

# MULLEN HIGH SCHOOL SPORTS PERFORMANCE NUTRITION GUIDE



## TABLE OF CONTENTS:

|   |          |
|---|----------|
| Sports Performance Nutrition Guidelines             | p. 3     |
| Sports Performance Daily Fueling Guidelines         | p. 4     |
| Sports Performance Nutrient Timing Guidelines       | p. 5     |
| Sports Performance Quick on the Go Breakfasts       | p. 6     |
| Sports Performance Fueling Snacks (Backpack Snacks) | p. 7     |
| Sports Performance Fueling Plates                   | p. 8-9   |
| Weight Gain and Weight Loss for Athletes            | p. 10-12 |
| Dangers of Under Fueling                            | p. 13    |
| Healthy Fast Food Choices                           | p. 14-15 |
| Performance Supplements                             | p. 16    |
| Additional Resources for Parents and Athletes       | p. 17    |
| Sources   | p. 18    |

## SPORTS PERFORMANCE NUTRITION GUIDELINES

- Food should be viewed as fuel/energy for performance instead of calories
- Choose nutrient-rich foods to fuel performance
- Eat multiple fueling meals and snacks throughout the day (every few hours)
- Encourage athletes not to skip meals or snacks
- ALWAYS eat breakfast
- DRINK WATER
  - Drink half of your bodyweight in ounces daily + fluid lost sweating
    - Ex: a 150lb. athlete should drink 75 oz. + fluid lost
- No foods are considered “bad” or off limits
- Limit high fat and high sugar calories from processed foods and flavored drinks (sweet tea, lemonade, soda, energy drinks, juice, etc.)
- Eat when you are hungry (don’t wait until starving), stop when you are satisfied
- Follow the 80/20 Rule:
  - 80% of the time eat for performance and health
    - Complex carbohydrates, lean protein, healthy fat each meal and snack.
    - Eat vegetables as often as possible
    - Drink water
  - 20% of the time eat for pleasure
    - Refined carbohydrates, fried food, high fat foods, baked goods/pastries/doughnuts, creamy sauces/spreads/dips

## SPORTS PERFORMANCE DAILY FUELING GUIDELINES

To eat for performance, each meal and/or snack should include the following:

- Carbohydrates
  - Most important energy source for athletes
  - Recommendation: approximately 45-60% of daily calories
  - Should be consumed at every meal and snack
  - Best choices: whole grains, rice, beans, oats, sweet potatoes, lentils
  
- Protein
  - Helps build and repair muscle mass, helps immune system and help you get full faster and stay full longer, thus regulating blood sugar
  - Recommendation: 0.75 – 1 gram of protein per pound of bodyweight a day
  - Should be consumed at every meal or snack
  - Best choices: lean meats low-fat dairy, eggs and beans
  
- Fat
  - Protects and lubricates joints. Young females need fat for hormone production and males & females need fat for energy
  - Goal is to consume 'good' fats instead of unhealthy saturated fats
  - Recommendation: meals should be "garnished" with fat
  - Best choices: Omega 3 fats, nuts, seeds, avocado, peanut butter, healthy oils, hummus, fatty fish
  
- Fruits and Vegetables
  - Eat a variety of fruits and vegetables as often as possible
    - Shoot for vegetables over fruit as these are usually consumed less

## **SPORTS PERFORMANCE NUTRIENT TIMING GUIDELINES**

- Athletes should eat smaller meals and snacks every 2-3 hours, eating 5-8 meals throughout the day
- Breakfast should ALWAYS be ate
- Fueling around practices, games, and workouts should be planned in advance
  
- **Pre-Workout/Practice/Game**
  - 2-4 hours before: Meal of complex carbohydrates and protein with some fat and easy to digest vegetables. Add 16-20 oz. water
  - 20-30 minutes before: carbohydrates snacks and 5-10 oz. water
  
- **During Workout/Practice/Game**
  - Consume electrolyte-rich fluids throughout workout/practice/game
  - Carbohydrate foods are needed in workouts/practice/games over 60-90 minutes to help maintain energy levels
  
- **Post Workout/Practice/Game**
  - Replenish with carbohydrate
  - Rebuild with protein
  - Rehydrate with fluid
    - 16 oz. of fluid per pound of sweat lost or until urine is pale yellow to clear color

## **SPORTS PERFORMANCE QUICK ON-THE-GO BREAKFASTS**

- Whole wheat bagel w/ peanut butter, banana, and low-fat milk
- Energy bar, banana, string cheese and low-fat milk
- Peanut butter and jelly sandwich on wheat bread and Greek yogurt with fruit
- Peanut butter crackers, small bag of trail mix and low-fat milk
- Smoothie with fruit, milk, Greek yogurt/whey protein powder, nut butter
- Whole grain granola bar (or two) with to-go peanut butter cup, string cheese and low-fat milk
- Overnight oats made with milk and top with nuts/seeds, granola and fruit with a Greek yogurt
- Pre-made scrambled eggs, apple, oatmeal and a scoop of peanut butter

## **SPORTS PERFORMANCE FUELING SNACKS (BACKPACK SNACKS)**

- Energy bar
- Individual bag of trail mix
- Beef jerky and a banana
- Granola bar and nuts
- Whole wheat crackers and string cheese
- Greek yogurt with granola and fruit
- Turkey/cheese roll-ups and apples or grapes
- Hummus and whole wheat pita bread/pita chips
- Apple and peanut butter
- Popcorn and string cheese
- Peanut butter bites
  - Stir  $\frac{1}{2}$  cup peanut butter and  $\frac{1}{4}$  cup honey together
  - Stir in 1 cup oats and  $\frac{1}{2}$  cup whey protein powder
  - Roll into 20-22 balls and refrigerate

# SPORTS PERFORMANCE FUELING PLATES

- Every athlete has different nutrient requirements based on their goals or each day
- The following fueling plates are visuals based on different days for athletes

## Easy Training Day / Trying to Lose Weight

**EASY TRAINING / WEIGHT MANAGEMENT:**

**FATS**  
1 Teaspoon

Avocado  
Oils  
Nuts  
Seeds  
Cheese  
Butter

**Whole Grains**  
Pasta  
Rice  
Potatoes  
Cereals  
Breads  
Legumes

**Lean Protein**  
Poultry  
Beef/Game/Lamb  
Fish  
Eggs  
Low-Fat Dairy  
Soy (e.g., Tofu, Tempeh)  
Legumes/Nuts

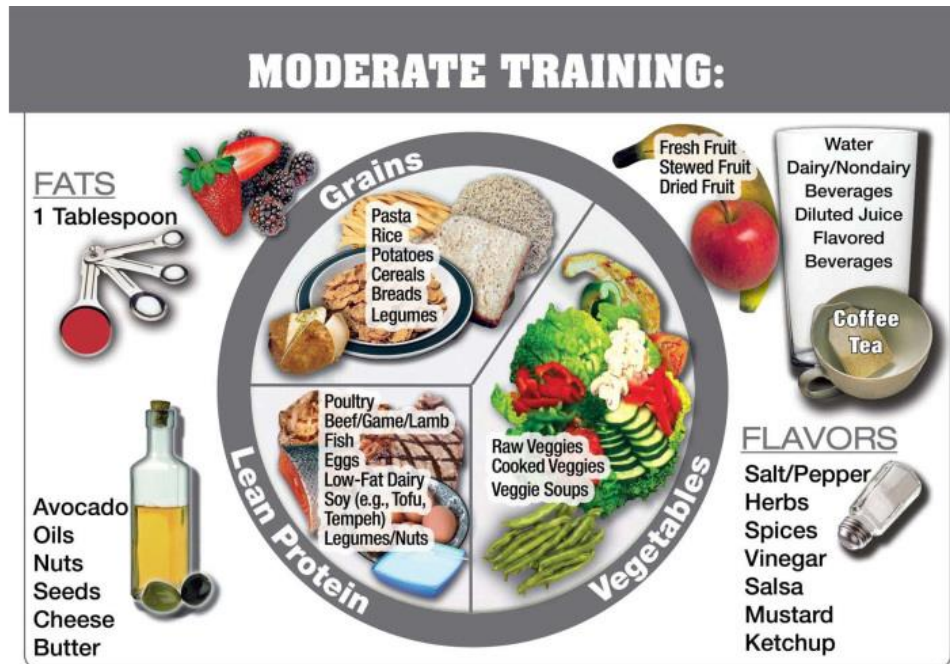
**Vegetables & Fruits**  
Raw Veggies  
Cooked Veggies  
Veggie Soups  
Fresh Fruit

**FLAVORS**  
Salt/Pepper  
Herbs  
Spices  
Vinegar  
Salsa  
Mustard  
Ketchup

Water  
Dairy/Nondairy  
Beverages  
Diluted Juice  
Flavored  
Beverages  
Coffee  
Tea



## Moderate Training Day / Trying to Maintain Weight



## Hard Training Day / Game Day / Weight Gain



# WEIGHT GAIN AND WEIGHT LOSS FOR ATHLETES

## 4 Things make up Bodyweight:

- Lean muscle mass
- Fat mass
- Water
- Bone

The only thing athletes should lose is fat mass

- This is typically minimally a 6-8 week process
- Weight lost quickly is water weight, maybe muscle mass
- Dehydrating the body can cause significant detriments to performance

## 4 Components Determine Total Daily Energy Expenditure (TDEE)

- Resting Metabolic Rate (RMR)
- Thermic Effect of Food (TEF)
- Exercise Energy Expenditure (EEE)\*
- Non-Exercise Activity Thermogenesis (NEAT)

\*EEE is the variable that can be controlled the most

## WEIGHT GAIN

- Increasing calorie intake is mandatory
  - o Overfeeding is required to put body into an anabolic state
- Increased calorie consumption may be offset by an increase in metabolism such that TDEE will increase
- There is an increase in TEF due to more calorie consumption

## Weight Gain Tips

- Eat 6-8 meals a day

- Do not skip breakfast
- Drink 2% milk with meals
- Eat a 30-minute pre-exercise snack every hour during exercise and immediately post-exercise
- Eat a high calorie meal or shake right before bed
- Be consistent
- Make high-calorie food exchanges
  - Add 2Tbs. peanut butter, honey & brown sugar to oatmeal
  - Add peanut butter & honey to waffles, pancakes, toast & bagels
  - Add low-fat granola to cereal, oatmeal yogurt or trail mix
  - Put nuts on salad, tuna, in cereal & in trail mix
  - Eat a small bag of trail mix throughout the day
  - Drink Boost Plus or Ensure Plus between meals
  - Eat a PBJ sandwich as a 'dessert' post meals

## **WEIGHT LOSS / LEAN OUT**

- Excess body fat can be detrimental for athletes because it can decrease speed
- Trying to achieve ever-lower body percentage can have disadvantages to health and performance
  - Disrupted hormonal balances
  - Disordered eating behaviors
  - Fatigue and delayed recovery
- Eat smaller more frequent meals throughout to day to manage hunger
- Do not skip meals or snacks
- Post-exercise snack of carbohydrates and protein is essential for recovery
- Eat quality healthy foods combining complex carbohydrates, lean protein, and healthy fat at each meal and snack (80-90% of the time)
- Avoid refined carbohydrates, fried foods, foods high in fat, baked goods/pastries/doughnuts, creamy sauces/spreads/dips
- Watch high calorie fluid intake

- Eat until satisfied, not full
  - Choose bread over bagels
  - Choose toast over waffles
  - Choose cereal over granola
  - Choose a granola bar over trail mix
  - Choose skim milk over 2% or whole milk
  - Choose steamed veggies over sautéed veggies
  - Choose water over milk or sports drinks

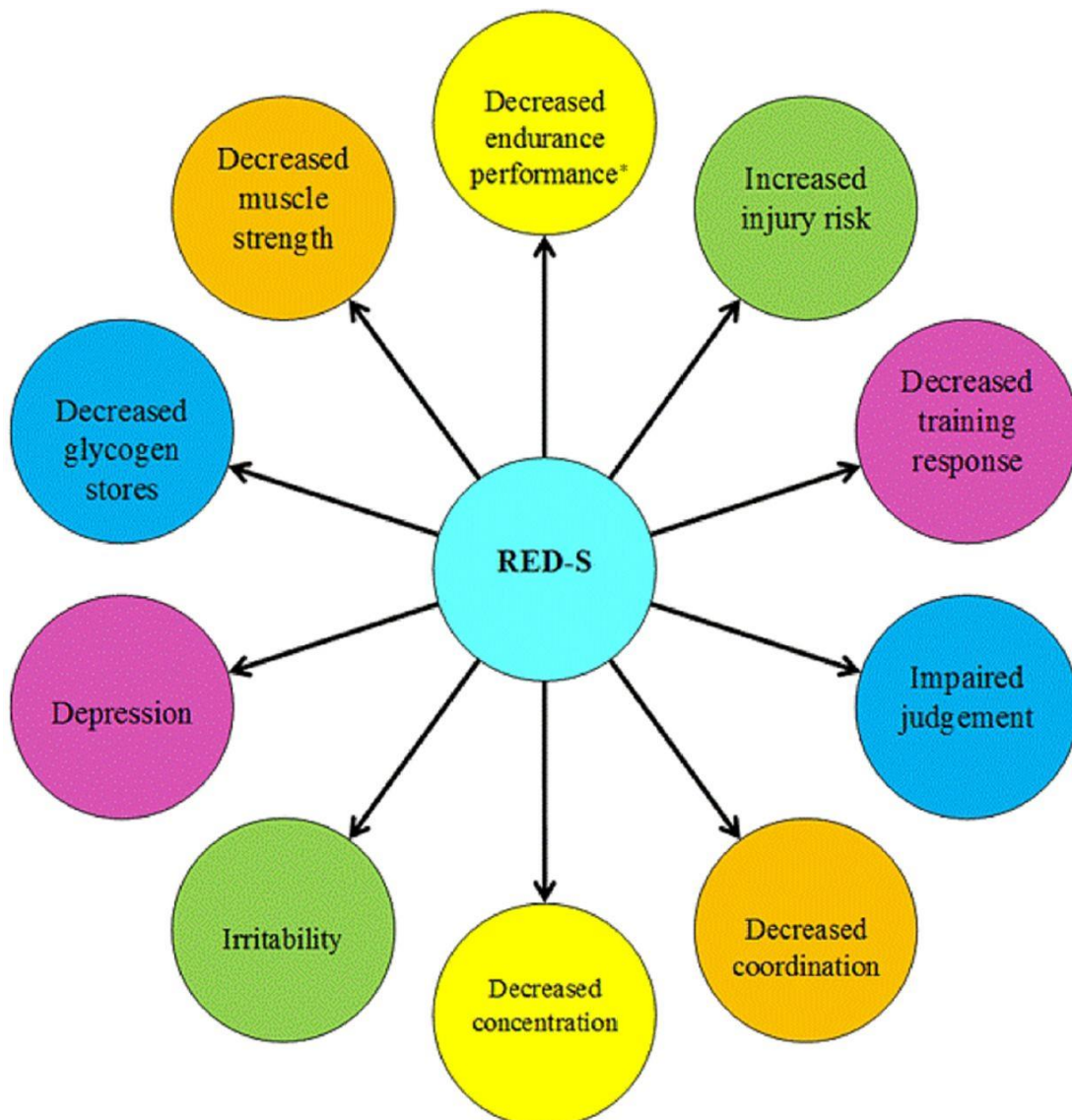
## DANGERS OF UNDER FUELING

Under fueling is when there is an energy deficiency relative to the balance between dietary energy intake and energy expenditure required for health and activities of daily living, growth and sporting events.

Under-fueling affects:

- Physiological function
- Health of the athlete
- Athletic performance

### Relative Energy Deficiency in Sport



# HEALTHY FAST FOOD CHOICES

Source: Amy Goodson, MS, RD, CSSD, LD  
[amy.goodson.rd@gmail.com](mailto:amy.goodson.rd@gmail.com)

## Subway

- 6" sandwich on whole wheat or honey oat
  - Meat, cheese, veggies & sauce on the side
  - w/1 bag Baked Lays or Apples
- 6" breakfast sandwich on whole wheat, honey oat or flatbread w/egg & cheese or ham & cheese

## Chick-Fil-A

- Breakfast: Bagel w/egg & cheese w/fruit cup
- Egg and Cheese Sandwich
- Grilled chicken sandwich w/fruit cup
- Grilled chicken wrap w/small amount dressing
- Grilled chicken salad w/large fruit cup
- Grilled Chicken Strips (no sauce)
- Chicken Teriyaki Bowl w/fruit cup

## McDonald's

- Breakfast: Egg McMuffin w/apple dippers
- Grilled chicken sandwich w/apple dippers
- Grilled chicken snack wrap w/yogurt & granola parfait
- Grilled chicken snack wrap w/snack-size fruit & walnut salad
- Grilled chicken salad w/apple dippers & caramel
- Toasted turkey deli sandwich (no bacon) w/apple dippers & caramel

## Jack In The Box

- Breakfast: Breakfast Jack w/apple sauce or 2% milk
- Grilled chicken sandwich w/fruit cup or apple sauce
- Chicken fajita pita w/fruit cup
- Grilled chicken salad w/dressing on side & fruit cup

## Sonic Drive-In

- Grilled Chicken Salad w/ apple slices & fat-free dipping sauce
- Grilled Chicken Wrap w/apple slices & fat-free dipping sauce
- Power Protein Plate

## Burger King

- Ham Omelette Sandwich
- TENDERGRILL™ Garden Salad
- TENDERGRILL™ Chicken Sandwich (no mayonnaise)

## Whataburger

- Grilled chicken sandwich w/ garden salad & low-fat dressing
- Grilled chicken salad w/ low-fat dressing

## Panera Bread/McAlister's

- Grilled chicken salad & fruit
  - ½ Sandwich on wheat bread w/ ½ salad & dressing on side or broth-based soup
- Breakfast Power Sandwich
- Strawberry Granola Parfait

## Arby's

- Market Fresh sandwich or wrap w/sauce on the side
- Hot Ham & Cheese Melt
- Market Fresh salad

## Wendy's

- Grilled Chicken Go Wrap w/side salad & low-fat dressing
- Grilled chicken sandwich w/ mandarin oranges
- Grilled chicken salad w/ low-fat dressing & mandarin oranges
- Small chili w/4 saltines & side salad w/ low-fat dressing

## Starbucks

- Non-fat latte (cold or hot)
  - can add sugar-free syrup
- Non-fat cappuccino
  - can add sugar-free syrup
- Light frappuccino
  - Brewed coffee or espresso
- Iced coffee
  - can add sugar-free syrup
- Unsweetened Tazo tea (cold or hot)
- Non-fat chai tea
- Yogurt Parfait
- Breakfast wraps & sandwiches
- Oatmeal w/nuts

## Taco Bell

- Fresco menu items
- Power Menu

## Pei Wei

- Kid-Sized Meals
- Grilled meat, veggies and 1 cup rice
- Lettuce wraps

# HEALTHY FAST FOOD CHOICES

Source: Amy Goodson, MS, RD, CSSD, LD  
[amy.goodson.rd@gmail.com](mailto:amy.goodson.rd@gmail.com)

## Make Your Own Burrito Restaurants (Chipotle, Qdoba, etc.)

- Choose a “bowl”, “naked burrito” or salad instead of a burrito
  - The tortillas alone add around 300 calories, 9 grams of fat and are roughly 3 carbohydrate servings!
- Pick no more than 2 of the following:
  - Rice
  - Black beans
  - Pinto beans
  - Corn

\*Refried beans are not a good choice because they usually have lard added!
- Choose chicken over beef.
  - The beef restaurants use is usually higher in fat and calories than the lean meats you would get at home.
  - Ask your server if lean pork or shredded beef is available. If so, then you can try one of those instead.
- Add a half the normal amount of cheese if you desire.
  - Remember, restaurants probably aren’t using 2% cheese!
- If you would like, get light sour cream or guacamole on the side.
  - Only use about 1 tablespoon of one or the other.
- Add as many non-starchy vegetables (peppers, onions, tomatoes, lettuce, etc.) and salsas as you like!

## Smoothie Shops (Smoothie King, Jamba Juice, etc.)

- Make your smoothie “skinny” if the option is available
  - Many smoothie places add sugar to their smoothies which boosts the calorie content, but not the nutrition!
- Choose smoothies that are made with fruit or yogurt instead of ice cream, sorbet or candy.
- Order a small or child’s size.
- If it’s available, look at the nutrition facts and choose smoothies that are 300 calories or less.
- Add a scoop of protein powder if it doesn’t already come with one.
  - This will help you feel full longer.

## General Restaurant Rules

- Add a salad before your meal w/dressing on the side
- Your plate should be assembled as such: ¼ carbohydrate, ¼ protein, ½ vegetables/salad
  - ~1 fist carbohydrate (pasta, rice, potato, sweet potato, bread, corn, peas, etc.)
  - ~1 palm size meat/protein (chicken, fish, red meat, egg, tofu, cottage cheese, etc.)
  - ½ plate veggies (salad, steamed vegetables, sautéed vegetables, raw vegetables, etc.)
- Get all dressings, sauces, gravies, dips, etc. on the side
- Never make pasta, rice, or potatoes the meal...make it the side dish & watch what sauces, butters, etc, it is cooked in or covered with
- Avoid drinks with high calories like sodas, sugar-sweet tea, alcohol, juice, etc.

## PERFORMANCE SUPPLEMENTS

\*\*\*High school student-athletes do not need supplements to enhance sports performance. Most high school athletes do not eat a sufficient diet, meaning purchasing supplements would be a poor investment. Athletes and parents should focus on consistently adhering to the nutrition recommendations in this booklet and consider safe supplements after post-adolescence years.\*\*\*

### Supplement Definition

- “A dietary supplement is a vitamin, mineral, herb, botanical, amino acid, metabolite, constituent, extract, or a combination of these ingredients.”

### Ergogenic Aid Definition

- Substances or techniques other than training that are thought to improve athletic performance.

### Supplement Facts

- There is no research on supplement use in young athletes
- Most athletes don't eat a diet that supports improving performance
- Supplements are supplements, not replacements
- The FDA does not conduct premarket reviews to determine if a supplement is effective
- There is no law that requires the manufacturer to show evidence of effectiveness before or after a supplement is marketed



## ADDITIONAL RESOURCES FOR PARENTS AND ATHLETES

### Additional Resources for Sports Nutrition

- Team USA Athlete Factsheets and Resources
  - <https://www.teamusa.org/About-the-USOC/Athlete-Development/Sport-Performance/Nutrition/Athlete-Factsheets-and-Resources>
- SCAN – Sports, Cardiovascular and Wellness Nutrition
  - <https://www.scandpg.org/sports-nutrition>
- My Sports Dietitian
  - <https://www.mysportsdconnect.com>

### Additional Resources on Supplements

- NSF Certified for Sport
  - <http://www.nsf-sport.com>
- Informed Choice
  - <http://www.informed-choice.org>

## SOURCES

Goodson, Amy. "Navigating Nutrition with Parents, Peers and Pressures." National High School Strength Coaches Association (NHSSCA) Rocky Mountain Regional Conference, 24 March 2017, Denver, CO.

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