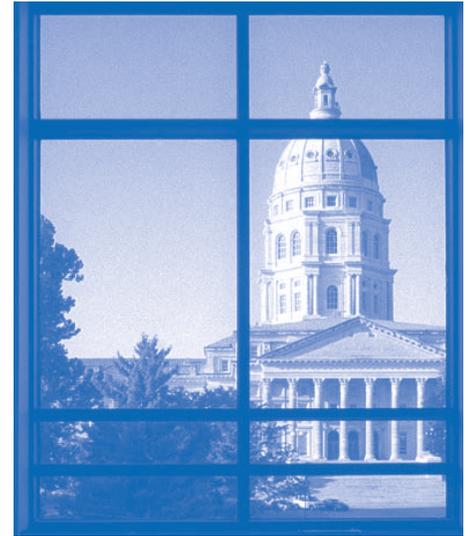


# Issue Brief



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## Kansans Not Following Nutrition Guidelines: Findings from the Kansas Health and Nutrition Survey

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### Study Results

**D**iet and nutritional choices directly impact health and wellness. A balanced diet supports an individual's well-being. Poor dietary habits can contribute to obesity and chronic conditions such as diabetes, heart disease and cancer. Data from the Kansas Health and Nutrition Survey were used to calculate respondents' Healthy Eating Index scores, a measurement that assesses overall dietary quality. According to the study:

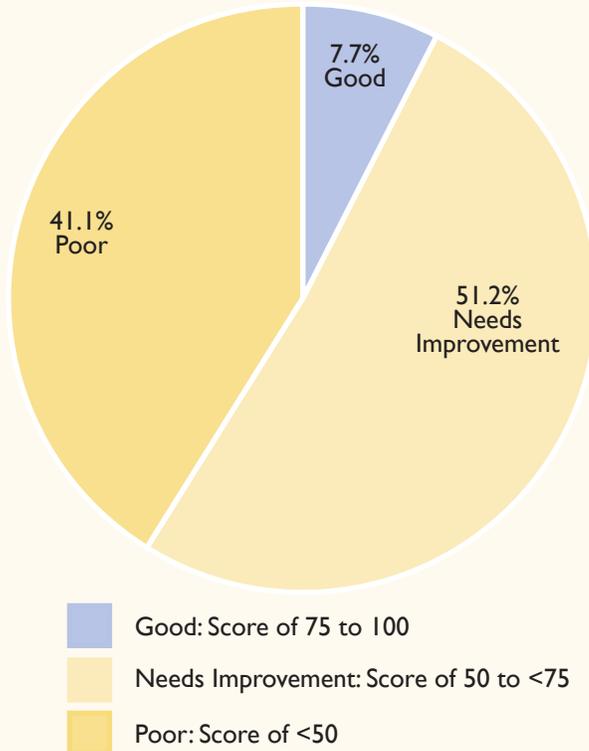
- A majority of Kansans were unaware of the USDA's recommended dietary guidelines and an even greater number failed to consume a healthy diet.
- Only 8 percent of Kansans followed a diet that achieved a "good" score on the Healthy Eating Index; the remainder consumed diets rated as either "needs improvement" or "poor."
- Women consumed a better diet than men, as did adults age 50 and older compared to those younger than 50.
- Behaviors such as usually eating breakfast, reading food nutrition labels and dieting positively influenced nutritional decisions.

### BACKGROUND

**T**he United States Department of Agriculture's Center for Nutrition Policy and Promotion developed the Healthy Eating Index (HEI) in 1995 to measure the overall quality of individuals' diets. The HEI score reflects how closely a diet follows the daily serving recommendations of the USDA's Food Guide Pyramid. The score is a composite of ten dietary components: dairy, fruits, grains, meats, vegetables, total fat, saturated fat, total cholesterol, sodium and dietary variety. Each component is measured on a scale of zero to 10,

## KANSANS NEED TO IMPROVE THEIR DIETS

Figure 1. Overall Healthy Eating Index Scores



thus the range of possible HEI scores falls between zero and 100. The higher the score, the more closely the diet conforms to the recommended guidelines.

## DATA AND METHODOLOGY

The Kansas Health and Nutrition Survey (KHANS) was designed to gather Kansas-specific data for factors that influence eating and physical activity behaviors. The survey was conducted as a telephone interview and modeled after the Kansas Behavioral Risk Factor Surveillance System.

A total of 2,170 survey interviews were conducted with households across the state of Kansas, and responses included 662 black and 909 Hispanic households. In the interest of understanding the higher rates of obesity among minority populations, KHANS was designed to over-sample minority households in order to provide a sufficient sample for sub-population analysis. Demographic data from the U.S. Census Bureau were utilized to identify blocks of telephone numbers with highest proportions of racial and ethnic minority households.

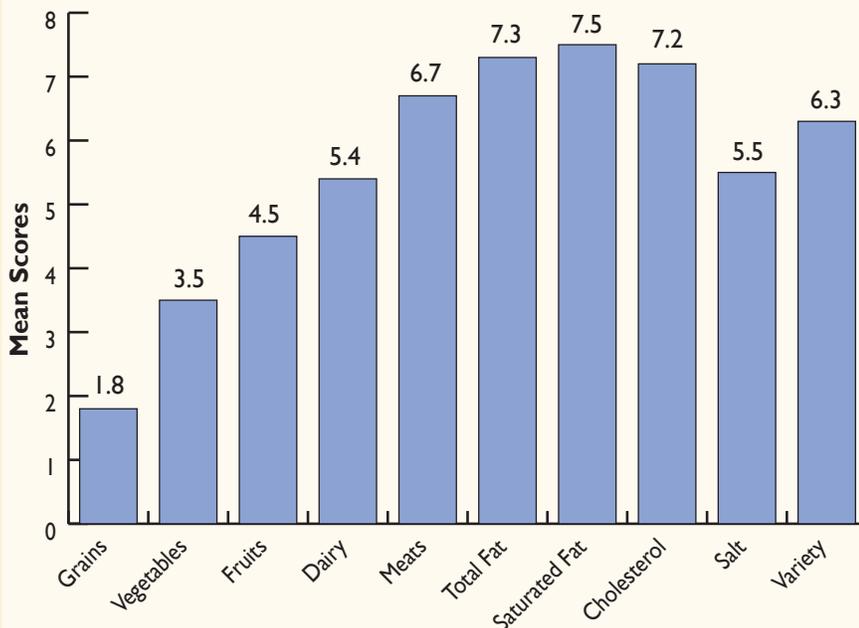
All analyses used statistical weighting techniques to accurately estimate obesity and obesity-related risk factors for the general population of Kansas, as well as for minority sub-populations. Multivariate statistical techniques were employed to assess interactions among the factors that influence obesity, and to identify which factors exerted the strongest influence on eating and physical activity behaviors.

## KANSANS ARE NOT FOLLOWING HEALTHY DIETS

HEI scores are classified into three categories: a “good” score is 75 points and higher, a score that “needs improvement”

## CONSUMPTION OF FRUITS, VEGETABLES AND GRAINS NEEDS IMPROVEMENT

Figure 2. Measurement of Healthy Eating Index Scores



Note: Scores range from 0 – 10 with 10 being the healthiest.

falls between 50 and 75 points and a score below 50 points is considered “poor.” Out of a maximum 100 points, the mean HEI score for the KHANS study population was 54.1, with only 8 percent of participants achieving a “good” rating (Figure 1).

Mean scores for each of the ten HEI components were also calculated (Figure 2). According to the figures, survey participants were least likely to eat the daily recommended servings of fruits, vegetables and grains.

### RESULTS VARIED BY CHARACTERISTIC OF THE SURVEY POPULATION

Although overall HEI scores were not significantly different based on a respondent’s race/ethnicity, household income, educational attainment or frequency of meals eaten with family members, there was a correlation between certain characteristics — such as gender and age — and HEI scores.

Women scored somewhat higher than men, and respondents of both genders age 50 and older scored higher than those who were younger. Additionally, survey participants whose dietary habits included eating breakfast on a regular basis, reading food labels or following any diet plan tended to score higher than respondents who did none of these things (Table 1).

### KANSANS ARE UNCERTAIN OF DIETARY GUIDELINES

Additionally, respondents were unaware of dietary recommendations: fewer than one-quarter knew that they should consume between five and nine servings of fruits and vegetables daily. These findings illustrate a need for more effective nutrition education programs.

## CERTAIN CHARACTERISTICS LINKED TO HEALTHIER EATING

Table 1. Factors Associated with Better HEI Scores

| CHARACTERISTIC                        | MEAN HEALTHY EATING INDEX SCORE |
|---------------------------------------|---------------------------------|
| Female                                | 57.3                            |
| Male                                  | 50.8                            |
| Age 50 years or greater               | 58.9                            |
| Age less than 50 years                | 51.3                            |
| Knows fruit/vegetable recommendations | 57.6                            |
| Doesn’t know recommendations          | 52.7                            |
| Currently dieting                     | 58.6                            |
| No current diet effort                | 39.5                            |
| Reads labels when purchasing foods    | 59.8                            |
| Does not read before purchase         | 50.8                            |
| Reads labels before eating foods      | 61.5                            |
| Does not read before eating           | 51.0                            |
| Eats breakfast                        | 56.7                            |
| Does not eat breakfast                | 47.1                            |

Note: Scores range from 0 – 100 with 100 being the healthiest.

### FACTORS ASSOCIATED WITH HIGHER SCORES

Two factors — regular reading of nutrition labels and current dieting effort — were most strongly correlated with higher HEI scores. Those who reported routinely reading nutrition labels scored about ten points higher than those who did not and those who reported current dieting effort of any type (limiting fats, salt, carbohydrate or cholesterol intake) scored almost 20 points higher on the index than non-dieters. These findings remained statistically significant after controlling for age, gender and time constraints (number

of hours worked each week), and suggest that the increased nutritional awareness gained from reading of nutritional labels and monitoring food intake helps to improve eating habits.

## OPPORTUNITIES FOR POLICYMAKERS

A complex system of personal, social and environmental factors influence an individual's dietary choices. By understanding the factors that influence eating choices, and by shaping a policy environment that encourages healthy eating, policymakers can improve the health of Kansans.

Actions to consider include:

- Encouraging the development of healthy eating habits in children by enhancing nutritional education and limiting access to unhealthy foods in schools.
- Improving access to, and affordability of, fresh fruits and vegetables by supporting farmers' markets and community gardens.
- Encouraging low-income individuals to eat more fruits and vegetables by participating in programs such as the WIC Farmers' Market Nutrition

Program and the Senior Farmers' Market Nutrition Program, and expanding the capacity of Kansas Farmers' markets to accept Electronic Benefit Transactions (Food Stamp benefits). Some states have expanded these efforts further by supplementing benefits provided by these federally sponsored nutrition assistance programs with additional state-funded vouchers.

- Helping consumers make informed eating choices by requiring restaurants and stores to make nutritional information for prepared foods readily available to customers.

## CONCLUSION

Data from the KHANS survey indicate that most individuals are unaware of, and do not follow, current dietary guidelines. Reversing unhealthy dietary trends requires coordinated interventions to address not only education, but also the personal and environmental factors that influence nutritional choices. Public policies that foster a supportive eating environment and encourage healthy dietary habits could significantly improve the health of Kansans.



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The Kansas Health Institute is an independent, nonprofit health policy and research organization based in Topeka, Kansas. Established in 1995 with a multi-year grant from the Kansas Health Foundation, the Kansas Health Institute conducts research and policy analysis on issues that affect the health of Kansans.

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KHI/10-02 • March 2010

### More Information

This Issue Brief can be found online at [www.khi.org](http://www.khi.org).

For additional information about nutrition and exercise in Kansas, please visit [www.khi.org](http://www.khi.org) where the following publications are also available:

- *Obesity Prevalence and Risk Factors Among Kansas Minorities*
- *Kansas Public School Health: Nutrition, Physical Education and Physical Activity Policies and Practices*
- *Obesity and Public Policy: A Framework for Intervention*