

# NAIL YOUR NUTRITION FOR SPORT & FOR LIFE AS A STUDENT ATHLETE



HEIDI STRICKLER, MS RD CSSD METS | ISAK L-1  
[HKSTRICKLER.SPORTSRD@GMAIL.COM](mailto:HKSTRICKLER.SPORTSRD@GMAIL.COM)

 @HKSTRICKLER\_SPORTSRD



# WHAT SHOULD YOUR DAILY NUTRITION LOOK LIKE?





# NUTRITION IS THE FOUNDATION

Daily Nutrition Makes The **BIGGEST** Difference!

1. Daily nutrition: daily meals, snacks & fluids

- Support basic health & immunity
- Fuel for the brain & daily activities
- Prepare for exercise
- Feed your metabolism

*~75% of your energy needs are for basal metabolic rate (keeping you alive!)*

**ALL  
FOODS  
FIT!!!!**





# CARBOHYDRATES TO FUEL

## WHY?

- ☑ Fuel for brain, blood & organs
- ☑ Meet baseline metabolic energy needs
- ☑ Fuel for exercise, especially high intensity
- ☑ Prevents muscle breakdown
- ☑ Hydrating

## WHEN?

Carbohydrates should be included with **all meals & snacks** for high school athletes

## WHAT?

Breads, pasta, rice, corn, potatoes, dessert, oatmeal, cereal, milk, granola bars, crackers, fruit, chips, baked goods

**Did you know ...?** *Your carbohydrate/energy stores are depleted by 70% overnight (you wake up on 30% battery life)*





# CARBOHYDRATES TO FUEL

**PRE:** Bar or cereal + sports drink

**DURING:** gummy bears + water

**POST:** smoothie + a pastry



AWAY FROM EXERCISE

Whole grains

Veggies

Fruit

Beans & Starches

Dairy

Fun foods

workout

Around workouts  
simpler  
sweeter  
starchier

Any time  
complex  
fibrous





# PROTEIN TO REBUILD

## WHY?

- ☑ Muscle recovery and repair
- ☑ Bone health
- ☑ Heart function
- ☑ Immune function
- ☑ Blood health

## WHEN?

Athletes should consume protein (plus carbohydrates) after exercise, and with meals & snacks **5-7x a day**.

## WHAT?

**Animal sources:** seafood, poultry (chicken, turkey), eggs, dairy, red meat (beef, pork, lamb)

**Plant-sources:** (>8g per serving) beans, lentils, peas, tofu, tempeh, edamame, nuts/seeds, nut butter, plant-based meat products (burgers, patties, nuggets, crumbles), some non-dairy milk & yogurt

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# FATS & OILS TO PROTECT

## WHY?

- ☑ Needed for healthy hormones
- ☑ Protects joints and soft tissues (tendons, ligaments)
- ☑ Helps absorption of vitamins & minerals
- ☑ Anti-inflammatory and immune function

## WHEN?

- ☑ All meals and most snacks
- ☑ The *only* time fat should be minimized is before/during training

## WHAT?

**All-Stars:** omega-3s from salmon, tuna, trout, sardines, anchovies, flax, chia, hemp, walnuts

**Other sources:** nuts, seeds, nut butter, full fat dairy (butter, cream cheese, full fat milk & yogurt), olives & olive oil, avocado & avocado oil, sesame oil, coconut & coconut oil, bacon & sausage





# IMPORTANT VITAMINS & MINERALS

## IRON

**At risk groups for iron deficiency & anemia:** runners, endurance athletes, athletes who menstruate, plant-based individuals, those with heavy periods

- ✓ **Animal sources (BEST!):** oysters, clams, red meat, shellfish, dark meat chicken/turkey, eggs
- ✓ **Plant sources:** iron-fortified cereal, cream of wheat, enriched rice, beans, pumpkin seeds, spinach, tofu, molasses
- ✓ **Girls: >18mg/d (athletes usually need more 2-3x more!)**
- ✓ Get an **iron panel + ferritin** checked every 6 months!
- ✓ **ONLY supplement if your lab work shows you are DEFICIENT!!**

## Enhance your absorption of iron by

- ✓ Eating iron foods with vitamin C sources (strawberries, kiwi, citrus, pineapple, papaya, peppers, broccoli)
- ✓ Consuming iron foods away from a calcium supplement, coffee, black tea & exercise
- ✓ Cook in a cast iron skillet

## BONE-BUILDING NUTRIENTS

- ✓ **CALCIUM:** dairy, non-dairy milk, almonds, sardines, dark leafy greens, fortified OJ, tofu
- ✓ **VITAMIN D:** sunlight. Minimal amounts from egg yolks, wild fatty fish, fortified milk & non-dairy milk
- ✓ **MAGNESIUM:** dark chocolate, spinach, pumpkin seeds, almonds, beans, whole grains

*Did you know ...? Peak bone mass is achieved by age 18-20 in females*



# HYDRATION

- ☑ Start drinking water as soon as you wake up.
- ☑ Carry a bottle with you during the day (\*Heidi's rubber band tip!)
- ☑ Drink fluids with meals.
- ☑ Have a bottle accessible in training and sip when possible.
- ☑ Rely on sports drinks during high-intensity practices.
- ☑ Replace electrolytes lost in sweat by salting your food.
- ☑ Monitor your urine color and volume.
- ☑ Include milk, juice, sports drinks & herbal tea!
- ☑ Remember the Beef Jerky analogy!



Range: body weight (lbs) ÷ 1 to 2  
+ 16oz/hr of exercise daily

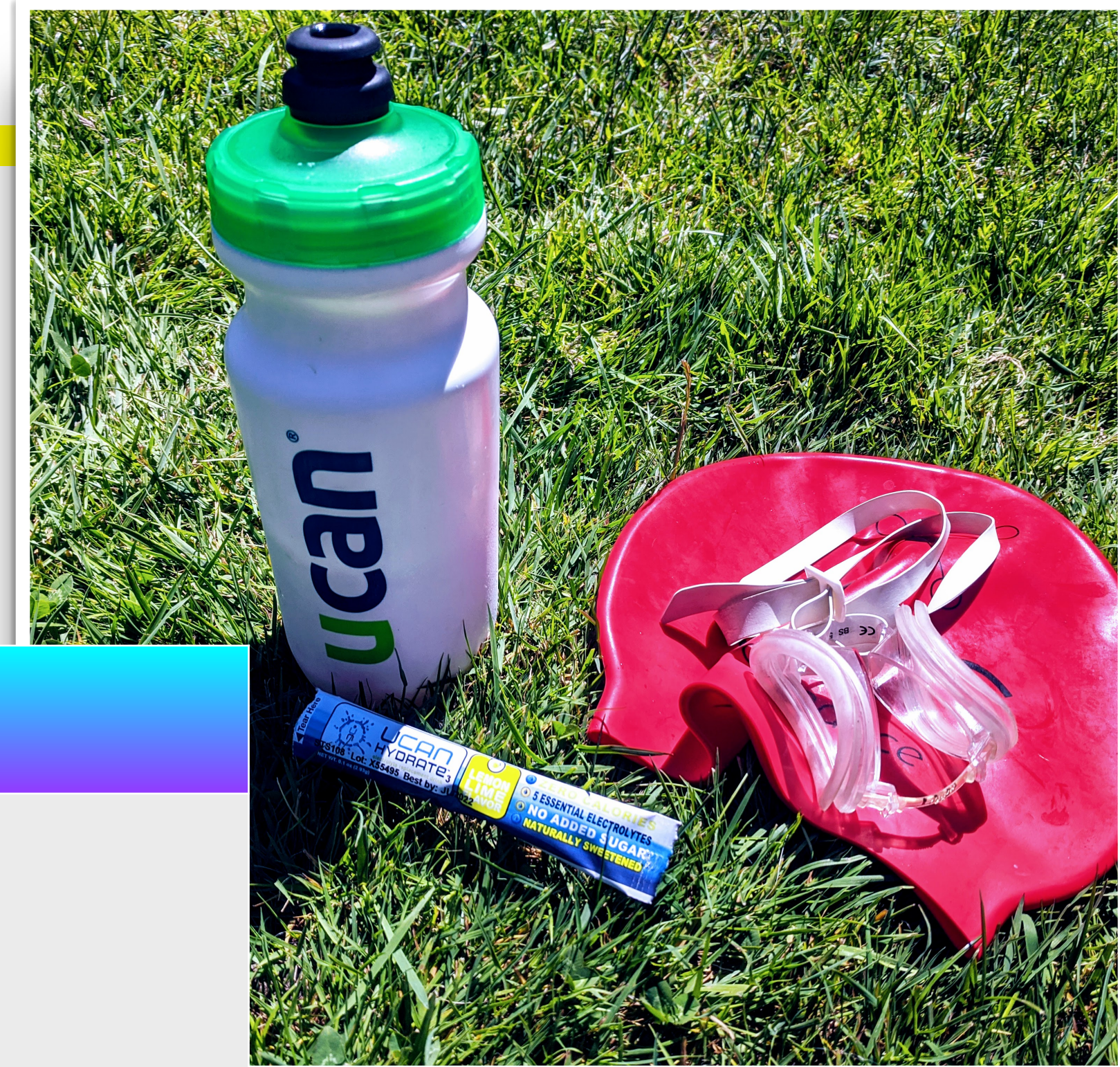
## AM I HYDRATED?

### Urine Color Chart

1		If your urine matches these colors, you are drinking enough fluids
2		Drink more water to get the ideal color in Shade 1 and 2.
3		Dehydrated
4		You may suffer from cramps and heat-related problems
5		Health risk! Drink more water.
6		Health risk! Drink more water.
7		Health risk! Drink more water.
8		Health risk! Drink more water.



# RETHINK YOUR DRINK



Daily	In Moderation	NEVER
Water	Coffee	Energy drinks
Tea	Carbonated drinks	Diet beverages of any kind
Milk/non-dairy milk	Kombucha	
Vegetable & fruit juice	Highly-Sweetened drinks (Arizona Tea, Sobe, soda)	
Coconut water		
Electrolyte & sport drinks		

*Which of these do you think is **THE MOST** hydrating???*



# TRAINING NUTRITION





# NUTRITION IS YOUR FOUNDATION

Training Nutrition is **ONLY EFFECTIVE** if your Daily Nutrition **IS ADEQUATE!**

1. Training nutrition: sport-specific eating & hydration

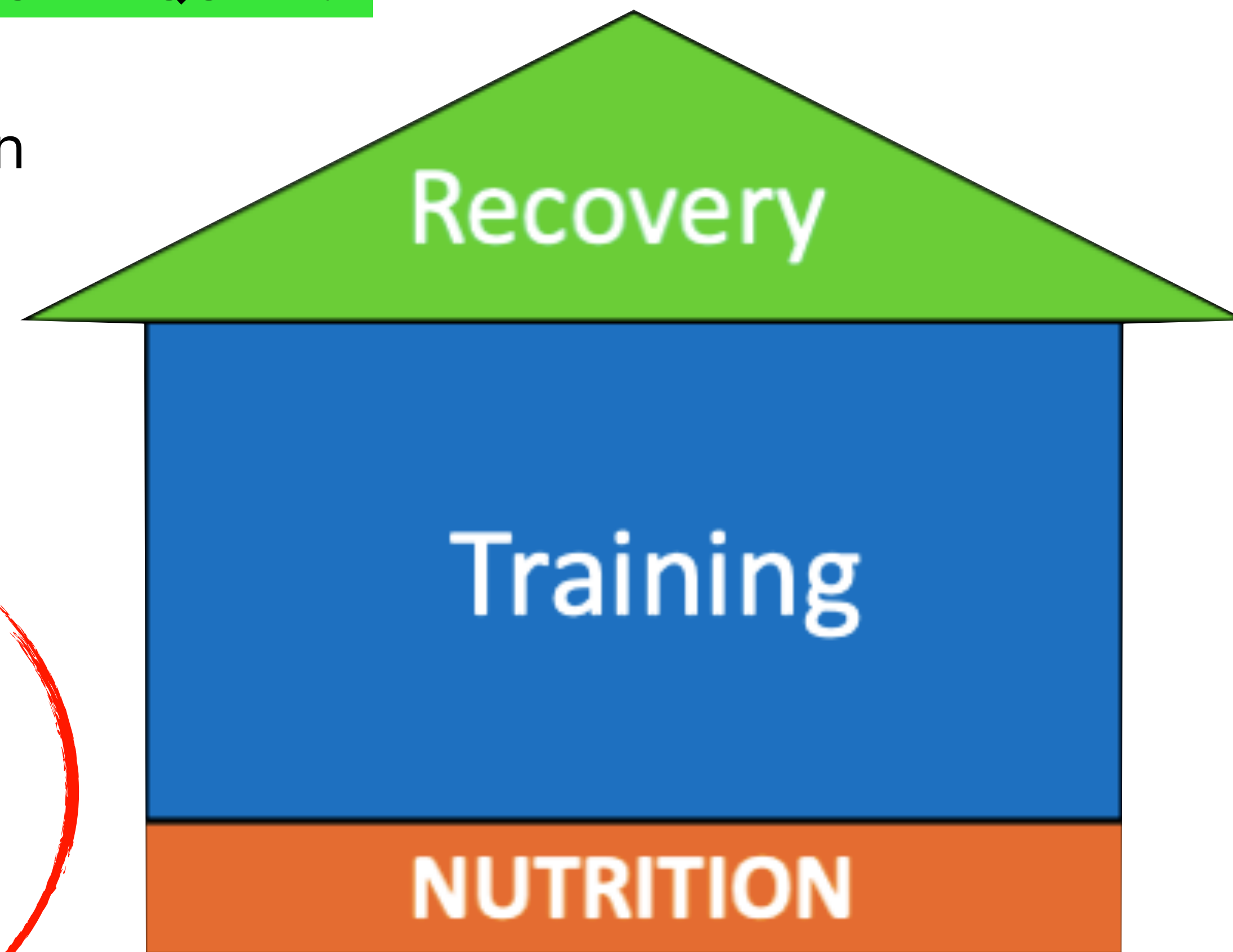
Before (0-2h)

During

After (0-2 hours)

2. **CRITICAL** to prevent you from experiencing low energy availability!

**ALL  
FOODS  
FIT!!!!!!**





# SUPPLEMENT SAVVY

Look for these images on the label of your supplement



Informed  
Choice



NSF



USP

## Healthy Tips



Don't order online or in the mail, unless you know the brand is safe



Never try any new supplements before your competition

**Natural**

Be careful when you see the word natural on the label. Natural doesn't always mean safe



If you are taking a new supplement or thinking of trying one, go to your dietitian or athletic trainer first

- ☑ **Sports bars:** PBJ, trail mix, PB or chocolate pretzels, candy bars, basic granola bars
- ☑ **Sports drinks:** Gatorade powder, fruit juice + salt
- ☑ **Electrolytes:** soups, pretzels, tomato juice, salted fruit
- ☑ **Gels & blocks:** gummy bears, applesauce, raisins, bite-size candy bars, jelly beans
- ☑ **Protein powders:** dry milk powder, Greek yogurt, cow's milk, cottage cheese, soy milk,



# FUELING BEFORE EXERCISE

The goal is to provide you with energy!

The pre-fuel top up should be:

- ✓ low in fiber
- ✓ easily digested
- ✓ rich in simple carbohydrates

How long until practice/warmup?

<15-30min: ALL carb (1 banana, 8oz juice/sports drink, 4-5 dates, 2 gram crackers, handful of pretzels or gummies). **TOP UP!**

45-60min: Mostly carb, low protein/fat (UCAN/Clif/Lara/Picky/Nature Valley bar, toast/waffle + PB, Poptart). **IDEAL FOR MORNINGS!**

90min-2hrs: Mostly carb, moderate protein/fat (PBJ, turkey sandwich, flour tortilla + hummus, oatmeal w/ nuts & fruit)

3-4 hrs: normal meal, limit fiber. **THIS SHOULD BE YOUR LAST BIG MEAL + TOP UP 15-60 MIN BEFORE!!!**





# MEET MINI MEALS & HALFTIME HACKS

The goal is to resupply your fuel stores & rehydrate.

Many athletes underfuel between events or drink only water. This creates a major energy deficit & blood sugar crash causing poor performance & increased injury risk.

- ☑ Low in fiber
- ☑ Moderate protein & fat
- ☑ Easily digested
- ☑ Rich in fast & slow carbohydrates
- ☑ Small-to-medium in size
- ☑ High in fluids & electrolytes, namely salt



**Examples: applesauce, pretzels, gummy candy, PBJ sandwich, sports drinks, granola bars, dry breakfast cereal, trail mix, muffins, Pop-Tarts, Chex Mix, white rice, tortillas/pita, fig bars, sandwich crackers, fruit snacks**



# REFUELING AFTER EXERCISE

Replenish. Repair. Rehydrate.

## Step 1: 30 minute recovery window:

1. **Replenish:** carbs
2. **Repair:** protein
3. **Rehydrate:** electrolyte-rich fluids

**ANYTHING is ALWAYS better than NOTHING!**

- Shelf-stable chocolate milk + Clif bar
- Homemade smoothie with milk/yogurt/cottage cheese, oats, fruit
- Greek yogurt or milk with granola
- Shelf-stable milk + PBJ
- Jerky, crackers, sports drink or fruit juice

## Step 2: Eat a complete meal in 1-2 hours: carbs, fats & oils, protein, fruit & veg





# WHAT HAPPENS WHEN ATHLETES UNDERFUEL?

AND WHY IT  
REALLY IS A BIG  
DEAL





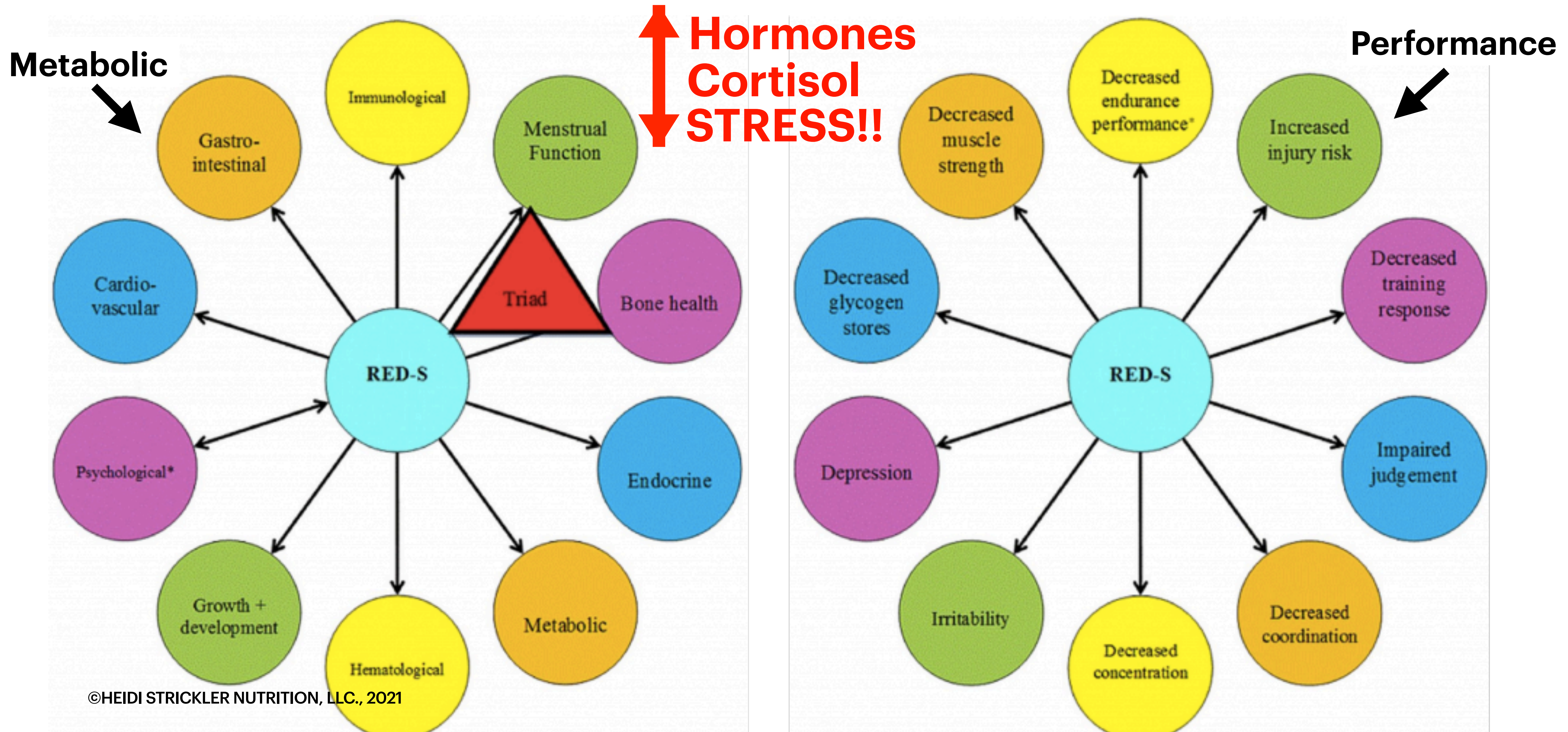
# INTUITIVE EATING + MECHANICAL EATING

- ☑ You are the expert of your body and its hunger signals
- ☑ The opposite of a traditional diet
- ☑ It does not impose rules about what to avoid; what, when, or how much to eat
- ☑ It respects the body's hunger and fullness signals and trusts that the body knows what it needs, and that these needs will change every day
- ☑ Full permission with food
- ☑ Promotes a healthy attitude toward food & body image

- ☑ Eating based on reasons other than biological/physical hunger
  - ☑ Based on meal breaks in school/work
  - ☑ Eating before/during/after exercise in the absence of hunger
  - ☑ When you are sick
- ☑ **An important skill for athletes to enable adequate nutrition and prevent low energy availability!!!**



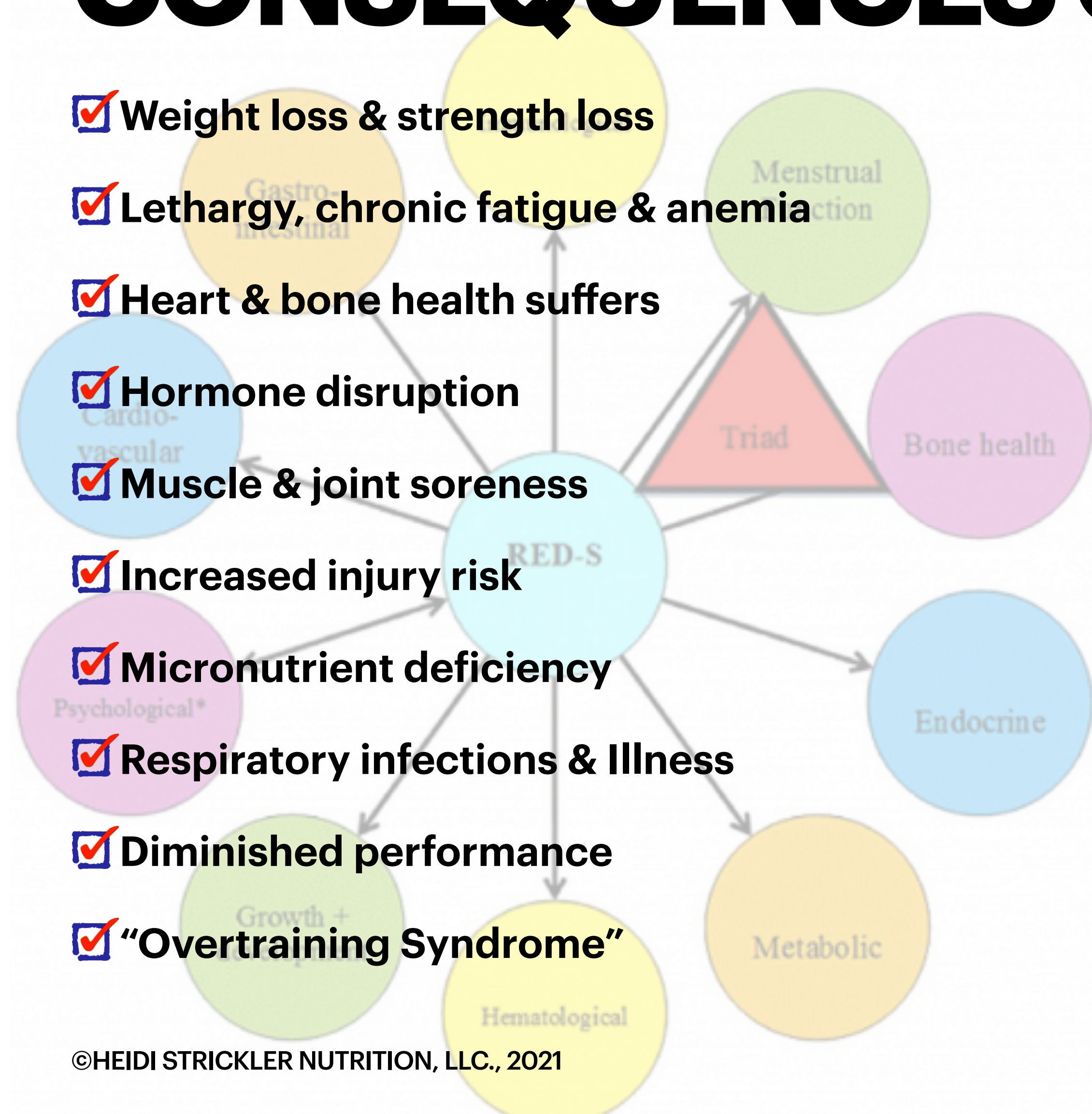
# LOW ENERGY AVAILABILITY





# CONSEQUENCES OF POOR NUTRITION

- ☑️ Weight loss & strength loss
- ☑️ Lethargy, chronic fatigue & anemia
- ☑️ Heart & bone health suffers
- ☑️ Hormone disruption
- ☑️ Muscle & joint soreness
- ☑️ Increased injury risk
- ☑️ Micronutrient deficiency
- ☑️ Respiratory infections & illness
- ☑️ Diminished performance
- ☑️ "Overtraining Syndrome"



- RED FLAGS**
- ☑️ brain fog/poor concentration
  - ☑️ new onset gut distress
  - ☑️ frequent illness and/or injury
  - ☑️ low resting heart rate
  - ☑️ dizziness upon standing/lightheadedness
  - ☑️ losing a period or a short period
  - ☑️ performance declines
  - ☑️ anemia and/or low ferritin
  - ☑️ thin hair, dry skin, weak fingernails
  - ☑️ Anxiety around eating out, eating processed foods, etc.





# DISORDERED EATING

- ✓ 20% of those with from anorexia are **male**
- ✓ 45% of **high school athletes** have disordered eating
- ✓ 85% of **high school runners** who identify as female report disordered eating habits
- ✓ 95% of those with eating disorders are **12-25 years**
- ✓ You are **200x MORE LIKELY** to develop an **eating disorder** than type 2 diabetes

# ORTHOREXIA

- ✓ Disguised as “healthy” or “clean” eating
- ✓ Avoiding sugar, especially if not “natural”
- ✓ Avoiding processed foods, trans fats, etc.
- ✓ Only eating organic, grass-fed, etc.

Eating disorders affect *both males and females* and often strike during adolescence. If not treated, they can have serious, even fatal consequences.

# Surprising Eating Disorder Statistics



**50%**

Americans who know someone with an eating disorder



**10-15%** of people with anorexia or bulimia who are **males**

**95 percent**

of people with eating disorders are aged **12 to 25**

**18-20%** of anorexics die within **20 years** of contracting the disease



# TAKEAWAYS & TOOLS FOR SUCCESS

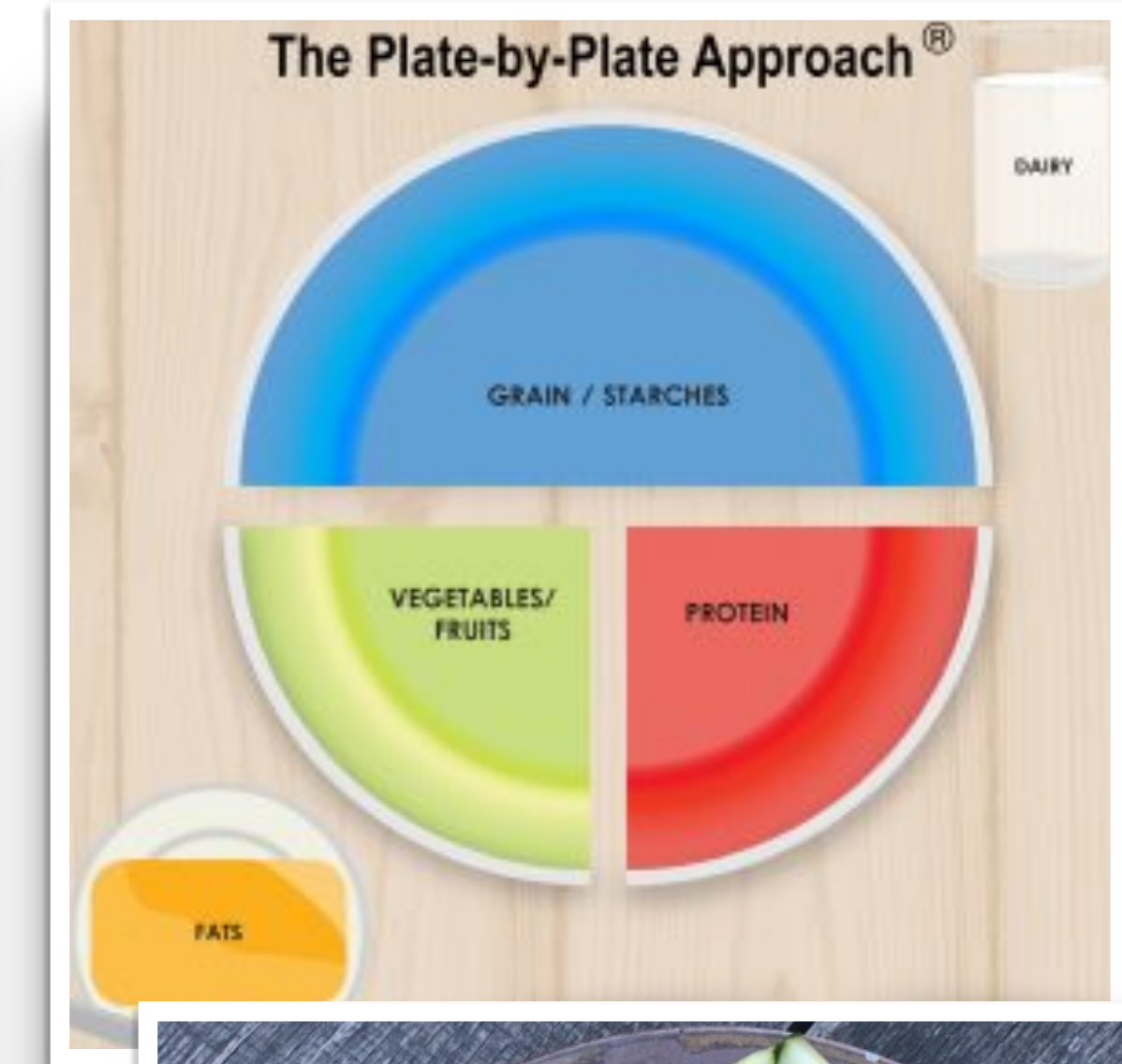
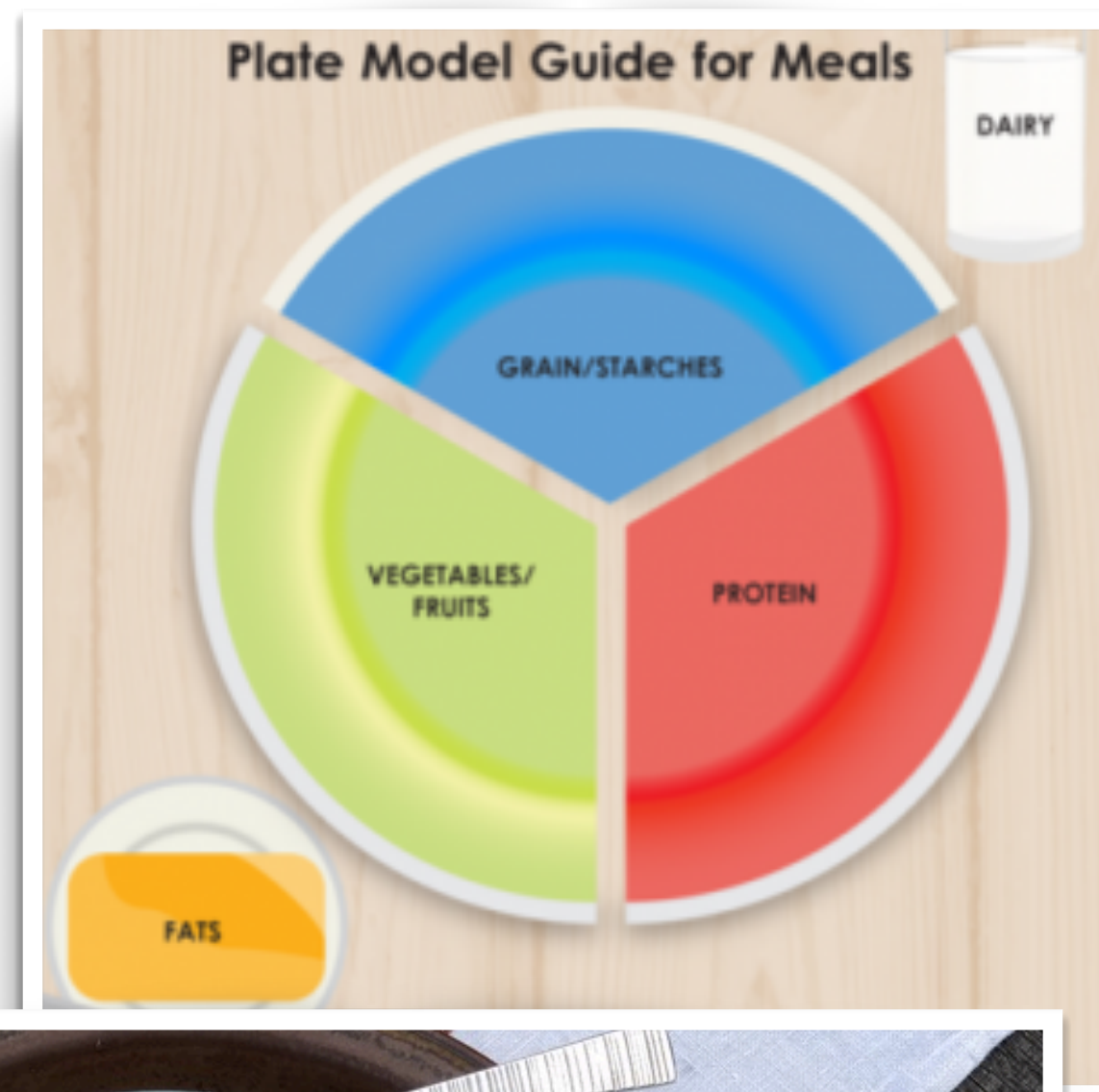




# BUILDING YOUR PLATE FOR SUCCESS

## 'ENOUGH' IS YOUR BEST FUEL!

- ☑ Eat every 2-3 hours
- ☑ Carbs + protein + fats/oils + color
- ☑ Get 2nds, 3rds, 4ths if you need!
- ☑ Variety of foods through the week
- ☑ Eat >2 food groups with snacks
- ☑ Eat foods that you ENJOY
- ☑ No foods are "off-limits" or "bad"
- ☑ Let your hand be your guide!
  - ☑ Eat a MINIMUM of a hand-sized portion of carbs and proteins





# EATING FOR SUCCESS: MAKE A FOOD LIST

## Sample Ideas:

- ☑ Breakfast: (1) oatmeal with milk, PB & banana; baked oats. (2) Pre-made breakfast burrito
- ☑ Morning snack: trail mix
- ☑ Lunch: (1) Meat/tempheh sandwich/wrap w/ cheese, veggies, and mayo/avocado. Side of fruit + fun food. (2) Dinner leftovers
- ☑ Pre-practice: Granola bar or Rice Krispie treat + Gatorade
- ☑ Post-practice: (1) string cheese + animal crackers + Craisins. (2) shelf-stable chocolate milk + pretzels
- ☑ Dinner: (1) spaghetti & meatballs + cooked veggies. (2) stir fry with rice/noodles, protein, veggies, topped with peanuts. (3) daal/curry over rice. (4) cheese burger, fries & side salad
- ☑ Bedtime: (1) PBJ. (2) ice cream. (3) yogurt & granola. (4) cookies & milk. (5) piece of pizza

Protein	Carb	Fats/oils	Color
Chicken	Oatmeal	Nuts	Apple
Beef	Rice	Avocado	Banana
Fish	Quinoa	Olive oil	Grapes
Canned tuna	Potatoes	Coconut	Carrots
Shrimp	Corn	PB	Spinach
Turkey	Beans	Seeds	Tomatoes
Beans/lentils	Peas	Olives	Peppers
Meat subs	Breads	Ghee	Fruit juice
Hummus	Baked goods	Salmon	Celery
Cheese	Pasta	Butter	Cherries
Cottage cheese	Tortillas	Cream sauce	Cucumber
Greek yogurt	Crackers	Dairy	Broccoli
Eggs	Cereal	Bacon	Beets
Tofu	Granola bars	Half & half	Snap peas
Edamame	Chips	Whole milk	Blueberries
Pumpkin seeds	Waffles	Cheese	Mango



# PRE-FUELING & RE-FUELING

## PRE-FUEL (<30 minutes before)

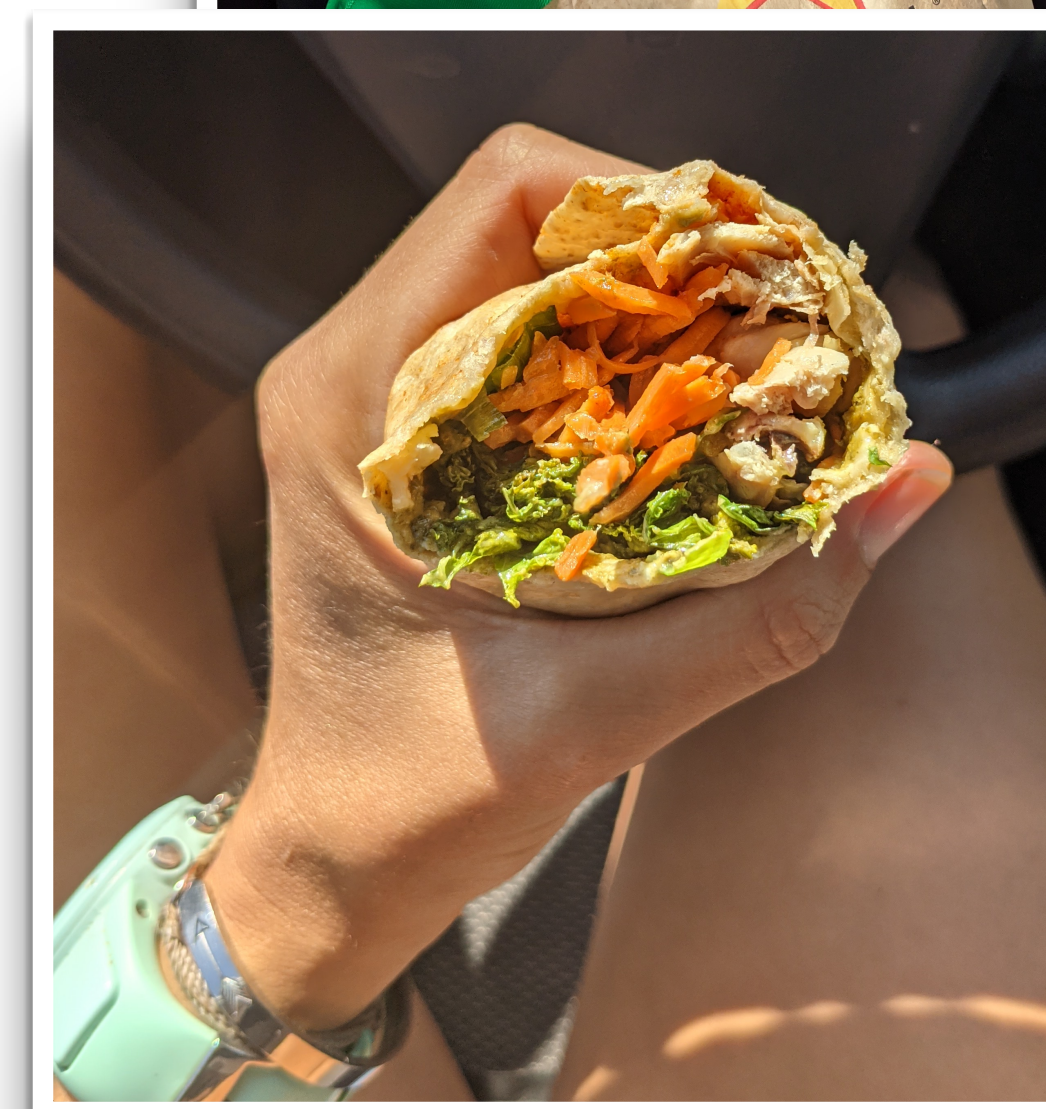
- ✓ Banana or handful of dried fruit, such as dates, raisins, or apricots
- ✓ Handful of pretzels or wheat thins
- ✓ Gram crackers or animal crackers or 1 Pop Tart or Rice Krispie treat
- ✓ Low-fiber bar (Nature Valley Original, Larabar, Zbars, Nutrigrain)
- ✓ 12 oz Gatorade

## PRE-FUEL (60-90 minutes before) + WATER!!!!

- ✓ Drinkable flavored yogurt + banana
- ✓ Small PBJ or meat sandwich
- ✓ Trail mix: nuts, dry fruit, chocolate, pretzels or cereal
- ✓ Small quesadilla
- ✓ 1/2-1 bagel with cream cheese or PB
- ✓ Bowl of low-fiber cereal with milk
- ✓ Handful of pretzels + string cheese
- ✓ Low-fiber bars: Clif, UCAN, ProBar; candy bars: Snickers or PayDay

## RE-FUEL

- ✓ Chocolate milk + banana or granola bar
- ✓ Yogurt and granola
- ✓ Smoothie: fruit, dairy, oats, PB
- ✓ Overnight oats
- ✓ Muffin + milk or 2 boiled eggs
- ✓ Heidi's power pancakes/waffles
- ✓ Pasta salad with protein
- ✓ Tuna/meat sandwich + chips
- ✓ Egg sandwich/burrito + juice
- ✓ Burger + milkshake
- ✓ Daal over rice
- ✓ Teriyaki rice bowl with protein
- ✓ Burrito with rice + protein





**Great for school, meets, and travel days!**

# SMART BACKPACK SNACKS



## SLOW FUEL - WHOLE GRAIN CARBS & HEALTHY FATS

Eat throughout the day for sustained energy

- Fruit and nut bars.
- Trail mix—dried fruit, nuts, whole grain cereal.
- Whole grain crackers and hummus cups.
- Granola/cereal in baggies.
- Pre-popped, low-fat popcorn.
- PB&J—whole grain bread, peanut butter, and jelly.
- Corn chips and guacamole or salsa.
- Instant oatmeal/cream of wheat.
- Fresh Fruit—apples, bananas, clementines, and grapes travel well.
- Baby carrots or other cut veggies.



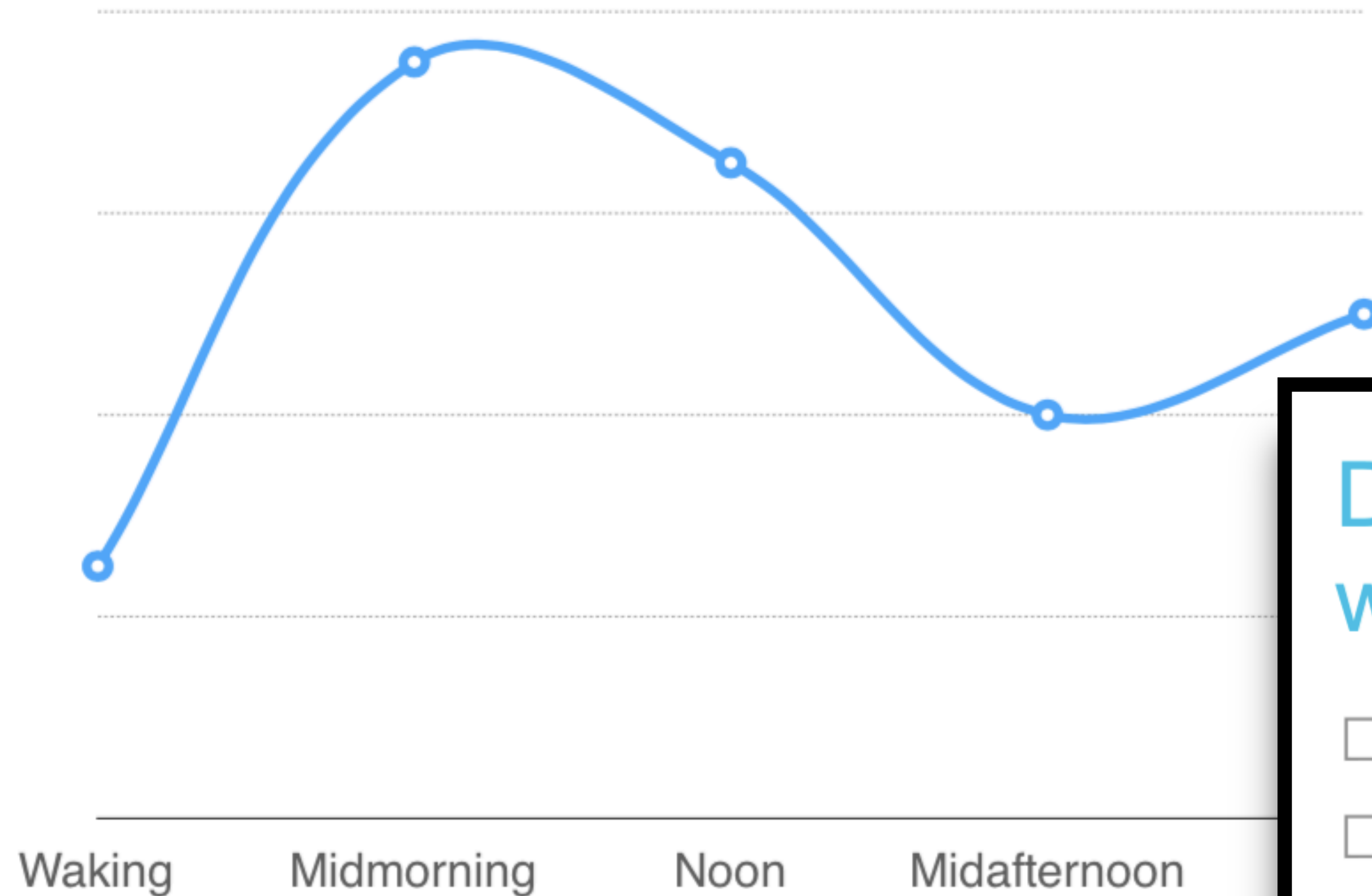
## PERFORMANCE PROTEINS

Optimal for mid-day snack and refueling post-workout

- Beef jerky.
- Hard-boiled eggs.
- String cheese.
- Greek yogurt.
- Deli turkey, chicken, or ham for simple deli sandwiches.
- Dry-roasted edamame.
- Tuna/chicken pouches.
- Protein powder—NSF certified.
- Single-serve peanut butter packets (protein & fat source).
- Shelf-stable chocolate milk/protein shakes.



## Draw your energy levels over a day



Do you have lots of energy for your workouts or competitions?

- Yes
- No
- 🤔?

Do you recover well from workouts / competitions?

- Yes
- No
- 🤔?