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Attitudes and Behaviors Related to Weight Status

Donald Rose
(202) 219-0864

The Dietary Guideline to maintain a healthy weight may be one of the most difficult to meet. This guideline is not new—having appeared as a recommendation in Government publications for close to 15 years. But despite public investment in health education and new evidence which shows that a majority of Americans are aware of health problems associated with being overweight, the percentage of overweight people in the United States is actually increasing.

Information from two recent national surveys—the 1989-90 Diet and Health Knowledge Survey (DHKS) and the Continuing Survey of Food Intakes by Individuals (CSFII)—reveals some interesting insights into the awareness, attitudes, and behaviors about food intake, weight maintenance, and related nutrition and health issues. These are the first national surveys to gather this information as well as food consumption data from the same individual.

For the surveys, conducted by USDA's Human Nutrition Information Service, a nationally representative sample of people was selected and asked to provide 3 days of food intake information. In

addition, the main meal planners/preparers for the household answered questions about their weight and their attitudes and knowledge about diet and health. The sample used for this article consisted of 2,232 women who were not pregnant or breastfeeding. (For additional information about these surveys, see the inside front cover of this issue.)

The surveys support what nutritionists have known for some time—that awareness of the relationship between diet and health may not be enough to change behavior effectively. In fact, the survey found that among women, awareness of health problems associated with being overweight did not lessen the likelihood of being overweight.



Being overweight is a condition which cuts across economic, educational, and racial groups. Yet, preliminary analyses of the survey data show that some women are more likely to be fatalistic about changing their weight, less likely to exercise during their leisure time, and more likely to be overweight.

The author is a nutritionist and agricultural economist with the Commodity Economics Division, Economic Research Service, USDA.

However, women who value the importance of maintaining a desirable weight appear less likely to be overweight than are those who do not possess this attitude. These women are also more likely to engage in moderate to heavy physical activity during leisure time, which may partly explain the association with weight status.

More Are Overweight Today Than in the 1970's

In *Healthy People 2000*, the Nation's health professionals set a goal of reducing the percentage of people who are overweight by more than 20 percent of the rate in the late 1970's. This goal seems ambitious, especially in light of recent trends. Self-reported weight and height data from women responding to the 1989-90 CSFII surveys reveal that 30 percent of those aged 20-74 years are overweight. This is slightly higher than the 27 percent of women of the same age who were found to be overweight in the 1976-80 National Health and Nutrition Examination Survey (NHANES), which weighed respondents.

Although the surveys are not directly comparable, it appears that the percentage of overweight women is increasing. Preliminary data from phase I of the third NHANES (1988-91) show that a greater percentage (35 percent) of women are overweight today than in the late 1970's.

As has been found in other surveys, the CSFII shows that a larger percentage of low-income women are overweight than are high-income women. Likewise, weight status is similarly associated with education level. For example, women with 8 years or less of education are more likely to be overweight than are those who have more schooling (table 1).

A higher percentage of black women are overweight than white women in all age groups. The

Table 1

Being Overweight Is a Condition Which Cuts Across Economic, Educational, and Racial Lines

Respondent profile	Overweight ¹	Aware of weight-health link ²
<i>Percent of women meal planners</i>		
Age:		
Under 30 years	12	70
30-49 years	30	81
50 years and over	34	71
Race:		
White	27	76
Black	46	75
Income level (percent of poverty line): ³		
185 percent and under	30	68
186-350 percent	35	73
Over 350 percent	24	82
Education (years of schooling):		
8 years or less	37	57
9-11 years	30	68
12 years	29	78
Over 12 years	26	79

Notes: ¹For women, overweight is defined as a body mass index (BMI) of 27.3 or greater. BMI is a ratio of weight (in kilograms) divided by the square of height (in meters). ²Women were considered "aware" of the weight-health link if they identified diabetes, hypertension, heart disease, or some cancers as a health problem that might be related to being overweight. ³The poverty line is a set of income thresholds used by the Bureau of Census to determine poverty status of households. The thresholds—which vary by family size, age of household head, and number of children under 18 years of age—are updated annually to reflect inflation. In 1989, for example, the average poverty threshold for a household of four was \$11,669.

prevalence is particularly high—52 percent—for black women in their 30's and 40's.

Most Are Aware of the Link Between Weight and Health

While a number of women meal planners may underreport their actual weight, they adequately assess their weight condition—that of being overweight or not. About 90 percent of women who were overweight considered themselves to be overweight, and 67 percent who were not overweight did not consider themselves as such.

In addition to being aware of their own weight condition, women meal planners are gener-

ally aware of the relationship between weight and disease. The health consequences of being overweight have been well documented. Experts generally agree that excessive body weight is associated with an increased risk for developing diabetes, hypertension, heart disease, and some cancers. About 90 percent of the women in the survey had heard of some unspecified health problem related to being overweight, and 75 percent knew that this health problem was one of the four conditions mentioned above.

However, not everyone was equally aware of the risk of health problems. Only 57 percent of women meal planners with no high school education were aware of the connection, compared with

78 percent of high school graduates. And, women with no high school education were more likely to be overweight (37 percent) than were high school graduates (29 percent).

Health educators have theorized that awareness of the link between having a condition, in this case being overweight, and getting a disease is only one of several factors predicting whether people adopt healthy behaviors leading to a change in that condition. Those aware of the health risk of being overweight were not less likely to be overweight (fig. 1).

Clearly, some individuals are more likely to be aware of the risks of being overweight precisely because they are overweight. Education to increase awareness about the link between diet and health is not the magic bullet for promoting healthy outcomes, but it may be a good place to start the process of behavioral change—especially for less educated people.

Weight Is an Important Consideration for Most

How people feel about a topic may have as much to do with how they behave as does what they know. Accordingly, the DHKS asked a number of questions about how people feel about specific nutritional advice or health behaviors. Those with certain attitudes about weight were less likely to be overweight than were others.

Over three-quarters of the women meal planners (77 percent) felt that maintaining a desirable weight was important to them. These women were less likely to be overweight (28 percent) than were those for whom maintaining a desirable weight was not important (41 percent) (fig. 1).

The women were also asked whether they agreed or disagreed with the following statement: "Some people are born to be fat and some thin; there is not much you can do to change this." About a quarter (26 percent) seemed to in-

dicating a fatalistic viewpoint by agreeing with this statement, compared with 46 percent who disagreed with the statement.

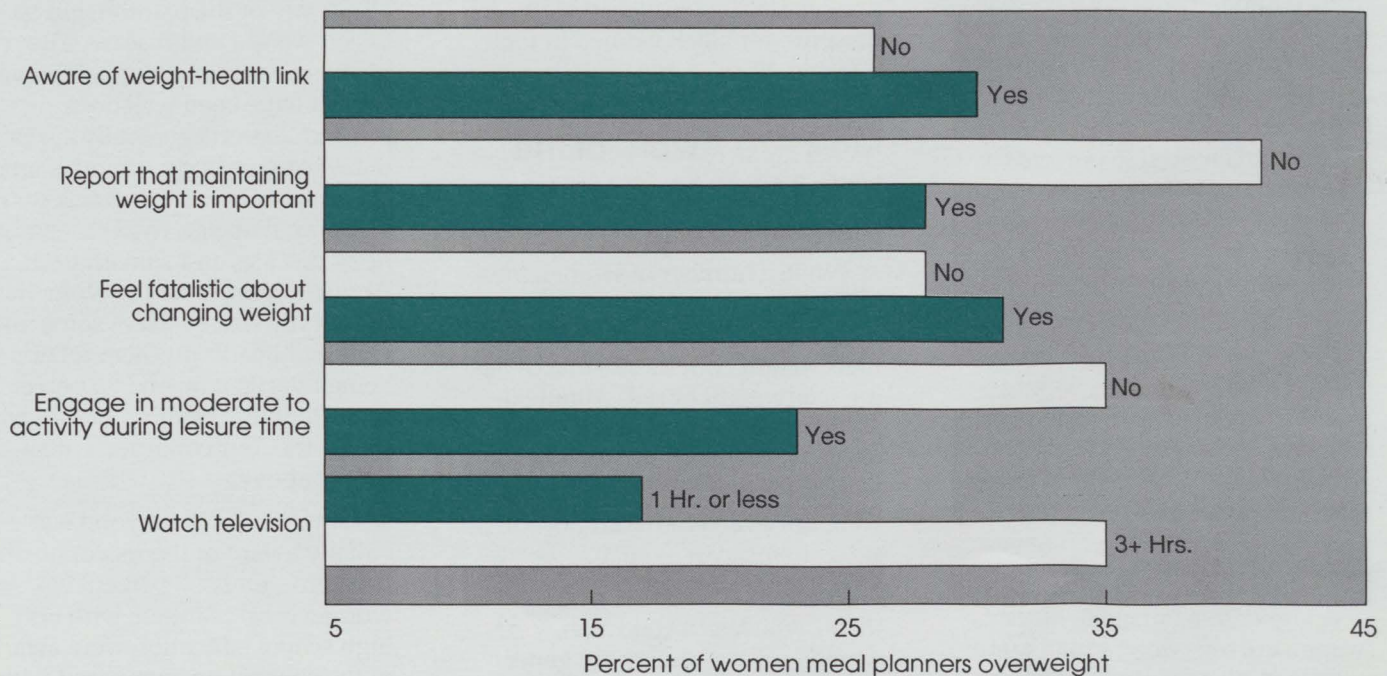
Older women, black women, and women with less education or income were more likely to be fatalistic about changing their weight and were also more likely to be overweight (fig. 2).

Diet and Exercise Behaviors Related to Weight Status

A number of factors, such as genetics, metabolism, overeating, and lack of exercise, have been studied as causes of an overweight condition. While there is controversy in the scientific community about the relative importance of these factors, there is general agreement that in order to lose weight, one must decrease the intake of food calories, increase the amount of energy expended in physical activity, or do some combination of the two.

Figure 1

Thirty-Five Percent of Women Who Watched Television 3 or More Hours Per Day Were Overweight



Diet

Women who were overweight consumed about the same amount of calories as did those who were not overweight. This agrees with some past research, which has found that overweight people do not necessarily consume more calories than do others.

Some recent research has shown that the overall diet one eats may be related to weight status—the overweight may consume more calories from fats and oils. In this study, women who were overweight reported consuming a slightly higher percentage of calories from fat than did those who were not overweight.

While some may speculate that the overall diet quality is as impor-

tant as the amount consumed, researchers are quick to point out that self-reported diet information should be interpreted with caution, since many people underreport their food intake.

Only about 6 percent reported being on a low-calorie or weight-loss diet. Although more overweight women were on diets (12 percent) than other women (4 percent), the overall percentage on diets seems relatively low. Other recent Federal surveys indicate that 28 to 34 percent of women are trying to lose weight by eating fewer calories. This difference may stem from the question sequence and/or wording. The question on weight-loss diet was asked only of those who responded affirmatively that

they were on a "special diet." Yet, many who were on a diet may not have seen anything special about it.

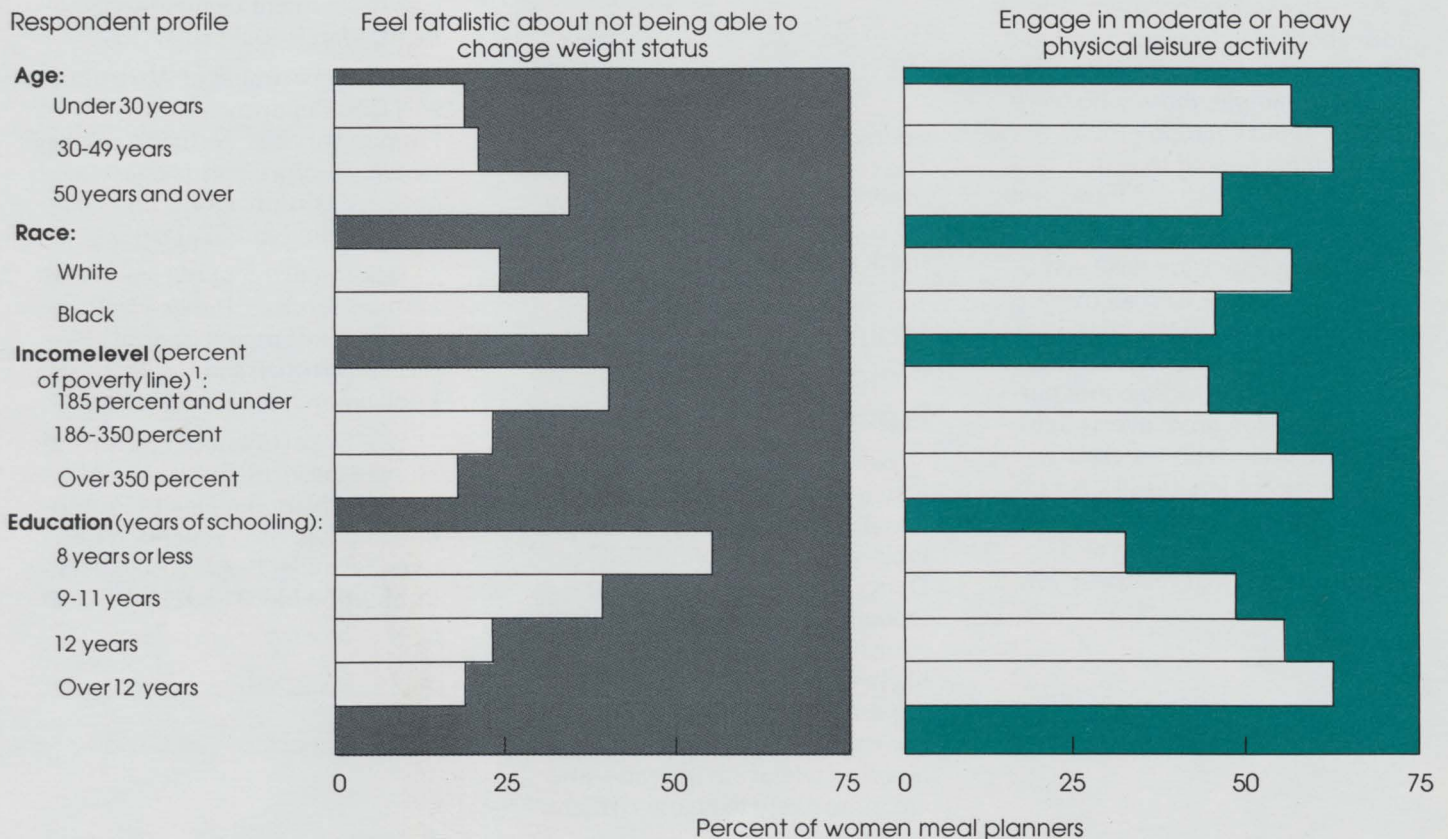
The low percentage of dieters also may indicate that more people are trying to follow current nutritional wisdom, as opposed to being actively engaged in crash weight-loss diets or other extreme approaches to losing weight rapidly.

Exercise

Health professionals advise that regular exercise is an important component of a healthy lifestyle. Over half (55 percent) of the women meal planners reported that their usual level of physical activity during leisure time was moderate or heavy. But, this varied

Figure 2

Demographics Play a Role in Attitudes About Weight Status and Physical Activity



Notes: ¹The poverty line is a set of income thresholds used by the Bureau of Census to determine poverty status of households. The thresholds—which vary by family size, age of household head, and number of children under 18 years of age—are updated annually to reflect inflation. In 1989, for example, the average poverty threshold for a household of four was \$11,669.

greatly across different demographic groups. Older women, black women, and women with less education or income reported exercising less (fig. 2).

Those more active during leisure time were less likely to be overweight than were others. About 23 percent of women meal planners who engaged in moderate or heavy activity were overweight, compared with 35 percent of others (fig. 1).

Exercise behavior appears to be consistent with the attitudes described about weight. Individuals for whom maintaining a desirable weight was important were more likely to have a moderate or heavy level of physical activity than were women for whom weight was not important. Those who were more fatalistic about changing their weight status were less likely to report that they exercised moderately during leisure time.

As with exercise behavior, attitudes about weight were correlated with time spent watching television. For example, those who were fatalistic about changing their weight status tended to watch more television than did those who were not.

Watching television has been shown to correlate with an overweight condition. In the DHKS, more than twice as many women who watched 3 or more hours per day of television were overweight than were those who watched 1 hour per day or less (fig. 1). An obvious reason for the correlations between television watching and weight status is that relatively few

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calories are expended while sitting. The constant bombardment of food advertisements might also increase the consumption of high-calorie snack foods.

Maintaining a Healthy Weight Is a Difficult Process

Being overweight is a condition which cuts across economic, educational, and racial groups. Yet, preliminary analyses of the CSFII and DHKS survey data show that women meal planners with less education and income are more likely to be fatalistic about changing their weight, less likely to exercise during their leisure time—favoring television instead—and are more likely to be overweight.

The difficulty of maintaining a healthy weight is mirrored by the complexity of the interaction between knowledge, attitudes, and behaviors in this area. Inability to maintain weight loss can lead to an attitude of fatalism about the subject, which, in turn, can lead to giving up on healthy diet or exercise behaviors, which can worsen the original condition. Studies have shown that only a small percentage of people who lose weight in weight-loss programs are able to keep it off over an extended period of time. Those people who are likely to be successful in this area are the ones who adopt mutually reinforcing healthy behaviors and positive attitudes about weight control.

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