



State Indicator Report on Fruits and Vegetables, 2009

The *State Indicator Report on Fruits and Vegetables, 2009* provides for the first time information on fruit and vegetable (F&V) consumption and policy and environmental support within each state.[†] Fruits and vegetables, as part of a healthy diet, are important for optimal child growth, weight management, and chronic disease prevention.^{1,2} Supporting increased F&V access, availability, and reduced price are key strategies towards the Centers for Disease Control and Prevention's (CDC) goal of improved F&V consumption and thus improved nutrition among all Americans.

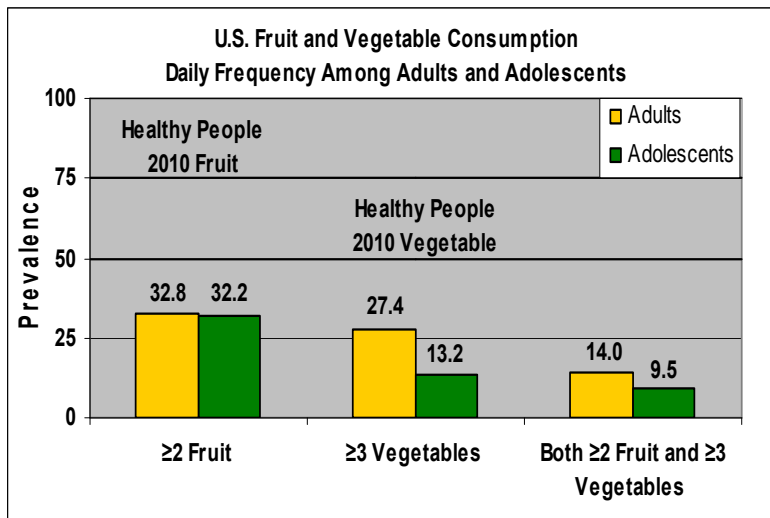
National and state-specific information is reported in the *State Indicator Report* for behavioral indicators and policy and environmental indicators. The behavioral indicators are derived from objectives for F&V consumption outlined in *Healthy People 2010*,² a framework for the nation's health priorities, and data is from CDC supported health surveillance systems. The policy and environmental indicators are from multiple data sources and measure several aspects of a state's ability to support the consumption of F&V. Each indicator can be measured in most states. Individual states, however, may have information collected through state-wide surveys and/or have policies enacted outside the monitoring period that can augment the data in this report and thus be used to further inform decision makers.

Throughout states and communities, many groups play a role in supporting policy and environmental change to ensure that individuals and families can easily purchase and consume F&V. When state officials, health professionals, employers, food store owners, farmers, school staff, and community members work together, their efforts can increase the number of Americans who live healthier lives, by increasing the availability of affordable, healthier food choices.

BEHAVIORAL INDICATORS – Each state's progress towards the national Healthy People 2010 fruit objective (75% consuming daily ≥ 2 fruit), vegetable objective (50% consuming daily ≥ 3 vegetable), and both objectives are assessed from the F&V survey items included in the 2007 Behavioral Risk Factor Surveillance System (adults aged ≥ 18 years) and the 2007 Youth Risk Behavior Surveillance System (adolescents in grades 9-12).

POLICY AND ENVIRONMENTAL INDICATORS – The policy and environmental indicators measure three different types of F&V support: availability of healthier food retail in communities; availability of healthier foods and nutrition services in schools; and food system support.

As measures of a state's ability to support F&V consumption, the report indicators show where a state has been successful and where more work may be needed.



Data in the *State Indicator Report on Fruits and Vegetables* can be used to:

- Portray how states support the consumption of F&V.
- Monitor progress and celebrate state successes.
- Identify opportunities for improvement in F&V support through environmental, policy, and systems approaches.





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Behavioral Indicators

In the *State Indicator Report*, each state's progress towards meeting the fruit objective, vegetable objective, and both fruit and vegetable objectives are presented from CDC supported health surveillance systems. All states have Behavioral Risk Factor Surveillance System F&V data and the majority of states have Youth Risk Behavior Surveillance System F&V data allowing for comparisons.

This is the first time that national and state-specific data for the proportion of Americans in each state meeting both F&V objectives is presented. The information for this indicator differs from the older *Healthy People 2000* objective of 5 or more F&V as that measure could be met by only consuming one component, e.g. fruit. Confidence intervals are provided in addition to the estimates and should be used when comparing data. The behavioral indicators profile the extent to which adults and adolescents in the state consume F&V as derived from the *Healthy People 2010* objectives and are therefore the

- **Proportion of adults in the state consuming daily: ≥ 2 fruit (objective 19-5), ≥ 3 vegetables (objective 19-6), and both ≥ 2 fruit and ≥ 3 vegetables (both objectives 19-5 and 19-6)**
- **Proportion of adolescents in the state consuming daily: ≥ 2 fruit (objective 19-5), ≥ 3 vegetables (objective 19-6), and both ≥ 2 fruit and ≥ 3 vegetables (both objectives 19-5 and 19-6)**

Policy and Environmental Indicators

The indicators represent three different types of strategies for improved F&V consumption. These types of strategies can occur or be supported at the state-level and/or occur or be supported at the community-level across the state. States may focus on a few or many of the indicators based on their existing capacity, partnerships, and resources. The strategy areas also generally reflect similar strategies to those that support healthy food choices at the local, community, or school level³⁻⁵ and strategies that encourage communities to organize for change.³

Availability of Healthier Food Retail in Communities

Strategies and policies to improve the food environment can include increased access to healthier foods such as F&V through retail vendors in communities. This can include increased access to supermarkets and grocery stores that typically stock a high proportion of healthier foods including F&V, improved availability of healthier foods such as F&V in small stores including convenience and corner stores, and

more farm-to-consumer approaches such as stands and markets where farmers sell F&V directly to consumers.⁶⁻⁸

- **Percentage of census tracts that have healthier food retailers located within the tract or within 1/2-mile of tract boundaries**

Having adequate neighborhood access to F&V such as through supermarkets, larger grocery stores, and F&V markets has been shown to be associated with increased F&V consumption.^{8,9} One measure of access to F&V in a neighborhood is the percentage of state census tracts (a subdivision of counties designed to be homogeneous with respect to population characteristics, economic status, and living conditions, delineated by local authorities under U.S. Census Bureau Guidelines) that have typical healthier food retailers (supermarkets, larger grocery stores, warehouse clubs, and F&V markets) located within 1/2-mile of their boundaries. Areas without these types of retailers, however, may still have adequate access if smaller stores provide quality and affordable produce.

- **Policy for healthier food retail**

State-level policies or laws that support access through healthier food retail also have the potential to increase F&V consumption and improve nutrition.⁷ Such policies include legislation and executive actions that provide for 1) the building or placement of new food retail outlets in underserved areas (e.g., grants/loans for building new supermarkets); 2) renovation and equipment upgrades of existing retail outlets to accommodate increased availability of healthier foods (e.g., purchasing refrigerators for small corner stores to allow the sale of fresh or frozen F&V); and/or 3) increases in and promotion of F&V at food retail outlets (e.g., increase display or shelf space, shelf labeling, or signage such as point of decision information).

- **Farmers markets per 100,000 state residents**
- **Percentage of farmers markets that accept electronic benefits transfer (EBT)**
- **Percentage of farmers markets that accept WIC Farmers Market Nutrition Program coupons**

Farmers markets are a mechanism for purchasing foods from local farms and can augment access to F&V from typical retail stores or provide a retail venue for F&V in areas lacking such stores.^{7,10} The number of farmers markets per 100,000 state residents provides a broad estimate of the availability of F&V from farmers markets adjusted for variation in population sizes. Farmers markets can also aid the local economy and act as important venues for low-income individuals and families by allowing those who participate in federal assistance programs administered by the of USDA to have increased





F&V access.¹⁰ The percentage of farmers markets that accept Electronic Benefits Transfer (EBT) is an indicator of the availability of markets to Supplemental Nutrition Assistance Program (SNAP), formerly known as Food Stamps, participants, other federal program recipients using electronic debit card systems, and to other community residents using bank debit and credit cards. Similarly, the percentage of farmers markets that allow purchases through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Farmers Market Nutrition Program (FMNP) coupons is an estimate of the availability of this potentially important source of F&V to WIC mothers and their children.¹¹

Availability of Healthier Foods and Nutrition Services in Schools

Schools are uniquely positioned to model and reinforce healthful eating behaviors by including F&V as part of foods offered on the school campus and at school-related activities among youth, school staff, parents, and community members.

- **Percentage of middle and high schools that offer fruits (not juice) and non-fried vegetables as competitive foods**

The Institute of Medicine recommends that competitive foods (food sold outside the USDA reimbursable school meal programs such as in vending machines, school stores, snack bars) be limited.⁵ When food is offered or sold, it should be nutritious foods, including F&V.⁵ Competitive foods are widely available in many middle and almost all high schools and thus increasing the percentage of these schools that offer fruit (not fruit juice) and non-fried vegetables to students can support a food environment in the school setting that more closely aligns with current dietary guidance.

- **Policy for Farm-to-School programs**

Farm-to-School programs can also improve access to F&V on the school campus and can facilitate education services about health, nutrition, and food production through training services for food providers, teachers, and/or parents and experiential learning for youth and staff through school gardens and farm visits.^{12,13} The existence of state-level policies such as legislation for Farm-to-School programs shows support for program creation, expansion, and maintenance.

†References to ‘states’ in the State Indicator Report when applicable include the District of Columbia as well as the 50 states.

Additional materials for the *State Indicator Report on Fruits and Vegetables, 2009* including maps and National Action Guide are available at <http://www.fruitsandveggiesmatter.gov/indicatorreport>

References

1. U.S. Department of Health and Human Services (DHHS) and U.S. Department of Agriculture. Dietary Guidelines for Americans, 2005. 6th Edition, Washington, DC: U.S. Government Printing Office, January 2005. <http://www.health.gov/DietaryGuidelines/dga2005/document/html/chapter5.htm>. Accessed August 28, 2009.

Food System Support

A systems approach to food considers the many factors involved in getting F&V from farm to consumer including aspects of food production, processing, distribution, and retail.¹⁴ Also included in a food system approach are the participants in that system, including farmers, industries, workers, governments, institutional purchasers, communities, and consumers.

- **Percentage of cropland acreage harvested for fruits and vegetables**

Cropland acreage harvested for F&V as reported by the USDA is a broad indicator of domestic F&V inputs to the food system. Although the USDA agriculture survey is comprehensive and collects information on acreage to the 1/10-acre, the cropland acreage measure lacks generalizability among some states because of factors such as: the types of plants harvested and their subsequent actual yields, as well as differences in states’ growing and environmental conditions, which can affect usable land for growing and harvesting purposes.

- **State-level Food Policy Council**
- **Local Food Policy Councils**

Food policy councils and related food committees or coalitions are organized, multi-stakeholder organizations which typically attempt to support environmental and policy change that can support improved food environments for healthy eating.³ Their multi-stakeholder members attempt to work together on their designated area’s food system issues in a coordinated fashion and support and advise citizens and governments in developing policies and programs to improve the regional, state, and/or local food system. These councils can aid community F&V access by encouraging improvement of retail stores, supporting farm to institute programs, and designing model procurement policies and practices for schools, work sites, and other community organizations.

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2. U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000. <http://www.healthypeople.gov/Document/HTML/Volume2/19Nutrition.htm>. Accessed August 28, 2009.
3. Keener D, Goodman K, Lowry A, Zaro S, Kettel Khan L (2009). Recommended community strategies and measurements to prevent obesity in the United States: Implementation and measurement guide. Atlanta, GA: U.S. DHHS, Centers for Disease Control and Prevention. http://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf
4. IOM (Institute of Medicine). 2009. Local Government Actions to Prevent Childhood Obesity. Washington, DC: The National Academies Press. <http://www.iom.edu/Object.File/Master/72/800/local%20govts%20obesity%20report%20brief%20FINAL%20for%20web.pdf>
5. IOM (Institute of Medicine). 2007. Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth. Washington, DC: The National Academies Press. <http://www.iom.edu/CMS/3788/30181/42502.aspx>
6. Seymour JD, Fenley MA, Yaroch AL, Khan LK, Serdula M. Fruit and vegetable environment, policy, and pricing workshop: introduction to the conference proceedings. *Prev Med* 2004;39(2):S71-4.
7. Story M, Kaphingst KM, Robinson-O'Brien R, Glanz K. Creating healthy food and eating environments: policy and environmental approaches. *Annu Rev Public Health* 2008;29:253-72.
8. Larson MI, Story M, Nelson MC. Neighborhood environments disparities in access to healthy foods in the U.S. *American Journal of Preventive Medicine* 2009;36(1):74-81.
9. United States Department of Agriculture Economic Research Service. Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences. 2009. <http://www.ers.usda.gov/Publications/AP/AP036/AP036.pdf>. Accessed August 28, 2009.
10. United States Department of Agriculture, Agriculture Marketing Service. <http://www.ams.usda.gov/AMSV1.0/farmersmarkets>. Accessed August 28, 2009.
11. Herman DR, Harrison GG, Afifi AA, Jenks E. Effect of a targeted subsidy on intake of fruits and vegetables among low-income women in the Special Supplemental Nutrition Program for Women, Infants, and Children. *Am J Public Health* 2008;98(1):98-105.
12. Joshi A, Azuma AM, Feenstra G. Do Farm-to-School Programs Make a Difference? Findings and Future Research Need. *Journal of Hunger & Environmental Nutrition* 2008;3(2):229-246.
13. Joshi A, Azuma AM. Bearing Fruit: Farm to School Program Evaluation Resources and Recommendations. <http://departments.oxy.edu/uepi/cfj/bearingfruit.htm>. Accessed August 28, 2009.
14. Sobal J, Khan LK, Bisogni C. A conceptual model of the food and nutrition system. *Soc Sci Med* 1998;47(7):853-63.

Data Sources

Behavioral Indicators

Proportion of adults in the state consuming daily: ≥ 2 fruit, ≥ 3 vegetables, and both ≥ 2 fruit and ≥ 3 vegetables

Behavioral Risk Factor Surveillance System (adults aged ≥ 18 years), 2007. Weighted percentage.

The BRFSS F&V module includes 6 questions delivered via telephone survey that were preceded by the following statement: "These next questions are about the foods you usually eat or drink. Please tell me how often you eat or drink each one, for example, twice a week, three times a month, and so forth." 1) "How often do you drink fruit juices such as orange, grapefruit, or tomato?" 2) "Not counting juice, how often do you eat fruit?" 3) "How often do you eat green salad?" 4) "How often do you eat potatoes, not including French fries, fried potatoes, or potato chips?" 5) "How often do you eat carrots?" 6) "Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat? (Example: a serving of vegetables at both lunch and dinner would be two servings.)" Response categories ranged from never to an open ended number of times per day. Participants were not given a definition of serving size. Total daily fruit consumption was calculated based on responses to questions 1 and 2, and total daily vegetable was based on questions 3-6 (note: answer to #6 was treated as times per day). Available at http://www.cdc.gov/brfss/technical_infodata/surveydata/2007.htm.





Proportion of adolescents in the state consuming daily: ≥ 2 fruit, ≥ 3 vegetables, and both ≥ 2 fruit and ≥ 3 vegetables

Youth Risk Behavior Surveillance System (adolescents in grades 9–12), 2007. Weighted percentage.

The Youth Risk Behavior Survey F&V module includes 6 questions delivered via classroom survey: 1) “During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)” 2) “During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)” 3) “During the past 7 days, how many times did you eat green salad?” 4) “During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)” 5) “During the past 7 days, how many times did you eat carrots?” 6) “During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)” Response categories ranged from 0 times in the last 7 days to 4 or more times per day. Total daily fruit consumption was calculated based on responses to questions 1 and 2, and total daily vegetable consumption was based on responses to questions 3-6.

States with no estimates were due to either not having collected survey data, to not having achieved a high enough overall response rate to receive weighted results, or missing 1 or more of module items during administration of the survey.

http://www.cdc.gov/HealthyYouth/yrbs/pdf/2007_National_YRBS_Data_Users_Manual.pdf

Available at <http://www.cdc.gov/HealthyYouth/yrbs/data/index.htm>.

Policy and Environmental Indicators

Percentage of census tracts that have healthier food retailers located within the tract or within 1/2-mile of tract boundaries

Numerator: Retail Data, U.S. Department of Homeland Security Database last updated November 2007 which includes information on retail food establishments derived from Dun and Bradstreet commercial data.

The following stores as defined by North American Industry Classification Codes (NAICS) were included: Supermarkets and larger grocery stores (NAICS 445110; supermarkets further defined as stores with ≥ 50 annual payroll employees and larger grocery stores defined as stores with 10-49 employees); Fruit and Vegetable Markets (NAICS 445230); Warehouse Clubs (NAICS 452910). Fruit and vegetable markets include establishments that retail produce and includes stands, permanent stands, markets, and permanent markets. Produce is typically from wholesale but can include local. The 2007 North American Industry Classification Codes descriptions. Available at <http://www.census.gov/eos/www/naics/>. Date accessed July 1, 2009.

Denominator: Census Tract Information, 2000 U.S. Census Bureau. Available at <http://www.census.gov/geo/www/tractez.html>. Date accessed July 1, 2009.

Policy for healthier food retail

State-level food retail policies (legislation, executive action) enacted (yes/no) between January 1, 2001, and August 1, 2009, and qualified if they supported any of the following goals:

a) the building and/or placement of new food retail outlets (e.g. new supermarkets in underserved areas, loan financing program for small business development); b) renovation and equipment upgrades of existing food retail outlets (e.g. purchasing refrigerators for small corner stores to allow for the sale of fresh produce); c) increases in and promotion of foods encouraged by the 2005 Dietary Guidelines for Americans stocked or available at food retail outlets (e.g. increase display or shelf space for encouraged foods such as F&V; assistance in marketing of these healthier foods such as through point of decision information).

Information on policy was obtained from the following three data sources:

1. CDC Nutrition, Physical Activity and Obesity Legislative Database. Date accessed July 1, 2009. Available at

<http://apps.nccd.cdc.gov/DNPALeg/>.

2. National Conference of State Legislatures Healthy Community Design and Access to Healthy Food Legislation Database. Date accessed August 11, 2009. Available at <http://www.ncsl.org/?tabid=13227>.

3. The Food Trust. Date accessed August 11, 2009. Available at <http://www.thefoodtrust.org/php/programs/fffi.php>; and

<http://www.thefoodtrust.org/php/programs/super.market.campaign.php#FFFIcreation>.

Farmers markets per 100,000 state residents

Numerator: Farmers Market List. United States Department of Agriculture, Agricultural Marketing Services. Released September 2009. Date accessed September 1, 2009. Available at <http://apps.ams.usda.gov/FarmersMarkets/>.

Denominator: Population Estimates United States Census Bureau. July 2008. Date accessed July 1 2009. Available at

<http://www.census.gov/popest/states/NST-ann-est.html>.

Percentage of farmers markets that accept EBT

Numerator: Farmers markets that accept EBT. United States Department of Agriculture, Agricultural Marketing Services. Released September 2009. Farmers' Market Search. Date accessed September 1, 2009. Available at <http://apps.ams.usda.gov/FarmersMarkets/>.





Denominator: Total farmers markets. United States Department of Agriculture, Agricultural Marketing Services. Released September 2009. Farmers' Market Search. Date accessed August 1, 2009. Available at <http://apps.ams.usda.gov/FarmersMarkets/>.

Percentage of farmers markets that accept WIC FMNP coupons

Numerator: United States Department of Agriculture, Agricultural Marketing Services. Released September 2009. Farmers' Market Search. Date accessed September 1, 2009. Available at <http://apps.ams.usda.gov/FarmersMarkets/>.

Denominator: Total farmers markets. United States Department of Agriculture, Agricultural Marketing Services. Released September 2009. Farmers' Market Search. Date accessed September 1, 2009. Available at <http://apps.ams.usda.gov/FarmersMarkets/>.

Percentage of middle and high schools that offer fruits (not juice) and non-fried vegetables as competitive foods

Numerator: Number of middle and high schools (via principal survey) that had affirmative response to Q. 32 about whether students can purchase from competitive food venues and affirmative to Q.33: "Can students purchase each of the following snack foods or beverages from vending machines or at the school store, canteen, or snack bar?" Yes to both response categories K. Fruits (not juice) and L. Non-fried vegetables (not juice). States with estimates are those with weighted data (at least 70% of the principals or lead health education teachers in the sample completed the survey).

Denominator: All middle and all high schools surveyed.

CDC 2008 School Health Profiles, School Principal Survey Available at <http://www.cdc.gov/healthyYouth/profiles/2008/QuestionnaireP.rtf>.

Policy for Farm-to-School Programs

State-level legislation for Farm-to-School programs enacted between January 1, 2001, and August 1, 2009, and qualified if the policy included one or more of the multiple components of the National Farm to School Program definition according to the Center for Food & Justice,¹² including serving F&V procured within the state, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers. Information on policy was obtained from the following two data sources:

1. CDC Nutrition, Physical Activity and Obesity Legislative Database. Date accessed July 1, 2009. Available at <http://apps.nccd.cdc.gov/DNPALeg/>.

2. National Conference of State Legislatures Healthy Community Design and Access to Healthy Food Legislation Database. Date accessed August 11, 2009. Available at <http://www.ncsl.org/?tabid=13227>.

Percentage of cropland acreage harvested for fruits and vegetables

The census of agriculture surveys U.S. farms and ranches every five years for comprehensive agricultural data for every state and county or county equivalent in the United States. The 2007 census definition of a farm is any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. Crop production is measured for the calendar year, except for avocados, citrus, and olives for which the production year overlaps the calendar year. Harvested cropland includes land from which crops were harvested and included land used to grow short-rotation woody crops and land in orchards, citrus groves, vineyards, nurseries, and greenhouses. Land from which two or more crops were harvested was counted only once.

Numerator: National Agricultural Statistics Service, United States Department of Agriculture. 2007. Census of Agriculture. Available at http://www.agcensus.usda.gov/Publications/2007/Full_Report/usv1.pdf.

Table 29 Vegetables, page 508; Table 32 Fruits (excluding nuts), page 543; Table 33 Berries, page 560

Denominator: National Agricultural Statistics Service, United States Department of Agriculture. 2007. Census of Agriculture.

Available at http://www.agcensus.usda.gov/Publications/2007/Full_Report/usv1.pdf.

Table 1, State Summary Highlights: 2007, page 276. Harvested cropland in acres, state-specific total acres.

State-level Food Policy Council

State councils designated as yes have a named point of contact on the Community Food Security Coalition website as of the accessed date.

Those listed include councils of various types, with different approaches and at various stages of development. Regional or multi-state councils are not designated in this source.

Community Food Security Coalition. 2008. Food Policy Council Program. Date accessed August 28, 2009. Available at <http://www.foodsecurity.org/FPC/council.html>.

Local Food Policy Councils

Local councils designated as yes have a named point of contact on the Coalition website as of the accessed date. Those listed include councils of various types, with different approaches and at various stages of development. Community Food Security Coalition. 2008. Food Policy Council Program. Date accessed August 28, 2009. Available at <http://www.foodsecurity.org/FPC/council.html>.

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State Indicator Report on Fruits and Vegetables, 2009 Behavioral Indicators

State	Fruit (2+) Consumption Adults	95% CI	Vegetable (3+) Consumption Adults	95% CI	Both Fruit (2+) & Veg (3+) Consumption Adults	95% CI	Fruit (2+) Consumption Adolescents	95% CI	Vegetable (3+) Consumption Adolescents	95% CI	Both Fruit (2+) & Vegetables (3+) Consumption Adolescents	95% CI
U.S. National	32.8	(32.5, 33.2)	27.4	(27.1, 27.7)	14.0	(13.8, 14.2)	32.2	(30.2, 34.2)	13.2	(12.0, 14.5)	9.5	(8.6, 10.6)
Alabama	23.8	(22.3, 25.5)	28.2	(26.6, 29.9)	9.8	(8.8, 10.9)						
Alaska	29.7	(26.8, 32.8)	27.6	(24.9, 30.5)	13.9	(11.8, 16.4)	26.9	(24.5, 29.4)	10.0	(8.5, 11.7)	7.0	(5.6, 8.6)
Arizona	32.8	(30.2, 35.6)	30.4	(27.9, 33.1)	16.1	(14.2, 18.1)	27.1	(24.8, 29.5)	11.0	(8.9, 13.5)	7.4	(5.7, 9.6)
Arkansas	24.4	(22.8, 26.0)	29.2	(27.7, 30.8)	11.2	(10.1, 12.3)	21.8	(19.3, 24.6)	8.8	(6.9, 11.1)	5.2	(4.1, 6.6)
California	40.6	(38.8, 42.4)	25.6	(24.1, 27.2)	16.1	(14.9, 17.4)						
Colorado	35.3	(34.2, 36.5)	26.5	(25.5, 27.6)	15.2	(14.4, 16.1)						
Connecticut	38.4	(36.8, 40.1)	29.2	(27.6, 30.7)	16.2	(15.0, 17.5)	33.6	(30.8, 36.5)	14.7	(12.7, 17.0)	10.4	(8.6, 12.4)
Delaware	28.9	(26.6, 31.2)	25.8	(23.7, 28.0)	12.3	(10.6, 14.3)	27.0	(24.9, 29.3)				
Dist of Columbia	41.6	(39.5, 43.7)	33.0	(31.0, 35.0)	20.1	(18.5, 21.9)	29.4	(26.6, 32.4)	12.1	(9.9, 14.8)	8.8	(7.2, 10.8)
Florida	36.1	(34.8, 37.3)	29.3	(28.2, 30.5)	15.6	(14.7, 16.6)	32.7	(31.2, 34.3)	14.9	(13.6, 16.3)	10.9	(9.8, 12.1)
Georgia	27.3	(25.7, 28.9)	30.3	(28.7, 31.9)	13.3	(12.2, 14.6)	28.9	(26.8, 31.1)	12.6	(10.8, 14.5)	7.9	(6.4, 9.6)
Hawaii	39.1	(37.4, 40.8)	29.6	(28.0, 31.1)	17.5	(16.2, 18.8)	24.4	(21.8, 27.2)	14.2	(11.4, 17.7)	9.2	(7.1, 11.8)
Idaho	29.1	(27.5, 30.9)	25.1	(23.5, 26.7)	13.0	(11.9, 14.3)	25.3	(21.9, 29.1)	14.0	(11.8, 16.5)	8.9	(7.0, 11.2)
Illinois	36.6	(34.9, 38.4)	23.2	(21.8, 24.7)	13.7	(12.5, 14.8)	32.6	(30.1, 35.2)	13.2	(11.5, 15.1)	10.0	(8.5, 11.9)
Indiana	30.0	(28.4, 31.8)	26.4	(24.8, 28.1)	13.5	(12.2, 14.8)	26.8	(24.2, 29.6)	12.3	(10.5, 14.3)	8.8	(7.2, 10.7)
Iowa	29.6	(28.1, 31.2)	22.5	(21.1, 23.9)	12.3	(11.2, 13.5)	28.5	(25.7, 31.4)	13.5	(11.8, 15.3)	8.3	(7.1, 9.7)
Kansas	23.9	(22.7, 25.2)	27.2	(26.0, 28.5)	10.6	(9.7, 11.5)	30.5	(28.2, 32.9)	14.8	(12.7, 17.3)	10.1	(8.2, 12.3)
Kentucky	24.6	(22.8, 26.5)	28.9	(27.1, 30.9)	10.8	(9.5, 12.3)	21.3	(19.9, 22.8)	11.1	(9.9, 12.5)	6.1	(5.1, 7.3)
Louisiana	28.5	(26.9, 30.2)	26.1	(24.7, 27.6)	11.5	(10.5, 12.7)						
Maine	36.5	(35.0, 38.1)	31.2	(29.8, 32.7)	17.7	(16.5, 18.9)	28.8	(24.5, 33.4)	14.2	(11.5, 17.4)	10.0	(8.3, 12.1)
Maryland	35.9	(34.3, 37.4)	28.7	(27.3, 30.2)	15.4	(14.3, 16.6)	29.3	(26.2, 32.6)	11.3	(9.6, 13.2)	7.2	(5.7, 9.2)
Massachusetts	38.9	(37.8, 40.0)	28.7	(27.7, 29.7)	16.4	(15.6, 17.2)						
Michigan	31.8	(30.4, 33.3)	23.2	(21.9, 24.6)	11.8	(10.8, 12.8)	29.7	(27.1, 32.4)	10.3	(9.0, 11.7)	7.4	(6.2, 8.8)
Minnesota	27.3	(25.6, 29.0)	25.8	(24.2, 27.5)	11.6	(10.5, 12.9)						
Mississippi	24.1	(22.7, 25.5)	22.4	(21.1, 23.7)	8.8	(7.9, 9.8)	28.7	(25.8, 31.8)	11.7	(10.0, 13.5)	7.9	(6.8, 9.2)
Missouri	25.1	(23.4, 26.9)	26.2	(24.3, 28.1)	11.2	(10.1, 12.5)	29.1	(26.6, 31.8)	11.3	(9.4, 13.5)	8.1	(6.4, 10.2)
Montana	29.8	(28.2, 31.5)	28.5	(26.9, 30.1)	14.5	(13.2, 15.8)	27.1	(25.2, 29.0)	11.7	(10.4, 13.2)	8.0	(7.0, 9.1)
Nebraska	33.6	(31.7, 35.5)	26.0	(24.3, 27.8)	14.0	(12.7, 15.5)						
Nevada	29.7	(27.5, 32.0)	23.7	(21.8, 25.8)	11.8	(10.4, 13.4)	29.7	(27.4, 32.2)	11.7	(10.1, 13.4)	8.3	(8.8, 10.0)
New Hampshire	36.1	(34.5, 37.7)	30.4	(28.9, 32.0)	16.2	(15.1, 17.4)	33.3	(30.8, 36.0)	14.0	(12.3, 15.8)	10.1	(8.7, 11.7)
New Jersey	36.5	(34.7, 38.3)	29.0	(27.4, 30.7)	14.9	(13.7, 16.2)						
New Mexico	27.5	(25.9, 29.1)	26.3	(24.8, 27.8)	12.5	(11.4, 13.6)	25.5	(22.9, 28.3)	13.3	(11.7, 15.2)	8.6	(6.9, 10.6)
New York	39.1	(37.4, 40.8)	27.3	(25.9, 28.9)	16.5	(15.2, 17.8)	34.4	(32.9, 36.0)				
North Carolina	25.0	(23.9, 26.2)	30.1	(28.9, 31.3)	10.8	(10.1, 11.6)	25.5	(23.1, 28.1)	9.6	(8.5, 10.7)	6.0	(5.3, 6.9)
North Dakota	29.0	(27.3, 30.8)	24.3	(22.6, 26.0)	13.3	(12.0, 14.7)	26.8	(24.2, 29.5)	10.8	(9.4, 12.5)	7.8	(6.5, 9.3)
Ohio	28.6	(27.4, 29.8)	25.2	(24.1, 26.5)	12.2	(11.3, 13.1)	26.2	(23.6, 28.9)	10.6	(9.4, 11.9)	7.2	(6.2, 8.4)
Oklahoma	20.5	(19.3, 21.8)	24.4	(23.1, 25.7)	9.3	(8.5, 10.2)	23.2	(21.2, 25.3)	10.7	(9.4, 12.2)	7.0	(6.0, 8.2)
Oregon	33.7	(31.9, 35.5)	29.7	(28.1, 31.4)	15.6	(14.3, 16.9)						
Pennsylvania	35.0	(33.5, 36.5)	27.1	(25.6, 28.5)	15.1	(14.0, 16.3)						
Rhode Island	36.4	(34.4, 38.4)	25.9	(24.2, 27.8)	14.6	(13.2, 16.1)	30.9	(29.1, 32.7)	11.7	(10.3, 13.2)	8.6	(7.6, 9.8)
South Carolina	23.8	(22.6, 25.0)	25.5	(24.3, 26.8)	9.3	(8.6, 10.1)	26.5	(23.4, 29.8)	10.4	(7.9, 13.5)	6.3	(5.1, 7.7)
South Dakota	25.8	(24.3, 27.3)	23.8	(22.3, 25.4)	10.1	(9.2, 11.1)	25.1	(21.8, 28.7)	10.9	(9.5, 12.4)	7.5	(6.1, 9.1)
Tennessee	26.0	(24.0, 28.0)	37.8	(35.6, 40.1)	13.1	(11.7, 14.7)	26.4	(23.8, 29.2)	12.1	(10.3, 14.3)	7.9	(6.4, 9.6)
Texas	29.1	(28.0, 30.3)	30.0	(28.9, 31.1)	14.3	(13.5, 15.2)	28.1	(26.4, 29.8)	11.7	(10.7, 12.8)	8.3	(7.6, 9.1)
Utah	32.2	(30.2, 34.1)	24.8	(23.0, 26.7)	13.2	(11.9, 14.7)	29.5	(26.3, 32.9)	10.6	(9.1, 12.4)	7.4	(5.7, 9.5)
Vermont	38.6	(37.1, 40.1)	31.9	(30.5, 33.3)	17.9	(16.8, 19.1)	34.5	(29.9, 39.5)	15.8	(13.5, 18.4)	11.4	(9.3, 14.0)
Virginia	33.1	(31.0, 35.3)	30.6	(28.5, 32.7)	14.2	(12.9, 15.7)						
Washington	33.7	(32.9, 34.6)	29.1	(28.3, 29.9)	15.1	(14.5, 15.7)						
West Virginia	24.9	(23.3, 26.5)	26.0	(24.5, 27.6)	10.3	(9.3, 11.4)	27.7	(24.9, 30.7)	14.0	(12.4, 15.8)	8.6	(7.2, 10.3)
Wisconsin	35.0	(33.2, 36.9)	23.3	(21.7, 24.9)	13.7	(12.5, 15.1)	30.1	(27.6, 32.7)	10.2	(8.4, 12.2)	6.7	(5.5, 8.1)
Wyoming	32.0	(30.3, 33.7)	26.8	(25.3, 28.3)	14.6	(13.4, 15.8)	25.5	(23.5, 27.7)	13.0	(11.5, 14.7)	8.7	(7.5, 10.0)

Data sources: 2007 BRFSS, 2007 YRBSS; States with no estimates were due to either not having collected survey data, to not having achieved a high enough overall response rate to receive weighted results, or missing 1+module items during survey administration.



