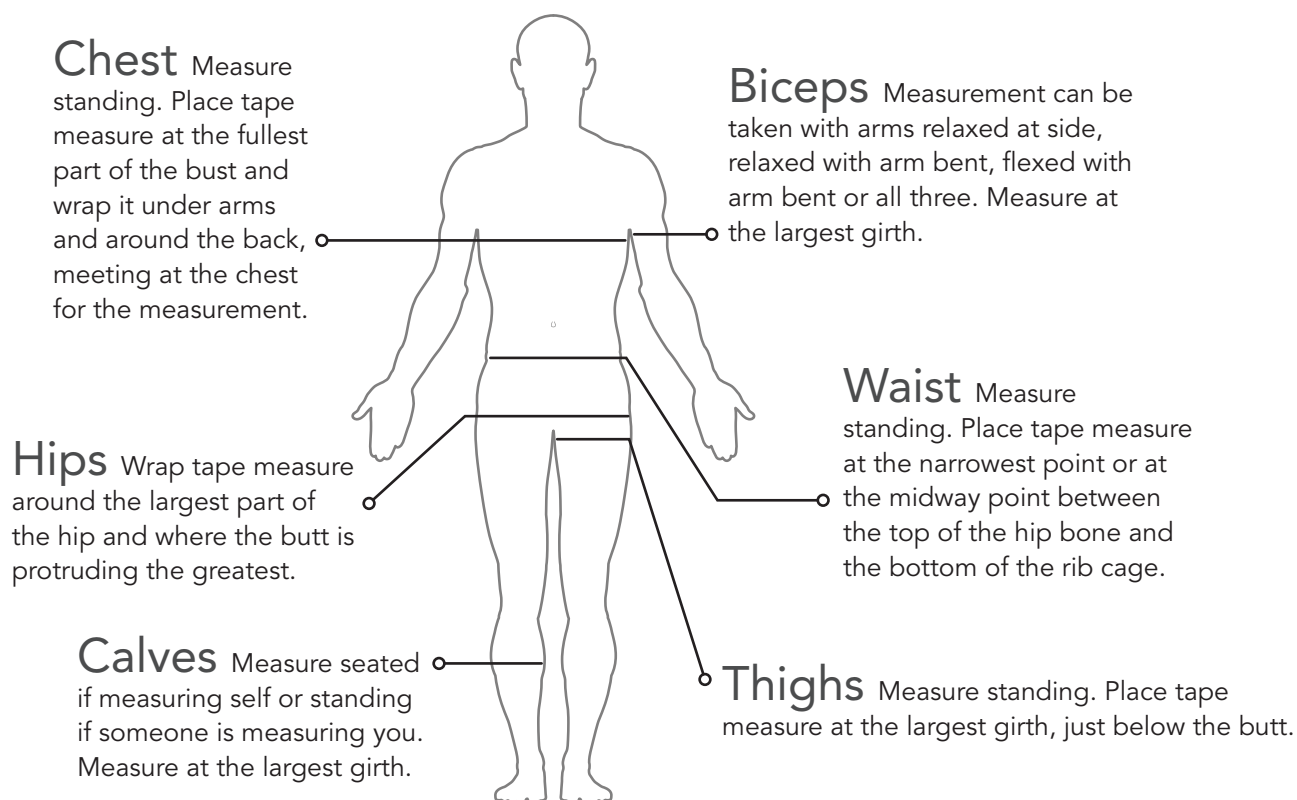


# MEASUREMENTS

(inches)	BICEPS		WAIST	CHEST	HIP	THIGHS		CALVES	
Initial	R	L				R	L	R	L
Final									
Lost									

**TOTAL INCHES LOST**



# NUTRITIONAL RECOMMENDATIONS

(Based on 1400 and 1600 calorie diet)

FOOD GROUP	Recommended DAILY SERVINGS		Approximate CALORIES PER SERVING	Approximate CALORIES PER DAY	
	(1400)	(1600)		(1400)	(1600)
Starches	5	6	80	400	480
Fruit	3	3	60	180	180
Milk	3	3	100	300	300
Vegetables	4	4	25	100	100
Meat or Meat Substitutes	5	6	75	375	450
Fat	2	3	45	90	135
	1445	<b>TOTAL</b>		1645	

 **DRINK AT LEAST 64 OUNCES OF WATER DAILY.**

1

## SAMPLE MEAL PLANS (Based on 1600 calorie diet)

	SAMPLE MEAL A	SAMPLE MEAL B
<b>Breakfast</b>	1 egg 1 1/2 c. Wheaties 1 c. skim milk 1 small banana 1 tsp olive oil	1 T peanut butter 2 slices whole wheat toast 100 calorie yogurt 3/4 c. raspberries
<b>AM snack</b>	1 Pria Snack Bar	1 small fruit + 1oz. cheese
<b>Lunch</b>	2 oz. white turkey 1 whole wheat bun 1 c. mixed green salad 3/4 c. strawberries 1 T fat free dressing	2 oz. tuna in water 12 low fat crackers 1 c. carrots and celery 2 T raisins 1 T fat free mayo
<b>PM snack</b>	1 c. yogurt or milk	1/2 c. frozen yogurt
<b>Dinner</b>	3 oz. grilled chicken 2/3 c. pasta, cooked 1 c. California blend veggies 1 c. melon cubes 1 tsp trans fat free margarine	3 oz. lean pork 1 small baked potato 1 slice bread 1 c. green beans 1/2 c. pineapple 1 tsp. trans fat free margarine

## STARCHES

Approximately 80 calories per serving.

- ½ bagel
- ½ pita (6")
- 1 bread slice
- 2 bread slices (reduced calorie)
- 1 flour or corn tortilla (6-8")
- ½ English muffin
- ½ hamburger or hotdog bun (whole wheat)
- 1 roll (small, plain)
- 1 waffle (reduced fat, 4 ½" square)

- 1 pancake (4" diameter, ½ in. thick)
- Cereal*
- ¾ c. unsweetened dry cereal
- 1½ c. puffed cereal
- ½ c. shredded wheat
- ¼ c. Grape-Nuts
- ½ c. cooked cereal
- 1/3c. pasta, rice, millet or couscous
- ¼ c. granola
- 1 potato (small baked)
- ½ c. potato (mashed)
- ½ c. peas
- ½ c. corn

- ½ c. beans or legumes (can count as a protein)
- 1 c. vegetable mix (with corn, peas or pasta)
- 2/3 c. lentils or lima beans
- 1 c. winter squash (acorn, butternut)
- 6 crackers (saltine)
- 2-5 crackers (whole wheat)
- 8 animal crackers
- 3 c. popcorn (nonfat or low-fat, microwave)

2

## PROTEIN

Approximately 45-100 calories per serving.

- 1 oz. turkey or chicken (without the skin)
- 1 oz. fish seafood or tuna
- 1 oz. beef ham pork lamb game meat

- 1 oz. cheese (low fat) (less than 3g of fat per ounce)
- 1 egg (medium)
- ¼ c. egg substitute
- 2 egg whites
- 1 T peanut butter
- 1-2 oz. veggie burger
- 2 oz. tofu

- ½ c. beans
- ¼ c. hummus
- 2 small sardines
- ¼ c. low-fat cottage cheese
- 6 medium oysters
- 1 oz. Canadian bacon

## \* TIPS

Bake, roast, grill, poach, steam and broil meats or fish rather than frying.

Use non-stick spray to brown foods.

Trim off visible fat or skin before eating and after cooking.

Aim to eat six ounces of fish per week. Fish high in healthy Omega-3 Fatty Acids include salmon, sardines, tuna and trout.

## VEGETABLES

Approximately 25 calories per serving.

### MILK/YOGURT

Approximately  
100–160 calories per serving.

- 1 c. milk (fat-free, skim)
- 1 c. milk (low-fat 1%)
- 1 c. milk (soy)
- 2/3 c. (6 oz.)  
yogurt  
(nonfat or low-fat fruit flavored)
- 1 c. buttermilk  
(nonfat or low-fat)

#### ½ c. *cooked vegetables*

carrots  
beets  
broccoli  
cauliflower  
spinach  
greens  
cabbage  
asparagus  
green beans  
beets  
eggplant  
green onions  
okra  
pea pods  
summer squash  
turnips  
water chestnuts

#### 1 c. *raw vegetables*

lettuce  
spinach  
salad greens  
tomato  
cucumber  
celery  
peppers  
onions

#### ½ c. tomato sauce (chunky veggie)

#### 4 oz. vegetable juice

3

## FRUITS

Approximately 60 calories per serving.

#### 4 oz. unsweetened fruit juice (100% juice)

1 small  
banana  
apple  
pear  
orange

2 plums  
kiwi  
tangerines

#### ¾ c. pineapple (fresh)

#### ½ c. canned fruit (in own juice)

#### 1 c. melon (cut)

#### 1¼ c. watermelon

#### ½ c. applesauce (unsweetened)

4 apricots (fresh)  
8 apricot halves dried

#### 3 dates

#### 2 figs (fresh, medium)

#### 1½ c. dried figs

#### ¾ c. grapefruit (canned sections)

#### ½ c. grapefruit (large)

#### ½ c. fruit salad (canned)

#### 12-15 cherries grapes

#### 3 prunes

#### 2T raisins

#### ¾ c. blackberries blueberries

#### 1 c. raspberries

#### 1¼ c. strawberries (whole)

#### ½ papaya (1 c. chopped)

#### ½ c. mango

1 tsp butter  
trans fat free margarine  
trans fat free oil

2 T light sour cream  
half and half  
light dressing

1½ tsp nut butters (trans fat free)

6 almonds

6 cashews

4 walnuts

2 Brazil nuts

5 hazelnuts

3 macadamia nuts

10 peanuts

4 pecan halves

16 pistachios

1 T mayo  
salad dressing

2T avocado

8 large black olives

10 green pimento stuffed olives

1 slice cheese +  
3 small crackers

1 Pria snack bar

¼ c. veggies with hummus

1 hard boiled egg with  
3 triscuits

1 low fat string cheese +  
2c popcorn

1 small fruit + 1 oz cheese

1T natural peanut butter  
with celery

1 c. yogurt or milk

½ c. frozen yogurt

1T natural peanut butter with  
1 small banana with

1 lowfat yogurt  
with a piece of fruit

½ c. oatmeal with  
1 c. skim milk and small fruit

1½ c. Smoothie made with  
lowfat yogurt, fruit and  
wheat germ or flax meal

1 c. low fat chocolate milk

6 oz. Greek yogurt with small fruit

½ c. high fiber cereal with  
1 c. skim milk and small fruit

2T lowfat dip with  
2 c. raw vegetables

2T raisins with 10 peanuts

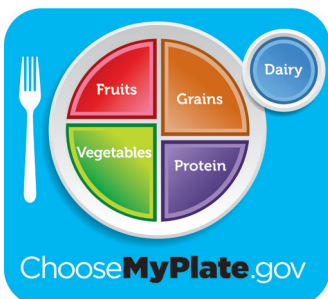
4 animal crackers with  
1 small orange

2 rice cakes with  
1 tsp natural peanut butter

½ c. skim milk with 4 apricot halves

6 melba toasts with  
¼ c. ricotta cheese

# PORTION PLATE





# GROCERY TIPS



## FRUITS AND VEGETABLES

- Fresh fruits and vegetables should make up the largest part of your heart-healthy food shopping list.
- Buy your favorites and cut them up in advance for easy snacking; or you can buy them pre-cut to save time.



## FROZEN FOODS

- Frozen foods are a convenient way to keep healthy foods on hand. However, be sure to read labels and avoid those with fat, sodium and sugar.
- Frozen fruit without added sugar can help with budgets when fruit is not in season.



## WHOLE GRAINS/CEREALS

- Most of your grain and cereal products should be made from whole grains for important vitamins, minerals and especially for heart-healthy fiber.
- Look for cereal with more than 5 grams of fiber per serving.



## CANNED AND DRY GOODS

- Watch out for high sodium content in canned items. Choose the “no salt added” varieties to help with this.
- Dry beans are an inexpensive and nutritious way to add plant protein and fiber to your diet.



## DAIRY AND REFRIGERATOR CASE

- Dairy products should be fat-free or at least low-fat.
- Choose reduced-fat or fat-free cheeses in flavors such as white cheddar, sharp cheddar and mozzarella.
- Look for trans-fat-free spreads and those with the least amount of saturated fats.



## DELI COUNTER

- You can reduce the fat content of sandwiches, snacks, and salads by choosing lean deli cold-cuts and prepared foods.
- If you buy a rotisserie chicken, remove the skin before eating it.



## LEAN PROTEINS

- Your protein choices should be as lean as possible, such as chicken without the skin, turkey breast, fish and lean cuts of pork and beef. Remove skin before cooking.
- Choose beef cuts labeled 90–95% lean or cuts with terms “loin” or “round.”
- Pork should be any of the loin varieties.
- Nuts, nut butters without hydrogenated oils, seeds and legumes are also good protein choices.



## OILS, CONDIMENTS AND SPICES

- Choose non-stick cooking spray, olive oil and canola oils.
- Compare labels to choose products that have less calories, fat and sodium.



## SNACK FOODS

- Snacking can be a great way to boost your nutritional intake.
- If you choose low-fat or reduced-fat snacks, read and compare labels. These snacks often have the same number of calories as the regular versions so make sure you keep your portions small.
- Don't eat directly out of the bag—put a small portion in a bowl, then put the bag away. Or better yet, divide big bags into smaller plastic bags as soon as you get home from the store.



## BEVERAGES

- Beverages should be kept simple. Water and fat-free milk, 100% juices and decaf herbal teas are all good choices.



## IN ADDITION...

- Choose “real” foods such as 100% whole-grain items with little processing and as few additives as possible.
- Always make a list and stick to it. This will save you time, money and extra calories.

# EAT SMART



## Fruits and Vegetables

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## Frozen Foods

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## Whole Grains/Cereals

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## Canned and Dry Goods

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## Dairy and Refrigerator Case

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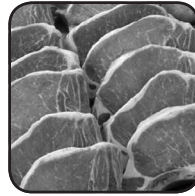
## Deli Counter

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## Lean Proteins

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## Oils, Condiments and Spices

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## Snack Foods

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## Beverages

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## In Addition...

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fold in half



# Kitchen Must-Haves for Healthy Cooking

When we think of healthier cooking, we tend to focus on the ingredients we need to make a healthier meal. Starting with some basic kitchen tools, however, will allow you to cook up a healthy meal with ease and in less time. Here are just a few items to get you started:

## **Good Set of Knives and a Vegetable Peeler**

Choose knives with a forged blade that goes through to the handle. Knives should be sharp and feel good in your hand. Four basic knives include a paring knife, utility knife, 8- or 10-inch chef knife and 8-inch serrated knife. Purchase a vegetable peeler you can hold comfortably.

## **Colander, Salad Spinner and Mesh Strainer**

A sturdy colander can be used for draining water from cooked pasta or boiled greens. A salad spinner is great for drying greens and herbs after washing. A fine mesh strainer can be used for rinsing beans and other small items.

## **Measuring Cups and Spoons**

Measuring cups and spoons accurately measure ingredients and/or portion sizes.

## **Mixing Bowls and a Wire Whisk**

Stacking bowls of different sizes come in handy. Whisks can be used for a variety of kitchen jobs, including mixing dry ingredients, frothing egg whites, creating smooth batters, mixing salad dressings or creating any type of smooth consistency.

## **Crock Pot (Slow Cooker)**

A slow cooker is your time-saving friend, making stews, soups, chili, whole chicken, pulled pork, hearty veggies and more. Set it, forget it and put a healthy meal on the table in a snap.

## **Vegetable Steamer**

Steaming is a great way to retain nutrients in vegetables. Using a steamer basket produces nice texture, color and taste. Cut vegetables the same size for more even steaming. Add low-sodium vegetable broth to the water for added flavor.

## **Food Processor or Mini Chopper**

Either device makes chopping, slicing and shredding fast and easy. A food processor is great for grating low-fat cheese, shredding cabbage, slicing veggies or making hummus, dips and pesto. It may be easier to use for some processing jobs than a blender. A mini chopper takes up less space than a food processor and will still save you time with chopping and dicing.

## **Dutch Oven**

This heavy-duty cooking pot is great for healthful recipes and one-pot meals. It can be used on top of the stove, be placed right into the oven and then taken straight to the table.

## **Pressure Cooker**

This completely sealed pot cooks foods at high temperatures up to 70% faster than stovetop cooking. More vitamins and minerals are retained than with conventional cooking methods.

## **Spray Bottle**

Fill a spray bottle with your favorite oil (olive, canola, sesame, etc.) and you are good to go. This is an awesome way to add a small amount of oil to the pan or food.

## **Microplane**

Great for zesting citrus fruits, grating cheese or nutmeg. The zest of citrus fruits has wonderful aromatic oils that add terrific flavor without calories. Grating good quality cheese with a microplane means you use less. Try freshly grated nutmeg on steamed veggies.

## About Herbs and Spices

An herb is any leaf, flower or stem of a plant used for seasoning food. Spices are seeds, seedpods, barks, roots or rhizomes (underground stems such as ginger) prepared into aromatic food seasonings.

**Tips for use:** Fresh summer herbs can be chopped or torn, then tossed into the dish at the last minute so they cook lightly and taste fresh. When cooking with dried herbs, use about half the amount you would when using fresh herbs. A general rule of thumb is  $\frac{1}{4}$  teaspoon of *ground herb* or 1 teaspoon of *dried herb* leaves equals 1 Tablespoon of finely chopped fresh herb. Basic herbs and spices include basil, bay leaf, cayenne pepper, cilantro, cinnamon, cumin, dill, garlic, ginger, mint, nutmeg, oregano, paprika, parsley and rosemary.

## Coordinating Healthy Food with Daily Life

### WEEKEND PREP

- On Saturday, plan main meals for the week. Write your shopping list and purchase needed ingredients.
- On Sunday, rinse and soak beans or grains for the week and cook. Wash and chop less perishable vegetables and fruits. Assemble a base of leafy greens.
- Prepare a protein dish, purchase a rotisserie chicken or grill several chicken breasts.

### COOK ONCE, EAT TWICE

- Use the protein dish for Sunday dinner and leftovers for quick and easy lunches for the next few days.
- Use the beans and/or grains cooked Sunday night throughout the week by adding them to salad, soup or stew.

### MIDWEEK PREP

If you have time on Wednesday, prepare a new salad and grain base or make a soup to last until the weekend.

### REDUCE CHOPPING TIME

Many fresh veggies can be purchased, prewashed and chopped. Look for bagged salad greens, prewashed spinach, diced squash, shredded carrots, etc.

### FIND WHAT WORKS FOR YOU

- Cook one new meal each week to build your culinary skills.
- Vary vegetables and fruits to prevent boredom and increase nutrition.

## A Healthy Eating Environment

- Do not watch TV while eating. Eat meals or snacks in the kitchen or dining room.
- Encourage family meals as much as possible. Multiple studies have shown the health benefits of families sitting down to eat together and reconnect.
- Put your fork or spoon down between bites to slow eating. It takes a good 20-30 minutes for your

mind to catch up with your stomach and sense you are full.

- Wait 20 minutes before getting a second serving. If you do want more, eat vegetables and fruits.

# Perfect Pantry Ingredients

The “perfect pantry” is stocked with basic ingredients used to make fast, healthy meals. A well-stocked pantry encourages you to try new recipes, since these basic items are the building blocks of many dishes. Broth can be used in place of water to cook grains or pasta. Canned tomatoes can be the base ingredient for homemade pasta sauce or soups, or even a topping for grilled chicken breast. Salsa is great as a dip, but you can also use it as a topping for grilled fish or baked potatoes. Fresh lemon or lime juice can be sprinkled over cooked vegetables, mixed into salad dressings, or squeezed into a glass of ice cold water. No-sugar-added preserves can be part of a glaze for pan-seared meats, chicken or fish. If melted down, preserves can also be used as syrup for pancakes, waffles or French toast.

## BRILLIANT BASICS

**Canned beans:** Good varieties to have on hand include black, pinto, garbanzo (chickpea) and red kidney beans. Choose lower sodium when possible. Leftover beans can be covered and refrigerated for two to three days.

**Canned tuna in water (not oil):** Leftovers can be stored in the refrigerator, tightly covered, for one to two days.

**Brown rice:** Store in an airtight container for up to a year. Keeping a dried red chili pepper in the same container will repel mealy bugs. Cooked rice can be covered and refrigerated for up to a week.

**Whole-grain pasta:** Keep at least one strand (linguini, spaghetti) and one shaped (penne, fusilli) pasta on hand. Uncooked dried pasta can be kept in an airtight container for up to a year. If it develops white speckles, toss it. Cooked pasta can be covered and refrigerated for two to three days.

**Fat-free or low-fat reduced-sodium chicken and vegetable broth:** Once opened, broth can be sealed and refrigerated for about one to two weeks.

**Fresh tomatoes:** Store at room temperature. Once cut, wrap in plastic and refrigerate for one to two days.

**Canned whole and diced tomatoes:** Refrigerate leftover canned tomatoes in an airtight container for three to four days or freeze for up to four to five months.

**Potatoes [sweet potatoes and white (Idaho/russet) potatoes]:** Buy hard potatoes with no bruising or splitting. White potatoes should not be green and should have no sprouting or eyes. The first sign of deterioration for sweet potatoes is shriveling and softness. Store both kinds for up to two weeks in a cool, dry bottom pantry shelf with good air circulation.

Perfect Pantry Ingredients, continued on other side

# Perfect Pantry Ingredients, continued

## COLD STAPLES

**Meat:** Skinless chicken breasts and thighs, boneless pork tenderloin, ground white-meat turkey, ground white-meat chicken or lean ground beef (93 percent). Keep only one to two days in the refrigerator and no more than four months, tightly wrapped, in the freezer.

**Frozen vegetables:** Broccoli, corn, spinach, peas or a medley of these and others. Use within four months. Tightly seal unused portions.

**Frozen stuffed pasta:** Tortellini and the like (whole wheat offers most nutritional value). Use within eight to nine months.

**Eggs:** Store in the coldest part of the refrigerator in the original carton for up to three weeks.

**Lemons and limes:** Use within one week for best freshness.

**Fresh herbs:** Parsley, cilantro, mint and dill. Bundle together with a rubber band and place in a glass of water. Cover loosely with a plastic bag. Store in the refrigerator two to three days.

**Fresh carrots:** Store in refrigerator's produce bin for up to two weeks, or until carrots begin to wither and become soft.

**Fresh celery:** Wrap loosely in a large plastic bag and place in the produce bin. Celery should keep for about three days.

## FLAVOR SAVERS

**Vinegars:** red wine, white wine and balsamic. Use within one year.

**Extra-virgin olive oil:** Transfer to an opaque container (can also be refrigerated). Use within six to seven months.

**Lower-sodium or light soy sauce:** Use within one year.

**Dijon mustard (coarse or smooth):** Use within one year. Once opened, store in the refrigerator.

**Salsa (in a jar):** Keep unopened jar in the pantry for one year. Once opened, keep in the refrigerator for no more than one month.

**Fresh onions and garlic:** Keep in the bottom of the pantry in a container with good air circulation for one to two weeks. If they start to sprout, toss.

**Dried herbs and spices:** Basil, bay leaf, oregano, rosemary, cumin, cinnamon, nutmeg, ginger, chili powder (hot or mild), cayenne pepper, paprika, black pepper (preferably whole peppercorns for grinding) and kosher or sea salt. Keep tightly sealed, away from light and heat. Use within one year.

**No-sugar-added preserves:** Use within one year. Once opened, store in the refrigerator.

**Plain bread crumbs:** Store tightly covered and use within one year.

# Eat Right

Food, Nutrition and Health Tips from the Academy of Nutrition and Dietetics

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## Healthy Eating on the Run: A Month of Tips

You probably eat out a lot—most Americans do. People are looking for fast, easy and good-tasting foods to fit a busy lifestyle. Whether it's carry-out, food court, office cafeteria or sit-down restaurant, there are smart choices everywhere. Here are 30 tips to help you eat healthy when eating out.

1. Think ahead and plan where you will eat. Consider what meal options are available. Look for restaurants or carry-out with a wide range of menu items.
2. Take time to look over the menu and make careful selections. Some restaurant menus may have a special section for “healthier” choices.
3. Read restaurant menus carefully for clues to fat and calorie content. Menu terms that can mean less fat and calories: baked, braised, broiled, grilled, poached, roasted, steamed.
4. Menu terms that can mean more fat and calories: batter-fried, pan-fried, buttered, creamed, crispy, breaded. Choose these foods only occasionally and in small portions.
5. Order the regular or child-size portion. Mega-sized servings are probably more than you need. For a lighter meal, order an appetizer in place of a main course.
6. It's OK to make special requests, just keep them simple. For example, ask for a baked potato or side salad in place of French fries; no mayonnaise or bacon on your sandwich; sauces served on the side.
7. Hunger can drive you to eat too much bread before your meal arrives. Hold the bread or chips until your meal is served. Out of sight, out of mind.
8. Think about your food choices for the entire day. If you're planning a special restaurant meal in the evening, have a light breakfast and lunch.
9. Limit the amount of alcohol you drink. No more than one drink for women and two for men. Alcohol tends to increase your appetite and provides calories without any nutrients.
10. Tempted by sweet, creamy desserts? Order one dessert with enough forks for everyone at the table to have a bite.
11. Split your order. Share an extra large sandwich or main course with a friend or take half home for another meal.
12. Boost the nutrition in all types of sandwiches by adding tomato, lettuce, peppers or other vegetables.





13. A baked potato offers more fiber, fewer calories and less fat than fries if you skip the sour cream and butter. Top your potato with broccoli and a sprinkle of cheese or salsa.
14. At the sandwich shop, choose lean beef, ham, turkey or chicken on whole grain bread. Ask for mustard, ketchup, salsa or lowfat spreads. And, don't forget the veggies.
15. In place of fries or chips, choose a sidesalad, fruit or baked potato. Or, share a regular order of fries with a friend.
16. Enjoy ethnic foods such as Chinese stirfry, vegetable-stuffed pita or Mexican fajitas. Go easy on the sour cream, cheese and guacamole.
17. At the salad bar, pile on the dark leafy greens, carrots, peppers and other fresh vegetables. Lighten up on mayonnaise-based salads and high-fat toppings. Enjoy fresh fruit as your dessert.
18. Eat your lower-calorie food first. Soup or salad is a good choice. Follow up with a light main course.
19. Ask for sauces, dressings and toppings to be served "on the side." Then you control how much you eat.
20. Pass up all-you-can-eat specials, buffets and unlimited salad bars if you tend to eat too much.
21. If you do choose the buffet, fill up on salads and vegetables first. Take no more than two trips and use the small plate that holds less food.
22. Load up your pizza with vegetable toppings. If you add meat, make it lean ham, Canadian bacon, chicken or shrimp.
23. Look for a sandwich wrap in a soft tortilla. Fillings such as rice mixed with seafood, chicken, or grilled vegetables are usually lower in fat and calories.
24. Build a better breakfast sandwich: replace bacon or sausage with Canadian bacon or ham and order your sandwich on a whole grain English muffin or bagel.
25. Be size-wise about muffins, bagels, croissants and biscuits. A jumbo muffin has more than twice the fat and calories of the regular size.
26. Try a smoothie made with juice, fruit and yogurt for a light lunch or snack.
27. Refrigerate carry-out or leftovers if the food won't be eaten right away. Toss foods kept at room temperature for more than two hours.
28. Grabbing dinner at the supermarket deli? Select rotisserie chicken, salad-in-a-bag and freshly baked bread. Or, try sliced lean roast beef, onion rolls, potato salad and fresh fruit.
29. Always eating on the go? Tuck portable, nonperishable foods in your purse, tote, briefcase or backpack for an on-the-run meal. Some suggestions are peanut butter and crackers, granola bars, a piece of fresh fruit, trail mix, single serve packages of whole grain cereal or crackers.
30. For desk-top dining, keep single-serve packages of crackers, fruit, peanut butter, soup, or tuna in your desk for a quick lunch.

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**For a referral to a registered dietitian and for additional food and nutrition information visit [www.eatright.org](http://www.eatright.org).**



The Academy of Nutrition and Dietetics is the world's largest organization of food and nutrition professionals. The Academy is committed to improving the nation's health and advancing the profession of dietetics through research, education and advocacy.

This tip sheet is provided by:



[LutheranHealth.net](http://LutheranHealth.net)

Authored by Academy of Nutrition and Dietetics staff registered dietitians.

Source: *Finding Your Way to a Healthier You*, U.S. Department of Health and Human Services, U. S. Department of Agriculture.

## Dietary Approaches to Stop Hypertension (DASH) and control blood pressure.

### WHAT IS THE DASH PLAN?

The meal pattern (shown at right) is rich in low-fat dairy foods, fruit and vegetables. For many people, following the DASH meal pattern can be an important and easy step in preventing or managing high blood pressure. The DASH diet eating plan has been proven to lower blood pressure in studies sponsored by the National Institutes of Health. Research shows that a diet low in fat and rich in low-fat dairy foods, fruits and vegetables, substantially lowers blood pressure. New research shows that following the DASH diet over time will reduce the risk of stroke and heart disease, as well as kidney stones.

### THE DASH EATING PLAN

FOOD GROUP	NUMBER SERVINGS	ONE SERVING IS
Dairy	2-5 daily	8 oz low-fat milk 1 cup low-fat yogurt 1 1/2 oz low-fat cheese
Fruits	4-5 daily	1 medium fruit 1/4 cup dried fruit 1/2 cup frozen or canned fruit 6 oz fruit juice
Vegetables	4-5 daily	1 cup raw, leafy vegetables 1/2 cup cooked vegetables 6 fluid oz vegetable juice
Grain	7-8 daily	1 slice bread 1/2 cup dry or hot cereal 1/2 cup cooked rice or pasta
Meat, fish or poultry	2 or less per day	3 oz cooked
Nuts, seeds or beans	4-5 per week	1/3 cup nuts 2 Tbsp seeds 1/2 cup beans

source: dashdiet.org

### Sample DASH meal plan

#### BREAKFAST

1 cup cornflakes  
1 tsp sugar  
8 oz low-fat milk  
1 banana  
1 slice of whole wheat toast  
1 Tbsp jelly  
1/2 grapefruit

#### LUNCH

2 oz of sliced turkey  
1 pita bread half  
1 Tbsp low-fat mayonnaise  
*Raw vegetable medley:*  
3-4 sticks each of carrots/celery  
2 radishes  
2 leaves of Romaine lettuce  
1/2 cup fruit cocktail in light syrup

#### SNACK

1/4 cup dried apricots  
3/4 cup mini pretzels  
1/3 cup mixed nuts  
1 cup flavored low-fat yogurt

#### DINNER

3 oz grilled lean beef  
1 cup scallion rice  
1 cup steamed broccoli  
*Spinach salad:*  
1/2 cup raw spinach  
2 cherry tomatoes  
2 cucumber slices  
1 Tbsp light Italian dressing  
8 oz low-fat chocolate milk

### DASH DINING TIPS

- Make low-fat milk your beverage of choice; order it when dining out.
- Combine a premade pizza crust with pizza sauce, shredded low-fat mozzarella and lots of vegetable toppings such as fresh tomatoes, zucchini, spinach, carrot curls, cauliflower, broccoli and artichoke hearts.
- Start your day with whole grain cereal and low-fat milk.

- Use low-fat milk in place of water when cooking especially with soups, rice and pasta dishes.

- Snack attack ideas: Serve cereal with low-fat milk and fresh fruit. Layer flavored low-fat yogurt with cereal for yogurt sundaes.

- Add fresh, canned or frozen vegetables to prepared soups.

- Blend low-fat milk, frozen fruit chunks and flavored extracts together for a smoothie.

- Serve baked potatoes with a variety of toppings like low-fat cheese, chili, refried beans, salsa and broccoli. One meal could contain three to four servings of vegetables!

- Make fruit dip by sprinkling cinnamon into vanilla low-fat yogurt. Make a vegetable dip by adding ranch seasoning or French onion soup mix to plain low-fat yogurt.

- Melt shredded low-fat cheese over steamed vegetables.

# MACRONUTRIENTS

## Carbohydrates, Proteins and Fats

### CARBOHYDRATES

Carbohydrates are broken down into simple sugars by the digestive system. These sugars enter the bloodstream and are delivered to cells in your body with the help of a hormone called insulin. Once in the cells, these sugars provide energy to your body.

Carbohydrates come in two forms: **simple** and **complex**.

**Simple carbohydrates** are sugars that do not need to be broken down by the body and provide quick boosts of energy. Fruits and fat-free or low-fat milk are healthy sources of simple sugars and also provide vitamins, minerals and fiber. Honey, maple syrup, soda, cookies, candy, table sugar and cakes are also sources of simple sugars, but since they are high in calories, they should only be eaten occasionally.

**Complex carbohydrates** are digested more slowly and provide longer-lasting energy. Bread, pasta, rice, oatmeal, corn and starchy vegetables (such as potatoes and peas) contain the highest amounts of complex carbohydrates. Choose vegetables, beans and whole grain, high-fiber breads and cereals as your main sources of complex carbohydrates.

### PROTEINS

Protein helps make up bodily tissues, including muscles, skin and organs. The digestive system breaks down protein into amino acids. These amino acids are later used by the body to build and repair cells and tissues.

The two main sources of protein are animal products, including meat, milk, fish and eggs, and vegetable products, including beans, nuts, seeds and soy. Eat a wide variety of protein-rich lean meats, fish, fat-free and low-fat dairy products, eggs, nuts, seeds and beans to insure that your body has all the amino acids it needs every day.

### FATS

Did you know eating a certain amount of fat is actually good for you? That's because your body needs it for proper brain development and to absorb certain vitamins.

There are two main types of fat: **saturated** and **unsaturated**.

**Unsaturated fat** is found in fish, including salmon and tuna, as well as nuts, seeds, avocados and most vegetable oils. Most of the fat you eat should come from these foods.

**Saturated fat** may increase your risk of heart disease, so it is important to limit the amount you consume. Saturated fat is found in foods that come from animals, including red meat, butter, cheese, milk (except fat-free) and ice cream. Coconut and palm oils are also high in saturated fat and can be found in many store-bought baked goods.

**Trans fat** can also increase the risk of heart disease. Trans fat is formed when liquid vegetable oils go through a chemical process called hydrogenation, which solidifies the oils. Food labels list the amount of trans fat in an item, so try to pick packaged foods labeled 0 grams trans fat per serving. Eating a diet rich in fruits, vegetables, whole-grain foods and fat-free and low-fat dairy will help limit the amount of saturated and trans fats you eat.

# CHOOSE HEALTHY FATS

## CHOOSE HEALTHY FATS

**Use liquid plant oils for cooking and baking.** Olive, canola, and other plant-based oils are rich in heart-healthy unsaturated fats. Try dressing up a salad or spring vegetables with a delicious, olive oil-based vinaigrette, such as this recipe for fresh mint vinaigrette.

**Ditch the trans fat.** In the supermarket, read the label to find foods that are trans free. In restaurants, steer clear of fried foods, biscuits, and other baked goods, unless you know that the restaurant has eliminated trans fat.

**Switch from butter to soft tub margarine.** Choose a product that has zero grams of trans fat, and scan the ingredient list to make sure it does not contain partially hydrogenated oils.

**Eat at least one good source of omega-3 fats each day.** Fatty fish, walnuts and canola oil all provide omega-3 fatty acids. Omega-3 fatty acids are important to good health.

**Go lean on meat and milk.** Beef, pork, lamb, and dairy products are high in saturated fat. Choose low-fat milk, and savor full-fat cheeses, but in small amounts; also, choose lean cuts of meat.

## AVOID SATURATED AND TRANS FATS

**Avoid saturated** (solid at room temperature) **and trans** (hydrogenated or partially hydrogenated) **fats** because these fats increase risk for certain diseases, including high cholesterol, heart disease and stroke.

No more than 5 percent of calories should come from *saturated* fats.

Avoid *trans* fats completely.

*Examples of bad fats are:* hog jowls, fat back, ham hocks, lard, bacon, butter, shortening and margarine.

## ASSESS YOUR FOOD INTAKE!

Use the interactive online tracker tools at [ChooseMyPlate.gov](http://ChooseMyPlate.gov).

## HEART HEALTHY COOKING TIPS

- **Sauté** with canola, olive, sesame or flavor-infused oils.
- **Bake** with canola, safflower, sunflower or vegetable. You may also substitute oil with fruit puree (such as applesauce) when baking. Also try substituting a stick of butter or margarine with trans fat-free margarine. Look for margarine with no more than 1 gram of saturated fat per tablespoon with liquid vegetable oil as the first ingredient.
- Bake, broil, grill, poach, smoke or steam foods.
- Use nonstick pots, pans and skillets because they require less fat for cooking.
- Measure or spray your fat into the pan; avoid “free pouring.”
- To thicken sauces or soups, use a mixture of cornstarch and water or pureed potatoes or beans; avoid making roux (butter and flour) because it is high in saturated fat.
- Skim fat off of meat broth, gravy, soups and stews by using a fat-straining cup or by chilling and removing the fat when it rises to the top.
- Microwave vegetables in broth instead of stir-frying them in oil.
- Use oil-free marinades or rub meat/poultry/fish with a mixture of fresh or dried herbs.
- If you use margarine, choose soft, tub or spray style that is cholesterol lowering such as Benecol, Promise or Smart Balance, but still use it sparingly. Choose a brand with 50 calories or less per serving.

# HERBS AND SPICES

**Enhance the flavor of your food without adding fat,  
salt or sugar by using fresh or dried herbs and spices.**

HERB OR SPICE	DESCRIPTION	USE TO ENHANCE
Basil	Sweet, clove-like taste	Italian foods, especially tomatoes, tomato sauces, pasta, chicken, fish and shellfish
Bay leaf	Pungent woody with slight cinnamon taste	Beans, stews and soups
Caraway	Seeds with a nutty, licorice flavor	Vegetables such as beets, cabbage, carrots, potatoes, turnips and winter squash
Chervil	In the parsley family with subtle flavor of licorice and lemon	French cuisine, fish, shellfish, chicken, peas, green beans, tomatoes and salads
Chili powder (Use chili powder that has no salt)	Mix of ground chili peppers, cumin, oregano, and other herbs and spices	Beans, stews and soups
Chives	Mild onion flavor	Sauces, soups, baked potatoes, salads, eggs, pasta, seafood and meat
Cilantro	Lively, citrusy, evergreen-like flavor	Mexican, Latin American and Asian cuisine; rice, beans, fish, shellfish, poultry, vegetables, salsa and salads
Cumin	Earthy, nutty flavor	Vegetables, poultry, fish and beans
Curry	A spice mix that includes cumin, pepper, chili peppers, ginger, onion, cinnamon, paprika, cilantro or turmeric	Indian or southeast Asian cuisine, lamb, and meat-based dishes and soups
Dill	Mildly sweet but tangy flavor	Seafood, chicken, yogurt, cucumbers, green beans, tomatoes, potatoes and beets, rice and fish
Ginger (ground)	Slightly sweet flavor with a hint of citrus	Rice, chicken and marinades
Mace	Warm, spicy flavor similar to nutmeg	Baked goods, fruit dishes, carrots, broccoli, brussels sprouts and cauliflower
Marjoram	Minty, basil flavor, similar to oregano	Tomato-based dishes, fish, meat, poultry, eggs and vegetables
Oregano	Somewhat sweet and peppery flavor	Italian and Greek cuisine, meat and poultry dishes
Paprika	Depending on the variety, adds a mild, sweet or spicy flavor	Spanish dishes, potatoes, soups, stews, baked fish and salad dressings
Rosemary	Pine-like flavor	Mushrooms, roasted potatoes, stuffing, melon, poultry and meats (esp. grilled)
Sage	Rich, musty flavor	Poultry stuffing, chicken, duck, pork, eggplant, beans and soups
Tarragon	Mild licorice flavor	Chicken, veal, fish, shellfish, eggs, salad dressings, tomatoes, mushrooms and carrots
Thyme	Strong minty and somewhat bitter flavor	Fish, shellfish, poultry, tomatoes, beans, eggplant, mushrooms, potatoes and summer squash
Turmeric	Sharp, woody taste	Indian cuisine, potatoes and light-colored vegetables



# SALT SUBSTITUTION

Enhance the flavor of your food without adding fat, salt or sugar by using fresh or dried herbs and spices.

FOOD	INSTEAD OF SALT, USE
Beans	Curry, basil, oregano, tomato, peppers, cumin, chili powder, garlic, onion
Beef	Bay leaf, marjoram, dry mustard, green peppers, garlic, ginger, rosemary, thyme, onion, pepper, fresh mushrooms
Eggs	Pepper, dry mustard, onion, parsley, basil, oregano, paprika, fresh mushrooms, green peppers
Fish	Vinegar, lemon, tomato, onions, pepper, parsley, dill weed, sweet basil, thyme, bay leaf, dry mustard, paprika, curry powder, fresh mushrooms, green peppers
Lamb	Curry powder, garlic, mint, pineapple, rosemary
Pork	Apples, applesauce, garlic, onion, sage
Potatoes	Black pepper, parsley, onion, paprika, green peppers, mace
Poultry	Garlic, onion, poultry seasoning, basil, ginger, curry, paprika, oregano, sage, thyme, fresh mushrooms, green peppers, cranberries, orange or lemon slices
Rice	Chives, green peppers, onion, pimento, saffron
Vegetables (green)	Vinegar, onion, basil, parsley, lemon, nutmeg, mushrooms, tomatoes, green peppers
Vegetables (yellow)	Ginger, cinnamon, mace, nutmeg, allspice
Salad	Basil, dill, garlic, dry mustard, fresh fruits, toasted nuts
Soup (bean)	Dry mustard, pepper, bay leaf, dill
Soup (pea)	Bay leaf, parsley
Soup (vegetable)	Allspice, vinegar, dash of sugar

## MAKE YOUR OWN 'SALT.'

Try these salt substitution recipes:

### Mix A

1 tsp chili powder  
2 Tbsp dry mustard  
2 tsp ground oregano  
2 Tbsp onion powder  
2 tsp black pepper  
3 Tbsp paprika  
1 Tbsp garlic powder  
3 Tbsp poultry seasoning  
Mix ingredients together.  
Fill your salt shaker with the mixture.

### Mix B

5 tsp onion powder  
1 tsp thyme  
1 Tbsp garlic powder  
½ tsp white pepper  
1 Tbsp dry mustard  
½ tsp celery seed  
1 Tbsp paprika  
Mix ingredients together.  
Fill your salt shaker with the mixture.

## WHY LIMIT SALT INTAKE?

According to the American Heart Association, keeping your blood pressure at healthy levels is important, because high blood pressure can lead to heart attacks or stroke. Reducing the amount of sodium you consume can help lower high blood pressure or prevent it from developing in the first place.

Choose and prepare foods with little or no salt to reduce the risk of cardiovascular disease. Aim to eat less than 1,500 mg of sodium per day.

# SUGARS

## NUTRITION LABEL ON FOODS

Sugars listed on a nutrition facts label refers to the family of simple carbohydrates that are found naturally in fruits, vegetables, grains, dairy products as well as sugars that are added to foods. Healthy sources, like fruits, vegetables, beans and whole grains, can reduce the risk of heart disease and improve digestive functioning. Limit foods with added sugars (sucrose, glucose, fructose, corn or maple syrup), which add calories but not other nutrients. Make sure that added sugars are not one of the first few items in the ingredients list.

### ADDED SUGARS

Ingredients are listed in descending order from most to least. Make sure that added sugars are *not* listed as one of the first few ingredients. Names for added sugars include: corn syrup, high-fructose corn syrup, fruit juice concentrate, maltose, dextrose, sucrose, honey and maple syrup. Also, check the daily value percentage on the label to see if a food is high or low in important nutrients like fiber or calcium.

### FOODS THAT AREN'T SWEET CONTAIN SUGAR

Sugar is used in many foods to enhance flavors, like in ketchup and spaghetti sauce. Try to pick packaged foods with only a small amount of sugar or no sugar.

### COMPARE FRUIT COCKTAIL IN JUICE VS. SYRUP

Fruit juice concentrates are used to sweeten canned fruits, jams and preserves and are nearly identical in taste to sugar syrups. Generally, foods sweetened with juice concentrates are very similar in nutrient profile to foods sweetened with sugar or corn syrup. Many fruit juices are good sources of vitamin C and may contain other vitamins and minerals. Look at the nutrition facts label to compare products.

### SWEETENERS ARE CARBOHYDRATES

Sweeteners are pure sources of carbohydrates and do not contain vitamins or mineral in significant amounts. Base your sweetener choice on taste, cooking performance and cost.

## REDUCING CALORIES IN HOME BAKING

Sugar is essential in baking and performs many functions besides sweetening. Sugar is necessary for proper browning and texture. No guidelines exist for reducing sugar in baking recipes that guarantee acceptable results. But, decreasing fat gives better baking results, and the calorie savings are more substantial. Try substituting applesauce for fat in baking recipes. For cake recipes replace fat with equal amounts of applesauce; in breads and muffins, substitute 1/4 of applesauce and 1/4 skim milk for 1/2 cup of fat.

### I TRY TO KEEP CALORIES AND FAT INTAKE DOWN. HOW CAN THE NUTRITION FACT LABEL HELP?

Check the serving size to be sure you're counting calories accurately and compare the serving size to what you actually eat. The food label can help you make trade-offs. For example, choose strawberry jam or fruit spread instead of margarine and you will save not only fat, but calories.

### BE CAREFUL OF PRODUCTS LABELS

Remember just because a product is labeled sugar-free/no sugar, it may not be carbohydrate-free.

*Sugar Free:* Less than 0.5 grams of sugar per serving size.

*No Added Sugar:* No sugars were added to the food.

This includes ingredients containing sugars from juices and fruits.

*Reduced or Less Sugar:* At least 25 percent less sugars than a similar full-sugar food.

### SUGAR-FREE LABELED FOODS

Sugar free does not mean calorie free. Don't expect much in the way of calories savings if a sugar-free product contains fat, like chocolate candy or cookies. Always look at the nutrition fact label for calories per serving.

### FOOD LABELS AND DIABETICS

Labels don't have diabetic-specific information listed, but they can help people choose foods wisely. According to the American Diabetes Association (diabetes.org), sugar can be treated like any other carbohydrate in the diet. Substitute a sweet food for a starchy food as long as each contains an equal amount of carbohydrate. Food labels give you the ability to track carbohydrate and calories, as well as fat, fiber and important nutrients like calcium.

### WHAT DOES "LIGHT" MEAN ON FOOD PRODUCTS?

Light may mean a food contains at least one-third fewer calories per serving than a similar full-calorie item. Or that a food contains no more than half the fat per serving of a full-fat counterpart. "Light" can also mean 50 percent less sodium per serving than a similar full-sodium item.

# USE THE NUTRITION FACTS LABEL TO EAT HEALTHIER

## Check the serving size and number of servings.

- The Nutrition Facts Label information is based on ONE serving, but many packages contain more. Look at the serving size and how many servings you are actually consuming. If you double the servings you eat, you double the calories and nutrients, including the % DVs.
- When you compare calories and nutrients between brands, check to see if the serving size is the same.

## Calories count, so pay attention to the amount.

- This is where you'll find the number of calories per serving and the calories from fat in each serving.
- Fat-free doesn't mean calorie-free. Lower fat items may have as many calories as full-fat versions.
- If the label lists that 1 serving equals 3 cookies and 100 calories, and you eat 6 cookies, you've eaten 2 servings, or twice the number of calories and fat.

## Look for foods that are rich in these nutrients.

- Use the label not only to limit fat and sodium, but also to increase nutrients that promote good health and may protect you from disease.
- Some Americans don't get enough vitamins A and C, potassium, calcium, and iron, so choose the brand with the higher % DV for these nutrients.
- Get the most nutrition for your calories—compare the calories to the nutrients you would be getting to make a healthier food choice.

# Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

Amount Per Serving		Calories from Fat 110
Calories	250	% Daily Value*
<b>Total Fat</b> 12g		
		18%
Saturated Fat 3g		
		15%
Trans Fat 3g		
<b>Cholesterol</b> 30mg		
		10%
<b>Sodium</b> 470mg		
		20%
<b>Potassium</b> 700mg		
		20%
<b>Total Carbohydrate</b> 31g		
		10%
Dietary Fiber 0g		
		0%
Sugars 5g		
<b>Protein</b> 5g		
		4%
Vitamin A		
		2%
Vitamin C		
		20%
Calcium		
		4%
Iron		

\* Percent Daily Values are based on a 2,000 calorie diet.  
Your Daily Values 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

## The % Daily Value is a key to a balanced diet.

The % DV is a general guide to help you link nutrients in a serving of food to their contribution to your total daily diet. It can help you determine if a food is high or low in a nutrient—5% or less is low, 20% or more is high. You can use the % DV to make dietary trade-offs with other foods throughout the day. The \* is a reminder that the % DV is based on a 2,000-calorie diet. You may need more or less, but the % DV is still a helpful gauge.

## Know your fats and reduce sodium for your health.

- To help reduce your risk of heart disease, use the label to select foods that are lowest in saturated fat, trans fat and cholesterol.
- Trans fat doesn't have a % DV, but consume as little as possible because it increases your risk of heart disease.
- The % DV for total fat includes all different kinds of fats.
- To help lower blood cholesterol, replace saturated and trans fats with monounsaturated and polyunsaturated fats found in fish, nuts, and liquid vegetable oils.
- Limit sodium to help reduce your risk of high blood pressure.

## Reach for healthy, wholesome carbohydrates.

- Fiber and sugars are types of carbohydrates. Healthy sources, like fruits, vegetables, beans, and whole grains, can reduce the risk of heart disease and improve digestive functioning.
- Whole grain foods can't always be identified by color or name, such as multi-grain or wheat. Look for the "whole" grain listed first in the ingredient list, such as whole wheat, brown rice, or whole oats.
- There isn't a % DV for sugar, but you can compare the sugar content in grams among products.
- Limit foods with added sugars (sucrose, glucose, fructose, corn or maple syrup), which add calories but not other nutrients, such as vitamins and minerals. Make sure that added sugars are not one of the first few items in the ingredients list.

## For protein, choose foods that are lower in fat.

- Most Americans get plenty of protein, but not always from the healthiest sources.
- When choosing a food for its protein content, such as meat, poultry, dry beans, milk and milk products, make choices that are lean, low-fat, or fat free.

# HEALTHY ALTERNATIVES



**Lutheran  
Health Network**

LutheranHealth.net

**Try to use non-fat versions of foods whenever possible for healthier eating.**

## **OIL ALTERNATIVES**

- Buy natural applesauce without added sugar.
- Applesauce or prune puree (prune butter or baby food, non-fat sour cream can be substituted oil to reduce fat content, calories and cholesterol.

*In cakes*, replace equal amount of substitute for oil. Crushed pineapple can be used as the substitute in a carrot cake recipe.

*In breads and muffins*, substitute  $\frac{1}{4}$  cup substitute and  $\frac{1}{4}$  cup skim milk, juice or water for  $\frac{1}{2}$  cup of oil.

*In brownies*, substitute  $\frac{1}{2}$  cup yogurt + 2 teaspoons of water for  $\frac{1}{2}$  cup of oil.

## **BOULLION OR BROTH**

- Buy low-sodium bouillon and broths.
- Use broth or bouillon to stirfry and flavor vegetables or rice.
- Combine bouillon with cornstarch to make a light gravy.

## **BUTTER SUBSTITUTES**

- Try non-fat, low-sodium instant butter-flavored sprinkles such as Molly McButter or Butter Buds. These can be turned into a liquid by adding hot water or may be sprinkled in dry form directly on hot, moist foods. In liquid form, they can be used with baked potatoes and pancakes, in sauces or soups. One half teaspoon of these sprinkles equals the taste of two teaspoons of butter. Eight teaspoons mixed with  $\frac{1}{2}$  cup hot water equals  $\frac{1}{2}$  cup or 8 tablespoons of liquid butter.
- Try liquid butter sprays for sautéing, on baked potatoes, popcorn, grilled sandwiches or garlic bread.

## **TORTILLA CHIPS**

Make your own with fat-free whole wheat tortillas! Preheat the oven to 400°F; slice each corn tortilla into 8 triangles; place the tortilla triangles in a single layer on a large baking sheet; spray each triangle with cooking spray, and sprinkle with seasonings or salt substitute; Bake for 10 minutes or until crisp.

## **CREAM CHEESE (FAT FREE)**

- Substitute fat-free cream cheese for the full fat versions
- Try on a whole wheat bagel, then top with fruit

## **EGG SUBSTITUTE**

A great way to eliminate the amount of fat and cholesterol found in recipes.

## **EVAPORATED SKIM MILK (IN A CAN)**

Can add the richness of cream to soups, sauces and desserts without the fat. The consistency of evaporated skim milk resembles whole milk. Once opened, must be refrigerated, tightly sealed and used within five days.

## **FLOUR (WHOLE WHEAT)**

Replace white flour with whole wheat (or half) to increase dietary fiber.

## **FROZEN YOGURT (NON-FAT)**

Eat in place of ice cream or low-fat frozen yogurt.

## **FRUIT JUICES**

Use a marinade or for stirfrying.

## **GRAPE NUTS**

Use in place of nuts for a crunchy topping or reduce the amount of nuts to half and substitute Grape Nuts for the remainder.

## **GROUND TURKEY BREAST OR GROUND ROUND**

Use in place of ground chuck.

## **JAM/JELLIES/MARMALADES**

Buy reduced sugar or 100% fruit spreads.

- Use in place of frosting or butter.
- Use as part of a marinade.

## **MAYONNAISE OR MIRACLE WHIP (NON-FAT)**

- Use in place of regular or low-fat mayonnaise.
- If using non-fat mayonnaise makes dishes taste plain, try adding rice wine vinegar or other seasonings to increase flavor.

## **MUSTARD**

Mix with vinegar and spices for a tasty marinade.

## **RICE WINE VINEGAR**

- Use as salad dressing.
- Use in marinades for vegetables, fish or meat.

## **SALAD DRESSINGS (FAT FREE)**

- Try using in pasta, potato and bean salads.
- Use as a marinade.
- Dip meats in dressing, then into a bread crumbs or panko. Bake or pan-fry using cooking spray.

## **SALSA**

- Mix with fat-free French dressing to top a salad
- Serve as a topping for potatoes
- Use in a marinade or as a basting for chicken/beef.

## **COOKING SPRAY**

- Use for pan-frying or sautéing lean meats and vegetables without adding extra calories.
- Butter-flavored sprays are great on French bread, corn-on-the-cob or air-popped popcorn.

# NUTRITION

## Before and after exercise nutrition tips.

### PRE-EXERCISE EATING

Consume high-carbohydrate foods for pre-exercise meals. Include fruit, bread products (adding jam or jelly increases the carbohydrate content) and a non-fat or low-fat yogurt. Fruit juices and non-fat milk are good high-carbohydrate beverages. Homemade liquid meals can be concocted by mixing milk, fruit and nonfat dry milk powder in a blender. For added variety, cereal, yogurt and flavorings (vanilla or chocolate) can be added. Carbohydrates provide the quickest, most efficient, source of energy and, unlike fats, are rapidly digested.

Small amounts of lean protein sources (two to four ounces) can be consumed four hours prior to exercise. Consume less protein as you get closer to exercising. However, the focus should be placed mainly on carbohydrate-rich foods. High fat protein sources should be eliminated because they take longer to digest.

If possible, try to eat two to four hours prior to exercise/competition to allow adequate time for the stomach to empty. To avoid potential gastrointestinal distress, reduce the size of the meal, making it smaller the closer it is to exercise time.

Fatty foods should be limited because they delay stomach emptying and can contribute to a heavy, sluggish feeling. Many high-protein foods eaten at breakfast, such as eggs and cheese, are also high in fat.

High-fiber foods may need to be limited as they may cause abdominal cramping and necessitate a bathroom break during exercise/competition.

### DURING EXERCISE/COMPETITION

Your primary need is fluid. Drink five to 10 ounces every 15–20 minutes.

For improved endurance and a competitive edge, if you are exercising longer than 60 minutes, consume 30–60 grams of carbohydrate (120–240 calories) every hour. Drinking Gatorade® or Exceed®, or eating one banana, or four graham crackers, or four fig bars, or one sports bar (e.g., Power Bar® or TigerSport Bar®) can provide this amount of carbohydrate. If you are eating solid food, drink plenty of water to aid in digestion and to help keep you hydrated.

### AFTER EXERCISE

Try to consume carbohydrates within 30 minutes after heavy exercise lasting several hours. Consuming high-carbohydrate fluids and foods soon after prolonged training and competitions increases your glycogen storage and may help you recover faster.

REHYDRATE, REHYDRATE, REHYDRATE! Drink 16 ounces of fluid for every pound lost during the exercise session or competition.

### CARBOHYDRATE-RICH PRE AND POST-EXERCISE MEAL AND SNACK SUGGESTIONS

- Cereal, milk and orange juice
- Pancakes, fresh fruit and milk
- Turkey sandwich, apple slices and yogurt
- Spaghetti with marinara sauce, grilled chicken and a garden salad



# HYDRATION

**Don't forget to replace fluids!**

**Water is the most important of all nutrients, as your body requires it constantly. An adequate supply of water is essential for temperature control (especially during exercise), for energy production, and for elimination of waste products from metabolism. Water is probably the nutrient most neglected by athletes.**

## **DEHYDRATION**

**Loss of body water:** Reduces endurance and increases the risk of heat illnesses, such as heat exhaustion and heat stroke.

**Heat illnesses:** Athletes who exercise in hot or humid weather are at risk for heat cramps, heat exhaustion or heat stroke.

Three factors contribute to the development of heat injuries:

- Increased body temperature
- Loss of body fluids
- Loss of electrolytes

Symptoms may include nausea, fatigue, increased heart rate, labored breathing and confusion.

## **FLUID REPLACEMENT GUIDELINES TO PREVENT HEAT RELATED ILLNESSES**

**At rest:** Approximately 64 ounces of water is needed daily.

**Before exercise (especially in heat):** Drink approximately 16 ounces of rapidly absorbed fluid (water or sports drink) two hours before exercise. This technique is called hyperhydration; it helps to lower your body's core temperature and reduce the added stress that heat places on your cardiovascular system.

**During exercise:** Drink five to 10 ounces of rapidly absorbed fluid every 15 to 20 minutes. The actual amount you consume will vary based on your rate of dehydration from sweating.

**After exercise:** Weigh yourself before and after exercise (nude is best) to determine how much fluid you are losing. Drink 16 ounces of fluid for every pound of body weight lost.

## **FLUID REPLACEMENT BEVERAGES**

Consume water or a sports drink to replace fluid losses. WATER is an effective and inexpensive fluid replacement if you are exercising for less than an hour. However, if you are exercising more than an hour and/or are an athlete looking for a performance edge, sports drinks provide a performance edge that water can't by providing carbohydrate for the working muscles. For optimal absorption and performance, a sports drink should contain six to eight percent carbohydrate (about 60-80 calories per eight ounces) such as Gatorade.

# WATER

## **WATER: THE FORGOTTEN NUTRIENT**

### **Q: What is the most vital nutrient?**

**A:** Water. Although you could live for about five weeks without food, you could only survive a few days without water. On average, an adult's body weight is made up of about 10-12 gallons of water (about 55-75% of body weight, 83% of blood, 73% of muscles, 25% of body fat and 22% of bones).

### **Q: Where does fluid intake come from?**

**A:** Eighty percent of your total fluid intake comes from beverages and the other 20% comes from foods. Fruits and vegetables contain lots of water.

### **Q: Why is water important to the body?**

**A:** Water is needed by all body cells. It regulates body temperature, carries nutrients and oxygen to cells, removes wastes, lubricates all joints, helps prevent constipation and protects organs and tissues.

### **Q: How much water does a person need?**

**A:** On an average day, a healthy adult needs eight to 12 cups of water to replace the amount lost through perspiration, breathing, urination and bowel movements. These fluids must be replaced to avoid dehydration and keep the body working normally. When eating a high-fiber diet, extra water is needed to process the additional roughage.

In general, one quart of water is needed daily for every 50 pounds of body weight. The exact amount of water needed depends on age, gender, weight, health, level of physical activity, foods eaten, medications taken and even the weather.

Thirst is one sign that you need fluids. Your current fluid intake is probably adequate if you drink enough water to quench your thirst, you feel good and you produce a normal amount of colorless or slightly yellow urine.

### **Q: What are signs of dehydration?**

**A:** Symptoms of dehydration include dry mouth, fatigue, headache, dizziness, difficulty breathing with physical activity and, in extreme cases, kidney failure. Though dehydration typically will not happen over the course of one day, it is important to pay attention to signals of water loss and minimize the risk of dehydration by drinking plenty of fluids throughout the day, before thirst sets in.

### **Q: Can I drink anything besides water?**

**A:** The most important fluid to consume is water. If you prefer a flavored beverage, try these options:

- decaffeinated beverage (caffeine acts as a diuretic, causing water loss)
- unsweetened flavored waters
- sports drinks, if exercising intensely for one hour or longer or in extreme heat and humidity