



SAINTS NUTRITION GUIDE



This guide was compiled by
the Department of Athletics at
St. Augustine High School
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6 COMMANDMENTS FOR EATING LIKE AN ATHLETE

1. EAT BREAKFAST

Your body needs fuel after fasting all night during sleep. Starting the day with an empty tank will negatively affect your mental and physical performance.

2. HYDRATE

Water is crucial to your health. It makes up 60% of your body weight. Dark urine is a sign that you are dehydrated.

3. EAT LEAN PROTEINS

Athletes should consume adequate amounts of lean protein to aid in repair and building of tissues.

4. EAT MORE FRUITS AND VEGETABLES

Athletes need nutrient dense foods. Eating fruits and vegetables is the best way to get the nutrients you need to perform your best.

5. NEVER FEEL HUNGRY

The best athletes graze rather than gorge. Eat the right foods all day instead of starving between infrequent large meals.

6. REFUEL TO RECOVER AND REPAIR

Your body needs fuel immediately after training. Waiting longer than thirty minutes after exercise before refueling is stressful and hinders your body's ability to recover and repair itself.



NUTRITIONAL GUIDELINES

ALWAYS ADJUST CALORIE INTAKE TO MEET TRAINING REQUIREMENTS

- Inadequate caloric intake during training = fatigue, weight loss (Including muscle), impaired performance
- Excessive caloric intake during lighter training = increase in body fat, and impaired performance

AVOID ERRATIC EATING SKIPPING BREAKFAST OR LUNCH:

- Reduces quality of training session due to reduced muscle and liver glycogen stores (energy)
- Impairs recovery

ADEQUATE NUTRITION IS CRITICAL BEFORE, DURING, AND AFTER EXERCISE TO:

- Maintain quality of training
- Promote optimum recovery
- Build muscle and other body tissue

EAT 5-6 TIMES A DAY, EVERY 2-3 HOURS

- Ensures adequate amount of calories to maintain energy and build tissue through continuous influx of nutrients throughout the day

WEIGHT GAIN AND LOSS

- Muscle mass gains and weight loss should be a gradual process. Not come in leaps and bounds
- Healthy weight gain should come in the amount of 1/2-1 pound per week
- Healthy Weight loss should come in the amount of 1-2 pounds per week

**NUTRITION CAN ACCOUNT FOR UP TO 70-80%
OF YOUR RESULTS. WITHOUT PROPER NUTRITION YOU WILL NOT HAVE THE
OPPORTUNITY TO REALIZE MAXIMAL RESULTS FROM TRAINING.**

CARBOHYDRATES

Carbohydrates are the primary fuel for your muscles. The longer and more intense the exercise, the more carbohydrates your muscles need.

BEST SOURCES:

- Brown Rice
- Quinoa
- Potatoes (Rotate between different types)
- Whole grain/sprouted pastas & breads
- Oatmeal

AVOID:

- Cereal for breakfast
- Chips
- Processed snack foods
- Pastries
- White bread/rice/pasta/tortillas

GUIDELINES:

- Your minimum carbohydrate intake should be roughly 40-60% of your daily intake, with a minimum of 200 grams per day.
- A majority should be coming from vegetables and fruits. Higher amounts are needed with increased muscle mass and physical activity. However, excessive carb consumption will be stored as fat.
- Consume at least 25 grams of fiber per day from vegetables, fruits, legumes, nuts, seeds, and whole grains.

PROTEIN

Proteins are often called the building blocks of the body. Protein consists of combinations of structures called amino acids that combine in various ways to make muscles, bone, tendons, skin, hair, and other tissues. Athletes need protein primarily to repair and rebuild muscle that is broken down during exercise and to help optimize carb storage.

BEST SOURCES:

- Whole eggs (preferably free range or omega-3)
- Red meat
- Chicken
- Whey protein
- Fish (preferably wild caught)
- Turkey
- Whole milk (Preferably organic/grass fed)
- Greek yogurt
- Mixed nuts
- Gelatin
- Wild game

AVOID:

- Soy protein
- Highly processed luncheon meats such as Bologna and hot dogs (the fewer ingredients listed, the better)

GUIDELINES:

- You should aim for 1 gram of protein per pound of bodyweight per day
- This should be about 20-30% of your daily caloric intake.
- If you need to lose weight or lean up, consuming beyond 1 gram per pound of body weight may help you feel satisfied after eating as well as maintain a healthy body composition and good immune function.
- You should include some protein before and after training to ensure adequate recovery.



FATS

Dietary fat is often blamed for many health problems. However, fat is an essential nutrient for optimal health. Disregard many of the myths surrounding dietary fats. Fats are precursors to many hormones and are necessary for brain (your brain is 60% fat!) and body development. During high intensity exercise where carbohydrates are the main fuel source fat is needed to help access stored carbohydrates.

BEST SOURCES:

- Coconut oil
- Palm oil
- Extra virgin (or cold-pressed) olive oil
- Avocado and avocado oil
- Most nuts and nut oils
- Fish (preferably wild caught) and fish oils
- Egg yolks
(Preferably free range or omega-3 eggs)
- Grass fed meat/butter
- Dairy (preferably organic/
grass fed/raw)

AVOID:

- Hydrogenated/partially hydrogenated fats and oils
- Trans fats and vegetable oils made from soy, corn, safflower, canola or cottonseed
- Fried foods

GUIDELINES:

- No less than 30% of your calories should come from Fat. Otherwise you will see a DECREASE in TESTOSTERONE!
- Avoid excess (More than 5 gm) fats post workout, as they tend to slow digestion.
- When cooking with fats and oils:
 - o Nut oils are best when using high heat because of their high smoke point. This decreases the chance of oxidation (which leads to health problems).
 - o Olive oil is not as stable at high heat. It is most beneficial in salads and with other veggies.

FRUITS & VEGGIES

Fruits and vegetables are particularly high in vitamins. Many are sources of antioxidants as well. They are alkaline producing, which can help to preserve bone mass and muscle tissue. Because fruits and vegetables have a high water and fiber content, they are low in calories relative to their volume.

BEST SOURCES:

- All berries
- Apples
- Bananas
- Grapefruit
- Oranges
- Tart Cherries
(great for muscle recovery!)

ALL VEGGIES ARE GOOD. HIGHLY RECOMMENDED ARE:

- Asparagus
- Spinach
- Kale
- Chard
- Artichoke
- Beets
- Zucchini

GUIDELINES:

- Try and incorporate at least one serving (2 fists full) into each meal.
- Focus on high color (yellow-orange, red, deep green, and blue) choices.
- It is strongly encouraged, when possible, to buy the following items organic due to their high pesticide prevalence:

- o Apples
- o Berries and Cherries
- o Grapes
- o Celery
- o Peaches
- o Spinach
- o Kale

- o Collard greens
- o Lettuce
- o Peppers
- o Nectarines
- o Cucumbers
- o Tomatoes

- Typically, foods with thick rinds or skins (like bananas and avocados) do not need to be purchased organic.



HYDRATION & DEHYDRATION

- Sweat losses as little as 2% of bodyweight can begin to impair athletic performance and temperature regulation.
- Consuming fluid during exercise improves athletic performance and protects health.
- Thirst and urine color should dictate water consumption. Use this chart as a reference.

You are over-hydrated.

You are hydrated. You are ready for your match and/or practice.

You are hydrated.

You may be dehydrated.

You are dehydrated. Your performance will decrease and you are at risk for heat illness.

You are dehydrated. Your performance will decrease and you are at risk for heat illness.

You are very dehydrated. Your performance has decreased. You need to drink more immediately!

Speak to a Health Care Provider immediately!

<http://www.wtatennis.com/nutrition-and-hydration/article/2538526>

- If you notice white stains in your clothes following workouts, it probably means you are a “salty sweater.” This means you need to be extra aware of your electrolyte intake so as to replace what has been lost in sweat. An easy way to remedy this is to add a little extra salt to your meals and have a banana for dessert.

WHAT SHOULD BE ON YOUR PLATE

The following image is a depiction of a meal one can consume any time of day, other than Post-Workout:

2/3 OF THE PLATE:

Vegetables- nutrient-dense, high fiber

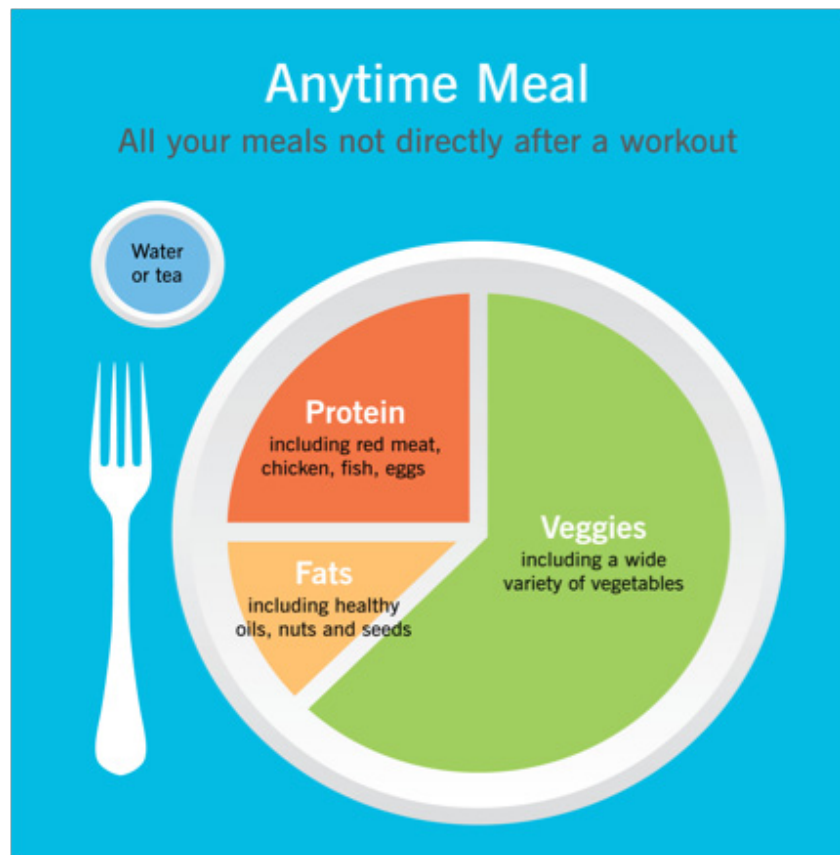
- Beans and Berries are optional additions

1/3 OF THE PLATE:

Protein (1/4 of the plate)- maintains lean mass and optimizes the metabolism

HEALTHY FAT (1/8 OF THE PLATE)

The drink of choice is water or tea.



Cease eating when you're about 80% full, not when the plate is empty. Most of your starchy carbs should be consumed within the 3 hours following exercise



If you feel tired or lethargic before a workout eat a well rounded snack such as a sandwich and fruit, or pretzels and cheese.

If you find yourself struggling to gain healthy weight, check to make sure you are getting adequate fat and protein. If those numbers are good you may add a starchy carb serving to your "Anytime Meal."

WHAT SHOULD BE ON YOUR PLATE

The following image is a depiction of a meal one can consume within 3-hours Post-Workout:

1/2 OF THE PLATE:

Vegetables

- Beans and Berries are optional additions

1/2 OF THE PLATE:

Protein

ONE SIDE DISH (1-2 CUPS) of starchy Carbohydrates

The drink of choice is water or tea.

This plate includes starchy carbohydrates and protein which are vital during the post-exercise period, in addition to a mix of vegetables and fruits.

Post Workout portions should be slightly larger as we add a small side dish of starchy carbohydrates on top of a full plate of protein and fruits/veggies.



NUTRIENT TIMING FOR OPTIMUM PERFORMANCE

BENEFITS:

- Enhances performance
- Optimizes fuel availability
- Improves body composition

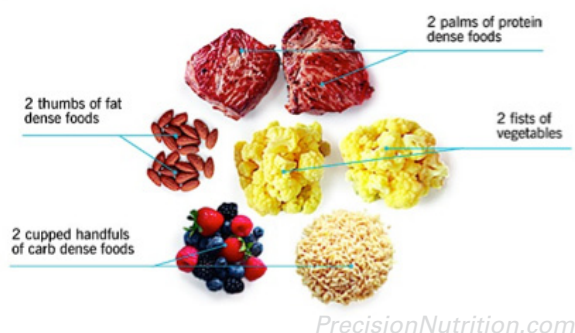
PRE-TRAINING MEAL

- Improves performance by 12.5-15%
- Prevents hunger
- Supplies energy for muscles

2-3 HOURS BEFORE EXERCISE

CONSUME A MIXED MEAL

CONSISTING OF:



0-60 MINS BEFORE EXERCISE

CONSUME A SMALL MEAL

CONSISTING OF:

- Protein- A few small slices of turkey, chicken, or a protein powder
- Carbs- Slow and fast digesting such as fruit and a slice of bread
- Example: Turkey sandwich with berries, Almond butter with honey sandwich and a banana, or a Fruit Smoothie. Whatever you choose make sure it is easy on your stomach.

RECOVERING ATHLETE NUTRIENT PROFILE

PHASE	OBJECTIVE
ENERGY PHASE 10 min prior to and during a work out	Increase nutrient delivery to muscles and spare muscle glycogen and protein Limit immune system suppression Minimize muscle damage Set the nutritional stage for a faster recovery following a workout
ANABOLIC PHASE Within 45 min after a workout	Shift metabolic machinery from a catabolic state to an anabolic state Speed the elimination of metabolic wastes by increasing muscle blood flow Replenish muscle glycogen stores Initiate tissue repair and set the stage for muscle growth Reduce muscle damage and bolster the immune system
GROWTH PHASE I Rapid segment The first 4 hours after a workout	Maintain increased insulin sensitivity Maintain the anabolic state
GROWTH PHASE II Sustained Segment The next 16-18 hours after a workout	Maintain positive nitrogen balance and stimulate protein synthesis Promote protein turnover and muscle development

Ivy, John, and Robert Portman. *Nutrient Timing: The Future of Sports Nutrition*. Laguna Beach, CA: Basic Health Publications, 2004.

NUTRITION IMMEDIATELY AFTER TRAINING OR COMPETITION

BENEFITS:

- Speeds muscle recovery
- Replaces fluid loss

EAT MEAL OR SNACK WITHIN 30 MINUTES:

- Carbohydrate to stimulate insulin release
- Protein to provide amino acids (20-40gm)



SAMPLE OF RECOVERY SNACKS:

- Protein/Carb Shake
- Cottage cheese, Crackers, and an apple
- Bagel or granola, fruit, and Greek yogurt
- Chocolate milk
- Turkey sandwich
- Egg whites and Toast

Continue to eat using the “Post workout meal” guidelines for any meals consumed within 3 hours following training. After 3 hours return to “Anytime Meal” guidelines.

THE BEST TIME TO EAT CARBS

CARBTYPE	EXAMPLES	WHENTO EAT
Fiber-rich	Vegetables (kale, spinach, carrots, tomatoes, celery, cucumber, zucchini, beets, bok choy, lettuce, collards, radish, onion, chard, watercress, etc.) Beans & Legumes, Berries	Eat often, and any time of day (especially for veggies)
Starchy	Sprouted grain breads and pastas Potatoes (Sweet and regular) or yams Quinoa Amaranth Oats Brown Rice	During the 3 hours or so after exercise
Refined sugary	Desserts Dried Fruit and Fruit juice Processed foods and Sports drinks Most commercial nutrition bars	Eat rarely, and during the 3 hours after exercise.

HEALTHY SPICES

THAT SHOULD BE CONSUMED OFTEN



CAYENNE PEPPER/POWDER

- Improves cardiovascular function and circulation
- Increases fat oxidation (burning)
- Relieves general pain, heartburn, cold and fever
- Fights Cancer



GARLIC

- Nutrient dense
- Boosts immune system
- Reduces blood pressure and improves cholesterol
- Improves bone health
- May improve metabolism



GINGER

- Anti-inflammatory
- Fights cancer
- Boosts immune system



TUMERIC/CURCUMIN

- Anti-inflammatory
- Fights Cancer
- Black Pepper greatly enhances absorption



BLACK PEPPER

- Fights Cancer
- Improved Metabolism
- Anti-inflammatory
- Boosts immune system



CINNAMON

- Lowers Blood Lipids
- Increases Insulin sensitivity
- Antifungal/Antibacterial properties
- If possible, use only Indonesian "ceylon" cinnamon

MEAL EXAMPLES

SAMPLE **ANYTIME MEALS**: SUPER SMOOTHIES (GREAT BREAKFAST OPTION)

STEP 1: Pick a liquid

- Water
- Almond milk (unsweetened)
- Cow's milk
- Hemp milk (unsweetened)
- Iced green tea

6-12 oz is recommended.

STEP 2: Pick a protein powder

- Whey protein (Best option)
- Rice protein
- Pea protein
- Hemp protein
- Other proteins or protein blend

1-2 scoops (25-50 g). No Soy Protein.

STEP 3: Pick a veggie

- Dark leafy greens: Spinach / Swiss chard / kale
- Pumpkin / sweet potato
- Beets / greens
- Cucumber / celery
- Powdered greens supplement

Add 1-2 fists.

STEP 4: Pick a fruit

- Berries (Best option)
- Apples
- Bananas
- Cherries
- Dates
- Pineapple / mango
- Powdered fruit supplement

You can use fresh or frozen fruit. 1-2 cupped handfuls.

STEP 5: Pick a healthy fat

- Walnuts
- Flax, hemp, chia seeds
- Nuts and/or nut butters
- Flavored liquid fish/cod liver oil supplement

Nuts and seeds also give the shake consistency. 1-2 thumbs is usually enough.

STEP 6: Pick a topper / extra

- Coconut
- Cacao nibs, dark chocolate
- Greek Yogurt
- Oats, granola
- Cinnamon
- Ice cubes (if using fresh fruit)

A little goes a long way.

MEAL EXAMPLES

SIRLOIN BURGER + COCONUT CAULIFLOWER MASH

Ground sirloin or lean ground beef, 6-8 oz
Salt, 2 pinches
Pepper, 1 pinch
Chili powder, 1 pinch
Fresh minced garlic, 1 tsp
Onion (finely chopped), 2 tbsp
Worcestershire sauce, 1 tsp
Olive oil or coconut oil cooking spray
Cauliflower (rough chopped), 3 cups
Cashews (crushed), ¼ cup
Coconut milk, ¼ cup
Salt, 1 pinch
Pepper, 1 pinch
Cinnamon, 1 pinch

LARGE SALAD WITH SEASONING

Beans, ½-1 cup
Olive oil and Balsamic vinegar, 1 tbsp
Black Pepper, 1- pinches
1 serving of chopped chicken or turkey (1-2 palms sized serving)
Healthy fat or omega-3/fish oil supplement

SPANISH OMELET

Whole eggs, 2-6
Black beans, ½ cup
Swiss chard, ½ cup
Green onions, mushrooms, Salsa, 1 Cup
Cheese, 1 oz
Healthy fat or omega-3/fish oil supplement

FRUITY CHICKEN + ZUCCHINI AND MUSHROOMS

Bone/skinless chicken breast
(whole/chopped), 6-8oz
Pineapple (1-in cubed), 3
Apple (core removed, 1-inch cubed), 3 pieces
Red pepper & Onion (cut into large pieces),
3 pieces each
Butter (melted), 1 tbsp
Ginger, ½ tsp
Salt, ¼ tsp
Chili powder, ¼ tsp
Zucchini (chopped to desired size), 2
Olive oil cooking spray
Onion (finely diced), ¼ cup
Fresh garlic (minced), 1 tsp
Shitake or portobello mushrooms (diced), ¼ cup
Tomato (finely diced), ¼ cup
Low-fat feta cheese (crumbled), ¼ cup
Pecans (crushed), ¼ cup
Tomato sauce, ½ cup

PEACHES AND CRÈME OMELET

Coconut oil cooking spray or butter
Whole eggs, 2-6
Cinnamon, 2 pinches
Splenda® or Stevia (1 package), ¼ tsp
Low-fat cottage cheese, ½ cup
Small peaches (diced), 2
Pecans (crushed), ¼ cup
Greek yogurt, ½ cup

SAMPLE POST-WORKOUT MEALS

PESTO CHICKEN PIZZA

Boneless skinless Chicken breast, 6-8 oz
Salt, ¼ tsp
Pepper, 2 pinches
Olive oil cooking spray
Whole wheat tortilla
Pesto, 3 tbsp
Broccoli florets (small), ¼ cup
Sundried tomato (thin sliced), ¼ cup
Asparagus (cut into ½ inch pieces), ½ cup
Aged white Cheddar, ½ cup

BLUEBERRY OATMEAL

Oats, 1 cup
Blueberries, 1 cup
1 serving (20-40grams) protein powder
Milk, 1/2 cup

PASTA

Whole grain/sprouted noodle of choice, 4 cups
Coconut oil or butter (melted), 1 tbsp
Salt, ¼ tsp
Pepper, 2 pinches
Cinnamon, 2 pinches
Olive oil cooking spray
Ground sirloin or extra lean ground beef, 12 oz
Onion (small diced), 1 cup
Tomato sauce, 2 cups
Cashews (crushed), ¼ cup
Parmesan cheese, ½ cup

BANANA CRÈME PIE OATMEAL

Low-fat milk, 1 cup
Coconut milk, ¼ cup
Old fashioned large flake oats, ½ cup
Water, ¼ cup
Vanilla protein (equal to 25 g protein), 1 scoop
Banana (sliced), ½

OTHER OPTIONS

Berries, bananas, or pineapple, 1-2 cups
1 English muffin with nut butter
6-8 egg Whites
Omega-3 supplement
Greek Yogurt/cottage cheese, 1-2 cups
Berries, 1-2 cups
Bagel
1 yam
1 cup black beans
½ cup mixed vegetables
Chicken Breast, 6-8oz
1 cup oats
1 cup blueberries
1 scoop protein powder
1 serving greens powder
1/2 cup milk
Omega-3 supplement

LATE NIGHT LOW CARBOHYDRATE SNACKS FOR ATHLETES

1. 1-2 cups Cottage cheese or Greek yogurt with 1-2 palms of berries
2. A cup of cottage cheese or Greek yogurt with half a scoop of whey protein with a splash of water to help with desired consistency
3. Sugar free pudding with half a scoop of whey protein with a splash of water to help with desired consistency
4. Sugar free tapioca with half a scoop of whey protein
5. Cottage cheese with sugar free flavoring mixed in
6. Mixed nuts (Preferably raw, soaked before)
7. Almond Butter with chocolate whey protein mixed on a stick of celery
8. Chocolate low carbohydrate whey protein blended with water and some type of nut butter
9. Sugar free jello with a protein snack
10. Cheese
11. Cheese with turkey or roast beef
12. Cheese and/or meat with hummus spread
13. Canned tuna or canned chicken with any low carb spice or additive
14. Low carb Jerky
15. Hard boiled eggs
16. Low carbohydrate protein bars – *Stay below 5 net carbohydrates*

PORTION CONTROL

THOSE NEEDING TO LEAN UP, USE THIS AS A GUIDE FOR PORTION CONTROL:

If you need to gain weight, use these guidelines, then add an additional half serving from each group. Let your appetite be your guide. Unless you need to lean up, you may increase your portion size if you are hungry. If you are trying to gain weight, you may find yourself forcing yourself to eat. **YOU MUST EAT TO GROW!**

90% COMPLIANCE RULE

- If you are compliant with this eating plan 90% of the time, then 10% of the time you may “cheat” and eat a reasonable portion of whatever you would like.
- 6 meals a day x 7 days a week= 42 meals a week. 10% of 42 meals = ~4 meals.
- **2-4 Cheat meals a week if you are leaner. 2 or less if you are trying to lean up**
- It's best to save these cheat meals for the weekends, at the end of the day, after filling up on protein.
- Even cheat meals can have some nutritional value.

Calorie Control: A Simple Guide

FOR MEN

Calorie counting is often complicated, tedious, and inaccurate. So, at Precision Nutrition, we've come up with an easier way to control calories. No weigh-scales or measuring cups. No calculators or smart phones. Just the ability to count to two. And your hand. To build your meals:



2 palms of protein dense foods with each meal



2 fists of vegetables with each meal



2 cupped handfuls of carb dense foods with most meals



2 entire thumbs of fat dense foods with most meals

Note: Your hand size is related to your body size, making it an excellent portable and personalized way to measure and track food intake.

Also note: Just like any other form of nutrition planning, this guide serves as a starting point. Stay flexible and adjust your portions based on hunger, fullness, and other important goals.

PrecisionNutrition.com

ADDITIONAL INFO

SUPPLEMENTS:

- Direct all questions regarding supplements to the strength and conditioning and athletic training staffs.
- You should be able to accomplish all your goals with diet and training alone.

SLEEP:

You must sleep a minimum of 8 hours to ensure optimal recovery, cognitive (mental) function, and body composition.

In short, if you do not get adequate sleep you will be:

- Fat
- Tired
- Slow (mentally and physically)
- Weak



Schoolwork cannot be an excuse to lose out on sleep. To avoid this you must:

- Manage your time wisely
- Eliminate distractions
- Get your schoolwork done in a timely fashion
- Take advantage of time in class to get work done

FINAL THOUGHTS:

To save time and energy, it is recommended to prepare meals in bulk and in advance. Example: Cook all your chicken, vegetables, and rice on Sunday evening and store them in Tupperware or plastic bags. They will then be easily available and ready to eat during the week. Crock-pot recipes are also a great healthy/practical option.

If cost or availability of healthy food items is an issue, you may be provided a list of the best stores and cost-effective options for certain foods.