

BOILER PUMP

THE OFFICIAL NEWSLETTER OF PURDUE SPORTS PERFORMANCE

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Leadership and Teamwork: Understanding the DISC Assessment

The key to success in an organization is the ability to understand oneself and those around you, from peers to team leaders (i.e., your teammates and your coaches). The **DISC assessment** is a series of questions that upon completion will give insight into four different behavioral dimensions. It is not a test and it does not have right or wrong answers, nor does it provide a pass or fail score. This assessment simply paints a picture of people's natural intrinsic style of behavior as well as how they adapt to their surroundings of people and situations within an environment. Applying this knowledge to a team setting is highly valuable. The assessment can share insight into how players and coaches "tick." For example, their motivation, strengths and weaknesses, their natural personality and role within a group, what helps them to excel, and how well they would respond to coaching and mentoring.

Once the assessment is completed, four key areas of personality are revealed:

1. The person's value to the team
2. Their tendencies while under stress
3. The ideal environment in which they would thrive
4. Possible limitations when it comes to optimal performance



The acronym for D.I.S.C. describes each of the four general personality types:

- (D) = **Dominance** (Those who are direct, competitive and daring)
- (I) = **Influence** (Those who are charming, enthusiastic and optimistic)
- (S) = **Steadiness** and schedule-oriented (Those who are steady, relaxed and a team-player)
- (C) = **Compliance** (Those who are analytical, have high standards and are fact-finders)

This month's leadership topic comes to you from Coach Carlisle.

If your team has not taken the DISC assessment and would like to do so, contact Cathy Wright-Eger for more information (cwright-eger@purdue.edu).

Resource: Target Training International, Ltd.

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Inside The Huddle

'DUE-ing WORK! Your volleyball and soccer leaders share stories of leadership, adversity and how to build TEAM together.

Volleyball: Val Nichol and Kiki Jones

Offseason conditioning usually presents many opportunities for growth and adjustment to a new system and of course opportunities to face adversity, be it improving fitness levels, overcoming past injuries or getting used to higher expectations, training loads and practice styles. This year, our team has an unusually large freshman class. As seniors, we have to make sure that this new group is aware of the Purdue volleyball culture that has been established and ensure that they fully buy into our team's collective goal of making it to the Final Four. They must rise up and meet the standards.

All upperclassmen must come together to enforce paying attention to the details early on in the off-season. For example, in conditioning, a difficult adjustment for newcomers is to consistently push through fatigue or navigate around mental road blocks. We must be sticklers for holding ourselves and our teammates accountable to always finish each sprint running through the line hard with 110 percent effort, and attack it the weight room by never skipping reps, keeping impeccable form, and always increasing in weight. Off the court, we must catch questionable things before they become a problem. There's no room for developing bad habits in work ethic or in life habits that would violate general team rules.

As team leaders, we look through a lens of experience which differs from newcomers. It's important for us to establish goals early, keep standards high, but also have a patient and a nurturing, guiding way (which can be a challenge in itself!) We've grown over the last couple of years and learned how to communicate these messages effectively in order to reach each person and ensure the message of corrective criticism is well received. Stakes are high and fortunately our team is deep so it keeps things competitive. Everyone must "show up" in out-of-season workouts and as we transition to on-court practices in order to earn playing time.



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Inside The Huddle

'DUE-ing WORK! Your soccer and volleyball leaders share stories of leadership, adversity and how to build TEAM together.

Soccer: Mikayla Lasky



I believe that hard workouts really do build a team. I would not say that I am the strongest or most fit person on our team, and we all struggle through workouts from time to time. When the workouts get hard, we start to rely on each other. There are workouts when I've been on the ground trying to catch my breath before the next sprint, and I know my teammates will always be there to physically pick me up. I can't tell you how many times Soraya just encouraged me and some fellow teammates in-between each sprint, and she honestly got us through the workout. We build as a team by being able to rely on one another, and know that everyone has your back no matter the circumstance. I may not be the strongest person on the field individually, but as a team there is no one stronger.



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Sports Science Report



Global Positioning Systems (GPS) in Sports

The STATSports Viper system incorporates the Viper pod with accompanying Viper software to deliver the most accurate and reliable tool in collecting and measuring both training and match-day data for each player. The Viper System is regarded as the worlds leading player performance analysis system available on the market. Viper allows coaches to manage squad training loads from pre-season right through the entire season to effectively manage player conditioning levels and preventing injuries.

The primary metrics presented in Viper include:

- > Speed
- > Distance
- > Accelerations
- > Decelerations
- > Heart Rate Variability
- > Sprints
- > Dynamic Stress Load
- > High Speed Running
- > High Metabolic Load Distance
- > Average Metabolic Power
- > Step Balance

As training continues to evolve, so too have performance models and associated technologies in an attempt to stretch the limits of human performance. In particular, advancements in technology allow us as coaches to more precisely monitor exactly what our athletes are doing during practices and games. One such technology currently utilized by Purdue Sports Performance staff with both our men's basketball and women's soccer teams is the Viper system. Developed by the Ireland-based company STATSports, the Viper system captures metrics pertaining to distance covered and the speeds at which athletes are running. In order to obtain this data, athletes wear a vest containing a matchbox size GPS tracking device with built-in accelerometer situated between their shoulder blades. This device provides information about the session such as; total distance covered, distance per minute, high-speed running distance, maximum speed achieved and how many times the athlete sprints, accelerates, or decelerates. When combined with heart rate data obtained simultaneously, we are able to gain greater insight as to each player's individual training load and mechanical efficiency. In other words, we are able to identify the relationship between a player's external load or output (GPS/accelerometer data) and the internal load or "energy cost" (heart-rate data) of the session. This data collected over time and applied in an appropriate manner offers the potential to optimize each player's long-term athletic development, while reducing their risk of injury and heightening their physical readiness to perform each game.



PURDUE WOMEN'S SOCCER

PurdueSports.com • Facebook.com/PurdueWomensSoccer • Twitter: @PurdueSoccer & @CoachKlatte
Thanks to Wally Becker, Jon Brinson & Kevin O'Connor for helping to compile & share this data



DISTANCE TRAVELED IN PENN STATE LOSS

Player	Distance	Minutes Played
Mollie Kuramoto	7.05 miles	90
Mikayla Lasky	6.34 miles	90
Holly Gregory	6.27 Miles	87
Vanessa Korolas	6.03 miles	90
Kim Love	6.00 miles	90
Erika Arkans	5.87 miles	79
Maddy Williams	5.60 miles	75
Soraya Toppin-Herbert	5.03 miles	58
Andrea Petrina	4.90 miles	57
Alex Hairston	4.75 miles	60
Nicole Robertson	4.44 miles	50
Player Average	5.64 miles	75.1

DISTANCE TRAVELED IN OHIO STATE WIN

Player	Distance	Minutes Played
Mollie Kuramoto	6.60 miles	90
Mikayla Lasky	6.24 miles	90
Holly Gregory	5.91 miles	90
Vanessa Korolas	5.79 miles	90
Erika Arkans	5.75 miles	83
Kim Love	5.58 miles	90
Alex Hairston	5.52 miles	84
Soraya Toppin-Herbert	5.39 miles	63
Maddy Williams	4.91 miles	78
Nicole Robertson	4.41 miles	51
Andrea Petrina	3.09 miles	38
Christa Szalach	2.41 miles	27
Player Average	5.13 miles	72.8

TEAM LEADERS IN PASSING EFFICIENCY VS. OHIO STATE

Unofficial Totals Kept for First Time Sunday

Player	Percentage	Passes Connected	Player	Percentage	Passes Connected
Maddy Williams	91.7	22-of-24	Mollie Kuramoto	78.7	37-of-47
Nicole Robertson	73.3	11-of-15	Alex Hairston	72.4	21-of-29
Soraya Toppin-Herbert	70.6	12-of-17	Holly Gregory	69.2	45-of-65
Christa Szalach	63.2	12-of-19	Kim Love	60.0	18-of-30

Team Totals: 65.3%, 237-of-363

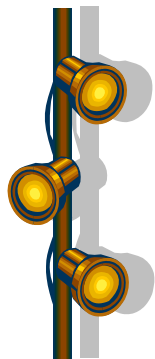
This month's sports science topic comes to you from Coaches Joshua Bonhotal and Wally Becker.

Coach Spotlight:

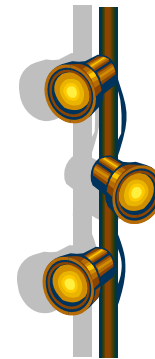
Sports Performance Associate Spencer Dawson

Coach Dawson was hired as a sports performance associate in May of 2014. He oversees the sports performance programs for softball. Additionally, he assists Coach Specos with women's basketball and volleyball, Coach Giacchino with cross country, and Coach Becker with track and field. Coach Dawson received his bachelor's degree in applied exercise and health with a concentration in sport performance from Purdue in 2013. He also spent two years between 2011 and 2013 as an Intern for the Purdue University Department of Sports Performance. Following his time at Purdue, Coach Dawson spent time as a strength and conditioning intern at Harvard University and Mike Boyle Strength and Conditioning. During the 2013-14 academic year, he was the strength and conditioning assistant to the 2014 B1G champion Michigan men's basketball program. He played football at Purdue from 2010 to 2011 as well as at Wabash College in 2007 as a quarterback. Currently, Spencer is working on receiving his master's in sports conditioning and performance from Southern Utah University. He is a Certified Strength and Conditioning Specialist via the NSCA as well as is certified with his Adult and Child First Aid CPR/AED through the American Red Cross Association.





Coach Spotlight:



Sports Performance Associate Spencer Dawson

What is your favorite part about being a coach?

Helping my athletes succeed. We (the athletes and coaches) put in a ton of work that no one will ever see. I take great pride in my athletes and the hard work, energy, and perseverance they display on a daily basis. It isn't easy being a collegiate athlete. It is a blessing to see them improve, compete and win games and know that I helped.

Who has influenced you the most throughout your career?

Assistant Director of Sports Performance at Purdue University Josh Bonhotal and Head Men's Basketball Strength and Conditioning Coach at the University of Michigan Jon Sanderson.

What is your favorite quote?

"The man who wins is an average man. Not blessed by any particular build. Not favored by any particular luck. The man who wins is the man who works."

What is your favorite book?

Band of Brothers by Stephen E. Ambrose

What are your favorite TV shows/movies?

This is unfair! There are too many to count! TV shows, I love Game of Thrones, Parks and Recreation, Modern Family and New Girl (yeah I admit it). Movies: It's more complicated. Top Gun is awesome. The Dark Knight Rises is great. Cinderella Man is pretty sweet. The Band of Brothers Mini Series is phenomenal. This is a short list and I feel like I'm cheating all other great movies.

What are your top 3 favorite exercises and why?

The Clean – I've always been pretty solid at it, and I've really smoothed it out in the last year so it's getting pretty fun.

Jumps – Any type. It's just fun to see how high you can jump and it's easy to see the progress you've made.

Bench Press – I'll get a ton of flak for this but, I'm usually just better at it than most people.

What is your training philosophy?

To utilize ground based, 3dimensional and multi-joint movements to improve the athletes ability to put force into the ground to run faster and jump higher.

What is your favorite type of training session or favorite exercise?

My favorite training session is a heavy lower body emphasis day in a group setting. I've never been the heaviest squatter but, when you get in a group and you're all moving forward together putting some weight on your back and pushing each other, it gets fun.

What can we find under "Most Played" in your iTunes library?

That's easy! 90's R&B/New Jack Swing – Boyz II Men and Jodeci; Country – Eric Church.

Tell us something interesting about you we don't know:

I love to cook. Whatever it is, I love it. I've been on a huge barbequing kick for the past year. Bought a charcoal/wood chip smoker, and it was the best decision I've ever made.

Tell us something about your experience as an athlete that helps you to be a better coach.

I was a walkon. As a walkon, you don't get anything handed to you, and you realize how big a gift it is to be able to call yourself a collegiate athlete. The workload is immense, the stress is off the charts and the talent level of your competition and your teammates is ridiculous but, the payoff is like nothing you could dream of. I think that knowledge allows me to relate to my athletes on a different level. I know what it is like to wake up at 6 am to train, to be in class all day and then go to meetings and practices, and to be perpetually exhausted. This helps me write better programs and to build stronger relationships.



Boilermaker ***SPORTS*** Nutrition



1 Carbohydrates are fattening.

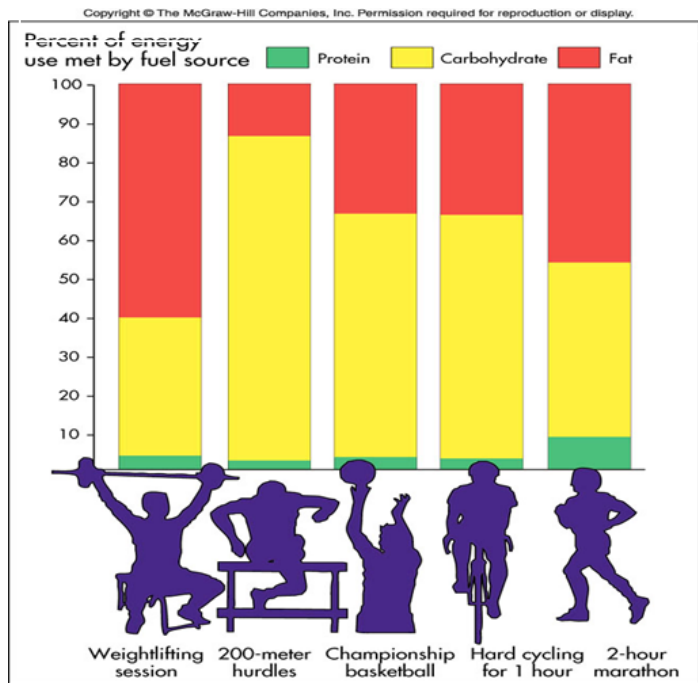
FALSE! Excess calories from fat and alcohol tend to contribute more to weight gain because they are easily stored as body fat. Overeating carbohydrates can also cause weight gain, BUT when you're physically active, you're more likely to burn these calories off during workouts (see graph). In fact, your body prefers to burn carbohydrates for energy rather than store them as fat. When you have two or more consecutive days off from training (like during a taper, injury rehab, or the off-season), reduce your carbohydrate intake.

TRICK OR TRUE?

Carbohydrate Myths Debunked!

Sports drinks have too much sugar. FALSE! The 6-8% carbohydrate content of Gatorade is *half* the amount of sugar in juice and soda. Drink sports drinks right before, during and/or after long or intense exercise. Choose water, low-fat milk, or soy milk at meals.

2



All intense exercise relies on carbs for energy. A shortage of carbs will trigger accelerated muscle protein breakdown (to use for energy) which can cause lean muscle loss.

HOW MUCH CARBOHYDRATE DO I REALLY NEED?

Daily:	5-10 grams per kilogram of body weight
At each meal:	¼ to ½ your plate with carb-rich foods
Fiber:	25 grams per day for women and 38 grams per day for men
Pre-exercise:	½ of your body weight in pounds = grams of carbohydrate to consume 1-2 hours before exercise
During intense or long exercise:	30-60 grams per hour

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Boilermaker **SPORTS** Nutrition

TRICK OR TRUE?

4

All carbohydrates are the same.

FALSE!

On a day-to-day basis, your best carb-rich food choices are less processed, higher in fiber, whole grain and free of added sugars.

Carbohydrate Myths Debunked!

3

Diet drinks don't have sugar or calories, so it's OK to drink any amount. FALSE!

Although diet drinks do not contain calories or added sugars, they lack nutritional benefits and should be consumed in moderation. Furthermore, new research at Purdue suggests that the artificial sweeteners in diet drinks lead to higher daily calorie intake, weight gain, and more body fat. How does *that* happen? The extreme sweetness may trigger your body and brain to seek out the calories it expected (when you had the sweet drink) and didn't get (since it was a diet drink).

	Whole grain	Added sugars	Fiber
brown rice	YES	0 g	4 g/cup
white rice	NO	0 g	1 g/cup
Nature Valley granola bar	YES	9 g	3 g
Special K bar	NO	17 g	0 g
plain yogurt	--	0 g/6 oz	--
flavored yogurt	--	20 g/6 oz	--
strawberries	--	0 g/cup	4 g/cup
fruit drink	--	23-30 g/cup	0 g/cup
Quaker Oatmeal Squares cereal	YES	8 g/cup	5 g/cup
Lucky Charms cereal	NO	15 g/cup	0 g/cup



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STUDENT CONTRIBUTORS: Jacquie Sullivan and Michelle Albrecht



Shop the Season!



Shopping in season is a great way to save money and ensure you're getting high-quality produce!

[Check out your local Farmer's Markets for some great local produce!](#)

Purdue Memorial Mall—Thursdays 11 a.m. to 2 p.m. until Oct 30

Lafayette Farmer's Market—Saturdays 7:30 a.m. to 12:30 p.m. until Oct 30
100 N. 5th Street, Lafayette, Indiana 47901

West Lafayette Farmer's Market—Wednesdays 4 to 7 p.m. until Oct 30

3001 N. Salisbury Street, West Lafayette, IN 47906

More questions on shopping? Check our social media pages and watch our Virtual Grocery Store Tour with Lauren Link!



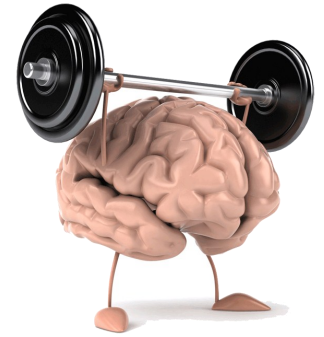
@BoilerFuel





Mental Conditioning

"Boiler Focus"



Mental Preparation for Athlete Excellence by *Dr. Chris Carr- Sport Psychologist*

"Having Fun ... Getting in the Zone"

As you prepare for your upcoming competition, the biggest mental challenge is to believe in your ability to get in the "zone" for every play. The research on the psychology of "FLOW" (optimal performance) shows that one of the keys to flow is having "enjoyment" in the activity. Every competition provides a great opportunity for you as an Boilermaker student-athlete to have that enjoyment and fun in the game.

Here are some "tips" to creating "FLOW" experience in your upcoming competition:

Have clear goals about your game ... you have worked hard this week to get better and be able to execute your game plan. On the day before the game, write down 2-3 specific goals that you want to perform perfectly in competition ... plays that only YOU have control over (e.g., having great technique).

"Visualize" your great performance ... the competition environment is full of energy and intensity. Before you go to bed each night, close your eyes and see yourself make 1-2 great plays ... create an image of GREAT performance in that environment. You control the "belief" of how you can perform ... that is what you control.

Find a "cue word" for the correct performance ... once you have re-visualized the play, think of a "cue word" that helps you to stay focused on the next play. Thus, you have a process where you do the following after a "bad" play":

- *First, take a deep breath and "let go"
- *Second, when you have a few moments, close your eyes, rewind, re-record
- *Third, find a positive "cue" word for the next play

HAVE A GREAT TIME ... let yourself be energized by the competitive environment. The energy of competition can be a great motivator and remind you that this is a GAME ... have FUN and play with great INTENSITY, FOCUS and CONFIDENCE!

"It's not the size of the dog in the fight, but the size of the fight in the dog."

Archie Griffin – Two-time Heisman Trophy winner, Ohio State

"Every team is beatable, you never know. The right moment, the right time, every team is beatable."

Tom Coughlin – Head Coach, New York Giants

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PSP on the WEB



Purduesports.com



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BOILER UP™