

NUTRITIONAL TOOL KIT

FOR DYSLIPIDEMIA MANAGEMENT

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HOW TO READ A NUTRITIONAL FACTS LABEL

The nutrition facts label can help us understand our food/drink choices, allowing us to know what we're consuming.

1. Servings Per Container tells you how many servings are in the entire container/package. One package may have more than one serving.

2. Serving Size is based on the amount of food normally eaten at one time. The information on the label is usually based on one serving of the food/drink but some may show it for the entire package.

3. Calories show how many calories are in one serving of the food/drink. Do you want to learn more about your child's calorie needs? Go to www.myplate.gov/myplate-plan.

4. Daily Value (%DV) shows how much of a nutrient adds to the total daily diet based on one serving size. %DV can be used to see if one serving of a food/drink is high or low in a single nutrient and to compare products. Make sure the serving sizes match if comparing.

- 5% DV or less per serving is considered low for a nutrient
- 20% DV or more per serving is considered high for a nutrient

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	



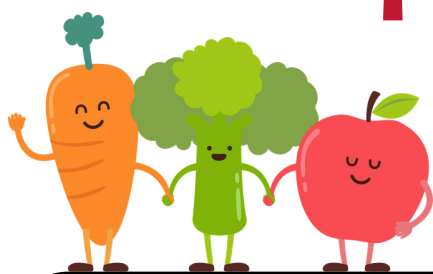
Nutrients to increase: Dietary fiber, vitamin D, calcium, iron, and potassium



Nutrients to decrease: Added sugars, sodium, and saturated fats

- **Added sugar:** The American Heart Association recommends limiting added sugar to no more than 25 g (6 teaspoons) per day for most women and children & no more than 36 g (9 teaspoons) per day for most men. The Dietary Guidelines for Americans recommends limiting added sugars to less than 10% of calories per day.
- **Sodium:** One teaspoon of salt equals 2,300 milligrams of sodium. Daily recommended sodium intake guidelines for children and adolescents are as follows:
 - Ages 1–3 — Less than 1,200 milligrams
 - Ages 4–8 — Less than 1,500 milligrams
 - Ages 9–13 — Less than 1,800 milligrams
 - Ages 14–18+ — 2,300 milligrams (this is about 1 teaspoon of salt)
- **Saturated fats:** The Dietary Guidelines for Americans recommends limiting this fat to less than 10% of calories per day starting at age 2 - which is about 22 g of saturated fat daily.

TIPS FOR A HEALTHY LIFESTYLE



Drink mostly water

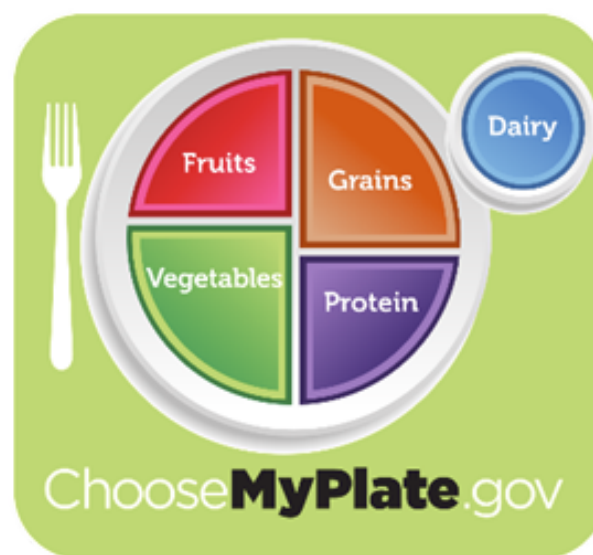
- Try adding fruit to water for flavor (berries, cucumber, lemon)
- Choose plain, low-fat, or unsweetened milk or milk alternatives (soy, almond, oat, etc.)
- Avoid sugary drinks (soda, energy drinks, sports drinks, fruit-flavored drinks, and other drinks with added sugar)
 - Choose zero calorie drinks while working to decrease sugary drinks until water can be the main drink consumed
- Limit fruit juice – if drinking, choose 100% fruit juice and have no more than 4-6 ounces per day
- Avoid caffeinated drinks

Eat more fruits and veggies

- Make half your plate fruits and vegetables at every meal
- Choose fruits and vegetables at snack time
- Eat different colors of fruits and vegetables throughout the day

Focus on portion control

- Use smaller plates and bowls
- Use measuring cups and spoons
- Make meals at home more often
- Limit fast food/processed food
 - Dine out/take out portions are larger than recommended
 - Choose healthier sides
 - Choose grilled/baked over fried options
- Follow the “MyPlate” guidelines
 - visit **ChooseMyPlate.gov** for more information



Move your body

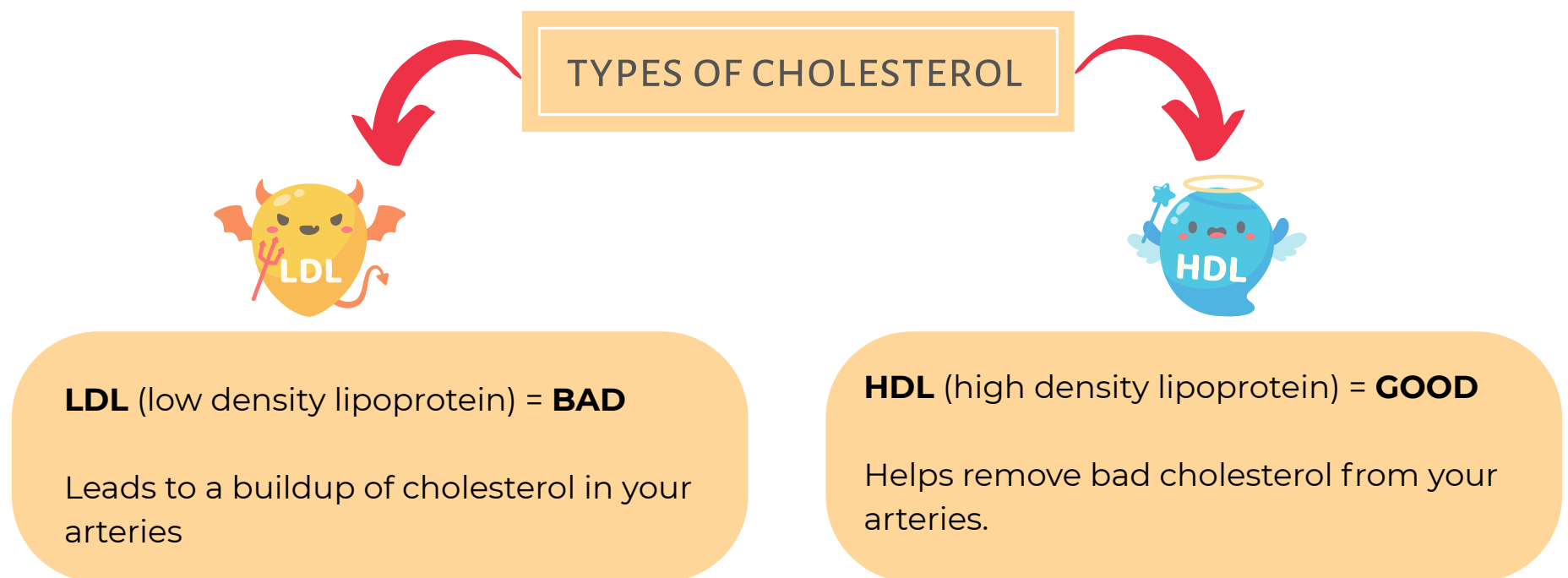
Physical Activity Recommendations:

- **Infants** several times a day through floor-based play where they can interact with others
- **Toddlers** at least 180 minutes (3 hours) a day in activities that develop gross motor skills such as walking, unstructured free play and playing on a playground
- **Ages 3-5** at least 180 minutes (3 hours) of physical activity throughout the day (about 15 minutes of every hour while awake)
- **Ages 6-17** 60 minutes (1 hour) every day, including activities that raises your heart rate and activities that strengthen your muscles and bones, at least three (3) days a week

HOW TO IMPROVE CHOLESTEROL

What is it?

Cholesterol is a waxy substance your body needs to build cells, and make vitamins and other hormones, but too much of it can cause problems. Cholesterol comes from two sources – your liver and your food. Your liver makes all the cholesterol you need; however, your body will get it from animal foods as well. For example, meat, poultry, and dairy products all have dietary cholesterol.

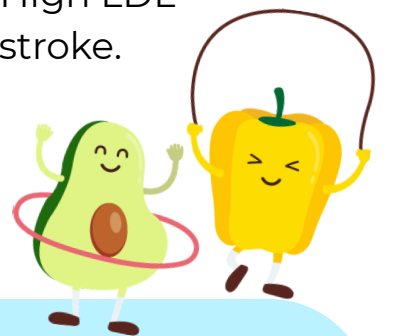


Too much LDL or not enough HDL raises the risk of cholesterol building up in the inner walls of the arteries that supply the heart and brain

Why does it matter?

Cholesterol flows within the blood and, as the amount rises, so does your health risk. High LDL cholesterol can increase the risk of cardiovascular disease, such as heart disease and stroke.

How can we improve it?



Exercise helps to get rid of the bad, LDL cholesterol, by raising the good, HDL cholesterol.

Physical Activity Recommendations:

- **Infants** several times a day through floor-based play where they can interact with others
- **Toddlers** at least 180 minutes (3 hours) a day in activities that develop gross motor skills such as walking, unstructured free play and playing on a playground
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SIMPLE TIPS TO LOWER CHOLESTEROL WITH NUTRITION



Nutrition: Eating food low in fiber and high in saturated fat and trans-fat increases the chance of getting high cholesterol and related conditions, such as heart disease.

Limit your intake of saturated fats:

Saturated fats are often found in animal foods. When eaten in excess, it leads to plaque buildup in the arteries that can block blood flow, increasing the risk of heart attack and stroke. The Dietary Guidelines for Americans recommends limiting this fat to less than 10% of calories per day starting at age 2 - which is about 22g of saturated fat daily.

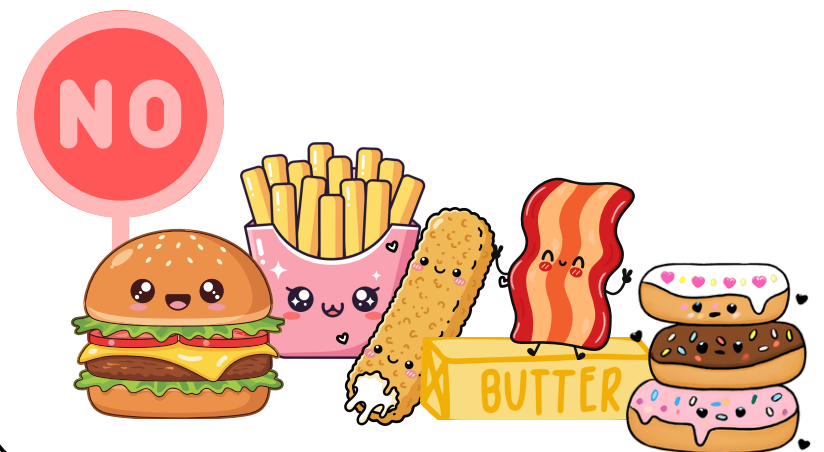
Examples of foods high in saturated fats:

processed meats, fatty meats, full-fat dairy, fried foods, coconut oil and palm oil

Avoid trans fats:

Fast foods and processed foods are typically high in saturated fats and the act of frying foods can create trans fats. Naturally, trans fat can be found in meat and dairy foods from ruminant animals (e.g. cows, sheep, goats, deer). Trans fats can raise your bad, LDL cholesterol and lower your good, HDL cholesterol. Since trans fats harm your body, it is best to avoid it.

Examples of foods that contain trans fats: fast-food, restaurant food, deep-fried food, bacon or beef fat, high-fat desserts, high-fat dairy, meat drippings and stick butter.



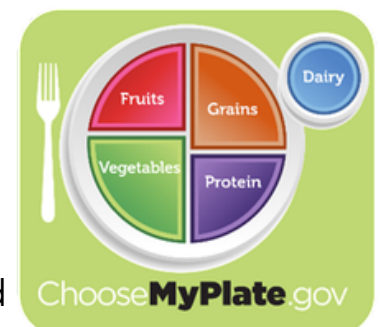
Add more soluble fiber to your day:

Fiber is a nutrient from plants that comes in two forms: soluble and insoluble. Soluble fiber is not absorbed in the intestine, allowing it to bind to cholesterol and remove it from the body. Total and LDL-cholesterol can lower by 5 to 11+ points by eating 5 to 10 grams of soluble fiber daily. To do this, choose food with 1 to 3 grams of soluble fiber each day. Be sure to drink more water as you eat more fiber.

Examples of foods with soluble fiber: vegetables, fruits, whole grains, beans, chia seed, ground flax meal, and avocado

Eat portioned meals and include variety:

It is best to choose a variety of foods at each meal following the “MyPlate” guidelines, making sure that each food group is portioned correctly.



LDL CHOLESTEROL NUTRITION THERAPY

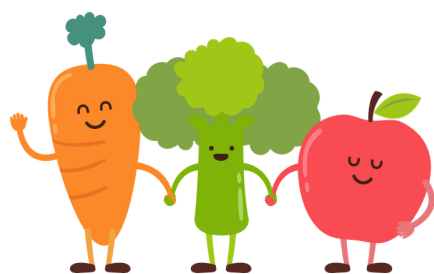
The chart below provides guidelines for foods to choose more often and food to choose less often.

CHOOSE MORE



Fiber:

- Whole fruits
 - Fresh or frozen fruit without added sugar
 - Canned fruit without added sugar or syrup
 - Applesauce without added sugar
- Vegetables
 - Fresh vegetables
 - Frozen or canned vegetables low in sodium (rinse and drain)
 - Potatoes with skin (white and sweet variety)



- Whole grains
 - 100% whole-grain breads and bagels
 - Whole grain cereals
 - Whole wheat waffles and pancakes
 - Oatmeal
 - Whole wheat or bean-based pastas
 - Microwave popcorn or air popped popcorn without added fat
 - Brown rice
 - Wild rice
 - Quinoa
 - Barley
 - Millet
 - Farro
- Buckwheat
- Legumes (peas, beans, lentils)
- Chia seeds, ground flax meal



Monosaturated Fats:

- Vegetable cooking oils and sprays (ex: extra virgin olive oil, avocado oil)
- Avocados
- Nuts (almonds, cashews, peanuts)

CHOOSE LESS / AVOID



Saturated Fats:

- Proteins:
 - Fatty and processed meats
 - Poultry skin
 - Bacon, sausage
 - Bologna
 - Salami, pepperoni
 - Hot dogs, melts, brats
 - Corned beef
 - Duck or goose
 - Fried meat or fish
 - Whole egg (no more than 1 per day)
 - Poultry with skin
 - Ribs
 - Hamburger
 - Organ meats (ex: liver)
- Dairy:
 - 2% or whole milk
 - Full fat yogurt
 - Full fat cheese
 - Full fat cream cheese
 - 4% cottage cheese
 - Full fat sour cream
 - Cream and half-and-half
 - Ice cream



- Fruit
 - Fried fruits
 - Fruit prepared with added fat (chocolate and yogurt covered)
- Vegetables
 - Fried or breaded vegetables, (ex: onion rings, French fries, hash browns)
 - Vegetables made with cheese or butter
 - Vegetables served with cream sauce

LDL CHOLESTEROL NUTRITION THERAPY

The chart below provides guidelines for foods to choose more often and food to choose less often.

CHOOSE MORE

Polyunsaturated fats (omega-3 and omega-6 fats):

- Fatty fish (salmon, mackerel, herring, tuna, trout)
- Some plant oils (soybean, sunflower, safflower, canola oil)
- Nuts and seeds (pine nuts, walnuts, Brazil nuts, flaxseed, chia seed)

Better options for Low saturated fat foods

- Low saturated fat margarine with no trans fats
- Salad dressings: nonfat, low fat, light, olive oil based
- Low fat mayonnaise
- Proteins:
 - Dried beans and lentils
 - Fish (ex: salmon, tuna, mackerel, herring); fresh, frozen, or canned (in water)
 - Egg whites or egg substitute
 - Poultry with skin removed
 - Lean cuts of venison
 - Lean cuts of beef, pork, or lamb
 - Nuts
 - Nut butters without partially hydrogenated oils
 - Seeds (ex: sesame, pumpkin, sunflower, chia, flax)
 - Shellfish
 - Tofu or tempeh
 - Edamame
- Dairy:
 - Skim or 1% milk

CHOOSE LESS / AVOID

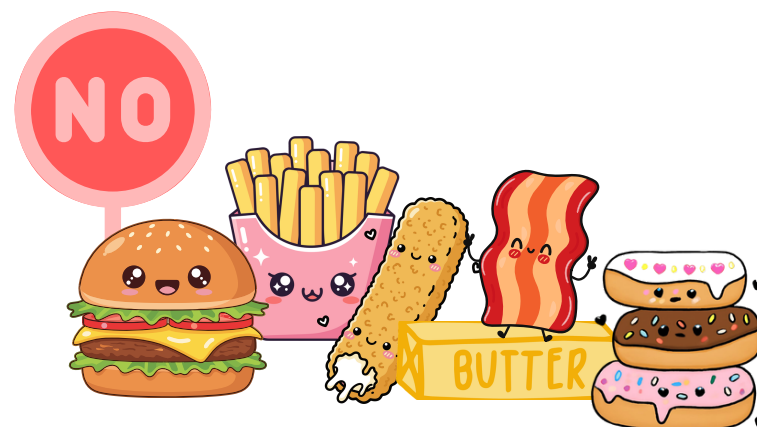
Saturated fats cont...

- Grains
 - White bread and bagels
 - Pancakes, waffles made from white flour
 - White noodles/pastas
 - White or fried rice
 - Baked goods, donuts, and pastries
 - Pretzels
 - Biscuits and croissants
 - Chips and cheese puffs
 - Buttered or cheese crackers

Trans fats (try to avoid!)

Trans fat may be naturally found in the following foods. Look for “0 g trans fat” on the Nutrition Facts label.

- Fast-food/restaurant foods
- Deep-fried foods
- High fat desserts
- High fat dairy
- Bacon fat, beef fat
- Meat drippings
- Stick butter



LDL CHOLESTEROL NUTRITION THERAPY

The chart below provides guidelines for foods to choose more often and food to choose less often.

CHOOSE MORE

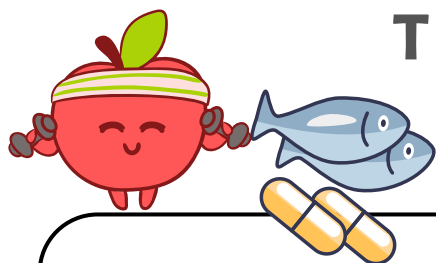


Better options for Low saturated fat foods cont...

- Dairy:
 - Fat free or low-fat plain or Greek yogurt with little to no added sugar
 - Fat free, part-skim or reduced fat cheese
 - Fat free or reduced fat cream cheese
 - Fat free, 1% or 2% cottage cheese
 - Fat free or light sour cream
 - Unsweetened soy milk
 - Unsweetened almond milk
 - Unsweetened oat milk



TRIGLYCERIDE NUTRITION THERAPY

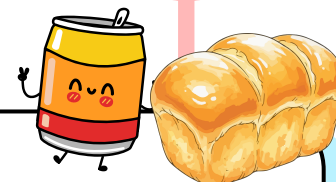


In addition to the above:



Low added sugar/more complex carbohydrates

- Cereals or snacks/dessert with added sugar less than 7 grams per serving
- Products where fructose or sucrose is NOT one of the first 5 ingredients listed on the label
- Fresh fruit or canned fruit without added sugar or syrup
- Increase dietary fish (increase omega-3 fats)



In addition to the above (limiting saturated fats, avoiding trans fats)



Low added sugar/more complex carbohydrates

- Simple sugars drinks and foods with added sugars
- Juice, regular soda, teas, sports drinks, syrups, sweetened sauces)
- Refined carbohydrates (white bread, white rice), starchy foods
- Fruit juice (Choose 100%; No more than 4-6 oz daily)

HOW TO IMPROVE TRIGLYCERIDES

What are Triglycerides?

Triglycerides are a type of fat that is stored in the blood. This happens when we eat too many sugary foods and drinks. Too much in the blood can cause artery damage and even heart disease. It can also increase risk for pancreatitis (inflammation of pancreas).

What are risk factors for developing high triglycerides?

Eating not-so-healthy foods, lack of exercise, overweight/obesity, high blood sugar/diabetes, certain illnesses, family history, smoking or vaping, and some medications.

How can we keep triglycerides in check?

Keep a healthy body weight, eating foods with a lot of nutrients, exercise regularly, and quitting smoking or vaping.

What are Sugars?

Sugars are in carbohydrates and can be simple or complex, coming from plant foods like fruits, vegetables, and nuts.

Simple sugars

give us quick energy.

Complex sugars

give us slower, stable energy

Eating plant foods with simple sugars is good because they have many nutrients. But too much sugar from things like table sugar, processed foods, and drinks can cause problems like gaining weight, high blood sugar, and too many triglycerides.

What sugars are not good for us?

Granulated sugar (table sugar) and high fructose corn syrup are mostly found in pre-packaged, processed foods and/or sugar-sweetened beverages.

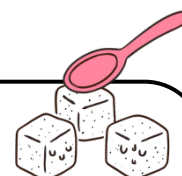


• **Avoid**

- Cakes, candies, cookies, and ice creams have added sugar.
 - Eating less of these helps manage triglycerides.
- Snack foods made with white flour or white rice can raise triglycerides.

• **Choose**

- Whole wheat or whole grain options when possible.



Sugar Recommendations:

- The American Heart Association recommends drinking no more than 25g of added sugars per day (6 tsp) for children less than 18 years of age.
- On average, a regular 12 oz. soft drink contains about 40g of added sugar. This is over 1.5x the recommended daily amount.



Beverage Facts:

- According to the Centers for Disease Control (CDC), almost two-thirds of boys and girls drank at least one sugar-sweetened beverage per day.
- In 2017-2018, the average daily intake of added sugars was 17 teaspoons for children and young 2-19 years of age.

HOW TO IMPROVE TRIGLYCERIDES

How can I drink less sugary beverages? What other options are there?

- Drink plain water every day.
- If drinking fruit juices:
 - Choose 100% fruit juice with no added sugars
 - Avoid drinking more than 4-6 oz. per day. Fruit juice contain natural sugars which can increase triglycerides.
- Dilute fruit juices and other sugar-sweetened beverages with plain water.
- Choose 0-calorie flavored beverages instead of sugar-sweetened beverages



IMPORTANT TIPS

Keep healthy body by eating the right amounts from each food group

- ! **Eat portioned meals and include variety:** It is best to choose a variety of foods at each meal following the “MyPlate” guidelines, making sure that each food group is portioned correctly.
- ! **Move around** for at least 60 minutes every day, as recommended by the American Heart Association.
- ! **Avoid foods with trans fats and limit foods with saturated fats.** Choose healthier fats like omega-3 and omega-6 fatty acids which are from fish, nuts, and seeds.
 - **Avoid trans fats:** Fast foods and processed foods are typically high in saturated fats and the act of frying foods can create trans fats. Naturally, trans fat can be found in meat and dairy foods from ruminant animals (e.g. cows, sheep, goats, deer). Trans fats can raise your bad, LDL cholesterol and lower your good, HDL cholesterol. Since trans fats harm your body, it is best to avoid it.

Examples of foods that contain trans fats: fast-food, restaurant food, deep-fried food, bacon or beef fat, high-fat desserts, high-fat dairy, meat drippings and stick butter.
 - **Limit your intake of saturated fats:** Saturated fats are often found in animal foods. When eaten in excess, it leads to plaque buildup in the arteries that can block blood flow, increasing the risk of heart attack and stroke. The Dietary Guidelines for Americans recommends limiting this fat to less than 10% of calories per day starting at age 2 - which is 22 g of saturated fat daily.

Examples of foods high in saturated fats: processed meats, fatty meats, full-fat dairy, fried foods, coconut oil and palm oil

LOW AND NO SUGAR DRINK OPTIONS

How can I drink less sugary beverages?

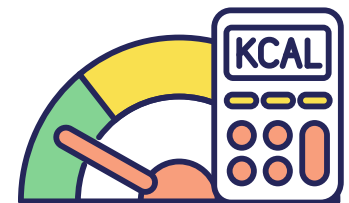
- Drink plain water every day - **THIS IS VERY IMPORTANT!**

Kids Total Daily Beverage and Drinking water requirements

Age Range	Sex	Cups/Day
4-8 years	Girls & Boys	5
9-13 years	Girls	7
	Boys	8
14-18 years	Girls	8
	Boys	11



- If drinking fruit juices:
 - Choose 100% fruit juice with no added sugars
 - Avoid drinking more than 4-6 oz. per day. Fruit juice contain natural sugars which can increase triglycerides.
- Dilute fruit juices and other sugar-sweetened beverages with plain water
- Choose 0-calorie flavored beverages instead of sugar-sweetened beverages

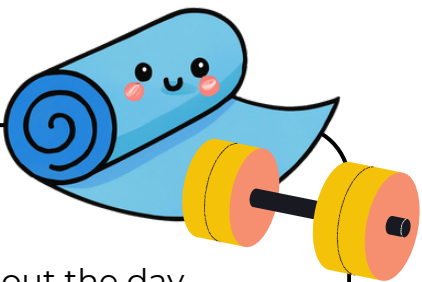


How are some other low-calorie drink alternatives?

Some of these beverages may contain added caffeine and/or electrolytes

- Infuse water to create natural sweetness using fruits, vegetables, and herbs
Examples: Berries, pineapple, melon, cucumber, mint, basil, ginger, rosemary, and cilantro
- Unsweetened teas
- Herbal teas are caffeine-free
- Unsweetened reduced-fat milk and/or unsweetened milk alternatives such as nut, oat, soya
- 0-calorie flavored waters which can be naturally and/or artificially flavored
 - Includes: Carbonated, sparkling, and still
 - 0-calorie water enhancers
- 100% fruit juice and/or fruit juice from concentrate that has been diluted with water
- “Diet” and/or 0-calorie fruit juices
- “Diet”, “Zero”, and/or 0-calorie soft drink

PHYSICAL ACTIVITY



How much physical activity do I need?

(As per the American Academy of Pediatrics)

- **Infants:** at least 30 min of tummy time and other interactive play spread throughout the day
- **Age 3-5 years:** at least 3 hours of physical activity per day (or about 15 min every hour they are awake)
- **Age 6 years and older:** 60 minutes (1 hour) or more of moderate-to-high intensity aerobic activity daily. Also, muscle and bone strengthening activities at least 3 days/week.

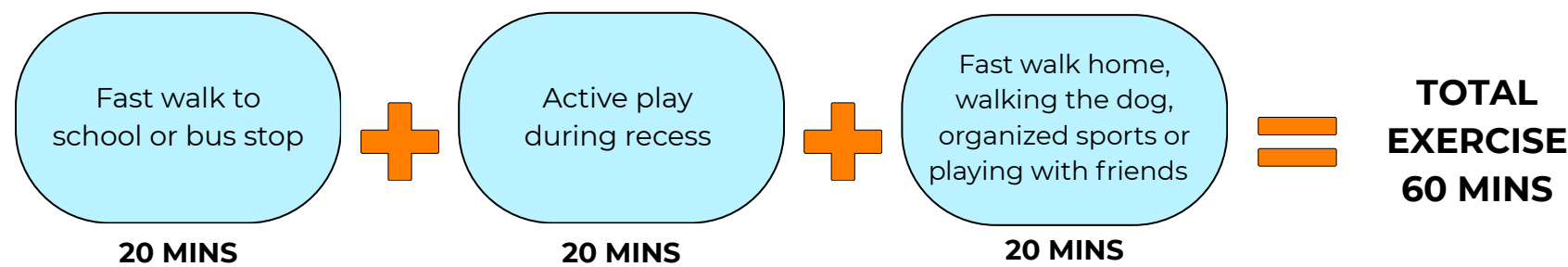
Why is physical activity important?

Exercise helps to build a stronger heart, lungs, bones, and muscle. Exercise also helps lower cholesterol, while improving sleep, mood, and energy levels.

How can I meet my exercise goal?

The recommended 60 minutes of exercise is not required to be done all at once. Activity can be split up over the day- it all adds up!

- Start with lower-intensity exercises for 5-10 minutes per day.
- Slowly increase intensity and time of activities as tolerated towards the goal of 60 minutes per day.



Type of Physical Activity	Examples	Ideas
Moderate-intensity activity aerobic	· Active play · Fast walking · Bike Riding · Chores · Catch	· Hiking, skateboarding, rollerblading · Cleaning around the house or yard work · Playing catch with a friend
High-intensity aerobic	· Active games · Bike riding · Jumping rope · Running · Sports · Energetic Dancing	· Playing tag, flag football · Making a 20-minute playlist to run to · Swimming laps · Playing soccer, field hockey, basketball, or tennis · YouTube Dance Videos
Muscle-strengthening	· Climbing · Resistance Exercises · Body Weight Exercises	· Indoor Rock Climbing · Exercise with resistance bands · Exercise with hand-held weights · Squats, push-ups, pull-ups, lunges, etc.
Bone-strengthening	· Jumping · Running · Sports	· Jump rope · Volleyball, gymnastics, basketball, tennis

-
- A vibrant, colorful illustration of various fruits and vegetables, including strawberries, bananas, oranges, apples, carrots, broccoli, fish, and nuts, arranged in a horizontal strip. The style is flat and modern, with a variety of colors like red, yellow, green, blue, and orange. The items are scattered across the strip, creating a sense of abundance and variety.

EATING HIGH FIBER DIET



Why is fiber important?

- Fiber is important to help your child have regular bowel movements.
- A high fiber diet should include foods from all the food groups.
- In addition to fibers, adequate fluids are important for good gut health.

How much fiber does my child need?

The Institute for Cancer Prevention simplified fiber intake guidelines for Americans as the "age + 5" rule.

For children age 2 years and older, the rule is that children should consume a number of grams of fiber each day that equals their age plus 5 additional grams.

For example, a five-year-old child would need about 10 grams of fiber, $5 + 5 = 10$. This formula allows for the increased need for fiber as your child grows.

What are some fiber-rich foods?

The most common sources of fiber are whole grain breads and cereals, beans and nuts, fruits and vegetables and should be included in your child's diet.

High fiber grains

- Read labels on foods, and look for 2 to 3 or more grams of fiber per serving.
- Eat 5 or more servings each day of cereals, breads, rice or pasta made with whole grains.
 - **1-3 year old children** servings
 - ½ slice of bread,
 - ¼ - 1/3 cup cooked cereal
 - ¼ - ½ cup dry cereal
 - ¼- 1/3 cup pasta or rice.
 - **4 years and older** servings
 - 1 slice of bread
 - ½ Honey Wheat English Muffin
 - ½ cup cereal or oatmeal
 - ½ cup brown rice or whole wheat pasta

What are some simple ways to increase fiber in my child's diet?

- Mix a high fiber cereal (whole grains) with your child's favorite.
- Offer fresh fruit with the skin on.
- Offer raw vegetables such as carrots, cucumbers or broccoli with low fat dip for snacks.
- Offer a salad or a sandwich with lettuce on it.
- Use whole wheat bread or white bread with added fiber.
- Mix brown rice with white rice.
- Mix whole wheat pasta with white pasta
- Offer snacks of granola bars, a trail mix with nuts and dried fruit, fig cookies.
- Use honey wheat English muffin in place of bagels.

HEALTHY SCHOOL CHOICES



- School lunch often contains more saturated fat than recommended dietary allowance (RDA), but often meets cholesterol recommendations.
- Most school lunches with 2 choices will have at least 1 choice which meets both cholesterol and saturated fat RDA recommendations.
- Avoid foods described as buttered, buttery, fried, pan-fried, creamed, escalloped, cheesy, au gratin
- If having school breakfast, choose cereal with at least 3 grams of fiber per serving and little or no added sugars instead of breakfast pastries or high sugar options

Nutrition Facts		
Serving Size 2/3 cup (55g)		
Servings Per Container About 8		
Amount Per Serving		
Calories 230	Calories from Fat 40	
	% Daily Value*	
Total Fat 8g		12%
Saturated Fat 1g		5%
Trans Fat 0g		
Cholesterol 0mg		0%
Sodium 160mg		7%
Total Carbohydrate 37g		12%
Dietary Fiber 4g		16%
Sugars 1g		
Protein 3g		
Vitamin A		10%
Vitamin C		8%
Calcium		20%
Iron		45%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.		
	Calories:	2,000 2,500
Total Fat	Less than	65g 80g
Sat Fat	Less than	20g 25g
Cholesterol	Less than	300mg 300mg
Sodium	Less than	2,400mg 2,400mg
Total Carbohydrate		300g 375g
Dietary Fiber		25g 30g

Above are some helpful tips to navigating school meals for a child with cholesterol concerns

What entrée should I choose?

- Choose options listed as grilled or baked instead of fried or breaded
- Get sauces on the side to use a smaller amount
- Choose the plant-based entrée option rather than a meat

What if I choose a salad?

- When choosing at a salad bar, avoid items like grated cheese, potato or pasta salad, creamy dressing, bacon bits or croutons
- Try to get your dressing on the side and dip your fork into it for flavor instead of covering the salad with it

What about sides or snacks?

- Take advantage of the salad bar or fruit sides for sides instead of carbohydrate-heavy snacks
- If choosing a carbohydrate snack, it is preferable to get popcorn or baked chips rather than regular chips



What if I want a sandwich?

At the sandwich bar, have whole wheat bread instead of white and choose lean deli meats, like ham, turkey or chicken, and choose mustard, relish and veggies rather than mayo or cheese as toppings

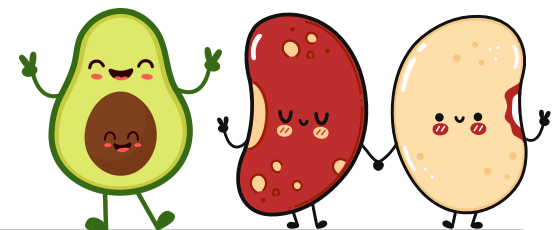
What should I drink?

- Bring your water bottle to lunch to avoid getting the juice
- Choose water or fat free milk instead of juice

CHOLESTEROL LOWERING SUPPLEMENTS

There are a few nutrition supplements that have been shown to help lower cholesterol in youth.

Reminder: Always talk to your dietitian or doctor before starting a new supplement. Not all supplements are right for everyone, and some may interfere with medications.



SOLUBLE FIBER

What does soluble fiber do?

Soluble fiber can lower total cholesterol, LDL cholesterol, and non-HDL cholesterol

What foods have high soluble fiber?

Soluble fiber is found in foods such as:

- oats
- beans
- avocado
- flaxseed
- and select fruits and vegetables.

This is helpful for gut health and cholesterol lowering.

For some people, it may be helpful to also use a soluble fiber supplement.

How much soluble fiber should children intake?

The goal intake of soluble fiber is:

- 2-12 years old: 6 grams per day
- >12 years old: 12 grams per day

What formulations does soluble fiber come in?

Soluble fiber supplements come in the form of powders, gummies, capsules, and fortified products (foods with added soluble fiber).

Ask your doctor or dietitian which would be best for your child.

Please note: Drink enough water when increasing fiber to avoid constipation or a blockage in the intestines. If using soluble fiber powder, drink at least 8oz water with the fiber to avoid a choking risk.

CHOLESTEROL LOWERING SUPPLEMENTS



PLANT STEROLS / STANOLS

What dose plant sterols/stanols do?

Plant sterols/stanols can help lower total cholesterol and LDL cholesterol

What foods have steroids and stanols?

Plant sterols and stanols are in plant foods and can block cholesterol from being absorbed in the gut.

What is the recommended dose of plant sterol and stanol?

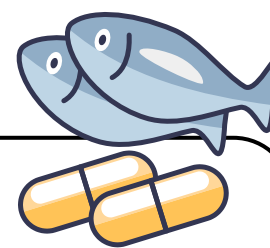
Recommended dose for a plant sterol and stanol supplement is 2 grams per day for those >2 years old.

What formulations dose plant sterols and stanols come in?

Plant sterol and stanol supplements come in the form of capsules, chewables, fortified foods, and gummies. Ask your doctor or dietitian which would be best for your child.

Studies have shown plant sterols to generally be safe with minimal side effects. People with sitosterolemia should not take plant sterols or stanols.

OMEGA-3 FATTY ACIDS OR FISH OILS



What dose omega-3 fatty acids and fish oil help lower?

Omega-3 fats can help to lower triglycerides.

What foods have high omega 3 fatty acids and fish oil?

It is best to have omega-3 fatty acids from our food, such as salmon, sardines, seaweed, flaxseed, chia seeds, or walnuts.

Should I take an omega- 3 supplement?

A supplement may not be helpful for every child. If a supplement is used, it is best to have a prescription omega-3 fatty acid supplement.

Please ask your doctor or dietitian before purchasing and giving an omega-3 fatty acid supplement.

ABCs OF HEART HEALTHY SNACKING

Snacks can be a great way to meet needed calories and extra nutrients throughout the day.

- Most kids and teens need to eat a meal or snack every 3-4 hours.
- Parents and kids should team together to pick snacks that are both nutritious and delicious!



Pay attention to the amount and times per day you choose to snack. Snacks are usually under 300 calories. Avoid eating straight from the container. Pre portion out snacks and put the rest up for later to avoid overeating.



Protein is a major needed food group, and it can be found in both plant and animal foods. Fiber can help lower cholesterol levels and keeps us full longer! Eating foods high in protein also keeps us full. A balanced snack should have about 5- 10 g of protein and at least 3 grams of fiber.



Work to create a home environment that has easy access to healthy snacks. Meal prep snacks ahead of time and place in areas with easy access. For instance, keep containers of cut up fruit and vegetables in the fridge. If constantly on the go, keep healthy snacks on hand to take when traveling.

PROTEIN + FIBER = HEART HEALTHY SNACK

Protein	Fiber
• Hard-boiled egg • Turkey stick • Hummus • Low fat string cheese stick • Handfull of nuts or seeds • Soy or Greek yogurt • Black, pinto, or kidney beans • 2 tablespoons of nut or seed butter • Reduced fat or no fat cottage cheese • Edamame • Tofu	• Quinoa snacks • Fruits (apples, pears, etc) • Whole grain crackers • Corn tortillas • Whole grain English muffins • Blue corn chips • Vegetables (carrots, bell peppers, broccoli, celery) • Oats • Black bean dip • Avocado or guacamole • Whole wheat toast • Chia seeds or flaxseeds

Healthy snack idea combinations:

- Low fat string cheese stick and an apple
- Small apple with 2 tablespoons of peanut butter
- 1/4 cup reduced fat cheese on whole wheat or corn tortilla with 1-2 tbsp of salsa

CHOLESTEROL MYTH BUSTERS



1

All fat intake is bad for you

- Fat is an essential nutrient needed for our body. Unsaturated fats are actually shown to improve our heart health.

2

Cholesterol Lowering Medication Replaces the Need for a Healthy Diet.

- Even when placed on cholesterol lowering medication, it is still important to follow the diet given to you by your dietitian

3

Only overweight or obese people have high cholesterol.

- People who are underweight, normal weight, and obese/overweight CAN ALL have high cholesterol levels

4

Children cannot have high cholesterol.

- High cholesterol can affect individuals of all ages due to genetic reasons or even diet.

5

Natural supplements are ALWAYS a substitute for medication.

- Over the counter supplements have varying degree of effectiveness and are not regulated.

6

High cholesterol causes symptoms.

- High cholesterol often causes no symptoms. It is measured best using a blood test. All children should have a cholesterol screening before age 11.

HOW TO PLAN **YOUR MEALS**

Meal planning is a process that involves building a menu tailored to fulfill the nutritional needs and eliminates the uncertainty surrounding meal choices, helps in adhering to a budget, and ensures alignment with our nutritional objectives.

“

Life is easy when things are sorted out and planned, and life is super easy when food is sorted out and planned.

”

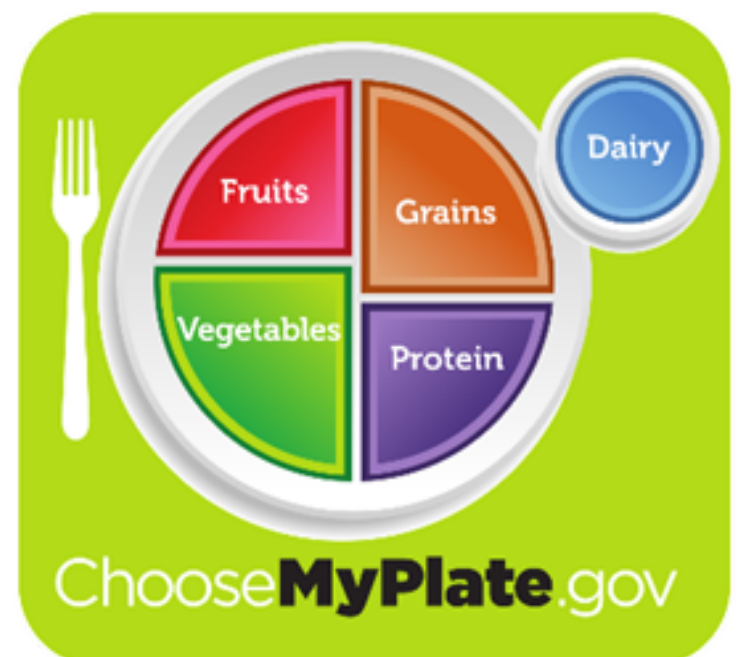
Meal Planning

Picking what to eat every day can be stressful, especially when life is busy with work, family, and friends. Many people end up throwing together quick meals or ordering takeout because it's easier.

- Pick your meals
- Plan for each day
- Make a shopping list
- Prep ahead
- Stay Flexible

How to build your plate:

- Follow USDA “my plate pattern.”
- The plate method is a simple way to meal plan and control the amount of carbohydrate you eat.
- Fill $\frac{1}{2}$ of your plate to include non- starchy vegetables and fruits.
- Fill $\frac{1}{4}$ of your plate to include a lean protein.
- Fill $\frac{1}{4}$ of your plate to include carbohydrate foods.
- Choose water or a low-calorie drink for your beverage.
- Use the Nutrition Facts Label and ingredients list to limit items high in saturated fat, sodium and added sugars.



EATING GUIDE FOR **FAST FOODS**



Healthier decisions

- Be mindful of choices and moderation can support a balanced diet while consuming fast food.
- Familiarize yourself with the nutritional content of the fast-food item.



Plan Ahead

- If possible, plan your fast-food meals in advance. Look up menus online and identify healthier options before you arrive.



Portion sizes

- Avoid "double," "jumbo," and "super size" items — they usually provide twice as much fat, calories and sodium as smaller-sized items.



So many choices

- Opt for grilled options whenever possible. Grilled chicken sandwiches or salads are often lower in saturated fats and calories
- Choose healthier side options such as fruit cups or side salads.



Beware of condiments

- Condiments like mayonnaise, ketchup, and creamy dressings can significantly increase calorie and fat content.
- Opt for lighter options like mustard, salsa, or vinaigrettes, and use them sparingly.



Hydration is key

- Skip sugary sodas and opt for water or a sugar free beverage.
- Choose sparkling water instead. Avoiding high-calorie beverages helps reduce overall calorie intake and keeps you hydrated.



Balance is key

- While it's essential to prioritize healthier options, it's also okay to enjoy indulgent treats occasionally.
- Balance is key to maintaining a sustainable and enjoyable diet

