Brighten Up With Breakfast

Why is Breakfast Important?
Your mother always told you that breakfast was the most important meal of the day. Believe it or not, research shows that she was right!

Breakfast means "breaking the fast," or refueling your body after going without food all night. Food is the fuel that keeps your body going, and refueling at breakfast helps you perform and feel better.

To Replenish Blood Sugar: Because it's been eight to 12 hours since your last meal or snack, your body and brain need more food to replenish their blood sugar, or glucose. Eating breakfast provides fuel after a night of fasting and improves your brain's ability to function. Morning is the time of day when you have peak energy demands, yet you have the lowest energy reserves.

To Energize the Body: Eating breakfast energizes you, enables you to be more productive in the late morning, and helps you feel less tired throughout the day. It gives you more endurance and strength, muscle coordination, better concentration and memory, as well as better problem-solving ability.

To Perform Better at School and Work: Studies have shown that when children have breakfast, they are more alert, participate more fully in school activities, and they usually are on their best behavior. They have longer attention spans, score better on tests and improve their grades, are tardy or absent less often, and make fewer visits to the school nurse. They also are not as easily distracted and are less fidgety, irritable or tired. (This applies to adults in the work place, too!)

Today's fast-paced lifestyle often keeps children from eating a balanced breakfast before getting to school. Several programs funded by the U.S. government provide a nutritious, high-quality school breakfast. It provides one-fourth of children's daily needs for calories and key nutrients like calcium.

Since the early 1990's the South Carolina legislature has required all public schools to provide breakfast to students. The school cafeteria isn't the only place breakfast is served. Non-traditional programs, referred to as "Breakfasts on the Go," reach students in classrooms, and even in hallways. This has increased the students' participation and their nutrition awareness.

School breakfast programs fill a need for children who don't get an adequate breakfast at home. Children who don't eat breakfast day after day are unable to reach their learning potential, and they get further and further behind in their schoolwork.

To Achieve Healthy Weight: Eating breakfast provides fuel to jump start your metabolism after fasting all night. This is one of the reasons that eating a nutritious breakfast when you wake up is an effective way to control your weight.

Another key to weight control is to establish a regular eating pattern, which typically means eating every three or four hours throughout the day. To decrease snacking and overeating, start your day with a nutritious breakfast, and have set meal times. Breakfast eaters seem to need fewer snacks and consume less fat all day.

To Get Adequate Nutrition: Breakfast is considered the most important meal of the day, yet hectic schedules make it hard to choose nutritious foods. Breakfast skippers may not get the missed nutrients at other meals and snacks during the day.
On the other hand, the eating patterns of people who eat ready-to-eat cereals for breakfast usually include more vitamins and minerals and less total fat, saturated fat, cholesterol and calories.

_To Reduce Risk for Heart Disease:_ Breakfast helps provide adequate nutrition that decreases the risk of developing chronic diseases, including heart disease. In general, breakfast eaters tend to eat less fat during the day, while breakfast skippers tend to have a higher blood cholesterol level, which puts them at risk for heart disease.

_To Get Enough Fiber:_ Without breakfast, it is hard to get adequate fiber, vitamins, and minerals. Look for a cereal with at least 5 grams of fiber per serving. A high-fiber, whole-grain cereal topped with fruit and served with milk is a better choice than a high-fat, high-sugar pastry or a biscuit made with white (processed) flour.

Fiber-rich breakfast food choices include items such as: bran cereal; whole-bran muffins; whole-wheat waffles; fiber-rich breakfast/cereal bars and cooked cereals (e.g. oatmeal, cream of wheat, grits, brown rice, and whole-grain couscous). To add flavor and nutrition to cooked cereals:
- top with fresh fruit
- blend in chopped fruit (fresh or dried), nuts or grated low-fat cheese
- use 100% fruit juice, low-fat or fat-free milk as the cooking liquid
- add dry milk to fortify with extra calcium
- jazz up with spices (e.g. cinnamon, nutmeg, allspice or cloves)

For more information on fiber, refer to _HGIC 4052, Fiber._

_Nutrient Dense Cereals_

Read the Nutrition Facts label, and choose a nutrient dense cereal. Select a ready-to-eat cereal that contains more nutrients (e.g. carbohydrate, protein, vitamins and minerals) per serving among brands. Avoid the low density "candy cereals" and reach for one with little or no added sugar. Adding your own sugar allows you to control the amount.

Look for lots of fiber and only a few ingredients. Cereal should be made with whole grains and contain 5 of more grams of fiber per serving. To add more fiber, top your cereal with fruit or a handful of nuts.

In general, select a cereal that is:
- high-carbohydrate (>25 grams/serving) with less than 40% of carbohydrate as sugar
- moderate-protein (5-10 grams/serving)
- low-fat (<5 grams/serving)
- high-fiber (5 or more grams/serving)

Nutrients in these amounts help to maintain your blood glucose level above the fasting level, and you feel better than if you skip breakfast or eat a meal high in carbohydrates only.

Don't depend on your morning ready-to-eat cereal to provide you with 100% of the Daily Values for certain vitamins and minerals. Instead, you should get these nutrients from fruits, vegetables, and whole grains that also provide fiber, phytochemicals and other antioxidants.

_Parts of a Good Breakfast_

A good breakfast can be hot or cold. What you choose for breakfast can affect your energy level for the morning. Sugary foods (e.g. fruit, candy, soft drinks) cause a quick rise in blood sugar and a surge in energy, followed by hunger symptoms about an hour later. On the other hand, a breakfast containing a balance of carbohydrates, proteins, and fats provides a sustained release of energy, maintaining blood sugar levels and postponing hunger symptoms for several hours.

The parts of a nutritious breakfast are:
- sensible amounts of a protein-rich food (e.g. low-fat milk, yogurt, cheese or peanut butter)
- a food containing complex carbohydrates (e.g. whole-grain cereal, bread, or muffins)
- a serving of a good source of vitamin C (e.g. orange, grapefruit, or strawberries)
- a small amount of good fat (to keep you feeling full longer)

For more information on planning a nutritious breakfast according to USDA's new food guide pyramid, MyPyramid, refer to: _HGIC 4010, MyPyramid; HGIC 4016, Focus on Fruits; HGIC 4017, Vary Your Veggies; HGIC 4018, Get Your Calcium-Rich Foods; HGIC 4019, Whole Grains._
Elementary school age kids can learn more about MyPyramid's Five Food Groups and play the National Nutrition Council's Breakfast Detective matching game at: www.nutritionexplorations.org/kids/activities/detective.asp.

Non-Traditional Breakfast Ideas

What is the most unusual breakfast you have ever eaten? Breakfast does not need to be limited to traditional breakfast foods. You can start your day with some low-fat milk, a glass of juice and one of these nutritious foods:

- leftovers from last night's supper. (e.g. a slice of pizza, burrito, taco, hamburger or cheeseburger with lettuce and tomato, spaghetti with tomato sauce, macaroni and cheese, a stuffed baked potato or soup)
- your favorite sandwich (e.g. grilled cheese, peanut butter and jelly, turkey or chicken)
- pancakes with one or more of these added: chopped fruit (strawberries, blueberries, peaches, bananas, apples), nuts, or cubes of cooked meat, such as ham
- quick-cooking oats with added dried or fresh fruit, nuts and brown sugar
- grits in which low-fat cheese or soft margarine (not butter) has been melted
- French toast with cinnamon or nutmeg added to the batter
- low-fat milk or low-fat yogurt combined with dried fruit, nuts and cinnamon
- leftover rice, low-fat yogurt, dried fruit, nuts and cinnamon combined together

Quick Morning Wake-Ups: For quick, nutritious breakfasts on busy mornings, try some of these with a glass of milk*:

- ready-to-eat cereals, fresh fruit
- low-fat yogurt with fruit or granola
- raisin toast with peanut butter and banana
- whole wheat toast, yogurt with fruit
- slice of cheese melted on whole wheat bread, canned peach half
- tuna on toast, fruit or tomato juice
- quick cook hot cereal, cinnamon applesauce
- instant oatmeal and canned peaches
- bagel with melted cheese, apple wedges
- whole grain crackers, low-fat cheese, orange wedges
- scrambled eggs, whole wheat toast and orange juice
- whole grain bagel, baby carrots
- bran muffins, banana
• cottage cheese with fruit
• tomato soup made with milk, crackers

*Serve skim or 1% milk for everyone over two years of age.

**Breakfast Sandwiches:** Sandwiches can easily combine a wide variety of ingredients between two pieces of bread or bread-type products to suit anyone's taste. However, you should go easy on breakfast sandwiches that contain ingredients that are high in fat and sodium, such as bacon, sausage, eggs, and cheese served in a biscuit or a croissant. A better choice is an English muffin, which has only one fat gram compared to a croissant's 10 fat grams and a typical fast food biscuit's 18 fat grams.

The size of muffins, bagels, croissants, and biscuits is important, also. For example, a 2-ounce muffin contains about 5 fat grams, but a jumbo-size muffin can have 10, 15 or even more fat grams!

Here are some ingredients you can use to create your own breakfast sandwiches.

**Breads:** Choose from items such as: bagels; low-fat muffins; English muffins; pancakes; French toast; waffles; tortillas; pita bread; French bread; loaf bread; rolls or hamburger buns. Make most of your choices whole-grain, which is more healthful than white bread. Cereal bars should be high in fiber but low in fat and sugar.

**Fruits & Vegetables:** Your choices are endless, including: apples; bananas; peppers; cherries; onions; oranges; peaches; pears; pineapple; potatoes; strawberries; tomatoes; mushrooms; zucchini; melons and kiwi.

**Meat or Protein:** Sources of protein include: chicken; chicken nuggets (baked); fajita strips; eggs*; extra lean ground beef; ham; Canadian bacon; sausage (preferably turkey or reduced-fat); turkey; taco meat; peanut butter and beans.

*Limit the amount of whole eggs and egg yolks you eat. One large egg has 213 milligrams of dietary cholesterol, and health experts advise you to consume 300 milligrams of cholesterol or less daily. A healthier choice is a product like Egg Beaters®, which are basically colored egg whites that contain no fat or cholesterol. Scramble them and tuck into a tortilla for a low-carb, high-fiber breakfast.

**Cheeses:** Add calcium to your sandwich with cheese, preferably a lower-fat cheese made with fat-free milk. A few choices are: part-skim mozzarella; American; cheddar; Monterey jack; Swiss; parmesan; light cream cheese; ricotta or feta.

**Mix 'n Match Breakfast Sandwich Ideas:** You can create tasty breakfast sandwiches like the ones sold in coffee cafes and fast food restaurants right in your own home kitchen. Here are a few ideas to get you started:

• pancake roll-up: link turkey sausage and string cheese in a pancake
• peanut butter and banana dog: peanut butter and banana in a toasted hot dog roll
• breakfast pita: cheese melted on a slice of French toast topped with shaved ham
• Hawaiian breakfast pizza: cheese melted on a toasted English muffin topped with pizza sauce, lean ham and pineapple
• open face Monte Cristo: cheese melted on a slice of French toast topped with sliced ham
• "wake from a dream": ricotta cheese and thin slices of fresh pear on a toasted bagel.

**Grab-&-Go Breakfasts:** In your kitchen keep at least two easy-to-serve items on hand from each MyPyramid food group. Store them in highly visible, convenient spots where family members, even young children, can reach them. Teach kids to help themselves to grab-and-go foods such as:

• frozen sandwiches filled with peanut butter, meat, fruit slices, or jam
• frozen tortillas that can be reheated in a toaster or microwave oven
• ready-to-eat cereals, milk, and juice. Store unbreakable bowls and cups in a low cabinet. Keep milk and juice in unbreakable, small containers on a low refrigerator shelf.
• cereal stirred into a container of yogurt
• a breakfast shake made by combining low-fat milk with a commercial powder like Instant Breakfast®
• a piece of fresh fruit, some trail mix (without candy), shelled nuts or roasted peanuts
• granola or a grain cereal poured in a plastic bag or an 8-ounce unbreakable container
- a plain toasted whole-grain frozen waffle-no syrup needed
- a container of carrot sticks served with bean dip, hummus, or yogurt.
- leftover casserole, pasta or stews, eaten hot or cold
- a snack pack pudding
- Mozzarella cheese sticks, baby carrots
- a yogurt to go-the kind packaged in the tube for easy eating on the run-and animal crackers

Middle school and high school teens can get a healthy start to their day by following these tips:
- Grab a cereal bar, peanut butter and jelly sandwich with a glass of milk and juice.
- Select grilled items in the school cafeteria and fast food restaurants. Watch your intake of fried foods! Try a grilled burger, side salad, fruit cup and milk. If you have to have French fries, get a small serving.
- At the convenience store or the vending machine make healthy choices like milk or juice, grab-and-go veggies with low-fat dip, and a piece of meat jerky.
- Make a breakfast shake with low-fat milk, low-fat vanilla ice cream, and strawberry or raspberry preserves. Blend until smooth.
- Top corn or wheat flakes with frozen yogurt or low-fat vanilla ice cream and fresh or frozen strawberries, blueberries, or peaches, and a little low-fat milk.
- Mix ½ cup each of plain low-fat yogurt and orange juice with half of a frozen banana and a few frozen strawberries. Blend until smooth.

**Fast Food Breakfasts:** Do you buy breakfast on the run or at the drive-through window of a fast food chain? Then look for healthy menu items like these:
- a whole-grain or bran cereal and low-fat or fat-free milk
- an egg-white omelet
- a fruit cup or plate
- fruit and yogurt
- fruit, bagel with jam, low-fat milk
- whole-wheat pancakes with syrup or fruit on top—but skip the butter or margarine
- hot cocoa made with low-fat milk
- Canadian bacon, which is leaner (Eat only on the rare occasion you must have bacon.)
- hard-cooked or poached eggs-Eggs don't always have to be cooked in butter or oil and served with bacon or sausage, which also are loaded with fat.
- breakfast burrito (bean and cheese) rather than a bacon, egg, and cheese biscuit
- breakfast sandwich on a whole-grain English muffin, bagel or hamburger bun rather than a biscuit
- an English muffin, bagel, toast, or a plain soft baked pretzel rather than a doughnut-spread with a small amount of jelly or jam, instead of cream cheese, margarine or butter

Eating a high fat, fast food breakfast at a typical drive through may be dangerous for your heart, according to a recent study. Consuming foods that are high in calories, fat, saturated fat, cholesterol and sodium on a regular basis is bad for your health. Hash browns, sausage, bacon or egg biscuits, egg muffins and pancakes are typically high in calories, carbohydrates and fat, especially saturated fat, yet they are low-fiber.

Fast food chains serve a variety of breakfast menu items, which have different nutritional values. For nutrition information about menus, check the chain's Web site by typing in their name and doing a search. In addition, NutritionData gives nutrition facts, calorie counts and nutrient data for recipes and many fast food and chain restaurants at: www.nutritiondata.com.

**Continental Breakfasts:** When eating a Continental breakfast (bread, juice and coffee), cut down on the fat by skipping the doughnuts, sweet rolls, croissants, and other pastries. Go for breads with less fat like a bagel, whole-wheat toast, a plain soft baked pretzel, or an English muffin. To save on fat grams, eat it with jam only, or get margarine, butter, or low-fat cream cheese on the side and use sparingly.

**Lighten up the Muffins**

Muffins are a quick and easy breakfast food that can be adapted to be more healthful. Research has shown that most people either don't notice much difference or they accept the difference when the following recipe changes are made.

**To Add Fiber:** Use whole-wheat pastry flour to replace ½ of the all-purpose flour in the recipe. This pastry flour is made from soft wheat berries and has
a lighter, finer texture than regular whole-wheat flour, making it perfect for baked goods. If you use regular whole-wheat flour, substitute it for only ¼ to ½ of the all-purpose flour in the recipe. Oat bran, oatmeal OR 100% bran cereal (ground to flour in a blender) can replace up to ¼ of the all-purpose flour. Be aware that oats impart a hearty, chewy texture, and whole-grain flours can give a very dense, dry crumb.

**To Reduce Fat & Cholesterol:** Replace ½ cup margarine with ¼ cup canola oil or light olive oil. Light olive oil has no detectable "olive" taste when baked with other ingredients. Another option is to substitute unsweetened applesauce or pureed bananas or prunes for up to ½ the oil or margarine in the recipe. Since oil is in a more liquid form than margarine or butter, you can substitute less fruit puree or canola oil (about ¼ less) for margarine or butter.

Substitute two egg whites for one whole egg or try packaged egg substitute. Cream can be replaced with non-fat evaporated milk or fat-free half-n-half. There are many fat-free or low-fat dairy options available.

Fat gives a moist, tender crumb, so the more fat that you replace, the more the texture changes. A good rule of thumb is to replace no more than ⅓ of the original fat in the recipe.

**To Reduce Sugar:** Begin by reducing the sugar by ⅓ in a recipe. To ensure that muffins are tasty, use at least 1 tablespoon sugar per 1 cup flour. When you reduce the sugar, use extra vanilla, cinnamon or nutmeg to impart a sweet flavor. Fruit purees and fruit juices can be used to replace sugar, but it is challenging to get a correct balance of liquids in the recipe.

There are some sweetener and sugar blends that are good for baking. Remember that sugar does more than just sweeten a product. It also produces a tender, moist, golden brown muffin. Removing all the sugar may produce a tough, flat, dry and gray product; therefore, replace no more than ½ the sugar with a sweetener.

Acesulfame potassium sweetener and sucralose sweetener are the best options for baked goods, because they are heat stable, retaining their sweetness when heated. Sunette is the brand name for acesulfame potassium, which also is found in the tabletop sweeteners, Sweet One and Swiss Sweet. Sucralose is marketed as Splenda.

**To Reduce Salt:** Unless you're making a yeast-based muffin, you can omit salt in most recipes.

**Breakfast Can Run Smoothly**

Busy parents can regain control of their family life by claiming breakfast as a time to be together with the children. Breakfast is a great time for families to check schedules, share words of advice, or discuss an upcoming event. A good breakfast will get everyone in the family started off on the right foot.

Follow these tips to make breakfast time run smoothly at your house.

- Get clothes ready the night before.
- Allow time for breakfast-wake up 10 minutes earlier!
- Sit down together at the table.
- Turn off the television or radio.
- Avoid controversial table conversation-accentuate the positive.
- Plan a week's breakfast menu at one time. Keep the menu simple, but provide enough choices to please everyone's taste.
- Store breakfast foods together in a cabinet or on a pantry shelf. This includes assorted cereals, canned juices and fruits, instant breakfast mix, etc.
- Bake two recipes of muffins at one time, and package them in meal-size containers. Store in the refrigerator or freezer for reheating.

You are only limited by your imagination. As a guideline, try to include foods from at least three food groups at breakfast. That important first meal of the day should make a big contribution to your daily dietary intake.

**Kid-Friendly Breakfast Recipes**

**Fruit Smoothie:**

2 cups of any fruit juice
5 or 6 ice cubes
1 tsp. vanilla
¼ cup nonfat dry milk powder

**Directions:** 1. Crush the ice in a blender. You can wrap the ice in a clean cloth and crush it with a hammer and rolling pin, if you don't have a blender.
2. Add juice, vanilla, and milk powder to the ice in the blender or other container with a lid.
3. Shake or blend well.
4. Pour into glasses and serve right away.
Makes 4 servings. One serving provides: 99 calories, 5 grams protein and 0.1 gram fat.

Breakfast Bars:
6 Tablespoons soft margarine
3 cups miniature marshmallows
½ cup peanut butter
½ cup nonfat dry milk
¼ teaspoon cinnamon
1 cup raisins
4 cups Cheerios

Directions: 1. Spray a 9"x9"x2" square pan with non-stick cooking spray.
2. In a large saucepan, melt margarine and marshmallows over low heat, stirring constantly.
3. Stir in peanut butter until melted.
4. Remove from heat and stir in milk and cinnamon.
5. Fold in raisins and cereal, stirring to coat evenly.
6. Pat into pan with buttered hands.
7. Cool thoroughly and cut into squares.
Makes 12 servings. One serving provides: 229 calories, 5 grams protein and 11 grams fat.

Cinnamon Orange Bran Muffins:
2 cups bran flakes cereal
1 cup orange juice
1 egg, beaten
3 Tbsp. vegetable oil
1 cup all purpose flour
½ cup packed brown sugar
2 tsp. baking powder
1 ½ tsp. ground cinnamon
½ tsp. baking soda
½ cup raisins

Directions: 1. Preheat oven to 400 ºF.
2. In a large bowl, combine cereal, orange juice, egg and oil. Let stand 5 minutes.
3. In a separate bowl, combine flour, brown sugar, baking powder, cinnamon and baking soda.
5. Divide mixture evenly among greased muffin tin, or in 12 muffin cups.
6. Bake 15 to 20 minutes or until toothpick inserted in center comes out clean.

Makes 12 muffins. One serving (muffin) provides: 155 calories, 3 grams protein, 29 grams carbohydrate, 1.5 grams fiber and 3 grams fat.

Sources:

This information has been reviewed and adapted for use in South Carolina by Janis G. Hunter, HGIC Nutrition Specialist, and Katherine L. Cason, Professor, State Program Leader for Food Safety and Nutrition, Clemson University. (New 10/07.)

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