WINNING NUTRITION: MAXIMIZE YOUR POTENTIAL

Allison Mankowski, MPH, RD, CSSD

Impact of proper sports nutrition



Improved energy levels



Improved recovery



Help prevent injury and illness



Help maintain appropriate body composition



IMPROVED PERFORMANCE!

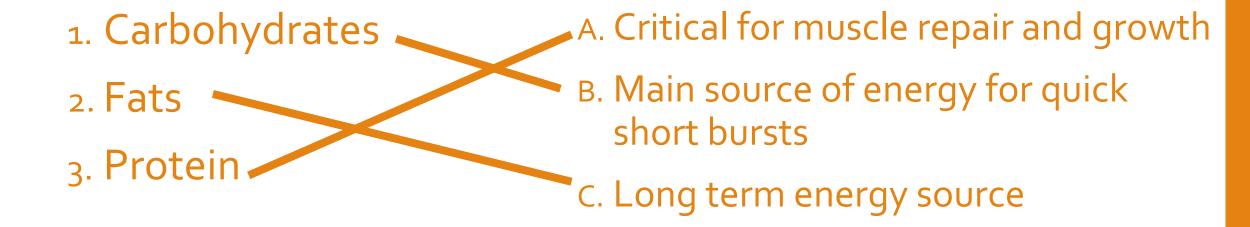
Basic Components of Nutrition

- WHAT you eat
- WHEN you eat
- HOW MUCH you eat

WHAT to eat

- High Performance Foods: 80-90% of intake
 - Tier 1 foods (little to no processing, nutrient dense): should be majority of intake, especially while in season and around practice times
 - Tier 2 foods (some processing, nutrient dense): still high quality, frequency will depend on personal factors
- Low Performance Foods: 10-20% of intake
 - Tier 3 foods (highly processed, higher in added sugars or fats, few nutrients): should be consumed occasionally, ideally not directly around practice times

Match the Macros



WHAT TO EAT: CARBOHYDRATES

- Tier 1:
 - Rice, quinoa, etc.
 - Oats
 - Potatoes (sweet, russet, redskin, etc.)
 - Beans (kidney, black, chickpeas, etc.)
- Tier 2:
 - Pre-packaged oatmeal
 - Whole wheat bread products (bread, pitas, bagels, etc.)
 - Whole wheat pasta
 - Whole wheat, low-sugar cereals (Cheerios, Chex, Kix, etc.)

- Tier 3:
 - White bread products (bread, pitas, bagels, etc.)
 - Snack crackers and chips (Cheese-Its, Ritz, Lays, etc.)
 - Processed pasta or rice (Mac & cheese, Rice-a-Roni, Raman, etc)
 - Sugary cereals (Lucky Charms, Frosted Flakes, etc.)
 - Sugary candies (Sweet Tarts, Gummies, Skittles, etc.)

WHAT TO EAT: PROTEIN

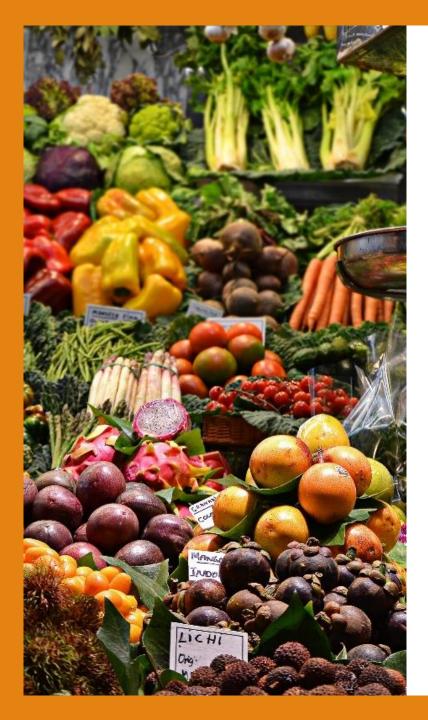
- Tier 1:
 - Poultry
 - Ham, other lean pork
 - Roast beef & lean beef cuts
 - Fish and seafood
 - Low-fat dairy
 - Eggs
 - Beans (kidney, black, chickpeas, etc.)
 - Nuts, seeds, nut butters
 - Soy products (tofu, tempeh, edamame)

- Tier 2:
 - Higher fat beef or pork cuts
 - Processed meat alternatives
- Tier 3:
 - Sausages
 - Bacon
 - Bologna, salami, pepperoni, etc.
 - ALL deep-fried meats



- Tier 1:
 - Oils, butter
 - Nuts, seeds
 - Nut butters
 - Coconut
 - Avocados & olives
- Tier 2:
 - Cheeses

- Tier 3:
 - Desserts and baked goods
 - Creamy sauces and dressings
 - Fried potatoes (French fries, hash browns)
 - Anything deep-fried



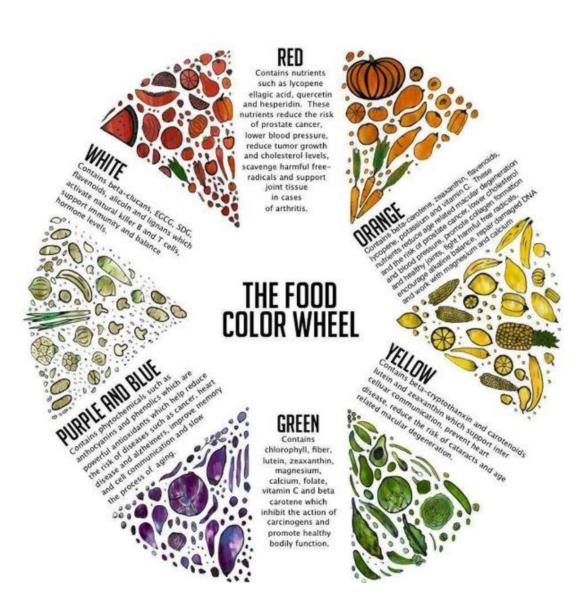
WHAT to eat: Micronutrients

- Assist in metabolism of macros
- Assist in uptake of other nutrients
- Prevent and repair inflammation
- Immune function
- Health of bones, skin, hair
- Many other body functions

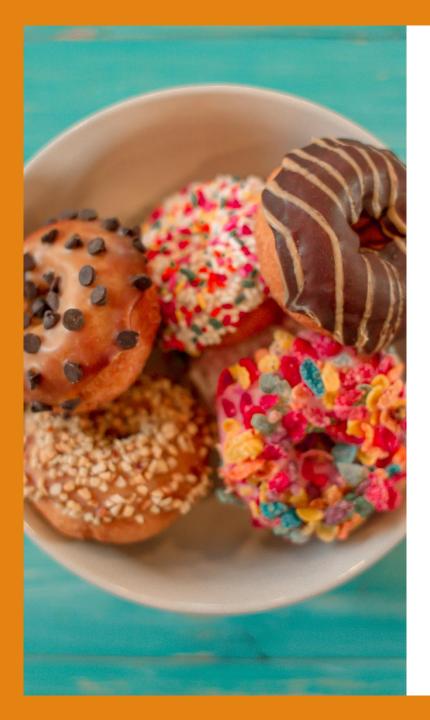
Prevent inflammation

Immune system response to intense physical activity

- Prolonged Inflammation
 - Causes fatigue, muscle damage and soreness.
 - Limits muscle growth and training progression
 - Increases muscle loss



WHAT TO EAT: FRUITS AND VEGGIES



What to eat: Foods for your mind!

- Benefits of an "all foods can fit" mindset
 - Eliminate food guilt
 - Happy mind = happy body
 - Social bonding
 - Decrease cravings and over-indulgence
 - Sustainable for the long term
- Follow 90-10 guidelines

HOW OFTEN SHOULD YOU EAT? A. EVERY 1-2 HOURS B. EVERY 5-6 HOURS C. EVERY 3-4 HOURS

WHEN to eat

Eat high-performance foods every 2-4 hours (including soon after you wake up!)

- Provides a consistent source of energy to keep your metabolism and energy even
 at maximum level
- Keeps you from getting too hungry which can lead to making poor choices or overeating



Snack suggestions

- Granola bars
- Trail mix—dried fruit, nuts, whole grain cereal
- Whole grain crackers and hummus or PB
- Granola/cereal in baggies
- Low-fat popcorn
- PB&J—whole grain bread, peanut butter, and jelly
- Corn chips and salsa
- Low-sugar cereal and milk
- Instant oatmeal
- Fresh Fruit/veggies

- Smoothie—fruit/veggie, yogurt, low-fat milk/100% juice
- Beef jerky
- Hard-boiled eggs
- String cheese
- Greek yogurt
- Deli turkey, chicken, or ham
- Tuna/chicken pouches.



WHEN to eat

Eat high-performance foods before activity

- A full meal 3-4 hours before
 - <u>High</u> in carbohydrates, <u>moderate</u> in protein and <u>low</u> in fat
- For activity longer than 60 minutes, eat a carbohydrate snack about 1 hour before
- Choose something easy to digest that you are familiar with and will not upset your stomach

Which of the following would be the best pre-workout meal?

Oatmeal with PB, honey and a banana

Breakfast pastry and a yogurt

Hard boiled egg and orange juice

WHEN to eat

Eat high-performance foods after activity

- Need BOTH complex carbohydrates and lean protein
 - o.5g of carbohydrates per pound of body weight
 - o.1g protein per pound of body weight
 - 200lb athlete: 100g carbohydrates, 20g protein
- Should be eaten within <u>15-60 minutes</u>.



Which of the following would be the best post-work meal?

Mixed green salad, two slices of whole wheat toast with avocado and an apple Turkey cheeseburger on whole wheat bun, sweet potatoes, and veggies

Caesar salad w/ salmon and a dinner roll

TRUE OR FALSE?

COUNTING CALORIES IS THE BEST WAY TO FIGURE OUT HOW MUCH TO EAT

FALSE

Challenges in Calorie Counting

Every BODY is different

Needs will fluctuate depending on many factors

Calorie counting is an inaccurate science

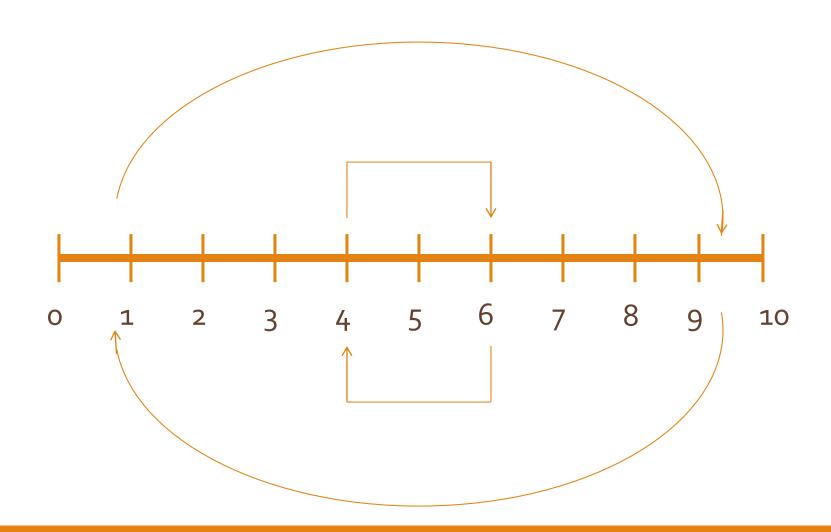
Tracking calories is at best <u>annoying</u> and at worst <u>triggering</u>

MODERATE TRAINING: Fresh Fruit Water Stewed Fruit Dairy/Nondairy **FATS Dried Fruit** Beverages 1 Tablespoon **Diluted Juice** Pasta Rice >> Flavored Beverages Cereals Breads 1 Coffee Tea Poultry Beef/Game/Lamb **FLAVORS** Raw Veggies Cooked Veggies Salt/Pepper Low-Fat Dairy Veggie Soups Soy (e.g., Tofu, Herbs Avocado Tempeh) Spices Oils Legumes/Nuts Vinegar Nuts Salsa Seeds Mustard Cheese Ketchup Butter

How much to eat

- All food groups are important for a balanced high-performance diet
- Try to get as many food groups as possible at every meal and snack
- Focus on tier one and tier two foods

HOW MUCH to eat: using hunger cues



What happens if I don't eat enough?

You will get tired easier and will sleep more.

You may experience mood swings.

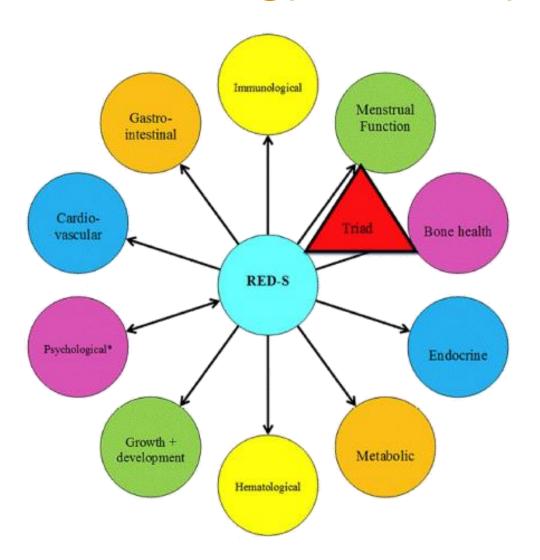
You will lose muscle as your body breaks it down for fuel.

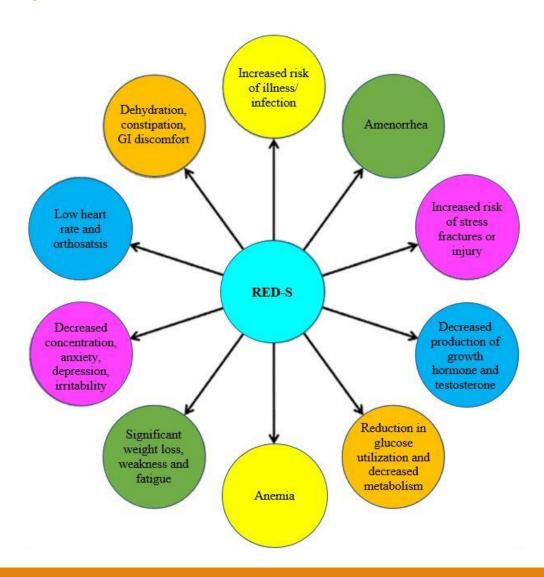
Your metabolism will slow down

You will be at greater risk of developing medical issues

You will not be able to practice or perform at their full potential!!

Relative Energy Deficiency In Sport (RED-s)





URINE COLOR CHART



Hydration

- Daily hydration:
 - Carry a water bottle
 - Drink to thirst OR
 - Take a few sips every 15-30 minutes
- Hydration for performance:
 - Pre-practice (2 hours prior): 16-24 oz
 - During practice: a few sips every 15-20 minutes
 - Post-practice (2 hours post): 16-48oz
- Focus mostly on water, however carbohydrate/electrolyte replacement drinks can also be helpful

Monitor your urine to determine daily hydration levels

Choose food first!

- Athletes can usually get everything they need from eating a balanced highperformance diet
- Supplements are expensive
- Supplements can be risky

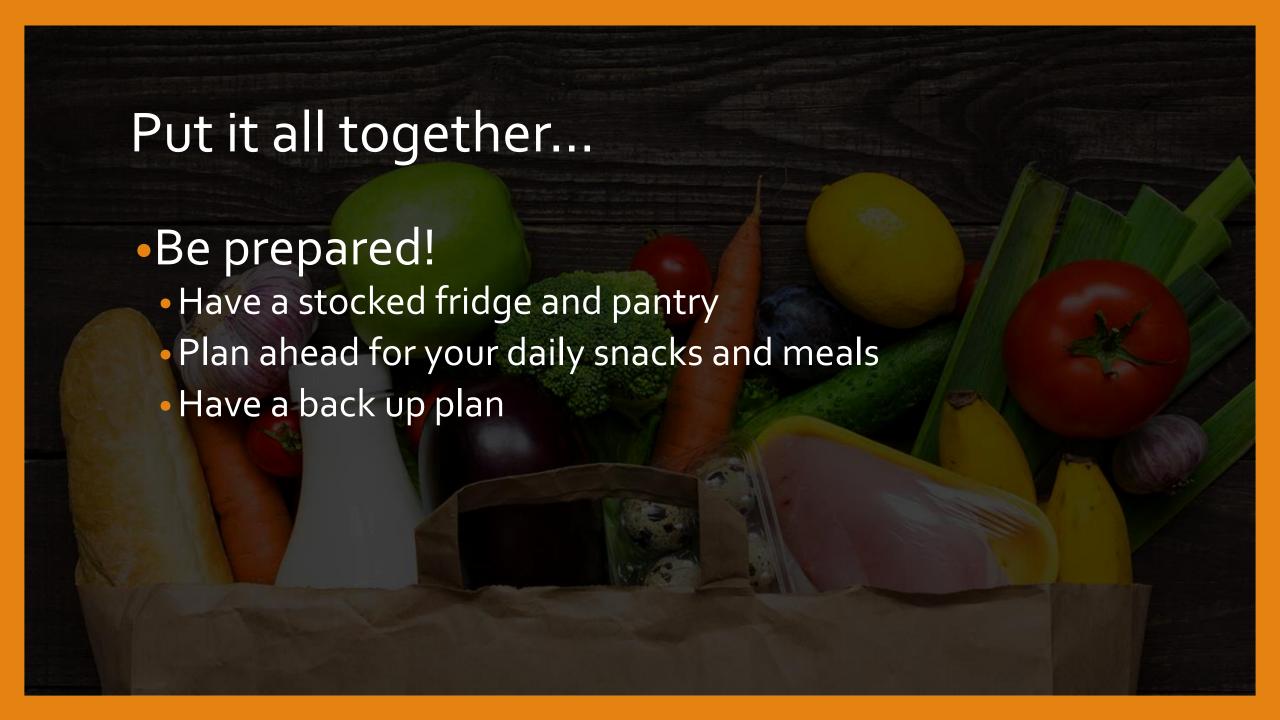






Stay Safe!

- Products do not contain any of approximately 270+ substances banned by major athletic organizations. (NSF/Informed Sport)
- The contents of the supplement match what is printed on the label.
- There are no unsafe levels of contaminants in the tested products.
- The product is manufactured at a facility that follows good manufacturing standards



Nutrition resources

College and Professional Sports Dietitians Association: www.sportsrd.org

Sports, Cardiovascular and Wellness Nutrition: www.scandpg.org

Precision Nutrition: www.precisionnutrition.com/blog

Gatorade Sports Science Institute: www.gssiweb.org

Team USA Nutrition: https://www.teamusa.org/nutrition

United Dairy Industry of Michigan: https://www.milkmeansmore.org/athletes/

When should I see a dietitian?



Medical concerns: GI issues, deficiencies, allergies/intolerances, etc.



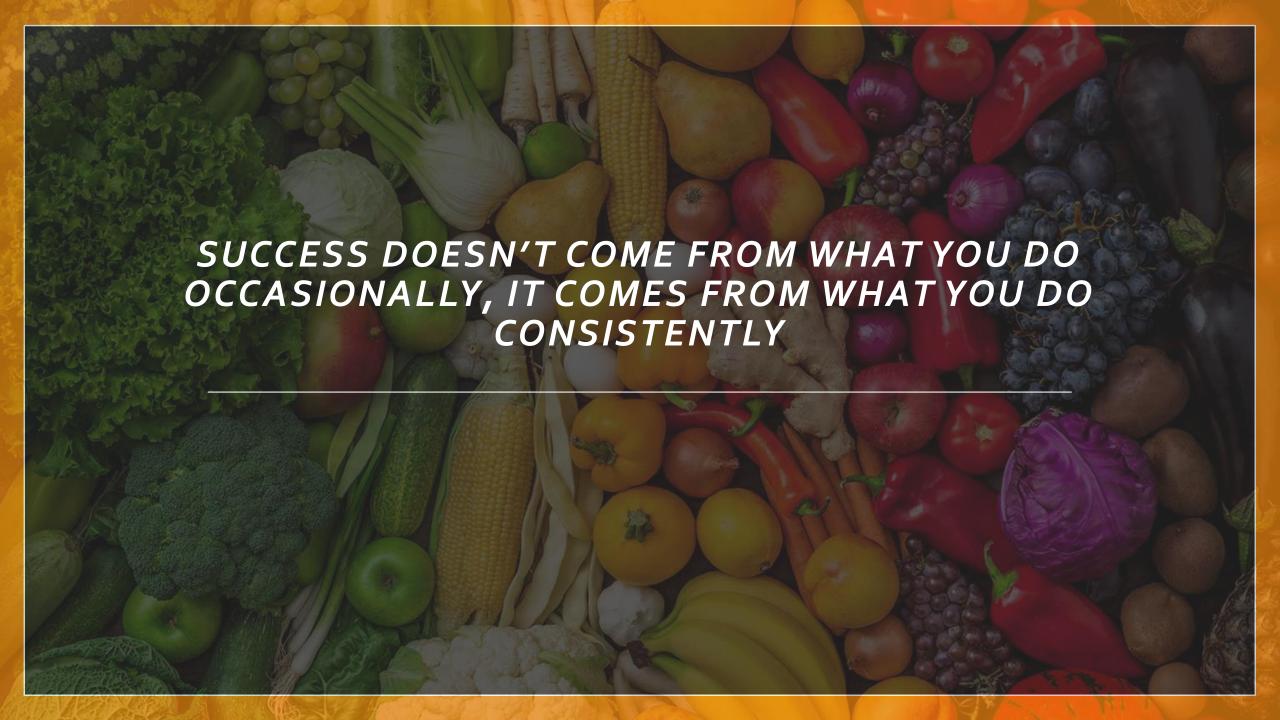
Suspected disordered eating or eating disorder



Rapid weight loss or weight gain



Extreme body weight/composition changes needed



QUESTIONS?

allison@leveluprd.com www.leveluprd.com