



September is:

- Food Safety Month
- Self-Improvement Month
- National Chicken Month
- National Courtesy Month
- National Rice Month
- Cholesterol Education Month
- National Papaya Month
- Better Breakfast Month

September 2002

Introduction

September is Better Breakfast Month, National Chicken Month, Cholesterol Education Month, and Courtesy Month. In this issue of the *Nourishing News*, you will learn why breakfast is important and receive tips on how to eat breakfast when you don't have time. This article provides tips for a quick breakfast including ideas re-

quiring preparation as well as ideas that do not require preparation.

In honor of cholesterol education month, this issue includes a lesson on what cholesterol is, how it gets into our bodies, and why we don't want too much of it. Also, you will learn how to detect, prevent, and treat high cholesterol levels by using some of

the tips from the National Cholesterol Education Program (NCEP) Guidelines.

While eating your low-cholesterol breakfast in a hurry, it may slip your mind to remember your table manners. However, since September is courtesy month, this issue includes an article on the importance of good table manners.

Curriculum Feature: Eat Smart. Play Hard.™

Eat Smart. Play Hard.™ is a USDA national healthy eating and physical activity campaign targeting school-aged children. The program is designed to convey science-based, behavior-focused and motivational messages about healthy eating and physical activity. The campaign uses Power Panther™ as the primary communication vehicle for delivering nutrition and physical activity messages to children and their caregivers. Support materials include posters, a slogan, Power Panther™ costumes, and other materials. The campaign focuses on four basic themes and includes messages to each theme.

- Breakfast (Be a Role

Model: Eat Breakfast with Kids; Power Up with Breakfast)

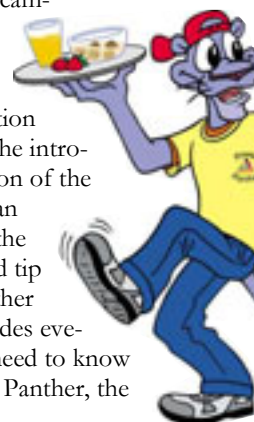
- Snacks (Grab Quick and Easy Snacks)
- Balance (Balance Your Day with Food and Play)
- Physical Activity (Move More. Sit Less; Make Family Time Active Time)

USDA has developed the Eat Smart. Play Hard.™ Power Pac kit of promotional and educational materials including information on how to integrate the campaign's messages into existing nutrition education programs. The introductory section of the kit provides an overview of the campaign and tip sheets. Another section provides everything you need to know about Power Panther, the

campaign's spokes character. A sampling of all the promotional and educational materials is provided along with publicity information. The Power Pac kit is designed for

- State agency nutrition personnel in the FNS nutrition assistance programs
- State Food Stamp Nutrition Education program cooperators
- School district directors or nutrition personnel

Parent brochures, posters, stickers, bookmarks and kids' activity sheets may be ordered in bulk while supplies last. Just download the order form at <http://www.fns.usda.gov/FNSmascot/PowerPac/PowerPac.htm> and fax directly to the number on the form (703-605-6852).



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Cholesterol/LDL/HDL

By Barbara Miller, Clemson University Nutrition Graduate

"**Cholesterol** is a sterol found in the cell membranes of all animal tissues that is also necessary for production of bile and steroid hormones". Though cholesterol is necessary for our bodies to function properly, it can also be harmful to us if we have too much in our blood at one time. Large amounts of cholesterol in the blood increase the risk of atherosclerosis. Atherosclerosis is a condition that decreases blood flow to the heart because the coronary arteries are clogged with a fatty substance called plaque. Atherosclerosis is one form of heart disease.

There are two major types of cholesterol that are found in the blood: **LDL (low-density lipoproteins)** and **HDL (high-density lipoproteins)**. In order to understand the difference between these two, it is necessary to understand the way in which cholesterol is absorbed into the body, packaged by the liver, and transported through the body via the blood. Cholesterol in the body has two sources. Most of the cholesterol in the body is produced in the liver. Some cholesterol, however, comes from the food we eat.

The cholesterol that comes from the

food that we eat is absorbed into the body by the small intestine. It is then transported through the blood to the liver.

In the liver, the cholesterol that is made by the liver as well as cholesterol from the food we eat is packaged with other fats and protein. This package of fat, cholesterol and protein travels through the blood delivering fat and cholesterol to all the cells in the body. These **low-density lipoproteins or LDL** are the main transporters of cholesterol to the body cells. Too much LDL cholesterol can build up in the walls of the arteries that feed the heart and brain and contribute to the formation of plaque. Plaque clogs the arteries leading to atherosclerosis. A high level of LDL reflects an increased risk of heart disease. That is why LDL cholesterol is often times called "bad" cholesterol.

The other main transport system for cholesterol, **high density lipoproteins or HDL**, are also made by the liver. They are more dense than LDL's because they

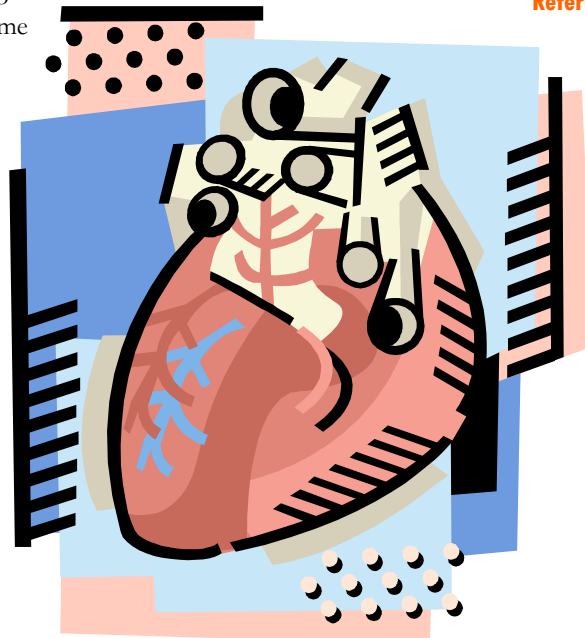
have less fat. HDL's take free cholesterol back to the liver thus removing it from the blood. An HDL molecule picks up free cholesterol from cell membranes and the blood and takes the collected cholesterol back to the liver to be used for making bile or hormones. HDL is thought of as the "good cholesterol" because its role is to pick up free cholesterol and take it back to the liver.

If cholesterol levels are high, it could be a result of a diet high in cholesterol or saturated fatty acids, both of which are found in animal products. Both may increase total blood cholesterol, but diets high in saturated fatty acids may cause a greater increase in blood cholesterol than a diet high in cholesterol. A diet high in both cholesterol and saturated fatty acids causes a greater increase in blood cholesterol than a diet high in cholesterol or saturated fatty acids alone. Factors other than diet also affect serum cholesterol and lipoprotein levels, so be sure to follow physician recommendations.

Reference

Escott-Stump, Sylvia and Mahan, Kathleen. *Krause's Food, Nutrition, and Diet Therapy*. 10th ed. W.B. Saunders Company: Philadelphia, PA, 2000. 31, 478.

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Breakfast on the Go

By Barbara Miller, Clemson University Nutrition Graduate

Breakfast is the most important meal of the day for many reasons. It improves your brain's ability to function because it provides fuel for the brain to use after the fast through the night. Children who eat breakfast perform better in school because of increased brain functioning and less of a tendency to be easily distracted, fidgety, irritable, or tired. Also, eating breakfast is a great way to establish regular eating patterns, which is the key to weight control. Set meal times decrease the frequency of snacking and overeating.

Another reason that breakfast is important is that it helps provide adequate nutrition that will decrease the risk of developing chronic diseases. Without breakfast, it is hard to get as much fiber, vitamins, and minerals as needed.

Breakfast should include:

- Some type of food rich in protein like low-fat milk, yogurt, cheese, or peanut butter.
- A food containing complex carbohydrates like whole-grain cereal, bread, or muffins.
- A serving of a good source of vitamin C like an orange, grapefruit, or strawberries.
- A small amount of fat.

Since the morning can be so hectic and chaotic, breakfast sometimes gets left out because it has a reputation of taking a lot of time. The fact is that it takes less time to eat breakfast than it does to shower, shave, and blow-dry your hair. Breakfast does not have to be time-expensive.

Here are some ideas for a quick nutritious breakfast:

- Mix 1/2 cup each of plain low-fat yogurt and orange juice with 1/2 a frozen banana and a few frozen strawberries, blend until smooth.

- Fill 1/2 a whole-wheat pita with 1/2 cup low-fat cottage cheese and sliced peaches, pears, banana, or your favorite fruit.

- Add fruit or cereal (like low-fat granola) to low-fat or fat-free yogurt for a crunchy treat.

- Grab a granola bar or fruit and grain bar along with some orange juice or milk (1/2 cup).

- Spread low-fat cream cheese on a raisin bagel topped with thin apple slices.

- Mix 1/2 cup each of plain low-fat yogurt and orange pineapple juice with 1/3 cup of sliced banana and 1/2 dozen fresh or frozen blueberries. Freeze overnight for a quick breakfast the next morning.

- Grab a yogurt to go, the kind packaged in the tube for easy eating on the go.

- Use milk to make a breakfast shake using something like Car-

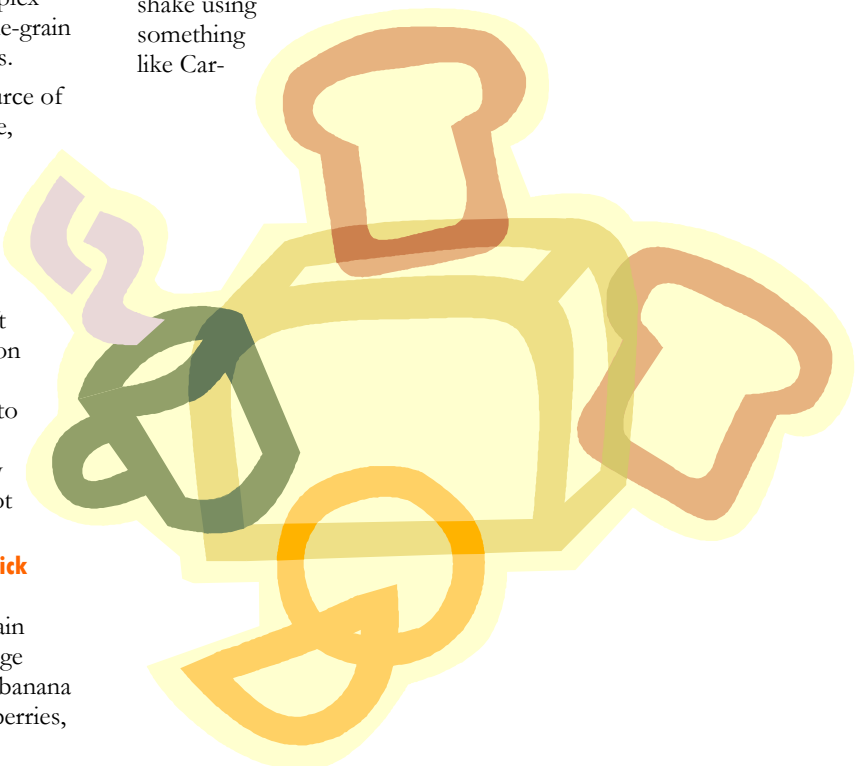
nation Instant Breakfast.

- Grab a piece of fruit to go... apples are quick and portable and bananas come in their own package.
- Take 1/2 cup or 1 cup of milk or orange juice (any kind of fortified fruit juice) with you in a travel cup.

References

http://family.go.com/recipes/family/feature/dony199611_portbreak/dony199611_portbreak.html
http://www.cspinet.org/nah/11_99/breakfastgrabandgo.pdf

It takes less time to eat breakfast than it does to shower, shave, and blow-dry your hair. Breakfast does not have to be time-expensive.



National Cholesterol Education Program Guidelines

By Barbara Miller, Clemson University Nutrition Graduate

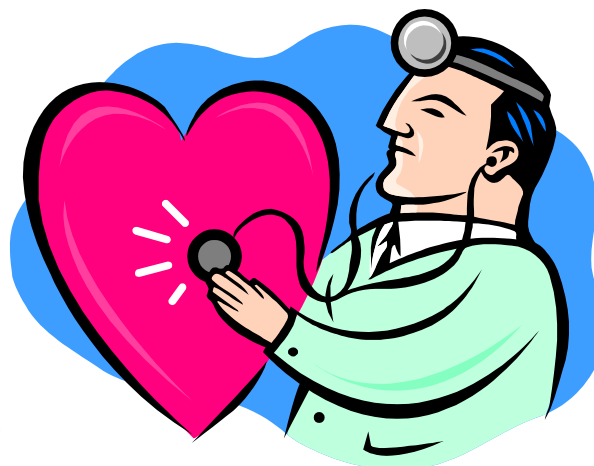
The National Cholesterol Education Program (NCEP) Guidelines are published by the National Heart, Lung, and Blood Institute, which is a division of the National Institutes of Health. These guidelines are used for the prevention and management/treatment of high cholesterol levels. The newest set of NCEP guidelines were released in 2001 and place more of an emphasis on aggressive treatment for those individuals with more than one risk factor for coronary heart disease (CHD).

The guidelines include the following tips for the detection, prevention, and treatment of high blood cholesterol levels:

Have your cholesterol profile checked. This includes serum total cholesterol, as well as low density lipoprotein (LDL) cholesterol and high density lipoprotein (HDL) cholesterol. Compare your values to values in the chart to the right.

Identify your risk factors for high cholesterol. If your cholesterol profile is not optimal, avoiding or limiting those behavioral risk factors may help bring your cholesterol down. If your cholesterol levels are optimal, avoiding or limiting these risk factors will help reduce your risk of developing high cholesterol levels. The risk factors are listed below:

- Cigarette smoking
- High blood pressure (above 140/90 mmHg)
- Family history of premature heart disease (heart disease in a first degree male relative less than 55 years; heart disease in a first degree female relative less than 65



fruits and vegetables in your diet (a combined 5 servings a day is good)

- Increase the amount of soluble fiber in your diet by eating oats, legumes, barley, apples, citrus fruits, strawberries, and carrots
- Lose weight if you are overweight
- Increase physical activity
- Ask your physician if you need to be on drug treatment for your cholesterol

Meal planning and preparation tips to improve your cholesterol profile:

- Saturated fats and cholesterol are found in animal foods. Use more plant based foods and less animal type foods
- Try broiling, grilling, or roasting in place of frying
- Begin with low fat cuts of meat; trim visible fat before preparation
- Eat moderate portions of meat. Mix with pasta, rice, beans and/or vegetables
- Use reduced fat dairy products
- Use soft or tub margarine to reduce the saturated fat content

Reference

<http://www.nhlbi.nih.gov/guidelines/cholesterol/atglance.htm#Step2>

- years)
- Age (men, over 45 years; women, over 55 years)
- Diabetes
- A diet high in saturated fat and cholesterol and low in fruits, vegetables, and fiber

Total Cholesterol	
Desireable	<200
Borderline High	200-239
High	>239
LDL Cholesterol	
Optimal	<100
Near Optimal/	100-129
Above Optimal	
Borderline High	130-159
High	160-189
Very High.....	190
HDL Cholesterol	
Low	<40
High	60

If your cholesterol level is not optimal, try the following life-style changes:

- Eat a diet low in saturated fat (less than 7% of calories) and low in cholesterol (less than 200mg/day). Total fat should be 20-30% of calories.
- Increase the amount of

Eat moderate portions of meat. Mix with pasta, rice, beans and/or vegetables.

The Importance of Table Manners

By Barbara Miller, Clemson University Nutrition Graduate

Table manners are important because they make everyone at the meal feel more comfortable because there are rules to follow. More importantly, once people enter the work world, it is important they know how to conduct themselves in business settings. Someone who makes blatant dining errors is noticed immediately and it can make a difference between getting that all-important job or not. Another important situation is that first date that takes place in a formal restaurant. Yet there are many college graduates with MBAs from ivy league colleges

much time spent around the dinner table. A report in *USA Today* indicates only 25% of families spend more than 31 minutes together at the dinner table on weeknights. Children do not learn these skills by themselves – they must be taught.

It is important that children be exposed to occasions where they can experience good table manners. Taking children with you to restaurants and involving them when entertaining at home by having them help to serve the appetizers and setting the table will strengthen etiquette skills.

with your fingers would be good topics to discuss.

Some basic pointers might include:

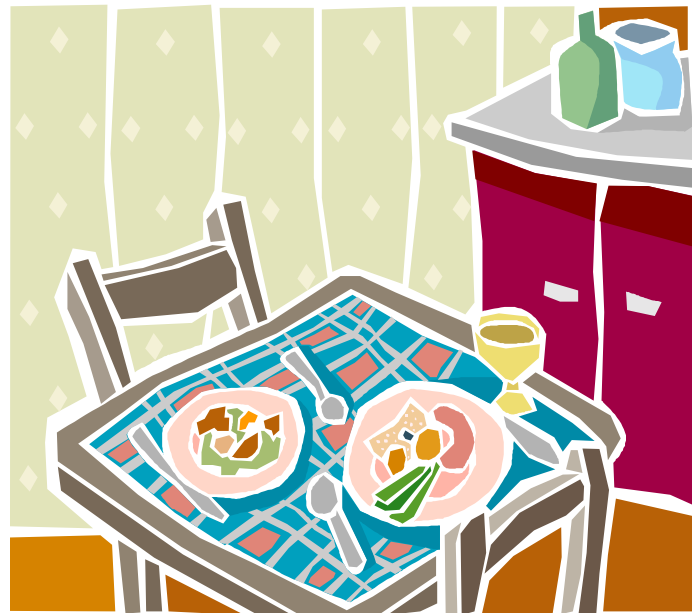
- The host will tell you where to sit
- Place your napkin on your lap
- Wait for others to be served before starting to eat
- Take small bites
- Avoid chewing noisily or with your mouth open
- Do not talk with your mouth full
- Pass food from left to right
- Use the words “please” and “thank you” when passing dishes to each other
- Wait till everyone has finished eating before getting up from the table
- Avoid wearing a hat to the dinner table

Some good websites on “Setting the Table”:

- <http://www.learn2.com/06/0608/06084.asp>
- <http://www.manners101.com/map.htm>

Some websites on general “Table Manners”:

- <http://www.leaderu.com/isr/lifeinamerica/tablemanners.html>
- <http://www.manners101.com/servers2.htm>
- <http://www.cuisinenet.com/glossary/tableman.html>



The KIDS Can Make A Difference® program contains several components which add to its effectiveness.

who do not have basic etiquette skills needed to function in the business world. Why is this? In our fast paced society with both parents working, there is not

In the classroom, such skills can also be taught. Teaching how to set a table, proper use of a fork, knife and spoon, how to use a napkin and what you can eat

Coming Next Month:

World Food Day is October 16. Help your students gain a better understanding of hunger and malnutrition on that day and throughout the year. Next month's *Nourishing News* will contain articles describing ways that you can teach your students about hunger, provide you with more information about World Food Day, and review lessons that you can use as a starting point to introduce the topic of hunger to your students. Please keep this date in mind as you plan your lessons for the upcoming semester.



Nutrition Information & Resource Center

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We're on the web! Check out the nutrition education resources available at the NIRC website.
<http://www.clemson.edu/NIRC/>

The NIRC offers information about food science and nutrition. Through email, users may request information and answers to specific questions. (Address queries to: eat4health@clermson.edu) The NIRC offers links to many other nutrition websites, making us a great place to start a search on any nutrition-related topic.

The food and human nutrition materials at NIRC consist of books, journals, and audiovisuals covering a broad range of topics from children's literature to technical nutrition information. NIRC provides direct lending services to teachers, dietitians, family and consumer scientists and other food, nutrition and health professionals.

For a free subscription to *Nourishing News*, delivered monthly via email in pdf format, email eat4health@clermson.edu, or fill out a subscription request form at <http://virtual.clemson.edu/groups/NIRC/teacher1.htm>.

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This Month's Recipe Feature

Power Breakfast Ideas

For this month's recipe feature, we offer some Power Breakfast Ideas from the **EAT SMART. PLAY HARD.™** campaign.

- Use quick-cooking oats and add dried or fresh fruit, nuts and brown sugar, or add cheese or soft margarine to grits instead of butter.
- Try something different like a burrito or other leftovers such as a stuffed baked potato or pizza.
- Fill pita bread with your favorite low-fat cheese, lean meat and vegetables. Heat in microwave.
- Mix low-fat milk or low-fat yogurt with berries for a cool shake.
- Mix leftover rice, low-fat yogurt, dried fruit, nuts and cinnamon.

