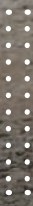


 HealthPartners

power up




NUTRITION GUIDE FOR ACTIVE TEENS



- PowerUp your plate
- Mind-body connection
- Boost your performance

 TRIA

 Melrose Center

WELCOME

Hello teens,

Food and staying active should be fun, but the world of nutrition and activity advice can be overwhelming. That's why this guide – crafted by dietitians for active teens – keeps nutrition simple and practical. Whether you're into sports, performance arts or just love being active, this guide is for you. Here's a sneak peek of what's inside.

Mind-body connection: Discover important principles to care for your mind and body as a whole. Listening to this connection and practicing mindfulness can boost your brainpower, sleep and mood.

Navigating nutrition: Nutrition isn't one-size-fits-all; all foods can fit. Explore the basics of calories, carbs, protein, fats and hydration.

PowerUp your plate: Explore a mix of food groups and ways to stay hydrated. Discover foods and build a plate that fits your needs and tastes.

Tune into timing: Understand when to eat so you feel your best and for optimal performance and recovery – before, during and after your activities.

PowerUp on the go: For busy days, find ideas that not only taste great but also offer ways to enhance your on-the-go snacking.

Reliable resources: This guide is a great start, and we've got more tips to help you find reliable nutrition advice.

Ready to PowerUp? Let's go!



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Nutrition and Outpatient
Programs Manager,
Melrose Center



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Clinical Dietitian, Park Nicollet

MIND–BODY CONNECTION

Caring for your mind and body can help you feel your best and excel in sports, performance arts and other activities.

Pause and listen: Taking care of your whole self begins with listening. What are your body and mind telling you? When you pause to listen, it helps you make choices that feel best for you.

Supportive self-talk: Leave judgments behind, including ones about food choices, body size and appearance. Affirming self-talk helps build a positive relationship with your mind and body.

- **Remind yourself of the positive things you and others bring: technique, leadership, hard work and positivity.**

SLEEP ROCKS: Sleep isn't just about hitting pause on your day; it's like leveling up in your favorite game while you're off-screen. It is essential for growth, recovering and repairing the wear and tear on your body and mind after being active.

Check out these sleep stats:

- While you're sleeping, your body's busy releasing growth hormone, which helps build muscle and keeps your metabolism fired up.
- A sleep study on basketball players found that increasing sleep to 10 hours per night led to improved reaction time, sprint time and shooting accuracy.
- Sleep boosts brain power – judgment, focus, decision-making, memory and learning new skills.

How much sleep you need

13 to 18 year olds – aim for 8-10 hours of sleep each night.

If you're feeling nervous, a quick stretch, a snack or a positive thought might be what you need to tap into your best performance.



TAKE A 5-MINUTE VACATION

Try this simple technique to help ground and calm your body.

- Name 5 things you can see**
- Notice 4 things you can touch**
- Name 3 things you can hear**
- Identify 2 things you can smell**
- Notice 1 thing you can taste**

SIMPLE SELF-CARE: Take intentional time for things that make you feel good.



Relationships: Hang out with friends. Connect. Set boundaries.



Gratitude: Think of three good things about each day.



Traditions: Have family meals. Hold game and storytelling nights.



Nature: Step outside to recharge. Take a walk. Sit in the sunshine.



Hobbies: Do activities you love. Play, create and learn.



Give back: Share a kind word. Lend a hand.

NAVIGATING NUTRITION

Food can be fun and fuel. Food is tied to so many fun life experiences. It's also important to eat enough and balance with variety. Variety allows you to choose what you want and like while also nourishing your body with what it needs. It's a winning ticket to feeling good and achieving peak performance.

GOOD TO KNOW

Active teens need to eat enough for growth and to match their activity. Skipping any meal can make it almost impossible to catch up with nutrition and energy needs. Going for long periods without food can be stressful for the body.



Tune out all the confusing and mixed messages about nutrition. Tune into your body's cues and this PowerUp guide as a trustworthy source of information. Remember:



Active teens need at least three meals a day in addition to snacks and water.



All foods have value. All foods fit. It's about having variety and balance to fuel you well.



All bodies are different and have different nutritional needs. What's right for one person may not be right for you.



There's no perfect way to eat. Be curious. Try new things. Listen to your body's cues and find a pattern that works for you.

GIVE YOURSELF A BREAKFAST BOOST

If you're not feeling the morning chef vibe or just aren't hungry, you're not alone. A low appetite in the morning can be common, but the body and mind still need to have consistent fuel throughout the day to meet your energy needs.

Keep it simple:

- Train your stomach to feel hungry in the morning by eating or drinking something. With consistency, your body will start asking for food by sending hunger cues.
- Drinking something, like milk or a smoothie, can be an easy way to start, and then add more foods over time.
- Grab something easy. A granola bar and a banana or a container of yogurt will do.



CALORIES = ENERGY



FOOD HAS CALORIES



WE EAT FOOD



IT GIVES OUR BODY AND BRAIN ENERGY TO DO ALL THE THINGS WE LOVE

GOOD TO KNOW

Think of calories simply as the unit of measurement for food.

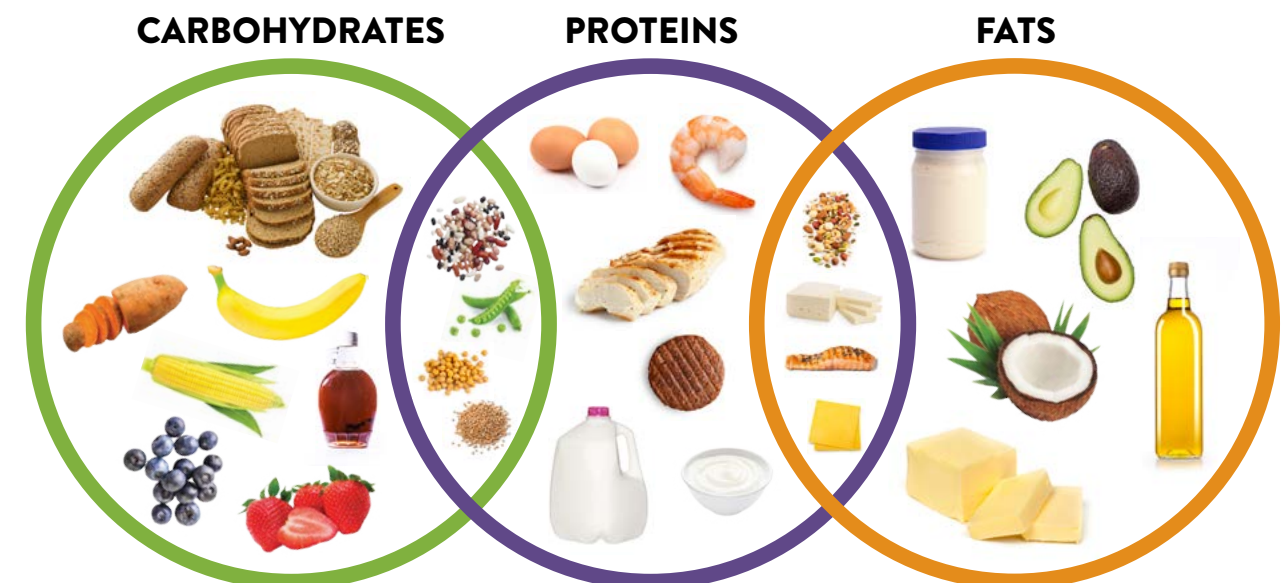
There's no need to track them or fear them.

All bodies need calories, and active teens need even more.

Stay fully charged. When the body gets too little energy from food on a consistent basis, the body goes into "low power mode," just like a cell phone. For the body this means brain fog, slow reaction time and poor recovery.



Food has nutrients. Some foods have more of one kind of nutrient, while many are a combination. Carbohydrates, proteins and fats are all essential and all do different things for your body.



CARBOHYDRATES = MAIN ENERGY SOURCE



- Grains**
 - Bread
 - Cereal
 - Crackers
 - Granola bar
 - Oats
- Vegetables/legumes**
 - Beans
 - Chickpeas
 - Corn
 - Edamame
 - Lentils
- Fruit**
 - Apple
 - Banana
 - Berries
 - Grapefruit
 - Grapes
- Milk products**
 - Chocolate milk
 - Milk
 - Yogurt

SIMPLE VS. COMPLEX CARBOHYDRATES

Each gives a different kind of energy. You need both.



Simple:
Fruits: apples, kiwi, pears, bananas, oranges, fruit juices
Milk products: milk, yogurt
Sweets: sugar, soda, sports drinks, candy, desserts
Refined grain products: white bread, rice, pasta, tortillas, pancakes

Complex:
Vegetables: potatoes, corn, squash
Legumes: beans, lentils, chickpeas
Whole grain products: bread, oatmeal, brown rice, popcorn

	Simple	Complex
Needed for active teens	✓	✓
Quick, short bursts of energy	✓	
Longer-lasting energy		✓
Digest faster	✓	
Digest slower		✓

WHY CARBOHYDRATES ARE IMPORTANT

- ✓ They are the main source of energy for your body and brain.
- ✓ They boost growth and performance.

GOOD TO KNOW

All foods fit. Desserts and other foods with added sugar have a place. These foods have more energy in a smaller volume.

They can be less filling, but that's OK. These foods make it easier to meet the high-energy requirements that active teen bodies need, and they're fun to eat, too.



PROTEIN = BUILDING BLOCKS



- Meat/seafood**
 - Beef
 - Fish
 - Poultry
 - Pork
 - Shellfish
- Dairy**
 - Cheese
 - Cottage cheese
 - Milk
 - Yogurt
- Eggs**
 - Whole eggs
 - Hard-boiled eggs
 - Scrambled
- Plant sources**
 - Beans
 - Edamame
 - Lentils
 - Nuts/seeds
 - Quinoa
 - Seitan
 - Soy/soy milk
 - Tempeh
 - Tofu

Flex your muscles: Exercise, strength training and eating enough food are the most important factors for increasing muscle size and strength. Excessively high protein intake is unnecessary (and expensive).

Thriving on plant protein: There are many non-animal sources of protein. Active teens following vegetarian, vegan or other plant-based eating patterns can thrive on meals and snacks that include plant-based protein sources.

Not all milk and yogurt is created equal: Of all plant-based milk alternatives, soy milk has protein and carbs closest to cow's milk. Most other alternatives (almond, coconut, oat) have little to no protein and vary in the amount of carbohydrates.

Be supplement savvy:

- There are very few performance-enhancing supplements that are helpful or safe for active teens.
- Products with a "supplement facts" label aren't regulated or required to prove they are safe or pure.
- Check supplement packaging for the National Sanitation Foundation (NSF) logo to know the product has been tested for quality and is free from banned substances.



GOOD TO KNOW



You can get the protein you need without purchasing protein powders. Some teens, due to their situation, may need or choose them. Consult a doctor or dietitian before using them.

If you choose protein powders, look for ones with a nutrition facts label, as they are regulated by the Food and Drug Administration (FDA) and contain safe ingredients.

WHY PROTEIN IS IMPORTANT

- ✓ It is essential for growth, energy and repairing muscles and tissues.
- ✓ It can be used for energy, but only after carb stores are used up.

Fat sources

- Avocado
- Butter
- Cheese
- Coconut
- Nuts/nut butter
- Oils (olive, canola, avocado)
- Olives
- Seeds/seed butter



Fit fat into your day: Toss a handful of nuts or seeds into yogurt, dip apple slices into seed or nut butter, add avocado to a sandwich, have guacamole with chips or a taco, or add pesto to your pasta.

Plant-powered fats: Vegetarian, vegan and other plant-based eating patterns tend to be lower in fat, which makes it even more important to add sources of fat to meals and snacks.

WHY FAT IS IMPORTANT

- ✓ It is needed to absorb important nutrients like vitamins A, D, E and K.
- ✓ It helps build nerve tissues and hormones.

CALCIUM

Teen years are your bone-building years. By getting enough calcium every day and continuing to stay active as a teen, you will enter your adult years with strong bones and a rock-solid foundation.

WHY CALCIUM IS IMPORTANT

- ✓ It helps build strong bones and teeth.
- ✓ It lowers the risk of fractures now and later in life.



Get calcium from milk, yogurt, cheese and plant-based sources like soy milk, tofu, edamame and some leafy greens. Calcium is added to some foods, like plant-based milks, yogurts and some grains, like cereals.

IRON

Active teens are at risk for low iron. **Low iron = low energy.**



PowerUp by eating iron-rich foods, like meat, poultry, seafood and eggs. Plant-based sources include beans/legumes, nuts, seeds, tofu, seitan, quinoa, iron-fortified cereals, breads and pastas, dried fruits (raisins, apricots) and leafy greens (spinach).

WHY IRON IS IMPORTANT

- ✓ It helps produce energy and transports oxygen to muscles.
- ✓ Low iron leads to feeling tired and run down.

GOOD TO KNOW

You're at greater risk of low iron if you have a menstrual cycle (period). Losing your period isn't a normal part of training or being active.

If you lose it, what does it mean?

- You're not eating enough to support your body, your sport or activity.
- You're missing out on a crucial time for bone development.
- It's important to follow up with your doctor.

VITAMIN D

Known as the sunshine vitamin, it helps absorb calcium, making it essential for strong bones and overall health.

WHY VITAMIN D IS IMPORTANT

- ✓ It keeps bones strong and lowers fracture risk.
- ✓ It boosts immunity and mood.

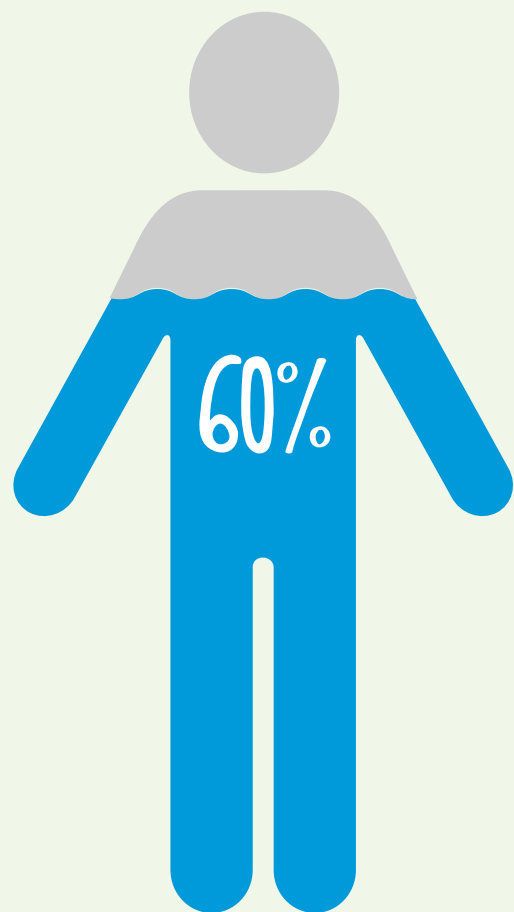


Vitamin D isn't found in many foods naturally. Vitamin D is in salmon, tuna, eggs, fish oils and added to some foods, like milk, but we mainly get vitamin D from the sun. Depending on where you live, access to sunshine can vary greatly throughout the year, so you many need a supplement. Talk to your doctor or dietitian for more information.

Some teens, due to their situations or food preferences, may need or choose a vitamin and mineral supplement. Talk to your doctor or dietitian to see what's best for you.

DON'T WAIT, HYDRATE!

Our body doesn't make or store water well, so we need to drink it throughout the day for the ultimate power boost. You need at least 8-10 cups (64-80 ounces) a day, plus more when you're active.



Water makes up 60% of our body. A tiny dip (as little as 2%) in body water can trigger signs of dehydration and negatively affect performance.

WHY HYDRATION IS IMPORTANT

- ✓ It delays fatigue and helps us maintain focus.
- ✓ Hydration regulates body temperature, especially in hot conditions.
- ✓ It speeds up recovery after exercise and prevents muscle cramping.

Hydration check-in:

You lose a lot of water by being active and sweating.

- **If you're thirsty, you're already dehydrated.** Don't play catch-up; stay ahead of thirst.
- **Check your urine.**
 - Clear to light yellow = you're hydrated. The lighter in color, the better.
 - Dark in color = you're dehydrated. Drink more.

Work water into your day:

- Always carry a water bottle.
- Focus on drinking fluids throughout the day, not just when you're active.
- When you choose fluids with calories, give these a try:
 - 100% fruit juice diluted with water or sparkling water
 - Mix herbal tea with your favorite 100% fruit juice
 - Kombucha
 - Broth
 - Cow or soy milk
- Eat your hydration. Fruits and veggies help hydrate you, too!



BE CAUTIOUS WITH CAFFEINE

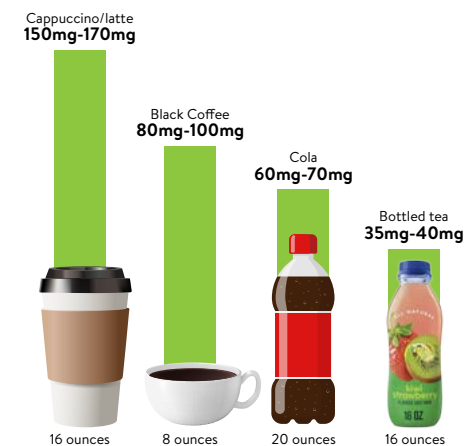
Caffeine is hiding in some sodas, coffee, teas, sports drinks and pain relievers. Always check labels to stay in the know.

Too much caffeine can:

- Cause upset stomach, shaking or over-stimulation.
- Negatively affect focus, sleep, exercise and overall performance.
- Be addictive. Caffeine withdrawal can show up as a headache, feeling tired or irritable, trouble sleeping and changes in heart rate.

LET'S COMPARE

American Academy of Pediatrics says the max for teens is 100 mg of caffeine a day (about 8 ounces of coffee).



GOOD TO KNOW

ENERGY DRINKS

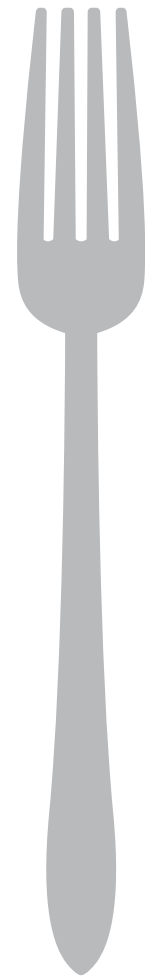
Play it safe: Instead of relying on energy drinks that might pack hidden dangers, focus on other ways to boost your performance. Think nourishing meals, staying hydrated and prioritizing sleep – the real MVPs when it comes to performing your best.



LEARN MORE
on hydration by
flipping to page 16.

POWERUP YOUR PLATE

Eating a combination of carbohydrates, proteins and fats with plenty of water at meals and snacks will help you feel good and perform your best. Using plate planning with food groups can help you visualize what this could look like. It's a starting place for building a plate that's tailored to your needs and likes.



DAIRY AND NON-DAIRY CALCIUM SOURCES

- Cheese (dairy or non-dairy)
- Cow's milk
- Soy milk
- Yogurt (dairy or non-dairy)

VEGETABLES

- Bell peppers
- Bok choy
- Broccoli
- Cauliflower
- Carrots
- Collard greens or kale
- Purple cabbage
- Sweet potatoes

FRUITS

- Apples
- Bananas
- Berries
- Melons
- Mango
- Oranges
- Papaya
- 100% fruit juice

GRAINS

- | | |
|------------------------------|------------------|
| Barley or farro | Oatmeal |
| Bread | Pancakes/waffles |
| Brown and white rice | Pasta/noodles |
| Cereal | Popcorn |
| Chapati or naan bread | Quinoa |
| Cornmeal | Tortillas |
| Crackers and pretzels | Wild rice |
| Injera (Ethiopian flatbread) | |

PROTEINS

- | | |
|-----------------------------|---------------------------|
| Plant-based: | Animal-based: |
| Beans (black, pinto, white) | Beef |
| Chickpeas/garbanzo | Eggs |
| Edamame | Fish/seafood |
| Lentils | Poultry (chicken, turkey) |
| Nuts/seeds | Pork |
| Seitan | |
| Soy products (tofu, tempeh) | |

GOOD TO KNOW

- Aim for 3 meals and at least 2-3 snacks every day.
- For balance and variety:
 - At meals, choose food from 3 or more food groups.
 - At snacks, choose food from 2-3 food groups.
 - Choose water or a hydrating beverage at all meals and snacks.
- The 5 food groups complement each other with different nutrients.
- Most of what we eat isn't neatly separated into sections on our plate. It is a combination of the food groups, like casserole, stir-fry and apple pie.

Determine how much you should eat:

Every body has different needs and each day will look different based on your activity level and other factors.

If you're experiencing any of these symptoms, you may not be fueling appropriately for your activity:

- Lack of improvement despite working harder
- Performance declining
- Feeling tired or fatigued
- Dehydration
- Chronic constipation
- Dizziness or fainting
- Loss of your period (if you have a menstrual cycle)
- Stomach discomfort
- Weight loss

TUNE INTO TIMING

Fuel up: Plan your pre-game, in-game and post-game eats!

Teen tip: Boost your food and water to boost your activity.

Whether it's before, during or after an event, timing is key for unstoppable energy and quicker recovery.

Crush your goals. The goal is to not be hungry or dehydrated. Keep the energy and fluid flowing for peak performance.



GOOD TO KNOW

Experiment with food. Test out various foods before, during and after practice or exercise to see what feels best for your body. It takes some trial and error to find what works best for you. Avoid testing new foods on game or event day. Sometimes, it's not just about being healthy, but what fuels your activity.

WHY TIMING IS IMPORTANT

- ✓ Carbohydrates are your main energy source before, during and after activity.
- ✓ Simple carbohydrates are your pre-game friend and during activity. They power you with easy to digest, quick fuel. And they refuel you after activity.
- ✓ Protein helps repair muscle tissues after exercise.
- ✓ Fat is slow to digest which makes it ideal 3-4 hours before activity, but may not sit as well 30-60 minutes before.
- ✓ Water is a non-negotiable. You need to drink it throughout the day, before, during and after activity.

EATING BEFORE, DURING AND AFTER ACTIVITIES

3-4 HOURS BEFORE EXERCISE

Eat a meal with multiple food groups while prioritizing carbohydrate-rich foods and water.



Turkey sandwich, apple, chocolate milk



Burrito bowl with beans, chicken, rice, veggies



PB&J sandwich, fruit smoothie



Pasta with marinara sauce, protein (meat, shrimp, tofu), broccoli, milk

30-60 MINUTES BEFORE EXERCISE

Keep it simple, with simple carbohydrates and water.

- Banana, applesauce, dried fruit, orange, fruit leather, fruit juice
- Pretzels, crackers, graham crackers
- Bread (or rice cake) and honey sandwich
- Pop-tarts®
- Fruit snacks
- Sports drink



DURING EXERCISE

For endurance activities or any exercise lasting longer than an hour, grab quick energy foods. Think easy to chew, simple carb foods like bananas, applesauce, fruit snacks and sports drinks. You need to fuel your body to power through longer events and boost recovery.



AFTER EXERCISE

Carbs to refuel. Protein to repair. Water to rehydrate.

- Refuel within 15-60 minutes after exercise or an event.
- If your appetite is low, liquid options may be best to refuel.
- Eat foods and fluids with a mix of carbohydrates and protein. And drink water.

Snacks to refuel



Chocolate milk (cow or soy) has it all: carbs to refuel, protein to repair and fluid to rehydrate.



Banana (carbohydrate)



Cheese sticks (protein)



Crackers (carbohydrate)



Water

GOOD TO KNOW

Refuel your rest: Your body doesn't clock out or reset at midnight; it's still recovering. You may even find you're hungrier on your days off. Respond to hunger on rest days – it's your body catching up. Trust your instincts, feed the recovery and let your body and muscles thank you later.

FLIP TO PAGES 17-23

for more snack and pre- and post-meal ideas.

TUNE INTO TIMING

WIN WITH WATER

Sip water, play hard!

Your body needs it every day, and more when you're active. Fuel your performance with H₂O.



Before activity or exercise: Start well-hydrated

- Drink 16-20 ounces of water at least four hours before exercise
- Drink 8-12 ounces (1 to 1 ½ cups) 10-15 minutes before being active

During activity or exercise: Keep sipping

- Drink a few big gulps every 15-20 minutes
- Exercise less than one hour: 2-3 large gulps of water (3-8 ounces or ½ to 1 cup)
- Exercise more than one hour: 3-8 ounces of sports drink

After activity or exercise: Rehydrate

- Drink 16-24 ounces (2-3 cups) of fluid or until your body signals it's hydrated (refer to page 10)

Stay cool, stay in the game. When playing or exercising in the heat, staying hydrated is key. Sodium is the main electrolyte lost in sweat. Electrolyte-rich sports drinks, salty snacks like pretzels and salty beverages like pickle juice help you rehydrate and avoid muscle cramps.



GOOD TO KNOW

SPORTS DRINKS HAVE A PLACE, IF:

- ✓ Exercise or activity lasts longer than one hour.
- ✓ You're exercising or active in the heat.
- ✓ You're a "salty sweater" (get white stains on your skin or clothing, your sweat stings your eyes, etc.)

POWERUP ON THE GO

GOOD TO KNOW

You eat to fuel your growing, active body. It's important to eat enough – your body needs it.

If you've got a busy schedule, we've got you! From quick bites to satisfying meals, level up your on-the-go meals and snacks to add variety and extra fuel.

Level it up: Check out our meal and snack ideas, pick suggested add-ons or invent your own winning combinations.

Check in by asking yourself:

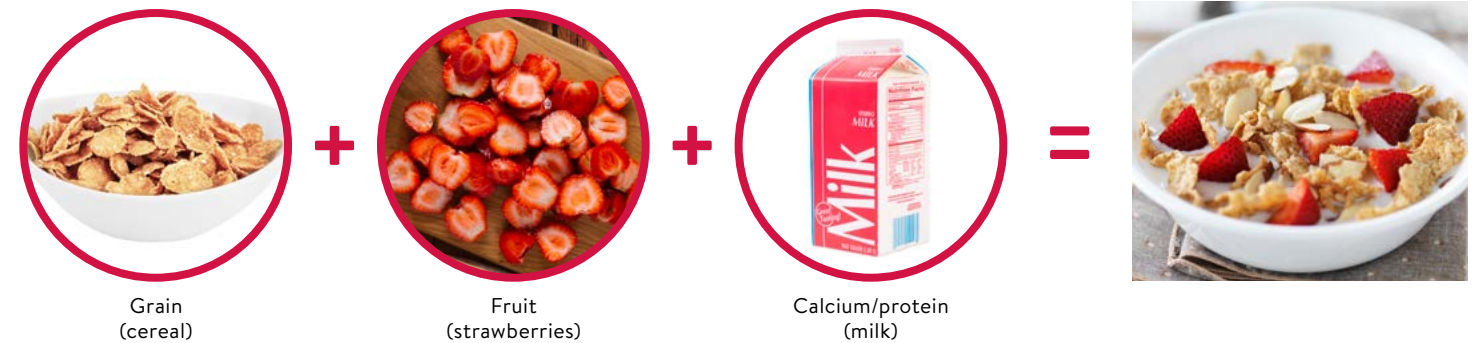
- Am I eating enough food at meals and snacks to have the energy I need to be active and feel good?
- Am I eating enough variety?

FUEL UP WITH BREAKFAST

These meal ideas also make great snacks.

If you're not a fan of breakfast foods, no worries. Eat what feels good for you. Leftovers from the day before can be great, too.

CEREAL



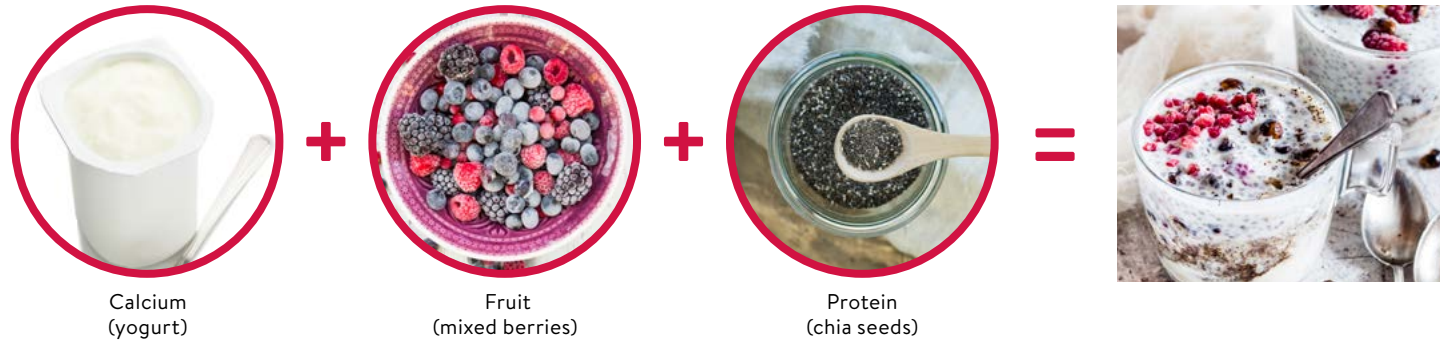
SMOOTHIE



FUEL UP WITH BREAKFAST

These meal ideas also make great snacks.

YOGURT BOWL



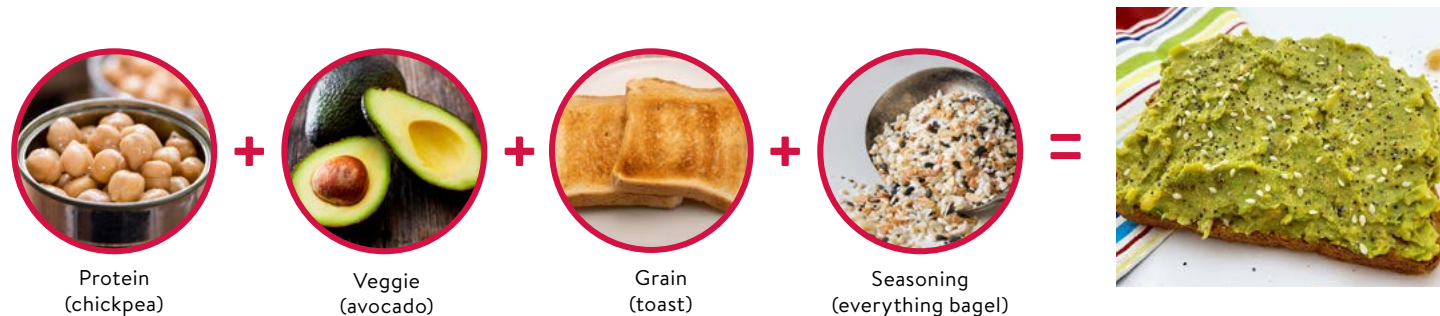
EGG WRAP OR SANDWICH



PANCAKE AND WAFFLE TOPPERS



CHICKPEA AVOCADO SMASH



LEVEL UP LUNCH OR DINNER

Try these or switch out with your favorite choices.

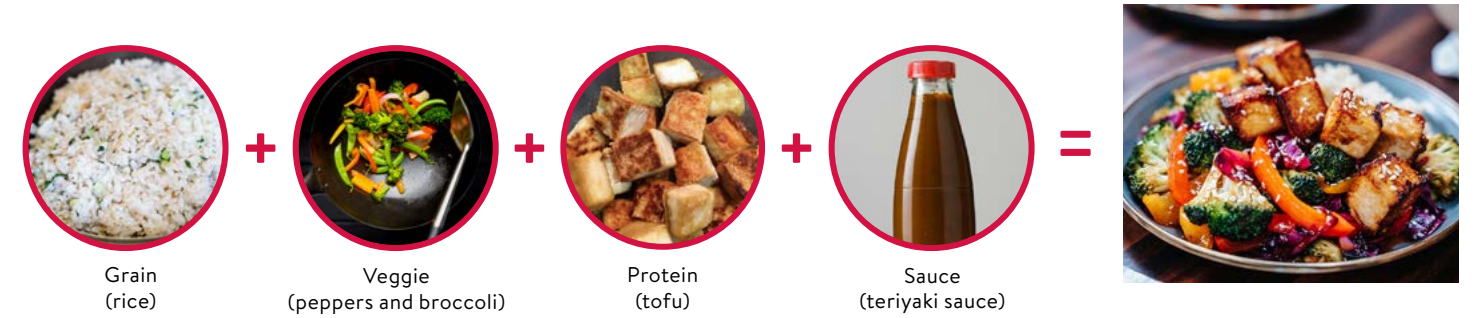
NOODLE BOWL



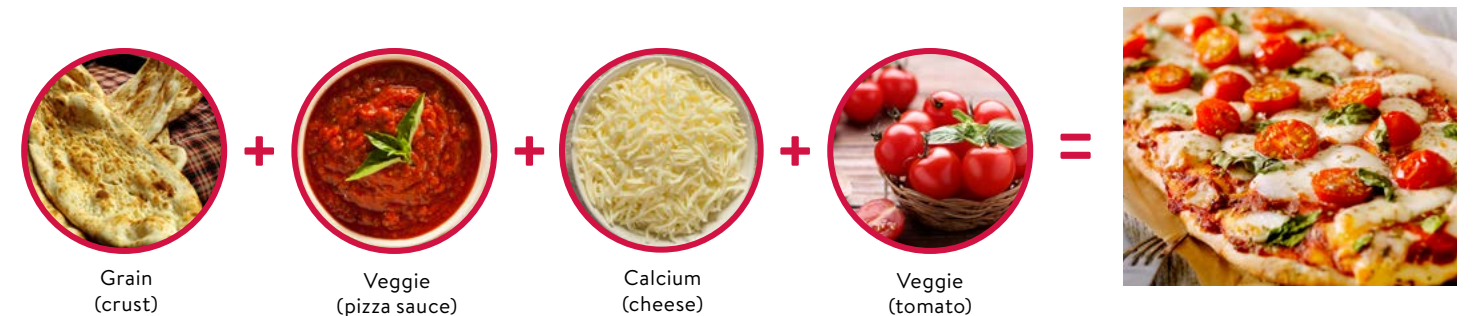
DAL CURRY



STIR-FRY



PIZZA AND FLATBREAD



LEVEL UP LUNCH OR DINNER

Try these or switch out with your favorite choices.

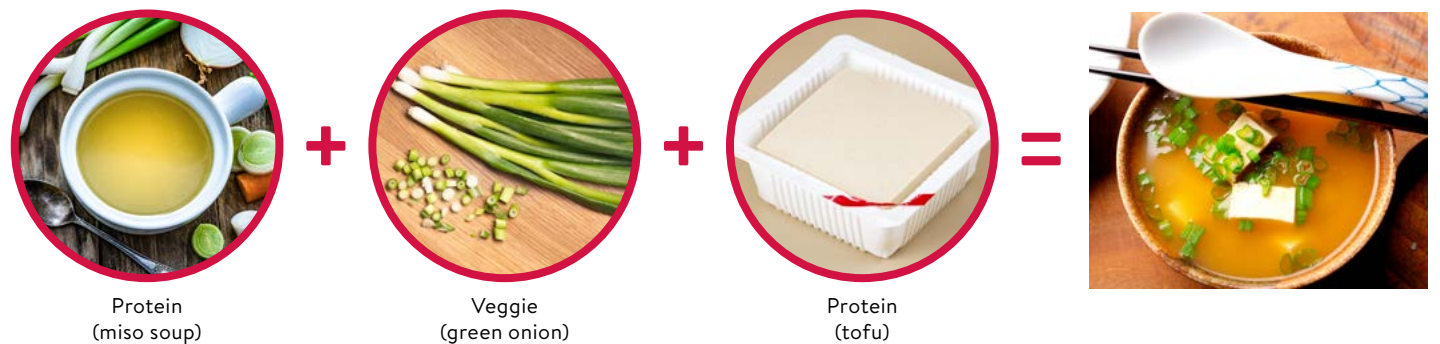
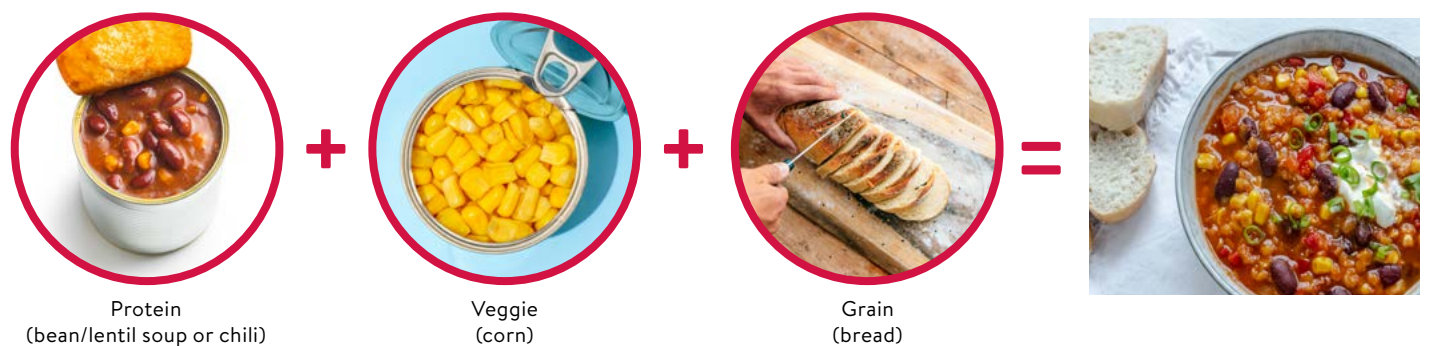
PASTA



BURRITO (WRAP OR BOWL)



SOUP AND STEWS



LEVEL UP LUNCH OR DINNER

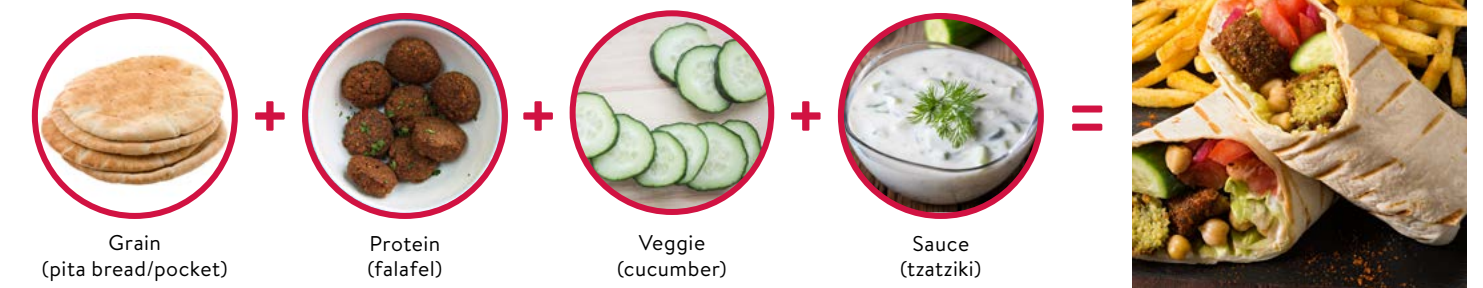
Try these or switch out with your favorite choices.

WRAP AND SANDWICH STATION

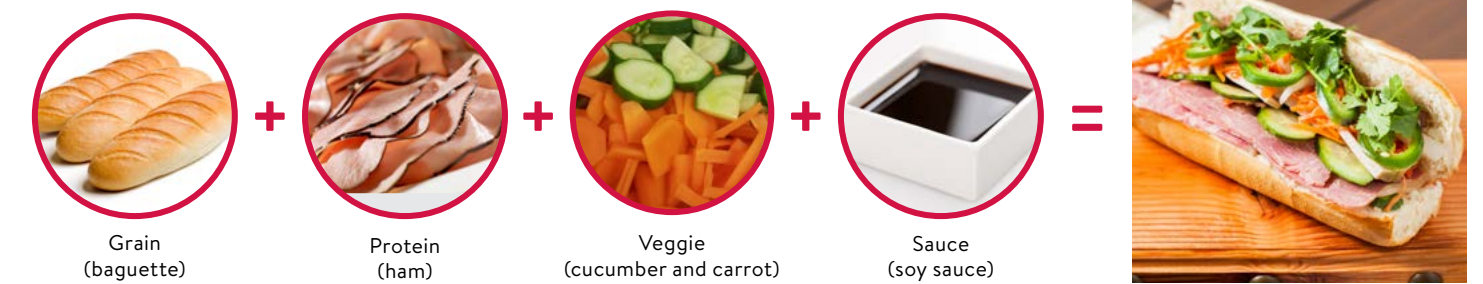
VADA PAV:



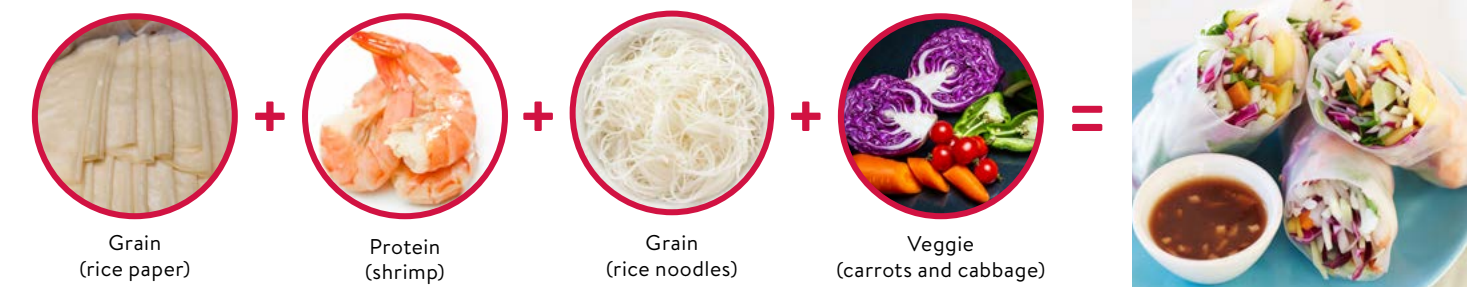
WRAP:



BÁNH MÌ:



SPRING ROLL:



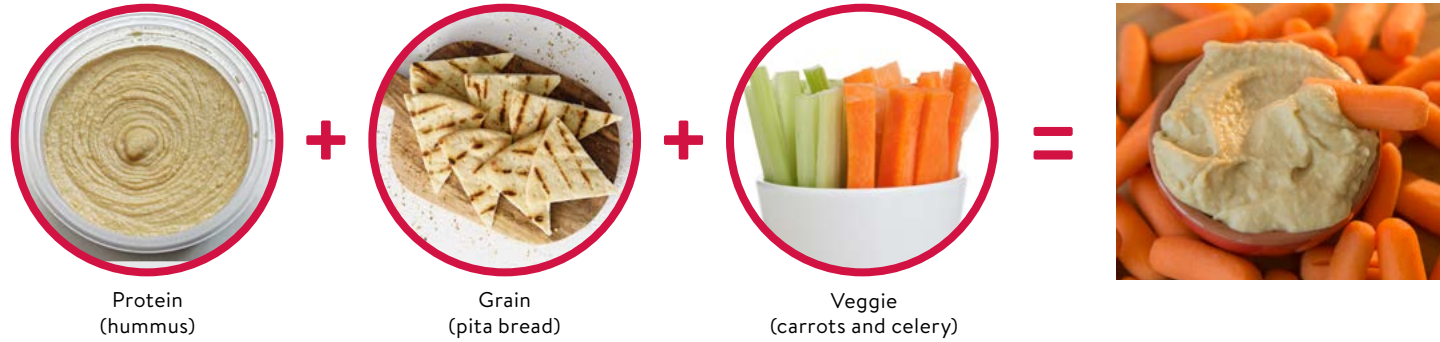
SNACKS AND QUICK BITES

Fuel up, refuel or just savor the pure enjoyment of these snacks and quick bites

NO-BAKE ENERGY BITES



HUMMUS



CHIPS AND DIP



HOMEMADE TRAIL MIX



POWERUP ON THE GO

MY MEAL AND SNACK LIST:

Handwriting practice area with horizontal lines and a vertical red margin line on the left. A yellow pencil is positioned vertically on the right side of the page.

MORE RECIPE IDEAS

PowerUp recipe gallery: powerup4kids.org/recipes

PowerUp with plant recipes: powerup4kids.org/plantrecipes

If you have food allergies, check out resources on the back to stay safe.

! FOOD ALLERGY ALERT

Always read labels; they can change frequently.
Flip to the back for resources on allergies. Stay safe. Stay fueled.

RELIABLE RESOURCES

Websites and articles

- allergyasthmanetwork.org
- berealusa.org
- bodyconfidentsport.com
- foodallergy.org
- healthpartners.com/blog
- withall.org

Podcasts

- **Melrose Heals**
- **High School Athlete Nutrition Podcast**
- **Phit for a Queen**
- **Sports Nutrition Playbook**

Books

- **Finding your Sweet Spot**, Rebecca McConville
- **Mindfulness for Student Athletes**, Gina Biegel and Todd Corbin
- **Sports Nutrition for Young Adults**, Jackie Slomin
- **Sports Nutrition Guidebook**, 6th Edition, Nancy Clark
- **Plant-Based Sports Nutrition**, D. Enette Larson-Meyer and Matt Ruscigno

Instagram

- Wendi Irlbeck, MS, RD, LD, CISSN
@nutrition_with_wendi
- Katie Spada, MS, RD
@fueling.former.athletes
- Stephanie Militano, RD
@highschool.athlete.nutrition

IDENTIFYING CREDIBLE NUTRITION SOURCES

Green flags (safe to go)

- Holds credentials as a registered dietitian (RD or RDN)
- Advocates for variety and balance, prioritizing food and habits over supplements and shortcuts
- Avoids strict rules and absolutes
- Encourages personalized and realistic goals
- Backs specific claims with evidence

Red flags (stay away)

- Lacks proper qualifications and credentials (certified nutritionist and holistic nutritionist aren't regulated titles; anyone can use them)
- Promises quick fixes for health and performance
- Categorizes foods as good or bad
- Recommends cutting an entire food group
- Encourages fear around specific foods or ingredients (dairy, gluten, carbs, sugar)



This **PowerUp guide** was created in partnership with TRIA and Melrose Center.

Visit powerup4kids.org, tria.com and melroseheals.com to learn how we support teens in our community.

