

Nutritional Needs of Young Athletes

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Disclaimer

- I am not a dietician or nutritionist
- I am a primary care sports doctor



Disclaimer

- Sports Nutrition is a HUGE topic



Overview

- Introduction
- Game day nutrient timing
- Hydration strategies
- Final Thoughts



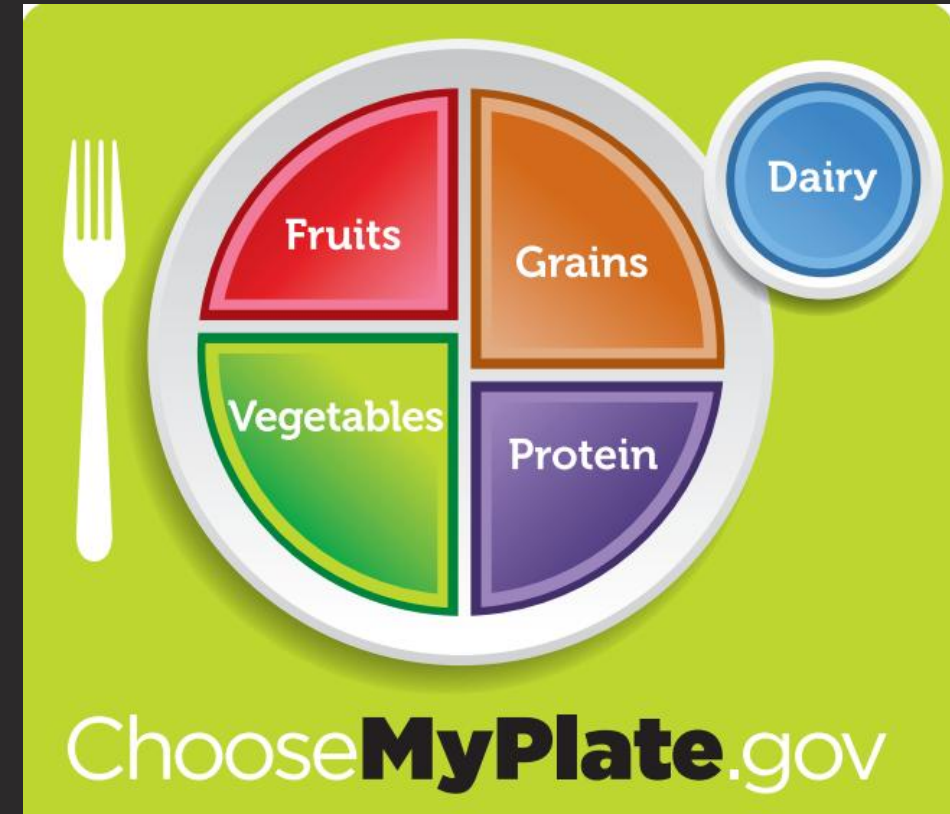
Basic Principles

- Kids who eat healthy, well-balanced meals and snacks will get the nutrients needed to perform well in sports
- Most athletes will naturally eat the right amount of food their bodies need
- Let common sense guide you



Young Athletes Need Extra Energy

- Kids need 20-30% more energy than adults for the same exercise activity
- Kids need more energy per pound of body weight than adults
- CALORIES!



Calories

- Proteins
- Carbohydrates
- Fats



Protein

- 15-20% calories/day
- Helps build and repair muscles
- Most kids get plenty from diet alone
- Examples: fish, lean meat and poultry, dairy products, beans, nuts, soy products



Carbohydrates

- 50-60% calories/day
- Crucial source of fuel for the body
- When you're choosing carbs, look for whole-grain foods like whole-wheat pasta, brown rice, whole-grain bread and cereal, and plenty of fruits and vegetables.
 - Fruits: bananas, cherries, mangoes, pineapple
 - Vegetables: squash, peas, beans, starchy veggies



Fats

- <30% calories/day
 - 10% or less saturated fat
 - Minimize trans fats
- Important source of energy
- Good sources of healthy fat:
 - olive oil, avocado, peanut butter, fatty fish, nuts, milk



How should I eat on game day?



Game Day Nutrition

- Pre-game nutrition:
 - Eat 3-4 hrs before activity
 - High in carbs, protein
 - Low in fat and high fiber foods
 - If <3 hours before game:
 - Light snack with easy-to-digest carbohydrates (e.g. fruits, sports drink, crackers, bread)



Game Day Nutrition

- Post-game Nutrition:

- Refueling Interval:

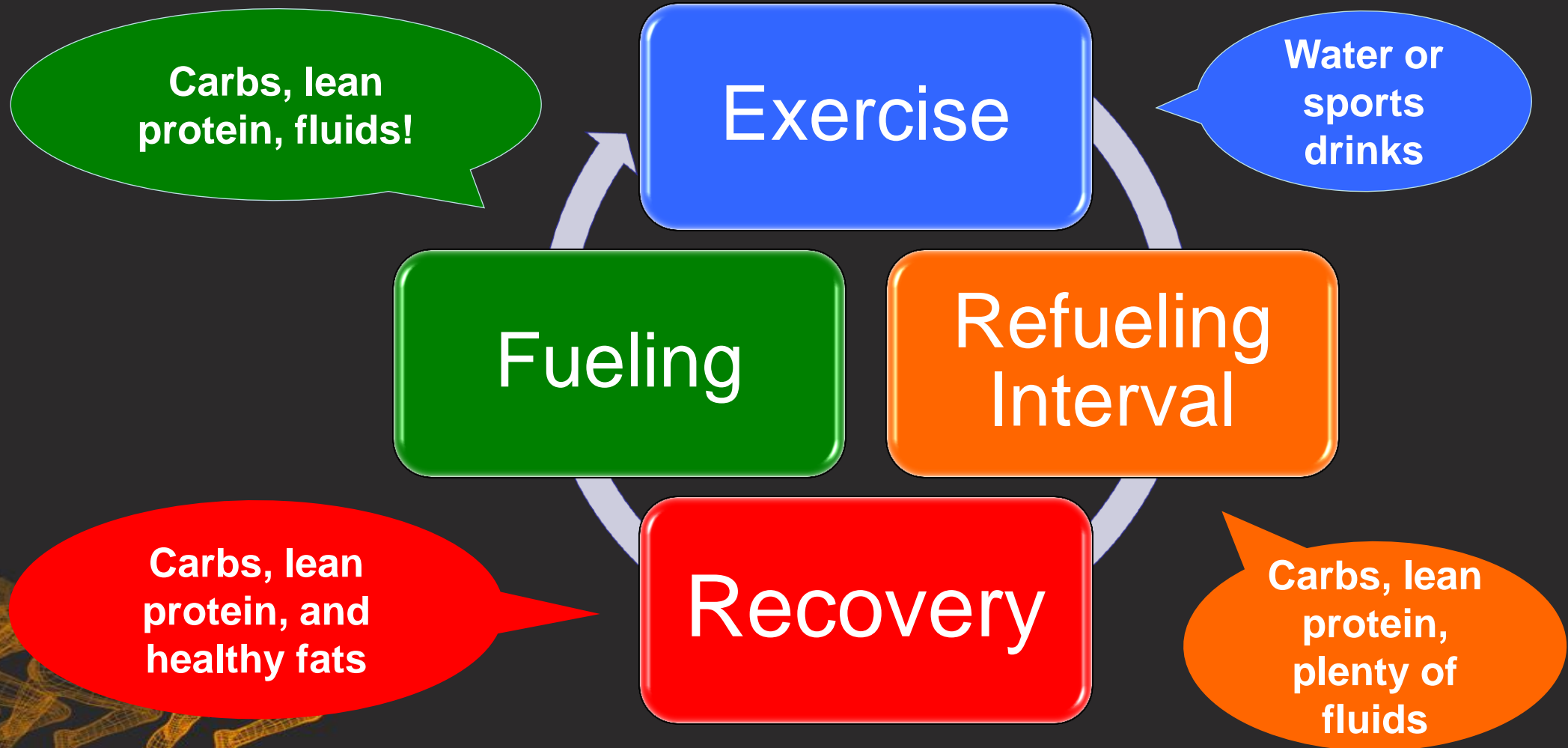
- Eat within 30 minutes of intense exercise
 - Balance of carbs and lean protein; low in fat
 - Milk

- Recovery:

- Remainder of day's intake should be a balanced diet to promote muscle growth and tissue repair
 - e.g. lean protein, starchy side, green vegetable, fruit, milk



Nutrient Timing Phases

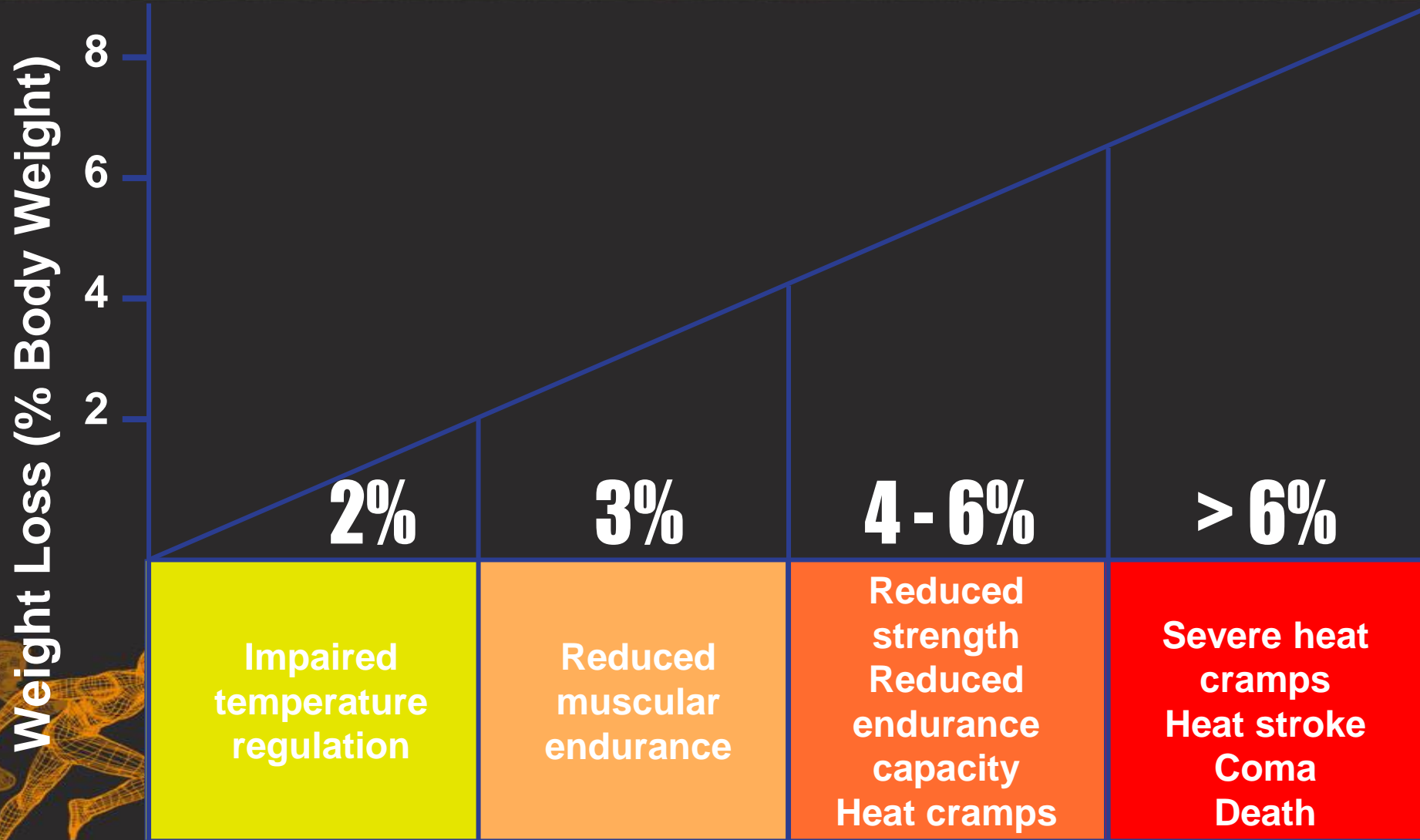


Hydration

- It's important for young athletes to drink plenty of fluids to prevent dehydration, which can zap strength, energy, and coordination and lead to heat-related illness.
- Even mild dehydration can affect athletic performance.



Dehydration and Performance



Hydration Timing

- Before exercise:
 - Begin hydrating 2-3 hrs before exercise
- During exercise:
 - Amount depends on individual and activity
 - Water is typically adequate for exercise <60 minutes
 - Sports drinks for energy if >60-90 minutes
- After exercise:
 - Water for hydration
 - CHO to replenish glycogen stores
 - Electrolytes to accelerate rehydration
 - Protein may be helpful



Hydration Bottom Line

- The bottom line is that for most young athletes, water is the best choice for hydration.
- After the activity, carbohydrates and electrolytes can be replenished.



Final Thoughts



Breakfast is Important!

- Don't skip breakfast
- 12-19 yr olds with infrequent breakfast consumption had greater body fat% and total fat mass



Meal Suggestions

- Breakfast:
 - Low-fat yogurt, granola, banana
 - Whole-grain cereal, low-fat milk, strawberries
- Lunch:
 - Bean burritos with low-fat cheese, lettuce and tomatoes + fruit
 - Turkey sandwich on whole-wheat bread + fruit
- Dinner:
 - Grilled chicken breast, steamed rice, vegetables
 - Pasta with red sauce, lean ground beef, salad
- Snacks: Pretzels, raisins, crackers, string cheese, vegetables, fruit



Conclusions

- Ensure your kids are meeting their macronutrient needs:
 - Carbohydrates
 - Protein
 - Healthy Fats
- Encourage fruits and veggies
- Nutrient timing and hydration are important
- Drink milk



#1 Reason Kids Participate in Sports

**TO
HAVE
FUN!**



Questions?

