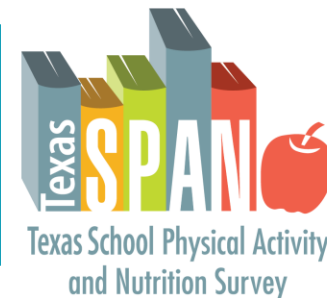


The Status of Child Health in Texas: Results from the Texas SPAN 2021-2023 Survey



The University of Texas Health Science Center at Houston (UTHealth Houston)
School of Public Health in Austin



Deanna M. Hoelscher, PhD, RDN, LD, CNS, FISBNPA



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The Status of Child Health in Texas: Results from the Texas SPAN 2021-2023 Survey



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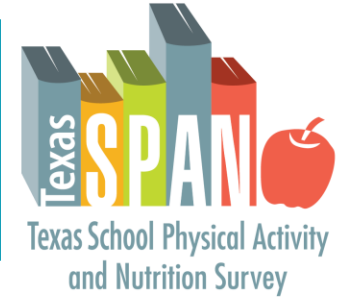
Deanna M. Hoelscher, PhD, RDN, LD, CNS, FISBNPA

Acknowledgements



- **The Texas Department of State Health Services (DSHS), Funding Agency**
 - Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under Grant Number HHS000084100001
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 - Michael & Susan Dell Foundation
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 - DSHS Region 4/5 Community Outreach Division
 - Area Health Education Centers (AHEC): Desert Mountain, Greater Houston, Lower Rio Grande, Panhandle, and West Texas
 - Texas School Physical Activity and Nutrition (Texas SPAN) Advisory Committee
-
- ***Thank you to the school districts, schools, children, and parents who participated in the study!***

Texas SPAN Research Team



UTHealth Houston SPH

— Investigators:

- Deanna Hoelscher, PhD, RDN, PI
- Nalini Ranjit, PhD
- Adriana Pérez, PhD
- Ethan Hunt, PhD
- Chris Pfladderer, PhD
- Augusto Ferreira De Moraes, PhD

— Project Director:

- Carolyn Smith

— Senior Research Assistants

- David (DJ) Badillo
- Richard Tandaju

— Data Management

- Pablo Martinez
- Raja Malkani

— Research Assistants:

- Kyna Farmer

— Doctoral Student:

- Brooke Sherry

— Post Doctoral Student:

- Yuzi Zhang, PhD

— Graduate Research Assistants:

- Aashna Maknojiya
- Alex Devora
- Ann Nguyen
- Danielle Gartner
- Tara Harazika

— Practicum Students:

- Ashely Schelfhout
- Lola Ojo
- Steven Despaigne
- Vijay Narayanan

— Staff:

- Alejandra Gonzalez
- Celina Moore
- Karen Kerkering
- Jerri Berry
- Martha Diaz
- Patricia Cochran
- Robyn Dunkin
- Sarah Macias

Partners

DSHS Staff

- Drue Evans
- PHR 4/5N Volunteers
- Susan Bareis
- Kim Beam

AHEC Staff

- Stephanie Loya
- Stefanie West
- Sonya Voyles
- Michelle Sulik
- Tommy Sweat

Consultant:

- Susan Nix

Education Research Center

University of Houston

- Toni Templeton, PhD

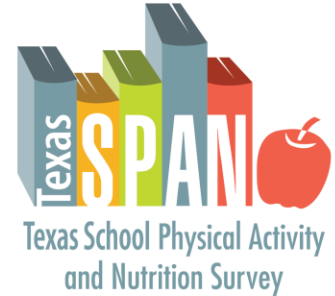


What is Texas SPAN?

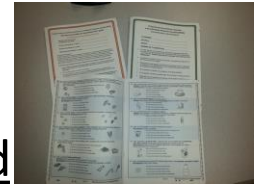


- Texas SPAN Project is a statewide project;
- SPAN is a surveillance system that monitors the prevalence and secular child health trends in Texas school children;
- SPAN identifies Texas student behaviors associated with obesity;
- SPAN information assists in programs development and policies to promote healthy weight and prevent chronic disease among Texas youth; and
- Texas SPAN 2021-2023 is the sixth time the project conducted.

Data Collected During SPAN

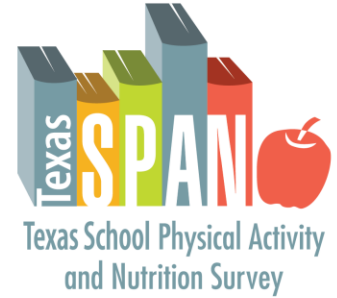


- Objectively measured students' height and weight from 2nd, 4th, 8th, and 11th grades;
- A self-report paper or online validated questionnaire administered to students of 4th, 8th, and 11th grades;
 - Demographics, diet, physical activity practices, knowledge, oral health
- A take-home or online survey for 2nd grade students' parents; and
 - Child's diet, activity, and oral health behaviors information, as well as related constructs
- School policies and practices.
 - School Health Policy Questionnaire (HPQ), Campus Improvement Plans (CIP), Vending Machine Inventory (VMI), and Signage Observations



Hoelscher et al., 2003; Hoelscher et al., Penkilo et al., 2008; Thiagarajah et al., 2008; Larsen et al., 2015

Statewide Participation (2021-2023)

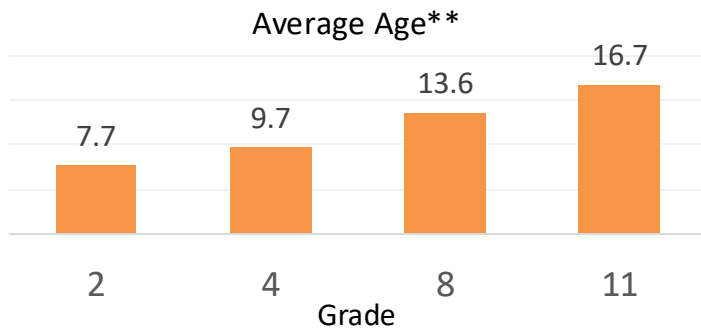
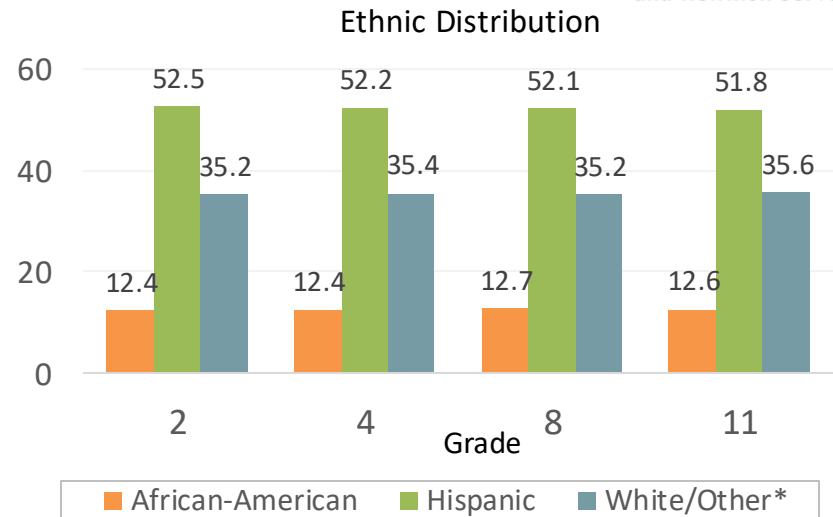
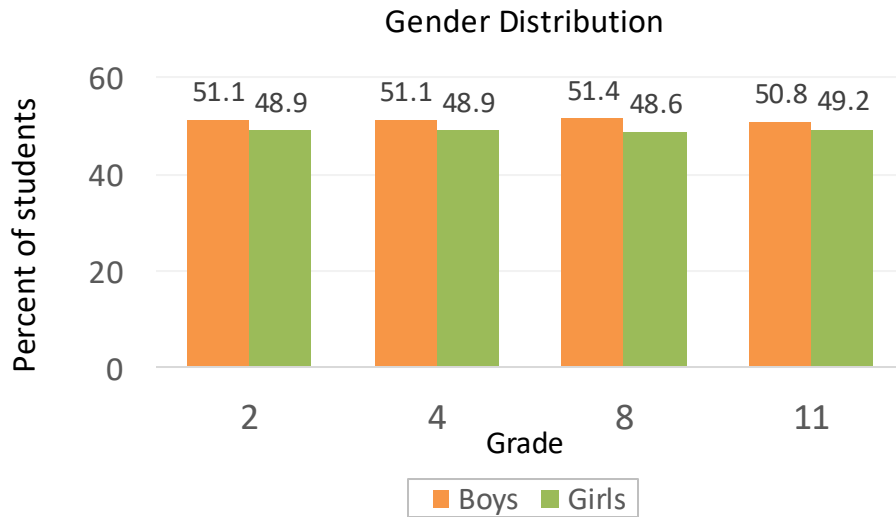
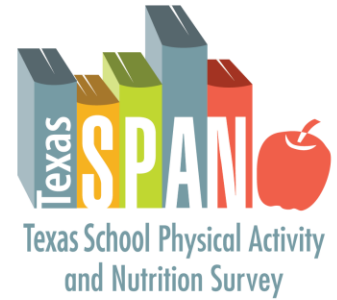


- ❑ Public Health Regions: 1, 2/3, 4/5N, 6/5S, 7, 8/11, 9/10
- ❑ Number of Districts Surveyed: 61
- ❑ Number of Schools Surveyed: 231

	Students Participating	2021-2023 Population Representation
2nd Grade*	2,108	337,791
4th Grade	3,484	338,857
8th Grade	3,143	373,651
11th Grade	2,122	346,669
Total	10,857	1,396,968

*Surveys completed by parents

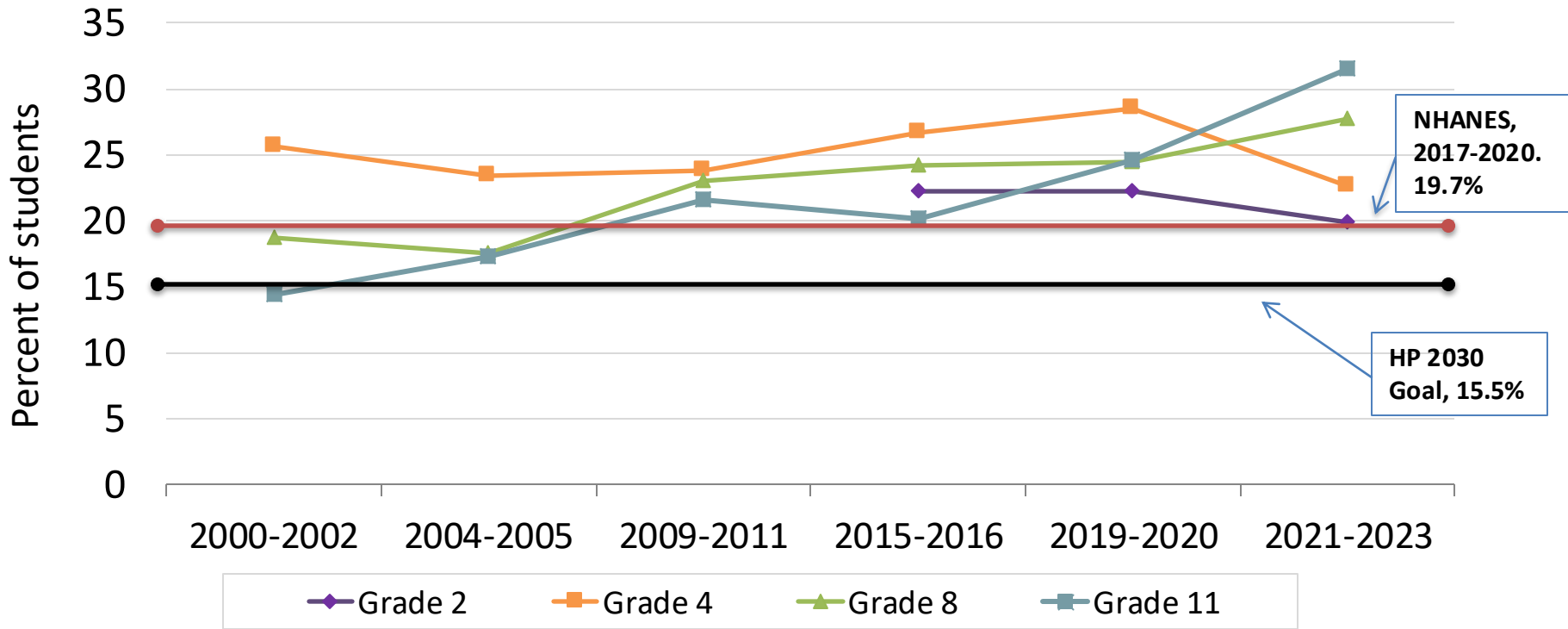
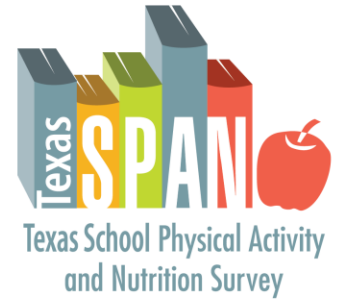
2021-2023 Demographics



* White/other includes multi-racial students.

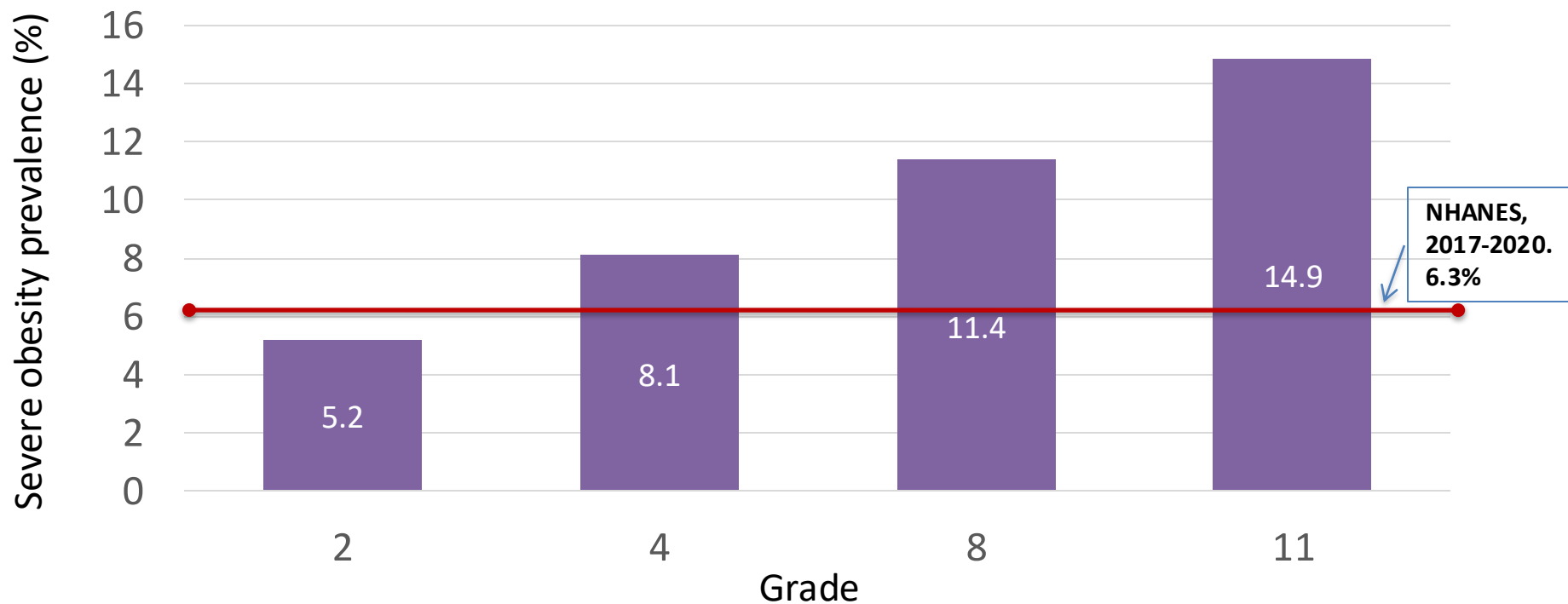
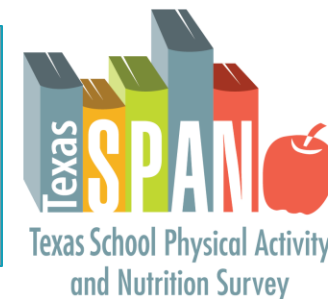
** Since most 2021-2023 sampling done in the spring semesters, the average age increased compared to the prior wave.

Texas Child Obesity Trends (2000-2023)



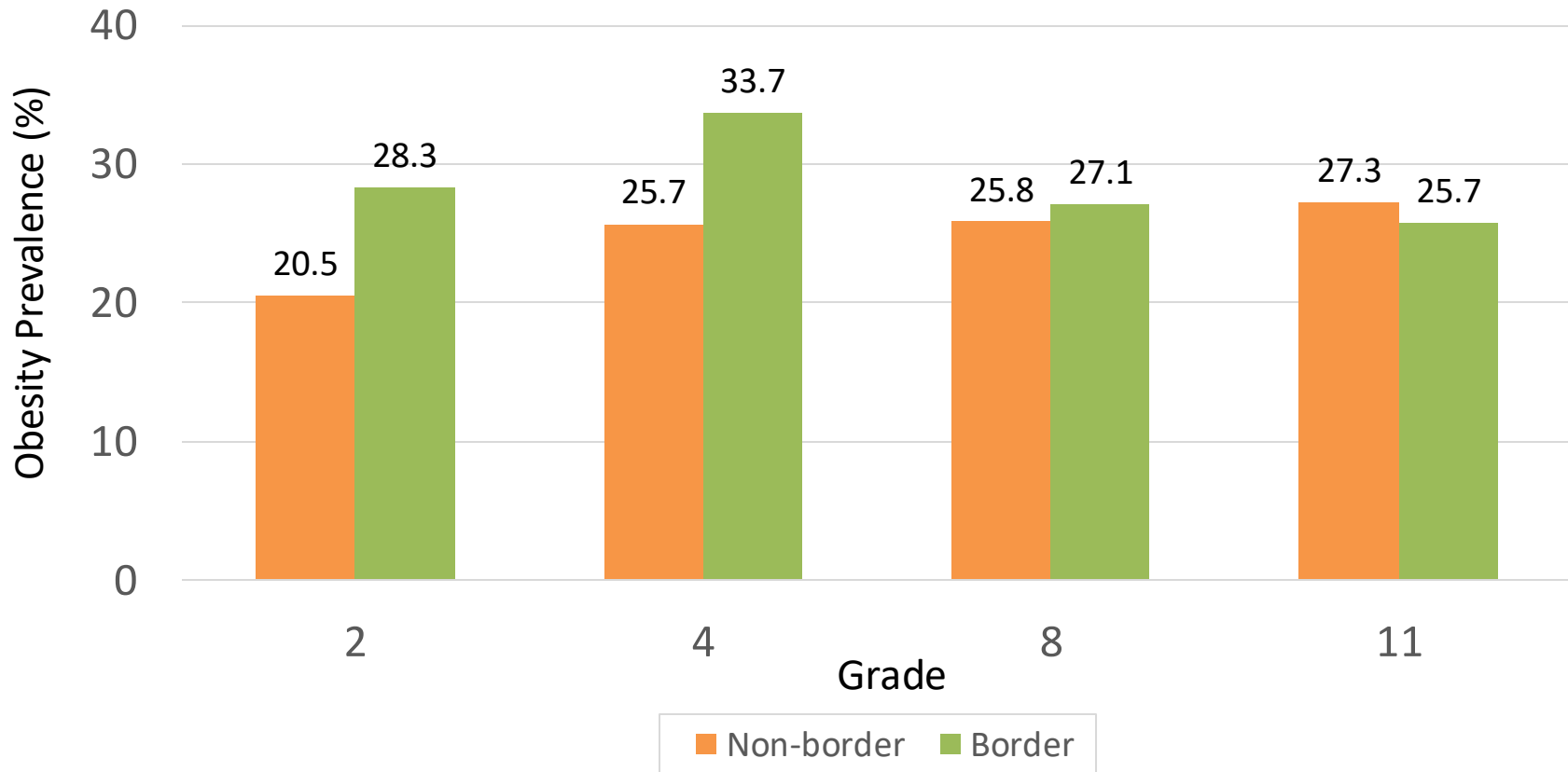
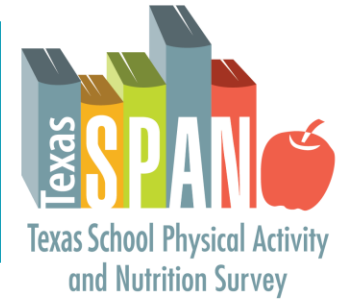
NHANES, National Health and Nutrition Examination System; HP 2030, Healthy People 2030
Data for Grade 2 not available before 2015-2016

Prevalence of Children with Severe Obesity in Texas

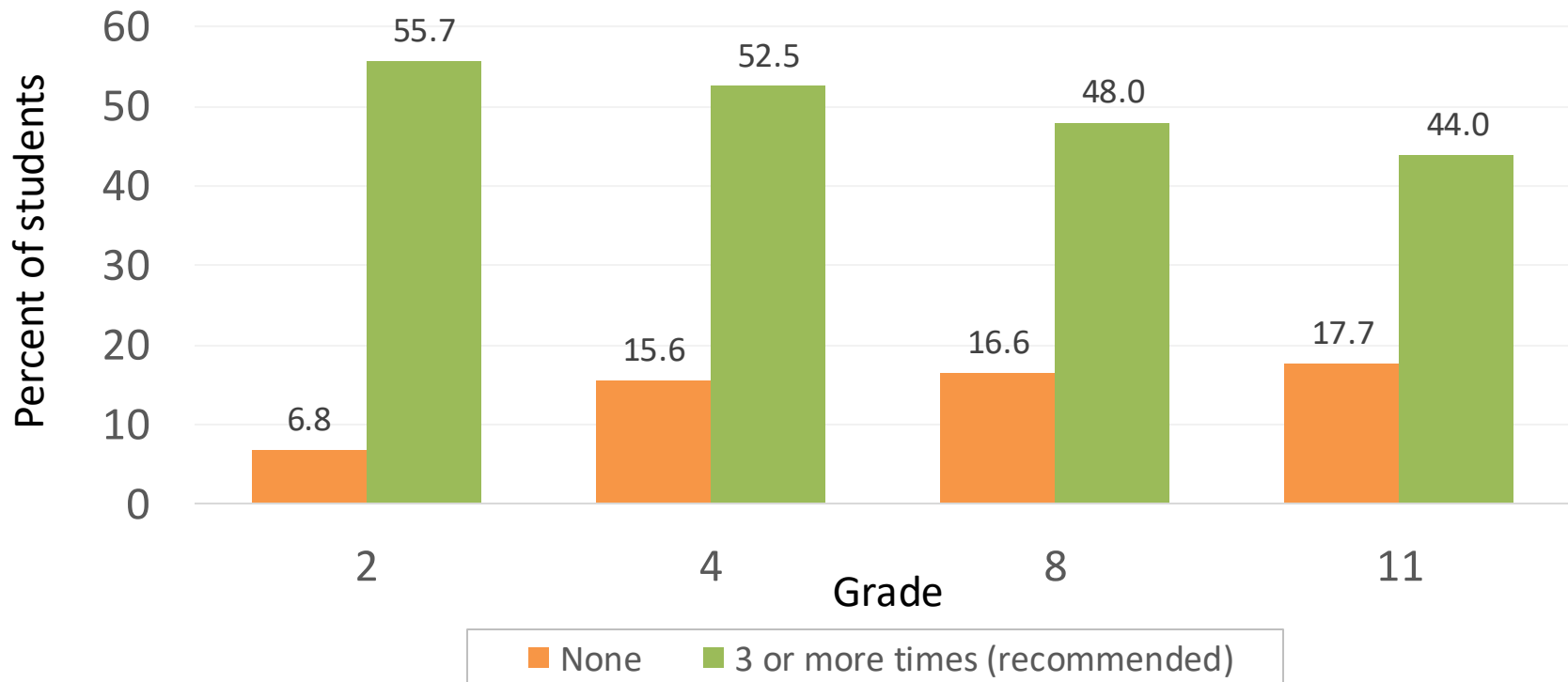
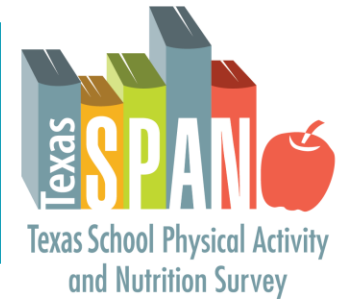


NHANES, National Health and Nutrition Examination System

Border County Obesity Prevalence by Grade

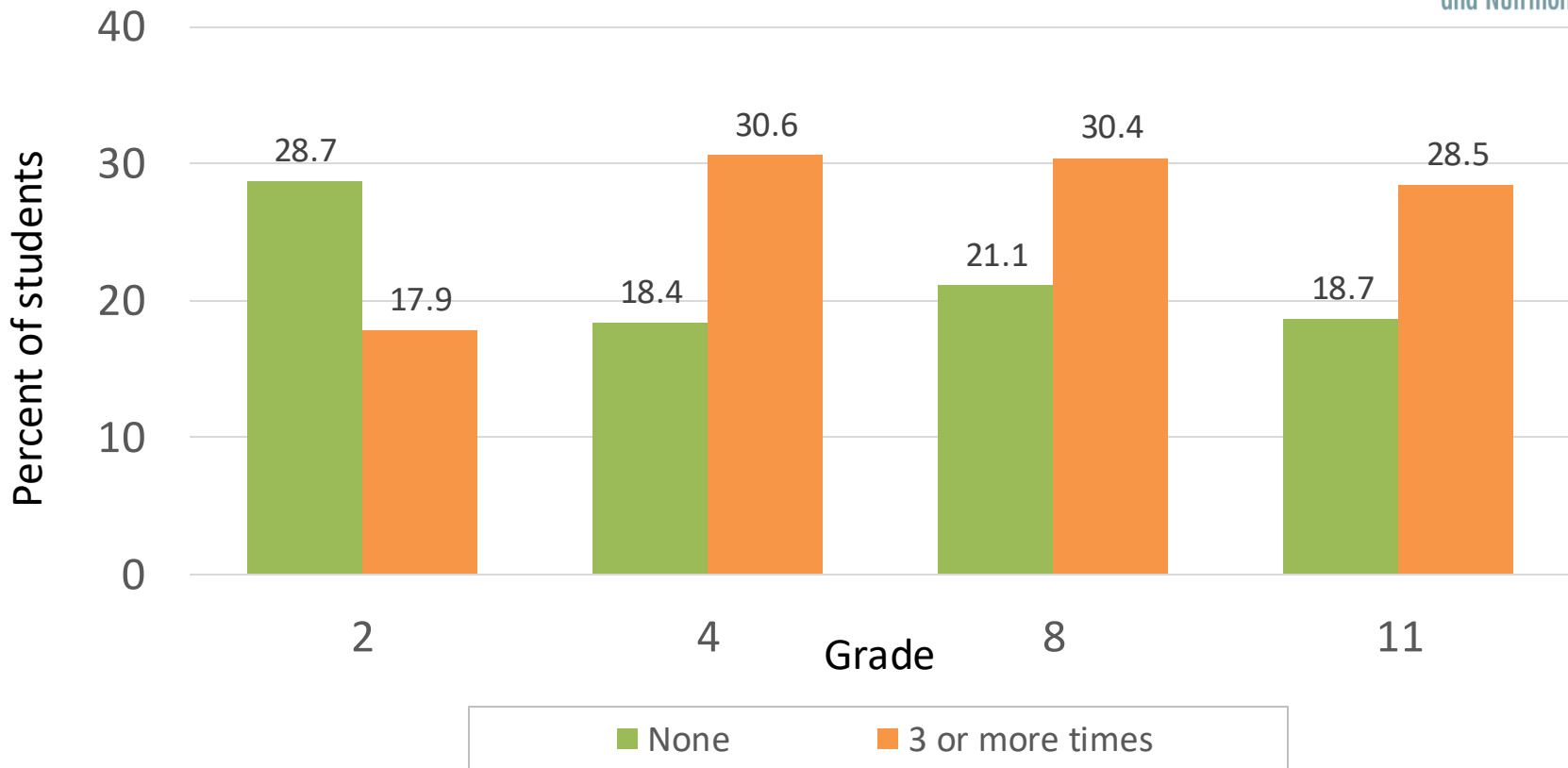
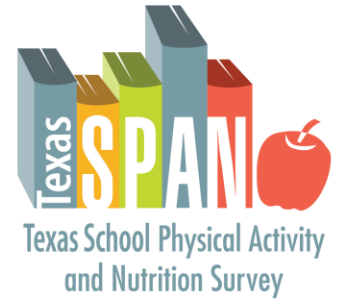


Number of Times Fruits (Excluding Juice) and Vegetables Consumed per Day by Grade*



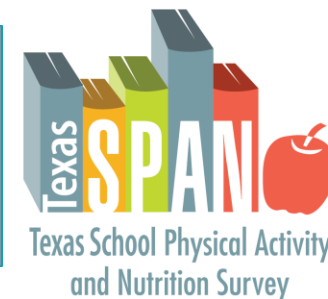
*Includes starchy, yellow/orange, green, and other vegetables; beans; and fruit

Number of Times Sugary Beverages* Consumed per Day by Grade

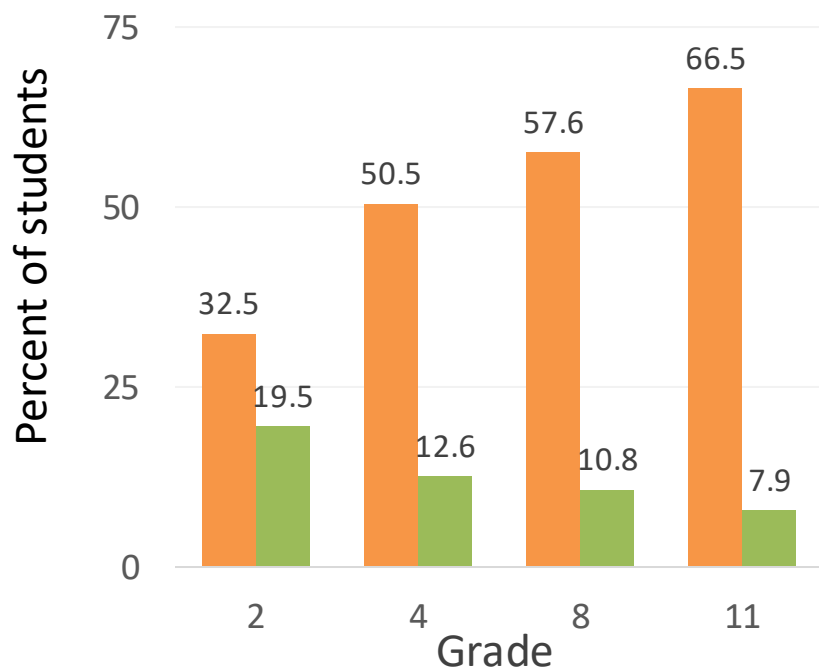


*Computed as consumption of regular sodas, coffee/tea with sugar, fruit drinks, flavored milks, and energy drinks

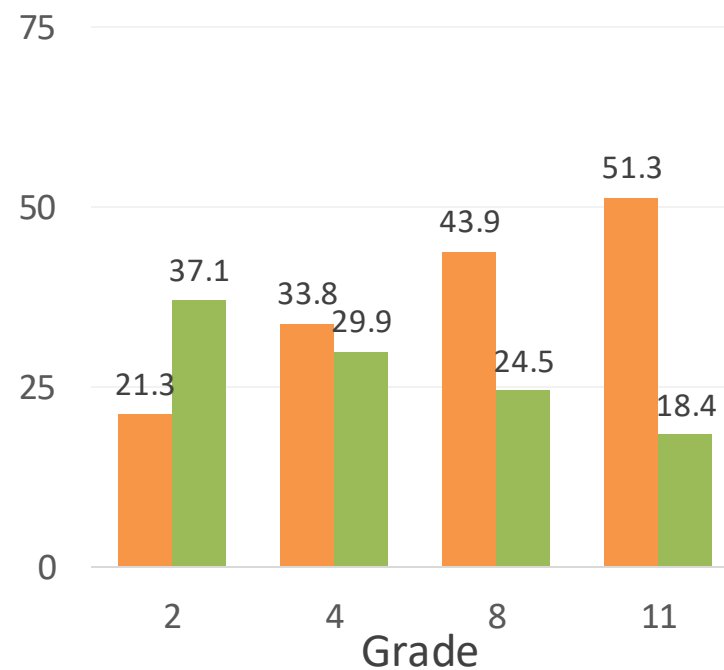
Number of Times Milk Consumed per Day by Grade



Plain milk

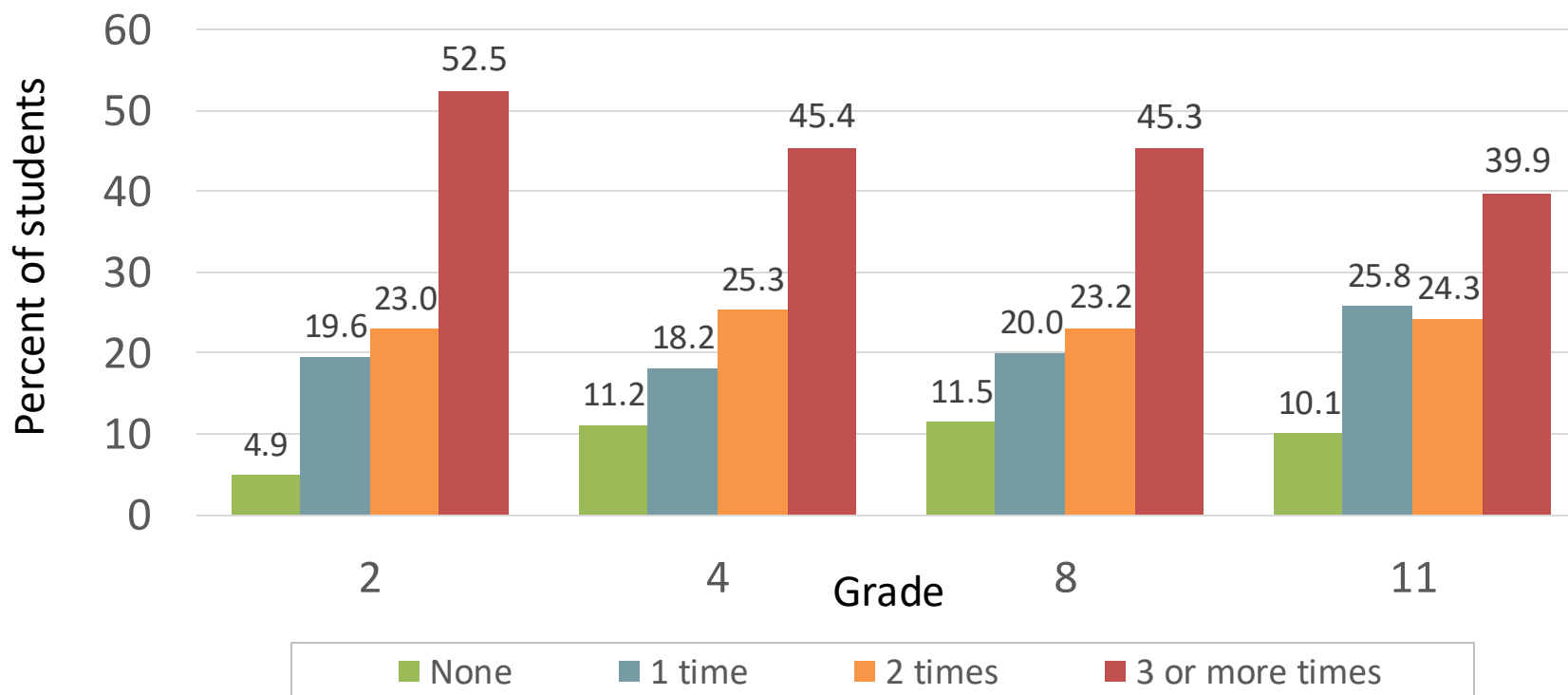
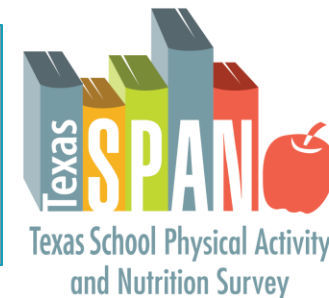


Plain and flavored milk



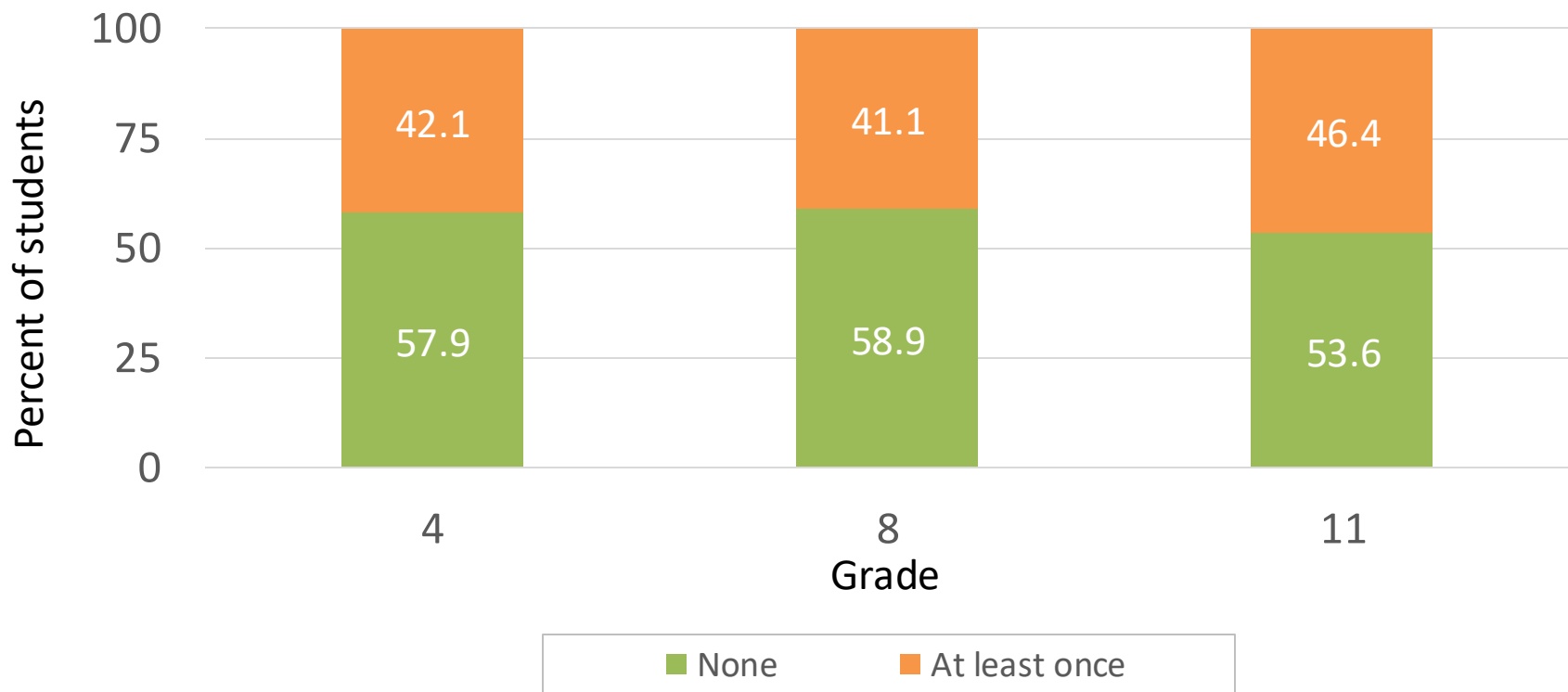
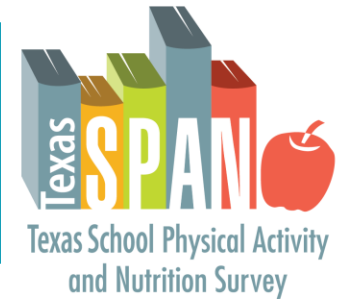
None 2 or more times

Number of Times Sweet and Savory Snacks* Consumed per Day by Grade



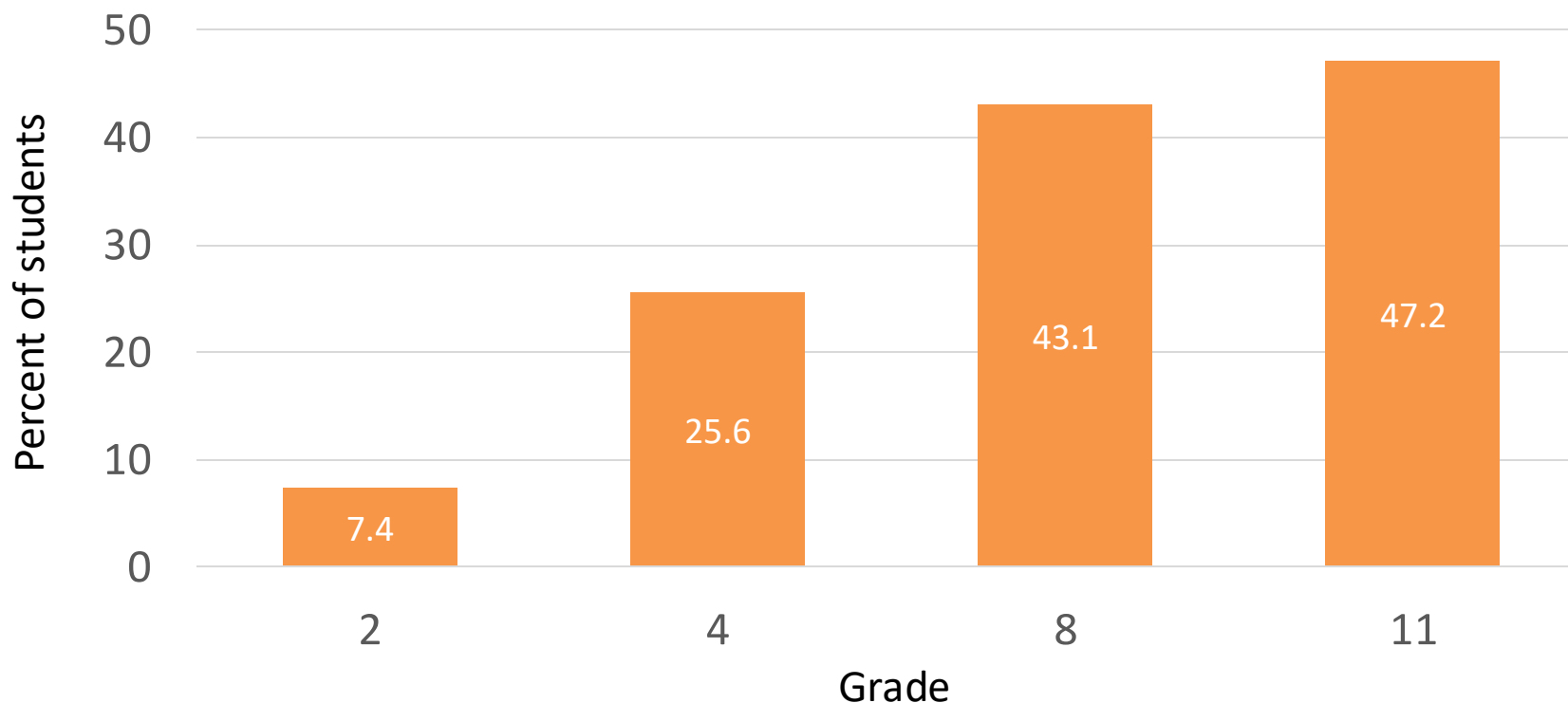
*Computed as consumption of candy, frozen dessert, cakes, French fries/chips, and snack bars

Number of Times Restaurant Food Consumed per Day by Grade*

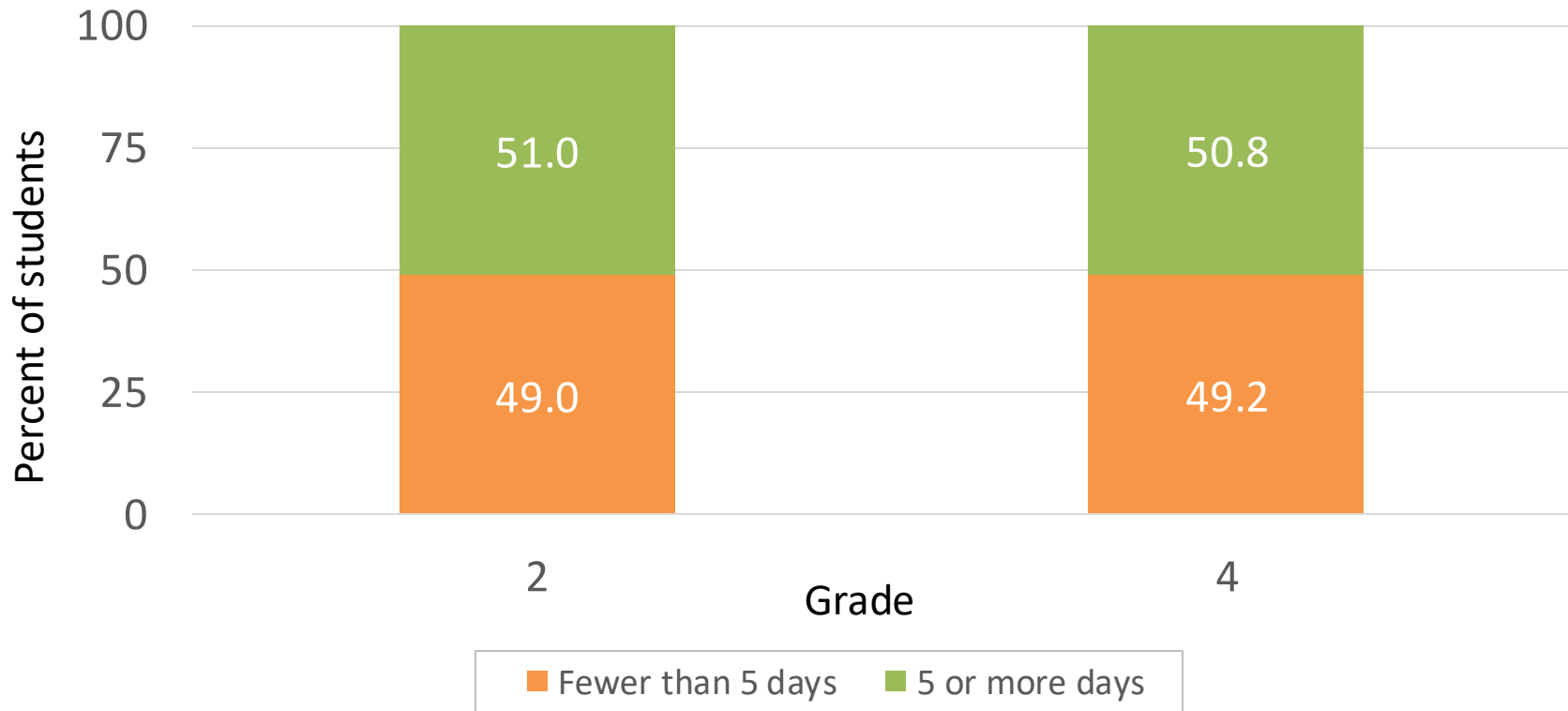
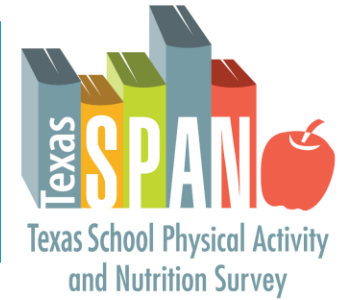


*Specific question was not asked on the 2nd grade survey

>40% of Grade 8 and 11 Students Did Not Eat Breakfast the Previous Day

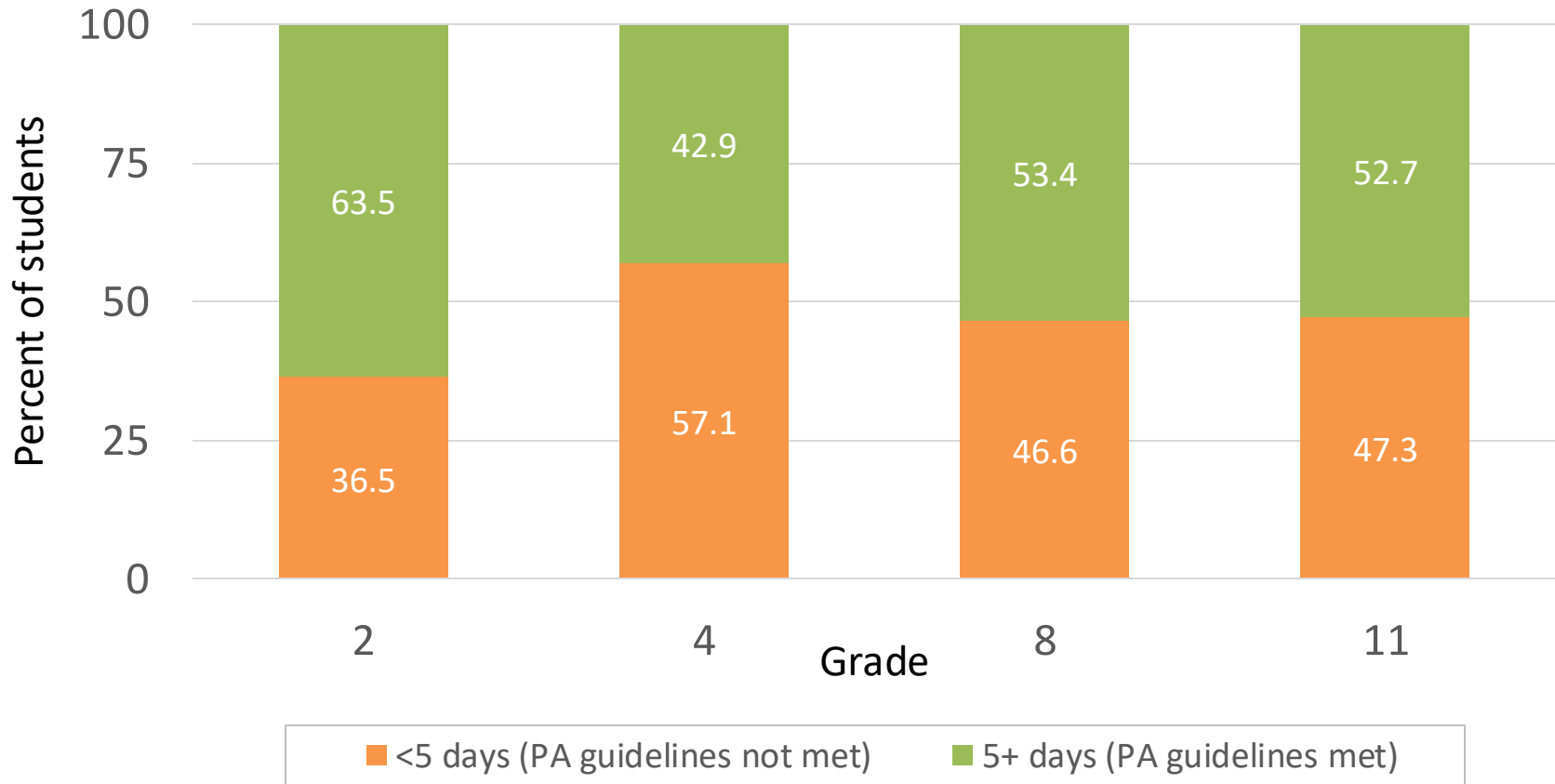
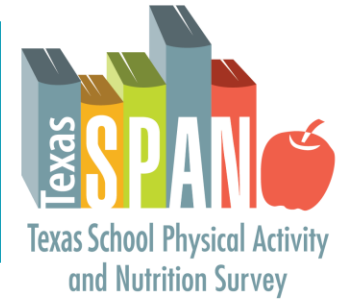


Last week, how many days did you play outdoors for 30 minutes or more?

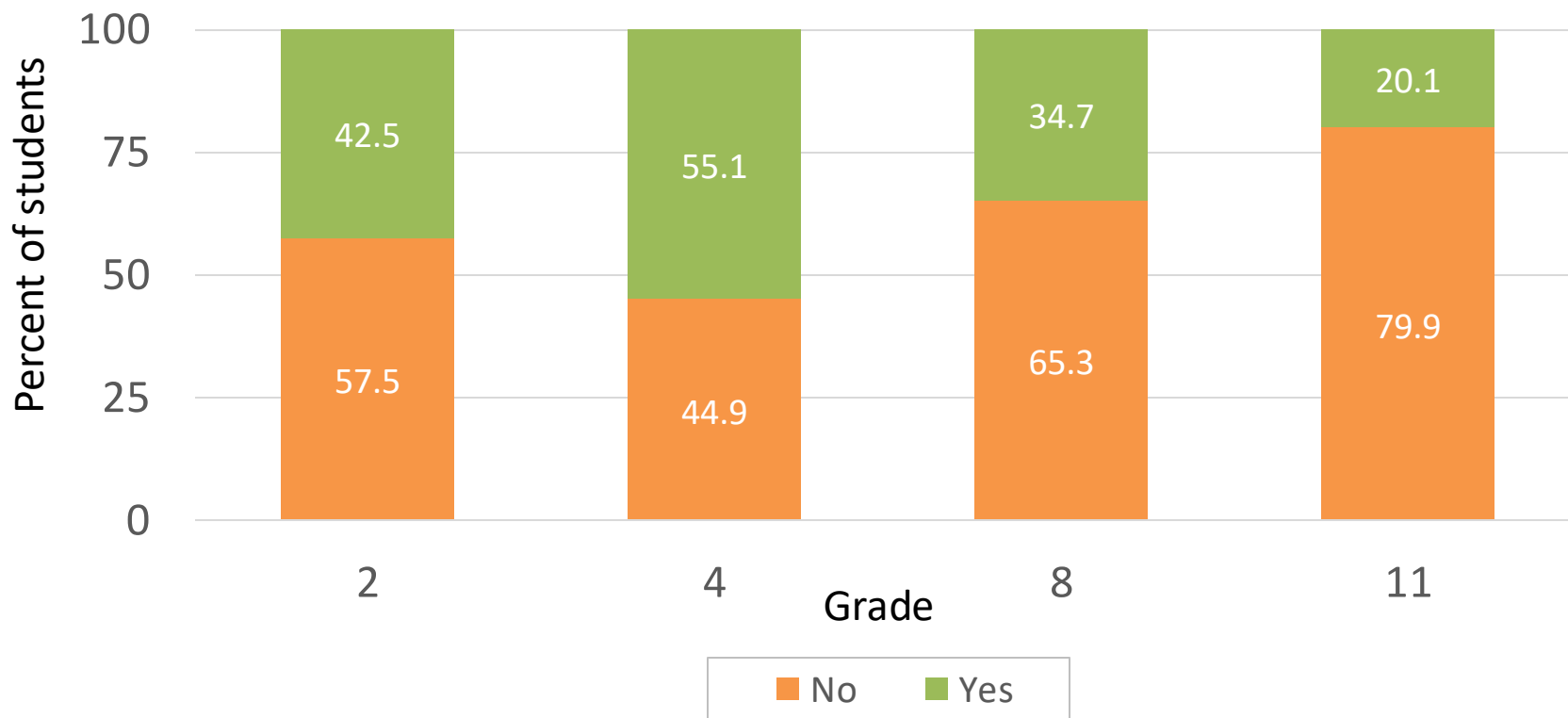
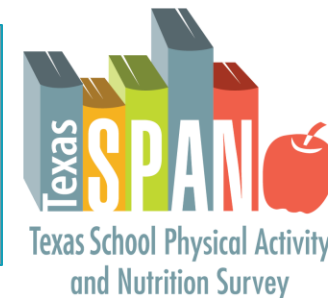


Question only asked on 2nd and 4th grade surveys

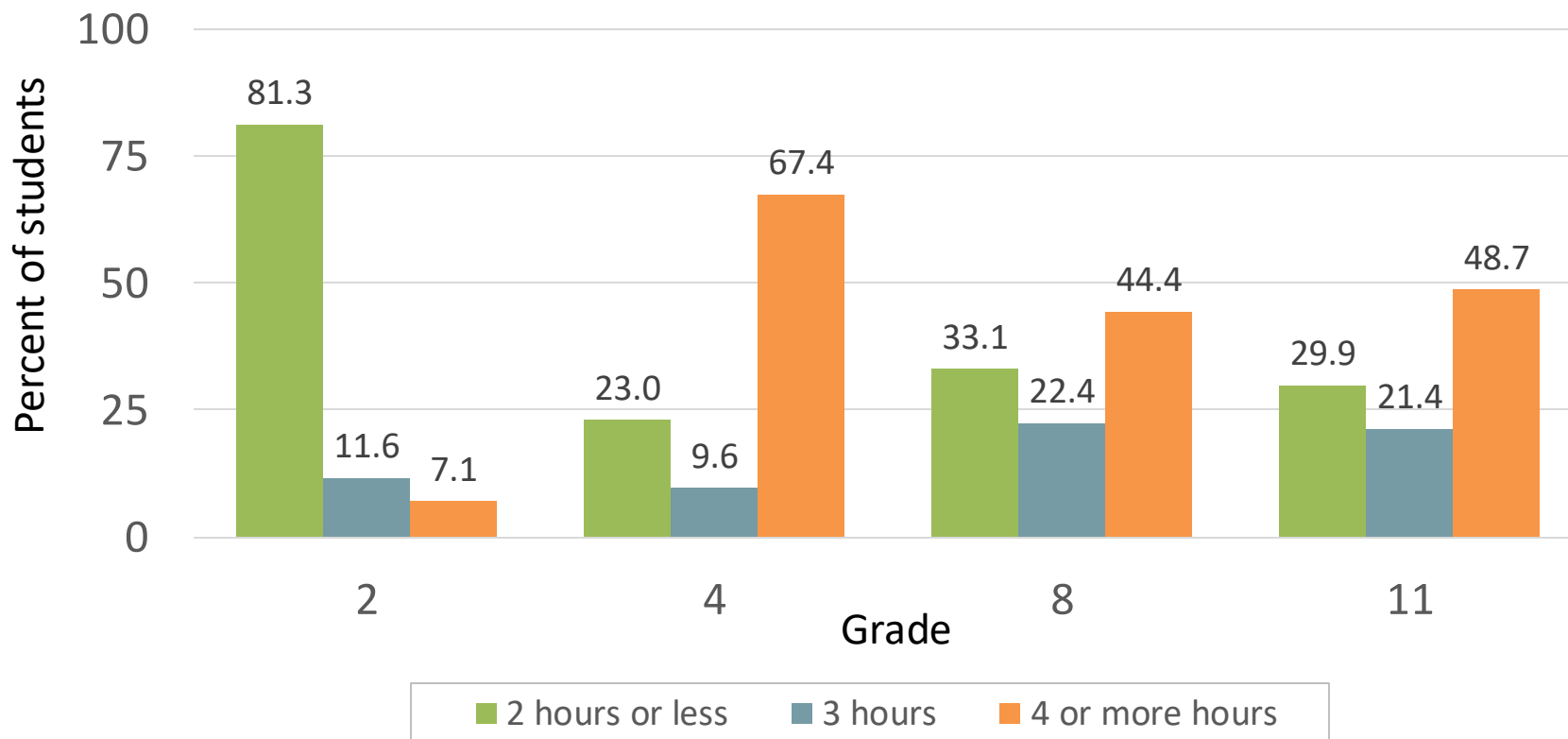
Last week, how many days were you physically active for a total of at least 60 minutes per day?



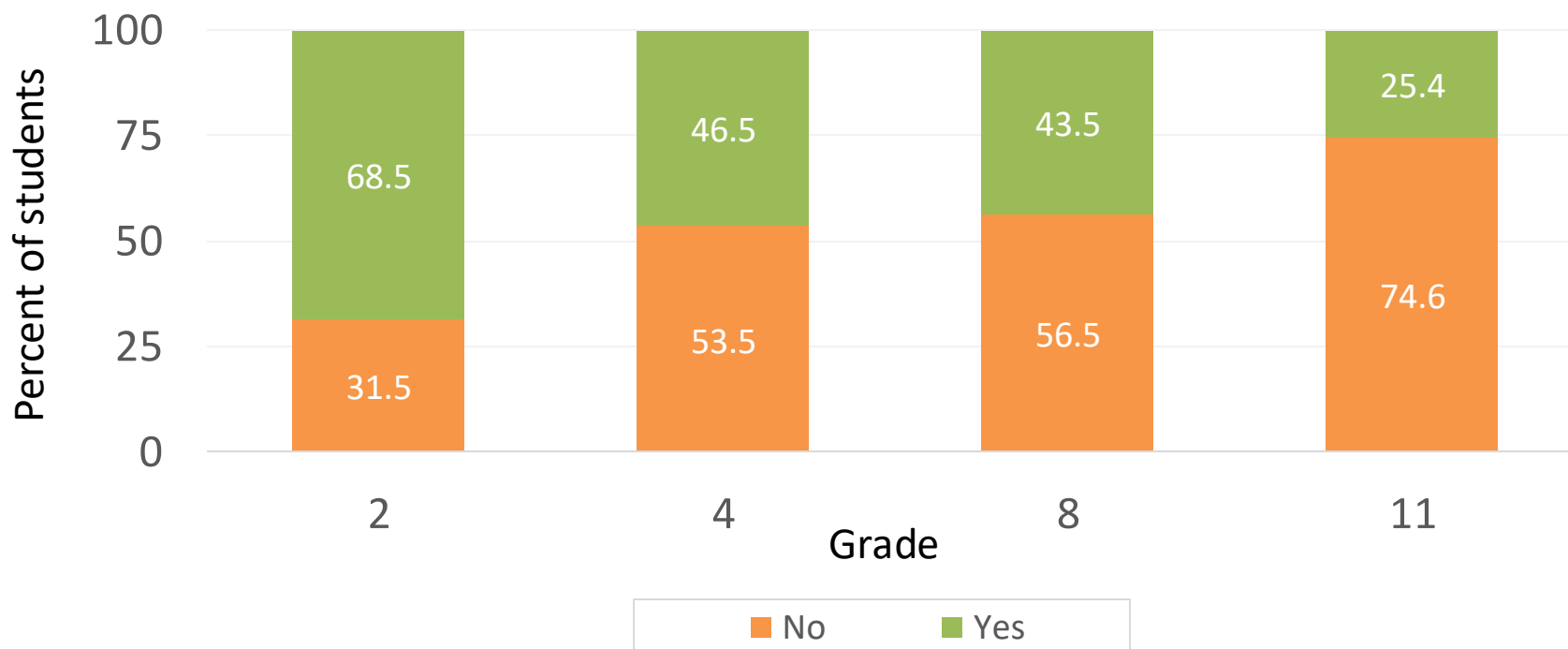
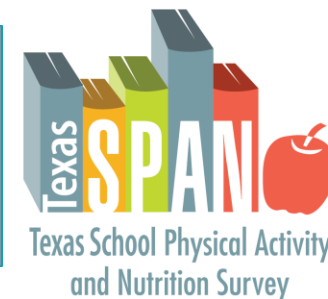
Do you currently participate in any other organized physical activities or take lessons?



How many hours per day do you usually spend on a computer, tablet/iPad®, TV, or other electronic device for anything except schoolwork?

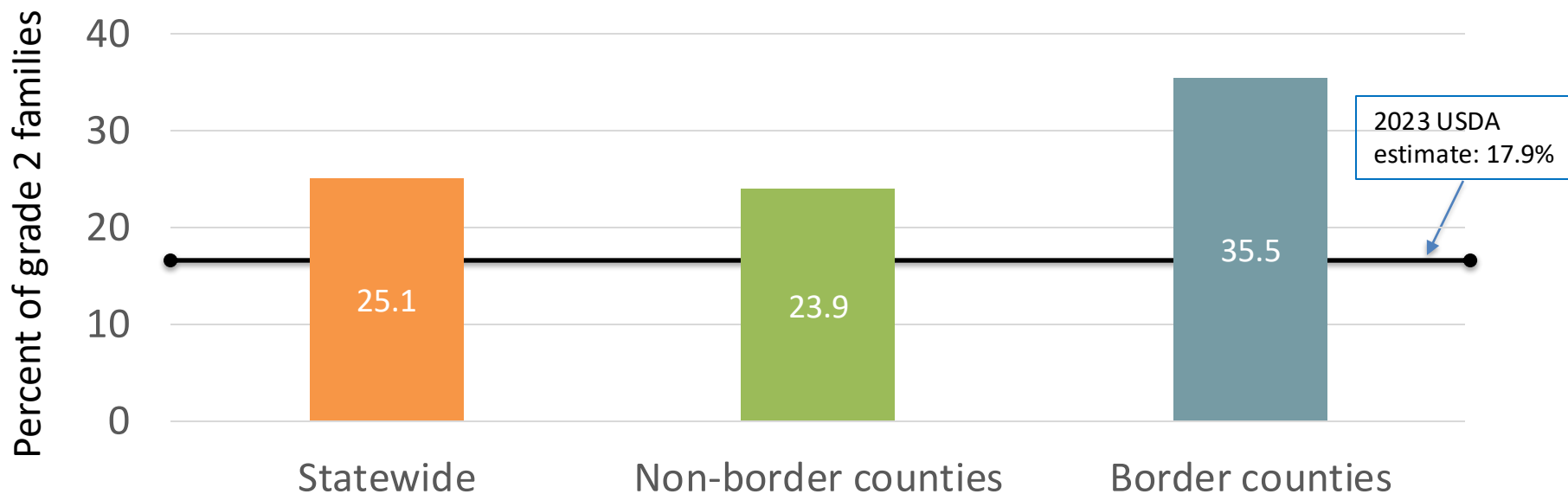
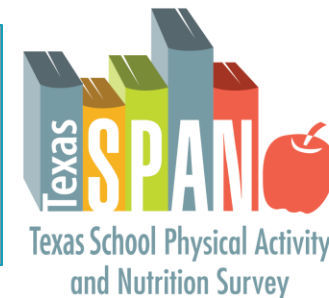


Students meeting sleep recommendations



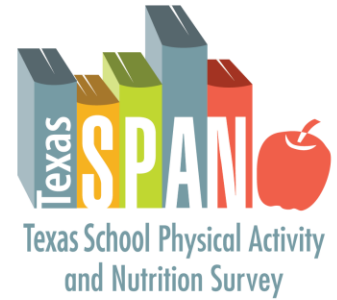
The American Academy of Sleep Medicine (AASM) recommends at least 9 hours of sleep for ages 6-12 and at least 8 hours of sleep for ages 13-18.

Prevalence of Food Insecurity Among Families of 2nd Grade Children



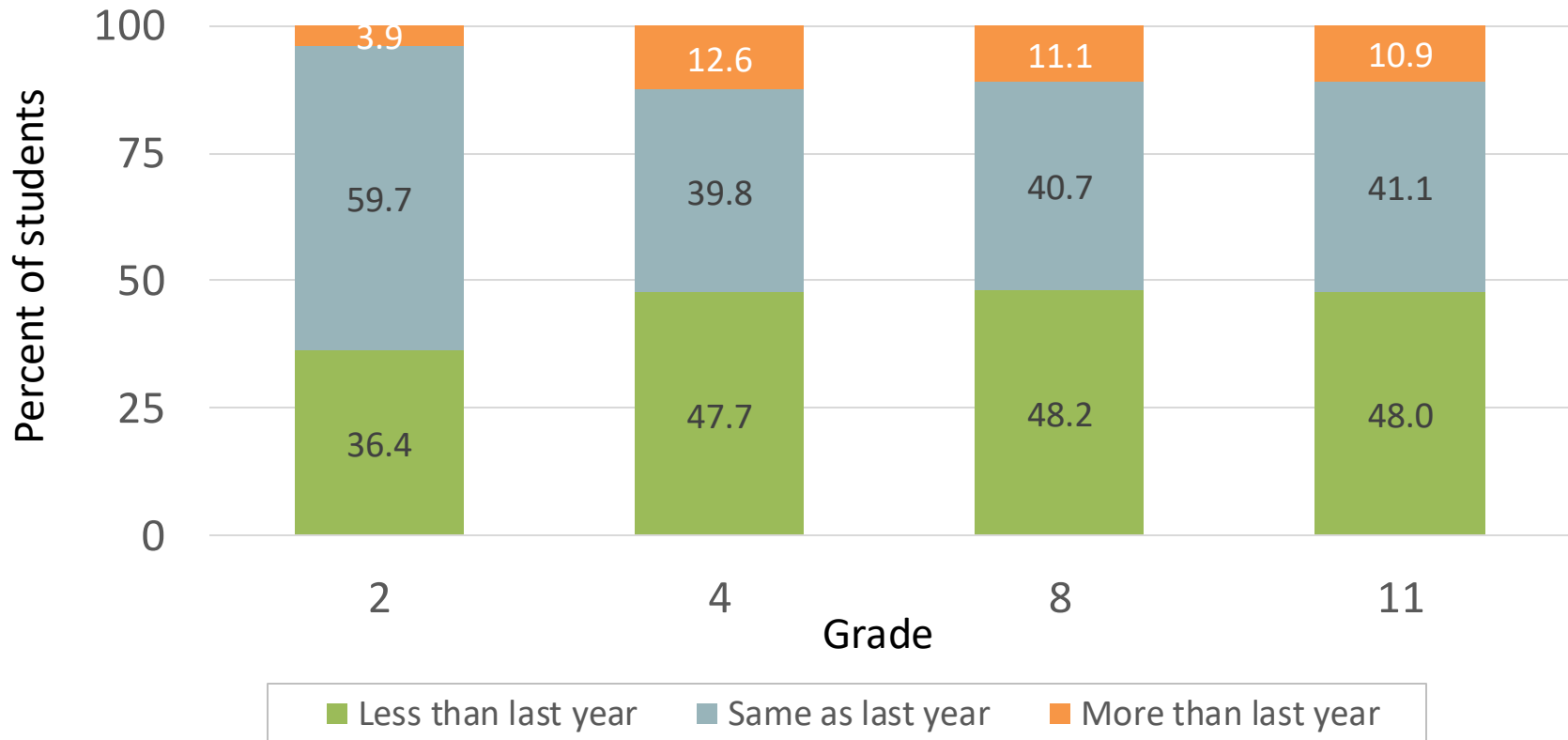
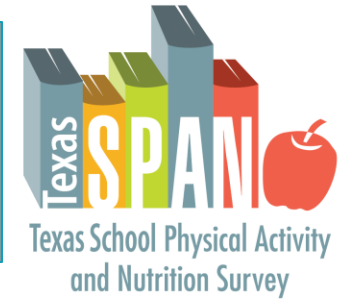
Note: this variable was derived as families that were either worried about food running out or were short on food and couldn't afford more. For the purposes of this comparison, the statewide estimate shown here was computed using the same sampling weights as the border and non-border figures.

Texas SPAN 2021-2023 Results

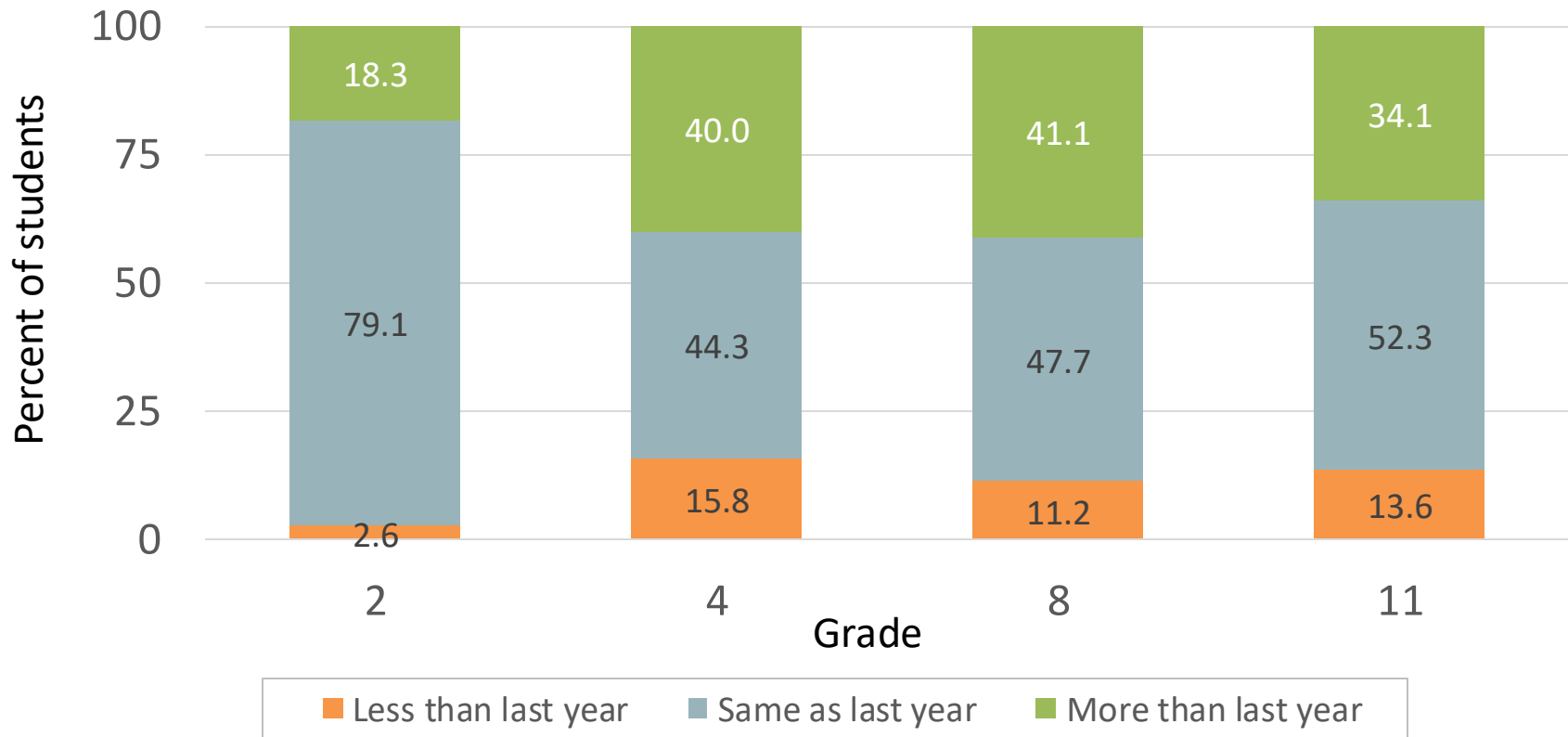
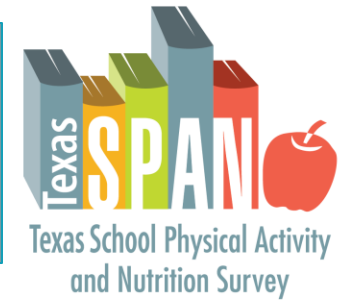


COVID-19 Pandemic Impact on Child Health Behaviors

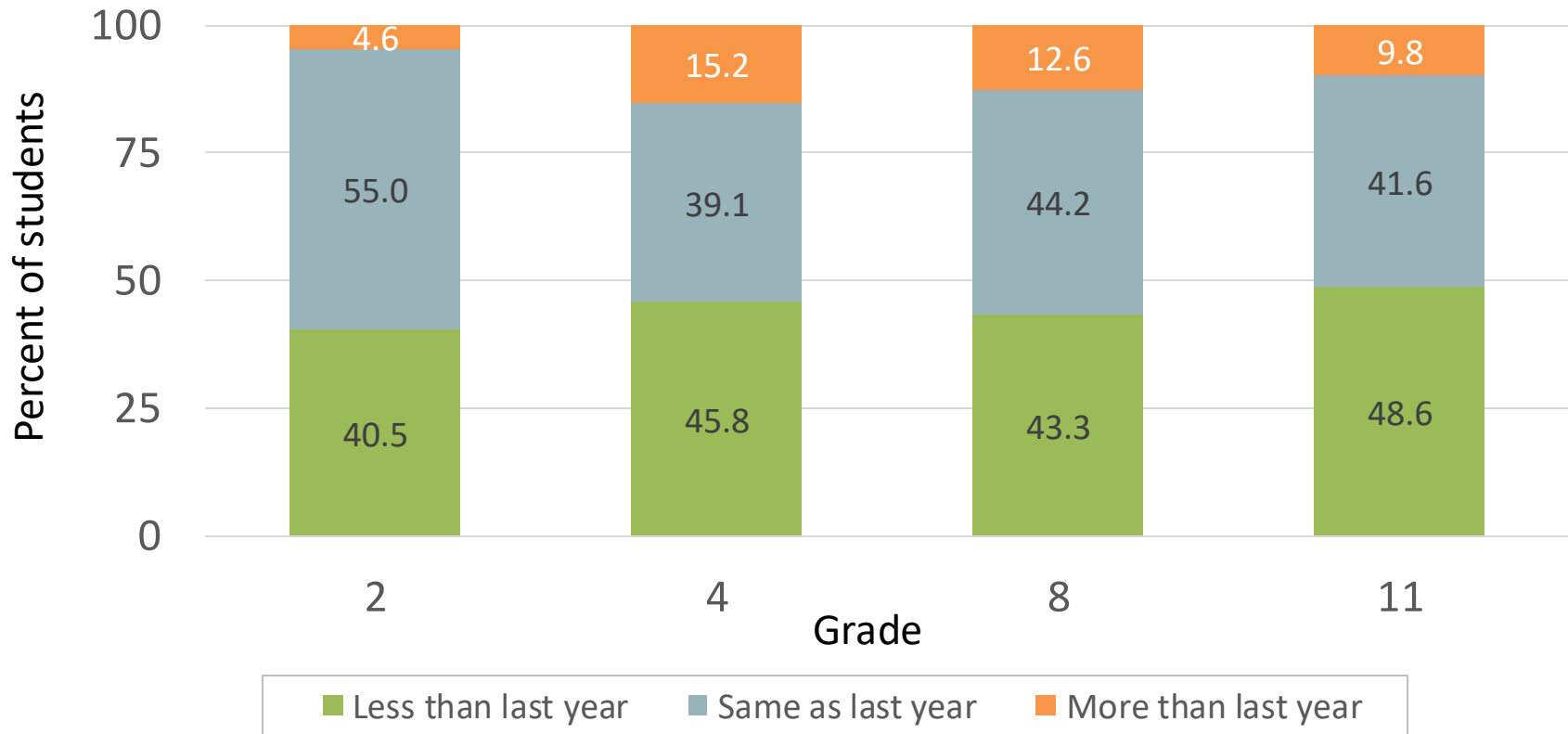
Compared to last year (during the COVID-19 pandemic), how much do you eat junk food?



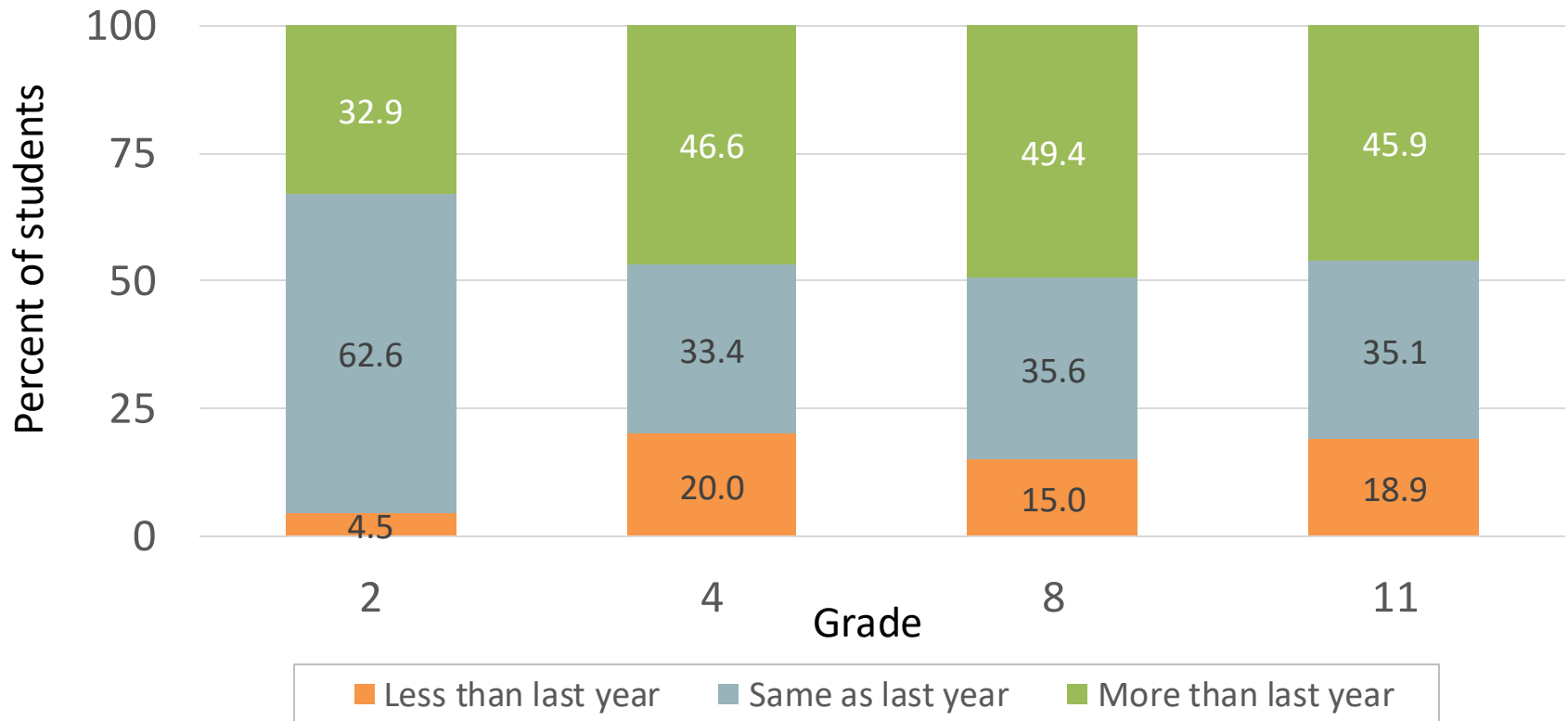
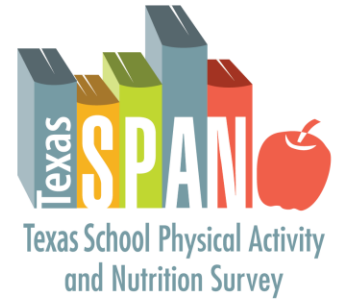
Compared to last year (during the COVID-19 pandemic), how much do you eat fruits and vegetables?



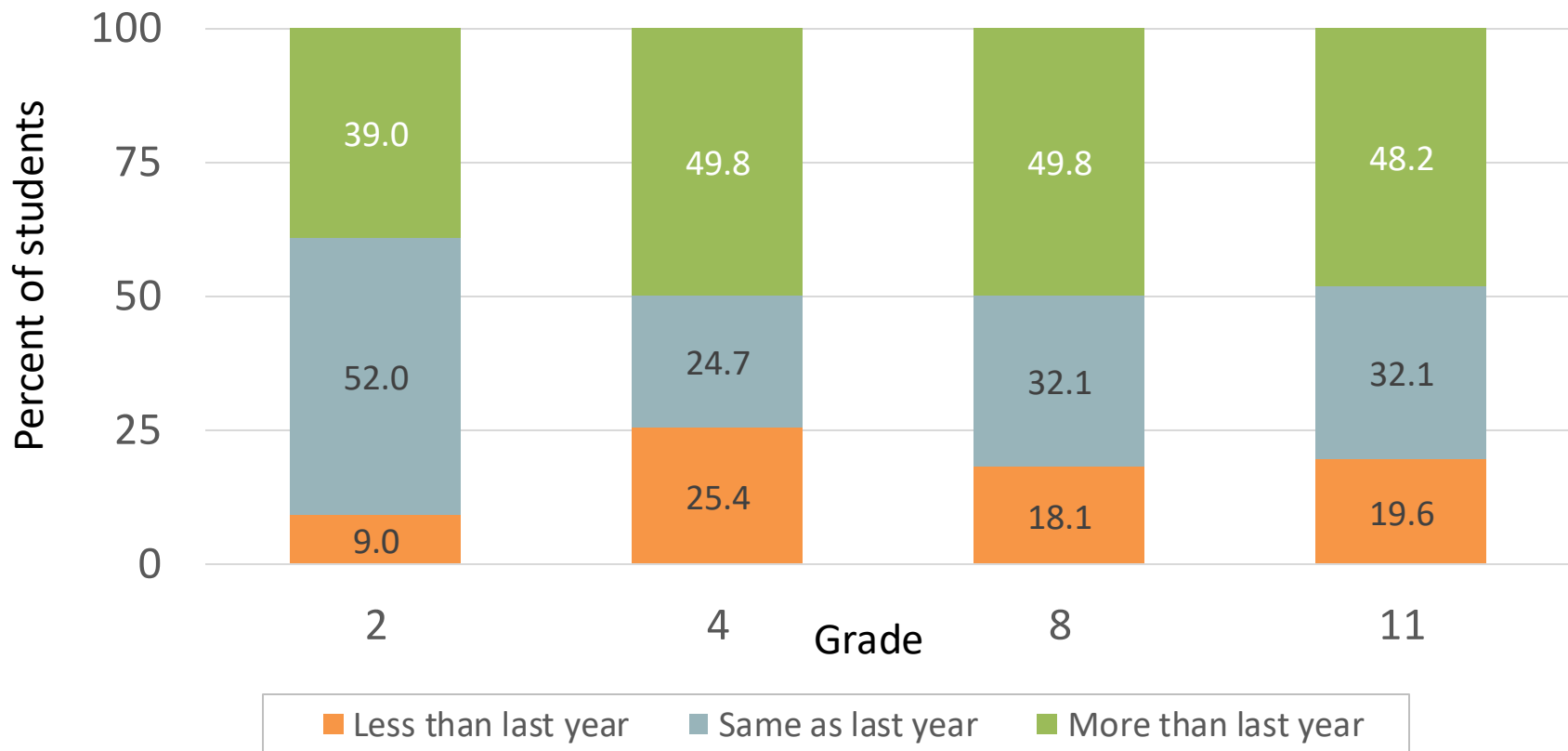
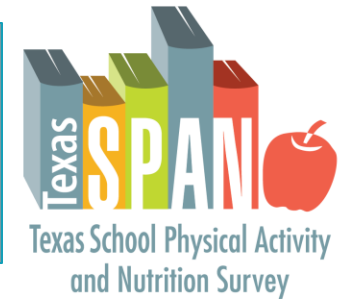
Compared to last year (during the COVID-19 pandemic), how much do you drink sodas?



Compared to last year (during the COVID-19 pandemic), how much are you physically active?



Compared to last year (during the COVID-19 pandemic), how much do you spend time with friends in person?



Summary and Implications



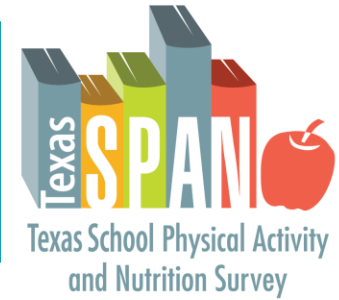
- Texas schoolchildren have high obesity rates, but rates vary by grade;
 - Severe obesity is problematic, especially among secondary school children; and
 - There is a need for obesity prevention efforts, especially for secondary school children.
- Ultra-processed foods consumption is high among Texas school children, particularly sugary beverages and snack foods;
- Texas school children do not eat recommended fruits and vegetables amounts; and
- Children, especially secondary school students, skip breakfast at high rates.
 - Promote School lunches and breakfasts

Summary and Implications



- Most students in grades 4, 8, and 11 do not meet sleep recommendations;
 - Parent programs to encourage sleep hygiene should be implemented
- Food insecurity rates are high, especially at the Texas-Mexico border; and
 - School food programs and national food assistance programs can help
- In general, students reported healthier behaviors after COVID-19.
 - Structured Day Hypothesis – research showed school day routine with physical activity and school foods can encourage healthier behaviors

Thank You!



Deanna Hoelscher, PhD, RDN

Regional Dean, Texas SPAN PI

Deanna.M.Hoelscher@uth.tmc.edu

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For additional information please contact:

Carolyn L Smith, Project Director

Carolyn.L.Smith@uth.tmc.edu

(512) 589-9081 (cell)



Resources



[Texas Child Health Status Report](#) & [Texas Child Health Toolkits](#)

Infographics and toolkits help you learn about and advocate for child health at home, at school, and in your community.

[Texas School Activity and Nutrition Survey \(Texas SPAN\) Project Information](#)

Interactive Website [*SPAN Data Explorer*](#).

The data explorer provides representative Texas data from SPAN from 2000 to 2020.



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