

# Eating Disorders in Sport: A Conversation for Coaches



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# Today's Objectives

1. What do coaches need to know about Relative Energy Deficiency in Sport and its consequences to health and performance?
2. How do we know who's at risk or who's affected?
3. What's my role as a coach?
4. How can I support my athletes' well-being?

# Nutrition for the Athlete

- Healthy strong body
- Increased nutr'l needs
- Optimal performance
- Adequate hydration
- Better immunity
- Injury prevention
- Faster recovery
- Mental focus



# PERFORMANCE NUTRITION

## □ Prioritize Fueling for Performance

- Be a competent eater

## □ Have a Game Plan

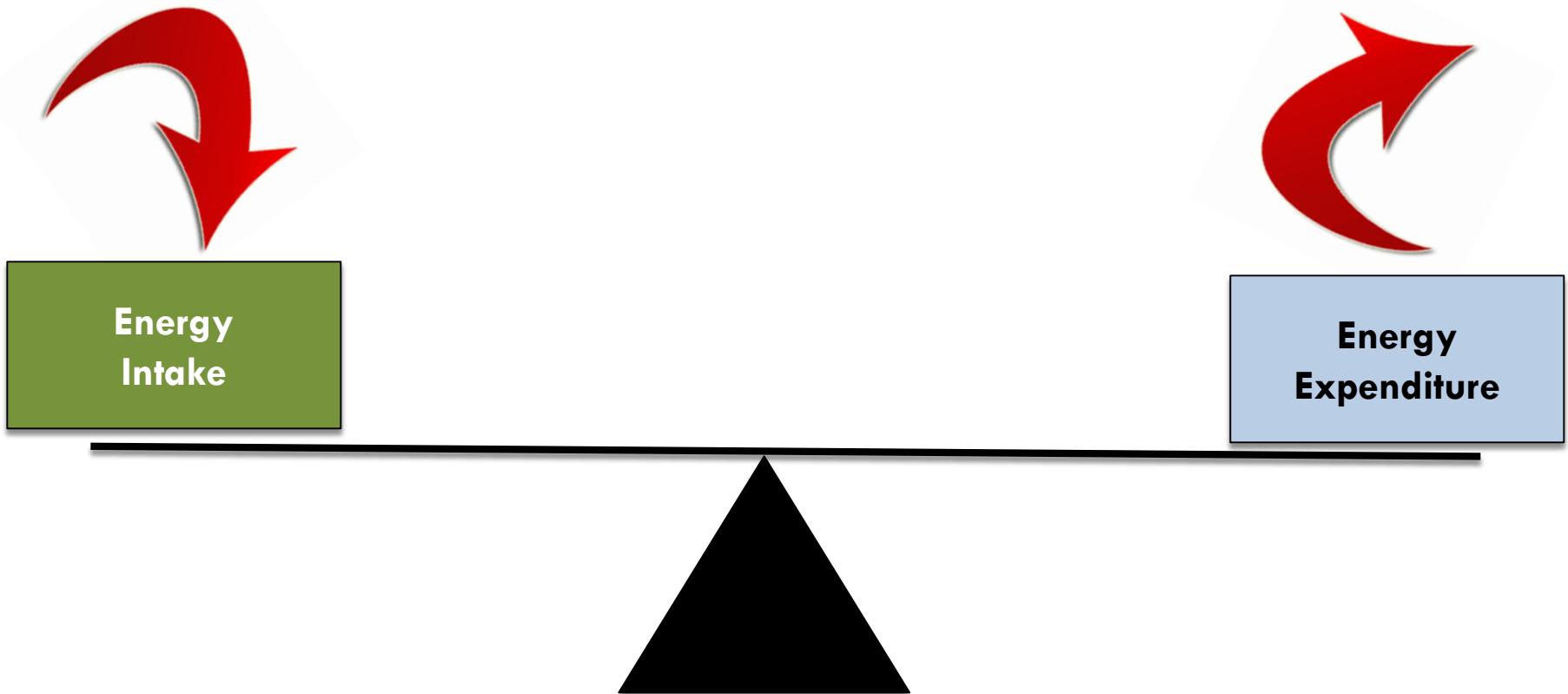
1. Hydration Plan
2. Fueling Strategy
3. Nutrient Timing



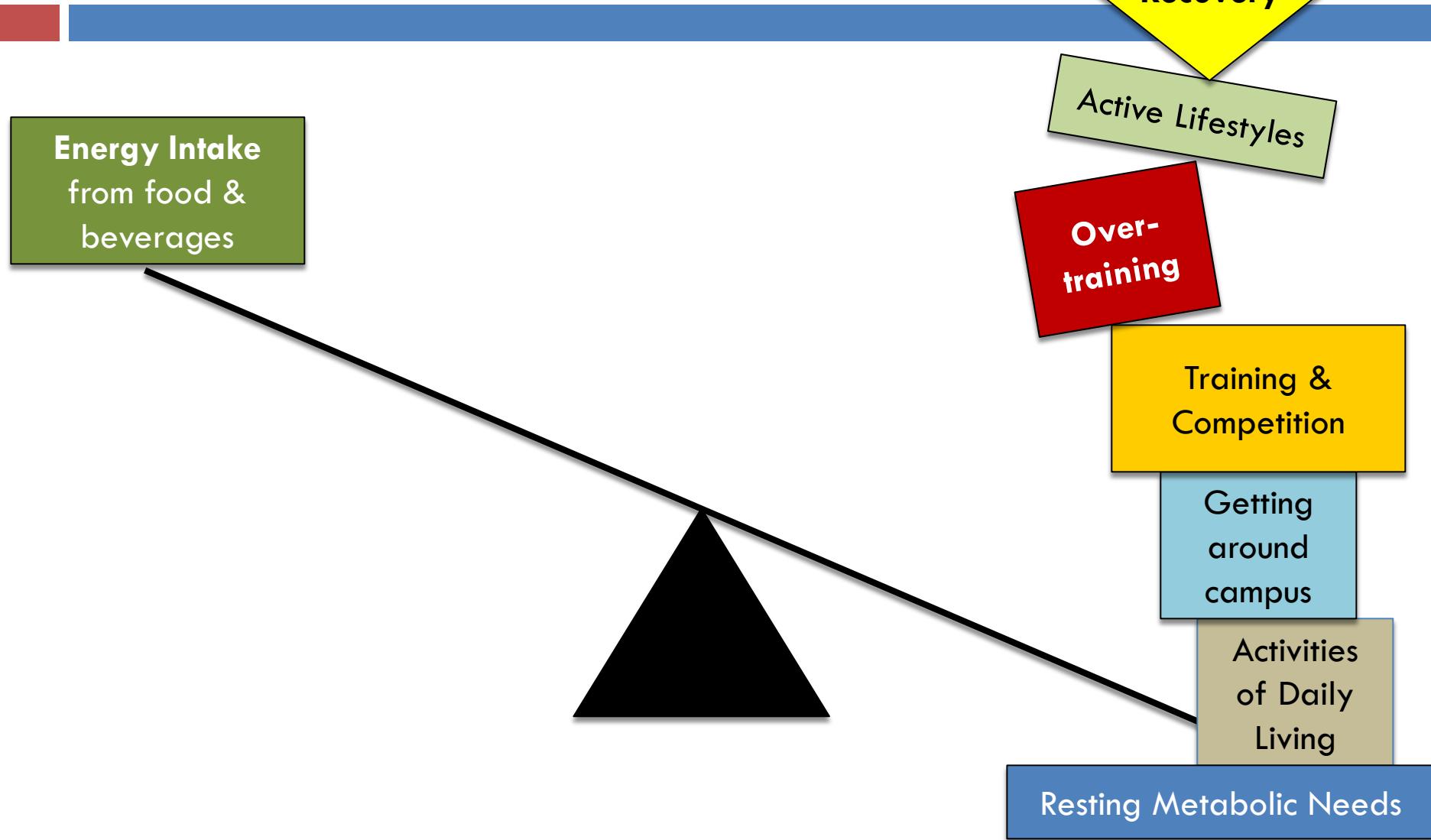
## □ Be Smart about Supplementation – **Food First!**



# Energy Balance

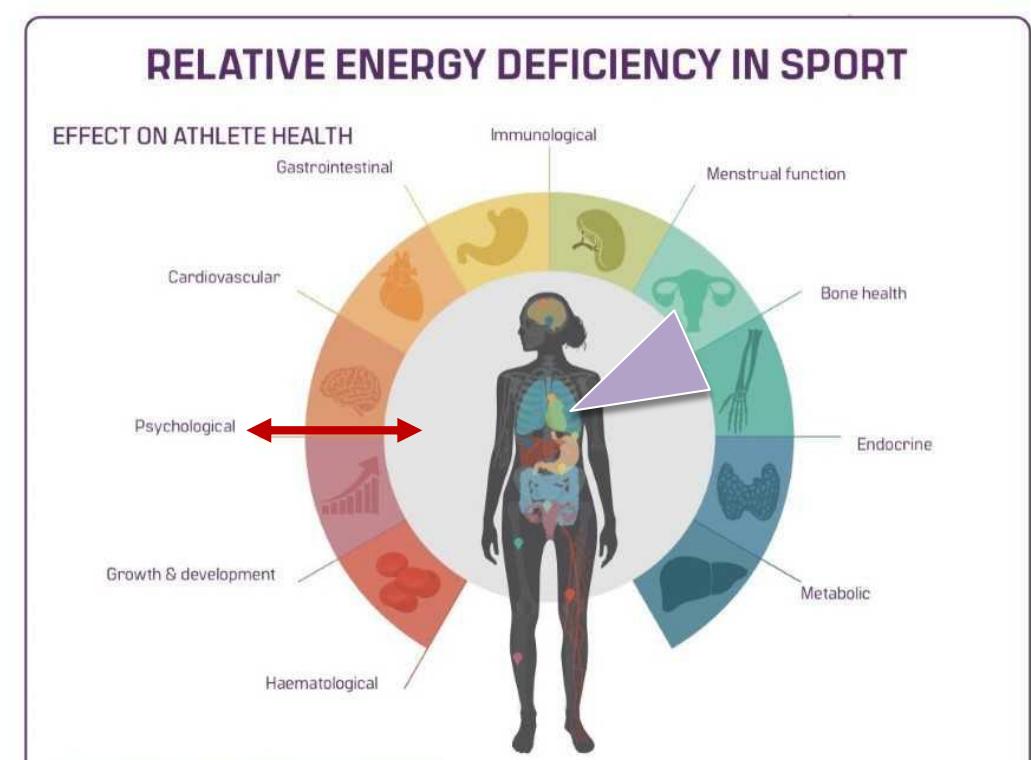
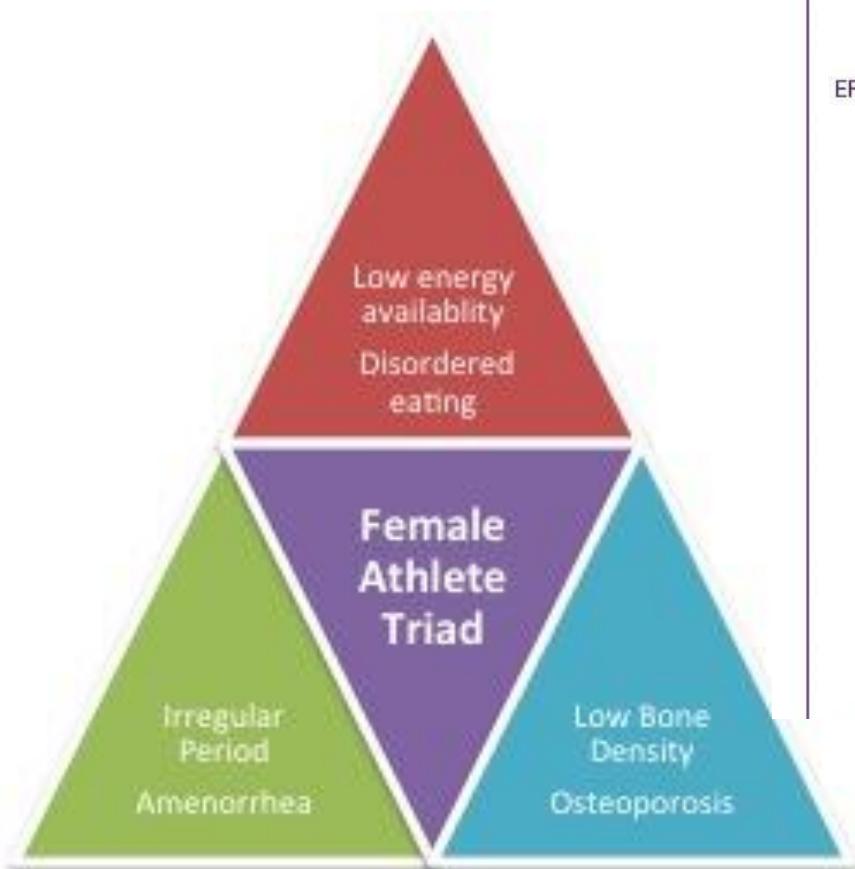


# Energy Imbalance in Sport



This creates a situation of Low Energy Availability

# Relative Energy Deficiency in Sport (RED-S)



Mountjoy et al, Br J Sports Med 2014

# RED-S sabotages what coaches & athletes care about: PERFORMANCE

## EFFECT ON ATHLETE PERFORMANCE



Modified with permission - Original illustration Mountjoy M, et al. *Br J Sports Med*. 2014; 48 (7) 491-497

<http://health4performance.co.uk/>

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# Eating Disorders & RED-S

## At risk:

- Any athlete training & competing at high levels
- Aesthetic, weight-based, and “lean” sports
- Perfectionists, harshly critical, low self-worth
- LGBTQ athletes
- Injured athletes
- Any w/ co-existing mental health conditions



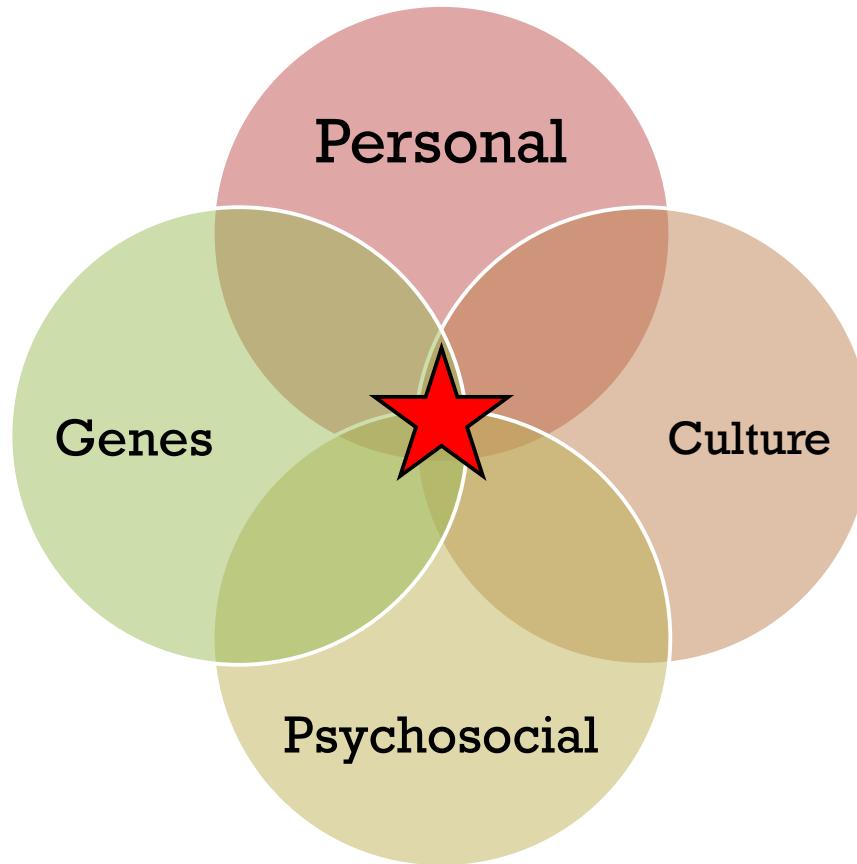
- Performing below expectations
- Thin or sport-specific body ideal
- Muscular ideal
- Over-valuation of athlete identity
- Compulsive exercisers
- Low eating competence



# Contributors to Eating Disorders

## Environment

- Home
- Food Insecurity
- College Campus
- Academic
- **Sport**
- Society
- Social Media
- **Trauma**



# Female Athlete Eating Disorders

## Driving Factors

- Desire to enhance sport performance by losing weight
- Negative emotions about missing training sessions

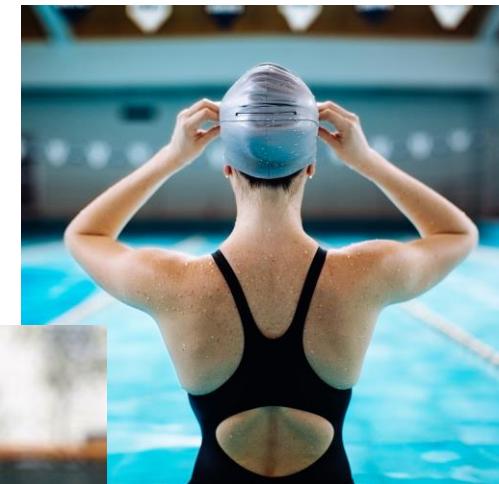
*Krentz & Warschburger, 2011*

## Factors Assoc with Onset

- Poor body image
- Dieting & weight changes
- Perfectionism/Control
- Sport performance pressures
- Role modeling by teammates
- Team weigh-ins, diet culture
- Injury
- Negative emotions
  - Low self-worth; inadequacy
  - Anxiety

*Arthur-Cameselle & Quatromoni, 2017*

# Don't be fooled by stereotypes...



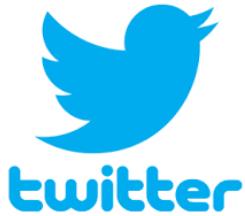
# Take Universal Precautions



- Assume every athlete is at risk
- Set a culture of acceptance, advocacy and positivity
- Be open and approachable to allow athletes to confide in you
- Be aware of your language and body language
- Be direct in your communication
- Set clear expectations
- Evaluate your approaches to motivating your players

# Today's Objectives

1. What do coaches need to know about Relative Energy Deficiency in Sport and its consequences to health and performance?
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3. **What's my role as a coach?**
4. How can I support my athletes' well-being?



# Where do your athletes get Nutrition Information?



# Follow Experts on Social Media



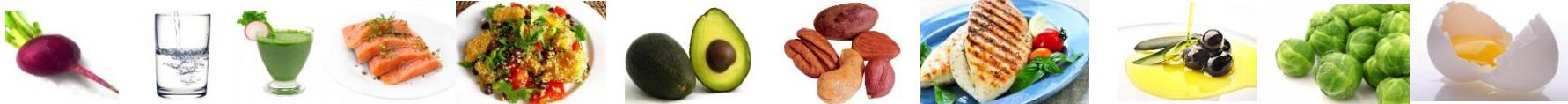
@LonghornFuel  
UT Sports Nutrition



@FuelupNU  
NU Perform Nutrition



@UVASportsRD  
UVA Sports Nutrition



# Performance Nutrition Resources



[teamusa.org/nutrition](http://teamusa.org/nutrition)



[sportsrd.org/downloadable-resources](http://sportsrd.org/downloadable-resources)



[ncaa.org/sport-science-institute/nutrition-sleep-and-performance](http://ncaa.org/sport-science-institute/nutrition-sleep-and-performance)

[eatright.org/fitness/sports-and-performance/tips-for-athletes](http://eatright.org/fitness/sports-and-performance/tips-for-athletes)

**eat<sup>®</sup> right.** Academy of Nutrition and Dietetics



# SOFTBALL SPORTS NUTRITION



PHOTO BY NCAAPHOTOS AND SHUTTERSTOCK

“My hitting in game two of doubleheaders always seems to go downhill. I feel tired and not as sharp. Could that have something to do with what I’m eating in the pregame meal? What should I eat and drink during and after game one?”

Collegiate softball is a highly competitive, fast-paced game requiring a unique mix of strength, speed, power and agility, in addition to sharp focus, quick judgment and split-second reaction time, to excel. The playing season is dynamic and rigorous, with most teams playing 50 or more games during the regular season. Nutrition and hydration impact every aspect of your game as a softball player. Take advantage of the fueling strategies presented here to help maximize your training and performance.

**Sport-specific  
expert advice**

**CPSDA**  
[sportsrd.org](http://sportsrd.org)

Information presented by



-C·P·S·D·A-



# NUTRITIONAL SUPPORT FOR INJURY RECOVERY AND RETURN-TO-PLAY

by Ryan Harmon, MS, RD, CSSD and Andres Ayesta, MS, RD, LD, CSCS

Injuries are an inevitable part of sports participation. Nutrition may not be able to keep an athlete completely injury-free, but it can support and often speed up injury recovery. Poor nutrition will impair recovery and lengthen the time it takes an athlete to return to play.

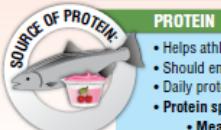


Nutrition intervention by the sports dietitian should occur immediately following an injury. The athlete should be screened for nutrient deficiencies, energy balance, lipid balance, optimal hydration and sleep habits. The nutrition plan should be tailored to an individual's phase of injury, resting metabolic rate (RMR), physical activity level and desire to minimize any gains in fat mass.

## GOALS OF NUTRITION INTERVENTION:

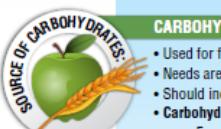
- Support muscle protein synthesis.
- Preserve muscle mass.
- Maintain energy balance.
- Prevent body fat accrual.

## NUTRITIONAL CONSIDERATIONS:



### PROTEIN

- Helps athletes heal and repair muscle tissue.
- Should emphasize proteins with a high leucine content (aim for ~3g leucine per serving).
- Daily protein intake should be between 1.6-2.5g/kg BW/day (depending on phase of injury).
- Protein specifics:
  - Meal dose = 20-40g (depending upon leucine content).
  - Frequency = every ~3-4h (4-6 meals daily).
  - Type = quickly digested, high leucine content during the day (whey protein, part-skim cheddar cheese and lean meats are great sources); slowly digested proteins prior to sleep (i.e. low-fat cottage cheese, low-fat Greek yogurt).



### CARBOHYDRATE (NEEDS UNIQUE TO EACH SCENARIO)

- Used for fuel so the protein eaten can be used to heal and repair muscle tissue.
- Needs are typically lower to prevent excess weight gain\*.
- Should include whole grains, fresh fruits and vegetables.
- Carbohydrate recommendations should be 3-5g/kg BW/day.
  - For a 170lb male = 232-386g/day (typical 4oz whole-wheat bagel = 60 grams).
  - Choose low glycemic index foods (i.e. whole grains).

\*The athlete should understand that some weight gain may be preferable to support a full recovery.



### FAT (NEEDS UNIQUE TO EACH SCENARIO)

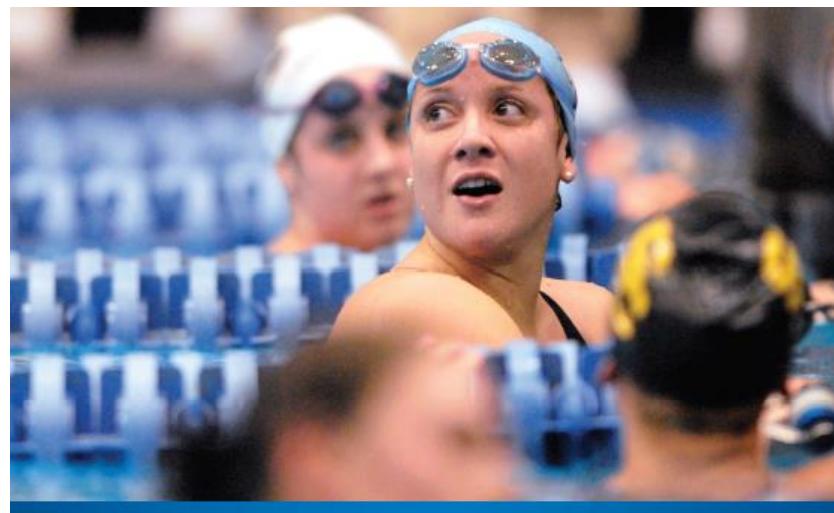
- Essential for healing, recovery and decreasing inflammation.
- Should come from anti-inflammatory nuts and nut butters, seeds, avocado, oily fish, flaxseed oil, extra virgin olive oil and omega-3 fish oil.
- Pro-inflammatory omega-6 vegetable oils, saturated and trans fats should be limited.
- Omega-6/omega-3 ratio should be low to enhance anti-inflammation.

**CPSDA**  
[sportsrd.org](http://sportsrd.org)

**NCAA**  
[ncaa.org](http://ncaa.org)

5

# Targeted advice



## VEGETARIAN EATING FOR THE STUDENT-ATHLETE

I have been a vegetarian for two years. With my busy schedule, it can be hard to find convenient vegetarian foods, so I don't eat as frequently as I should and often grab whatever is easiest. I often wonder if I am eating properly to support my training. How can I remain a vegetarian student-athlete without sacrificing performance?

Consistent, well-planned vegetarian meals can provide adequate nutrition and a variety of health benefits. Vegetarians tend to have a lower intake of saturated fat and cholesterol and a higher intake of fiber and phytochemicals from nutrient-dense fruits, vegetables, whole grains, nuts and soy. However, eliminating meat and dairy can jeopardize iron, calcium, iodine, zinc, protein, vitamins B12 and D, and energy (calories) levels. Understanding which vegetarian food choices will support peak performance and overall health is important for student-athlete success.

(For what to eat and best practices, turn the page.)



Information presented by



[www.NGAA.org](http://www.NGAA.org)  
[www.academyofrd.org](http://www.academyofrd.org) | 800/248-2875  
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# How can coaches help?

**Top 3 Challenges I had to overcome  
to beat an eating disorder in sport:**

1. Stop believing that **weight** is a measure of success, failure or self-worth
2. Abandon rigid and restrictive "**high commitment eating**" and the hyper-focus on dieting and weight as the keys to performance goals
3. Stop the constant **comparison** to others

# How can coaches help?

## Top 3 Challenges I had to overcome to beat an eating disorder in sport:

1. Stop believing that **weight** is a measure of success, failure or self-worth
2. Abandon rigid and restrictive "**high commitment eating**" and the hyper-focus on dieting and weight as the keys to performance goals
3. Stop the constant **comparison** to others

## Focus on performance, not weight, to prevent eating disorders in sport:

1. Avoid **language, actions, or culture** that endorses weight as a measure of success, failure or an athlete's worth
2. Role model **eating competence, promote adequacy, don't judge!**  
Address other important factors that impact performance: **proper fueling, hydration, sleep, rest days, RED-S, appropriate training load, following injury rehab protocols.**
3. **Don't compare** athletes; embrace **diversity**; address **social media** use

# WHY DON'T YOU? LOSE 5 POUNDS?

YOU'RE GONNA EAT  
**ALL THAT?**



**Wow!**  
Have you  
lost weight?

@cheatdaydesign

You look  
great!

# Acceptable Verbiage

FOR COACHES

How to appropriately speak with student-athletes about weight and body composition

## AVOID THIS

### Unacceptable Verbiage & Terminology

Direct these comments towards sports medicine/sports performance,  
not the student-athlete

Your goal weight is \_\_\_\_ lbs.

You need to watch what you eat.  
Are you really going to eat all that?  
Are you really going to choose THAT?

You look like you have gained/lost  
weight/body fat.  
Your arms/stomach/etc look bigger/different.

You look better since you have been working  
with Sports Nutrition/Sports Performance.

You should do extra conditioning to lose  
excess body fat.

You need to reduce portion sizes to lose excess  
body fat.

You should lower your carbohydrate (or fat,  
or protein) intake to lose excess body fat.

You look like you have gained weight during  
the off-season.

You need to lose weight/body fat.  
You look like you've gained weight/body fat.

## SAY THIS

### Acceptable Verbiage & Terminology

These comments may be directed towards the student-athlete

Sports Nutrition and Sports Performance are  
available to help you with goals related to  
body composition.

Sports Nutrition can help you find appropriate  
fueling strategies to meet your needs.

Sports Performance can design strength and  
conditioning programs to improve your fitness  
level and optimize your performance.

Since working with Sports Nutrition you appear  
to have more energy for workouts and practice.

Sports Nutrition and Sports Performance can  
design programs to improve your fitness and  
help with body composition goals.

If you have questions regarding nutrition and  
how it can help you, talk to your Sports RD.

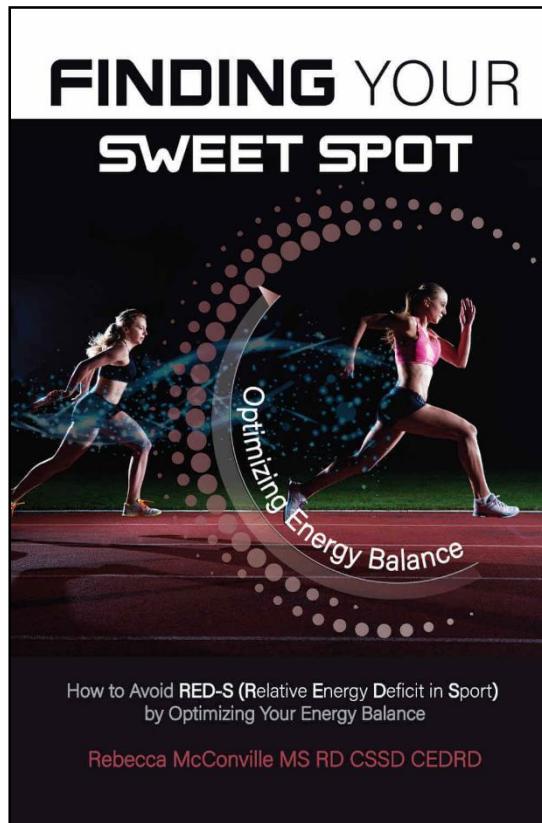
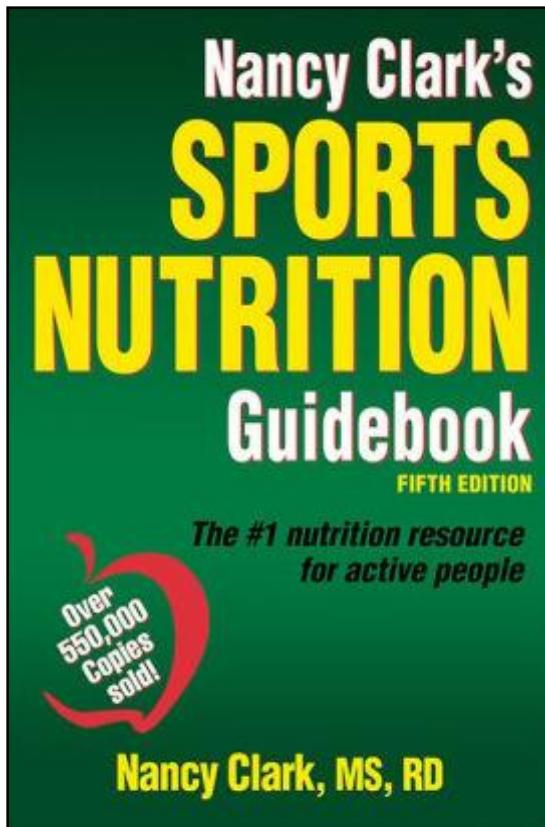
Your performance on the field/court/etc is not  
where it has been - have you considered talking  
to Sports Nutrition about fueling strategies?

You seem tired/not yourself lately - have you  
considered talking to Sports Nutrition or  
Sports Medicine?

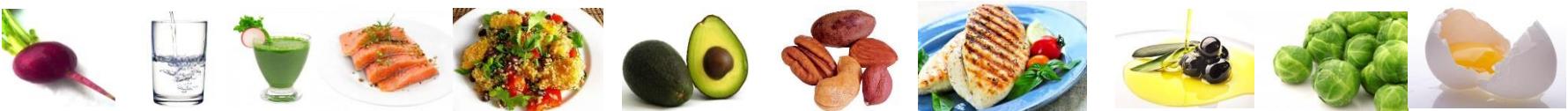
I noticed your times (or sport specific  
performance indicator) have been slower -  
have you considered talking to Sports Nutrition  
about fueling strategies?

Available at: [sportsrd.org](http://sportsrd.org)

# Understand Sports Nutrition & RED-S



## Spot On! Podcast





# Coaches & Trainers TOOLKIT



[www.nationaleatingdisorders.org](http://www.nationaleatingdisorders.org)

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# Express Care & Concern

- Talk in private and under calm circumstances
- Express your concern without judgement
- Stick to the facts of what you observe
- Expect anger, resistance and denial of any problem
- Listen, be supportive, and role model healthy habits
- Encourage your athlete to accept help; check in with them often
- Seek support and education for yourself

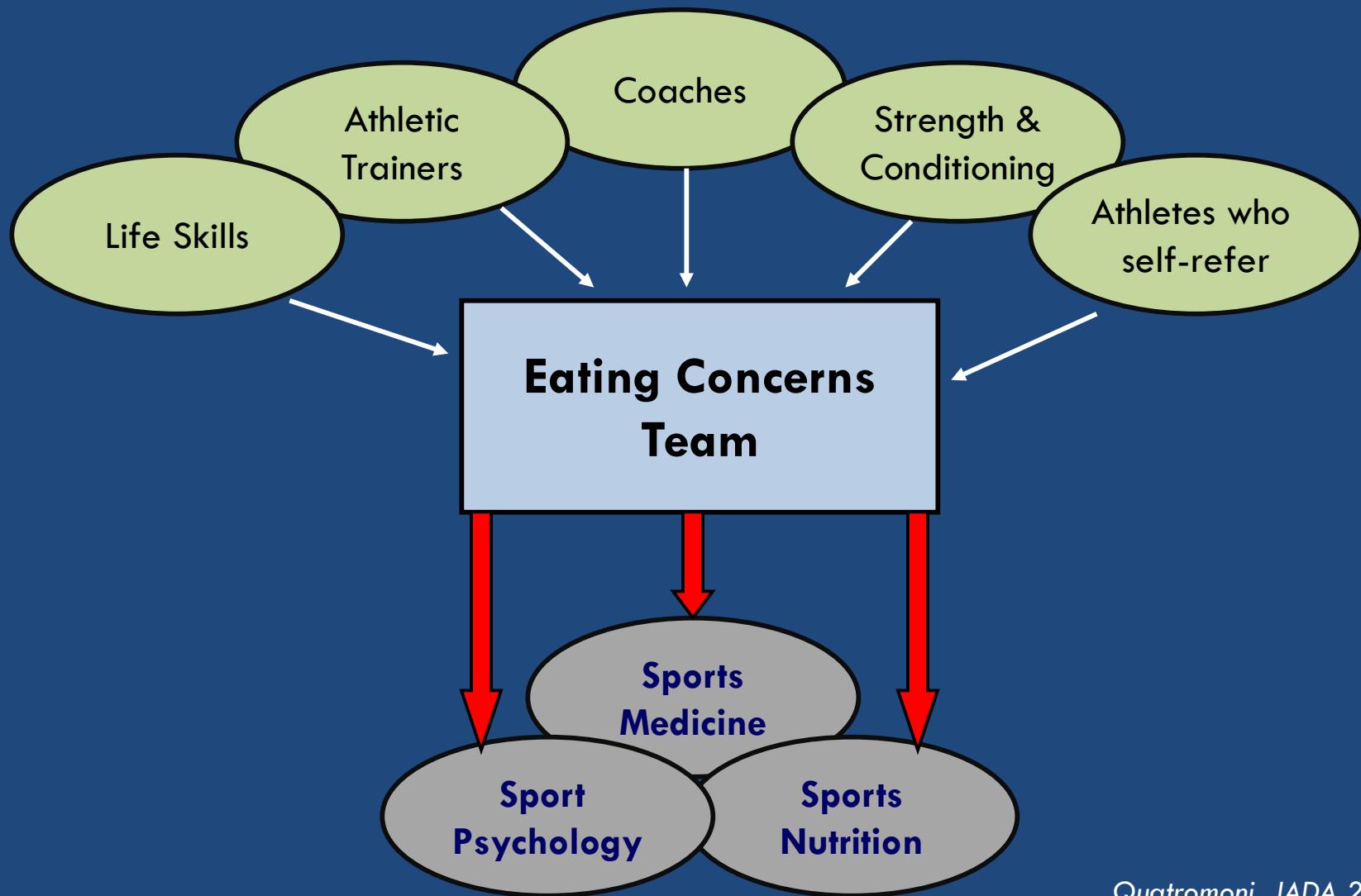


# Pathway to Prevention



- Do not ignore warning signs or fall prey to stereotypes
- Do not wait for performance to dip or weight loss to become extreme
- **Early intervention is key to recovery**
- Disordered behaviors are contagious & can develop into eating disorders
- Eating disorders are serious mental health illnesses; they are not a choice
- **People do not recover without treatment and intervention**
- Failure to intervene acts to condone the behavior and puts athletes at risk
- Expressing care and concern leads individuals into treatment
- **Remember, people die from eating disorders...**

# Multidisciplinary Sports Wellness Team



# Coaches Set Team Culture: Make Proper Nutrition a Team Priority



# Additional Resources

# Nine Truths about Eating Disorders

TRUTHS

- 1** Many people with eating disorders look healthy, yet may be extremely ill.
- 2** Families are not to blame, and can be the patients' and providers' best allies in treatment.
- 3** An eating disorder diagnosis is a health crisis that disrupts personal and family functioning.
- 4** Eating disorders are not choices, but serious biologically influenced illnesses.
- 5** Eating disorders affect people of all genders, ages, races, ethnicities, body shapes and weights, sexual orientations, and socioeconomic statuses.
- 6** Eating disorders carry an increased risk for both suicide and medical complications.
- 7** Genes and environment play important roles in the development of eating disorders.
- 8** Genes alone do not predict who will develop eating disorders.
- 9** Full recovery from an eating disorder is possible. Early detection and intervention are important.



Academy for  
Eating Disorders

Academy for Eating Disorders® | [www.aedweb.org](http://www.aedweb.org)

Produced in collaboration with Dr. Cynthia Bulik, PhD, FAED, who serves as distinguished Professor of Eating Disorders in the School of Medicine at the University of North Carolina at Chapel Hill and Professor of Medical Epidemiology and Biostatistics at the Karolinska Institutet in Stockholm, Sweden. "Nine Truths" is based on Dr. Bulik's 2014 "9 Eating Disorders Myths Busted" talk at the National Institute of Mental Health Alliance for Research Progress meeting. Leading associations in the field of eating disorders also contributed their valuable input.

# Find a Registered Dietitian

**eatright.org**



Academy of Nutrition  
and Dietetics

**Find an Expert >**

## Find a Registered Dietitian Nutritionist

The Academy of Nutrition and Dietetics' Find a Registered Dietitian Nutritionist online referral service allows you to search a national database of Academy members for the exclusive purpose of finding a qualified registered dietitian nutritionist or food and nutrition practitioner who is right for you (no solicitations, please).

Active category Academy members can enroll in the Find an RDN program by signing in and visiting the My Account tab, located in the My Academy Toolbar.

Search near you

Enter your ZIP Code

**Search Now**

Or **Search by expertise**



# Blog posts @ RunningInSilence.org

## ***Running*** in Silence



### **How Can a Coach Support an Athlete With an Eating Disorder? Q&A With Paula Quatromoni**

August 7, 2019 / in Coaching, Q&A / by Rachael

*This is part of a Q&A series with leading expert in eating disorders and sports, Paula Quatromoni. For more Q&As click [here](#).*



### **TRENDING POSTS**

[What I Eat in a Day in Eating Disorder Recovery](#)

["They Just Disappeared": Beyond Anorexia in Runners](#)  
[Q&A: "I'm a Runner Who is](#)



# Building a Performance Plate



Lean Protein

+ High-Quality Carbohydrate

+ Colorful Vegetables

## 3-STEP Guide

### 1. Picky with your PROTEINS

\*Lean protein options help Build + Repair your muscle

- Chicken, Turkey, Lean Beef
- Eggs
- Greek yogurt, Milk, Cottage Cheese, String Cheese
- Salmon, Tuna, Shrimp, etc.
- Nuts & Seeds
- Beans, Lentils, Tofu

- Oatmeal
- Potatoes/ Sweet Potatoes
- Brown Rice
- Corn, Peas, Beans, Lentils
- Whole grain breads/cereals/pasta
- Tortillas
- Fruit

### 2. Choose Smart CARBS

- Broccoli, Cauliflower
- Red, green, yellow peppers
- Beets
- Carrots
- Spinach, Arugula
- Zucchini, Squash
- Tomatoes
- Cucumbers, Asparagus
- Avocado

\*Carbohydrates are the body's primary source of Fuel + Energy

### Quick + Easy Meal Options

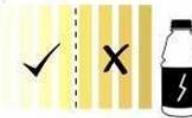
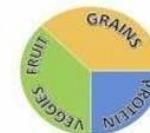
- Burrito Bowl
- Brown Rice or Quinoa
- Pico de gallo
- Peppers & Onions
- Guacamole
- Black or Pinto Beans
- Chicken or Beef

- Sandwich
- Whole-grain Bread / Roll
- Turkey
- Spinach + Tomato + Pickles + Peppers
- Avocado Mustard

- Pasta
- Whole-grain Pasta
- Lean Ground Beef
- Peppers + Onions + Mushrooms
- Marinara Sauce

- Stir-Fry
- Brown Rice or Quinoa
- Chicken or Shrimp
- Carrots + Snap Peas + Broccoli + Scallions + Peppers
- Teriyaki Sauce

# NUTRITION for PERFORMANCE



### PRE-EVENT FUELING

#### Athlete's Plate, Every Meal

Focus on carbs, lean protein, vegetables, and fruit! For competition, increase carb intake 1-2 days out (~50% of plate).



Hydration is Key  
Carry your water bottle with you! Hydrate to prevent fatigue & dizziness. Check your urine; it should be clear to pale yellow in color!

Snack Smart  
Plan ahead. Opt for energy boosting snacks such as fruit, trail mix, smoothies, yogurt, and cereal!



### DAY OF COMPETITION

#### It's Go Time!

Consume 30-60 g of carb per hour of activity through sports drinks and/or food.  
ex) sports drink, fruit, gels, and/or chews



#### 30-60 minutes

Focus on easily digestible carb for optimal fueling! Sips of water & sports drink for hydration, electrolytes, and carbs!

ex) applesauce, sports drink, fruit, or pretzels

< 2 hours before  
Decrease the size of meals/snacks, and shift towards mostly carbs with minimal protein & fat. Stick with foods you know!  
ex) PBJ sandwich, granola bar, fruit, sports drink



3-4 hours out  
Consume a meal that is high carb, moderate protein, and low fat & fiber!  
ex) oatmeal, banana, eggs, sports drink

Sandwich with lean meat (turkey, tuna, ham), fruit

### POST COMPETITION

#### Rehydrate, Repair, Replenish!

+ 20-24 oz fluid for every lb lost  
+ 20-30 g protein within 1 hour & with each meal after (every 3-5 h)  
+ 0.5 g carb per lb of body weight within 1 hour

ex) 16 oz high protein milk,  
8 oz greek yogurt-based fruit smoothie, or whole grain turkey sandwich

Created by Kylie McKenzie MS, University of Houston, Dietetic Intern | Edited by Brett Singer MS, RD, CSSD, LD - @BSinger10

Athlete's Plate  
Replenish your glycogen stores and rebuild muscle with a balanced meal.

ex) pasta, chicken, fruit & vegetables

Eggs, toast, fruit

Team effort!  
Be accountable to yourself and your teammates. Will you do what it takes to set yourselves up for performance?

