

# Nutrition and Academic Grades Among Vermont High School Students

## Vermont Youth Risk Behavior Survey 2017

There is a strong relationship between educational outcomes and health-related behaviors. Students with lower grades are more likely to engage in health risk behaviors than students with higher grades. Students who do not eat a healthful diet tend to get lower grades.<sup>1</sup> Hunger due to lack of food is linked to higher absenteeism, decreased cognitive performance, and lower academic performance – including repeating grades. In fact, skipping breakfast alone is associated with decreased cognitive and academic performance.<sup>2</sup> This brief examines the relationship between nutrition and academic performance among Vermont high school students.

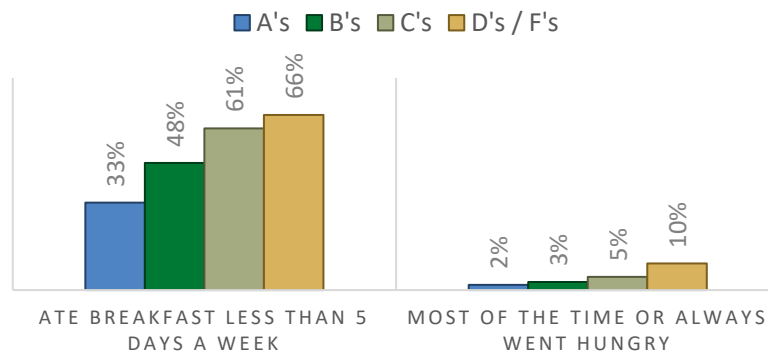
**High school students with lower grades were more likely to be food insecure and not eat breakfast than students who earned higher grades.**

*Food Insecurity & Breakfast Consumption.* As grades increase, food insecurity and breakfast consumption decreases. Two-thirds (66%) of students with mostly D's and F's reported eating breakfast less than five days a week, double that who earned mostly A's (33%). With each decrease in grades earned the rate of students who most of the time or always went hungry in the past week significantly increased. It should be noted that breakfast consumption could be related to student choice and is not necessarily indicative of access to breakfast at home or school.

### GOING HUNGRY

Students earning mostly D's and F's were five times as likely as those with mostly A's to always or most of the time go hungry.

**FOOD INSECURITY & BREAKFAST CONSUMPTION, BY GRADES EARNED**



**In Vermont, high school students with lower grades were more likely to report not consuming recommended amounts of nutritious foods and beverages than their peers with higher grades.**

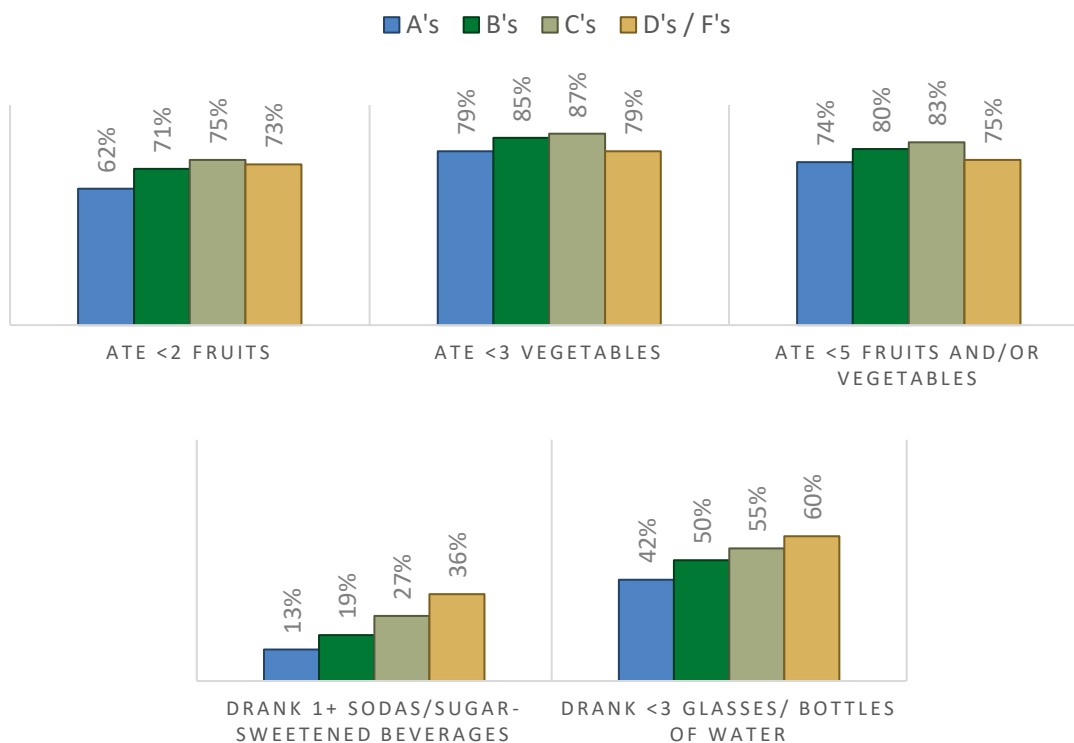
*Daily Fruit & Vegetable Consumption.* Students who earned mostly C's were significantly more likely to not eat the recommended amount of fruits and vegetables than students with mostly A's. Students earning mostly D's and F's have slightly less poor nutrition than those who earned mostly B's or C's for all measures except fruit consumption.

*Daily Sugary Drink & Water Consumption.* With each decrease in grades earned, consumption of one or more sodas/sugar-sweetened beverages significantly increased. Similarly, drinking less than three glasses/bottles of water increased with decreasing grades, all differences are significant except between students who earned C's and D's and F's.

<sup>1</sup> Rasberry CN, Tiu GF, Kann L, et al. Health-Related Behaviors and Academic Achievement Among High School Students — United States, 2015. MMWR Morb Mortal Wkly Rep 2017;66:921–927. DOI: <http://dx.doi.org/10.15585/mmwr.mm6635a1>

<sup>2</sup> CDC. Health and Academic Achievement. [https://www.cdc.gov/healthyyouth/health\\_and\\_academics/pdf/health-academic-achievement.pdf](https://www.cdc.gov/healthyyouth/health_and_academics/pdf/health-academic-achievement.pdf).

## DAILY NUTRITION CONSUMPTION, BY GRADES EARNED



Results from the 2017 Vermont YRBS show a relationship between most all nutrition measures and academic performance among Vermont high school youth. This supports established research which demonstrates that access to a healthy diet is linked to better academic performance.

The following evidence-based strategies and expert recommendations provide examples of policies and practices that could be implemented locally. These are just some of the examples of strategies schools can employ to strengthen the nutrition environment.

### *Strategies/Recommendations for Schools to Strengthen the Local Nutrition Environment*

- Implement strong nutrition standards that meet or exceed the USDA's "Smart Snacks in School" nutrition standards for all foods available in school
- Provide and promote free and accessible drinking water
- Encourage enrollment in school breakfast and lunch programs, including universal meals
- Provide nutrition education as part of the K-12 health education curriculum
- Prohibit marketing of unhealthful items and promote more healthful items
- Offer healthy or non-food items during school and classroom celebrations
- Develop sustainable Farm to School programs (<https://vermontfarmtoschool.org/>)
- Encourage school staff to model healthy eating behaviors
- Develop strong Local School Wellness Policies highlighting the school nutrition environment

Visit the VDH School Physical Activity & Nutrition Website for resources and information to support your school  
<http://www.healthvermont.gov/wellness/physical-activity-nutrition/school-and-early-child-care>

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**For past data briefs, statewide and local reports:** please see the YRBS website at: <http://healthvermont.gov/research/yrebs.aspx>