<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Guidelines</td>
<td>3</td>
</tr>
<tr>
<td>Daily Checklist</td>
<td>4</td>
</tr>
<tr>
<td>Meeting Your Energy Needs</td>
<td>5</td>
</tr>
<tr>
<td>Feed the Machine</td>
<td>6</td>
</tr>
<tr>
<td>4 R’s of Recovery</td>
<td>7</td>
</tr>
<tr>
<td>Macronutrients</td>
<td>8</td>
</tr>
<tr>
<td>The Athlete Plate</td>
<td>9-11</td>
</tr>
<tr>
<td>Rest Days</td>
<td>9</td>
</tr>
<tr>
<td>Moderate Training Days</td>
<td>10</td>
</tr>
<tr>
<td>Hard Training Days</td>
<td>11</td>
</tr>
<tr>
<td>Pre, During, &amp; Post Exercise Nutrition</td>
<td>12</td>
</tr>
<tr>
<td>Healthy Snack Options</td>
<td>13</td>
</tr>
<tr>
<td>Hydration</td>
<td>14</td>
</tr>
<tr>
<td>Smart Weight Gain</td>
<td>15</td>
</tr>
<tr>
<td>Smart Weight Loss</td>
<td>16</td>
</tr>
<tr>
<td>Eating On Campus</td>
<td>17</td>
</tr>
<tr>
<td>Eating Off Campus</td>
<td>18</td>
</tr>
<tr>
<td>Nutrition on the Road</td>
<td>19</td>
</tr>
<tr>
<td>Grocery Shopping Tips</td>
<td>20</td>
</tr>
<tr>
<td>Athlete Shopping List</td>
<td>21</td>
</tr>
<tr>
<td>Understanding the Nutrition Facts Label</td>
<td>22</td>
</tr>
<tr>
<td>Specific Concerns</td>
<td>23-27</td>
</tr>
<tr>
<td>Vegetarian Athletes</td>
<td>23</td>
</tr>
<tr>
<td>Optimizing Bone Health</td>
<td>24</td>
</tr>
<tr>
<td>Optimal Immune Function</td>
<td>25</td>
</tr>
<tr>
<td>Nutrition for the Injured Athlete</td>
<td>26</td>
</tr>
<tr>
<td>All About Iron</td>
<td>27</td>
</tr>
<tr>
<td>Supplements – Banned Substances</td>
<td>28</td>
</tr>
<tr>
<td>Supplements</td>
<td>29</td>
</tr>
<tr>
<td>Caffeine</td>
<td>30</td>
</tr>
<tr>
<td>Alcohol</td>
<td>31</td>
</tr>
<tr>
<td>Recipes</td>
<td>32-41</td>
</tr>
</tbody>
</table>
General Guidelines

- The right mix of foods can help improve overall health and athletic performance

- A healthy diet is one that is:
  - Adequate
  - Balanced
  - Calorie/portion controlled
  - Moderate
  - Provides variety

- Remember:
  - There are no “good” or “bad” foods
  - Combinations of foods create a healthy or unhealthy diet
  - Start with small changes to make healthier choices you enjoy

<table>
<thead>
<tr>
<th>Choose a variety of whole fruits and vegetables daily</th>
<th>Consume dairy 2-3 times/day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consume less processed foods and sugary beverages</strong></td>
<td><strong>Vary your protein choices</strong></td>
</tr>
<tr>
<td><strong>Choose whole grains over refined/enriched grains</strong></td>
<td></td>
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</tbody>
</table>
Athlete Daily Checklist

☐ I ate breakfast within an hour of waking up.

☐ I ate 3 balanced meals.

☐ I ate 2-3 nutritious snacks.

☐ I ate 2-3 pieces of fruit.

☐ I ate 3-5 servings of vegetables.

☐ I ate 3-4 servings of dairy.

☐ I ate a lean source of protein with each meal.

☐ I ate a good source of carbohydrates with each meal.

☐ I drank water regularly throughout the day.

☐ I replenished within 45 min. following workouts.

☐ I slept 7-9 hours last night.
Determine Your Calorie Needs

Your Basal Metabolic Rate (BMR) is the number of calories you burn at rest. Meeting your BMR is important because your body is truly a machine.

Over the course of 24 hours:
- Your heart beats 103,689 times
- Your blood travels 168,000 miles
- You breathe 23,040 times
- You exercise 7,000,000 brain cells
- You turn in your sleep 2,530 times

Use these equations to determine your BMR:

**BMR Women:**

\[ 655 + (4.35 \times \text{weight in pounds}) + (4.7 \times \text{height in inches}) - (4.7 \times \text{age}) = \text{BMR} \]

**BMR Men:**

\[ 66 + (6.23 \times \text{weight in pounds}) + (12.7 \times \text{height in inches}) - (6.8 \times \text{age}) = \text{BMR} \]

**Activity Level:**

Once you have your BMR, factor in your activity level and add it to your BMR to determine your total caloric needs.

- Sedentary- \( \text{BMR} \times 1.2 \)
- Lightly Active- \( \text{BMR} \times 1.3 \)
- Moderately Active- \( \text{BMR} \times 1.4 \)
- Very Active- \( \text{BMR} \times 1.5 \)
- Extremely Active- \( \text{BMR} \times 1.6 \)

**Thermic Effect of Food**

The thermic effect of food is the energy your body needs to break down the food you consume. This includes the energy required for digestion, absorption, metabolism, and disposal of waste. The thermic effect of food accounts for 10-15% of your total caloric needs and varies depending on the amount and type of food you consume.
Feed The Machine!

- Eat breakfast every day.
- Eat every 3-4 hours.
- Eat a healthy snack before AND after lift or practice.
The Four R’s of Recovery!

Rehydrate

Replenish – Consume a mix of carbs and protein after lift or practice.

Repair – Consume protein with each meal.

Rest – Get 7-9 hours of sleep each night.
### Macronutrients 101

#### Carbohydrates

**Functions**
- Provides energy
- Spares the breakdown of protein and replenishes glycogen stores after exercise

**Benefits**
- Critical for high intensity and long duration exercise
- Helps maintain blood sugar
- Promotes bowel health

**Sources**
- Whole grains, sweet potatoes, couscous, whole wheat bread, whole wheat pasta, oatmeal, brown rice, quinoa, beans

**Tips**
- Choose whole grains over enriched/processed grains
- Carbohydrate consumption should include a variety of grains, fruits, dairy, and vegetables

#### Protein

**Functions**
- Building blocks for bones, muscles, cartilage, skin, and blood
- Makes up enzymes and some hormones

**Benefits**
- Essential to maintain muscle mass and strength
- Tissue repair
- Strengthens immune system

**Sources**
- Lean meats, chicken breast, fish, eggs, tofu, Greek yogurt, milk, beans, nuts, and nut butters

**Tips**
- Be sure to include protein with each meal (average 20-40g/meal depending on individual needs)

#### Fat

**Functions**
- Protection
- Insulation
- Normal cell and hormone function

**Benefits**
- Brain development and growth
- Hair, skin, and nail health
- Enhances taste and satiety

**Sources**
- Olive oil, canola oil, fatty fish, nuts, seeds, avocados, nut butters, flaxseed

**Tips**
- Consuming a diet too low in fat can compromise performance and is harmful to your health
- Be sure to include a good source of fat with each meal
How Should My Plate Look?

Rest Days

On rest days your plate should include good quality protein and whole grains, with half of your plate consisting of fruits and vegetables.
How Should My Plate Look?

1 Lift or 1 Practice

On days where you have 1 lift or 1 practice divide your plate into thirds. 1/3 should consist of good quality protein, 1/3 should be whole grains, and 1/3 should be vegetables.
How Should My Plate Look?

2 Practices or 1 Practice and 1 Lift

On days where you have multiple practices, or practice and lift, your plate should include good quality protein and vegetables with half of your plate consisting of whole grains.
Pre, During, & Post Exercise Nutrition

**Pre**
- **Goal**: Fuel for training/competition
- **1-3 hours before**
  - Choose foods that are carbohydrate rich with some protein, low in fiber, and low in fat
  - Turkey sandwich with fruit, Greek yogurt with fruit and granola, or grilled chicken with brown rice and veggies
  - Drink 2 cups of water before exercise
  - Choose foods that are mostly carbohydrate/easy to digest
  - Granola bar, fruit, pretzels, graham crackers
- **30-60 minutes before**
  - Eat a regular sized meal 3 hours before exercise
  - Consume a small snack right before competition
  - Stick to your typical routine – trying new foods before exercise may upset your stomach

**During**
- **Goal**: Sustain energy and hydration levels
- **Carbs**
  - 30-60g every hour after the first hour of exercise
  - Mainly simple carbohydrates
- **Fluids**
  - 1-2 cups of water every 15-20 minutes during training
- **Examples**
  - ½ plain bagel, orange or apple slices, banana, fig newtons, gatorade, graham crackers, granola bar, pretzels, raisins
- **Tips**
  - If you are training more than 60 minutes you should fuel during your session

**Post**
- **Goal**: Growth and repair
  - Replenish glycogen stores
  - Protein synthesis
- **Food**
  - Simple and complex carbohydrates
  - Consume adequate protein to help your body repair and rebuild muscle
- **Fluids**
  - Rehydrate to replace fluids lost during exercise
- **Examples**
  - Chicken stir fry with rice, peanut butter and jelly sandwich, fish with potatoes and veggies, chocolate milk
- **Tips**
  - It is best to consume a balanced meal within 30-60 minutes post-exercise
  - Eat a heartier meal than pre- and during training choices
Healthy Snack Options

Athletes should eat every 3-4 hours to keep energy levels high for long days filled with classes, practices, lifts, and games. Having snacks in-between meals that contain both carbohydrates and protein is a great way to continually feed the machine throughout the day. Pack 2-3 of these healthy snacks to keep you feeling and performing your best!

- Peanut Butter and Jelly Sandwich
- Protein Bar with a Piece of Fruit
- Trail mix: Nuts, Seeds, Cereal/Granola/Pretzels, Dried fruit (raisins, cranberries, etc.), Dark chocolate chips/M&M’s
- Peanut Butter and Crackers
- Cheese and Crackers
- Tuna and Crackers
- Hummus and Pretzels
- Greek Yogurt, Granola, and Fruit
- Fruit and Peanut Butter
- Fruit and String Cheese
- Beef Jerky
- Chocolate Milk
**Hydration**

**Heat Cramps**
- Caused by lack of water and electrolytes. Occurs in the abdominals, arms, and calves.

**Heat Exhaustion**
- A sign of overheating. Includes heavy sweating and rapid heart rate.

**Heat Stroke**
- Occurs with a body temperature over 104 deg. F. Signs and symptoms include lack of sweat, bright red skin color, dizziness, and fatigue.

**Dehydration of as little as 2% body weight can decrease athletic performance. Negative side effects of dehydration include:**
- Decreased endurance
- Early fatigue
- Increased heart rate
- Increased rate of perceived exertion
- Increased risk of heat illness

**Signs and Symptoms of Dehydration:**
- Thirst
- Less Frequent Urination
- Dry Skin
- Fatigue
- Lightheadedness
- Dizziness
- Confusion
- Increased Breathing
- Increased Heart Rate

**Signs and Symptoms of Dehydration:**
- Thirst
- Less Frequent Urination
- Dry Skin
- Fatigue
- Lightheadedness
- Dizziness
- Confusion
- Increased Breathing
- Increased Heart Rate

**When to hydrate:**

**Before**
- Drink 2 cups of fluid 2 hours prior to exercise
- Drink an additional 1 to 1.5 cups of fluid 10-15 minutes before exercise

**During**
- Drink 1 to 2 cups of fluid every 15-20 minutes during exercise

**After**
- Drink 2 to 3 cups of fluid for every pound lost during exercise

Use this urine chart to determine your hydration status
Adding on 1 pound of muscle requires 2,500 calories. To ensure you pack on as much muscle as possible, train hard and eat right! Here are some tips to help:

- Be realistic and specific about your goal weight
- Aim to gain no more than 1-2 pounds per week
- Don’t skip meals! Eat every 2-3 hours
- Consume 2-3 nutrient dense snacks each day
- Plan ahead! Pack meals and snacks so you have them with you
- Include carbs and protein with each meal and snack
- Drink milk or juice with meals and snacks

SNACK OPTIONS

- PB + J sandwich + fruit + milk
- Trail mix: nuts, cereal/ granola/ pretzels, dried fruit
- Greek yogurt + fruit + granola
- Cereal/oatmeal + nuts + fruit
- Turkey/ham/ roast beef sandwich + cheese + fruit + milk
- Protein Bar (≥ 300Kcal) + fruit + milk
- Smoothie made with Greek yogurt, milk, PB, + fruit
Be realistic and specific about your goal weight

Aim to lose no more than 1-2 pounds per week

Eat every 3-4 hours

Include carbs and protein with each meal and snack

Drink water with meals and snacks

Don't skip meals!

Eat slowly and avoid distractions while eating

1 pound of fat is worth 3,500 calories. To lose weight properly, plan to decrease your caloric intake by or burn an extra 500-1000 calories/day. This will lead to a loss of 1-2 pounds per week.

Use peanut or almond butter instead of cream cheese or butter

Consume high fiber foods to keep you feeling full and satisfied

Stay hydrated! Your body often confuses thirst with hunger

Eat fruit and yogurt in place of sugary desserts

Consume the foods you enjoy in moderation

Choose lean protein and low fat dairy options

Foods to limit: saturated and trans fats, added sugar, and alcohol
General Tips for Eating on Campus

- Making good decisions in CHENEY
  Make the choice to wait in line for the healthier food options instead of going for the quick French fry, pizza, or fried food line
  On your way out of the dining hall grab a piece of fruit instead of dessert
  Try something new at least once a week! The gluten free section always has great new options

- Making good decisions in the UNION
  When building your own burger, try the “grilled chicken” option
  Instead of ordering French fries, grab a piece of fruit or side salad
  Avoid the impulse to buy unhealthy snacks while waiting in line to pay
  Choose grilled chicken, turkey, roast beef, or ham when building your own sandwich or salad at Subway and the salad bar
General Tips for Eating off Campus

QUICK TIPS

Ask for dressings or sauces on the side and request substitutions when necessary.

Hydrate! Water is always the best option, and it’s free!

Aim to eat as similarly as you do at home.

Portions at restaurants are often bigger than one serving size. Make sure to eat a similar amount as you would at home. You can always take the rest of your meal to go!

RESTAURANT DINING

ENTREES
- American:
  - Turkey sandwich
  - Salad with vinaigrette dressing
  - Whole wheat wraps
  - Grilled chicken/fish
- Italian:
  - Whole wheat pasta
  - Lean protein and tomato sauce
  - Grilled chicken/sandwich/salad
- Mexican:
  - Grilled chicken burrito
  - Fajitas on flour tortillas
- Asian:
  - Grilled chicken/beef/shrimp with vegetables and brown rice

SIDES
- Rice
- Fruit cup
- Black beans
- Steamed veggies
- Sweet potatoes
- Guacamole
- Yogurt
- Miso soup
- Edamame
- Side salad

Popular Fast Food Joints

SUBWAY/SANDWICH SHOP
- Grilled chicken/turkey/roast beef sub on wheat bread with veggie toppings and oil based dressings
- Sides: broth based soup, salad, baked chips, pretzels

McDONALD’S/BURGER KING/WENDY’S
- Grilled chicken sandwich or hamburger with lettuce and tomato
- Grilled chicken salad with oil based salad dressing

ITALIAN/PIZZA
- Tomato based pasta sauce dishes with lean protein
- Grilled chicken sandwich or salad
- Pizza with vegetable toppings and side salad

Quick & Easy Restaurant Menu Guide

<table>
<thead>
<tr>
<th>SKIP IT</th>
<th>PICK IT</th>
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<tbody>
<tr>
<td>Fried</td>
<td>Broiled</td>
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<tr>
<td>Battered</td>
<td>Steamed</td>
</tr>
<tr>
<td>Creamy</td>
<td>Blackened</td>
</tr>
<tr>
<td>Crispy</td>
<td>Baked</td>
</tr>
<tr>
<td>Cheesy</td>
<td>Light</td>
</tr>
<tr>
<td>Thick</td>
<td>Fresh</td>
</tr>
<tr>
<td>Breaded</td>
<td>Fresh</td>
</tr>
<tr>
<td>Glazed</td>
<td>Grilled</td>
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</table>
HEALTHY EATING AT RESTAURANTS AND REST STOPS

- **Rest Stops:** Choose high protein snacks such as trail mix, protein bars, string cheese, Greek yogurt, and beef jerky.
- **Restaurants:** Choose grilled options over fried options. Choose oil based dressings on salads. Request sauces be served on the side.

CONTINENTAL BREAKFAST AT HOTELS

- Choose whole-foods such as fresh fruit, yogurt with granola, oatmeal, whole wheat bagel with peanut butter, or whole grain cereal with milk.
- Avoid pastries and baked goods such as donuts, danishes, muffins, and croissants.

SNACKS TO PACK

- **Cooler:** Greek Yogurt, String Cheese, Hard-Boiled Eggs, Vegetables with Hummus.
- **Shelf-Stable Foods:** Fresh Fruit, Crackers, Tuna Packets, Trail Mix, Peanut Butter and Jelly Sandwiches, Beef Jerky

HYDRATION

- Remember to stay hydrated while on the road! Water is always the best option! Avoid soda and alcohol!
## GROCERY SHOPPING TIPS

### MONEY SAVERS
- Buy fresh produce that is in season
- Buy frozen fruits and vegetables if they are not in season
- Don’t shop when you are hungry
- Make a list before going to the grocery store
- Buy family sized packages
- Sign up for the grocery store’s rewards card (i.e. Big Y Silver Savings)
- Compare the unit prices when choosing between the same foods
- Buy generic or store brands
- Buy in bulk (i.e. toilet paper, paper towels, meat, etc.)
- Have a goal in mind of how much you want to spend
- Download coupons

### GENERAL TIPS
- Wash/rinse fruits and veggies before eating
- Choose a variety of fruits and vegetables of all different colors!
- Choose low-fat/skim dairy products
- Choose Greek yogurt over regular yogurt
- Choose lean meats
- Check expiration dates
- Check for cracked eggs
- Stay around the perimeter of the store
- Spend less time in the aisles
## Athlete Shopping List

### PRODUCE
- Fresh Fruits of Choice
- Fresh Vegetables of Choice
- Sweet Potatoes
- Salad Greens
- Baby Carrots
- Green Beans
- Potatoes
- Tomatoes
- Peppers
- Hummus
- Garlic
- Bananas
- Dried Fruit
- Squash
- Avocados
- Onions
- Tofu
- Tempeh

### FROZEN
- Frozen Fruit
- Frozen Vegetables
- Whole Grain Waffles
- Frozen Meals (per serving: <600mg sodium, ≥4g fiber, >15g protein)

### SNACK
- Wheat Crackers
- Pretzels
- Rice Cakes
- Tortilla Chips
- Air Popped Popcorn
- Nuts
- Trail Mix
- Dark Chocolate
- Granola Bars (<7g sugar, >3g fiber, >3g protein)

### DAIRY
- Milk
- Eggs
- Greek Yogurt
- Cheese
- Cottage Cheese
- Butter

### MEAT
- Chicken Breast
- Chicken Tenders
- Ground Beef
- Pork Loin
- Sirloin
- Ground Turkey
- Lean Ground Beef

### NONPERISHABLE
- Pasta
- Brown Rice
- Canned Tuna or Chicken in water
- Peanut Butter
- Whole Grain Cereal (per 1 cup: >5g fiber, <5g sugar, >3g protein)
- Oatmeal
- Applesauce
- Granola
- Lentils
- Canned Soup
- Canned or Dried Beans (kidney, black, chickpeas)
- Tortillas
- Salsa
- Quinoa
- Crushed Tomatoes
- Vegetable or Chicken Bouillon

### SNACK
- Wheat Crackers
- Pretzels
- Rice Cakes
- Tortilla Chips
- Air Popped Popcorn
- Nuts
- Trail Mix
- Dark Chocolate
- Granola Bars (<7g sugar, >3g fiber, >3g protein)

### DAILY STAPLES
- Olive Oil
- Balsamic Vinegar
- Salt
- Pepper
- Soy Sauce
- Honey
- Maple Syrup
- Mustard
- Ketchup
- Sriracha (hot sauce)
- Cinnamon
- Italian Seasoning
- Dried Herbs and Spices of Choice

### ETHNIC
- Black Beans
- Brown Rice
- Couscous
- Chickpeas
- Quinoa
- Salsa

### MEAT
- Chicken Breast
- Chicken Tenders
- Ground Beef
- Pork Loin
- Sirloin
- Ground Turkey
- Lean Ground Beef

### FROZEN
- Frozen Fruit
- Frozen Vegetables
- Whole Grain Waffles
- Frozen Meals (per serving: <600mg sodium, ≥4g fiber, >15g protein)

### BAKERY/BREAD
- Whole Wheat Bread (per slice: ≥3g fiber, <125mg sodium, <3g sugar)
- Whole Wheat English Muffins
- Whole Wheat Bagels
- 100% whole wheat, not “enriched”

### ETHNIC
- Black Beans
- Brown Rice
- Couscous
- Chickpeas
- Quinoa
- Salsa

### SEAFOOD
- Tilapia
- Cod
- Salmon
- Shrimp
- Trout

### DELI
- Sliced Chicken Breast
- Sliced Ham
- Sliced Turkey Breast
- Sliced Roast Beef
- Sliced Cheese

### BEVERAGES
- Coffee
- Tea Bags
- Seltzer Water
- 100% Orange Juice
- Bottled Water
Understanding the Nutrition Facts Label

OLD LABEL

Serving Size: Compare this to the portion size you are actually eating.

% Guide:
≤5% is low
≥20% is high

Limit these nutrients

Get enough of these nutrients

Ingredients are listed from most to least. Those in the largest amounts are listed first.

NEW LABEL

Serving size 2/3 cup (55g)

Amount per serving
Calories 230
Total Fat 8g
Saturated Fat 1g
Trans Fat 0g
Cholesterol 0mg
Sodium 160mg
Total Carbohydrate 37g
Dietary Fiber 4g
Sugars 1g
Protein 3g
Vitamin A
Vitamin C
Calcium
Iron

Limit these nutrients

Get enough of these nutrients

Ingredients: Water, high-fructose corn syrup, pear and grape juice concentrates, citric acid, water-extracted orange and pineapple juice concentrates, natural flavor

NEW LABEL

Serving size 2/3 cup (55g)

Amount per serving
Calories 230
Total Fat 8g
Saturated Fat 1g
Trans Fat 0g
Cholesterol 0mg
Sodium 160mg
Total Carbohydrate 37g
Dietary Fiber 4g
Sugars 1g
Protein 3g
Vitamin D 2mcg
Calcium 260mg
Iron 8mg
Potassium 235mg

Limit these nutrients

Get enough of these nutrients

Ingredients: Water, high-fructose corn syrup, pear and grape juice concentrates, citric acid, water-extracted orange and pineapple juice concentrates, natural flavor
Vegetarian Athletes

• Forms of Vegetarianism
  • Vegan - consisting of only plant-based foods
  • Lacto-ovo - includes milk, milk-based foods, and eggs
  • Pescatarian - includes fish, dairy products, and eggs

• Eating a variety of foods on a regular basis increases nutrient exposure and decreases risk of deficiency

• Nutrients at risk for the vegetarian athlete:

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Plant Food Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Beans, lentils, soy, quinoa, nuts, seeds, eggs, dairy, fish.</td>
</tr>
<tr>
<td>Iron</td>
<td>Beans, lentils, nuts, seeds, whole grains, green leafy veggies, dried fruit, fortified cereal.</td>
</tr>
<tr>
<td>Calcium</td>
<td>Milk, cheese, yogurt, green leafy vegetables, fish with bones, fortified OJ, soy, almonds.</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Eggs, fortified milk, juice, yogurt, mushrooms.</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>Dairy products, eggs, nutritional yeast, fortified soy milk, cereal.</td>
</tr>
<tr>
<td>Omega 3 Fatty Acids</td>
<td>Walnuts, flaxseeds, chia seeds, canola oil, pistachios.</td>
</tr>
<tr>
<td>Zinc</td>
<td>Beans, lentils, nuts, seeds, whole grains, soy, hard cheeses, fortified cereal.</td>
</tr>
</tbody>
</table>
Optimizing Bone Health and Muscle Function

- Consume adequate calcium and vitamin D
- Calcium rich foods:
  - Milk, yogurt, cheese, calcium fortified tofu, leafy greens
- Vitamin D rich foods:
  - Egg yolks, fatty fish (salmon, trout), mushrooms, fortified milk, fortified orange juice

<table>
<thead>
<tr>
<th>Snack Ideas</th>
<th>Meal Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoothie made with Vitamin D fortified milk and spinach.</td>
<td>Stir fry with mushrooms, tofu, green veggies.</td>
</tr>
<tr>
<td>Greek yogurt with granola and nuts</td>
<td>Salmon or tuna sandwich with milk</td>
</tr>
<tr>
<td>Hard boiled eggs and whole grain grain toast.</td>
<td>Omelet made with veggies, cheese, and turkey/ham.</td>
</tr>
</tbody>
</table>

- Individuals who have low energy availability and abnormal menstrual periods are at risk for low bone density and may need more calcium & vitamin D
- Have your vitamin D level assessed, preferably during the winter months
- Include foods containing calcium and protein into post exercise recovery such as chocolate milk or Greek yogurt and granola
- Expose your arms, legs and trunk to the sun between the hours of 10 a.m. and 3 p.m. for 5-30 minutes, 2-3 times per week
Nutrition for Optimal Immune Function

- Select lean protein sources high in iron and zinc to support immune function
- Consume Vitamin C rich foods to promote immune function
- Consume antioxidant rich foods to combat oxidative stress
- Include foods high in Omega-3s to help decrease inflammation
- Ensure adequate Vitamin D to promote immune defense
- Choose foods that contain prebiotics and probiotics for gut health

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Food Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>Red meat, dark poultry, fish, beans, lentils, nuts, seeds, whole grains,</td>
</tr>
<tr>
<td></td>
<td>green leafy veggies, dried fruit, fortified cereal.</td>
</tr>
<tr>
<td>Zinc</td>
<td>Red meat, dark poultry, beans, lentils, nuts, whole grains, shellfish,</td>
</tr>
<tr>
<td></td>
<td>seeds, soy, hard cheeses, fortified cereal.</td>
</tr>
<tr>
<td>Antioxidants</td>
<td>Variety of veggies and fruits of different colors, dark chocolate, nuts.</td>
</tr>
<tr>
<td>Omega 3s</td>
<td>Fatty fish (salmon, trout), walnuts, flaxseeds, chia seeds, canola oil,</td>
</tr>
<tr>
<td></td>
<td>pistachios.</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Fatty fish (salmon, trout), eggs, mushrooms and fortified: milk, juice,</td>
</tr>
<tr>
<td></td>
<td>and yogurt.</td>
</tr>
<tr>
<td>Prebiotics</td>
<td>Garlic, leeks, onions, artichokes, bananas, barley, oats, apples.</td>
</tr>
<tr>
<td>Probiotics</td>
<td>Yogurt and kefir containing Lactobacillus and bifidobacterium, kimchi,</td>
</tr>
<tr>
<td></td>
<td>Kombucha, tempeh, sauerkraut.</td>
</tr>
</tbody>
</table>
Nutrition for the Injured Athlete

• Be consistent and don’t skip meals
• Include lean protein with each meal to promote healing
• Limit foods and drinks with added sugars
• Omega 3 may reduce inflammation and swelling
• Vitamin C supports collagen synthesis
• Vitamin A aids in cell growth and development
• Zinc is involved with wound healing
• Calcium and Vitamin D are essential for bone development and repair

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Lean meat, seafood, poultry, Greek yogurt, beans, lentils, eggs, nuts, seeds, soy, quinoa.</td>
</tr>
<tr>
<td>Omega 3s</td>
<td>Fatty fish (salmon, trout, mackerel), walnuts, flaxseeds, chia seeds, canola oil, pistachios.</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Citrus fruits, strawberries, kiwi, tomatoes, bell peppers</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Sweet potatoes, carrots, cantaloupe, red bell peppers.</td>
</tr>
<tr>
<td>Zinc</td>
<td>Red meat, dark poultry, beans, lentils, nuts, whole grains, shellfish, seeds, soy, hard cheeses, fortified cereal.</td>
</tr>
<tr>
<td>Calcium</td>
<td>Milk, cheese, yogurt, green leafy vegetables, fish with bones, fortified OJ, soy, almonds.</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Fatty fish (salmon, trout), eggs, mushrooms and fortified: milk, juice, and yogurt.</td>
</tr>
</tbody>
</table>
All About Iron

• Importance of iron
  • Component of hemoglobin & myoglobin that deliver oxygen to muscles
  • Inadequate iron may lead to impaired muscle function and aerobic capacity

• Who is at increased risk for iron deficiency?
  • Females
  • Vegetarians/vegans
  • Individuals restricting calories
  • Individuals participating in strenuous physical activity

• Boosting Iron Stores
  • Enhance iron absorption by consuming iron rich foods with Vitamin C sources
  • Avoid consuming tea or coffee with iron-rich meals
  • Use cast iron skillets for cooking

<table>
<thead>
<tr>
<th>Iron</th>
<th>Vitamin C</th>
</tr>
</thead>
</table>

• Monitor Iron Status
  • Consult your physician for a complete blood count and serum ferritin levels
  • Iron supplementation is not recommended without clinical evidence and may become toxic if unnecessary
Supplements- Banned Substances

Consult a physician and do your homework before taking any supplements! Make sure you are well informed about the product and that it is appropriate for your performance goals.

- Just because it can be easily purchased at a store or over the internet does not mean it is allowed by the NCAA
- Student-athletes who test positive can lose their eligibility or be suspended for a game or more
- Tobacco is banned during practice and games
- Know if your prescription medicines contain banned substances
- Don’t look for “quick fix” supplements. If it’s too good to be true, it probably is!
- Have a specific goal for the supplement you take and ask yourself, “Did I try to achieve it through my diet first?”
- Supplement use is at your own risk

<table>
<thead>
<tr>
<th>Drug Class (examples)</th>
<th>NCAA Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Anabolic Steroids</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Beta 2 Agonists (ex- asthma meds)</td>
<td>Prohibited or Restricted</td>
</tr>
<tr>
<td>Beta Blockers</td>
<td>Prohibited in Riflery</td>
</tr>
<tr>
<td>Corticosteroids (ex- prednisone)</td>
<td>Allowed</td>
</tr>
<tr>
<td>Dietary Supplements</td>
<td>Warning*</td>
</tr>
<tr>
<td>Diuretics</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Local Anesthetics</td>
<td>Restricted</td>
</tr>
<tr>
<td>Masking Agents</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Peptide Hormones (ex- growth)</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Stimulants</td>
<td>Prohibited (except pseudoephedrine or phenylpropanolamine)</td>
</tr>
<tr>
<td>Street Drugs (ex- marijuana)</td>
<td>Prohibited</td>
</tr>
</tbody>
</table>

Prohibited- drug class may not be used
Restricted- drug class may be used under exceptional circumstances defined by NCAA
Allowed- category may be used, assuming the use is legal, appropriate
**Supplements**

Supplements should only be used in addition to a good diet. Before resorting to supplements, improve your diet by including foods that contain vitamins and minerals.

<table>
<thead>
<tr>
<th>Vitamin/ Mineral</th>
<th>Whole Food Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>Milk, Cheese, Kale</td>
</tr>
<tr>
<td>Iron</td>
<td>Beans, Beef, Dark Turkey</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Leafy Greens, Nuts, Quinoa</td>
</tr>
<tr>
<td>Manganese</td>
<td>Nuts, Beans, Legumes</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>Dairy Products, Eggs, Cereals</td>
</tr>
<tr>
<td>Potassium</td>
<td>Potatoes, Bananas, Yogurt</td>
</tr>
<tr>
<td>Zinc</td>
<td>Brown Rice, Potatoes, Milk</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Sweet Potatoes, Carrots, Spinach</td>
</tr>
<tr>
<td>Vitamin B1</td>
<td>Whole Grain Products</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Citrus Fruits, Red and Green Peppers</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Fatty Fish, Fortified Milk</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Vegetable Oil, Almonds, Peanut Butter</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>Broccoli, Spinach, Green Tea</td>
</tr>
</tbody>
</table>
Caffeine

Caffeine is a central nervous system stimulant proven to enhance performance. In moderate amounts caffeine is safe and allowed, however there are considerations that should be taken into account when using caffeine.

Benefits:
- Decreases perception of fatigue
- Enhances performance in endurance and speed endurance athletes
- Increases concentration

Risks:
- Anxiety, jitters, rapid heart rate
- GI distress
- Insomnia
- Dehydration when not properly hydrated

Strategies for Consumption:
- 2-6 mg/kg of body weight is an adequate amount
- Taking 200-300 mg regularly may not yield a performance benefit
- Taking 6-9 mg/kg a day will not necessarily further improve performance. This will likely lead to a negative “overstimulation”

NCAA Regulation:
- 6-8 cups 2-3 hours before competition can result in a positive drug test

<table>
<thead>
<tr>
<th>Product</th>
<th>Amount of Caffeine (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cup of home brewed drip coffee</td>
<td>80-100</td>
</tr>
<tr>
<td>1 cup of instant coffee</td>
<td>65-100</td>
</tr>
<tr>
<td>¼ cup of espresso</td>
<td>100</td>
</tr>
<tr>
<td>1 cup of decaf coffee</td>
<td>5</td>
</tr>
<tr>
<td>1 cup of brewed tea</td>
<td>50</td>
</tr>
<tr>
<td>1.5 cups of soft drink with caffeine</td>
<td>35-55</td>
</tr>
<tr>
<td>1 cup of an energy drink</td>
<td>80</td>
</tr>
<tr>
<td>Energy bar with caffeine</td>
<td>50-100</td>
</tr>
<tr>
<td>1.5 ounces of dark chocolate</td>
<td>30</td>
</tr>
<tr>
<td>2 caplets of Excedrin</td>
<td>130</td>
</tr>
<tr>
<td>1 caffeine tablet</td>
<td>200</td>
</tr>
</tbody>
</table>
Alcohol

Effect on Performance:
Impairs reaction time and mental focus for several days after consumption
Interferes with lactic acid breakdown, causing increased soreness after exercise
Decreases hand-eye coordination

Alcohol should only be consumed by those 21 and over. Drink responsibly!

One night of binge drinking can decrease performance for 3-5 days.

Negative effects of over consumption:
Decreases testosterone which can decrease muscle recovery and lean muscle mass
Increases body fat percentage
Decreases quality of sleep
Depresses the immune system
Increases stress hormones
Acts as a diuretic, causing dehydration
Post Workout PB&J Smoothie

Ingredients
6 oz. plain nonfat Greek Yogurt
2 cups chopped fresh or frozen strawberries
2 teaspoons peanut butter
1 frozen banana, chopped
½ cup ice
Fill with low fat milk
Put all ingredients in a blender. Blend until smooth. Serve and Enjoy!

Homemade Electrolyte Drink

Ingredients:
1/4 cup sugar
1/4 tsp. salt
1/4 cup hot water
1/4 cup orange juice
2 tbs. lemon juice
3 1/2 cups cold water

Directions:
1. In the bottom of pitcher, dissolve sugar and salt in hot water.
2. Add juice and remaining cold water; chill.
No Bake Peanut Butter Oat Squares

Ingredients
1 cup peanut butter (or nut butter of choice)
½ cup honey
3 cups rolled oats
½ cup raisins (optional)

Directions
1. Line a 9x9 in. pan with foil, spray lightly with non-stick cooking spray.
2. Melt peanut butter and honey together until smooth in microwaveable dish.
3. Combine with oats and raisins.
4. Press into prepared pan and refrigerate until firm.

Peanut Butter & Apples

Ingredients:
Green apples
Smooth peanut butter
Granola
Dried cranberries

Directions:
1. Cut apples into wedges.
2. Warm up peanut butter and drizzle over apples.
3. Sprinkle granola and cranberries over apples.
Pumpkin Pie Overnight Oats

Ingredients:
1/3 cup pumpkin puree
¼ cup old fashioned oats
¼ teaspoon ground cinnamon
1/3 cup non-fat plain Greek yogurt
1 tbs. honey

Directions:
1. Add all the ingredients in a plastic container or mason jar.
2. Mix contents up until mixture is thoroughly combined.
3. Cover and refrigerate for 8 hours overnight.
4. Serve cold.
Banana Pinwheels
Ingredients:
Whole Wheat tortilla
1 banana
2 tbs. peanut butter

Directions:
Spread peanut butter on a whole wheat tortilla, wrap around a banana and slice into circles.

Chovocado Pudding
Ingredients:
1 ripe avocado
¼ cup cocoa powder
¼ cup liquid sweetener
(agave, honey, maple syrup)
¼ cup milk
1 teaspoon vanilla extract

Directions:
Peel and quarter avocado. Put all ingredients in a blender or food processor, blend until smooth. Serve and Enjoy!
Old Bay Chicken

Mix:
1 cup olive oil
1 teaspoon black pepper
1 teaspoon lemon juice
2 tbs. + 2 tsp. Old Bay seasoning

Marinate:
1 Pack of boneless chicken breast in mix for ~30 min

Directions:
Bake in oven for 30 minutes at 425F. Serve with rice and vegetable of choice

Grilled Honey Chicken

Ingredients:
2 pounds chicken breast
2 tbs. ketchup
2 tbs. honey
¼ teaspoon black pepper
½ teaspoon salt

Directions:
Mix ingredients together in small bowl. Brush on chicken breast and grill chicken until done.
**Chili Lime Sauce**

**Ingredients:**
- 3 tbs. fresh lime juice
- 1 tbs. chili powder
- Pinch of salt
- Pinch of black pepper
- 1 teaspoon olive oil

**Directions:**
1. Combine all ingredients in a small bowl to make a thin paste.
2. Use as a rub or marinade chicken in refrigerated plastic bag for up to 24 hours.

**Balsamic BBQ Glaze**

**Ingredients:**
- 1 cup red onion
- 2 cups balsamic vinegar
- ¼ cup Dijon mustard
- 2 tbs. honey
- 1 tbs. Worcestershire sauce

**Directions:**
1. Combine all ingredients in a sauce pan and bring to a boil.
2. Reduce to simmer and cook 10-20 min. or until it reaches a syrup consistency.

**Mustard Sauce**

**Ingredients:**
- ½ cup Dijon mustard
- ¼ cup frozen apple juice concentrate
- ¼ teaspoon red chili flakes
- 2 tbs. sesame oil
- ¼ cup water

**Directions:**
1. Combine all ingredients in a small bowl and mix well.
2. Use as a rub or marinade chicken in refrigerated plastic bag for up to 24 hours.
Lentils and Potatoes

Ingredients:
2 cups green lentils, cooked
1 pound chopped sweet potatoes
1 garlic clove, minced
¼ cup olive oil
1 tablespoon Italian Seasoning

Directions:
1. Cook green lentils according to directions on package.
2. Preheat oven to 365F.
3. Mix chopped potatoes, garlic, olive oil and Italian seasoning in a bowl.
4. Pour in casserole dish and bake in oven for 30 min., stirring frequently until potatoes are pierced easily with fork.
Pesto Chicken and Green Beans

Ingredients:
2 tbs. olive oil
4 chicken breasts, boneless and skinless
Salt, to taste
Black pepper, to taste
1 pound green beans
2 cups cherry tomatoes, halved
½ cup basil pesto

Directions:
1. Cook chicken in pan with olive oil, salt, and pepper.
2. Add green beans, tomatoes, and pesto, and cook until tender.
3. Serve over brown rice or with a sweet potato.
Guacamole

Ingredients:
2 ripe avocados
½ medium ripe tomato, chopped
¼ teaspoon salt
1 small red onion, finely chopped
Juice from 1 lime

Directions:
Combine all ingredients in food processor or with a spoon. Enjoy with pita chips, baked tortilla chips or cut up veggies.
7 Layer Dip

Ingredients:
10 oz. hummus
½ cup plain Greek yogurt
1 tomato, diced
½ cup cucumber, diced
½ cup lettuce, chopped
1/3 cup feta cheese
¼ cup Kalamata olives, chopped

Directions:
Layer all ingredients in a casserole dish. Serve with pita chips, veggies, or crackers.