



Nutrition for Family Living

Susan Nitzke, Nutrition Specialist; susan.nitzke@ces.uwex.edu
Sherry Tanumihardjo, Nutrition Specialist; sherry.tan@ces.uwex.edu
Amy Rettammel, Outreach Specialist; arettamm@facstaff.wisc.edu

April, 2000 Topics

- Upcoming Obesity Videoconference, 4/26/00
- The Fat vs. Carbohydrate Debate
- Added Sweeteners Intake of Americans
- USDA Proposes Revised Rule on Products Labeled "Organic"

Upcoming Obesity Videoconference, 4/26/00

The weight of Americans continues to be in the spotlight, as over half of American adults are overweight and over 20% are obese. The prevalence of overweight American children is equally astounding, with estimates ranging from 12-20% of children. The concern surrounding high weights among Americans centers on health issues, because obesity is linked with chronic diseases like heart disease, cancer, Type II Diabetes, and osteoarthritis.

Recommendations for healthy weight loss include a combination of eating less total calories and increasing physical activity. According to an article in the Journal of the American Medical Association¹, two-thirds of American adults are trying to lose weight but most of them are not following recommendations. Researchers examined the results of a survey conducted with 107,804 men and women who were asked about their attempts to lose or maintain weight, and their weight control strategies.

Only 21.5 percent of men and 19.4 percent of women reported using the recommended combination of eating fewer calories and engaging in at least 150 minutes of leisure-time physical activity per week. "Thus, although most Americans reported using diet, physical activity, or both for weight loss, only a minority were using the recommended combination," the authors said.

The need for education about obesity and overweight continues. While the answers are not black and white, there are points of agreement on what is good advice. To learn more about obesity and overweight, attend the April 26th compressed videoconference, "Obesity and Fad Diets: An Extension Perspective." Registration information is on the next page. The **registration deadline is April 15, 2000.**

References:

- 1) Serdula et al. Prevalence of Attempting Weight Loss and Strategies for Controlling Weight. *JAMA* October 13, 1999. <http://jama.ama-assn.org/issues/v282n14/pdf/joc90559.pdf>
- 2) Adapted from: Bobroff. Weight Loss Practices. Nutrition Newsletter, University of Florida Extension, Winter 2000. <http://www.ifas.ufl.edu/~fyicsweb/linda7.htm#anchor11>



Nutrition for Family Living April, 2000

Obesity Videoconference, cont'd

Registration Information (per a 3/13/00 email announcement from Gloria Green)

1. Decide what location you will be attending for the videoconference and email the site coordinator for that location (see table below). Include in the email the names of individuals who will be attending the videoconference at that location on April 26th.
2. Registration deadline is April 15th.

SITE LOCATION	SITE COORDINATOR	EMAIL ADDRESS
UW-Green Bay	John Pinkart	JOHN.PINKART@CES.UWEX.EDU
UW-Extension/DNR Rhineland	Pam Cira	PAM.CIRA@CES.UWEX.EDU
UW-Superior	Linda Bruce	LINDA.BRUCE@CES.UWEX.EDU
UW-Milwaukee UCCE	Gerri Gondek	GERRI.GONDEK@CES.UWEX.EDU
UW-Stout	Nancy Coffey	NANCY.COFFEY@CES.UWEX.EDU
Pyle Center, Madison	Gloria Green	GLORIA.GREEN@CES.UWEX.EDU



The Fat vs. Carbohydrate Debate

While currently popular diet books espouse the virtues of protein and warn against the evils of carbohydrate, a very different debate is occupying scientific researchers. Unlike currently popular diet book authors, researchers are not arguing over how much protein people should eat (researchers tend to agree on approximately 15% of total calories). The scientific debate is about the balance of the remaining non-protein calories - how much should come from carbohydrate and how much should come from fat?

An article authored by Scott Grundy in the *Annual Review of Nutrition* (1999; 19:325-41) provides a review of the controversies surrounding recommended dietary patterns for Americans. At the heart of this debate is how best to lower diet-related chronic disease risk (like heart disease and cancer). One group of researchers says that a high fat intake contributes to risk of heart disease and other chronic diseases. Another group says that certain *types* of fats raise the risk of heart disease while other types protect against chronic diseases, and still others say that a high carbohydrate diet may be more powerful in determining one's risk of heart disease.

There are several ways to gather evidence regarding the link between diet and chronic disease risk, including animal studies, epidemiological surveys, and clinical trials. The point to remember however, is that only clinical trials can produce human evidence that links the effect of a particular diet to the cause of a particular disease. Evidence gathered by any other means shows only an *association* between diet and disease, but cannot demonstrate cause and effect. The sticking point is that clinical trials are very expensive and difficult to carry out.

Let's take heart disease for example. It is generally accepted among the scientific community that saturated fats can significantly raise serum cholesterol levels in humans. Evidence for this conclusion is based on animal and human feeding studies, epidemiological observations, and several small clinical trials. The question that remains is, "when people cut their saturated fat intake, what should they replace those calories with - other types of fats (polyunsaturated or monounsaturated), or carbohydrates?" Polyunsaturated fats (like linoleic acid in corn oil) can lower serum cholesterol levels. While humans do need to consume linoleic acid in small amounts in order to function, no population has consumed high levels of linoleic acid over the long term. For this consideration of safety, researchers are reluctant to make a population-wide recommendation to replace saturated fats in the diet with polyunsaturated fats. Then there are monounsaturated fats like oleic acid (the fat in olive oil). In the Mediterranean region of the world, people have eaten lots of olive oil for a long period of time, and they have a low incidence of heart disease. This observation in combination with evidence that oleic acid can lower cholesterol levels in humans has convinced many researchers to recommend replacing saturated fats with monounsaturated fats in order to lower heart disease risk.

Another way is to replace saturated fats with carbohydrates (starches and sugars), rather than with other types of fats. Like the epidemiological evidence supporting monounsaturated fats, there is evidence that populations eating a very low-fat diet (e.g. Asia) also have a lower risk of heart disease; and that a very low-fat diet can lower LDL ('bad') cholesterol levels as much as diets high in monounsaturated fats can. Debates continue over the benefits of high-carbohydrate diets, especially regarding the trade-offs between sugars and starches and the importance of dietary fiber.

What does this mean? The current debate on the appropriate proportion of fat to carbohydrate in the diet is likely to continue as results of new studies become available. Other diet/disease relationships that are relevant to this debate over fat vs. carbohydrate include cancer and Type 2 Diabetes. Obesity is also a factor, and it's important to remember that all fats, whether highly saturated or not, have roughly 9 calories per gram, while carbohydrates have only 4 calories per gram.

While researchers continue to study what portion of calories should come from fat and what portion should come from carbohydrate, current dietary recommendations must make the best of the available scientific evidence to date. After considering all the evidence, the Dietary Guidelines Advisory Committee has recommended that Americans aim for a diet moderate in total fat (30% of total calories) and low in saturated fat.



Added Sweeteners Intake of Americans

A recent article in the January 2000 issue of the *Journal of the American Dietetic Association* describes Americans' intake of added sweeteners, categorized by age group and gender. Items considered "added sweeteners" are those added in the processing or preparation of foods, or added at the table. Examples of sugars that are not considered "added" are fructose in fruit and lactose in milk. Following are terms that indicate added sweeteners in food label ingredient lists:

anhydrous dextrose	dextrose	maltodextrin (or dextrin)
beet sugar	evaporated cane juice	maple syrup
brown sugar	fructose	molasses
cane sugar	fructose sweetener	pancake syrup
confectioner's sugar	high fructose corn syrup	raw sugar
corn syrup	honey	sucrose
corn syrup solids	invert sugar	turbinado sugar
crystal dextrose	liquid fructose	white sugar
crystallized cane juice	malt syrup	

1994-1996 CSFII data on food intake were used to determine how much added sweeteners Americans are eating:

- Overall, Americans eat 82 gram equivalents* of added sweeteners per day. This equals 16% of total calorie intake.
- At 142 gram equivalents* per day, 12-17 year-old males consumed the most added sweeteners of all age/gender groups. This equals 20% of their total calorie intake.
- At 98 gram equivalents* per day, 12-17 year-old females consumed less total added sweeteners than their male counterparts, but these 98 grams still contributed the same proportion (20%) of total intake.
- Overall, regular soft drinks accounted for 1/3 of all added sweetener consumption. They were the number one contribution to added sweetener intake in all age/gender groups except children ages 2-5 (sugars/sweets were #1 here), men 65 and older, and women 55-64 years old (sweetened grains were #1 in these two groups).
- The second largest overall contributor to added sweetener intake was sugars/sweets (table sugar, honey, syrups, candies, jams, jellies, and gelatin desserts).
- The third largest overall contributor was sweetened grains (cookies, cakes), which in women aged 55-64 and in both genders 65 and older accounted for 20% of total calorie intake.
- The fourth largest overall contributor was fruitades/drinks, which in children ages 2-4 accounted for 19.4% of total calorie intake

What does this mean? Americans are clearly exceeding the Food Guide Pyramid recommendation that added sweeteners comprise just 6-10% of total calorie intake. Added sweeteners come with calories, but without nutrients. Rising soft drink consumption has likely contributed to the decline in milk consumption (an important source of calcium). Foods high in added sweeteners sometimes *displace* calories from other, more nutritious foods. Other times added sweeteners *add extra* calories – possibly contributing to the rapidly rising obesity rates among Americans.

Nutrition educators can encourage consumers to recognize foods that give them "empty calories" from added sweeteners. Labeling lessons can help consumers understand confusing terms such as "crystallized cane juice." Education for certain groups can be improved by targeted messages, eg: encourage milk instead of soda among teenagers and 100% juice, milk, or water instead of fruit drinks among parents of 2-4 year olds.

*Gram-equivalent is an amount of added sweeteners comparable in carbohydrate content to 1 g sucrose (table sugar).



Nutrition for Family Living April, 2000

USDA Revises Proposed Rule for Products Labeled as “Organic”

Currently, organic food is certified by various private and state organizations that each use their own standards for the term "organic." The Organic Foods Production Act (OFPA) of 1990, adopted as part of the 1990 Farm Bill, requires USDA to develop national standards and regulations for organically produced agricultural products, to assure consumers that agricultural products marketed as “organic” comply with these standards. The OFPA and the National Organic Program (NOP) require that agricultural products labeled “organic” originate from farms or handling operations certified by a State or private agency that has been accredited by the USDA. In December 1997, the USDA published a proposed rule for products labeled as “organic,” and received 275,603 public comments.

On March 7th, USDA Secretary Dan Glickman announced a new proposal incorporating the most prevalent comments. The new rule will set uniform and consistent national standards for organic food.

The proposal specifies the methods, practices, and substances that can be used in producing and handling organic crops and livestock, as well as processed products. It establishes labeling criteria so that consumers know exactly what they are buying when they purchase organic food. It specifically prohibits the use of genetic engineering, sewage sludge, and irradiation in the production of food products labeled "organic." The proposal also prohibits antibiotics in organic livestock production and requires 100 percent organic feed for organic livestock.

Fact sheets and other background materials on the proposed organic rule can be found at <http://www.ams.usda.gov/nop>.