# Reported Motivations for and Locations of Healthy Eating Among Georgia High School Students 

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#### Abstract

BACKGROUND: Understanding how youth perceive eating healthy foods can inform programs and policies that aim to improve healthy eating. We assessed the reasons for and the most common locations of eating healthy foods among Georgia's (GA) high school (HS) students.

METHODS: Using the 2013 GA HS Youth Risk Behavior Survey, we examined motivations for and locations of eating healthy foods by sociodemographic characteristics and daily fruit and vegetable intake. Weighted chi-square tests were used to examine differences in responses for each perception.

RESULTS: Nineteen percent of GA HS students consumed fruit $>3$ times/day and $11 \%$ consumed vegetables $>3$ times/day. The most frequently chosen response to motivations for eating healthy foods was the desire to be healthy ( $42 \%$ ), followed by enjoying their taste ( $18 \%$ ). The most likely location to eat healthy foods was at home ( $80 \%$ ), followed by at school ( $13 \%$ ).

CONCLUSIONS: GA HS students are most motivated to eat healthy foods by the desire to be healthy and their enjoyment of the taste of healthy foods. Incorporating messages that align with students' motivations to eat healthy foods could be considered when developing promotional programs/policies targeting healthy eating.


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## Keywords

healthy foods; adolescents; motivations; Georgia

In the United States, obesity among adolescents has quadrupled in the past 30 years. ${ }^{1,2}$ The etiology of obesity among youth is likely multifactorial, including greater access to foods high in fats, added sugars and calories, eating outside of the home, and a sedentary lifestyle including increased television viewing. ${ }^{3-5}$ Adolescent obesity is associated with numerous health risks that can extend into adulthood; these include high blood pressure, high blood cholesterol levels, type 2 diabetes, metabolic syndrome, and psychological problems. ${ }^{6,7}$ Evidence suggests that improving diet and nutrition can lower the risk of becoming obese and developing related diseases. ${ }^{8}$

National and state level data indicate that the majority of adolescents do not meet recommendations for healthy eating. ${ }^{9}$ The 2010 Dietary Guidelines for Americans (DGA) recommend a diet rich in fruits and vegetables, whole grains, and fat-free and low-fat dairy products and consuming less added sugars and solid fats for persons $\geq 2$ years of age. ${ }^{10}$ For example, the recommendation for how many servings of fruits (including $100 \%$ fruit juice) and vegetables youth between the ages of 14 to 18 should consume per day is between 4 and 6.5 cups/day (eg, 1 cup equivalent is: 1 cup raw or cooked vegetable or fruit; half cup dried vegetable or fruit; 1 cup vegetable or fruit juice; 2 cups leafy salad greens) depending on the level of activity. ${ }^{8}$ Nationally, according to the US Centers for Disease Control and Prevention (CDC)'s 2013 Youth Risk Behavior Survey (YRBS), only 22\% of high school students had consumed fruit or drank $100 \%$ fruit juice $\geq 3$ times/day and only $16 \%$ had consumed vegetables $\geq 3$ times/day. ${ }^{11}$

Adolescent dietary behaviors are likely influenced by each level of the socio-ecological framework including the individual, interpersonal, community, and societal levels. ${ }^{12}$ For example, individual factors such as taste preferences for healthy foods such as fruits and vegetables and setting personal goals for fruit and vegetable intake are associated with fruit and vegetable intake. ${ }^{13}$ Interpersonal factors that are associated with adolescent eating behaviors include parental and peer support for eating healthy, while community-level factors include the presence of fast-food restaurants and grocery stores. ${ }^{13,14}$ The school nutrition environment is another important community-level predictor of adolescent dietary behaviors. ${ }^{13}$ Societal factors include mass media and food marketing. ${ }^{15}$

Whereas a number of studies have explored correlates and predictors of adolescent dietary intake, ${ }^{13-15}$ little is known about which among these correlates are most likely to influence an adolescent's decision to eat healthy. This study explores these gaps in understanding by examining results from a survey administered to a representative sample of public high school students in Georgia. This would be the first time that Georgia has explored the most likely predictor(s) of eating healthy foods among the high school students. Understanding what factors are associated with decisions to engage in healthy eating can inform current and future programs and policies that aim to improve healthy eating among Georgia's high school students. This study had 2 objectives. The first was to assess the reasons Georgia high school students choose to eat healthy and the second was to examine the most
common location of eating healthy. We describe the overall estimates and the estimates by sociodemographic characteristics and daily fruit or vegetable consumption status. We were interested in learning if high school students' motivations for healthy eating and locations of healthy eating varied by the frequency of fruit or vegetable consumption; we hypothesized that students who had greater fruit ( $\geq 3$ times/day) or vegetable intake ( $\geq 3$ times/day) reported greater interest in their own health and/or more often enjoyed the taste of healthy foods.

## METHODS

## Instruments

This cross-sectional study used data from the 2013 YRBS conducted by the Georgia Department of Public Health (DPH) with technical and financial support from CDC. The YRBS is a paper-and-pencil survey that monitors priority health risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The Georgia high school YRBS is administered to students in grades 9 through 12 in a representative sample of schools across the state of Georgia. Local parental consent procedures were followed prior to survey administration and student participation was anonymous and voluntary. The survey was administered by persons trained in YRBS during a single regular class period, with students spending approximately 35 minutes to complete the survey. ${ }^{16}$

## Participants

Of the 50 schools sampled for participation, $35(70 \%)$ participated. Of students enrolled in the sampled classes at participating schools, 1992 ( $87 \%$ ) completed the survey. Taken together, the overall response rate was $61 \%$, meeting the CDC standards for results to be considered adequately representative of all students enrolled in regular public and alternative schools in the state of Georgia. ${ }^{16}$ When assessing motivations for and locations of healthy eating by the sociodemographic characteristics (ie, grade, sex, and race/ethnicity), any students with missing responses for these 2 questions and each of the sociodemographic characteristics as well as students who reported "I do not eat healthy" (see below) were excluded, with varying final analytic samples for each sociodemographic characteristic (eg, 1385 for grade and motivation for eating healthy). Similarly, for assessing motivations for and locations of healthy eating by daily fruit and vegetable consumption status, students with any missing responses for these 2 questions and either daily fruit or daily vegetable intake as well as students who reported "I do not eat healthy" were excluded, with varying final analytic samples for daily fruit and vegetable consumption statuses.

## Measures

The study involved analyzing responses to 2 novel state-added questions to the Georgia YRBS. The questions were developed after several iterations of comments from internal and external stakeholders and in collaboration with the CDC.

Perceptions about healthy eating.-The main outcomes of interest were to characterize motivations for and locations of eating healthy foods: (1) the most likely reason
to eat healthy foods ("Why are you most likely to eat healthy foods?"); and (2) the most common location to eat healthy foods ("Where are you most likely to eat healthy foods?"). For characterizing motivations for eating healthy foods, the 8 response choices included: (1) I do not eat healthy foods; (2) My friends are watching; (3) I like how healthy foods taste; (4) My family eats healthy foods; (5) My doctor told me to; (6) I want to look good; (7) I want to be healthy; and (8) Some other reason. For identifying the most common location to eat healthy foods, the 5 response choices included: (1) I do not eat healthy foods; (2) At home; (3) At school; (4) At a restaurant; and (5) Some other place. Estimates for students who reported "I do not eat healthy foods" for both questions were reported separately for each question but included all students who responded to each of the questions and excluded missing responses only. Estimates describing motivations for eating healthy foods and the most common location to eat healthy foods were calculated among students who selected response options $2-8$ and $2-5$, respectively.

Sociodemographic and behavioral variables.-Sociodemographic variables included grade (9th, 10th, 11th, and 12th grade), sex, and race/ethnicity (non-Hispanic (NH) white, NH black, Hispanic). Weight status was measured using self-reported body height and body weight data to calculate the body mass index, as defined by the CDC Growth Chart cutoffs. ${ }^{17}$ Overall fruit consumption was determined by assessing 7-day reported intake of both $100 \%$ fruit juice ("During the past 7 days, how many times did you drink $100 \%$ fruit juices such as orange juice, apple juice, or grape juice?") and fruit ("During the past 7 days, how many times did you eat fruit?"). For each question, the response options were as follows: (1) I did not drink $100 \%$ fruit juice/eat fruit during the past 7 days; (2) 1-3 times during the past 7 days; (3) 4-6 times during the past 7 days; (4) 1 time/day; (5) 2 times/day; (6) 3 times/day; and (7) 4 times/day. To calculate total fruit intake, the frequency of reported consumption of $100 \%$ fruit juice and fruit were summed. For those responses that displayed a range (eg, "4-6 times during the past 7 days), the midpoint number was used. Using a previously used method, ${ }^{18}$ weekly intake was converted to daily intake. For example, 1-3 times during the past 7 days was converted to 0.29 time/day ( 2 divided by 7) and 4-6 times during the past 7 days was converted to 0.71 time/day ( 5 divided by 7 ). For daily fruit consumption, 3 mutually exclusive categories were created: None, >0 to <3 times/day, and $\geq 3$ times/day. Overall reported vegetable consumption was determined by assessing 7-day intake of (1) green salad ("During the past 7 days, how many times did you eat green salad?"); (2) potatoes ("During the past 7 days, how many times did you eat potatoes?"); (3) carrots ("During the past 7 days, how many times did you carrots?"); and (4) other vegetables ("During the past 7 days, how many times did you eat other vegetables?"). Response options were the same as the fruit consumption variables. Daily vegetable consumption was calculated using the same method as above for calculating daily fruit consumption where weekly intake was converted to daily intake. For daily vegetable consumption, 3 mutually exclusive categories were created: None, $>0$ to $<3$ times/day, and $\geq 3$ times/day. The authors acknowledge that although the focus of healthy foods in this study is on fruits and vegetables, that an overall healthy eating dietary pattern encompasses broader variety of foods such as whole grains and low-fat dairy products, which were not included in this study.

## Data Analysis

Descriptive analyses were conducted. Frequencies were calculated to determine the overall prevalence of student respondents by sociodemographic and behavioral characteristics, and the prevalence of students who responded to both the motivations about eating healthy foods and the most common location of eating healthy foods overall, by grade, sex, and race/ethnicity, and by fruit and vegetable consumption status. Weighted chi-square tests were used to examine differences in overall distribution of responses to both the motivations about eating healthy foods and the most common location of eating healthy foods by (1) grade, sex, and race/ethnicity; and (2) fruit and vegetable consumption status. A p-value of <. 05 was used as the cutoff point for statistical significance. Pairwise contrasts were performed to identify significant differences in each response for the motivations for and locations of eating healthy foods by demographic and fruit and vegetable consumption status. Bonferroni adjustment method was used to make adjustments for the number of comparisons. All statistical analyses were performed with the Statistical Analysis Software (SAS) (version 9.3, SAS Institute, Inc., Cary, NC) and incorporated appropriate procedures (eg, SUDAAN procedures, appropriate weights, and strata specification) to account for the complex sampling design.

## RESULTS

Table 1 shows the sociodemographic and behavioral characteristics of the high school student respondents. Approximately $31 \%$ of participants were 9th grade students, $47 \%$ were NH white, $30 \%$ were overweight or obese, $19 \%$ consumed fruit ( $100 \%$ fruit juice and fruit) $\geq 3$ times/day, and $11 \%$ consumed vegetables $\geq 3$ times/day. The sex of survey participants was evenly distributed.

The overall prevalence for responses to the motivations to eat healthy foods and the most common location to eat healthy foods are shown in Table 2 . The most frequently chosen responses to why students were most likely to eat healthy foods were the desire to be healthy ( $42 \%$ ), followed by liking the taste of healthy foods ( $18 \%$ ), and the desire to look good $(14 \%)$. The most frequently chosen responses for most likely location to eat healthy foods were at home ( $80 \%$ ), followed by at the school ( $13 \%$ ). Approximately $9-11 \%$ of students reported that they do not eat healthy foods.

## Motivations for Eating Healthy Foods and Most Common Location of Eating Healthy Foods by Sociodemographic Factors

The overall distribution of responses to the motivations for eating healthy foods and the most common location of eating healthy foods did not differ by grade. However, the responses differed by sex (with the exception of the most common location of eating healthy foods) (chi-square tests, $\mathrm{p}<.0001$ ) and race/ethnicity (chi-square tests, $\mathrm{p}<.0001$ ) (Table 2). A greater proportion of males reported that their friends were watching as a reason for why they are most likely to eat healthy foods ( $4 \%$ for boys and $2 \%$ for girls), and both NH black participants and Hispanic participants more often reported that their friends were watching as a reason for why they are most likely to eat healthy foods compared to NH white participants ( $4 \%$ for NH black participants, $6 \%$ for Hispanic participants, and $2 \%$ for

NH white participants). A greater proportion of females reported that they wanted to look good as a reason for why they are most likely to eat healthy foods ( $12 \%$ for boys and $16 \%$ for girls), and a higher proportion of NH white participants reported that they want to look good compared to participants who were NH black ( $17 \%$ for NH white participants and $10 \%$ for NH black participants). NH black participants more often reported that they wanted to be healthy compared with NH white participants ( $46 \%$ for NH black participants and $41 \%$ for NH white participants). NH black participants more often reported that they eat healthy foods at school ( $17 \%$ for NH black participants and $11 \%$ for NH white participants) and less often reported that they eat healthy foods at home ( $78 \%$ for NH black participants and $81 \%$ for NH white participants) compared with NH white participants.

## Motivations for Eating Healthy Foods and Most Common Location of Eating Healthy Foods by Fruit and Vegetable Consumption Status

The overall distribution of responses to the motivations for eating healthy foods and the most common location of eating healthy foods differed by fruit intake and vegetable intake status (both: chi-square tests, $\mathrm{p}<.0001$ ) (Table 3). Among students from all daily fruit intake categories, the most common reason they were most likely to eat healthy foods was that they wanted to be healthy ( $34 \%$ for no daily fruit intake, $43 \%$ for $>0$ to $<3$ times/day, and $44 \%$ for $\geq 3$ times/day). A higher proportion of students who had no daily fruit consumption reported that they are most likely to eat healthy foods because their doctor told them to compared with students who had any fruit consumption ( $10 \%$ for no daily fruit intake, $2 \%$ for >0 to <3 times/day, and $3 \%$ for $\geq 3$ times/day). Among students from all daily vegetable consumption categories, the most common reason they were most likely to eat healthy foods was that they wanted to be healthy ( $40 \%$ for no daily vegetable consumption, $41 \%$ for $>0$ to $<3$ times/ day, and $53 \%$ for $\geq 3$ times/day). A higher proportion of students from the vegetable intake category of $>0$ to $<3$ times/day reported that they like how healthy foods taste compared with students who reported no daily vegetable intake ( $12 \%$ for no daily vegetable intake and $19 \%$ for $>0$ to <3 times/day) (Table 3).

The majority of students from all daily fruit and vegetable consumption categories reported that they were most likely to eat healthy foods at home (Table 3). A higher proportion of students who had any daily vegetable intake reported that they were more likely to eat healthy foods at home compared to students who had no daily vegetable intake ( $65 \%$ for no daily fruit intake, $81 \%$ for $>0$ to $<3$ times/day, and $82 \%$ for $\geq 3$ times/day). Students who had no daily vegetable intake more often reported that they were most likely to eat healthy foods at school compared with students with any daily vegetable intake ( $17 \%$ for no daily fruit intake, $13 \%$ for $>0$ to $<3$ times/day, and $8 \%$ for $\geq 3$ times/day). Further, a greater proportion of students who had no daily fruit or vegetable intake were more likely to eat healthy foods at a restaurant compared with students with any daily fruit or vegetable intake (Table 3). When assessing motivations to eat healthy foods and most likely locations to eat healthy foods, between $4 \%$ and $9 \%$ of students who reported that they do not eat healthy foods reported some daily fruit or vegetable consumption.

## DISCUSSION

Our findings reveal that whereas the majority of Georgia high school students consumed fruits and vegetables each day, few consumed fruits or vegetables $\geq 3$ times/day. ${ }^{16}$ Furthermore, there were some differences in motivations for eating healthy foods by sex, race, and fruit and vegetable consumption status. The desire to be healthy and liking how healthy foods taste were the most commonly reported reasons cited to eat healthy foods. The majority of students were most likely to report eating healthy foods at home followed by at school, regardless of grade, sex, race/ethnicity, and daily fruit or vegetable consumption status.

## Fruit and Vegetable Intake

Although the majority of students consumed fruits or vegetables daily, less than one fifth of students consumed fruits or vegetables at least 3 times a day. The DGA recommends that youth between the ages of 14 to 18 consume between 1.5 and 2.5 cups of fruit daily (including $100 \%$ fruit juice) and 2.5 to 4 cups of vegetables daily, depending on level of activity (eg, lower range of fruits or vegetables intake per day for sedentary lifestyle and higher range for active lifestyle). ${ }^{10}$ Whereas this study does not report actual servings per day of fruit and vegetable intake, Georgia high school students reported low levels of daily fruit and vegetable intake, with only $19 \%$ consuming fruits at least 3 times/day and $11 \%$ consuming vegetables at least 3 times/day. Compared with national estimates of fruit and vegetable intake at least 3 times/day, Georgia high school students have similar intake of fruit or $100 \%$ fruit juice ( $22 \%$ nationally) but lower intake of vegetables ( $16 \%$ nationally). From 2003 to 2013 from the Georgia YRBS, fruit or vegetable intake at least 3 times/day among Georgia high school students continued to remain low, a similar trend noted in other studies. ${ }^{19-22}$ Evidence suggests that children have a stronger preference for fruits than vegetables. ${ }^{20}$ Low intake of fruits and vegetables can be attributed to several reasons such as taste preferences, knowledge of dietary recommendations, social support, family meal patterns, behavior modeling, price, and both home and neighborhood availability of fruits and vegetables. ${ }^{13-15,22,23}$

## Motivations for Eating Healthy Foods

Similar to this study which reports that Georgia high school students most commonly cited the desire to be healthy and liking how healthy foods taste as the reasons they are most likely to eat healthy foods, previous studies corroborate the finding that individual level factors such as the adolescents' concern about health (eg, "how much do you care about being healthy?") and taste preferences for fruits or vegetables are correlated with increased fruit or vegetable intake. ${ }^{15,22-25}$ These individual level factors have been correlated with increased fruit or vegetable intake, which is similar to the findings in our study. ${ }^{22-25}$ In a longitudinal study conducted by Larson et al, ${ }^{22}$ factors in adolescence that predicted higher intake of both fruits and vegetables in young adulthood (after adjustment for energy intake and sociodemographic characteristics) included greater concern about health (eg, desire to be healthy) and liking the taste of these foods along with other factors including lower perceived time barriers to healthy eating and greater home availability of fruits and vegetables. Additionally, a higher proportion of girls and NH white students
reported the desire to look good as a reason to eat healthy foods compared to boys and students from other race/ethnicities, respectively. Girls and NH white adolescents may be disproportionately concerned with body image and ideal body size which can possibly explain this finding. ${ }^{26-29}$ The finding that students who reported no daily fruit intake more often reported that their doctor told them to eat healthy foods is not surprising given that $87 \%$ of pediatric primary care physicians report counseling on fruit and vegetable intake ${ }^{30}$ and are likely to emphasize improved intake among youth who consume less produce.

## Locations of Eating Healthy Foods

The finding that the majority of students reported they were most likely to consume healthy foods at home can be supported by other studies showing that home environment and interpersonal factors such as availability and accessibility of healthy foods, frequency of family meals, parental intake of healthy foods, and parental social support for healthy eating likely influence healthful dietary behaviors among adolescents within the home. ${ }^{13,15,23,31,32}$ These factors may also support the finding that a greater proportion of students with any daily vegetable intake compared with no daily vegetable intake most likely eat healthy foods at home. National survey data indicate that Americans consume the majority (approximately two thirds) of their total calories from foods within the home. ${ }^{32,33}$ The next most commonly reported location of eating healthy foods was at the school. The school food environment can have a significant impact on adolescents' dietary intake given that in federally funded school meal programs, up to 2 meals and snacks can be eaten at school each day. ${ }^{15,32}$ Moreover, students who may not eat healthy foods such as vegetables at home or at other areas, may have the opportunity to eat them at school, especially considering the finding that a higher proportion of students with no daily vegetable intake reported that they were most likely to eat healthy foods at school. Food is available at school via the federally reimbursed school meals (ie, the National School Lunch Program [NSLP] and School Breakfast Program) and competitive foods-foods and beverages sold and served outside of the federal meal programs (eg, vending machines and a la carte offerings in cafeteria). The federally reimbursed meals must meet federally defined nutrition standards based on the DGA; ${ }^{32}$ hence, students who participate in these programs are more likely to consume healthier meals in school. ${ }^{34,35} \mathrm{NH}$ black youth are more likely to participate in the federally reimbursed school meals such as the NSLP; hence, this is a possible reason for why they are more likely to report eating healthier foods in school compared to NH white youth. ${ }^{36}$

Interestingly, whereas the majority of students who reported that they do not eat healthy foods also reported that they did not eat any fruits or vegetables daily, approximately $4 \%$ to $9 \%$ of students who reported that they do not eat healthy foods also reported some daily fruit or vegetable consumption. Possibilities for this discrepancy could be that the fruits and vegetables that the adolescents consume are of a less healthy variety or that their overall dietary pattern may not be healthy. Some adolescents may not be fully aware of what constitutes healthy eating, although the majority of adolescents are able to distinguish between healthy foods and less healthy foods. ${ }^{37,38}$ Another possible reason for this discrepancy is that some adolescents may have little concern for eating healthy or feel that healthy eating is not peer-supported. ${ }^{37-39}$ Within this perceptual framework, students
may choose a response that they do not eat healthy foods despite the fact that they do eat some healthy foods.

## Limitations

There are several limitations to this study. First, estimates of fruit and vegetable consumption were based on self-report, and respondents might not have accurately reported their consumption; therefore, estimates might be either underestimated or overestimated. Second, although it was possible to estimate the frequency of fruit or vegetable consumption per day, it was not possible to determine the actual amount of fruits and vegetables consumed (eg, the servings of fruits and vegetables consumed per day). Therefore, we were unable to determine whether students are actually meeting the DGA recommendations for fruit and vegetable intake per day. Further, it is unknown whether students are including fried or other less healthy methods of preparing fruits and vegetables (eg, fried okra) when reporting their frequency of intake of these foods, given that the survey did not specifically capture how these foods were prepared. Third, a number of varieties of vegetables, such other dark leafy green vegetables that may be more relevant to specific cultural groups, were not specifically asked in the survey. However, it is possible that these were captured under "other vegetables." Fourth, the smaller sample size of Georgia's Hispanic population compared to the NH white and NH black populations can be a potential limitation for power to identify differences in the responses. Fifth, students were only able to choose one response from all possible responses for each perception question; therefore, we were unable to assess the possibility of multiple reasons that may influence students' reasons to eat healthy foods or multiple locations that students may eat healthy foods. Sixth, given that a definition of "healthy foods" was not provided in the survey, it is unclear adolescents" interpretation of "eating healthy foods" when responding to the questions. Last, there are several other potential influential reasons to choose to eat healthy foods that were not assessed in this survey, such as the availability of healthy foods at home and the pricing of healthy foods. These other factors may have been captured in the response "Some other reason." Future studies can explore these gaps such as assessing other possible healthy eating influential factors such as the food environment in addition to the motivations presented in this study.

## Conclusions

Multiple studies have demonstrated a variety of potential influential factors that may influence an adolescent's decision to eat healthy foods; to the authors' knowledge, no studies have explored which potential factors are most likely to influence their decisions. This study revealed that Georgia high school students are motivated by the desire to be healthy and their enjoyment of the taste of healthy foods. Further, students are most likely to eat healthy foods within their home followed by at their school.

## IMPLICATIONS FOR SCHOOL HEALTH

Incorporating messages that aligns with students' motivations for eating healthy foods could be considered when developing promotional programs or policies that target healthy eating among high school students in Georgia. For example, schools can consider integrating
messages about how eating healthy foods improves a person's general health and well-being into health curriculum in schools. ${ }^{2}$ Schools can also incorporate taste testing of different healthy foods options in cafeterias. ${ }^{2}$ Newsletters that are sent out to families can share information about the benefits of eating healthy foods or nutritious recipes to support families who are aiming to improve consumption of nutritious foods at home. ${ }^{2}$ Such strategies could also possibly expose students who report that they do not eat healthy foods to consider healthy food options at school and at home. However, these potential interventions do not guarantee that youth will actually increase their intake of these healthy foods and hence, the effectiveness of these interventions would need to be further evaluated once implemented.

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## Table 1.

Sociodemographic and Behavioral Characteristics of Georgia High School Students ( $\mathrm{N}=1805$ )—Georgia Youth Risk Behavior Survey, 2013*

| Characteristic | N | \% (Confidence Interval) |
| :---: | :---: | :---: |
| Total sample |  |  |
| Grade |  |  |
| 9th | 532 | $30.5 \pm 4.7$ |
| 10th | 515 | $26.5 \pm 3.2$ |
| 11th | 389 | $20.9 \pm 3.0$ |
| 12th | 369 | $22.1 \pm 3.6$ |
| Sex |  |  |
| Male | 912 | $50.2 \pm 1.4$ |
| Female | 893 | $49.8 \pm 1.4$ |
| Race/Ethnicity |  |  |
| NH White | 802 | $46.9 \pm 5.2$ |
| NH Black | 591 | $36.3 \pm 5.0$ |
| Hispanic | 225 | $9.0 \pm 1.3$ |
| Other | 187 | $7.8 \pm 0.9$ |
| Weight status |  |  |
| Underweight | 48 | $2.7 \pm 0.3$ |
| Normal weight | 1215 | $67.2 \pm 1.4$ |
| Overweight | 315 | $17.4 \pm 1.0$ |
| Obese | 227 | $12.7 \pm 0.8$ |
| $\text { Fruit intake }{ }^{\dagger}$ |  |  |
| None | 110 | $5.9 \pm 0.6$ |
| $>0$ to <3 times/day | 1351 | $75.2 \pm 1.6$ |
| $\geq 3$ times/day | 344 | $18.8 \pm 1.5$ |
| Vegetable intake |  |  |
| None | 148 | $7.9 \pm 0.7$ |
| $>0$ to <3 times/day | 1458 | $81.1 \pm 1.1$ |
| $\geq 3$ times/day | 199 | $10.9 \pm 0.7$ |

Table 2.

| Perceptions About Healthy Eating | $\begin{aligned} & \text { Overall Sample }(\% \pm \\ & \text { SE }) \end{aligned}$ | Grade (\% $\pm$ SE) |  |  |  | Sex ${ }^{*}(\% \pm$ SE) |  | Race/Ethnicity ${ }^{\$}(\% \pm$ SE) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 9th | 10th | 11th | 12th | Male | Female | NH White | NH Black | Hispanic |
| Why are you most likely to eat healthy foods? | $\mathrm{N}=1566$ | $\mathrm{N}=1545$ |  |  |  | $\mathrm{N}=1556$ |  | $\mathrm{N}=1420$ |  |  |
| 1 do not eat healthy foods ${ }^{\prime \prime}$ | $10.6 \pm 1.0$ | $8.2 \pm 1.5$ | $10.7 \pm 1.7$ | $9.8 \pm 1.9$ | $13.0 \pm 2.4$ | $12.7 \pm 1.4$ | $8.4 \pm 1.0$ | $8.4 \pm 1.1$ | $12.6 \pm 1.4$ | $8.6 \pm 1.7$ |
| Why are you most likely to eat healthy foods? | $\mathrm{N}=1398$ | $\mathrm{N}=1385$ |  |  |  | $\mathbf{N}=\mathbf{1 3 8 9}$ |  | $\mathrm{N}=\mathbf{1 2 7 8}$ |  |  |
| My friends are watching ${ }^{\text {d/ }}$ | $3.3 \pm 0.5$ | $4.9 \pm 1.0$ | $1.8 \pm 0.8$ | $2.8 \pm 0.8$ | $2.8 \pm 0.7$ | $4.1 \pm 0.8$ | $2.1 \pm 0.4$ | $1.9 \pm 0.6$ | $3.8 \pm 0.6$ | $5.9 \pm 1.6$ |
| 1 like how healthy foods taste | $18.0 \pm 1.0$ | $18.1 \pm 2.7$ | $15.2 \pm 1.5$ | $19.4 \pm 1.8$ | $19.4 \pm 2.0$ | $18.1 \pm 1.7$ | $17.9 \pm 0.8$ | $18.2 \pm 1.4$ | $15.7 \pm 2.4$ | $14.2 \pm 2.6$ |
| My fami ly eats healthy foods | $11.8 \pm 1.2$ | $12.6 \pm 2.1$ | $12.3 \pm 2.2$ | $14.1 \pm 2.5$ | $7.6 \pm 1.8$ | $11.3 \pm 1.3$ | $12.4 \pm 1.6$ | $11.6 \pm 1.5$ | $11.9 \pm 2.4$ | $14.5 \pm 2.0$ |
| My doctor told me to | $2.7 \pm 0.5$ | $2.3 \pm 0.7$ | $2.8 \pm 0.8$ | $3.1 \pm 1.2$ | $2.7 \pm 1.5$ | $2.0 \pm 0.6$ | $3.4 \pm 0.8$ | $2.3 \pm 0.6$ | $2.9 \pm 0.9$ | $4.6 \pm 1.7$ |
| 1 want to look good ${ }^{\#}$ | $13.9 \pm 0.7$ | $13.8 \pm 1.0$ | $14.4 \pm 1.4$ | $13.0 \pm 1.1$ | $15.0 \pm 1.5$ | $11.9 \pm 0.8$ | $16.1 \pm 1.5$ | $16.8 \pm 1.0$ | $10.4 \pm 0.9$ | $13.1 \pm 2.3$ |
| 1 want to be healthy ${ }^{* *}$ | $42.3 \pm 1.4$ | $39.7 \pm 2.7$ | $45.0 \pm 1.6$ | $41.0 \pm 2.9$ | $44.9 \pm 4.1$ | $43.8 \pm 1.9$ | $41.1 \pm 1.6$ | $41.1 \pm 1.5$ | $46.3 \pm 1.9$ | $43.8 \pm 4.3$ |
| Some other reason | $7.9 \pm 0.7$ | $8.6 \pm 1.5$ | $8.4 \pm 1.1$ | $6.6 \pm 1.9$ | $7.7 \pm 2.0$ | $8.9 \pm 0.7$ | $6.9 \pm 1.0$ | $8.0 \pm 0.9$ | $8.9 \pm 1.2$ | $3.9 \pm 1.4$ |
| Where are you most likely to eat healthy foods? |  | $\mathrm{N}=1534$ |  |  |  | $\mathrm{N}=1546$ |  | $\mathrm{N}=1411$ |  |  |
| 1 do not eat healthy foods ${ }^{\dagger \dagger}$ | $8.6 \pm 0.8$ | $6.0 \pm 0.7$ | $9.2 \pm 1.2$ | $8.4 \pm 1.9$ | $10.7 \pm 2.6$ | $10.6 \pm 1.2$ | $6.4 \pm 0.7$ | $6.5 \pm 1.0$ | $9.2 \pm 0.9$ | $12.2 \pm 2.1$ |
| Where are you most likely to eat healthy foods? | $\mathrm{N}=1417$ | $\mathrm{N}=1400$ |  |  |  | $\mathrm{N}=1409$ |  | $\mathrm{N}=1291$ |  |  |
| At home | $79.7 \pm 0.9$ | $78.8 \pm 2.0$ | $82.9 \pm 1.8$ | $81.2 \pm 1.8$ | $77.3 \pm 1.9$ | $78.8 \pm 0.9$ | $80.9 \pm 1.4$ | $81.0 \pm 1.3$ | $77.5 \pm 1.0$ | $80.3 \pm 2.7$ |
| At school ${ }^{\text {\% }}$ | $12.8 \pm 0.8$ | $12.8 \pm 2.1$ | $10.1 \pm 1.1$ | $11.8 \pm 1.4$ | $16.1 \pm 1.4$ | $13.2 \pm 0.9$ | $12.2 \pm 1.0$ | $10.7 \pm 1.1$ | $16.6 \pm 1.1$ | $9.9 \pm 2.6$ |
| At a restaurant | $5.0 \pm 0.4$ | $4.9 \pm 1.1$ | $5.2 \pm 1.2$ | $4.5 \pm 1.4$ | $4.8 \pm 0.6$ | $4.7 \pm 0.5$ | $5.1 \pm 0.8$ | $5.5 \pm 0.7$ | $4.3 \pm 0.5$ | $5.1 \pm 0.6$ |
| Some other place | $2.6 \pm 0.3$ | $3.5 \pm 0.8$ | $1.8 \pm 0.7$ | $2.5 \pm 0.7$ | $1.8 \pm 0.5$ | $3.3 \pm 0.6$ | $1.8 \pm 0.3$ | $2.7 \pm 0.5$ | $1.6 \pm 0.5$ | $4.7 \pm 1.8$ |

[^1]Kumar et al.
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Perceptions About Healthy Eating Among High School Students in Georgia by Fruit and Vegetable Consumption Status-Georgia Youth Risk Behavior Survey, 2013**

| Perceptions About Healthy Eating | Daily Fruit Consumption ${ }^{\ddagger}(\% \pm$ SE) |  |  | Daily Vegetable Consumption ${ }^{\S}(\% \pm$ SE $)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | $>0$ to $<3$ times/day | 23 times/day | None | >0 to $<3$ times/day | 23 times/day |
| Why are you most likely to eat healthy foods? | $\mathrm{N}=1546$ |  |  | $\mathrm{N}=1530$ |  |  |
| 1 do not eat healthy foods ${ }^{\prime \prime}$ | $41.1 \pm 6.0$ | $9.2 \pm 0.9$ | $5.4 \pm 1.3$ | $36.4 \pm 4.0$ | $8.5 \pm 0.9$ | $6.6 \pm 1.3$ |
| Why are you most likely to eat healthy foods? | N = 1385 |  |  | $\mathbf{N}=1388$ |  |  |
| My friends are watching ${ }^{\text {g/ }}$ | $3.9 \pm 2.7$ | $2.8 \pm 0.4$ | $5.0 \pm 1.0$ | $3.8 \pm 2.7$ | $2.9 \pm 0.4$ | $4.5 \pm 1.0$ |
| I like how healthy foods taste | $11.7 \pm 2.8$ | $17.7 \pm 1.1$ | $19.5 \pm 2.4$ | $11.6 \pm 2.7$ | $18.7 \pm 1.3$ | $17.4 \pm 3.0$ |
| My family eats healthyfoods | $11.9 \pm 3.1$ | $11.8 \pm 1.3$ | $11.6 \pm 1.7$ | $7.6 \pm 2.6$ | $12.5 \pm 1.3$ | $8.9 \pm 2.3$ |
| My doctor told me to ${ }^{\text {\# }}$ | $10.4 \pm 4.1$ | $2.4 \pm 0.5$ | $2.6 \pm 0.8$ | $3.1 \pm 1.8$ | $2.8 \pm 0.6$ | $2.0 \pm 0.7$ |
| I want to look good | $12.7 \pm 4.3$ | $14.7 \pm 0.7$ | $11.0 \pm 1.4$ | $17.3 \pm 3.5$ | $14.4 \pm 0.9$ | $9.8 \pm 2.1$ |
| I want to be healthy ** | $33.7 \pm 6.7$ | $42.5 \pm 1.8$ | $44.4 \pm 2.8$ | $40.0 \pm 6.5$ | $41.0 \pm 1.8$ | $52.5 \pm 3.6$ |
| Some other reason ${ }^{\dagger \dagger}$ | $15.8 \pm 4.1$ | $8.0 \pm 0.7$ | $5.9 \pm 1.2$ | $16.6 \pm 3.1$ | $7.7 \pm 0.9$ | $4.9 \pm 1.5$ |
| Where are you most likely to eat healthy foods? | $\mathrm{N}=1536$ |  |  | $\mathbf{N}=1542$ |  |  |
| I do not eat healthy foods ${ }^{\text {t/ }}$ | $29.9 \pm 4.7$ | $7.6 \pm 0.7$ | $6.3 \pm 1.2$ | $24.6 \pm 3.8$ | $7.6 \pm 0.8$ | $4.2 \pm 1.4$ |
| Where are you most likely to eat healthy foods? | N = 1399 |  |  | $\mathrm{N}=1405$ |  |  |
| At home ${ }^{\xi \xi}$ | $73.3 \pm 5.7$ | $80.1 \pm 1.0$ | $80.2 \pm 1.8$ | $64.6 \pm 4.4$ | $80.6 \pm 1.0$ | $82.4 \pm 1.7$ |
| At school ${ }^{\text {I/II }}$ | $8.7 \pm 3.1$ | $12.8 \pm 1.1$ | $13.7 \pm 1.8$ | $16.6 \pm 2.5$ | $13.1 \pm 0.9$ | $8.3 \pm 1.4$ |
| At a restaurant ${ }^{\text {q/II }}$ | $13.9 \pm 4.1$ | $4.9 \pm 0.6$ | $2.8 \pm 1.1$ | $10.4 \pm 2.7$ | $4.5 \pm 0.4$ | $4.3 \pm 1.0$ |
| Some other place ${ }^{\# \#}$ | $4.1 \pm 1.4$ | $2.2 \pm 0.4$ | $3.4 \pm 0.9$ | $8.4 \pm 3.0$ | $1.8 \pm 0.2$ | $5.0 \pm 1.5$ |

[^2]


[^0]:    Address correspondence to: Gayathri S. Kumar, Medical Officer, (wiz3@cdc.gov), Centers for Disease Control and Prevention, 4770 Buford Highway, Atlanta, Georgia 30341.
    Human Subjects Approval Statement
    The study was exempt by the CDC Institutional Review Board and Georgia DPH because it used surveillance data and personal identifiers were not included in the data provided to the Georgia DPH.

[^1]:    Weighted percentage may not add up to $100 \%$ because of rounding.
    ${ }^{\prime}$ Chi-square tests used to test for statistical significance for overall distribution of responses using a p-value of <. 05 as cutoff point for significance ${ }^{*}$ Responses to motivations to eat healthy differed by sex.
    $\xi_{\text {Responses to motivations to eat healthy and most likely location of eating healthy differed by race/ethnicity. }}$

[^2]:    Weighted percentage may not add up to $100 \%$ because of rounding.
    ${ }^{\dagger}$ Chi-square tests used to test for statistical significance using a p-value of <. 05 as cutoff point for significance.
    ${ }^{7}$ Responses to motivations to eat healthy and most likely location of eating healthy differed by daily fruit consumption.
    $\xi_{\text {Responses to motivations to eat healthy and most likely location of eating healthy differed by daily vegetable consumption }}$

