

**Obesity Prevalence and Risk
Factors Among Racial and
Ethnic Minorities in Kansas**

October 2006

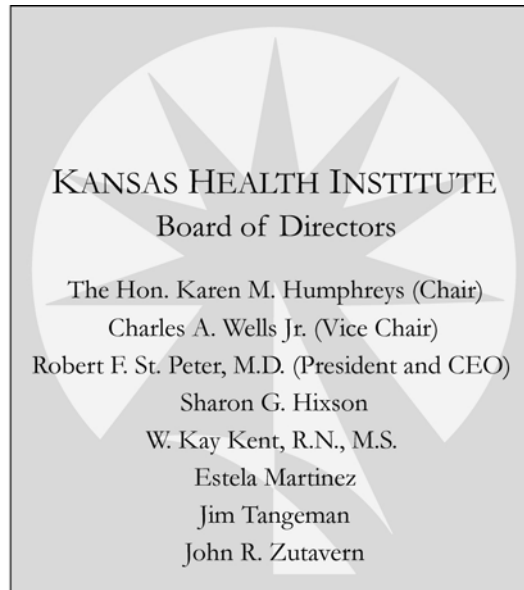
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EXECUTIVE SUMMARY

Blacks and Hispanics living in the United States have a higher prevalence of overweight and obesity than White Americans, according to the National Center for Health Statistics. Unfortunately, comparable data on the prevalence of overweight and obesity among racial and ethnic minorities in Kansas has been unavailable to date. While the Kansas Behavioral Risk Factor Surveillance System (BRFSS) collects data annually on the prevalence of overweight and obesity among Kansas residents, the sample size of minorities is too small to calculate reliable prevalence estimates for them. If the prevalence of obesity were stable over time, several years of annual measurements of minority obesity could be pooled to achieve a sample size large enough to calculate prevalence rates with a degree of confidence. But obesity prevalence nationally is not stable: The United States is in the midst of an obesity epidemic. The prevalence of obesity nationally has been increasing each year. Consequently, pooling obesity data could result in obesity prevalence rates that misrepresent the current prevalence. The only way to reliably estimate the prevalence of overweight and obesity among Kansas minorities is to increase the sample size for them in a single survey.

This study did just that. The Kansas Health Institute, with the assistance of the Kansas Department of Health and Environment, conducted an obesity-related special survey based upon BRFSS methodology that over-sampled Black and Hispanic households. With these data, better estimates of the prevalence of overweight and obesity by race, ethnicity, and gender were possible. In addition, data on factors that contribute to weight gain, such as eating habits and patterns of physical activity, were also collected and analyzed. Four key findings of this report are as follows:

1. Sixty-one percent of all Kansas adults are either overweight or obese. Seven of 10 Blacks and Hispanics are either overweight or obese as are six of 10 White Kansans.

(See Table I.)

Table 1. Percent of Respondents by Self-Reported Weight Category

	Race / Ethnicity			Total
	<i>Hispanic</i> %	<i>Black</i> %	<i>White</i> %	%
Survey Respondents				
Underweight/Normal Weight	30	29	40	39
Overweight	38	35	31	32
Obese	32	36	29	29
Children of Survey Respondents				
Underweight/“About the Right Weight”	81	80	84	84
Overweight	17	19	10	11
Very Overweight	2	1	6	5

- Obesity prevalence among all races and ethnicities in Kansas is higher than the most recently reported national statistics for comparable groups. The obesity prevalence for Blacks in Kansas, as measured in this study, is 36 percent compared to 34 percent nationally; the Kansas obesity prevalence for Hispanics is 32 percent and the national prevalence is 27 percent; the prevalence of obesity among White Kansans stands at 29 percent compared to 23 percent nationally (national data from the National BRFSS Program, 2005). Both the Kansas and national data were collected during 2005 and analyzed using similar statistical techniques which allowed for valid comparisons of Kansas and national obesity prevalence rates for the first time.

It is important to note that, while comparisons to national prevalence rates are interesting and useful in many ways, national trend rates are not the goals to which the state should aspire. The Healthy People 2010 obesity prevalence goal, regardless of race and ethnicity, is 15 percent. By any measure, Kansas — and the nation as a whole — is far from achieving ideal obesity prevalence rates, and more importantly, it is headed in the wrong direction.

- Parents in the households surveyed reported that their children were either overweight or very overweight at the following rates: Blacks 20 percent, Hispanics 19 percent, and

Whites 16 percent. These rates are based on the opinions of parents and not on a calculated body mass index (BMI) of their children. Consequently, childhood overweight prevalence may be under-reported. Recent data from Arkansas, where BMIs are calculated for all school-age children, suggest that the prevalence of overweight among children may be somewhat higher than those reported here and that Black and Hispanic children have significantly higher rates of overweight and are at greater risk for becoming overweight than White children.

4. Overweight and obesity in Kansas is due, in large part, to poor nutrition and lack of physical activity. Approximately one in four Blacks and Whites in Kansas meets the Centers for Disease Control and Prevention’s recommendations for fruit and vegetable consumption. Fewer than one in five Hispanics consume recommended daily servings of fruits and vegetables. Approximately one in three of all Kansans meets the CDC’s recommendations for moderate physical activity. Approximately one in five Blacks and Hispanics satisfy the CDC’s recommendations for vigorous physical activity; one in three White Kansans meet CDC’s vigorous physical activity recommendations. (See Table II.)

Table II. Compliance with CDC Recommendations for Physical Activity and Diet

	Hispanic	Black	White
	%	%	%
Meets CDC recommendations for Moderate Physical Activity	30	27	34
Meets CDC recommendations for Vigorous Physical Activity	19	21	30
Consumes Five Daily Servings of Fruits and Vegetables	18	25	28

This study confirms much of what has been hypothesized about overweight and obesity in Kansas. First, it indicates that the prevalence of overweight and obesity in Kansas is high compared to both national goals and national comparison groups of racial and ethnic minorities. Second, it provides robust evidence that that the prevalence of overweight status and obesity among adult Hispanics and Blacks in Kansas is greater than the prevalence among Whites.

INTRODUCTION

National data suggest an impending health crisis for the United States: Fully two-thirds (65 percent) of adults (129.6 million persons) are overweight or obese (Weight Control Information Network, 2006), and despite highly visible efforts to improve nutrition education and support weight loss programs, the rate of adults who are overweight or obese is increasing. Nationally, obesity rates doubled between 1980 and 2000, resulting in 60 million adults (30 percent of the adult population) who are currently obese (Centers for Disease Control and Prevention, 2006).

Overweight and obesity is associated with a variety of long-term health problems such as diabetes, heart disease, high blood pressure, high cholesterol, asthma, arthritis, and poor health status (Mokdad, et al., 2003). Obesity is associated with increased risk of death (Flegal, et al., 2005). Thus, the health burden of obesity born by individuals is reflected in reduced life expectancy and reported poorer quality of life (Peeters, et al., 2003).

Obesity is a multifaceted problem, resulting from genetic, social/environmental, and personal health behavior interactions. At the most basic level, obesity is a problem of energy imbalance — calories consumed exceed calories that are used through metabolism and physical activities. The underlying causes of excess calorie consumption and lack of physical activity are strongly affected by personal health choices that interact on many levels with genetics and the social environment, ultimately resulting in obesity.

Personal health behaviors affect the risk of obesity. Poor eating habits — such as consumption of high calorie, low nutrition processed foods, limited intake of fresh fruits and vegetables, and skipping breakfast — are a key contributor to overweight (Quatromoni, et al., 2002; Song, et al., 2005). Other dietary habits that affect obesity include meal size and frequency (Tai, et al., 1991), and the location and people with whom one eats (Patrick, et al., 2005). One's social environment also influences the risk for overweight and obesity. Availability and accessibility of grocery stores offering healthy nutritional foods at affordable prices, public and private fitness facilities, number and proximity of fast food and convenience stores, and availability of safe walking paths each affect the choices available to individuals (Hill, et al., 1998).

Finally, the risk of obesity is influenced by sedentary behaviors such as the amount of time spent watching television and sitting at a computer (Jebb, et al. 1999). Lack of leisure time physical activity is also a risk factor for obesity.

Racial and ethnic minorities, particularly Blacks and Hispanics, are at increased risk for overweight and obesity. In 2005, according to the national Behavioral Risk Factor Surveillance System (BRFSS) program, the obesity prevalence rate was 34 percent for Blacks and 27 percent for Hispanics compared to 23 percent for Whites. National studies provide information about the prevalence of overweight and obesity among racial and ethnic minorities and the health behaviors associated with these conditions, but little information specific to Kansans is available. The primary source of information on overweight and obesity in Kansas is the annual Kansas BRFSS survey. The survey asked respondents to report their height and weight, then body mass index (BMI) was calculated for each respondent. Given the tendency of people to under-report their weight, overstate their height, or both, BRFSS estimates of overweight/obesity prevalence are likely under-estimated. They are, nevertheless, the best prevalence estimates available for the entire population of Kansas. Due to BRFSS sample size and design of the survey, however, reliable assessments of overweight and obesity among minority populations in Kansas have not been possible.

To obtain better estimates of the prevalence of overweight by race, ethnicity, and gender, the Kansas Health Institute (KHI), in collaboration with the Kansas Department of Health and Environment (KDHE), conducted a statewide obesity-related special telephone survey based upon BRFSS methodology that over-sampled Black and Hispanic households. In addition to questions about height and weight, questions were asked regarding obesity-related behaviors and risk factors. This paper summarizes the findings of the survey.

The paper contains two appendices. Appendix A provides information on the methods and data used for the project. Readers with an interest in sampling and analysis issues are directed to this section. Appendix B contains the survey instrument used for the study.

FINDINGS¹

PREVALENCE OF OVERWEIGHT AND OBESITY

The primary outcome of this study is an estimate of overweight and obesity prevalence among Hispanic, Black and White Kansans. Overweight and obesity were assessed through collection of self-reported height and weight for each participant. This information was used to calculate a body mass index (BMI) for each participant.

Table 1 provides a summary of respondents by their weight classification. Because of the limited number of “underweight” respondents (4.8 percent of the total), underweight and normal weight respondents are combined into one group for purpose of analysis and reporting. Overweight and obesity were determined using the cut-points established by CDC: A person with a BMI between 25 and 30 is considered overweight and a person with a BMI over 30 is considered obese. Hispanics have the highest proportion of people who are overweight but not obese. Overweight is a risk factor for obesity; the high prevalence of overweight among Hispanics may indicate higher future rates of obesity among the Hispanic population.

Table 1. Percent of Respondents by Self-Reported Weight Category

	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
Survey Respondents				
Underweight/Normal Weight	30	29	40	39
Overweight	38	35	31	32
Obese	32	36	29	29
Children of Survey Respondents				
Underweight/“About the Right Weight”	81	80	84	84
Overweight	17	19	10	11
Very Overweight	2	1	6	5

¹ All data reported in the body of this report are weighted for sampling distribution and adjusted for age and sex differences.

Respondents with children under 18 years of age were asked survey questions about a single child in their household. Eighty-four percent of respondents with children in the household said the identified child was underweight or about the right weight, 11 percent reported the child was slightly overweight, and 5 percent said the child was very overweight. Fewer Whites than both Hispanics and Blacks reported that their children were overweight, but more Whites said their children were *very* overweight.

Although 23 percent of the survey respondents indicated that a doctor, nurse, or other health professional had given them advice about their weight within the last year, many more were attempting to address their weight concerns. Forty-four percent of total respondents said they were trying to lose weight at the time of the survey, and 63 percent reported trying to maintain their current weight. Of those who reported trying to lose or maintain their weight, 73 percent reported that they were eating fewer calories or less fat and 64 percent said that they had increased physical activity and exercise. Approximately one-half (49 percent) of those who were trying to lose or maintain their weight both reduced caloric intake and increased physical activity.

HEALTH STATUS AND MORBIDITY

Respondents were asked to rate their general health status on a 5-point scale (1 = excellent, 5 = poor). Most respondents (54 percent) said their health was very good or excellent. Eighteen percent of respondents said their health was fair or poor, approximately one of five (see Table 2). Hispanics and Blacks rated their health status fair or poor more frequently than Whites. The children of respondents were likewise in good health; 90 percent of respondent parents indicated that their child was in very good or excellent health. Five percent said their child was in fair or poor health.

Approximately two-thirds (68 percent) of Kansans interviewed reported zero days of physical illness in the last month. Seven of 10 (72 percent) reported that they had had zero days of illness attributable to poor mental health within the past month. In the case of both physical and mental health, Hispanics report fewer days of illness than Blacks and Whites.

Table 2. General Indicators of Physical and Mental Health

Health Status	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
General Health — Fair or Poor	23	23	18	18
Physical Health — Zero days of illness	73	67	67	68
Mental Health — Zero days of illness	79	71	71	72

Respondents reported a variety of chronic conditions (see Table 3). Thirty percent of respondents said that they had high blood pressure and 61 percent of them were taking medication for their hypertension at the time of the survey. Three of four respondents (76 percent) said that they had had their cholesterol checked at least once. Approximately one-third of the respondents (30 percent) had been told previously that they had high cholesterol. Of the 11 percent of individuals who had previously been told that they had asthma, 74 percent said that they still had asthma at the time of the survey.

Racial and ethnic comparisons revealed differences in the health status among minorities. Fewer Hispanics reported that they had been told that they had high blood pressure, high cholesterol, or asthma than Whites or Blacks (see Table 3). Two of several possible explanations for this finding are: 1) Hispanics may indeed have lower prevalence rates for hypertension, blood cholesterol, and asthma than the racial groups studied because, as a group, they are younger, or 2) the lower responses could reflect the fact that Hispanics have less contact with the health care system. Hispanics in Kansas have lower rates of health insurance than Whites or Blacks (Duncan, et al., 2001) and many Hispanics have multiple jobs which may limit the amount of time available for seeking non-emergent treatment.

Table 3. Percent of Respondents with Diagnosed Chronic Conditions

Have you ever been told by a doctor, nurse, or other health professional that you have: (percent responded yes)	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	%
	%	%	%	%
Diabetes	13	16	7	8
High Blood Pressure	26	39	31	30
High Cholesterol	25	29	30	30
Asthma	7	13	11	11

ACTIVITY: BEHAVIOR AND BARRIERS

Physical Activity

To obtain information on factors that contribute to overweight and obesity, survey respondents were asked about their physical activity patterns at work and outside of work (Table 4). When asked to indicate the physical activity level that best describes their work, 69 percent of respondents reported having jobs where they mostly sat or stood; fewer Hispanics than Blacks and Whites said they mostly sat or stood at work.

Respondents were also asked about their physical activity outside of work. For specific leisure-time activities they were asked the number of days and the amount of time spent on each activity. This information was compared to CDC recommendations for leisure time physical activity. Results of the comparison indicated that 34 percent of respondents engaged in moderate physical activity (at least 30 minutes, five days a week), and 29 percent achieved the recommended amount of vigorous physical activity (at least 20 minutes, 3 days a week). A greater percentage of Whites than either Hispanics or Blacks met the criteria for both moderate and vigorous physical activity.

Table 4. Percent of Respondents Meeting CDC-Recommended Leisure-Time Activity Levels

	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
Meets CDC recommendations for Moderate Physical Activity	30	27	34	34
Meets CDC recommendations for Vigorous Physical Activity	19	21	30	29

Sedentary Lifestyle

Because a sedentary lifestyle is a risk factor for becoming overweight or obese, information was obtained on the amount of time respondents spent in sedentary activities outside of work. Time spent in sedentary activities was divided between activities which occurred on workdays and those that occurred on non-workdays (e.g., weekends, holidays, and vacations). Table 5 shows time spent on workdays and non-workdays for two primary sedentary leisure activities, television viewing and computer use.

Twenty percent of Blacks said they watched television more than four hours per day on workdays, a higher percentage than either Hispanics or Whites. Computer use was lowest among Hispanics, which may be a consequence of language barriers, culture, lack of leisure time, and cost.

Table 5. Percent of Respondents Engaging in Sedentary Behaviors

	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
On a typical day, how many hours do you				
TV Watching at Home (Workday) >4 hours	15	20	12	13
Computer Use at Home (Workday) >1 hours	18	31	35	33
TV Watching at Home (Non-Workday) >4 hours	28	45	27	29
Computer Use at Home (Non-Workday) >1 hours	17	39	38	38

The number of hours respondents spent in front of their televisions and computers per day (“screen time”) was calculated from responses. On average, respondents reported spending 2.8 hours per day during a workday and 3.7 hours per day during a non-workday in front of a screen. Blacks had the most screen time during both the workday (3.1 hours) and non-workday (4.6 hours) compared to Hispanics (2.7 and 3.2 hours respectively) and Whites (2.8 and 3.6 hours).

Desire and Expectation for Physical Activity

Overall, 54 percent of the respondents said they were not as physically active or did not exercise as much as they wanted; 65 percent said they were not as physically active or did not exercise as much as they thought they should. Neither the desire to be more active nor the expectation that they should be more active differed substantially by race or ethnicity.

Table 6 displays a summary of barriers to physical activity. Respondents were asked for the main reason that they do not exercise more or are not more physically active. The most common response (42 percent) was “I don’t have enough time.” The second and third most frequent responses, lack of “self motivation or will power” and “too tired or don’t have enough energy,” lagged substantially behind at 14 and 13 percent, respectively.

Fewer Blacks compared to Whites and Hispanics reported insufficient time as the main reason why they did not exercise; Hispanics gave the reason that they were too tired more frequently than Whites and Blacks. Whites more frequently than Blacks and Hispanics said they lacked sufficient self motivation or will power to exercise more. Asked what one thing it would take to get them to exercise more often, approximately four of 10 Whites and Hispanics (45 percent and 41 percent respectively) said more time. Although this was also the most frequent answer given by Blacks (28 percent), it was cited as a barrier less often than for other respondents.

Table 6. Perceived Barriers to Increasing Physical Activity

	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
Main reason for not exercising more				
I don't have enough time	34	27	43	42
Too tired or don't have the energy	21	14	14	13
Self motivation or will power	10	12	15	14
What one thing would it take to get you to exercise more				
More time	41	28	45	43
Self motivation or will power	18	20	17	16

Community Environment

Information on community characteristics that support physical activity was obtained. Overall, 28 percent of the respondents walked for transportation in the past month, and 50 percent indicated that they could walk to places they need to go instead of driving. A substantially lower percentage of Whites indicated that there are businesses they can walk to instead of drive compared to Hispanics and Blacks (see Table 7). Approximately 10 percent fewer Hispanics than Whites consider it safe to walk to local businesses. Overall, 82 percent of respondents said that a no-cost recreational facility was located in their community; small differences were observed in the availability of no-cost recreational facilities among the groups studied.

Table 7. Characteristics of Community Environments

	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
In your community, are there:				
Businesses or places you need to go where you can walk instead of drive	58	58	48	50
Do you consider it safe to walk there	85	87	94	92
Public swimming pools, parks, walking trails, bike trails or other recreation facilities you could use at no cost if you wanted to	75	76	83	82
Health clubs or other recreation facilities that require you to pay to use if you wanted to	75	74	81	79

DIETARY INTAKE

Questions about the number of servings of food eaten, meal settings, food purchasing decisions, availability of food choices, and the participant's health knowledge and beliefs were asked to obtain information on factors that contribute to obesity and health status.

Servings of Food

The respondents were asked about the number of servings of specific food groups they consumed at home and away from home. (An example of each specific food group was given along with an example of what a serving portion size is for that food group.) Table 8 shows the summary of responses by race and ethnicity.

Approximately one-half of all respondents reported consuming two or more servings of fruits, vegetables, dairy products, and grains per day. Fewer individuals said that they consume two or more servings of meat (38 percent), fish (7 percent) and beans (3 percent) per day. Thirteen percent of the respondents have two or more servings of sweets a day, and 10 percent have two or more snacks per day.

Whites reported eating fruits and vegetables more frequently than the other groups. Blacks and Hispanics consume dairy products less frequently than Whites. Consumption of dairy items by Blacks may be affected by actual or perceived lactose intolerance (Smith, et al., 2003). Hispanics consume substantially fewer multiple servings of grains than Whites.

Four of 10 Whites eat two or more servings of meat per day compared to two of 10 Hispanics and three of 10 Blacks. A greater percentage of Blacks consume two or more daily servings of fish (9 percent) than Whites (7 percent). Only 3 percent of Hispanics consume two or more servings of fish per day. While Hispanics eat fewer daily servings of meat and fish than Whites and Blacks, they consume more daily servings of beans, an incomplete protein that can be supplemented by cheese or corn to increase its nutritional value. Seven percent of Hispanics eat two or more servings of beans per day compared to 2 percent for Whites and Blacks.

Whites eat sweets and snacks more frequently than the Hispanics and Blacks.

The daily recommendation of fruits and vegetable is five to nine servings per day, and daily consumption recommendation for dairy products is three servings per day. A smaller percentage of Hispanics than Whites consumes five servings of fruits and vegetables (18 percent versus 28 percent) and three servings of dairy (13 percent versus 30 percent) per day. Twenty-five percent of Blacks consume at least five servings of fruits and vegetables per day and 17 percent consume at least three servings of dairy per day.

Table 8. Number of Food Group Servings by Race and Ethnicity

Number of Servings Per Day	Race / Ethnicity			Total
	<i>Hispanic</i> %	<i>Black</i> %	<i>White</i> %	%
Fruits				
Never Eat	4	4	5	6
Less than One Serving	27	27	21	22
One to less than Two Servings	25	29	26	26
Two Servings or More	42	40	48	46
Vegetables				
Never Eat	3	2	2	2
Less than One Serving	35	25	21	22
One to less than Two Servings	25	30	26	27
Two Servings or More	37	43	51	49
Dairy				
Never Eat	2	4	1	2
Less than One Serving	24	33	13	14
One to less than Two Servings	39	33	32	33
Two Servings or More	36	30	55	51
Grains				
Never Eat	2	2	1	1
Less than One Serving	33	25	16	18
One to less than Two Servings	30	29	24	25
Two Servings or More	35	45	59	56

Table 8 (continued). Number of Food Group Servings by Race and Ethnicity

Number of Servings Per Day	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
Meat				
Never Eat	2	3	2	2
Less than One Serving	54	42	30	34
One to less than Two Servings	26	26	25	25
Two Servings or More	18	28	42	38
Fish				
Never Eat	5	4	6	6
Less than One Serving	85	73	73	74
One to less than Two Servings	8	14	14	13
Two Servings or More	3	9	7	7
Beans				
Never Eat	9	21	17	18
Less than One Serving	63	71	69	68
One to less than Two Servings	21	6	12	11
Two Servings or More	7	2	2	3
Sweets				
Never Eat	19	15	7	9
Less than One Serving	54	61	54	55
One to less than Two Servings	18	17	24	23
Two Servings or More	8	7	15	13
Snacks				
Never Eat	16	8	9	10
Less than One Serving	65	61	51	53
One to less than Two Servings	14	22	29	27
Two Servings or More	5	9	10	10

Controlling Dietary Intake

Respondents were asked if they were attempting to control their dietary intake by decreasing or limiting the amount of specific foods. Substantial percentages of Kansans — ranging from approximately 40 percent to 60 percent depending on the strategy — said that they were attempting to control their intake of fat, cholesterol, salt, and carbohydrates (see Table 9). A greater percentage of Blacks than Whites were attempting to decrease or limit consumption of salt and carbohydrates. A greater percentage of Hispanics than Whites were attempting to

decrease or limit their consumption of cholesterol. Across the board, greater percentages of Blacks and Hispanics than Whites were attempting to control their intake of certain nutrients. Despite the reported difference on using carbohydrate restrictions for weight control, the groups were similar on their use of low carbohydrate diets such as Atkins or South Beach.

Table 9. Percent of Respondents Attempting to Control Dietary Intake

Type of Dietary Restriction	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
Decrease or limit amount of Fat	65	69	56	58
Decrease or limit amount of Cholesterol	57	63	44	47
Decrease or limit amount of Salt	48	68	38	42
Decrease or limit amount of Carbohydrates	43	54	38	39
Using Low Carb Diet (e.g., Atkins, South Beach)	5	8	6	6

Meal Settings

When asked if they usually eat or drink something for breakfast, 73 percent of respondents said they almost always eat or drink something for breakfast. Ten percent fewer Blacks than Whites or Hispanics report regularly eating breakfast. Three of 10 Kansans responding to the survey said they always have the television on at meals. Approximately one-half of Black respondents said they always have the television on during meals. (See Table 10.)

Table 10. Meal Settings

Would you say you:	Race / Ethnicity			Total
	<i>Hispanic</i>	<i>Black</i>	<i>White</i>	
	%	%	%	%
Almost always eat breakfast	72	64	74	73
Never have a sit down dinner with family	7	13	9	9
Always have a TV on during meals	32	45	29	30

Respondents were asked how frequently they ate meals outside of the house. Overall, Kansans eat at restaurants, cafeterias, or fast-food establishments an average of 2.8 times per week. Whites consumed the highest average number of meals per week at a restaurant, cafeteria

or fast-food establishment (3.0 times per week). On average, Blacks consumed 2.2 meals per week outside of the home and Hispanics 1.8 meals per week.

Food Purchasing Decisions

Respondents were asked how important various factors are to them when buying food. Although approximately two-thirds of the respondents said they think that nutrition is important when buying food, 37 percent indicated that they “almost always or always” read nutrition labels on food packages to decide whether or not to buy a food. The proportion of Hispanics and Black respondents who said that each of the factors on Table 11 were “very important” was higher than the percentage of Whites who responded; Blacks and Whites “tied” at 82 percent on the importance of taste to purchasing decisions.

Table 11. Food Purchasing Decisions

When you buy food, how important is each of the following factors?	Race / Ethnicity			Total
	<i>Hispanic</i> %	<i>Black</i> %	<i>White</i> %	%
How safe the food is to eat	83	79	68	71
Nutrition	83	82	61	64
Price	62	61	46	48
How well the food keeps	77	70	49	54
How easy the food is to prepare	54	47	37	39
Taste	86	82	82	82

Availability and Quality of Food

When asked where respondents usually purchased groceries, at a “supermarket” was the largest response (77 percent), though fewer Hispanics than Whites and Blacks reported buying groceries at supermarkets. In contrast, Hispanics more often reported purchasing their groceries from a “warehouse” as compared to Blacks or Whites.

In response to questions about the quality and variety of the fresh fruits and vegetables at the store where they do most of their grocery shopping, 88 percent of the respondents said that the quality and variety of the fresh fruits and vegetables are “excellent” or “good.” The percentage of

Hispanics who said that their fresh fruits and vegetables were not affordable was higher than White respondents.

Diet, Health Knowledge, and Beliefs

To assess respondents’ beliefs about diet and health, respondents were asked if they agreed with a series of statements (see Table 12). Higher percentages of Hispanics and Blacks than Whites agreed that choosing a healthy diet is just a matter of knowing what foods are good and bad, although rate of agreement among all groups was quite high. A lower percentage of Hispanics than Whites agreed with the statement “What you eat can make a big difference in your chance of getting a disease, like heart disease or cancer,” but the overall level of knowledge among Hispanics was high (86 percent agreed with the statement). A much higher percentage of Hispanic than White respondents believe that the foods they currently eat and drink are so healthy that there is no reason to change behaviors.

Considerable confusion exists among all of the groups studied in regard to recommendations of what to eat and drink. Approximately three fourths of respondents agreed with the statement, “There are so many recommendations about healthy ways to eat, it’s hard to know what to believe.”

Table 12. Respondents Knowledge and Beliefs Regarding Diet and Health

Indicate if you agree with the following statements about what people eat:	Race / Ethnicity			Total %
	<i>Hispanic</i> %	<i>Black</i> %	<i>White</i> %	
Choosing a healthy diet is just a matter of knowing what foods are good and bad	93	90	83	85
Some people are born to be fat and some thin; there is not much you can do to change this	35	34	29	31
There are so many recommendations about healthy ways to eat, it’s hard to know what to believe	78	78	73	74
What you eat can make a big difference in your chance of getting a disease, like heart disease or cancer	86	91	94	93
The things I eat and drink now are so healthy, there is no reason for me to make changes	60	47	42	43

COMPARISONS TO NATIONAL DATA

One of the purposes for conducting the survey that is the centerpiece of this project was to obtain obesity-related data for minorities in Kansas that could be compared to national data. Comparisons suggest how well Kansas is doing *relative to others* and whether trends displayed in Kansas data are mirrored in national data.

While comparisons to national prevalence rates are interesting and useful in many ways, it is important to note that meeting national trend rates is not the goal to which the state should aspire. The Healthy People 2010 obesity prevalence goal, regardless of race and ethnicity, is 15 percent. By any measure, Kansas — and the nation as a whole — is far from achieving ideal obesity prevalence rates, and more importantly, it is headed in the wrong direction.

Using data from this study and the national BRFSS program, Kansas and national data are compared for select variables in Table 13. Because both the Kansas and the national data were collected during the same period, 2005, and analyzed using similar statistical techniques, they represent comparable point estimates. Healthy People 2010 (HP2010) goals are also listed by each factor.

For all study groups, the Kansas estimate of obesity prevalence is higher than the national estimate. The Kansas estimates for frequency of vigorous physical activity are lower than national rates for Hispanics and Blacks and slightly higher for Whites.

Higher percentages of Black and White Kansans meet the recommended daily servings of fruits and vegetables than do their counterparts nationally. A smaller percentage of Hispanics in Kansas than Hispanics nationally, however, consume at least five servings of fruits and vegetables daily as recommended by the CDC. Despite posting Kansas fruit and vegetable consumption estimates in some groups that are better than national estimates, Kansas still falls considerably short of the HP2010 goal.

Table 13. Comparison of Kansas and National Obesity-Related Data

	2005 Kansas %	2005 National %	HP2010 Goal %
Obesity			
Hispanic	32	27	15
Black	36	34	15
White	29	23	15
Meet CDC recommendation for Vigorous Physical Activity			
Hispanic	19	23	30
Black	21	24	30
White	30	29	30
Five Fruits and Vegetables			
Hispanic	18	20	50
Black	25	22	50
White	28	24	50

National data source: Behavior Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP

CONCLUSIONS

SUMMARY

In an effort to better understand the variation in obesity prevalence among Kansas adults, particularly for minority populations thought to be at higher risk for obesity, a study of obesity rates and related health risk behaviors among Hispanics, Blacks, and Whites in Kansas was conducted.

Over 60 percent of Kansas adults are either overweight or obese. A higher percentage of Blacks (71 percent) and Hispanics (70 percent) are either overweight or obese than Whites (60 percent). The high prevalence of overweight and obesity in the Kansas adult population can be explained, in part, by the fact that two-thirds of Kansas adults do not get sufficient physical activity and have jobs that promote sedentary behavior. Adult Kansans spend an average of 3.7 hours watching television or working on a computer on non-workdays and 2.8 hours on workdays (once their workday ends).

The prevalence of overweight and obesity may also be related to dietary habits of Kansans. Fewer than 30 percent of Kansans consume the daily recommended servings of dairy, fruits and vegetables. Fewer Hispanics (17.9 percent) than Blacks (25.1 percent) and Whites (27.8 percent) report consuming the recommended number of servings of fruits and vegetables. Twenty-seven percent of adults surveyed said that they never eat breakfast, a habit associated with poor nutritional intake. On average, adults reported that they eat out 2.8 times per week, putting their ability to make nutritious food choices and control food preparation at risk.

While this study focused on the prevalence of obesity among adult minorities and the behaviors associated with increases in body mass, one question on the survey attempted to estimate the prevalence of obesity among minority children. Parents in the households surveyed were asked whether their children were underweight, about the right weight, overweight, or very overweight. Even accounting for reporting bias inherent in asking parents to evaluate their children, the results were alarming: One in five parents said their child was either overweight or very overweight. Nineteen percent of Hispanics gave this assessment of their child's weight;

20 percent of Blacks said their child was overweight or very overweight as did 16 percent of Whites.

Finally, although most adults report that their overall health status is good or better, early signs of long-term illness often associated with overweight and obesity are present in one-third of the adult population of Kansas.

SUGGESTIONS FOR FUTURE RESEARCH

Based on the findings from this study, there are several possibilities for subsequent research and analysis. First, this study was intended to collect and analyze baseline information on the prevalence of obesity and related health risks among Kansas minorities and other residents. Conducting a second survey using the same instrument and methods would allow Kansas to begin to track within-state trends in minority obesity prevalence. This trend analysis would provide an opportunity to measure and evaluate any changes in obesity and related health behaviors and how they change over time. Second, data collected from the most current survey could be analyzed to identify how the various risk factors are related to health conditions and obesity levels, controlling for various confounding variables such as age, race, ethnicity, and sex. A multivariate model could be used to test for any relationships that may exist among various risk factors (including detecting significantly correlated differences between the racial and ethnic groups), and may help to describe important factors that are related to obesity. Using a multinomial logistic regression model with BMI as an outcome, the relative effect of various behavior risk factors collected in this study could be detected. Finally, a healthy diet indicator might be constructed from the survey data to help determine how well Kansans are meeting the USDA's dietary recommendations, and how the measure is related to an increased risk of obesity.

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APPENDIX A

MATERIALS AND METHODS

SURVEY DESIGN

A telephone survey was developed for this study based on questions adapted from the core and optional modules of the Kansas Behavioral Risk Factor Surveillance System (BRFSS). Additional questions were added from the following dietary and physical activity questionnaires: The North Carolina Six County Cardiovascular Health Survey, the Women and Physical Activity Survey, 5-2-1-Go Middle School Food and Physical Activity Questionnaire, Michigan 1997 BRFSS, School Physical Activity and Nutrition Project Survey, and the Diet and Health Knowledge Survey Questionnaire. These surveys contained validated questions that were included to obtain additional specific information about physical activity and nutritional risk factors that are not contained in the Kansas BRFSS.

Survey items reflect a combination of 125 questions including Yes/No, Likert scale (e.g., 1=excellent, 5=poor) and categorical checklists designed to obtain information on the following topics and issues:

- Household demographics
- Barriers to physical activity
- Overweight and obesity status
- Sedentary behaviors
- General, physical and mental health status
- Dietary servings per day
- Related chronic illnesses and risk factors
- Weight control efforts
- Physical activity
- Health knowledge and beliefs

Data were self-reported and represent the answers provided by the adult respondent. For households with children, a subset of questions was asked about one randomly selected child, as

well as the adult participant. Appendix B includes a copy of the survey instrument. Overall weighted responses to each question, along with the wording of each question also can be found on the KDHE Bureau of Health Promotion Health Risk Studies Program website at www.kdheks.gov/bhp/HealthRiskStudies/PDFS/survey/KHANS_final_rev.pdf.

RACE AND ETHNICITY

The survey included a race and ethnicity screener with separate questions for Hispanic ethnicity and race that followed the OMB 15 guideline (OMB, 1997). All race and ethnic groups were included in the study. By convention, we chose to use the term “Black” to refer to individuals who self-identify as either “African American,” “Negro,” or “Black.” Likewise, the term “Hispanic” is used throughout to include individuals who may self-identify as Latino/Latina or who may use a nationality to declare their ethnicity (i.e., Mexican, Costa Rican, etc.). Hispanic/non-Hispanic is the only ethnicity recognized by OMB 15, and it is the only ethnicity distinction used in the study. By design, Hispanic and Black minorities were over-sampled. Individuals who reported other races including Asian, Pacific Islander, Native American, Alaska Native and White (in excess of the necessary sample number) are represented in the “Total” data.

A limitation of this study is that race and ethnicity categories used may not allow for a sufficiently precise understanding of underlying differences between the groups with regard to the health conditions and risk behaviors that were measured for this study. For example, the Hispanic population in Kansas is comprised of a diverse group of cultures. These individuals often do not identify themselves consistently in terms of any racial category, but rather in terms of their culture or nationality. The differences among these cultures possibly contribute differentially to health behaviors and health conditions — information that cannot be identified in this study. The same is true across racial groups. There is no biological support for the discrete variable of race. Ethnic and cultural backgrounds may contribute more to health disparities and conditions than any underlying genetic difference they may have. The terms used to categorize individuals for this study are considered proxies for the underlying differences largely attributable to health behaviors that contribute to the observed health conditions and patterns. For more detailed information, see Kimminau and Satzler (2005) for a discussion of race, ethnicity, and health disparities.

SURVEY PARTICIPANTS

A total of 2,177 participants were surveyed for the study. Due to seven incomplete surveys, 2,170 participants were included in the analysis. The sample includes a total of 751 White households, 662 Black households, and 909 Hispanic households, representing the largest race- and ethnicity-specific sample conducted in Kansas on the topic. The households sampled for the study were statewide. Demographic information from the U.S. Census Bureau along with geographic information sources to identify blocks of telephone numbers with the highest proportions of racial and ethnic minority communities across the state were used to draw a sample sufficient for sub-population characterizations. For more information on the specific sampling methods used, see Link, et al. (2005).

PROCEDURES

Data collection was conducted by the Office of Health Promotion/Health Risk Studies Program at KDHE using the telephones numbers provided by an independent sample vendor. All interviewers were current employees of KDHE, had extensive training and previous experience collecting BRFSS data, and were monitored during the interview process by the survey supervisor. To ensure that data were collected and stored properly, frequent reviews were conducted by program supervisors of the Computer Assisted Telephone Interview (CATI) unit at KDHE. For each call, the unit would attempt to contact each household on the sample list, and once they were able to make contact, a short screener was used to determine the ethnicity and race of the respondent. If respondents chose either Hispanic ethnicity or any of the race options other than White, the telephone interviewer moved directly into the survey. If respondents chose White without having indicated the Hispanic ethnicity, they were randomly selected to complete the survey.

HUMAN SUBJECTS REVIEW

The survey instrument and proposed study protocol were submitted to human subjects protection review by the Institutional Review Board of KDHE. Confidentiality of personal information was maintained consistent with KDHE's standard BRFSS protocols. First, all KDHE staff involved with BRFSS data collection were required to sign confidentiality agreements.

Second, respondent data were stored on password-protected data systems. Third, no identifying information, such as name or address, was solicited from respondents. Fourth, once data collection was complete, the full telephone numbers used for sampling were deleted from the dataset, with only area code and prefixes retained. Fifth, no personal identifiers in the final dataset were transferred to KHI for analysis. Finally, because results are reported in aggregate form only, a given individual's responses to the survey remain anonymous.

DATA ANALYSIS

Data were tabulated and weighted using the STATA[®] statistical software package. Data weighting (adjusted using the population percentages by sex, age cohort, and race/ethnicity) was used to accurately estimate obesity prevalence and related risk factors for the general population in Kansas, as well as for the targeted over-sampled minority sub-populations. Age and sex adjustment was performed on the data to account for the differences in the age and sex distributions among racial and ethnic subgroups. Direct standardization was used to equalize the age and sex distributions, utilizing the 2004 American Population Survey as the standard population for the age and sex breakdown of Kansas.

For this report, as stated above, the OMB 15 guidelines were followed in constructing the three subgroups of ethnicity and race relevant to this project. If the respondent indicated that they were Hispanic, they are included in the Hispanic subgroup, no matter what race they choose (909 Hispanic households). Likewise, if the respondent indicated that they were Black, they are included in the Black subgroup no matter what ethnicity they choose (662 Black households). The White subgroup was constructed in the same fashion as the Black subgroup (751 White households). Hence, these groups are not mutually exclusive with respect to ethnicity and racial categories.

Results are provided for respondents who were 18 years of age or older at the time of data collection. Results are reported for the total group, as well as by race and ethnicity categories. Comparisons of the racial and ethnic minority groups to the majority population are highlighted in the findings section; some of the differences may represent important trends or findings that might benefit from monitoring.

PARTICIPANT DEMOGRAPHICS

Survey respondents represented adults throughout Kansas, with higher concentrations of sampled households in Sedgwick, Wyandotte, and Johnson counties (where higher concentrations of minorities reside in Kansas). See Table A-1 for the distribution of participants by their county of residence.

Table A-1. Respondents by County of Residence

County	% of study sample	n
Wyandotte County	27.4	594
Sedgwick County	20.8	451
Johnson County	6.6	144
Shawnee County	6.5	142
Ford County	3.6	77
Finney County	3.4	74
Seward County	3.1	68
Geary County	2.4	52
Lyon County	2.4	53
Counties with less than 50 respondents	23.7	515

Table A-2 provides a summary of demographic information on the total sample of survey respondents. About half of survey respondents were White (49.8 percent) and another 43.9 percent were Black. Of the total sample, 58.1 percent were non-Hispanic. Most participants were female (51.1 percent) and ranged in age from 25 to 54 years (56.1 percent). The majority of respondents had a high school degree or GED as their highest educational attainment (30.3 percent); were employed or self-employed (64.3 percent); and had an annual household income of between \$15,000 and \$24,999 (20 percent).

Most participants were married (68.4 percent), and 38.0 percent had children under the age of 18 living in the household. Average household size was two adults and one child under age 18 years (range = 1 to 7 adults, 0 to 7 children). Although all survey respondents in the study had to have had a telephone, 5.0 percent had more than one telephone number (not including cell phones or numbers used by a computer or fax machine); and of these households with more than

one number, an average of 1.5 of the numbers were residential (range = 1 to 5). In the 12-month period prior to the data collection, 5.8 percent of the participants had been without telephone service for one or more weeks (not including disruptions due to weather or natural disasters).

Demographics by Race and Ethnicity

Survey respondent demographics are presented in Table A-2. For example, Hispanic participants were younger than either Black or White participants (e.g., 55.7 percent of Hispanics compared to 28.7 percent of Whites were less than 35 years of age). In terms of education, Hispanic participants were less educated than other participants (e.g., 40.4 percent of Hispanics had “less than high school” degree, compared to 7.3 of Blacks and 5.7 percent of Whites). These demographic profiles are comparable to the Kimminau and Satzler (2005) findings for these populations.

Despite similarity in employment status for Whites, Blacks, and Hispanics, differences among the groups exist for income. Whites had higher income levels compared to both minority groups; 44.6 percent of Whites report having an annual household income of \$50,000 or more, compared to 24.0 percent of Blacks and 12.4 percent of Hispanics.

Finally, marital status of survey participants varied by race and ethnicity. Less than half of Blacks (45.8 percent) compared to almost three-quarters of Hispanics (72.0 percent) reported being married or being part of an unmarried couple.

Table A-2. Demographics by Race and Ethnicity

Characteristic	Race / Ethnicity			Total	
	<i>Hispanic</i> %	<i>Black</i> %	<i>White</i> %	%	n
Sex					
Male	54.9	49.6	48.3	48.9	882
Female	45.1	50.4	51.7	51.1	1,288
Age Group					
18-24 years	25.0	18.4	13.7	14.3	145
25-34 years	30.7	21.2	15.0	17.0	453
35-44 years	20.2	22.6	18.8	19.7	483
45-54 years	12.9	17.0	20.1	19.4	463
55-64 years	6.2	10.0	13.3	12.3	288
65+ years	5.1	10.8	19.1	17.3	338
Education					
Less than High School	40.4	7.3	5.7	8.0	503
High School or GED	30.3	40.4	29.9	30.3	674
Some College	18.6	31.8	30.1	29.4	534
College Graduate	10.7	20.5	34.3	32.2	447
Annual Household Income					
Less than \$15,000	10.3	15.5	5.6	7.6	258
\$15,000 - \$24,999	41.7	27.7	18.6	20.0	620
\$25,000 - \$34,999	21.9	18.6	15.7	16.3	336
\$35,000 - \$49,999	13.7	14.2	15.5	16.4	281
\$50,000+	12.4	24.0	44.6	39.6	422
Employment Status					
Employed/Self-Employed	69.2	61.2	64.6	64.3	1,287
Out of Work	6.0	8.7	3.8	4.0	108
Homemaker/Student	18.1	9.6	9.8	10.5	282
Retired	4.7	12.7	19.4	17.9	357
Unable to Work	2.0	7.8	2.5	3.4	131
Marital Status					
Married/Unmarried Couple	72.0	45.8	69.2	68.4	1,274
Divorced/Separated	8.7	15.9	9.4	10.1	381
Widowed	2.1	5.6	7.5	6.5	182
Never Married	17.2	32.7	13.9	15.0	317
Children under 18 Living in Household	56.1	47.0	36.0	38.0	902
Households Experiencing Disruption in Telephone Service in Last 12 Months	12.1	7.3	5.2	5.8	197

Demographics of Sample Respondents Compared to State Census

Because the results of the survey were weighted to reflect the Kansas population distribution, many of the demographic characteristics of the sample are similar to those of the overall Kansas population. Refer to Table A-3 for a summary of study sample and state comparisons. The following comparisons highlight how representative our sample of participants was to the Kansas population as a whole. The sample's demographic characteristics were not exactly equal to the overall Kansas population in every category. Education level showed some minor divergence. Compared to the 25.8 percent of the Kansas population that completed a college degree, a slightly higher portion of the study sample (32.2 percent) achieved this education level (a weighted percentage). Annual household income, particularly at the lower levels, showed some difference as well. Compared to the Kansas population, a smaller portion of the study sample had incomes of less than \$15,000 (15.2 percent of the Kansas population, 7.6 percent of the sample), and a larger portion had incomes of between \$15,000 and \$34,999 (26.0 percent for Kansas, 36.3 for the study sample). For employment status, a smaller portion of the study sample had people who were employed or self-employed (64.3 percent) compared to the state's population (70.3 percent). Finally, marital status comparisons indicated that, compared to the Kansas population, more of the study sample group were married or part of an unmarried couple (57.7 percent for state, 68.4 for study sample) and fewer were never married (24.4 percent for Kansas, 15.0 percent for the study sample).

Overall, the weighted sample response for each demographic characteristic is close to the overall profile of the total Kansas population, indicating that the sample obtained for this study is representative of the Kansas population. The slight differences noted are to be expected due to the different sampling methods used for this study compared to the Census Bureau, including the sampling error and any non-response bias that may have occurred during data collection.

Table A-3. Demographics — Total Sample Compared to State Census

Characteristic	<i>Sample n</i>	<i>Sample Weighted %</i>	<i>Kansas n</i>	<i>Kansas %</i>
Sex				
Male over 18 years old	882	48.9	961,257	48.8
Female over 18 years old	1,288	51.1	1,008,894	51.2
Age Group				
18 - 24 years	145	14.3	254,691	12.9
25 - 34 years	453	17.0	351,087	17.8
35 - 44 years	483	19.7	387,640	19.7
45 - 54 years	463	19.4	395,645	20.1
55 - 64 years	288	12.3	250,818	12.7
65+ years	338	17.3	330,270	16.8
Ethnicity				
Hispanic	909	6.7	160,808	6.1
Non-Hispanic	1,260	93.3	2,492,646	93.9
Race				
White	751	86.2	2,310,170	87.1
Black	662	5.6	134,243	5.1
Other	25	3.0	143,732	5.4
Multiracial	69	5.1	65,309	2.5
Education				
Less than High School	503	8.0	222,844	11.3
High School or GED	674	30.3	590,723	30.0
Some College	534	29.4	648,186	32.9
College Graduate	447	32.2	508,652	25.8
Annual Household Income				
Less than \$15,000	258	7.6	163,608	15.2
\$15,000 - \$24,999	620	20.0	145,309	13.5
\$25,000 - \$34,999	366	16.3	134,546	12.5
\$35,000 - \$49,999	281	16.4	182,982	17.0
\$50,000+	422	39.6	449,921	41.8

Table A-3 (continued). Demographics — Total Sample Compared to State Census

Characteristic	Sample <i>n</i>	Sample Weighted %	Kansas <i>n</i>	Kansas %
Employment Status				
Employed/Self-Employed	1,287	64.3	1,440,304	70.3
Out of Work	108	4.0	106,537	5.2
Homemaker/Student	282	10.5	*	*
Retired	357	17.9	*	*
Unable to Work	131	3.4	*	*
Marital Status				
Married/Unmarried Couple	1,274	68.4	1,206,007	57.7
Widowed/Divorced	563	16.6	371,748	17.8
Never Married	317	15.0	511,330	24.4

Notes:

1) Kansas data were obtained from the 2004 American Community Survey conducted by the U.S. Census Bureau;

2) * = Missing information.

APPENDIX A: REFERENCES

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APPENDIX B

Survey Instrument

Kansas Health Nutrition and Activity Survey
2005 - 2006
Revised June 21, 2005: deleted unnecessary introductory sentences

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INTRODUCTION AND CONSENT SECTION

Interviewer Script:

Hello. I am calling for the Kansas Health Institute and the Kansas Department of Health and Environment. My name is (name). Your phone number has been chosen randomly and we are gathering information on the health and health practices.

Is this (phone number)? **If ‘No’**, : Thank you very much, but I seem to have dialed the wrong number. **Stop.**

Is this a private residence? **If ‘No’**: Thank you very much, but we are only interviewing people in private residences. **Stop.**

I need to randomly select one adult who lives in your household to be interviewed. How many members of your household, including yourself, are 18 years of age or older?

____ Number of adults

If “1” : Are you the adult?

If “yes” : Then you are the person I need to speak with. Enter 1 man or 1 woman below (Ask gender if necessary). **Go to “Consent” section on next page.**

If “no” : Is the adult a man or a woman? Enter 1 man or woman below. May I speak with [fill in (him/her) from previous question]? **Go to “correct respondent” on next page.**

How many of these adults are men and how many are women?

____ Number of men

____ Number of women

The person in your household that I need to speak with is _____. **If “you”, Go to “Consent” section on next page.**

To correct respondent: HELLO. I’m (name), calling for the Kansas Health Institute and the Kansas Department of Health and Environment. You have been randomly chosen to be interviewed and I’d like to ask you some questions about health and health practices.

Section 1: Race/Ethnicity Screener

First, I need to ask you a few questions that will help us ensure we are getting adequate representation from different groups of people.

1.1 Are you Hispanic or Latino?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

1.2 Which one or more of the following would you say is your race?

(Mark all that apply, please read:)

- 1 White
- 2 Black or African American
- 3 Asian
- 4 Native Hawaiian or Pacific Islander
- 5 American Indian, Alaska Native
- OR
- 6 Other (specify) _____
- 8 No additional choices

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

If more than one response to Q1.2, continue. Otherwise, Go to Section 2.

1.3 Which of the following groups would you say best represents your race?

[Mark only one]

- 1 White
- 2 Black or African American
- 3 Asian
- 4 Native Hawaiian or Pacific Islander
- 5 American Indian, Alaska Native
- 6 Other (specify) _____
- 7 Don't know / Not sure
- 9 Refused

If “yes” to question 1.1 or “Black or African American” to question 1.2, then proceed to question 2.1. Else, a randomization process will occur such that only a subsample of respondents will be selected to proceed with interview. If respondent is randomly selected to participate, proceed to consent and question 2.1. If respondent is not randomly selected to participate, read the following statement:

Thank you very much for your time and cooperation, but our random selection process has determined that it is not necessary to proceed with our interview at this time. Have a good [day/evening].

TERMINATE INTERVIEW.

If the respondent is selected to participate, read the following statement:

Consent:

I won't ask for your name, address, or other personal information that can identify you. Your participation is voluntary and will not affect any services you may receive from the state of Kansas. You don't have to answer any questions that you don't want to, and you can end the interview at any time. The interview takes a short time and any information that you give me will be confidential. If you have any questions about this survey, I will provide a telephone number for you to get more information.

Section 2. Health Status:

2.1 Would you say that in general your health is:

[Please read:]

- 1 Excellent
- 2 Very Good
- 3 Good
- 4 Fair
- 5 Poor

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

2.2 Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

___ ___ Number of days

- 8 8 None
- 7 7 Don't know / Not sure
- 9 9 Refused

2.3 Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

___ ___ Number of days

- 8 8 None
- 7 7 Don't know / Not sure
- 9 9 Refused

2.4 Have you ever been told by a doctor, nurse or other health professional that you have diabetes?

(If “Yes” and female respondent, ask “Was this only when you were pregnant?”)

(If Respondent says pre-diabetes or borderline diabetes, use response code 4.)

- 1 Yes
- 2 Yes, but female told only during pregnancy
- 3 No
- 4 No, pre-diabetes or borderline diabetes**
- 7 Don't know/ Not sure
- 9 Refused

2.5 Have you ever been told by a doctor, nurse or other health professional that you have high blood pressure?

(If “Yes” and female respondent, ask “Was this only when you were pregnant?”)

- 1 Yes
- 2 Yes, only during pregnancy [Go to Q 2.7]
- 3 No [Go to Q 2.7]
- 7 Don't know/ Not sure [Go to Q 2.7]
- 9 Refused [Go to Q 2.7]

2.6 Are you currently taking medicine for your high blood pressure?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

2.7 Blood cholesterol is a fatty substance found in the blood. Have you ever had your cholesterol checked?

- 1 Yes
- 2 No [Go to Q 2.10]
- 7 Don't know / Not sure [Go to Q 2.10]
- 9 Refused [Go to Q 2.10]

2.8 About how long has it been since you last had your cholesterol checked?

[Read only if necessary:]

- 1 Within the past year (any time less than 12 months ago)
- 2 Within the past 2 years (1 year but less than 2 years ago)
- 3 Within the past 5 years (2 years but less than 5 years ago)
- 4 5 or more years ago
- 7 Don't know/ Not sure
- 9 Refused

2.9 Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

2.10 Have you ever been told by a doctor, nurse, or other health professional that you have asthma?

- 1 Yes
- 2 No **[Go to Section 3]**
- 7 Don't know / Not sure **[Go to Section 3]**
- 9 Refused **[Go to Section 3]**

2.11 Do you still have asthma?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

Section 3: Adult Time Constraints

3.1 Are you currently:

[Please read:]

- 1 Employed for wages
- 2 Self-employed
- 3 Out of work for more than 1 year
- 4 Out of work for less than 1 year
- 5 A homemaker
- 6 A student
- 7 Retired

OR

- 8 Unable to work

[Do not read:]

- 9 Refused

[If answer to Q3.1 is 1, 2, 6 or 7 Go to 3.2, Otherwise Go to Q 3.3]

3.2 You indicated that you were [insert response from Q3.1]. On average, how many hours per week, if any, do you work at a job or business?

- __ Number of hours (76 = 76 or more hours)
- 8 8 Do not work/ none
- 7 7 Don't know/ Not sure
- 9 9 Refused

If number of adults in household is greater than 1, continue. Otherwise, Go to section 4.

3.3 You indicated that there are (number) adults living in your household. Besides yourself, how many of the other adults in your household are employed outside the home?

- __ Number
- 77 Don't know / Not sure
- 99 Refused

Section 4 : Physical Activity

If Q 3.2 is greater than zero, but less than 77, continue. Otherwise Go to Q 4.6.

4.1 When you are at work, which of the following best describes what you do?
Would you say:

(Note to interviewer: If respondent has multiple jobs, include all jobs.)

[Read options:]

- 1 Mostly sitting or standing
- 2 Mostly walking
- 3 Mostly heavy labor or physically demanding work

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

4.2 Do you have lunch breaks or other regular breaks during most workdays?

- 1 Yes
- 2 No **[Go to Q 4.4]**
- 7 Don't know/ Not sure **[Go to Q 4.4]**
- 9 Refused **[Go to Q 4.4]**

4.3 In a usual week, do you use your lunch or other regular work breaks to do physical activity or exercise, such as walking, aerobics, or jogging for at least 10 minutes at a time?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

4.4 Does your workplace have any policies or rules that state whether or not employees may use lunch or other break times for exercise or physical activity?

[If yes, probe for which]

- 1 Yes, may use breaks to exercise or be physically active
- 2 Yes, MAY NOT use breaks to exercise or be physically active
- 3 No policies or rules
- 7 Don't know/ Not sure
- 9 Refused

If answer to Q4.3 is NO and Q4.4 is 1 or 3 continue. Otherwise go to Q4.6

4.5 What is the main reason you are not more physically active during your break time?

[Read only if necessary. Code 1 response]

- 1 Must remain at desk or work station during breaks
- 2 Usually eat during breaks
- 3 Breaks are too short
- 4 Not allowed to use breaks for physical activity
- 5 Don't usually take breaks / too busy with work
- 6 Usually do personal business or errands during breaks
- 7 No good place to be physically active at workplace
- 8 Usually rest during break time
- 9 Don't want to go back to work sweaty
- 10 Already get enough physical activity
- 11 Other (specify) : _____

Don't know/ Not sure

- 99 Refused

We are interested in two types of physical activity: vigorous and moderate. Vigorous activities cause large increases in breathing or heart rate while moderate activities cause small increases in breathing or heart rate.

4.6 Now, thinking about the moderate physical activities that you do ***[fill in (when you are not working), if 'employed' or 'self-employed']*** in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate?

- 1 Yes
- 2 No **[Go to Q4.9]**
- 3 Don't know / Not sure **[Go to Q 4.9]**
- 4 Refused **[Go to Q 4.9]**

4.7 How many days per week do you do these moderate activities for at least 10 minutes at a time?

__ Days per week

8 8 Does not exercise 10 minutes weekly [Go to Q 4.9]

7 7 Don't know / Not sure [Go to 4.9]

9 9 Refused [Go to 4.9]

4.8 On days when you do moderate activities for at least 10 minutes at a time, how much total time *per day* do you spend doing these activities?

_: __ Hours and minutes per day

7 7 7 Don't know / Not sure

9 9 9 Refused

4.9 Now thinking about the vigorous physical activities that you do [fill in (when you are **not working**) if '**employed**' or '**self-employed**'] in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?

1 Yes

2 No [Go to Section 5]

7 Don't know / Not sure [Go to Section 5]

9 Refused [Go to Section 5]

4.10 How many days per week do you do these vigorous activities for at least 10 minutes at a time?

__ Days per week

8 8 Does not exercise 10 minutes weekly [Go to Section 5]

7 7 Don't know / Not sure

9 9 Refused

4.11 On days when you do vigorous activities for at least 10 minutes at a time, how much total time *per day* do you spend doing these activities?

_: __ Hours and minutes per day

7 7 7 Don't know / Not sure

9 9 9 Refused

Section 5: Personal Barriers to Physical Activity

5.1 Are you currently physically active or exercising as much as you WANT?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

5.2 Are you currently physically active or exercising as much as you think you SHOULD?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

If NO to Q5.1 OR 5.2 then continue. Otherwise, go to next section.

5.3 What is the main personal reason that you do not exercise more or be more physically active?

[Mark only one, do not read]

- 1 I don't have enough time
- 2 Too tired or don't have the energy
- 3 Ill or otherwise physically unable
- 4 Don't enjoy being active
- 5 Don't have anyone to be active with
- 6 Afraid of injury
- 7 It is too expensive
- 8 Already get enough exercise
- 9 Self-motivation or will-power
- 10 No personal reason
- 11 Other (specify) _____
- 77 Don't know/ Not sure
- 99 Refused

5.4 What one thing would it take to get you to exercise more or be more physically active?

[Mark only one, do not read]

- 1 More time
- 2 Money
- 3 Access
- 4 Support from family
- 5 Support from a friend
- 6 Childcare
- 7 Doctor's advice
- 8 Transportation
- 9 Facilities
- 10 Self-motivation or will-power
- 11 No personal reason
- 12 Already get enough exercise
- 13 Other (specify) _____
- 77 Don't know/ Not sure
- 99 Refused

Section 6: Community Environment

6.1 During the past month, did you walk for transportation, like to go to or from work, to run errands, or to go somewhere else that you wanted or needed to go?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

6.2 In your community, are there businesses or places where you need to go, such as stores or churches, where you can walk instead of driving?

- 1 Yes
- 2 No **[Go to Q 6.4]**
- 7 Don't know/ Not sure **[Go to Q 6.4]**
- 9 Refused **[Go to Q 6.4]**

6.3 Do you consider it safe to walk there?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

6.4 During the past month, how often did you ride a bicycle for transportation, like to go to or from work, run errands, or to go somewhere else that you wanted or needed to go?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

6.5 In your community are there public swimming pools, parks, walking trails, bike trails, or other recreation facilities you could use at no cost if you wanted to?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

6.6 In your community are there health clubs or other recreation facilities that require you to pay to use if you wanted to?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

If 'YES' to Q5.1 AND 5.2 the skip to Q7.1

6.7 What, if anything, about your community or neighborhood keeps you from doing physical activity or exercising more?

[Mark all responses, do not read]

- 1 Not enough sidewalks
- 2 Not enough bike lanes or paths
- 3 Not enough recreational facilities
- 4 Not enough physical activity programs
- 5 High crime
- 6 No street lights
- 7 Unattended dogs
- 8 Too many hills
- 9 Bad weather
- 10 Heavy traffic
- 11 Poor air from cars
- 12 Poor scenery
- 13 Rural environment or remote area
- 14 Gang violence
- 15 Verbal abuse from persons on street
- 16 Mentally ill or homeless people on street
- 17 Random gunshots
- 18 Speeding drivers
- 19 Nothing or no reason
- 20 Other reason (specify) _____
- 77 Don't know/ Not sure
- 99 Refused

Section 7: Sedentary Behaviors

[If answer to Q3.1 is 3, 4, 5, 8 or if answers to Q3.1 is 6 or 7 AND Q3.2 equals 88 Go to 7.3, Otherwise Go to 7.1]

7.1 On a typical day that you work, but not counting time at your job, how many hours and minutes per day do you watch TV, video tapes or DVDs?

- ___ __: ___ __ Hours and minutes per day
- 8 8 8 8 None
- 7 7 7 7 Don't know/ Not sure
- 9 9 9 9 Refused

7.2 On a typical day that you work, but not counting time at your job, how many hours and minutes do you spend using a computer or playing interactive electronic games, computer games, Nintendo, Gameboy, PlayStation, or others?

___:___ Hours and minutes per day
8 8 8 8 None
7 7 7 7 Don't know/ Not sure
9 9 9 9 Refused

7.3 On a typical day **[fill in (that you do not work if 3.2 > 0 hours worked)]**, how many hours and minutes per day do you watch TV, video tapes or DVDs?

___:___ Hours and minutes per day
8 8 8 8 None
7 7 7 7 Don't know/ Not sure
9 9 9 9 Refused

7.4 On a typical day **[fill in (that you do not work if 3.2 > 0 hours worked)]**, how many hours and minutes do you spend using a computer or playing interactive electronic games, computer games, Nintendo, Gameboy, PlayStation, or others?

___:___ Hours and minutes per day
8 8 8 8 None
7 7 7 7 Don't know/ Not sure
9 9 9 9 Refused

Section 8: Dietary Intake:

8.1. Would you consider your eating habits to be....

[Please read:]

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

Next, I'm going to ask you about specific food groups. I am only interested in the foods you eat. Please include all foods you eat, both at home and away from home.

8.2 How many servings of fruit or fruit juice, including fresh, canned, frozen, or dried, do you usually eat or drink per day or per week?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.3 How many servings of vegetables or vegetable juice, including fresh, canned or frozen, do you usually eat or drink per day or per week? Please include potatoes, but not French Fries.

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.4 How many servings of any kind of breads, rolls, cereals, pasta, rice, or other grain foods do you usually eat per day or per week? Examples of a serving are one slice of bread; one-half cup of cooked cereal, rice or pasta; or one cup of cold cereal.
(Interviewer instructions: If asked, please include bagels and muffins.)

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.5 How often do you usually eat sweets, such as cakes, pies, donuts, cookies, or candy bars?
(Interviewer instructions: If necessary, probe with "How many times per day or per week do you usually eat sweets, such as cakes, pies, donuts, cookies, or candy?")

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.6 How often do you usually eat snack foods, such as crackers, chips, or nuts?
(Interviewer instructions: If necessary, probe with “How many times per day or per week do you usually eat snack foods, such as crackers, chips, or nuts?”)

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.7 How many servings of beef, pork, hot dogs, lunch meats, or eggs do you usually eat per day or per week? A serving of meat is 2 to 3 oz., or about the size of a deck of cards.

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.8 How many servings of fish or poultry do you usually eat per day or per week? A serving of poultry or fish is about 2 to 3 oz, or about the size of a deck of cards.

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.9 How many servings of peanut butter or cooked dried beans, such as navy, pinto, or kidney beans, do you usually eat per day or per week? A serving of peanut butter is 2 tablespoons; a serving of cooked dried beans is about one-half cup.

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.10 How many servings of milk or yogurt do you usually consume per day or per week?
Please include milk on cereal and chocolate milk. A serving of either milk or yogurt is 8 oz. or one cup.

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never [**Go to 8.12**]
- 7 7 7 Don't know / Not sure [**Go to 8.12**]
- 9 9 9 Refused [**Go to 8.12**]

8.11 Do you usually drink.....

[Please read:]

- 1 Whole milk
- 2 2% milk
- 3 1% milk
- 4 Skim milk or ½% milk
- 5 Combination of types
- 6 Other (specify) _____

[Don't read]

- 7 Don't know / Not sure
- 9 Refused

8.12 How many servings of cheese do you usually eat per day or per week? Please include cottage cheese and foods with cheese in them. A serving of cheese is about 1 ½ oz.; a serving of cottage cheese is one cup.

(Interviewer instructions: If asked, do not include cream cheese.)

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

8.13 Are you currently trying to decrease or limit the amount of fat in the foods that you eat?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

8.14 Are you currently trying to decrease or limit the amount of cholesterol in the foods that you eat?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

8.15 Are you currently trying to decrease or limit the amount of salt in the foods that you eat?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

8.16 Are you currently trying to decrease or limit the amount of carbohydrates in the foods that you eat?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

8.17 Are you currently on a structured low carbohydrate diet such as Atkins, South Beach or other program?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

8.18 Next, I am going to ask you about the variety of foods that you eat on a regular basis. By variety, I mean the number of different foods within each food group that you usually eat over a period of time. Would you say that there is.....

(Interviewer instruction: If necessary, use “By variety, I mean the number of different foods within each food group that a person usually eats, for example, the number of different kinds of fruits and vegetables, cereals and breads, and meats that a person eats during a week.”)

[Please read:]

- 1 Little variety in the foods you eat from day to day
- 2 Some variety
- 3 A lot of variety

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

Section 9: Meal settings

9.1 Do you usually eat or drink something for breakfast? Would you say....

[Please read:]

- 1 Almost Always or Always
- 2 Sometimes
- 3 Almost Never or Never

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

9.2 How often do you typically get meals in restaurants, cafeterias, or fast food places?

- 1 __ Per day
- 2 __ Per week
- 3 __ Per month
- 4 __ Per year
- 5 5 5 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

9.3 How often do you sit down with other members of your family to eat dinner or supper?
Would you say....

[Please read:]

- 1 Never
- 2 Some days
- 3 Most days
- 4 Every day

[Do not read:]

- 7 Don't know/Not sure
- 9 Refused

9.4 How often is there a TV on during meals? Would you say.....

[Please read:]

- 1 Always
- 2 Often
- 3 Sometimes
- 4 Rarely
- 5 Never

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

Section 10: Weight Control

10.1 Are you now trying to lose weight?

- 1 Yes [**Go to Q10.3**]
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

10.2 Are you now trying to maintain your current weight, that is to keep from gaining weight?

- 1 Yes
- 2 No [**Go to Q 10.5**]
- 7 Don't know/ Not sure [**Go to Q 10.5**]
- 9 Refused [**Go to Q 10.5**]

10.3 Are you eating fewer calories or less fat to
lose weight? [if 'yes' to Q10.1]
keep from gaining weight ? [if 'yes' to Q10.2]

Probe for which:

- 1 Yes, fewer calories
- 2 Yes, less fat
- 3 Yes, fewer calories and less fat
- 4 No
- 7 Don't know/ Not sure
- 9 Refused

10.4 Are you using physical activity or exercise to
lose weight [if 'yes' to Q10.1]
keep from gaining weight [if 'yes' to Q10.2]

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

10.5 Do you have one person that you think of as your personal doctor or health care provider?

[Interviewer: If 'no', ask 'Is there more than one or is there no person who you think of?']

- 1 Yes, only one
- 2 More than one
- 3 No [Go to Q 10.7]
- 7 Don't know/ Not sure [Go to Q 10.7]
- 9 Refused [Go to Q 10.7]

10.6 Have you seen your doctor in the past 12 months?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

10.7 In the past 12 months, has a doctor, nurse, or other health professional given you advice about your weight?

Probe for which:

- 1 Yes, lose weight
- 2 Yes, gain weight
- 3 Yes, maintain current weight
- 4 No
- 7 Don't know/ Not sure
- 9 Refused

Section 11: Diet and Health Knowledge & Beliefs

Now I would like to ask you some questions about your opinions on your diet, health, food shopping and related topics.

11.1 How many servings of fruits and vegetables do you THINK experts recommend you should eat each day?

- __ __ Number of servings
- 8 8 None
- 7 7 Don't know / Not sure
- 9 9 Refused

Now I am going to read you some statements about what people eat. Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

11.2 Choosing a healthy diet is just a matter of knowing what foods are good and what foods are bad.

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree
- 7 Don't know / Not sure
- 9 Refused

11.3 Some people are born to be fat and some thin; there is not much you can do to change this.

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree
- 7 Don't know / Not sure
- 9 Refused

11.4 There are so many recommendations about healthy ways to eat, it's hard to know what to believe.

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree
- 7 Don't know / Not sure
- 9 Refused

11.5 What you eat can make a big difference in your chance of getting a disease, like heart disease or cancer.

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree
- 7 Don't know / Not sure
- 9 Refused

11.6 The things I eat and drink now are healthy so there is no reason for me to make changes.

- 1 Strongly agree
- 2 Somewhat agree
- 3 Somewhat disagree
- 4 Strongly disagree
- 7 Don't know / Not sure
- 9 Refused

Section 12: Food Purchasing Decisions

Now think about buying food. When you buy food, how important is each of the following factors?

12.1 How safe the food is to eat?

[Please read:]

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

12.2 Nutrition?

[Please read:]

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

12.3 Price?

[Please read:]

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

12.4 How well the food keeps?

[Please read:]

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

12.5 How easy the food is to prepare?

[Please read:]

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

12.6 Taste?

[Please read:]

- 1 Very important
- 2 Somewhat important
- 3 Not too important
- 4 Not important at all

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

12.7 How often do you read nutrition labels on food packages to decide whether or not to buy a food?

[Please read:]

- 1 Almost Always or Always
- 2 Sometimes
- 3 Almost Never or Never

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

12.8 How often do you read nutrition labels on food packages to decide whether or not to eat a food?

[Please read:]

- 1 Almost Always or Always
- 2 Sometimes
- 3 Almost Never or Never

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

Section 13: Availability of Food Choices

13.1 Which of the following would best describe the place where your family usually purchases groceries?

[Please read:]

- 1 Warehouse/ discount center
- 2 Supermarket/ large grocery store
- 3 Small grocery store
- 4 Convenience store, such as a Quick Shop, Gas N' Shop, etc.

[Do not read:]

- 5 Other (specify) _____
- 7 Don't know/ Not sure
- 9 Refused

The next few questions are about the fresh fruits and vegetables sold at your grocery store. Do not include canned or frozen.

13.2 Thinking of the store where you do most of your grocery shopping, how would you rate the quality of their fresh fruits and vegetables? Would you say:

[Please read:]

- 1 Excellent
- 2 Good
- 3 Fair
- 4 Poor

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

13.3 How would you rate the variety of their fresh fruits and vegetables? Would you say:

[Please read:]

- 1 Excellent
- 2 Good
- 3 Fair
- 4 Poor

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

13.4. How would you rate the affordability of their fresh fruits and vegetables? Would you say:

[Please read:]

- 1 Very affordable
- 2 Somewhat affordable
- 3 Not affordable

[Do not read:]

- 7 Don't know/ Not sure
- 9 Refused

13.5 How often do you usually purchase food items, not including beverages, from a vending machine?

- 1 __ Per day
- 2 __ Per week
- 3 __ Per month
- 4 __ Per year
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

Section 14: Food Security Scale

These next questions are about the food eaten in your family. People do different things when they are running out of money for food to make their food or money go further.

14.1 In the last 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?

- 1 Yes
- 2 No [**Skip to Q 14.3**]
- 7 Don't know/ Not sure [**Skip to Q 14.3**]
- 9 Refused [**Skip to Q 14.3**]

14.2 How often did this happen?

[Please read:]

- 1 Almost every month
- 2 Some months but not every month
- 3 Only in 1 or 2 months

[Do not read:]

- 7 Don't know / Not sure
- 9 Refused

14.3 In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money to buy food?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

14.4 In the last 12 months, were you ever hungry but didn't eat because you couldn't afford enough food?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

Now I'm going to read you 2 statements that people have made about their food situation. For these statements, please tell me whether the statement was often, sometimes, or never true for you or other members of your household in the last 12 months.

14.5 The first statement is, “The food that I or we bought just didn’t last, and I or we didn’t have money to get more.” Was that often, sometimes or never true for you in the last 12 months?

- 1 Often
- 2 Sometimes
- 3 Never
- 7 Don’t know / Not sure
- 9 Refused

14.6 “I or we couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for you in the last 12 months?

- 1 Often
- 2 Sometimes
- 3 Never
- 7 Don’t know / Not sure
- 9 Refused

Section 15. Demographics

15.1 Are you the person that is mainly responsible for food purchasing in your household?

- 1 Yes
- 2 No
- 3 Shared equally
- 7 Don’t know/ Not sure
- 9 Refused

15.2 Are you the person that is mainly responsible for food preparation in your household?

- 1 Yes
- 2 No
- 3 Shared equally
- 7 Don’t know/ Not sure
- 9 Refused

15.3 What is your age?

- — — Code age in years
- 07 Don’t know/ Not sure
- 09 Refused

15.4 Are you:

[Please read:]

- 1 Married
 - 2 Divorced
 - 3 Widowed
 - 4 Separated
 - 5 Never married
- OR
- 6 A member of an unmarried couple

[Do not read:]

- 9 Refused

15.5 How many children less than 18 years of age live in your household?

- __ Number of children
- 88 None
 - 99 Refused

15.6 What is the highest grade or year of school that you have completed?

[Read only if necessary]

- 1 Never attended school or only attended kindergarten
- 2 Grades 1 through 8 (Elementary)
- 3 Grades 9 through 11 (Some high school)
- 4 Grade 12 or GED (High school graduate)
- 5 College 1 year to 3 years (Some college or technical school)
- 6 College 4 years or more (College graduate)
- 9 Refused

15.7 Is your annual household income from all sources:

[Note: if respondent refuses at any income level, code refused.]

- 04 Less than \$25,000 If “no” as 05; if “yes” ask 03 (\$20,000 to less than \$25,000)
- 03 Less than \$20,000 If “no” code 04; if “yes” ask 02 (\$15,000 to less than \$20,000)
- 02 Less than \$15,000 If “no” code 03; if “yes” ask 01 (\$10,000 to less than \$15,000)
- 01 Less than \$10,000 If “no” code 02
- 05 Less than \$35,000 If “no” ask 06 (\$25,000 to less than \$35,000)
- 06 Less than \$50,000 If “no” ask 07 (\$35,000 to less than \$50,000)
- 07 Less than \$75,000 If “no” code 08 (\$50,000 to less than \$75,000)
- 08 \$75,000 or more

[Do not read]:

- 77 Don't know/ Not sure
- 99 Refused

15.8 About how much do you weigh without shoes?

[Note: If respondent answers in metrics, put "9" in 1st position, see example below.]

Round fractions up

— — — — Weight in pounds (Ex. 200 pounds = 200)
or kilograms (Ex. 196 kilograms = 9126)

7 7 7 7 Don't know / Not sure

9 9 9 9 Refused

15.9 About how tall are you without shoes?

[Note: If respondent answers in metrics, put "9" in 1st position, see example below.]

Round fractions down

— — / — — Enter height in feet & inches (Ex. 5 feet 9 inches = 509) or
in meters & centimeters (Ex. 1 meter 75 centimeters = 9175)

7 7 7 7 Don't know / Not sure

9 9 9 9 Refused

15.10 What county do you live in?

— — — FIPS county code

7 7 7 Don't know / Not sure

9 9 9 Refused

15.11 Do you have more than one telephone number in your household? Do not include cell phones or numbers that are only used by a computer or fax machine.

1 Yes

2 No **[Go to Q15.13]**

7 Don't know / Not sure **[Go to Q 15.13]**

9 Refused **[Go to Q15.13]**

15.12 How many of these are residential numbers?

1 One

2 Two

3 Three

4 Four

5 Five

6 Six or more

7 Don't know / Not sure

9 Refused

15.13 During the past 12 months, has your household been without telephone service for 1 week or more? Do not include when service is interrupted by weather or natural disasters.

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

15.14 Indicate sex of respondent. Ask only if necessary.

- 1 Male
- 2 Female

Section 16: Child Health, Activity and Nutrition

If no children under age 18 (Q15.5 = 88) in the household, go to closing.

16.1. Previously, you indicated there were [number from core, Q15.4] children under age 18 in your household. What is the age of the [randomly selected -- oldest, second oldest, etc.] child?

- 1 __ __ Age in months
- 2 __ __ Age in years
- 7 7 7 Don't know/Not sure **[Go to closing]**
- 9 9 9 Refused **[Go to closing]**

16.2. What is the gender of this child?

- 1 Male
- 2 Female
- 9 Refused [Go to closing]

16.3. Is the [randomly selected child] child Hispanic or Latino?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

16.4 Which one or more of the following would you say is the race of the [randomly selected child]?

Check all that apply

[Please read:]

- 1 White
 - 2 Black or African American
 - 3 Asian
 - 4 Native Hawaiian or Other Pacific Islander
 - 5 American Indian, Alaska Native
- OR
- 6 Other (specify:_____)

[Do not read:]

- 8 No additional choices
- 7 Don't know/ Not sure
- 9 Refused

[If more than one race selected in Q16.4 continue with Q16.5. Else skip to Q16.6.]

16.5 Which one of these groups would you say best represents the race of the [randomly selected child?]

[Please read:]

- 1 White
 - 2 Black or African American
 - 3 Asian
 - 4 Native Hawaiian or Other Pacific Islander
 - 5 American Indian, Alaska Native
- 6 Other (specify:_____)

[Do not read:]

- 7 Don't know/ Not Sure
- 9 Refused

16.6 How are you related to the [randomly selected child]?

- 1 Parent (mother or father) [interviewer instruction: include biologic, step or adoptive]
- 2 Grand parent
- 3 Foster parent
- 4 Sibling (brother or sister) [interviewer instruction: include biologic, step or adoptive sibling]
- 5 Guardian
- 6 Not related
- 7 Other (specify: _____)
- 77 Don't know/ Not sure
- 99 Refused

16.7 Would you say that in general the child's health is:

[Please read:]

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

[Don't read]

- 7 Don't know / Not sure
- 9 Refused

If the randomly selected child is less than 5 years old, skip to Q16.10; otherwise continue.

16.8 When weather permits, on how many days per week does the [randomly selected child] usually walk to school?

- __ __ Number of days
- 5 5 Child is not in school or is home schooled
- 8 8 None
- 7 7 Don't know/ Not sure
- 9 9 Refused

16.9 When weather permits, on how many days per week does the [randomly selected child] usually bike to school?

- __ __ Number of days
- 5 5 Child is not in school or is home schooled
- 8 8 None
- 7 7 Don't know/ Not sure
- 9 9 Refused

16.10 In your household, are there household rules about the amount of time the [randomly selected child] is allowed to watch television or play computer or video games?

- 1 Yes
- 2 No [**Skip to Q16.12**]
- 7 Don't know/ Not sure [**Skip to Q16.12**]
- 9 Refused [**Skip to Q16.12**]

16.11 How many hours per day is the [randomly selected] child allowed to watch television or play computer or video games?

- Number of hours
- 8 8 None
- 7 7 Don't know / Not sure
- 9 9 Refused

16.12 Is there a working television in the room where the [randomly selected child] sleeps?

- 1 Yes
- 2 No
- 7 Don't know/ Not sure
- 9 Refused

16.13 In your household, are there limits on the amount of sweetened beverages, such as sodas, Kool-aid, sports drinks or sweetened fruit juices that the [randomly selected child] is allowed to drink?

- 1 Yes
- 2 No [**Skip to Q16.15**]
- 7 Don't know/ Not sure [**Skip to Q16.15**]
- 9 Refused [**Skip to Q16.15**]

16.14 About how many 6-8 ounce servings per day of sweetened beverages is your child allowed?

- Number of beverages (25 = 25 or more)
- 8 8 None
- 7 7 Don't know / Not sure
- 9 9 Refused

16.15 In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert?

.....Chips such as potato chips, corn chips, cheese puffs

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.16 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Crackers?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.17 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Cookies, cakes, brownies or granola bars?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.18 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Candy of any kind?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.19 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Snacks like pizza, pizza rolls, etc.?

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.20 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Fresh fruits?

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.21 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Fresh vegetables?

- 1 __ Per day
- 2 __ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.22 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Yogurt ?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.23 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Cheese?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.24 [In your household, how many times per day or per week does the [randomly selected child] eat each of the following kinds of foods as a snack or dessert:]

.....Ice cream?

- 1 _ _ Per day
- 2 _ _ Per week
- 3 3 3 Less than once per week
- 8 8 8 Never
- 7 7 7 Don't know / Not sure
- 9 9 9 Refused

16.25 How would you rate this child's current weight?

[Please read:]

- 1 Very underweight
- 2 Slightly underweight
- 3 About the right weight
- 4 Slightly overweight
- 5 Very overweight

[Don't read]

- 7 Don't know / Not sure
- 9 Refused

CLOSING STATEMENT

That is my last question. Everyone's answers will be combined to give us information about the health practices of people in Kansas. Thank you very much for your time and cooperation.