

Meal Planning and Timing



Optimal meal planning and timing are crucial for high school swimmers, as they help enhance performance, support recovery, and promote overall health. Proper meal planning ensures swimmers consume the right balance of macronutrients (carbohydrates, proteins, and fats) to provide energy for training and competitions. Strategic meal timing can enhance recovery post-training by providing the necessary nutrients to repair muscles, replenish glycogen stores, and reduce muscle soreness. Adequate nutrition supports bone health, muscle development, and overall maturation. Well-planned meals help prevent energy dips from inappropriate food choices or irregular eating patterns. Meal planning that includes fluid-rich foods can support overall hydration and electrolyte balance, which are essential for performance.

It is crucial to test different strategies and foods on practice days and only do what is tried and true on meet days. A meet day is not the time to try a new food item, to change routine, or to explore different sports drinks or gels.

Optimal Meal Timing for High School Swimmer



Pre-Training or Pre-Competition Meals

Snacks Before Training

Post-Training Meals

Timing

Eat 2-4 hours before practice or competition for optimal digestion.

If less than 30 minutes before practice, a quick snack may be appropriate

Aim to eat within 30-60 minutes after practice to support recovery.

Focus

To prevent gastrointestinal discomfort, focus on a meal rich in carbohydrates (to fuel energy), moderate in protein, and lower in fats and fiber.

Simple carbohydrates provide quick energy without causing discomfort. If protein is included, it should be very light.

Focus on a combination of carbohydrates and protein (generally, a 3:1 or 4:1 ratio of carbs to protein is recommended). This helps replenish glycogen stores and aids muscle repair.

Composition

Carbohydrates: 60-70% of total intake

Protein: 10-20% of total intake

Fats: 10-20% of total intake

Carbohydrates: 80-90% of total intake

Protein: 10-20% of total intake

Fats: Minimal to none

Carbohydrates: 50-70% of total intake

Protein: 20-30% of total intake

Fats: 10-20% of total intake

Examples

Whole-grain pasta with lean protein and vegetables, oatmeal with fruit and honey, or whole-grain bread with turkey and avocado sandwich.

Bananas, energy bars, applesauce, rice cakes, fruit puree packs, honey, maple syrup, white bread with jelly, smoothie drinks, white pasta with olive oil, or yogurt

Smoothies with protein powder and fruit, smoothie bowls, chocolate milk, or a turkey and cheese wrap with a banana are great options.

Prioritize

Summary	Aim for a higher carbohydrate intake with moderate protein and low fat.	Focus on simple carbohydrates with minimal protein and fats.	carbohydrates for recovery, alongside high-quality protein, with moderate fats.
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Daily Schedule Tips and Tricks		
<ul style="list-style-type: none"> • Have three balanced meals and 1-3 snacks daily to ensure sufficient nutrient intake, especially around training times. • Meals and snacks should include a variety of foods to provide essential vitamins and minerals necessary for growth and performance. 	<ul style="list-style-type: none"> • Prepare meals ahead of time to ensure healthy options are readily available. This can save time and help avoid fast food or less healthy choices on busy days. • Aim for a diverse diet that includes fruits, vegetables, whole grains, lean proteins, and healthy fats to meet nutrient needs and prevent dietary monotony. 	<ul style="list-style-type: none"> • Consider using a food diary or mobile app to monitor eating habits and make adjustments as needed. This can help identify patterns of under-fueling or over-fueling.

Sample Meal Plan for **MORNING** Practice Days

Breakfast (Pre-Practice)

- Oatmeal: 1 cup cooked oats topped with sliced banana and a tablespoon of almond butter. Consider adding some berries, nuts and seeds.
- Greek Yogurt: ½ cup with honey and a sprinkle of cinnamon.
- Hydration: 8-12 ounces of water.

OR

- Toast: 2 slices whole-grain toast with peanut butter and sliced strawberries
- Eggs: 2 eggs with salsa
- Hydration: 8-12 oz water

OR

- Overnight Oats: Rolled oats soaked overnight in milk or yogurt, mixed with chia seeds, and topped with fruits like bananas or berries.

OR

- Smoothie: A blend of banana, spinach, Greek yogurt, and nut butter with milk or a milk alternative.

OR

- Egg and Avocado Toast: Whole grain toast topped with mashed avocado and a poached or scrambled egg, sprinkled with salt and pepper.

OR

- Greek Yogurt Parfait: Greek yogurt layered with granola and mixed berries or banana slices.

OR

- Banana Pancakes: Pancakes made with mashed bananas and oats, served with a drizzle of honey or maple syrup.

OR

- Cottage Cheese with Fruit: Cottage cheese topped with fresh fruit like peaches, pineapple, or berries and a sprinkle of nuts or seeds.

OR

- Chia Seed Pudding: Chia seeds soaked in almond or coconut milk overnight, served with fresh fruit.

OR

- Muffins: Whole grain or oatmeal muffins, possibly enriched with fruits or nuts.

Morning Snack (Post-Practice)

- Fruit: A medium apple or orange.
- Nuts: A small handful of almonds or walnuts.

OR

- Chocolate milk

Lunch

- Sandwich: Whole-grain bread with turkey or chicken breast, lettuce, tomato, and avocado. Or Whole Grain Wrap: Whole grain tortilla filled with turkey or chicken, leafy greens, cheese, hummus, and vegetables (like shredded carrots or cucumbers).
- Side: Baby carrots or sliced cucumber with hummus.
- Hydration: 16 ounces of water.

OR

- Grilled Chicken Salad: Grilled chicken breast, mixed greens (spinach, kale, romaine), cherry tomatoes, cucumber, bell peppers, avocado, and a vinaigrette dressing.

OR

- Quinoa Bowl: Cooked quinoa topped with black beans, corn, diced tomatoes, avocado, and a squeeze of lime juice.

OR

- Pasta with Lean Protein: Whole grain pasta tossed with olive oil, grilled chicken or shrimp, and a variety of roasted vegetables (zucchini, bell peppers, or broccoli).

OR

- Sushi Rolls: Brown rice sushi rolls filled with salmon or tuna, avocado, cucumber, and a side of edamame.

OR

- Veggie and Hummus Plate: A platter of assorted raw vegetables (carrots, bell peppers, cucumber) served with hummus and whole grain pita.

OR

- Rice and Beans: Brown rice topped with black beans, salsa, diced avocado, and cilantro.

OR

- Omelet with Whole Grain Toast: An omelet made with eggs, spinach, tomatoes, and

Afternoon Snack

- Smoothie: Blend protein powder, spinach, half a banana, frozen berries, and 8 ounces of almond milk.
- Alternatively, a whole grain granola bar or energy bar.

Dinner (Any of the lunch options)

- Grilled Chicken or Fish: About 4-6 ounces (little bigger than your palm).
- Quinoa or Brown Rice: 1 cup cooked.
- Steamed Vegetables: 1-2 cups (broccoli, green beans, or mixed veggies).
- Salad: Mixed greens with olive oil and vinegar dressing.
- Hydration: 16-20 ounces of water.

OR

- Chicken Stir-Fry: Sautéed chicken breast with a mix of bell peppers, broccoli, and snow peas served over brown rice or quinoa.

OR

- Baked Salmon with Sweet Potatoes and Asparagus: Baked salmon fillet seasoned with herbs, served with roasted sweet potatoes and steamed asparagus.

OR

- Whole Grain Pasta with Meat Sauce: Whole grain pasta topped with a lean ground turkey or beef tomato sauce and a side of mixed salad.

OR

- Chicken Fajitas: Grilled chicken strips with bell peppers and onions served in whole grain tortillas, topped with guacamole and salsa.

OR

- Stuffed Bell Peppers: Bell peppers stuffed with a mixture of brown rice, lean ground meat or beans, diced tomatoes, and spices, topped with cheese.

OR

- Mediterranean Bowl: Brown rice or quinoa topped with grilled chicken, cherry tomatoes, cucumber, olives, hummus, and feta cheese.

OR

- Homemade Pizza: Whole wheat pizza base topped with marinara sauce, part-skim mozzarella cheese, and assorted toppings like lean meats and vegetables.

OR

- Turkey and Vegetable Chili: A hearty chili made with lean ground turkey, kidney beans, black beans, diced tomatoes, and vegetables, served with whole grain bread.

Sample Meal Plan for *AFTERNOON* Practice Days

Breakfast

- Whole Grain Toast: 2 slices with avocado and a poached egg or sliced tomato.
- Greek Yogurt: ½ cup topped with mixed berries and a drizzle of honey.
- Hydration: 8-12 ounces of water or herbal tea.

OR

- Toast: 2 slices whole-grain toast with peanut butter and sliced strawberries
- Eggs: 2 eggs with salsa
- Hydration: 8-12 oz water

OR

- Oatmeal Bowl: Rolled or steel-cut oats topped with sliced bananas, a tablespoon of peanut butter, and a sprinkle of cinnamon.

OR

- Greek Yogurt Parfait: Greek yogurt layered with granola, mixed berries (strawberries, blueberries, raspberries), and a drizzle of honey.

OR

- Egg and Spinach Breakfast Wrap: Scrambled eggs with sautéed spinach and cheese wrapped in a whole grain tortilla, served with salsa.

OR

- Breakfast Tacos: Scrambled eggs with bell peppers, onions and cheese stuffed into corn tortillas.

OR

- Smoothie Bowl: A smoothie made of spinach, banana, protein powder, and almond milk, topped with granola, nuts, and seeds.

OR

- Whole Grain Pancakes: Whole grain pancakes topped with mixed berries and a dollop of Greek yogurt or a drizzle of maple syrup.

OR

- Chia Seed Pudding: Chia seeds soaked overnight in almond milk, topped with sliced fruits and nuts.

OR

- Breakfast Grain Bowl: Cooked grain (quinoa, amaranth) mixed with almond milk, topped with dried fruits, nuts, and a dash of cinnamon.

OR

- Peanut Butter Banana Toast: Whole grain bread topped with peanut butter and sliced bananas, drizzled with honey or sprinkled with chia seeds.

OR

- Cottage Cheese and Fruit: Cottage cheese topped with pineapple, berries, or peaches and a handful of nuts.

OR

- Protein Smoothie: A smoothie made with protein powder, spinach, banana, yogurt,

Morning Snack

- Fruit: 1 medium apple or banana.
- Nuts: A small handful of walnuts or almonds.

OR

- Granola Bar

Lunch

- Wrap or Sandwich: Whole grain wrap with lean protein (turkey or chicken), lettuce, tomato, cucumber, and avocado.
- Side: Baby carrots or cherry tomatoes with hummus (or Greek yogurt ranch dip).
- Hydration: 16 ounces of water.

OR

- Grilled Chicken Quinoa Salad: Grilled chicken breast mixed with quinoa, cherry tomatoes, cucumbers, spinach, avocado, and a vinaigrette dressing.

OR

- Pasta Salad: Whole grain pasta mixed with olive oil, diced vegetables (bell peppers, zucchini, cherry tomatoes), feta cheese, and grilled chicken or chickpeas.

OR

- Rice Bowl: Brown rice topped with lean protein (grilled chicken, shrimp, or tofu), black beans, corn, salsa, and a dollop of guacamole.

OR

- Egg Fried Rice: Brown rice stir-fried with scrambled eggs, peas, corn, and green onions.

OR

- Taco Bowl: Ground turkey or lentils seasoned as taco filling served over brown rice or quinoa, with toppings like avocado, salsa, and cheese.

OR

- Chickpea and Avocado Salad: A salad made with canned chickpeas, diced avocado.

Afternoon Snack (Pre-Practice Snack (30-60 minutes before practice))

- Energy Bar: Look for one that is lower in fiber and contains carbohydrates for quick energy.
- Trail Mix
- Banana
- Rice Cakes with honey
- Hydration: 8 ounces of water.

Dinner (Any of the lunch options)

- Grilled Chicken or Fish: About 4-6 ounces (little bigger than your palm).
- Quinoa or Brown Rice: 1 cup cooked.
- Steamed Vegetables: 1-2 cups (broccoli, green beans, or mixed veggies).
- Salad: Mixed greens with olive oil and vinegar dressing.
- Hydration: 16-20 ounces of water.

OR

- Chickpea and Spinach Curry: A warm curry made with chickpeas, spinach, coconut milk, and spices, served with basmati rice.

OR

- Grilled Shrimp Tacos: Grilled shrimp wrapped in corn tortillas and topped with cabbage slaw and avocado sauce.

OR

- Homemade Sushi Rolls: Sushi made with brown rice, nori, fresh fish (like salmon or tuna), and vegetables (avocado, cucumber).

OR

- Soup and sandwiches: Homemade soup (vegetables, noodles, protein source) with small sandwiches or crackers and cheese.

Sample Meal Plan for *SATURDAY* Meet Days

Breakfast (3-4 hours before the meet)

- Pancakes or Waffles: 2 whole-grain pancakes topped with maple syrup or honey.
- Eggs: 2 scrambled eggs or an omelet with spinach and cheese.
- Fruit: A medium banana or a handful of berries.
- Hydration: 16 ounces of water or a sports drink.

Morning Snack (1-2 hours before the meet)

- Energy Bar or Granola Bar: A snack that's low in fiber but provides quick energy.
- Fruit: banana or a handful of grapes.
- Hydration: 8 ounces of water.

Lunch (Post-Event or Between Heats)

- Wrap or Sandwich: Whole-grain wrap with lean protein (chicken, turkey) and veggies (lettuce, tomato, cucumber).
- Snack: Trail mix with nuts and dried fruits or a pouch of nut butter.
- Hydration: Alternate between water and an electrolyte drink.

OR (these can be snacks for between heats as well)

- Fruit and Nut Butter: Sliced apple or banana with a small packet of almond or peanut butter.
- Granola Bars: Low-sugar granola bars or protein bars.
- Yogurt Cups: Greek yogurt or a non-dairy yogurt, possibly with granola or fruit.
- Rice Cakes with Toppings: Rice cakes with a light spread of hummus or nut butter, topped with sliced banana or cucumber.
- Pasta Salad: A small serving of pasta salad made with whole grain pasta, veggies, and a light dressing.
- Veggie Sticks and Hummus: Pre-cut carrot, cucumber, and bell pepper sticks with a small container of hummus for dipping.
- Mini Wraps: Whole grain wrap with sliced turkey and lettuce, rolled up and cut into bite-sized pieces OR wini PB & J wraps

Post-Event Snack

- Fruit: A medium apple or orange.
- Nuts: A small handful of almonds or walnuts.

OR

- Chocolate milk

Dinner (Post-Meet)

- Stir-Fry: Lean beef, chicken, or tofu with a variety of vegetables (bell peppers, broccoli) served over brown rice.
- Salad: Mixed greens with cherry tomatoes, carrots, and a light vinaigrette.
- Hydration: 16-20 ounces of water.

OR

- One of the other recommended meals

Evening Snack (if needed)

- Recovery Shake: A blend of protein powder, banana, peanut butter, and almond milk.
- Hydration: Water or a sports drink to replace lost fluids.

Sample Meal Plan for *AFTER-SCHOOL Meets* (follows similar to afternoon practice plan)

Breakfast - Carbohydrate-Focused Meal:

- Oatmeal: 1 cup cooked rolled oats topped with: Sliced banana, 1 tablespoon of almond butter or peanut butter, A sprinkle of cinnamon or a drizzle of honey
- Protein Source: 2 scrambled eggs or a serving of Greek yogurt
- Hydration: 16 ounces of water or low-fat milk

OR

- Greek Yogurt Parfait: Greek yogurt layered with granola, mixed berries (strawberries, blueberries, raspberries), and a drizzle of honey.

OR

- Egg and Spinach Breakfast Wrap: Scrambled eggs with sautéed spinach and cheese wrapped in a whole grain tortilla, served with salsa.

OR

- Breakfast Tacos: Scrambled eggs with bell peppers, onions and cheese stuffed into corn tortillas.

OR

- Smoothie Bowl: A smoothie made of spinach, banana, protein powder, and almond milk, topped with granola, nuts, and seeds.

OR

- Whole Grain Pancakes: Whole grain pancakes topped with mixed berries and a dollop of Greek yogurt or a drizzle of maple syrup.

OR

- Chia Seed Pudding: Chia seeds soaked overnight in almond milk, topped with sliced fruits and nuts.

OR

- Breakfast Grain Bowl: Cooked grain (quinoa, amaranth) mixed with almond milk, topped with dried fruits, nuts, and a dash of cinnamon.

OR

- Peanut Butter Banana Toast: Whole grain bread topped with peanut butter and sliced bananas, drizzled with honey or sprinkled with chia seeds.

OR

- Cottage Cheese and Fruit: Cottage cheese topped with pineapple, berries, or peaches and a handful of nuts.

OR

- Protein Smoothie: A smoothie made with protein powder, spinach, banana, yogurt,

Morning Snack

- Fruit: 1 medium apple or banana.
- Nuts: A small handful of walnuts or almonds.

OR

- Granola Bar/trail mix

Lunch

- Wrap or Sandwich: Whole grain wrap with lean protein (turkey or chicken), lettuce, tomato, cucumber, and avocado.
- Side: Baby carrots or cherry tomatoes with hummus (or Greek yogurt ranch dip).
- Hydration: 16 ounces of water.

OR

- Grilled Chicken Quinoa Salad: Grilled chicken breast mixed with quinoa, cherry tomatoes, cucumbers, spinach, avocado, and a vinaigrette dressing.

OR

- Pasta Salad: Whole grain pasta mixed with olive oil, diced vegetables (bell peppers, zucchini, cherry tomatoes), feta cheese, and grilled chicken or chickpeas.

OR

- Rice Bowl: Brown rice topped with lean protein (grilled chicken, shrimp, or tofu), black beans, corn, salsa, and a dollop of guacamole.

OR

- Egg Fried Rice: Brown rice stir-fried with scrambled eggs, peas, corn, and green onions.

OR

- Taco Bowl: Ground turkey or lentils seasoned as taco filling served over brown rice or quinoa, with toppings like avocado, salsa, and cheese.

OR

- Chickpea and Avocado Salad: A salad made with canned chickpeas, diced avocado, cucumber, red onion, and a lemon-tahini dressing.

Afternoon (Pre-meet snack)

- Banana with Nut Butter: A banana sliced and topped with a tablespoon of almond or peanut butter.

OR

- Fruit and Yogurt: A small cup of Greek yogurt topped with fresh fruit (like berries or sliced peaches).

OR

- Cottage Cheese with Pineapple: A small bowl of cottage cheese mixed with diced pineapple or another fruit.

OR

- Homemade Energy Bites: No-bake energy bites made with oats, honey, nut butter, and chocolate chips or dried fruit.

OR

- Cheese and Whole Grain Crackers: Slices of cheese paired with whole grain crackers.

Post-meet- Pre-dinner snack (if needed)

- Chocolate milk
- energy drink

Dinner (Post-Meet)

- Stir-Fry: Lean beef, chicken, or tofu with a variety of vegetables (bell peppers, broccoli) served over brown rice.
- Salad: Mixed greens with cherry tomatoes, carrots, and a light vinaigrette.
- Hydration: 16-20 ounces of water.

OR

- One of the other recommended meals