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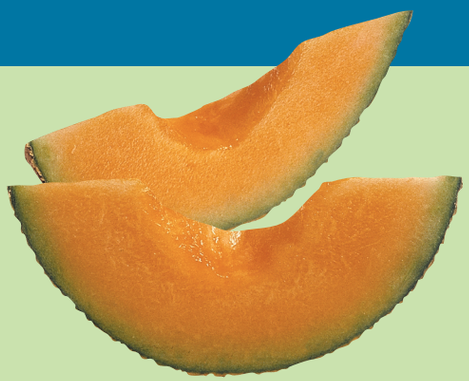


EAT SMART NORTH CAROLINA:

Snacks and Drinks

Simple solutions to help you and your family eat healthy

Eat Smart Move More NORTH CAROLINA™

Eat Smart North Carolina:
Snacks and Drinks

Have you ever found yourself at a snack bar or vending machine in search of a quick bite during the day? Or have you packed snacks and drinks for yourself or your child's soccer game and wondered what are smart choices? If so, this guide is for you.

What are snacks?

Snacks are foods and drinks we eat in between meals to satisfy hunger or boredom. For some people, a snack may be a quick meal replacer. We may also snack mindlessly while watching TV or doing some other activity.

Why think about snacks and drinks?

It is now more common in America to be overweight than to be at a healthy weight. While weight gain can be a result of many factors, the basic reason is *calorie imbalance*. Weight gain occurs when we eat and drink more calories than we need. Americans' calorie intake has increased during the past several years and continues to rise. Most of these extra calories usually come from food purchased away from home, sweet and salty snacks, soft drinks[1] and large portion sizes.[2]

Calories from snacks and drinks often push our daily calorie intake above what we need to achieve a healthy weight.[3]

To snack or not to snack?

Snacks are important for small children and perhaps a few adults with very high calorie needs, who don't eat enough food at meals to grow, heal or perform. But for most of us, snacks are often a source of extra calories—usually from foods that we eat too much of already.

Before you pick up a snack, ask yourself if you are really hungry. If you aren't, skip it. When you do need to eat a snack, make a smart choice. Smart snack choices can help us to eat foods that we usually don't get enough of—mostly fruits and vegetables or low-fat dairy and whole grains. Smart snacks can also help us bridge the time between meals so that we don't come to lunch or dinner overly hungry and unable to make healthy choices.

What are healthy snacks?

Fruits and vegetables are excellent snacks for almost anyone. They are a nutritious substitute for high-calorie snack foods such as chips and cookies. Fruits and vegetables are good choices not only because they are low in calories and high in fiber, vitamins and minerals, but also because they can decrease the risk for certain cancers and heart disease.[4, 5] Additionally, fruits and vegetables come in a variety of forms—fresh, frozen, canned and dried.

Dairy foods and whole grains can also be healthy snacks. Look for those that are low-fat and low-sugar.

Choose fruits, vegetables, low-fat dairy, whole-grain foods or nuts in small portions for snacks.

Right-size your snacks

Portion control is key in ensuring that snacks don't provide too many calories. Eat snacks in small portions. Snacks are meant to hold us until our next meal and should not replace a meal. Pick up a small-size snack, share a large snack with a friend, or save some for later.

The size of the package matters. Usually, we eat more from larger packages or bowls, without realizing it.[6]

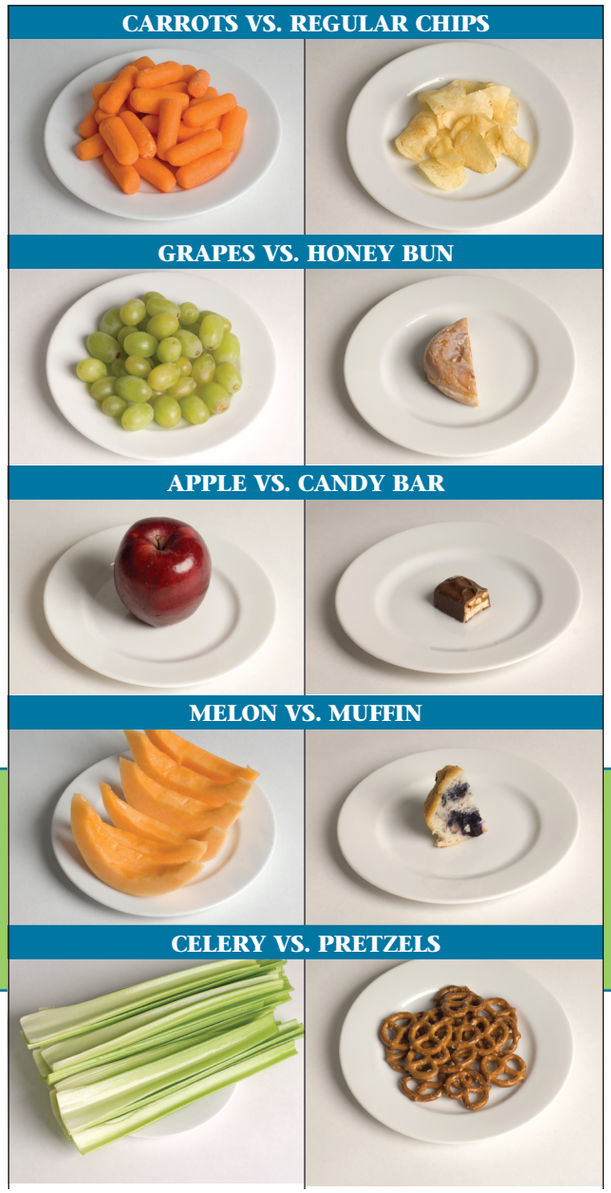
Try these simple tips to control portions:

- **Divide the contents of one large package into several small bags or containers.**
- **Try single serving packs.**
- **Avoid eating straight from the package. Instead put a small portion into a bowl or other container.**

Ultimately, the most important thing for a smart snack is calories. Think about how much you eat when you usually eat snacks.

Plan ahead and divide up the contents of a large package into small bags or containers before you start eating.

The food pictures here show a 100-calorie portion for some healthy vs. traditional snack options.



Control mindless munching

It is easy to overeat and still not feel satisfied if we eat snacks when we are doing something else such as driving, reading, watching TV or working on the computer. We tend to eat more when we have easy access to food and are distracted. It is better to slow down and really enjoy what you are eating—you'll eat less and enjoy it more. Be aware of cues to eat. Only eat snacks when you are truly hungry. Large portions, food smells and colors can overcome our body's ability to tell us when we are full or just not hungry. If you need to snack while doing something else, portion your snack into a separate small bowl or container.

Try these simple "out of sight, out of mind" tips:

- **Get rid of the candy dish or replace it with a fruit bowl.**
- **Move healthier options to eye level.**
- **Don't buy tempting snacks such as cookies, chips or ice cream. If you do buy these, place them out of sight, such as on a high shelf or at the back of the freezer.**
- **Store bulk purchases out of sight.**

Smart on-the-go snacks include fresh fruits and vegetables, raisins or other dried fruit, whole-grain cereal and crackers, nuts in small portions, low-fat granola bars, baked chips and rice cakes.

Plan your snacks

Planning ahead can help you make smart snack choices. Try these simple tips to help you plan and prepare snacks:

- Carry a snack bag with you when you leave home for the day. It is a good way to eat healthy and save money.
- Include seasonal fruits and vegetables on your shopping list. They will be less expensive and taste great.
- Find healthier options for the kinds of snacks that you usually crave—sweet, sour, salty, savory, crunchy, chewy, etc. For example, if you are looking for something sweet, eat an orange or an apple. For something salty, grab a small portion of nuts or low-fat popcorn.

- Organize a healthy snack shelf or drawer at home.
- Keep healthy snacks in small portions at work or in the car.

Calories in all foods and drinks (no matter what, when or how much) count towards your total for the day.

Re-think your drink

For many of us, the availability of high-calorie sodas and fruit drinks makes it easy for us to grab a drink on the go—without thinking about how many calories we're drinking.

Studies show that we usually don't do a good job of reducing calories from other foods after drinking high-calorie drinks.[7] Since our bodies don't register the calories from drinks, it is important that we choose our drinks very carefully. Choose water and diet drinks instead of regular sodas and fruit drinks.

Try these simple tips to re-think your drink:

- Carry a water bottle with you throughout the day.
- Stock your refrigerator with a jug or bottles of water.
- Drink carbonated water.
- Add slices of lemon, lime, cucumber or watermelon to water.
- Choose calorie-free diet drinks.
- Add a splash of 100% fruit juice to plain sparkling water to make a low-calorie drink.
- Try hot or cold tea or herb tea (without added sugar or sweetened with calorie-free sweeteners).
- Make your coffee with calorie-free sweetener and low-fat milk, or have black coffee.

Choose lower-calorie drinks to save you lots of calories during the day.

Drinking non-diet soft drinks is clearly associated with increased body weight.[8]

Eat Smart Snacks

Snack	Serving Size for 1 Unit (1 Unit = 100 calories)	Comments
FRUITS		
Apple	1 large	Choose fruits from different color groups—red, blue/purple, orange/yellow, green and white to add taste and variety. Fruits are a good source of several vitamins, minerals and fiber.
Banana	1 medium	
Blueberries	1 cup	
Cantaloupe	1 1/2 cups cubes	
Cherries	20 pieces	
Grapefruit	1 large	
Grapes	30 small	
Oranges	1 medium	
Peaches	2 medium	
Pear	1 medium	
Strawberries	2 cups	
Watermelon	2 cups	
Fruit, canned in fruit juice	1 cup	
Raisins	3 Tbsps	
Dried fruit, no added sugar	1/4 cup	
VEGETABLES		
Baby carrots	Vegetables are very low-calorie. You can usually enjoy a large portion without exceeding 100-calories	Choose vegetables as a snack (sometimes with a low-fat or fat-free dip). Vegetables are a good source of vitamins, minerals and fiber.
Broccoli florets		
Celery sticks		
Cherry tomatoes		
Cucumber slices		
Pepper slices		
DAIRY		
Fat-free yogurt, fruit flavored (sugar-free)	6 oz.	Choose low-fat or fat-free dairy options for a protein rich snack. These choices are excellent sources of calcium.
Cottage cheese, low-fat (2%)	1/2 cup	
Cottage cheese, fat-free	1 cup	
String cheese, reduced-fat	1 stick	
NUTS AND SEEDS		
Almonds, roasted	13 pieces	A small handful of nuts can satisfy your craving for something salty and be a source of several nutrients at the same time.
Mixed nuts, roasted	1 Tbsp	
Peanuts, roasted	1 Tbsp	
Sunflower seeds, roasted	1 Tbsp	
Walnuts	8 halves	
OTHERS		
Cheerios, plain	1 cup	Air-popped or 94% fat-free microwave
Frosted Mini Wheats Bite-Size	12 biscuits	
Peanut butter	1 Tbsp	
Popcorn, no butter	3 cups	
Potato chips, baked	20 chips	
Rice Chex	1 cup	
Tortilla chips, baked	20 chips	
Whole-wheat crackers	Depends on brand	Read the food label to find a 100-calorie portion.
Granola bars		
Trail mix		

LOOK FOR THE FOLLOWING...

CEREAL

- 200 or fewer calories per serving
- 6 or fewer grams of sugar per serving
- At least 3 grams dietary fiber per serving

BAR

- 200 or fewer calories per bar
- 5 or fewer grams of sugar per 100 calories
- At least 3 grams dietary fiber per bar

Smart Snacking at the Vending Machine or Convenience Store

There are times when we are away from home, get hungry and realize that we have forgotten to pack a healthy snack. The only options may be to visit a vending machine or stop by a convenience store.

The following are some options for a smart snack at these venues.

- Baked chips
- Low-fat microwave popcorn
- Fig bars
- Nuts in small portions
- Whole-grain crackers
- Bottled water
- Diet drinks

Make sure to look for packages that provide a single serving. Often, what seems to be a small package may provide more than one serving. Read the food label to check how many servings are in the package. If there is more than one serving in a package, share it with a friend or a co-worker.

Convenience stores usually offer more choices. Look for low-fat yogurt cups, string cheese, flavored skim milk (with no added sugar) and fresh fruit (usually near the check-out counter).

REFERENCES

1. Nielsen SJ, Siega-Riz AM, Popkin BM. Trends in energy intake in U.S. between 1977 and 1996: similar shifts seen across age groups. *Obes Res* 2002;10:370-378.
2. Nielsen SJ, Popkin BM. Patterns and trends in food portion sizes, 1977-1998. *JAMA* 2003;289:450-453.
3. Graaf CD. Effects of snacks on energy intake: an evolutionary perspective. *Appetite* 2006;47:18-23.
4. Ness AR, Fowles JW. Fruit and vegetables and cardiovascular disease: a review. *Int J Epidemiology* 1997;26:1-13.
5. Block G, Patterson B, Subar A. Fruit, vegetables and cancer prevention: a review of the epidemiological evidence. *Nutr Cancer* 1992;18:1-29.
6. Rolls BJ, Roe LS, Kral TV, Meengs JS, Wall DE. Increasing the portion size of a packaged snack increases energy intake in men and women. *Appetite* 2004 Feb;42(1):63-69.
7. DiMeglio DP, Mattes RD. Liquid versus solid carbohydrate: effects on food intake and body weight. *Int J Obes Relat Metab Disord* 2000 June;24(6):794-800.
8. Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: A systematic review and meta-analysis. *Am J Pub Hlth* 2007 April;97(4):667-675.

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