



Empowering Athletes: Insights from a Sports Nutrition Dietitian

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Disclosure

West Virginia University: Employee



Overview

- About & Career Path
- Learn about the profession of sports nutrition and the evolution of the Registered Dietitian in the world of athletics
- Understand the roles and responsibilities of the sports dietitian as a part of the interdisciplinary care team for athletes
- Learn about the nutritional care of athletes and common areas of practice for a sports dietitian
- Learn about some common challenges
- Tips for the aspiring sports RD



About Me & Career Path

- Born and raised on Long Island, New York
- Played soccer and baseball recreationally
- Interest in nutrition began in teenage years, but didn't consider a career in it until much later
- 2010: Manhattan College - BA Secondary Education & English Literature
- 2011: Assistant Director at learning center
- 2012: Relocated to Chicago
- 2012 - 2019: Chicago restaurant industry - Bartender (more useful than you realize!)
- 2017: Decided to pursue nutrition as a career; Began prerequisites to apply for coordinated nutrition program at University of Illinois at Chicago
- 20 week sports nutrition rotation at Northwestern University
- 2021: MS Nutrition
- 2022: Passed RD Exam & accepted into Gatorade Sports Nutrition Immersion Program (SNIP) Fellowship - paired with University of Delaware
- 2023: West Virginia University - Director of Olympic Nutrition
 - Second-Career RDs can feel "behind" in this case it was an advantage.



· C · P · S · D · A ·
FUELING VICTORY



Why Sports Nutrition?

- Sports & Science together!
- Unconventional
- Every day is different
- Athletes listen...usually
- See your impact daily and over time (work with athletes through the course of their career vs numbered sessions of consultations)
 - Growth/Maturity, Ability to capitalize on state of readiness shift
- Diversity of population
- A bit of all areas of dietetics



What is a Sports Dietitian?

“A registered dietitian (RD) who is a specialist in sports dietetics and applies evidence-based nutrition knowledge in exercise and sports. RDs specializing in sports dietetics assess, educate, and counsel athletes and active individuals. They design, implement, and manage safe and effective nutrition strategies that enhance lifelong health, fitness, and optimal performance.”

- The sports dietitian job description published in ADA's Job Descriptions: Models for the Dietetics Profession
 - <https://www.sportsrd.org/wp-content/uploads/2014/09/sports-dietitian-job-description.pdf>
- SOP's published by the Academy of Nutrition and Dietetics: Revised 2021 Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sports and Human Performance Nutrition.
 - https://sportsrd.org/wp-content/uploads/2021/08/2917426_0_2021_SOP_SOPP_Sports_RDs.pdf
- Interassociation Consensus Statement on Sports Nutrition Models for the Provision of Nutrition Services From Registered Dietitian Nutritionists in Collegiate Athletics
 - <https://sportsrd.org/wp-content/uploads/2022/11/College-Nutrition-Consensus-Statement-111422FINAL.pdf>

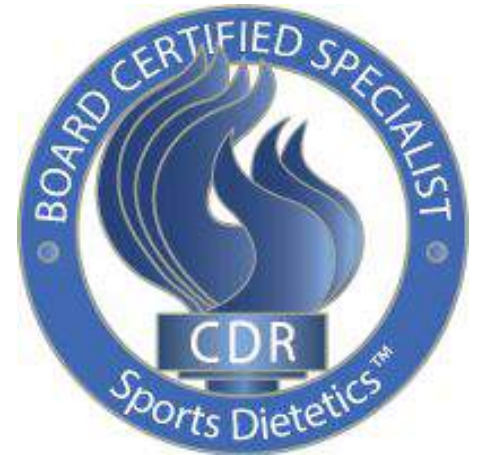


Sports Nutrition Experts

- Collegiate & Professional Sports Dietitians Association (CPSDA)
<http://www.SportsRD.org>
 - Over 1600 Members (RDs, ATCs, Strength Coaches, MDs, ADs)
 - Annual Conference & other workshops throughout the year
 - Webinars, huddles, special interest groups
 - Member rate low and good value (research library, NatMed Professional, more)
 - Academy membership not necessary to join
- Sports & Human Performance Nutrition Dietetic Practice Group (SHPN)
 - Virtual conference
 - Volunteer and mentor opportunities
 - Opportunities to connect with local RDs
 - Academy membership required to join

Certified Specialist in Sports Dietetics

- Certified Specialist in Sports Dietetics (CSSD)
 - An RD with a specialty credential in sports nutrition. A CSSD has been practicing for 2+ years, has accumulated 2,000+ hours of sports specific practice and passed a board exam.
 - Must also continue to accumulate sports-specific hours and retake the exam ever 5 years to maintain the credential





Where do Sports Dietitians Work?

- Collegiate Athletics
- Professional Sports
- Sports Performance Institutes (UFC, etc.)
- Tactical/Military
- Private Practice
- Hospital Sports Medicine programs
- High Schools

A Very Brief History Lesson..

August 1991



NCAA creates rule to limit meals and snacks in order to prevent better-funded athletic programs from gaining unfair advantage.



NCAA member schools feed athletes one meal per day up to five days a week along with snacks, which were limited to fruits, nuts and bagels.

1991-2004

August 2014 - NCAA lifted restrictions around organizations providing food. Often referred to as "deregulation" this change catalyzed massive changes in collegiate sports nutrition.

January 2017 - NCAA removed the long-standing "30% rule" which limited protein amounts in products provided to no more than 30% of total calories.

January 2019 - NCAA moved Omega-3 fatty acids into the permissible supplement category.

August 2021 - NCAA approved the addition of chelated minerals to the list of permissible substances. NCAA also added an addendum that allows lactase to be used as a food additive and for medical treatment.

August 2022 - NCAA lifts remaining restrictions on feeding and constraints around defining a meal vs. a snack. The new legislation reads: "An institution may provide meals and snacks to a student-athlete at any time."

Growth of the Collegiate Sports RD

1994 to today

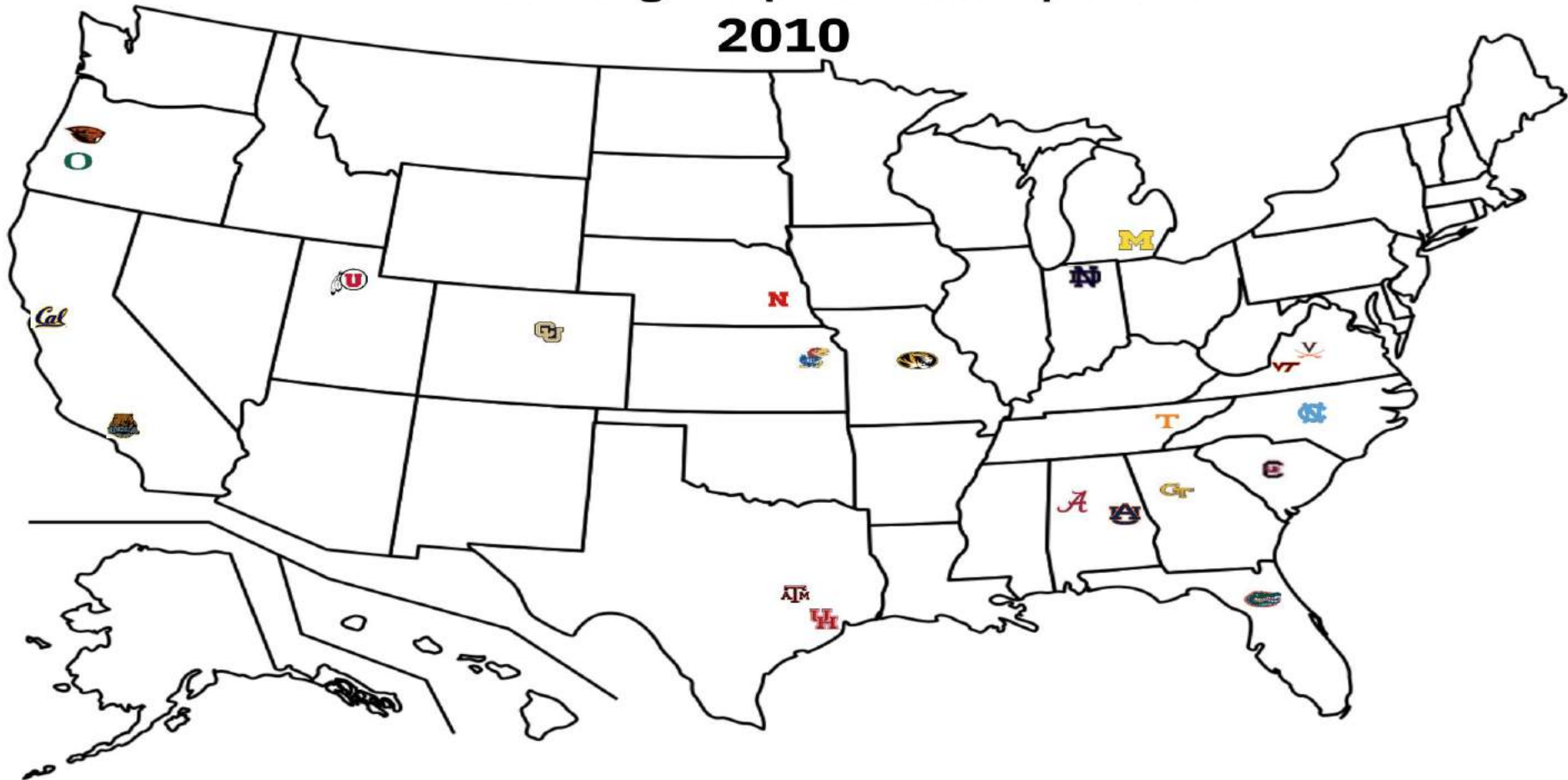


Full-Time Collegiate Dietitian Positions...The Beginning

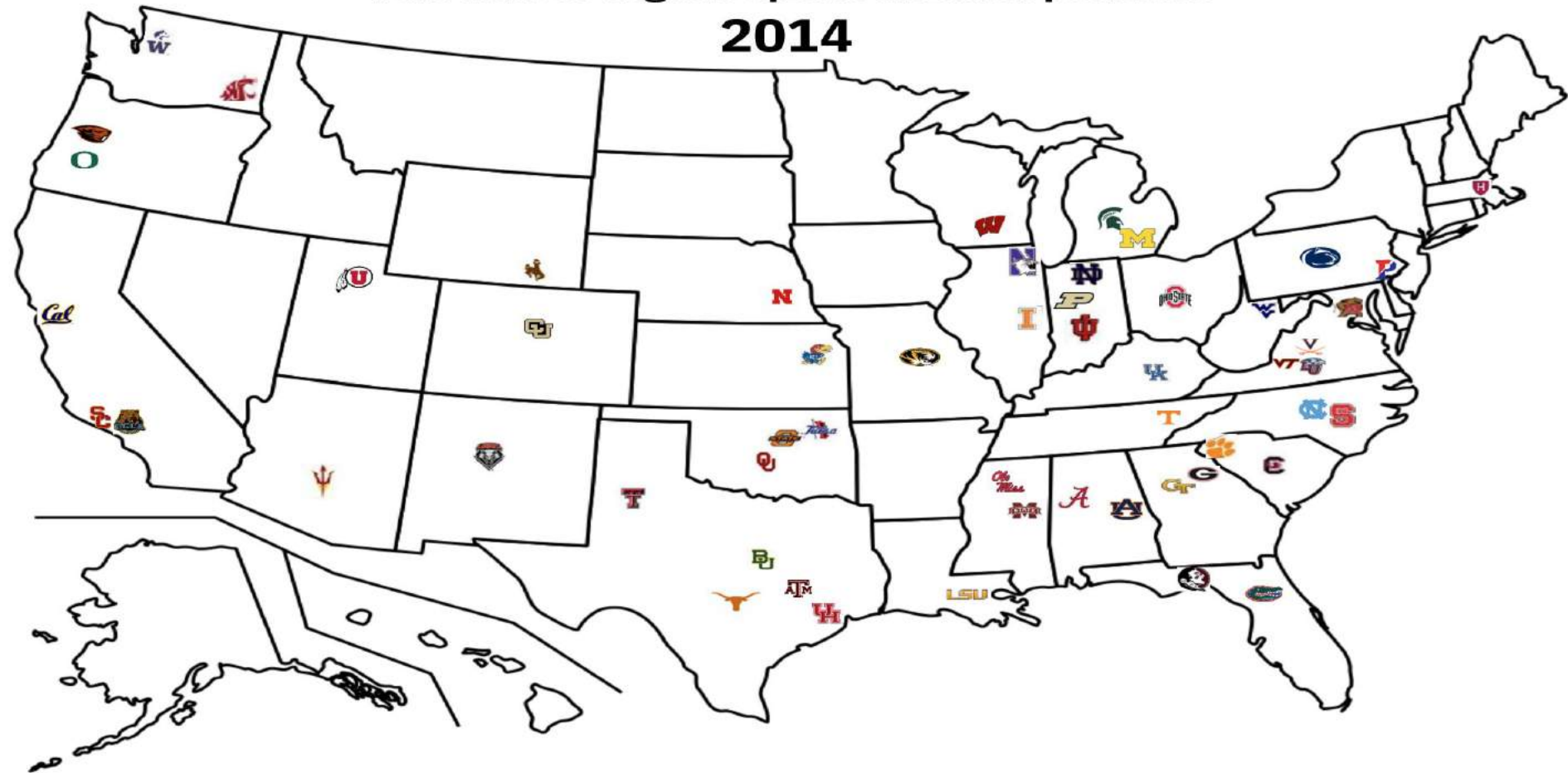


Source material from sportsrd.org

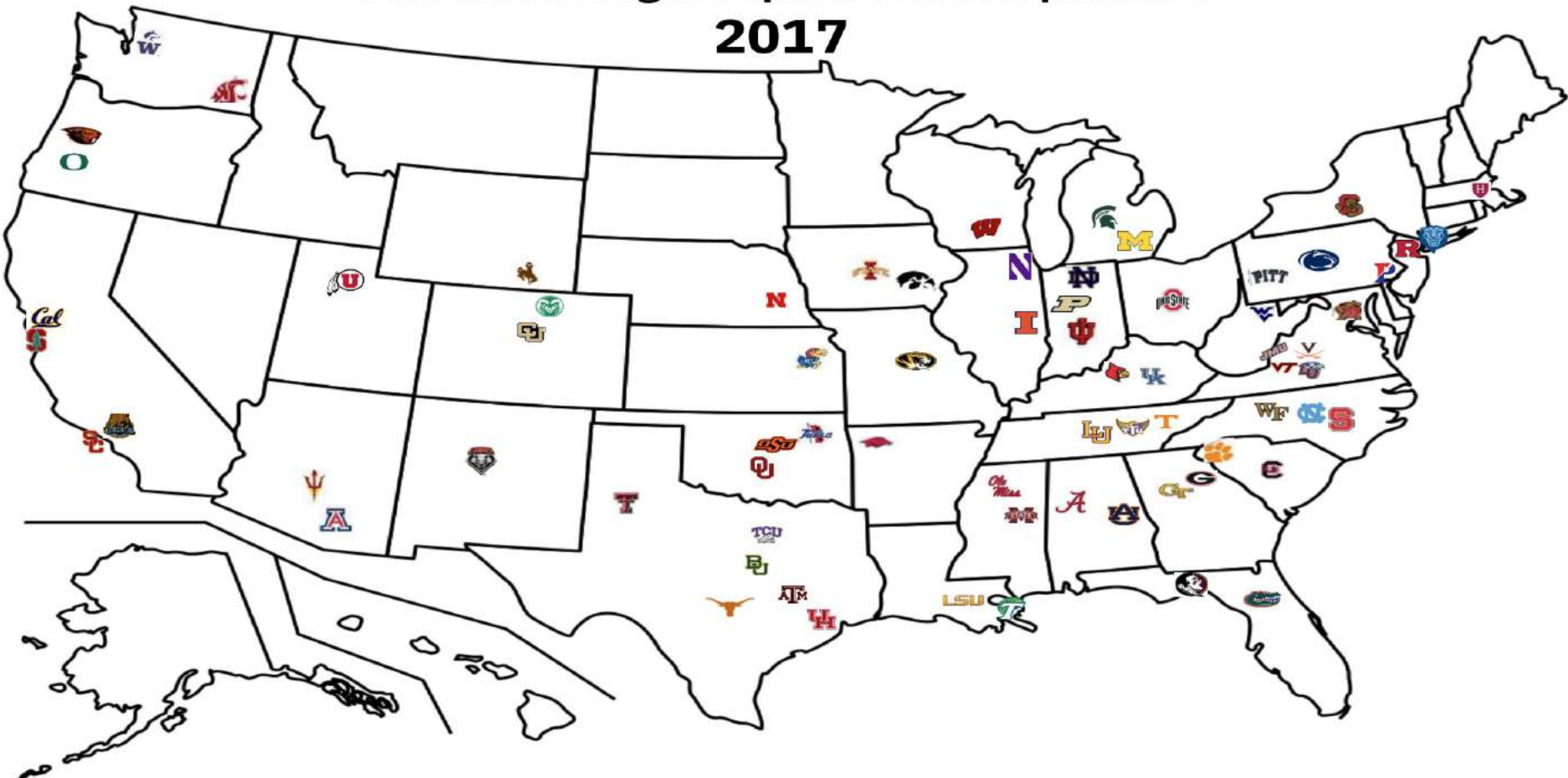
Full-time collegiate sports dietitian positions 2010



Full-time collegiate sports dietitian positions 2014



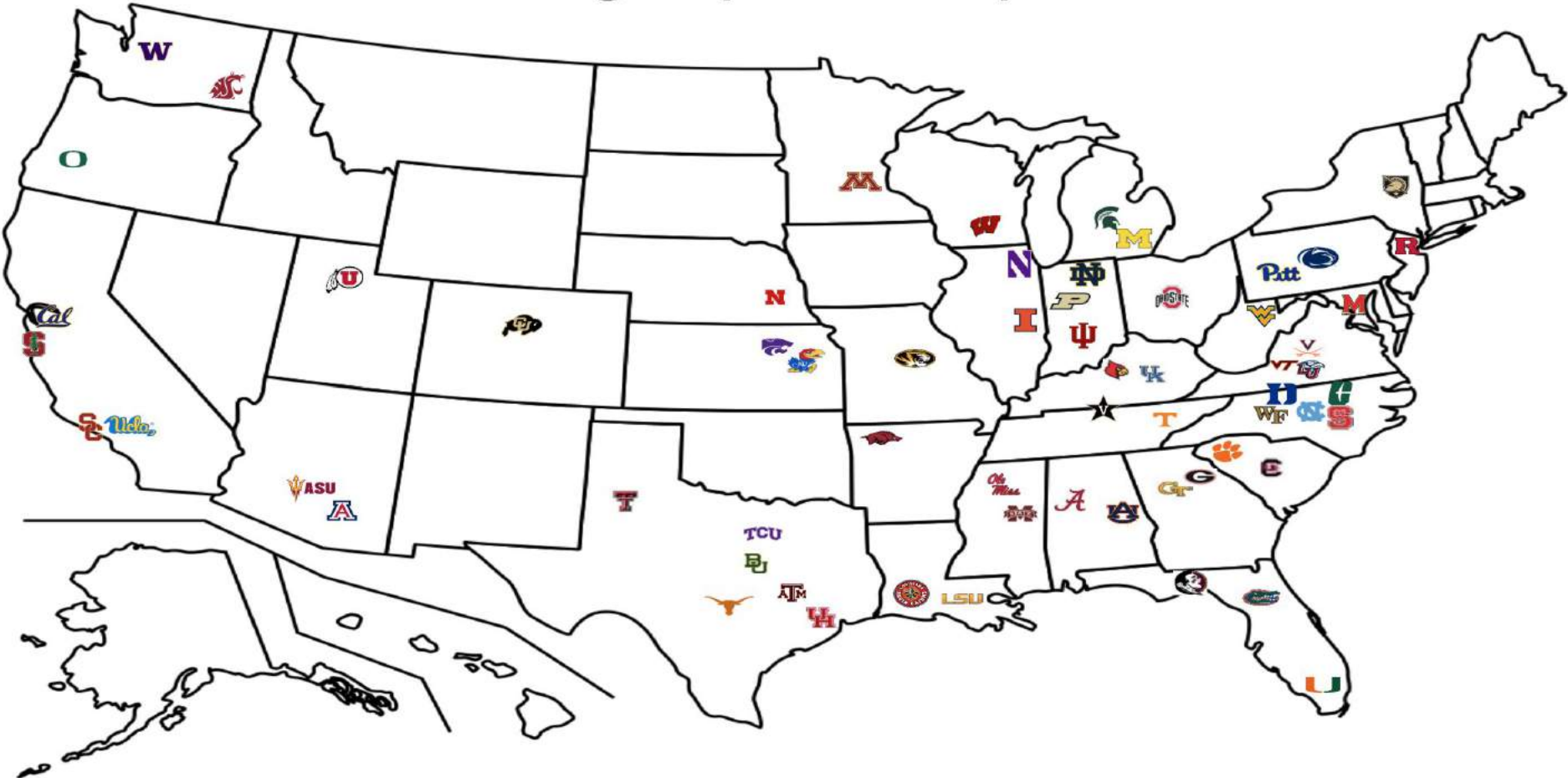
Full-time collegiate sports dietitian positions 2017



Full-time collegiate sports dietitian positions 2022



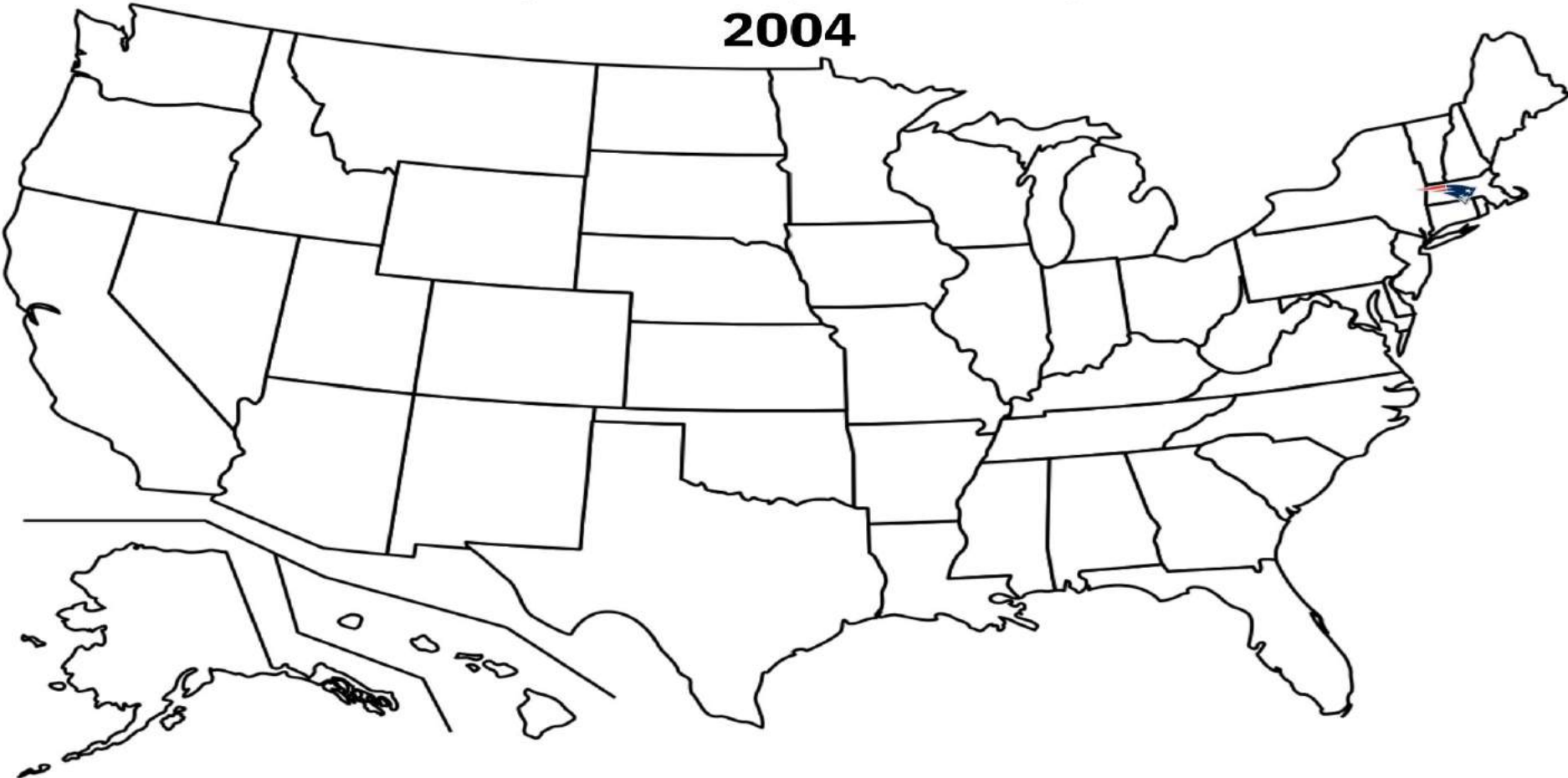
Full-time collegiate sports dietitian positions –2+



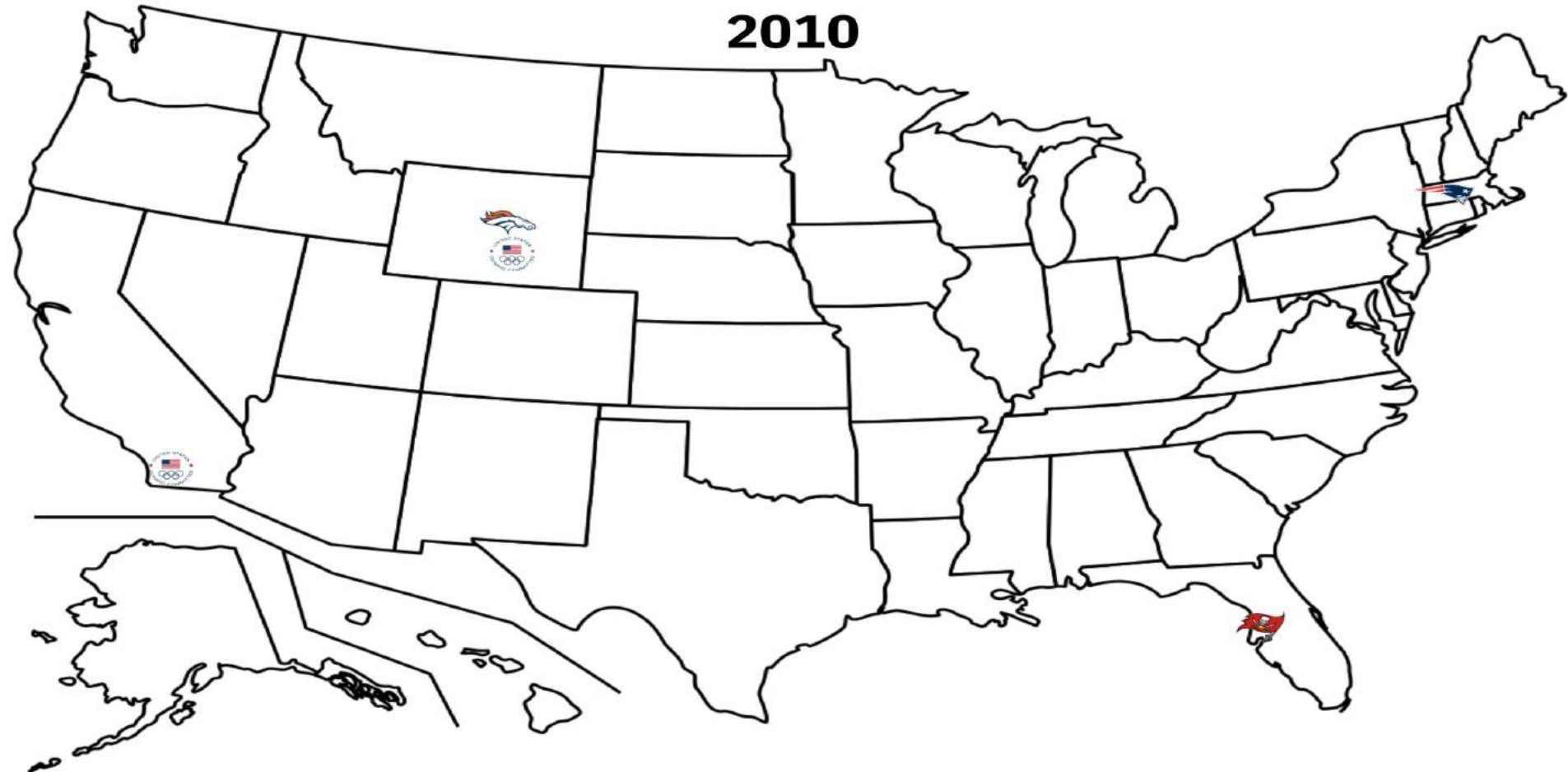
Growth of the Professional Sports RD: 2004 to today

NFL, USOC, MLB, NBA, NHL, MLS

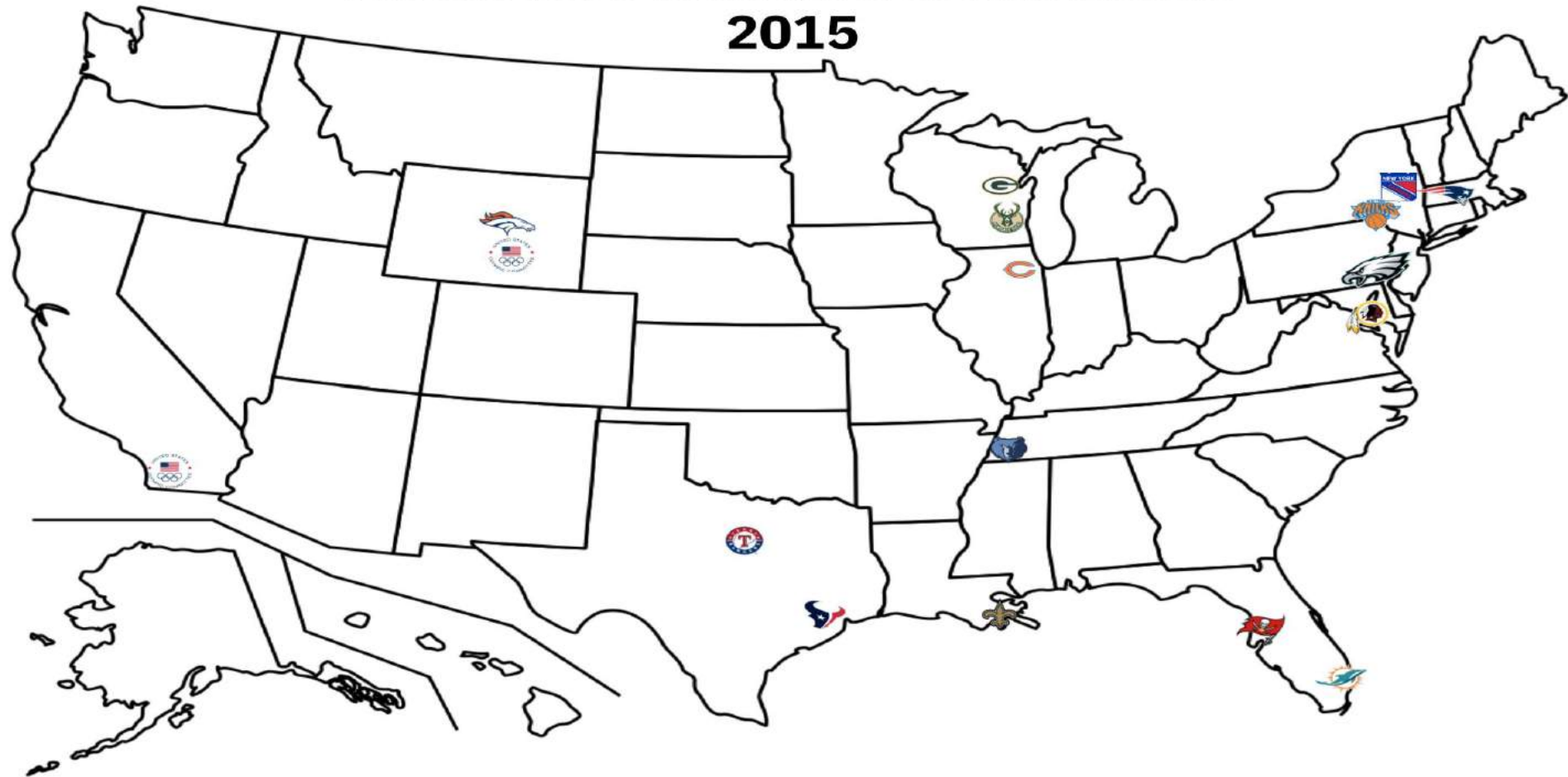
Full-time professional sports dietitian positions 2004



Full-time professional sports dietitian positions 2010



Full-time professional sports dietitian positions 2015



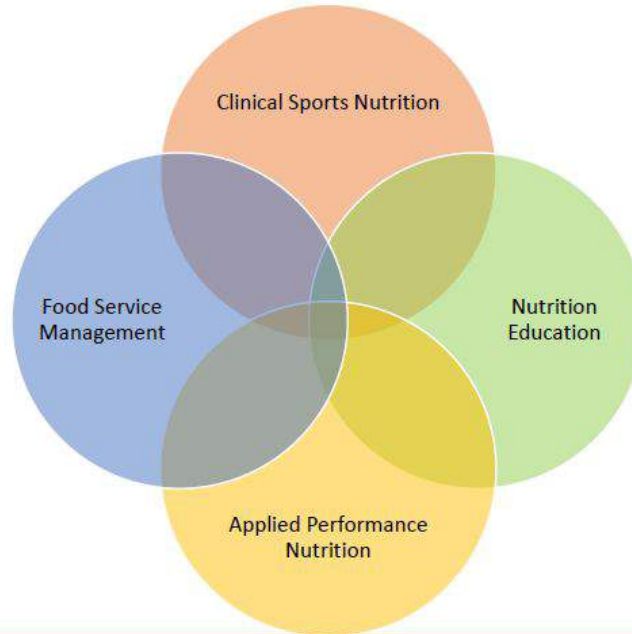
Full-time professional sports dietitian positions 2022



Full-Time Performance Dietitian Positions - Tactical (2017)



Sports Nutrition Services





Sports RD Tasks CAN Include but are not limited to:

- Individual counseling
- Team counseling
- Training Table coordination
- Travel meal coordination
- Body composition testing & assessment
- Cooking demos
- Grocery store tours
- Recipe analysis
- Managing contracts with vendors
- Supplement education and distribution
- Recruiting
- Blood work (yearly physical)
- Eating Disorder management
- Drug testing
- Life Skills
- Game day operations
- Sideline fueling
- Championship tournaments
- Any other task that the Athletic Director deems important



Clinical Sports Nutrition

- Screening, Counseling, Documentation
 - Dietary assessments and evaluations
 - 400 student-athletes from 17 teams have equal access to RD
- Body weight & composition management
- Eating Disorder/Disordered Eating, Relative Energy Deficiency in Sport (RED-S)
- Biomarker testing and management
- Dietary supplement evaluation and management
- Interdisciplinary care team management



Typical Issues Presented by Student-Athletes

General Issues

- Lack of Knowledge
- Energy Needs
- Recovery Needs
- Hydration
- Weight Gain
- Weight Loss
- Timing
- Supplement Evaluations

Medical Nutrition Therapy

- Cramping
- Anemia/Low Iron
- Diabetes
- Stress Fractures/Bone
- GERD
- IBS/IBD/Celiac/Crohn's
- Runner's Gut
- Food Allergies
- Injury Recovery
- Low Energy Availability/RED-S
- Eating Disorders/DE
- Fatigue
- Hypertension



Supplements

- Sports RDs are uniquely qualified to assess supplements and fortified foods for safety, quality and efficacy - which protects the athlete's health and eligibility
- Educate on third-party testing
- Ultimately, it is the athlete's choice (and responsibility)
- Failed drug test = 365 days of lost eligibility
- Is it LEGAL?
- Is it SAFE?
- Is it EFFECTIVE?



Safety/Permissibility



NCAA Bylaw 16.5.2. Nutritional Supplements.

An institution may provide permissible nutritional supplements to a student-athlete for the purpose of providing calories and electrolytes. Permissible nutritional supplements do not contain any NCAA banned substances and are identified according to the following classes...

| Permissible | Not Permissible ¹ |
|---|--|
| <ul style="list-style-type: none">• Calorie replacement drinks.• Carbohydrate/electrolyte replacement drinks.• Energy bars.• Fish oil (omega-3 fatty acids).• Protein supplements (e.g., protein powder)• Vitamins and minerals (including chelated minerals). | <ul style="list-style-type: none">• Amino acids.• Carnitine.• Chondroitin.• Chrysin• CLA (Conjugated Linoleic Acid)• Creatine/creatine-containing compounds.• Garcinia cambogia (hydroxycitric acid).• Ginkgo biloba.• Ginseng.• Glucosamine.• Glycerol²• Green tea.• HMB.• Lactase.³• Melatonin.• MSM (Methylsulfonyl methane).• Tribulus.• Yohimbe. |

¹It is permissible for an institution to provide any supplement to a student-athlete for medical purposes, provided such substances are provided by a licensed medical doctor to treat a specific, diagnosed medical condition (as opposed to prescribing them for preventative reasons).

²Glycerine or glycerol as a binding ingredient in a supplement product is permissible.

THERE IS NO COMPLETE LIST OF BANNED SUBSTANCES. DO NOT RELY ON THIS LIST TO RULE OUT ANY LABEL INGREDIENT.

Many nutritional/dietary supplements are contaminated with banned substances not listed on the label. It is your responsibility to check with the appropriate or designated athletics staff before using any substance.

| Drug Classes | Some Examples of Substances in Each Class | |
|--|---|--|
| Stimulants | Amphetamine (Adderall) Caffeine (Guarana) Cocaine Dimethylbutylamine (DMBA; AMP) Dimethylhexylamine (DMHA; Octodrine) Ephedrine Heptaminol Hordenine Lisdexamfetamine (Vyvanse) <i>Exceptions: Phenylephrine and Pseudoephedrine are not banned.</i> | Methamphetamine Methylhexanamine (DMAA; Forthane) Methylphenidate (Ritalin) Mephedrone (bath salts) Modafinil Octopamine Phenethylamine (PEA) and its derivatives Phentermine Synephrine (bitter orange) |
| Anabolic Agents | Androstenedione Boldenone Clenbuterol Clostebol DHCMT (Oral Turinabol) DHEA Drostanolone Epitrenbolone Etiocholanolone | Methandienone Methasterone Nandrolone (19-nortestosterone) Oxandrolone SARMs (Ligandrol (LGD-4033); Ostarine; RAD140; S-23) Stanozolol Stenbolone Testosterone Trenbolone |
| Beta Blockers (banned for rifle only) | Atenolol Metoprolol Nadolol | Pindolol Propranolol Timolol |

| | | |
|--|---|--|
| Diuretics and Masking Agents | Bumetanide Canrenone (Spironolactone) Chlorothiazide Furosemide <i>Exceptions: Finasteride is not banned.</i> | Hydrochlorothiazide Probenecid Triamterene Trichlormethiazide |
| Narcotics | Buprenorphine Dextromoramide Diamorphine (heroin) Fentanyl and its derivatives Hydrocodone Hydromorphone Meperidine | Methadone Morphine Nicomorphine Oxycodone Oxymorphone Pentazocine Tramadol |
| Cannabinoids | Marijuana Synthetic cannabinoids (Spice; K2; JWH-018; JWH-073) Tetrahydrocannabinol (THC, Delta-8) | |
| Peptide Hormones, growth factors, related substances and mimetics | Growth hormone (hGH) Human Chorionic Gonadotropin (hCG) Erythropoietin (EPO) <i>Exceptions: Insulin, Synthroid and Forteo are not banned.</i> | IGF-1 (colostrum; deer antler velvet) Ibutamoren (MK-677) |
| Hormone and Metabolic Modulators | Anti-Estrogen (Fulvestrant) Aromatase Inhibitors [Anastrozole (Arimidex); ATD (androstatrienedione); Formestane; Letrozole] PPAR- δ [GW1516 (Cardarine); GW0742] SERMS [Clomiphene (Clomid); Raloxifene (Evista); Tamoxifen (Nolvadex)] | |
| Beta-2 Agonists | Albuterol Formoterol Higenamine | Salbutamol Salmeterol Vilanterol |

Any substance that is chemically/pharmacologically related to one of the above drug classes, even if it is not listed as an example, is also banned.

***Caffeine- conditionally banned at urinary concentration of 15 mcg/mL; corresponds to about 500 mg in a 2-3 hr timeframe**

Reviewing an Athlete's Dietary Supplements



Program Considerations

- How and when are athletes disclosing their dietary supplements?
- What is being reviewed, how and when?
- Does your review process match your people power?
- NIL- what is your role in educating and documenting?

Review Process and Communication

- Review
 - Ingredients & Dosing
 - Quality Assurance Testing
 - Drug/Nutrient Interactions
 - Efficacy
- Communication
 - FDA regulation & Third Party Testing
 - Governing body's supplement policy
 - Risk Stratification & RD recommendation
 - Athlete is ultimately responsible for what goes in their body

Document

Student-Athlete: _____ Date: _____

Sport: _____

Substance/Supplement: _____

Manufacturer: _____

Attending Athletic Trainer/Physician: _____

Is the student-athlete currently taking substance/supplement? Yes No

Supplement Inquiry Response: _____

Signed _____ Date _____

Note: Nutritional supplements are poorly regulated by the US FDA. Therefore, the product's purity or safety cannot be guaranteed. Impure supplements may result in a positive drug test. Student-athletes are advised that the use of supplements is at the user's own risk. The NCAA position on nutritional supplements is one of caution, it is a "buyer beware market."

Supplement Brand Claims

Ingredient Review

- List ingredient/nutrient or groups of ingredients/nutrients (multivitamin/multimineral, BCAA, blend, complex etc)
- Explain purpose, efficacy, and safety
- List food sources

Important Reminders

FDA regulation:

The above mentioned supplement is not regulated by the FDA or third party tested. Therefore, the quality of the ingredients could be compromised, it could contain ingredients that are not listed, and/or not contain the ingredients in the amounts listed. Lack of regulation increases the risk for a positive drug test.

Third Party testing:

This supplement has (NOT) been third party tested for banned substances, quality, purity, or potency. Products that undergo third party testing are considered less risky than those that are not tested. To know if a supplement has been third party tested, look for the NSF certified for sport rating on the supplement you are considering.

Conclusion

This is a **low/moderate/high** risk supplement and is not recommended.

Risk is generally assigned based on the following:

Low risk: Supplement is USP, NSF certified for sport, or Informed Sport.

Moderate risk: Supplement has not been flagged for banned substances, however it is also not USP, NSF certified for sport, or Informed Sport.

High risk: Supplement contains banned substances or is potentially harmful to health.

Note - There is always inherent risk when choosing to supplement. No risk is not a valid classification! The NCAA does not approve of or condone the use of any supplements even if they are third party tested. Classification of risk is subject to the medical staff's clinical judgement.

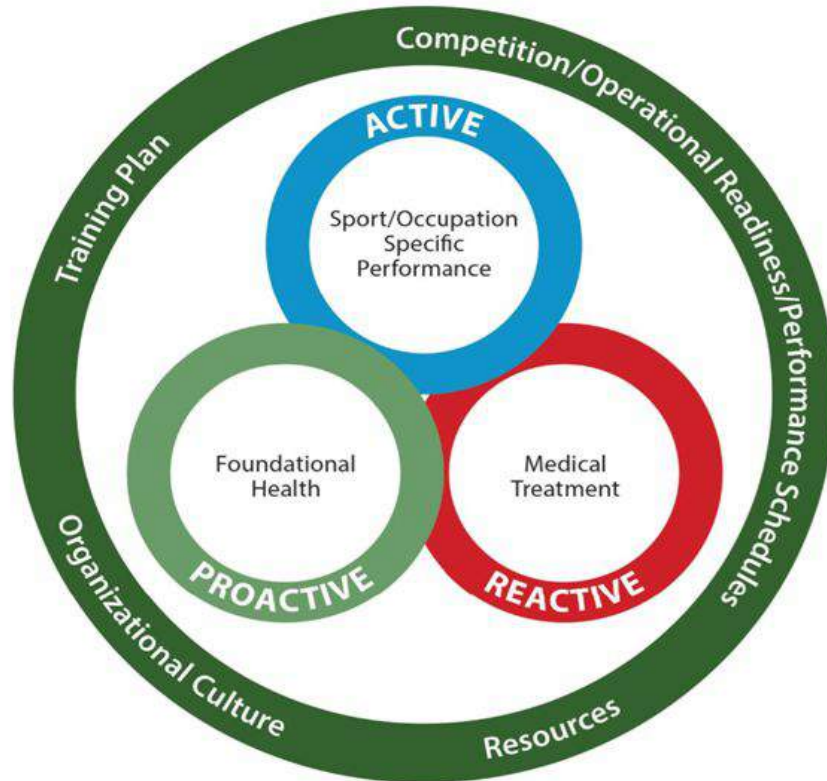
Dietitian's Recommendations

If you are concerned with any aspect of your current nutrition routine or would like to discuss a supplement in person, please reach out to a member of the Performance Nutrition Team. We can help you develop a personalized fueling plan!

Sources:

www.examine.com
www.nsforsport.com
www.usp.org

Comprehensive Sports and Human Performance Nutrition Concept



PROACTIVE

Chronic Disease Prevention
Immune System Enhancement

ACTIVE

Event Fueling
Post-Event Recovery
Task-Specific Body Composition
Cognitive Performance
Arduous Environment Preparedness

REACTIVE

Illness and Injury Recovery
Support of Long-term Conditions

Food Service Management

- Training Table (Athlete Dining Hal)
 - Menu, budget, operations, point of service education & Signage, plate coaching
 - Allergen-friendly options
 - Vegetarian & vegan-friendly options
- Catered meals & snacks
 - Pre and Post-Competitions (home and away), travel logistics
- Fueling Stations
 - Operations, health code standards, staffing, menu, budgets, educations/programming
 - Rely on student volunteers for day to day operations
 - Establishing relationship with university nutrition dept



Applied Performance Nutrition

- Game day fueling, hydration monitoring & testing
- Training/Strength Training fueling
 - Pre/post fuel
- Travel Nutrition
- Injury Recovery - Collaboration with AT/SC/Sports Medicine
- Other
 - Recruiting
 - Policy Development



Double Header Nutrition

What do we need to consider?

Increasing intake Electrolytes
Fluids Timing Pre-game prep

Energy demands

Single game — 3900 Calories Double game — 4700 Calories

Keep in mind this is just an estimate referencing someone who is ~180 lbs. with moderate muscle mass.

Timeline

| Time | Pre-game | Between Games | Post-game |
|--------------------------|--|--|--|
| Night before | Post-dinner Protein/Carbs, complex, Greek yogurt + fruit | Complete fuel with moderate protein, low/moderate fat, no fiber, high carbs | |
| Day of prep | 3 meals + 2 snacks for total 2000-2500 weight in oz of food | 3rd Quick carb + fluids | |
| Warm up/battle/preactice | Quick carb + fluids + 2-3oz electrolyte + fluids | 6th Quick carb (can also include a little protein) e.g. granola bar + fluids | |
| 3rd | Quick carb (can also include a little protein) e.g. granola bar + fluids | 8th Rehydrate | |
| 6th | Quick carb + fluids | Post game | Post game meal: Fruit/Protein/Carb/protein complex |

Fueling Kit

Protein

- Turkey jerky
- Cheese stick
- Whey protein
- Chicken/Turkey nuggets

Carbohydrates

- Honey
- Dried fruit
- Soft cereal
- Fig bar

Complex snacks

- Granola
- Trail mix
- PB&J
- Cliff Bar
- Gatorade Bar

Electrolytes

- Right stuff
- Prezielle
- Salted Gatorade
- Drip drop
- Salt on food





Policy Development

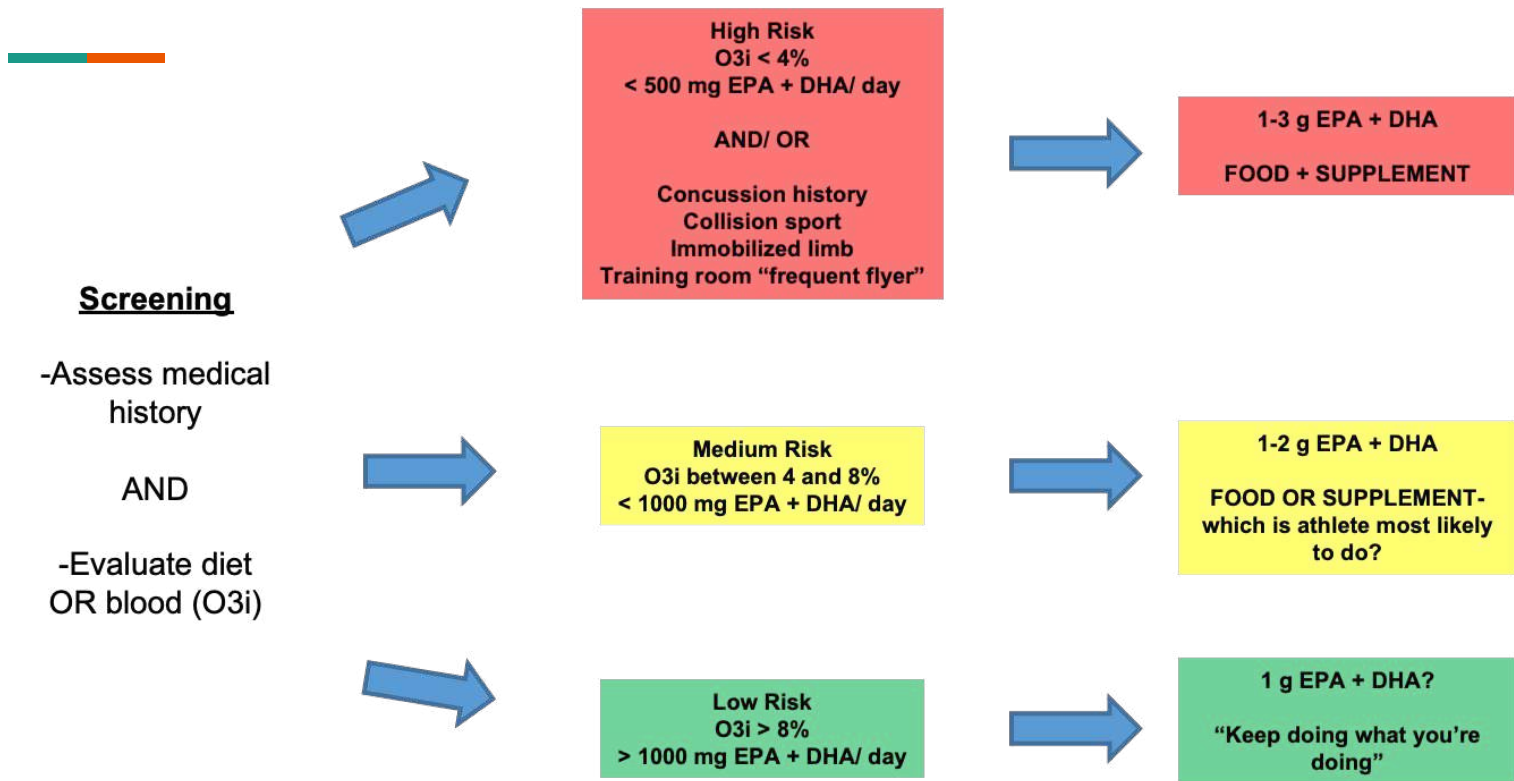
Statement of
Need: identify
the problem

Research:
Gather & summarize
current evidence
*Include references

Logistics:
- Individualizing dose:
bloodwork, set of criteria
-Product selection
-Follow-Up Plan: re-testing,
refills, evaluation process for
policy

Education & Communication
Plan:
-Create education points for..
a) Athletes
b) Coaches
c) High Performance Team

Example Policy & 2020 Fish Oil Permissibility



Nutrition Education

- Translate science into easily digestible info
- Emphasizing meal culture, performance nutrition and education
- Giving athletes the tools to be successful in life and on the field/court, etc
- Group education
 - Team talks, fueling plans, plate coaching
- Print materials and signage
- Life skills (cooking demos, grocery store tours)
- Social Media



NUTRITION for PERFORMANCE

PRE-VENT FUELING

Athlete's Plate, Every Meal
Focus on carbs, lean proteins, vegetables, and fruit for competition. Go easy with intake 1-2 days out (50% of plate).

Hydration is Key
Carry your water bottle with you! Hydrate to prevent fatigue & illnesses. Check your urine & should be clear days out (50% of plate).

Snack Smart
Plan ahead, tip 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 carbs per hour of activity through sports drinks and/or food.
no alcohol, fruit, pork, and no lard

30-60 minutes
Focus on easily digestible carbs for optimal fueling! Sip on water & sports drink for hydration, electrolytes, and caffeine!
no alcohol, sports drink, fruit, or potatoes

< 2 hours before
Decrease the size of meals/snacks, and shift towards mostly carbs with amount of proteins, fat, starch, and fiber you know!

3-4 hours out
Consume a meal that is high carb, moderate protein, and low fat to fuel your effort!
no alcohol, no lard, no fat, no fiber!
no alcohol, no lard, no fat, no fiber!

POST COMPETITION

Rehydrate, Reup, Replenish!
• 20-24 oz fluid for every 1 lb lost
• 20-30 g protein within 1 hour & within 2 hrs used after every 2-3 g/lp
• 0.5 g carb per lb of body weight within 1 hour
no high protein milk, no alcohol, no lard, no fat, no fiber, or white carbs in any amount

Athlete's Plate
Replenish your glycogen stores and rebuild muscle with a balanced meal of protein, carbs, fruit & vegetables.
Eggs, toast, fruit

Team effort!
Be accountable to yourself and your teammates. Talk to do what it takes to get yourself up for performance!

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EASY TRAINING / WEIGHT MANAGEMENT:

FATS 1 tablespoon

Protein 3-4 ounces

Grains 1/2 cup

Vegetables 1/2 cup

FLAVORS

MODERATE TRAINING:

FATS 1 tablespoon

Protein 3-4 ounces

Grains 1/2 cup

Vegetables 1/2 cup

FLAVORS

HARD TRAINING / RACE DAY:

FATS 1 tablespoon

Protein 3-4 ounces

Grains 1/2 cup

Vegetables 1/2 cup

FLAVORS



Common Challenges

- Staffing and establishing a service model
- Advocacy, establishing value via impact reporting
- Body Composition Testing
- Dealing with difficult coaches, support staff, administration, and the front office
- Burnout!

Staffing & Establishing a Service Model

- Chronically understaffed
- Many factors can influence your service model
- WVU - 400 athletes spanning 17 teams
- In addition to overseeing operation of fueling station

| Part Time | Full Time | Program | Department |
|--|---|---|--|
| <p>Personnel Roles</p> <ul style="list-style-type: none"> • Clinical • Educational <p>Scope of Service</p> <ul style="list-style-type: none"> • Clinical sports nutrition • Limited performance nutrition • Limited nutrition education • Supplement safety <p>Recommended Staffing Model</p> <ul style="list-style-type: none"> • Consultant/part-time sports dietitian • 0.25–0.75 FTE or hourly contract | <p>Personnel Roles</p> <ul style="list-style-type: none"> • Clinical • Educational <p>Scope of Service</p> <ul style="list-style-type: none"> • Clinical sports nutrition • Limited performance nutrition • Select nutrition education • Supplement safety • Food-service operations advising • Policy advising • Oversee nutrition-related compliance with rules & regulations of sports organizations <p>Recommended Staffing Model</p> <ul style="list-style-type: none"> • Staff sports dietitian, 1 FTE | <p>Personnel Roles</p> <ul style="list-style-type: none"> • Clinical • Educational • Administrative <p>Scope of Service</p> <ul style="list-style-type: none"> • Clinical sports nutrition • Performance nutrition • Nutrition education initiatives • Supplement safety • Limited food-service operations • Budget & finance • Set policy & procedures • Oversee nutrition-related compliance with rules & regulations of sports organizations • Select staff development & training <p>Recommended Staffing Model</p> <ul style="list-style-type: none"> • Director, sports nutrition, 1 FTE • Staff RDN, football, 1 FTE • Staff RDN, Olympic sports, 1 FTE • Sports RDN intern, 1 FTE • Student workforce, 75–80 h/wk | <p>Personnel Roles</p> <ul style="list-style-type: none"> • Clinical • Educational • Administrative • Food service • Academic <p>Scope of Service</p> <ul style="list-style-type: none"> • Clinical sports nutrition • Performance nutrition • Nutrition education initiatives • Supplement safety • Select food-service operations • Budget & finance • Set policy & procedures • Oversee nutrition-related compliance with rules & regulations of sports organizations • Select recruiting activities • Staff development & training <p>Recommended Staffing Model</p> <ul style="list-style-type: none"> • Director, sports nutrition, 1 FTE • Assistant director, 1 FTE • Staff RDN, football, 1 FTE • Staff RDN, Olympic sports, 1 FTE • Nutrition operations specialist, 1 FTE • Sports RDN fellow, 1 FTE • Sports nutrition graduate assistant, 1 FTE • Student workforce, 150 h/wk |

Journal of Athletic Training, 2012, 57(8):717-732
 doi: 10.4085/1062-4050-037122
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 www.natajournal.org

Nutrition

Interassociation Consensus Statement on Sports Nutrition Models for the Provision of Nutrition Services From Registered Dietitian Nutritionists in Collegiate Athletics


Victoria Lambert, MS, RDN, LD*; Aaron Carbuhn, PhD, RDN, CSSD†; Amy Culp, RDN, CSSD, LD, CEDRD‡; Jennifer Ketterly, MS, RDN, CSSD, LD§; Becci Twombly, RDN||; Dana White, MS, RDN, ATC¶

*Private practice, Flemington, NJ; †Department of Dietetics and Nutrition, University of Kansas Medical Center, Kansas City; ‡Intercollegiate Athletics, University of Texas at Austin; §Duke Sports Sciences Institute, Duke University School of Medicine, Durham, NC; ||Los Angeles Lakers, Los Angeles Angels, CA; ¶Athletic Training & Sports Medicine, Quinnipiac University, Hamden, CT

Collegiate athletic programs are increasingly adding nutrition services to interdisciplinary sports medicine and sports performance departments in response to scientific evidence highlighting nutrition's integral role in supporting athletic performance and overall health. Registered Diet-

Performance," make these practitioners uniquely qualified to deliver the breadth of care required in the collegiate setting. Therefore, this document, guided by a multidisciplinary panel, introduces 4 sports nutrition models through which any collegiate athletic program can deliver sports

DOI: 10.4085/1062-4050-037122

- 
- Consider
 - Expectations
 - Your level of practice
 - Consensus Statement Service Model Framework
 - Resources
 - What can you control
 - And more...

Assessing Yourself



FROM THE ACADEMY
Standards of Practice



Academy of Nutrition and Dietetics: Revised 2021 Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sports and Human Performance Nutrition

Karen Daigle, MS, RD, CSSD, CSCS, LDN; Regina Subach, EdD, RD, CSSD, LDN; Melinda Valliant, PhD, RD, CSSD, LDN



| Indicators for Standard 1: Nutrition Assessment | | | | | | | |
|--|------|---|--|---|--|------------|--------|
| Bold font indicators are Academy Core RDN Standards of Practice indicators | | | | | The "X" signifies the indicators for the level of practice | | |
| Each RDN: | | | | | Competent | Proficient | Expert |
| | | 1.5C5 | Appropriateness of dietary supplements regimen | | X | X | X |
| | | 1.5C5i | Adding, maintaining, changing, or discontinuing dietary supplement use based on athlete's or professional's age, career longevity, level of competitiveness, duty status, training cycle, competitive or operational readiness or performance schedule, and travel schedule | | | X | X |
| | | 1.5C4ii | Dose and timing of medications and dietary supplements relative to meal timing, training cycles, competition or operational readiness, or performance schedules, travel schedules, and time zone changes | | | X | X |
| | 1.5D | Knowledge, beliefs, and attitudes (eg, understanding of nutrition-related concepts, emotions about food/nutrition/health, body image, preoccupation with food and/or weight, readiness to change nutrition- or health-related behaviors, and activities and actions influencing achievement of nutrition-related goals) Evaluates: | | X | X | X | |
| | | 1.5D1 | General food and nutrition knowledge, skills, or strategies | | X | X | X |
| | | 1.5D2 | Risk for or history of eating disorder or disordered eating and related factors (eg, limited food choices, distorted body image, preoccupation with food or nutrients); See Standards of Practice (SOP) and Standards of Professional Performance (SOPP) for RDNs in Eating Disorders for additional information | | X | X | X |
| | | 1.5D3 | SHP food and nutrition knowledge, skills, or strategies | | | X | X |
| | | 1.5D4 | Beliefs and attitudes (eg, behavioral mediators or antecedents related to SHP nutrition, intentions, readiness and willingness to change, appropriateness of goals and | | | X | X |

| | |
|--------------------------------|---|
| Assessment | Initial Assessment is Strongly Recommended |
| Body Composition | Optional Assessment and Consultation 2x's per year |
| Body Weight | Recommended Weigh ins/outs during pre-season traing |
| Dietary Supplements | All Should be reviewed and Documented by a Sports Dietitian |
| Specialized Supplements | As deemed necessary and distributed by Sports Dietitians: Vitamins and Minerals, Higher Calorie Beverages Collagen and Bars |
| Other Optional Services | Notemeal |

Education

| | |
|--------------------------|---|
| Formal, Active | Pre-season Team Education with Sports Medicine & During Offseason |
| | Monthly Post Practice Announcement |
| | Cooking Class and Grocery Store Tours Available |
| Informal, Passive | Fuel Bar Verbal, Smart Board, Signage |
| | Social Media, Newsletter & Teamworks Messaging |

Food Service

| | |
|---|---|
| Team Meals | Training table Menu Planning and Execution |
| Fueling Station | Fuel Bar, Weight Room, Meeting Room Areas Stocked Daily with Pre- Mid- Post- and Between Meal Fuel |
| Travel | Meal, Snack, Pre-fuel and Re-fuel planning/coordination |
| | Travel Kit with specialized and meeting fuel |
| Team Funded Enhanced Fueling Items | Recovery Packs: Cheribundi Bottles, Pro Bar Live, Turmeric and Ginger Shots, Ginger Chews, Omega 3 Bars, Collagen Others: Cheese its, Fruit Snacks |

Body Composition Testing

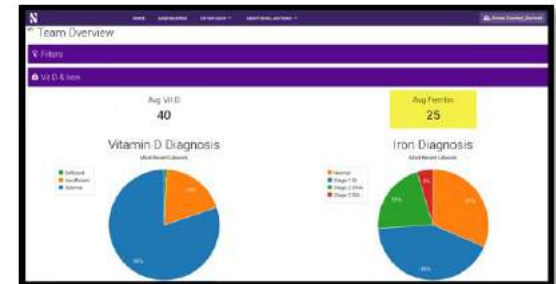
- Can be another useful tool or a burden
- Important to educate coaches on how to discuss body comp with athletes
- Have a policy to protect yourself and the athlete



Advocacy & Establishing Value - Impact Reporting

OUR IMPACT: REDUCED RISK

- 283 Total Dietary Supplement reviews completed this fall (38% low risk, 55% moderate risk, 7% high risk)
 - 82% of the dietary supplements submitted by Football Student Athletes were low risk! This is outstanding and a testament to all the preventive education we do!
- REDS and Eating Disorder Care (Ave of 20 student athletes being followed by ECATT team at a time)
 - Screening leads to early identification and multidisciplinary treatment
 - Note that these are *very* time intensive cases to treat, and case manage
 - Motivated group of clinicians frequently updates policy, screening and assessment tools, and interventions to reflect IOC guidance
- Football Camp Hydration Monitoring
 - Collect daily in and out weights during pre-season (~3000 data points) utilizing the latest technology to alert dietitians of need for additional assessment and intervention
- Nutrition Deficiency Identification and Intervention



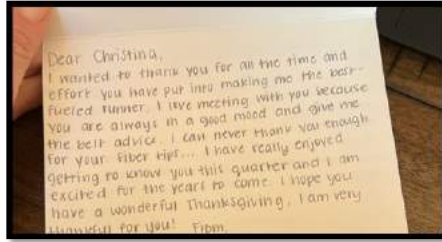
Our Impact: Fueling Efficiencies

- 440+ competitions + thousands more training sessions each year
- We accept over 240 food deliveries each year to multiple locations and get all that food to our student athletes' mouths
- We are very strategic in our inventory and ordering to provide high quality fuel within our budget amid rising food costs.
 - In the past 18 months, we have found over \$40K in operational efficiencies which we used to purchase more fuel for our student athletes

| 2023 Select Fueling Consumption Statistics | |
|---|-------|
| Fairlife Milk Bottles (cartons of milk are not included) | 46404 |
| Core Power Protein Shakes (Gatorade protein shakes not included) | 44925 |
| Cherry Juice Packets (bottles of cherry juice not included) | 9600 |
| Right Stuff Electrolyte Packets | 7920 |
| Jerky Packets and Sticks | 9000 |

*Samples provided by
Northwestern Sports Nutrition
Source material from CPSDA advanced practice workshop

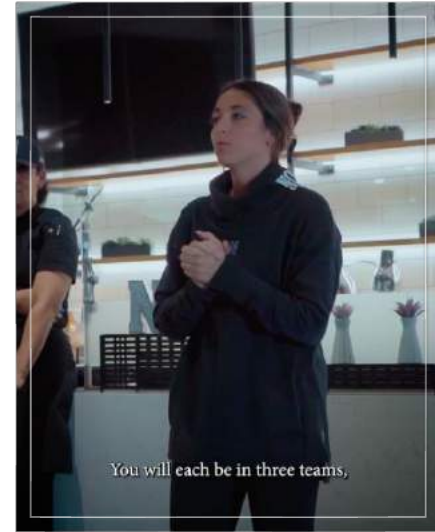
Our Impact: Positive Patient Experiences



I just wanted to drop you a note and thank you for your support of [redacted] over the past couple of years. We are all sad that she's leaving but we believe it's what's best for her for the next couple of years. She just loves the game and wants to compete!

We know that you played a significant role in her overall recovery and are forever indebted to you. She seems to be doing really well right now and we have you (and several others) to thank!

- "Any time I had questions for the performance nutrition staff, they have been very friendly and willing to help. I can tell the staff is top of the line and is very passionate."
- "Fueling up at NU helped me push my body to go another level as far as strength and speed"
- "I have greater knowledge about the things I need to eat to see results in my performance and health"
- "I struggle to put on weight / body fat due to my metabolism and training load, but one of the nutritionists provided me with a solid detailed plan as to how I can sneak in extra calories and carbs in order to put on a bit of weight."
- "Northwestern University sports dietitians and overall nutrition ecosystem is simply world-class...The staff are always friendly, provide the upmost care for all student athletes and make sure were fed well and fueled to the absolute best for competition. There's nothing more impactful than having a supportive staff like working with the sports dietitian's regarding eating habits and hydration"



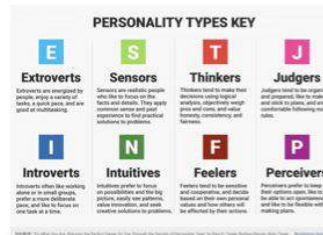
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"The biggest thing was that it just felt like home to me," Giacchino said. "As soon as I hit campus it felt like home. When I was around the coaches and everyone in the program, from the athletic director to the nutritionist, it felt like I've known them forever. They were all so welcoming."



*Samples provided by Northwestern Sports Nutrition

Dealing with Difficult Coaches, Support Staff, Administration

- Lots of “D” personality types in athletics
- Communication is key
- Talk to everyone in their own “language”
 - Coaches: How are you going to help them win?
 - Support Staff: Understand where their pressure comes from
 - Administration: \$\$\$\$\$\$\$\$\$\$



Personality Types

There are many ways to quantify personality but understanding the differences is key to establish rapport & respect.

- + What Motivates You
- + How do you like to communicate
- + How do you like to be communicated with
- + Areas of Strength
- + Area of Improvement

TOP 10

REASONS TO HIRE A SPORTS RD

A Registered Dietitian (RD) or Registered Dietitian Nutritionist (RDN) has completed a degree in nutritional sciences and a year-long internship, before sitting for a board exam. They must accumulate 75 continuing education units (CEUs) every 5 years to maintain the RD credential.

A Certified Specialist in Sports Dietetics (CSSD) is an RD with a specialty credential in sports nutrition. A CSSD has been a practicing RD for 2+ years, has accumulated 2,000+ hours of sports-specific practice and passed a board exam. They must also continue to accumulate sports-specific hours and retake the exam every 5 years to maintain the credential.

- 1. Registered Dietitians (RD) are the only professional with the education and credential to provide Medical Nutrition Therapy.**

An RD is an essential part of managing anemia, gastrointestinal conditions such as Irritable Bowel Syndrome (IBS), Crohn's and Ulcerative Colitis, Type 1 Diabetes, hypertension, thyroid disorder, and food allergies.

- 2. Having non-credentialed individuals consult with athletes on anything past basic nutrition advice creates a liability for your organization.**

Advice that can seem benign (supplement recommendations or adjustments to macro/micronutrient consumption), can cause complications especially if a pre-existing medical condition, or medications were not considered.

- 3. Sports RDs are uniquely qualified to assess supplements and fortified foods for safety, quality, and efficacy - which protects your athlete's health and eligibility.**

- 4. Sports RDs act as an integral part of a multi-disciplinary team to offer complete care to athletes. (Athletic Trainers, Strength Coaches, Psychologists, Physicians, and Chefs).**

- 5. Sports RDs positively impact performance and reduce training/competition time lost to injury/illness.**

Counseling around hydration, adequate caloric consumption, nutrient timing and implementation of injury and recovery nutrition protocols are ways that Sports RDs can impact performance and healing.

- 6. Sports RDs assess and monitor body composition and weight for athletes in a realistic and safe manner helping to prevent body image issues and eating disorders in athletes.**

- 7. Having an RD involved with food and supplement procurement, delivery and inventory management helps maximize department-wide budget efficiency.**

- 8. Sports RDs teach athletes real-life skills through experiences like cooking demos, meal planning and grocery store tours.**

- 9. RDs are an imperative component of eating disorder treatment and should be included as part of any eating disorder treatment or high-risk team.**

- 10. Your competition is.**

The number of full-time sports dietitians in the collegiate, professional sports and military settings is exploding and shows no sign of slowing down. Check out www.sportsrd.org - within the Career Development tab you'll find our Full-Time Sports RD list, job board, and recent salary survey.



Please visit www.sportsrd.org to learn more about CPSDA and the role of a Sports RD.
Collegiate and Professional Sports Dietitians Association

@CPSDA   

Burnout

- Work life balance is important but varies depending on service model and expectations, sport, time of year (busy fall and spring, but summers are very slow)
- Establish expectations up front so you can say no later





Tips for the Aspiring Sports RD

- Understand the demands of athletics and be realistic with yourself and your own values
- Location can be self-limiting, especially in the collegiate/professional space. You may need to be creative
- Experience is everything. Get involved wherever you can, ideally in various service models, and ask questions.
- Whatever your role, independence, critical thinking, and problem solving will get you far - ESTABLISH VALUE!
- No matter how prepared you are, your plans WILL change - be ready to be flexible
- Don't take things personally - lots of personalities



Tips for the Aspiring Sports RD Cont'd

- Know that despite its growth, sports nutrition is still a small field
 - "It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently."
- Your network is everything
 - Industry connections: Building a network of contacts within the sports nutrition industry can provide valuable insights into market trends, emerging research, and new product developments.
 - Career opportunities: Networking opens doors to potential job opportunities, whether it's through direct referrals or by learning about job openings before they're publicly advertised.
 - Knowledge Exchange: Engaging with peers and experts in the field enables professionals to exchange ideas, share best practices, and stay informed about advancements in sports nutrition science.
 - Partnerships and Collaborations: Networking can lead to partnerships with other professionals or organizations, fostering collaboration on research projects, product development, marketing campaigns, or business opportunities.
 - Professional Development: Attending industry events, conferences, and workshops facilitates ongoing learning and professional development, which is essential in a field as dynamic as sports nutrition.
- Don't underestimate the power of a great mentor
- It's just sports. Remember to have fun!



Questions?



Thank You!



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