low back doesn't have to be a hindrance to our well-being or performance. When trained properly and managed safely, it is more than possible to prevent low back issues and to strengthen the area for optimum performance.

There is a lot going on in the low back in terms of bone, ligaments, muscle, tendon, innervation, blood flow and fascia. First and foremost, we must understand low-back structure and mechanics to properly bulletproof it. The human spine is a structure that is naturally curved (when looking from a side view). This spinal curve is meant to bear a significant amount of weight. For a quick comparison, we can look at the structure of a bridge, as there is a similar curve that also serves to bear a tremendous amount of weight. If a piece of this curved weight-bearing structure were to fail or change, the bridge would collapse. This is much like our spine. We are strongest and can bear the most amount of weight for a longer period as long as this natural curve stays in place.

The lower part of our spine (the lumbar spine) is what we commonly known as our "lower back." This part of our spine takes the majority of our bodyweight and, thus, is built uniquely to handle the increased load. The bones of the lumbar spine are thicker and have a wider area of support.

These characteristics of our spine tell us that our bodies are built to handle stress, as long as the supporting structures hold true. Applications of this to sport can apply to almost any athletic movement. For example, when landing from a maximum effort jump, a lot of weight is coming down to the ground and needs to be supported. While landing and the spine collapses because of lack of strength or awareness, an injury could occur.



This month's sports science report comes to you from ***Coach Sam Craven***

Inside the Huddle...

This Month, Purdue Sports Performance catches up with men's and women's Tennis athletes Lucas Dages and Dani Vidal

Q: In what ways do you believe your training has influenced your tennis performance?
A: It has definitely helped me become a better mover on the court. I have been able to stay in points and chase down balls I never would have gotten in the past.
Q: What are you most proud of accomplishing in the weight room?
A: Passing the conditioning test last fall was a big deal. It was one of the most physically demanding things I've had to do.
Q: What are your favorite/least favorite exercises?
A: I can't really pick a favorite, but my least favorite exercises are the sprints, particularly the 16's and tempo runs.
Q: What is your favorite quality about Coach Roberts?
A: The fact that he is a young and was an athlete here at Purdue. This makes it easier for me to listen because I know he has been through everything he is putting us through. Regardless of how hard he may push us, I know he has experienced the exact same thing.
Q: What advice would you give to an incoming freshman about training with Purdue sports performance?
A: I would tell him to make sure that his running shoes fit well because he is going to use them a lot.
Q: What has been the highlight of being a Purdue tennis player?
A: It has to be our home upset of Northwestern. It was a dramatic match and really worked as a platform for us to excel from the rest of the season.
Q. Who is your favorite athlete of all-time and why?
A: My favorite athlete has to be Mike Ditka. However, I admire him more for his coaching attitudes than his attitudes as a player. He did not worry about outside opinions, he just kept to what he thought would bring improvement.

Q: In what ways do you believe your training has influenced your tennis performance?
A: It has had a huge impact, mostly because my biggest strength on the court is my physical strength. Compared to my freshman year, I feel I am much quicker and agile on the court.
Q: What are you most proud of accomplishing in the weight room?
A: I am most proud of making my mile time in 6:11 and making track sprints, but I am definitely impressed with how much I can lift, especially max squatting and deadlifting. In the summer, I squatted more than my coach, Molly Binetti, which felt pretty good.
Q: What is your favorite quality about Coach Binetti?
A: I am very lucky to have her as my strength coach because she always pushes me to give my very best. Her attitude and work ethic are extremely good. I have really enjoyed the time we have worked together because I can see the results of her coaching on me. She's also always there to give us advice, not just for our sport but life in general.
Q: Tell us about your most memorable training session with the PSP staff.
A: My freshman year we had to make the mile as a team in 6:15 and if we didn't we had to do more sprints later. I was pretty far back from the rest of the team, and Jenny Rabot decided to literally push me the last lap, for which I am very grateful because without that I wouldn't have made it on my own.
Q: What has been the highlight of being a Purdue tennis player?
A: Being part of the team is truly an honor. Being from another country makes me really appreciate everything Purdue has offered me not just on the court but academically, as well. The highlight is definitely when we won our first Big Ten championship. Watching the team grow and see all that hard work pay off was a great feeling.
Q. Who is your favorite athlete of all-time and why?
A: Two tennis players from Spain, Rafael Nadal and David Ferrer. I admire the fight they put in every match and their competitiveness. It is unbelievable how much passion and heart they have. They are also very humble.

Mental Conditioning

Dr. Chris Carr – Sport Psychologist, St. Vincent Sports Performance

Set Controllable Goals

As I was involved with USA Diving and observed the 2008 Summer Olympic Games, it reminded me that athletes that win medals have for years had the "goal" of winning a medal. Yet, it was the daily work, effort and goal attainment that paid off at the Olympic Games. In the men's 4x100 freestyle relay, the USA team trailed France going into the last 100. But Jason Lezak from the U.S. came from behind and by .08 seconds beat the French world champion and set a world record! After the race, Lezak was quoted as saying to himself as he felt the fatigue: "Then I changed. I said, 'You know what, that's ridiculous. This is the Olympics. I'm here for these guys. I'm here for the United States of America. It's more than I don't care how bad it hurts, or whatever, I'm just going to go out there and hit it.'" The rest is Olympic history.

Will you make the same commitment to yourself in pursuit of your dreams?

Make Daily Practice Goals: *Take a notebook (could be your mental training journal) or some 3x5 cards and write down one to three goals for each practice. Not just "doing" what is on the practice schedule, but make the goal specific to your improvement (e.g. percent of passes completed; number of digs successfully done). Just one to three goals a day, then hen review after each practice. Did you accomplish your goal(s)? Did you make good progress? Then make revisions and be goal-directed at the next practice … every day!*

Review your Goals Each Day: *Find time to sit down and review the goals you had for that particular practice/scrimmage. Did you achieve the goal? What did you do (or not do) to help you achieve that goal? How can you make the goal more challenging tomorrow? Make this process your own and don't wait for a coach to give you goal direction The results will be more confidence and belief in yourself when the whistle blows to begin.*

Learn how to Refocus your Goals During Practice: *If you made a practice goal that is going to be tough to accomplish (due to a bad start or change in drills), make the adjustment so you can still find success. Even small successes (catching one pass, making one kill, using a positive cue word) in goals can lead to confidence and focus. As soon as you drift from goals, you lose self-direction and focus in your confidence.*

"The fight is won or lost far away from the witnesses … behind the lines, in the gym and out there on the road, long before I dance under those lights."

- Muhammad Ali

BOILERMAKER FUEL
HIGH PERFORMANCE SPORTS NUTRITION

PURDUE UNIVERSITY ATHLETICS

April 2014

FDA to make changes to Nutrition

New food labels

The Food and Drug Administration is proposing changes to nutrition labels, the first major updates since early 1990s.

Old label

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container about 2

Amount Per Serving
Calories 250 — Calories from Fat 110

	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Proteins 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Serving portion more prominent
2. Calories in large bold text
3. Daily percentages placed first
4. Added sugars shown
5. Vitamins A, C removed; vitamin D, potassium added

One of the proposed labels

Nutrition Facts

8 servings per containe (1)
Serving size 2/3 cup (55g)

Amount per 2/3 cup
Calories (2) **230**

% DV*	
12%	**Total Fat** 8g (3)
5%	Saturated Fat 8g
	Trans Fat 0g
0%	**Cholesterol** 0mg
7%	**Sodium** 160mg
12%	**Total Carbs** 37g
14%	Dietary Fiber 4g
	Sugars 1g
	Added Sugars 0g (4)
	Protein 3g
10%	**Vitamin D** 2mcg
20%	**Calcium** 260mg (5)
45%	**Iron** 8mg
5%	**Potassium** 235mg

* Footnote on Daily Values (DV) and calories reference to be inserted here.

Serving sizes adjusted

Single serving sizes will be more realistic to reflect how much people typically eat at one time

1 pint

Current serving size 4 servings 200 calories

Proposed serving size 2 servings 400 calories

20 oz. 12 oz.
200 calories

1 serving per bottle for either size

Source: U.S. Food and Drug Administration

McCLATCHY/TRIBUNE

QUESTIONS? Contact: Rachel A. Clark, Sports Dietitian, RachelClark@purdue.edu • Lauren Link, Registered Dietitian, LVarnau@purdue.edu

HOW TO USE THE

NUTRITION FACTS LABEL

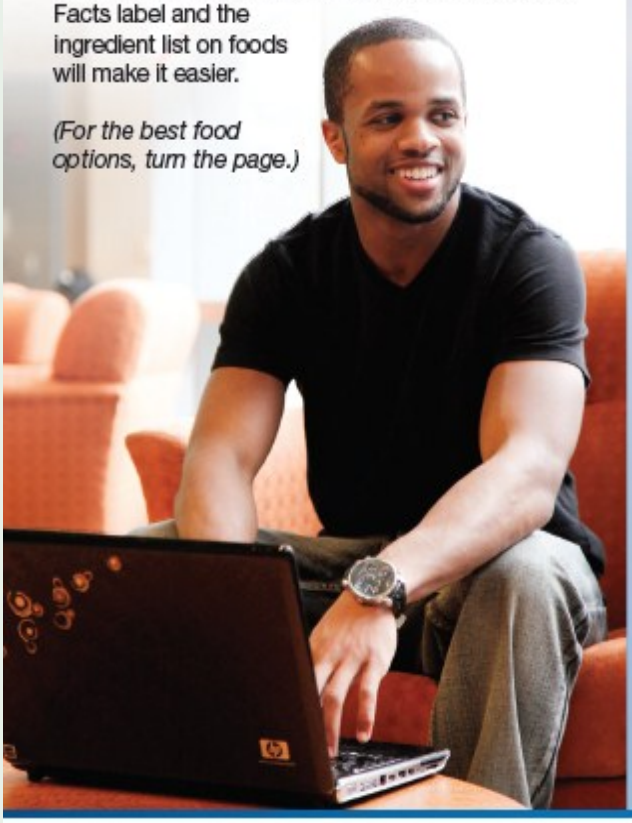
I'm moving out of the dorms and into an apartment with a few of my teammates. I'll be responsible for my own meals, but I don't have much experience grocery shopping. Planning healthful meals are important for my athletic performance, but I'm not sure how to pick the best foods.

How can I use food labels to help me?

GET THE COMPETITIVE EDGE

In the highly competitive world of collegiate athletics, the difference between first and last can be small. Optimal eating habits can give you an edge over your competitors, but planning and selecting a high-quality diet can be challenging. Using the Nutrition Facts label and the ingredient list on foods will make it easier.

(For the best food options, turn the page.)



Information presented by

NCAA SPORT SCIENCE INSTITUTE

Sports, Cardiovascular, and Wellness Nutrition
a dietetic practice group of the Academy of Nutrition and Dietetics

www.NCAA.org
www.scandpg.org | 800/249-2875

WHAT TO LOOK FOR: NUTRITION FACTS*

1. Calories multiplied by Servings Per Container equals Calories in one container.
2. Limit saturated and *trans* fat to make room for healthy fats (not always listed).
3. Evaluate carbohydrate, protein and sodium based on your individual needs and training/competition phase.
4. Note % DV only for vitamins and minerals.

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container about 2

Amount Per Serving	
Calories 250	Calories from Fat 110
	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Proteins 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

For educational purposes only. This label does not meet the labeling requirements described in 21 CFR 101.9

WHAT TO LOOK FOR: INGREDIENT LIST

- Avoid stimulants, such as guarana, mate or caffeine.
- If several servings are consumed per day, choose those with less than 20% DV for vitamins and minerals.
- Avoid partially hydrogenated vegetable oils.

*See related Fact Sheets to help determine your nutrition needs: Performance Hydration, Eating Before Exercise, Eating for Recovery, and Fueling During Exercise.

Written by SCAN Registered Dietitians (RDs). For advice on customizing a nutrition plan, consult a RD who specializes in sports, particularly a Board Certified Specialist in Sports Dietetics (CSSD). Find a SCAN RD at www.scandpg.org.

Here are tips to help you make healthful choices when selecting foods. Striving to meet all of these recommendations is optimal, but sometimes that's not possible. Remember to focus on your total diet.

Cereal, pasta, rice, granola bars, crackers, bread
- Choose whole grain, such as whole wheat or whole rye, as the first or second food in the ingredient list, except right before or during exercise.
- For women, select grain foods with more than 10% DV for iron.

Salad dressings
- Dressings can be a healthy source of fat in your diet. Lower-fat versions may not always healthier.
- Simply use smaller portions.

Beef, pork, chicken, fish
- The Nutrition Facts label does not appear on fresh fish — it's an all-around healthy choice!
- Choose canned fish packed in water, rather than oil, for a great source of healthy fats.
- Choose lean (less than 4.5 g per 3 ½-ounce serving) or extra lean cuts of meat (less than 2 g per serving) for nutrition without the saturated fat. Or, look for cuts with "loin" or "round" in the name.
- Eat chicken without the skin.
- Beef has the most iron of all meats (nearly 20% DV), especially important for women.

Frozen meals
- Look for the correct balance of grains, vegetables and protein sources.

Soups
- Vegetable- and bean-based soups will help you increase vitamin, mineral and fiber intakes.

Sauces (spaghetti, alfredo, salsa, nacho cheese)
- Look for whole foods, such as tomatoes or milk, as the first two to three foods in the ingredient list.
- Use smaller portions of high-fat sauces.

Yogurt
- Look for those with more than 20% DV for calcium.

Spreads (cream cheese, nut butters, margarine/butter)
- Use smaller portions.
- Peanut and other nut butters are a good source of healthy fats and protein.

Canned or frozen fruits and vegetables
- Check the ingredient list to avoid added sugars, fats and sodium.

Fruit juice, lemonade, tea, soft drinks, energy drinks
- Choose "100%" juice.
- Avoid drinks with more than 100% DV of vitamins or minerals.

Sports/Energy/Protein Bars
- Look for whole foods as the first two to three foods in the ingredient list.

Other Snack Foods
- Chips, crackers, puffs, sweets and similar snacks are best eaten in small amounts.
- Baked snack varieties are generally lower in fat, but may be higher in added sugars and/or sodium.

COACH SPOTLIGHT: MOLLY BINETTI

Coach Binetti was hired as a sports performance assistant in June of 2013 after spending the previous year as a graduate intern at the University of Minnesota and strength coach at Cretin-Derham Hall High School in St. Paul, Minn. Binetti coordinates the sports performances programs for **women's tennis** and **cheer** while assisting with **volleyball**, **soccer**, **cross country** and **women's swimming**. She received her bachelor's degree in exercise physiology from Marquette University and a master's in applied kinesiology from Minnesota. While at Marquette, Binetti served as a strength and conditioning assistant for three years. In the spring of 2012, she was a performance specialist intern at Athletes' Performance in Phoenix. She is a NSCA Certified Strength and Conditioning Specialist and an iTPA Certified Tennis Performance Trainer.

What is your favorite part about being a coach? The influence you can have on someone that extends far beyond his/her athletic potential. We often spend more time with our athletes than their parents or head coach, so I have to ask myself, "What kind of example am I setting?" If a kid leaves me after their career is over and I didn't help make them a better person, I didn't do my job.

Who has influenced you the most throughout your career? Todd Smith, Chris Simenz, Brett Bartholomew, Sara Wiley, Megan Young, Shawn Myzska, the entire Purdue staff.

What is your favorite quote? "Only those who will risk going too far can possibly find out how far one can go." – T.S. Eliot

What is your favorite book? Tiny Beautiful Things by Cheryl Strayed

What is your training philosophy? Build trust and develop relationships before anything. Create a culture of high standards, including discipline, accountability, pride and teamwork. Emphasize movement quality and proficiency in the basics. Educate every chance you get.

What is your favorite type of training session or favorite exercise? My favorite lift would be the deadlift, and I love coaching any movement or heavy-lift sessions.

What can we find under "Most Played" in your iTunes library? Ben Rector, Van Morrison, Brandi Carlile and a whole lot of country.

Tell us something interesting about you we don't know: Outside of the weight room, my favorite thing to do is cook. And eat. Mostly eat.

PSP on the WEB

Purduesports.com

Boiler Power

@BoilerPower

Contact the Staff

Directors

Duane Carlisle, Director
765-494-2268
dcarlisle@purdue.edu
Doug Davis
765-496-1670
davis676@purdue.edu
Christina Specos
765-494-7816
cspecos@purdue.edu
Joshua Bonhotal
765-494-7855
jbonhotal@purdue.edu

Mollenkopf Staff

Office Phone: 765-496-1655

Ross Bowsher
rbowsher@purdue.edu
Grant Geib
ggeib@purdue.edu
Kane Thompson
kthompson@purdue.edu

Mackey Staff

Office Phone: 765-494-7932

Wally Becker
wbecker@purdue.edu
Molly Binetti
mbinetti@purdue.edu
Sam Craven
wcraven@purdue.edu
Gavin Roberts
gjrobert@purdue.edu