

HIGH-FIBER, LOW-FAT MEANS BETTER NUTRITION FOR TEENS

Few teens have eating habits that mirror U.S. dietary recommendations for fat and fiber. But, those who do reap both immediate and long-term health benefits, according to a survey of teen eating habits conducted by CNRC nutritionist Dr. Theresa Nicklas.

A low-fat, high-fiber diet is recommended for all Americans over 2 years of age to reduce cardiovascular disease and cancer risk. So, it's not too surprising that teens who followed this dietary regime consumed less total cholesterol and saturated fat than their peers.

The benefits of a low-fat, high-fiber diet didn't stop there. The teens also consumed more important vitamins and minerals, including vitamin A, B6, B12, and C, folate, niacin, thiamin, riboflavin, iron, zinc, calcium, magnesium, and phosphorus.

Yet, the number of calories their food choices provided was similar to that of teens whose diets weren't nearly as healthy.

"This suggests that teens who choose a low-fat, high-fiber diet aren't overly calorie conscious and that this eating pattern can provide plenty of energy for growing teens," said Nicklas, a Baylor College of Medicine professor of pediatrics.

To find her results, Nicklas asked hundreds of 15-year-old teens to recall what they had eaten during the previous 24 hours. Reports from teens that fell into one of four eating patterns—high-fat/high-fiber, high-fat/low-fiber, low-fat/low-fiber, or low-fat/high-fiber—were further analyzed for nutritional content.

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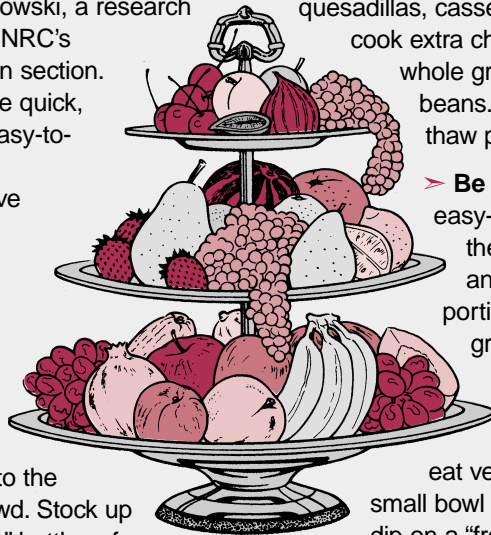
KITCHEN MAKEOVER MAKES HEALTHY EATING HASSLE-FREE

Simply rethinking how you shop and store groceries could help your family eat healthier.

"Expecting busy family members to stop and peel a carrot is unrealistic," says Janice Baranowski, a research dietitian with the CNRC's Behavioral Nutrition section. "Snacks need to be quick, easy-to-find and easy-to-eat."

To help improve your family's diet, Baranowski offers these kitchen "makeover" tips:

> Think small: Individual portions are most attractive to the "eat-it-now" crowd. Stock up on "grab-and-go" bottles of low-fat milk and water, boxes of 100 percent fruit juice, easy-to-eat "tubes" of yogurt, low-fat string cheese, and snack bags of mini carrots and a favorite low-fat dip. Pack pantry shelves with mini boxes of raisins. Re-portion packages of whole-wheat crackers into easy-to-grab snack bags.



> Remember easy does it: No-fuss "salad in a bag," easy-to-thaw frozen poultry pieces, grated low-fat cheese, and canned and frozen vegetables cut meal prep time. For quick quesadillas, casseroles and soups, cook extra chicken breasts and whole grains, rice and beans. Freeze in easy-to-thaw portions.

> Be obvious: Keep easy-to-eat fresh fruit on the kitchen counter and snack-size portions of frozen grapes in front of high-fat freezer snacks. Keep pre-cut fruits, ready-to-eat vegetables and a small bowl of favorite low-fat dip on a "front-and center" shelf in the refrigerator.

> Small changes add up: Switch to 100 percent fruit juice, 100 percent whole-grain bread and ready-to-eat cereals, soft or liquid margarine, and low-fat or fat-free milk and dairy products. Add nuts, seeds or fruit to

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VOLUNTEERS

Houston-area volunteers are needed to participate in the following studies.

Transportation/parking is available. For more information call the CNRC volunteer hotline, (713) 798-7002.

Biological Diversity of Growth

Needs Hispanic, African-American, and European-American children 2 to 5 years of age and 19 to 22 years of age; African-American and Hispanic males 10 to 17 years of age; and any child or adult under 23 years of age who has been involved in CNRC studies that included body composition measurements. Stipend. Call Marilyn, (713) 798-7002.

Low-Lactose Formula Study

Needs full-term, formula-fed infants, 6 to 10 weeks of age. Free Formula/ Stipend. Call Dee Dee, (713) 798-7085.

Carbohydrate Metabolism in Heavy Kids

Needs overweight 13- to 16-year-old children to help researchers learn if a child's weight affects how they metabolize carbohydrates and sugars. Free Meals/Stipend. Call Andrea, (713) 798-7083.

Baby-Friendly Neighborhood

Breastfeeding assistance for moms living in Houston-area zip codes 77003, 77011, 77012, 77020, 77023, and 77029. Free Classes/Consultations/ Infant Weight Checks/Infant Portraits. Information in Spanish/English. Call Rosa, (713) 798-7194 or Daisy or Sandra, (713) 926-3372.

Breastfeeding Study

Needs pregnant women in their last trimester who plan to breast-feed and new mothers with breastfed infants between 2 weeks and 2 months of age. Call Andrea, (713) 798-7083.

Formula Composition and Baby Fat

Needs formula-fed infants, 0 to 4 weeks of age, to help determine whether an essential fat improves a baby's metabolism and influences how fat a baby becomes. Free Formula/Baby Portraits. Contact Betty (713) 798-7064.

Fun, Food & Fitness (GEMS)

Needs African-American 8-year-old girls and their parents for discussion groups. Stipend. Call LaTroy or Judy, (713) 798-7082.

Peer Counselor Training Program

Needs English- and/or Spanish-speaking women to help new mothers and their babies learn to breastfeed after delivery. Free Training/Parking at Ben Taub Hospital. Call Rosa, (713) 798-7194. ❖

Kitchen Makeover

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salads. Serve more fish, poultry and leaner cuts of meat and meals that give center stage to vegetables and grains.

> **Downsize treats:** Help your family by buying smaller packages and limiting snack variety.

> **Advertise:** Develop "in-house promotions," such as a chart that allows each family member to track the number of fruit, vegetable, whole grain servings they eat each day. Establish a non-food reward system and mark daily progress with stamps or stickers. ❖

ABCs OF HEALTHY EATING

Citing eating "one of life's greatest pleasures," the latest edition of the *Dietary Guidelines for Americans* offers the following 10 recommendations for good health:

Aim for Fitness:

- > Aim for a healthy weight.
- > Be physically active each day.

Build a Healthy Base:

- > Let the Pyramid guide your food choices.
- > Choose a variety of grains daily, especially whole grains.
- > Choose a variety of fruits and vegetables daily.
- > Keep food safe to eat.

Choose Sensibly:

- > Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- > Choose beverages and foods to moderate your intake of sugars.
- > Choose and prepare foods with less salt.

- > If you drink alcoholic beverages, do so in moderation.

The Dietary Guidelines provide the basis for the Food Guide Pyramid and federal nutrition policy and programs.

First published in 1980, the Dietary Guidelines are updated every five years based on the recommendations of an 11-member Dietary Guidelines Advisory Committee who evaluate advances in medical and scientific research.

Dr. Cutberto Garza of Cornell University, the advisory committee chair for the newest edition of the guidelines, is a former CNRC assistant director. CNRC director, Dr. Dennis Bier, was a member of the 1995 committee.

To learn more about the new dietary guidelines, see www.health.gov/dietaryguidelines/. To obtain a copy, send a check or money order for \$4.75 to Consumer Information Center, Pueblo, CO 81009. ❖

WEIGH BMI LIMITATIONS WHEN EVALUATING CHILDREN

An explosion of “super-sized” kids has American health professionals greeting the body mass index (BMI) with open arms. But preliminary findings from a large-scale CNRC study suggest tempering enthusiasm with an understanding of the BMI’s limitations. The BMI is an additional obesity-screening tool released with the new pediatric growth charts in May.

“One out of six children whose BMI value was in the normal range was found to have an unhealthy level of body fat. And one out of four with a BMI in the at-risk to obese range actually had a body-fat percentage in the normal range,” said Dr. Kenneth Ellis, a body composition expert with the CNRC and Baylor professor of pediatrics.

Ellis compared calculated BMI values for an ethnically diverse group of 979 boys and girls, ages 3 to 18, to scientific measurements of their body fat. BMI values were calculated using the children’s height and weight, while their percent body fat was measured using a sensitive instrument called DXA.

“Two basic assumptions regarding body composition lead to inaccuracies when the BMI is used as a one-size-fits-all screening tool for fatness,” Ellis said. One is that every individual whose BMI is within the normal range has a normal amount of body fat. The other is that every ounce of body weight over the standard weight-for-height is fat.

When assessing your child’s BMI, remember:

- BMI is only a guideline. It does not measure bone, fat or muscle.
- BMI values considered “appropriate” increase with age.
- There is no “right” BMI value for any single child at any age.
- BMI values should not be compared between children.
- A high or low BMI value isn’t always cause for concern.

If you have concerns about your child’s weight, see a physician.

Few people think that normal-weight kids can have unhealthy levels of body fat. Yet, the DXA measurements of children with calculated BMI values between 18 and 20 showed body-fat percentages ranging from 10 to 40 percent. Body-fat levels over 30 percent are generally considered unhealthy in children over 3 years of age.

“Clearly, if we rely solely on the BMI, kids who probably need some type of intervention could fall through the cracks,” Ellis said.

There is also the risk of labeling one out of four children with a high BMI as at-risk or overweight when they actually have normal amounts of body fat. High levels of physical activity, early maturation, genetics and ethnicity can all contribute to a child having a high BMI but a healthy amount of body fat.

“If our concern is that excess body fat increases the risk for cardiovascular disease, Type 2 diabetes and other illnesses in children now and later in life, health professionals must consider other factors in addition to BMI values when evaluating children,” Ellis said. ❖

Note: The new pediatric growth charts, including BMI charts and a BMI calculator, are available on the Centers for Disease Control (CDC) website: <http://www.cdc.gov/growthcharts/>.

Nutrition for Teens

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Reports classified as low-fat met the dietary guideline that fat provide no more than 30 percent of total daily energy, while high-fat reports had levels of 40 percent or more. High-fiber reports satisfied the “age plus five” fiber guideline and contained at least 20 grams; low-fiber diets, 15 grams or less. The “age plus five” guideline recommends one gram of fiber per year of life through age 20 plus five grams, or 20 grams per day for the teens in the study.

According to Nicklas, teens whose reports met the fat and fiber guidelines ate smaller portions and leaner cuts of meat, skinless poultry, and low-fat dairy products. They also ate more whole-grain breads and ready-to-eat cereals, fruit, salads, beans, and vegetables, and few fried and high-fat foods.

But, the study did have a downside. Although the low-fat/high-fiber regime was the hands-down nutritional winner, only one-third of the 319 teens whose diets were analyzed had this eating pattern, including just nine percent of non-white teens. ❖

Healthy Eating Resources

USDA’s Center for Nutrition Policy and Promotion

<http://www.usda.gov/cnpp/>

Tufts’ Nutrition Navigator

<http://navigator.tufts.edu/>

Mayo Health Oasis

<http://www.mayohealth.org/>

Parent’s Place

<http://www.parentsplace.com/expert/nutritionist/>

Feeding Kids Newsletter

http://www.nutritionforkids.com/Feeding_Kids.htm

Tiny Tummies Online

<http://www.tinytummies.com/>

Meals For You

<http://www.mealsforyou.com/mfy/>

Nutrition & Your Child

Baylor College of Medicine
USDA/ARS Children's Nutrition Research Center
Office of Public Affairs
One Baylor Plaza, Room 176B
Houston, Texas 77030

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Permit 1492

NUTRITION TIDBITS

Q

How much fiber does my 8-year-old daughter need?

A

"Age + 5," is a good rule of thumb for the daily fiber needs of children over the age of 3, says Dr. Debby Demory-Luce, a registered dietitian with the CNRC.

Although 13 grams of dietary fiber might sound like a lot, rest assured that your daughter can get all the fiber she needs by eating a variety of healthy foods and the recommended minimum of five servings of fruits and vegetables and one serving of whole-grain foods each day.

For example, eating a medium banana with breakfast (2 gm), a sandwich made with two slices of 100 percent whole wheat bread (2 gm/slice) and a medium orange at lunch (3 gm), and about three medium-size "oven" fried potato wedges with skin (2 gm) and one-half cup of peas (2 grams) at dinner will provide your daughter with a full 13 grams of fiber.

Other fiber-filled tips include:

- > Leave the peeler in the drawer when preparing apple and pear snacks and potatoes.
- > Fresh, frozen or canned fruits are richer in fiber than juice. Offer for snacks or dessert.
- > Keep ready-to-eat vegetables and dip on child-accessible shelves in the refrigerator.
- > Toss extra vegetables, beans or lentils into soups and salads.
- > Stock up on whole-grain breads and crackers.
- > Some brown-hued breads are simply white bread with food coloring. Check for the word "whole" before grain names on food labels and ingredient lists.

To learn more about fiber, see Upbeat on Fiber, *Food Insights*, August 1998. <http://ificinfo.health.org/insight/upfiber.htm>. ❖

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