



# Nutrition for Family Living

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## September, 2001 Topics

- Diet and exercise delay diabetes
- The decision to breastfeed: does race matter?
- Avoid getting duped by foods masquerading as healthful.
- Heart disease in the neighborhood
- Composition of fats and oils
- New grant with research and extension partnership

## Diet and exercise delay diabetes

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A major clinical trial comparing diet and exercise to drug treatment has shown that diet and exercise can help many adults at risk of Type 2 diabetes to sharply lower their chances of getting the disease.

The study came from the Diabetes Prevention Program, which enrolled 3,234 adults with impaired glucose tolerance (blood sugar levels higher than normal but not yet diabetic). Forty-five percent of the sample was recruited from minority groups that have increased rates of type 2 diabetes: African Americans, Hispanic Americans, Asian Americans and Pacific Islanders, and American Indians. The study also recruited other high risk individuals over age 60, women with a history of gestational diabetes, and people with a close relative with type 2 diabetes. Participants were assigned to one of three groups: intensive lifestyle change, drug therapy with metformin, and a placebo pill in place of metformin. All groups received information on diet and exercise.

Participants in the lifestyle intervention group received training in diet, exercise (most chose walking) and behavior modification. All three groups were given the same general advice about diet and exercise, but only those in the group that attended classes on diet and exercise were able to put the advice into practice. After the 24 weeks of classes, participants were assigned coaches that followed up with them once/month. Most achieved the study goal, an average of 7% or 15 pound weight loss, and generally maintained a 5% total weight loss for the duration of the study. The lifestyle intervention worked as well in men and women and in all the ethnic groups. It also worked well in individuals over age 60, reducing the development of diabetes by 71%.

This study population is similar to the population many educators serve through Extension. Educators and their clients can be encouraged by this information: modest lifestyle changes – eating less fat, exercising 30 minutes/day, and losing a moderate amount of weight – can cut the incidence of diabetes by more than half among those most at risk. Classes that taught about eating a healthy, balanced diet and being physically active were essential to their success.

Diet and Exercise Dramatically Delay Type 2 Diabetes: Diabetes Medication Metformin Also Effective. HHS News press release, August 8, 2001 [www.hhs.gov/news/press/2001pres/20010808a.html](http://www.hhs.gov/news/press/2001pres/20010808a.html)

Diet and exercise are found to cut diabetes by over half. *The New York Times*, August 9, 2001.



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## The decision to breastfeed: does race matter?

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Researchers at Brigham Young University analyzed data from the 1995 National Survey of Family Growth to investigate the effects of maternal and birth characteristics on the decision to breastfeed, and whether breastfeeding practices help to explain racial differences in infant mortality. The data was collected by the Centers for Disease Control and Prevention and included a national sample of 1,088 women with a child 18 months or younger at the time of the interview.

**Background.** Previous research has shown some characteristics help predict which women will choose to breastfeed. Women are more likely to breastfeed if they are:

- College-educated
- Unemployed
- Older
- Hispanic
- Foreign-born
- Live in the western US
- Catholic
- Married
- Positive self-image
- Health-conscious

Also, first-born children are more likely to be breastfed while infants with poor health or who were delivered by Cesearian section are less likely to be breastfed.

**Maternal and infant characteristics.** In this sample, about 57% of all mothers chose to breastfeed; 65% of white mothers breastfed and 30% of black mothers breastfed. The white mothers in this sample also showed more of the characteristics that previous research predicts would contribute to the decision to breastfeed: higher income and education, marriage, and residence in the western part of the country. Even after controlling for socioeconomic background and birth characteristics, black women were only 40% as likely to breastfeed as nonblack women.

**Breastfeeding and infant mortality.** Past research has shown that the high incidence of low birth weight in black infants is partially responsible for the higher infant mortality rate in blacks. These authors investigated whether the lower breastfeeding rate was also a contributing factor. When they compared statistical models including low birth weight and whether the infant had ever been breastfed, they found that the two factors were almost equally important.

**Implications.** Black infants have a 30% higher mortality rate than white infants. These authors suggest that if more black women could be encouraged to breastfeed, the difference in infant mortality rates between white and black infants should become less. The most common reason given by black women for not breastfeeding was “prefer to bottle feed.” The authors agree that more research is needed to understand this reason and how it impacts black women’s decisions.

Educators should continue to promote breastfeeding, especially among black women, while understanding that there are many maternal and infant characteristics that influence the decision-making process. The relationship between breastfeeding, low birth weight, and infant mortality is compelling and while it may not influence an individual woman’s decision, it should serve to remind educators that their efforts to promote breastfeeding can make a difference.

Forste R, Weiss J, Lippincott E. The decision to breastfeed in the United States: Does race matter? *Pediatrics* 2001;108:291-296.



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### Avoid getting duped by foods masquerading as healthful.

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*Environmental Nutrition* did some supermarket sleuthing and has tips for telling the truly healthy choices from the imposters:

- Don't judge a bread by its color. Look for "100% whole wheat" or "100% whole grain" on the label. Some wheat breads are simply white flour plus molasses, for color. Multi-grain breads aren't necessarily better unless they're made from primarily whole grains. Confused by the words on the label? Whole grain bread will have several grams of fiber.
- Honey of a cereal? Honey is added for its image, but it's really no better than sugar. The words in the cereal's name may or may not give good clues as to its sugar and fiber content. Read the label and compare several similar products. You may find some surprises. Some ingredients like blueberries are added for their health benefits but there may not be enough present to have an effect.
- Berry juicy? Juice "cocktails" or "drinks" are not 100% juice. Products that boast 100% of the DV for Vitamin C are also not necessarily 100% juice. Many juice blends don't mention everything in their name; check the ingredient list to see exactly what's in there. Many berry juices are actually juice blends, with the main ingredient being apple or grape juice. If you're buying berry juice for the carotenoids, be sure to check the ingredient list. You won't get as many if apple or grape juice is listed first.
- Skip the breakfast bars. Despite their "grainy" sounding names, most breakfast bars contain very little grain, even less fruit, and a lot of sugar. Have some cereal instead.
- Fruit or candy? Fruit snacks containing "real fruit juice" contain very little of a juice's nutrients and are not a substitute for real fruit or juice. They are more like candy than fruit.
- Yogurt is changing. Serving sizes are getting smaller and all the added "goodies" – cereal, fruit jam, sprinkles – add calories without significant nutrients. Check the serving size; it may be smaller than you think. Look for basic low-fat yogurt with active cultures.

*Environmental Nutrition*, July 2001



## Heart disease in the neighborhood

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From the desk of Sherry T.:

Typically, when we think about risk factors for heart disease we think about lifestyle choices and family history. However, a recent study has shown that the neighborhood in which a person lives may also be a factor related to health status and mortality.

Using data from the Atherosclerosis Risk in Communities Study, the authors examined the relationship between characteristics of neighborhoods and the incidence of coronary heart disease. The ages of the participants were 45 to 64 years and included four diverse representative study sites in the United States.

During 9.1 years of follow-up observation, 615 heart-related problems (heart attack or death due to heart disease) occurred in 13,009 participants. Living in the most disadvantaged group of neighborhoods, as compared with the most advantaged group, was associated with a 70-90 percent higher risk of heart disease in whites and a 30-50 percent higher risk in blacks. Effects of neighborhood were observed in both racial groups even though the blacks were drawn from significantly more disadvantaged neighborhoods than whites.

### **Implications for our work:**

Our work with individuals and families to improve dietary choices is very important in the prevention of disease. Improving broader social and environmental forces are also key in shaping health outcomes. Preventing heart disease and other chronic disease risks will be most effective if interventions occur at multiple levels. Our work in educating individuals and families is critically important, but other interventions to address broader socio-cultural factors are also needed. Coordinating our education with partners within and outside of Extension will continue to be important as we address the need for “systems and environmental change.”

Diez Roux AV et al. Neighborhood of residence and incidence of coronary heart disease. *New England Journal of Medicine* 2001; 345: 99-106.



## Nutrition for Family Living September, 2001

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### Composition of Fats and Oils

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Dennis Buege, Extension Meat Specialist, has written a summary of the types of fats and oils found in food. If you're looking for a straightforward reference to print and keep on file for those inevitable consumer questions, this is it: [www.uwex.edu/ces/animalscience/newletter/](http://www.uwex.edu/ces/animalscience/newletter/)

Summaries of related information you'll also find useful:

Dietary Guidelines for Americans, p 28-31

[www.health.gov/dietaryguidelines/dga2000/DIETGD.PDF](http://www.health.gov/dietaryguidelines/dga2000/DIETGD.PDF)

UW Extension "Eating for Your Health" publications ("Finding Fat in Food," B3712-1, "Eating Less Fat" B3712-2)

FDA's consumer publication [www.cfsan.fda.gov/~dms/dfats.html](http://www.cfsan.fda.gov/~dms/dfats.html)

American Dietetic Assn.'s primer on fats and oils [www.eatright.org/nfs/nfs0301b.html](http://www.eatright.org/nfs/nfs0301b.html)



## Nutrition for Family Living September, 2001

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### New grant with research and Extension partnership

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Susan Nitzke and co-researchers in nine other states are planning to begin a new 4-year USDA/IFAFS grant-funded project later this year. This new research project is designed to develop effective interventions via research/education/Extension partnerships to improve food choice behaviors of economically-disadvantaged young adults. The primary objectives are 1) to increase fruit and/or vegetable intakes by young adults and 2) to determine the effectiveness of stage-tailored intervention modalities based on the Transtheoretical Model (TTM or “Stages of Change”) and 3) to extend these findings to a specific set of recommendations for community-based practitioners. The intervention will be a combination of mailed materials and telephone education provided by Extension educators. The six-month intervention includes a combination of individually-tailored computer generated reports, educational telephone contacts, a manual, and stage-tailored newsletters. Qualitative interviews and readability assessments in the first year will offer additional rigor in refining intervention materials and protocols according to the needs and preferences of the targeted population. If you are interested in cooperating in this research, please let Susan know ([susan.nitzke@ces.uwex.edu](mailto:susan.nitzke@ces.uwex.edu)).