

RETREAT IS NOT AN OPTION FOR KENTUCKY

Healthier school meals
protect our children *and*
our country

★ ★ ★ ★ ★
MISSION: READINESS

RETREAT
IS NOT AN
OPTION



RETREAT IS NOT AN OPTION: A message from retired generals in Kentucky



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While the Nation's obesity epidemic makes daily headlines, its effect on the U.S. military has largely been unreported: a 61 percent rise in obesity since 2002 among active duty forces; more than \$1.5 billion in annual obesity-related health care spending and costs to replace unfit personnel; significant recruiting challenges with nearly one in three young adults too heavy to serve; and newly released data in this report showing overall ineligibility above 70 percent in most states.

With this in mind, the more than 500 retired senior military leaders who comprise MISSION: READINESS are looking ahead to the fourth school year in which—thanks to Congress' enactment of the Healthy, Hunger-Free Kids Act of 2010—millions of students are now eating healthier school meals with more whole grains, fruits, vegetables and lean proteins. This fall will also mark the second year in which candy and many other high-calorie, low-nutrient snacks and beverages in vending machines and elsewhere are being replaced with healthier snacks and drinks.

These changes are important victories in the battle against obesity. America's youth spend considerable time at school, and many young people consume up to half of their daily calories there. If we are to win, schools must be our allies.

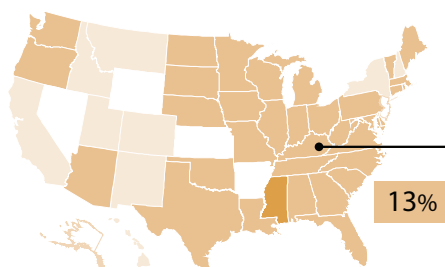
According to the U.S. Department of Agriculture (USDA), more than 95 percent of the country's school districts – and 100 percent of Kentucky districts – are successfully meeting the healthier meal standards. Recent surveys indicate widespread student acceptance of healthier lunches across all grade levels. Furthermore, 72 percent of parents nationwide favor updated nutrition standards for school meals and school snacks, while 91 percent favor requiring schools to serve fruits or vegetables with every meal. From a financial perspective, USDA projects that school food service revenue will far outpace costs over five years.

We understand that some schools need additional support to help meet the updated standards, such as better equipment and more staff training, and that support should be provided. At the same time, moving forward with implementation of the standards for all schools is paramount. Students depend on schools to reinforce efforts by parents and communities to put them on track for healthy and productive lives. Healthy school meals and snacks are a vital part of that effort.

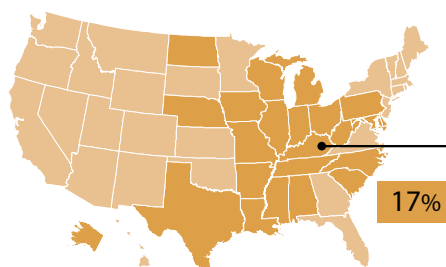
When it comes to children's health and our national security, retreat is not an option.

THE SPREADING EPIDEMIC OF OBESITY IN AMERICA (1990-2013)

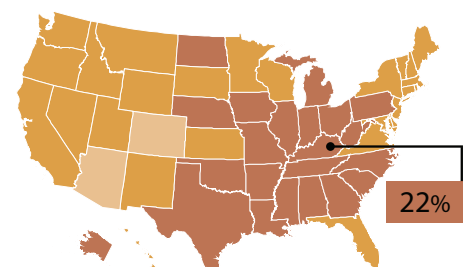
ALL STATES AT OR UNDER 15%



— 1990 —



— 1995 —



— 2000 —

RETREAT IS NOT AN OPTION FOR KENTUCKY

NEARLY 1 IN 3 IS TOO HEAVY TO JOIN, & 1 IN 8 WHO GOT IN IS NOW OBESE

The more than 500 retired military leaders who comprise MISSION: READINESS know that healthier school meals and snacks are vital for addressing the nation's obesity epidemic and supporting national security as well.

Our previous reports—including *Too Fat to Fight*—have detailed how weight and fitness problems often prevent young people from qualifying for the military. Data now show that these issues also pose tremendous challenges for millions of active duty personnel.

Currently, 12 percent of active duty service members are obese based on height and weight—an increase of 61 percent since 2002—which is resulting in serious problems with injuries and dismissals.¹ Given that one-third of American children and teens are now obese or overweight (including 33 percent of teens in Kentucky) and nearly one-third of Americans ages 17 to 24 are too overweight to serve in our military, the obesity rate among active duty service members could get even worse in the future if we do not act.² Obesity among our military and their families is costing our defense budget well over \$1.5 billion a year in health care spending and recruiting replacements for those who are too unfit to serve.³

73% of young Kentuckians cannot join the military, the 10th-worst rate in the nation (see page 8).

What has changed?

Due to poor nutrition and health before World War II, U.S. troops in the war were on average 1.5 inches shorter than today.



That is why General Hershey, the Director of Selective Service, called for Congress to approve a National School Lunch program in 1945.

Mostly due to excess calories and too little exercise, young adults today are on average 20 pounds heavier than in 1960.



That is why over 500 retired admirals and generals support healthier meals and snacks in our schools.

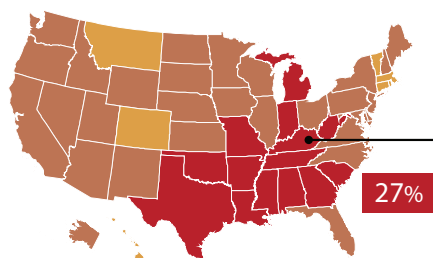
IT WAS NOT ALWAYS LIKE THIS

When World War II began, frequent undernourishment and health problems stemming from the Great Depression meant that our troops were, on average, an inch and a half shorter than troops are today. In fact, military leaders led by Major General Lewis B. Hershey (the Director of the Selective Service System at the time) stepped in and urged Congress to pass a national school lunch program to improve the health and well-being of our nation's children and youth.⁴

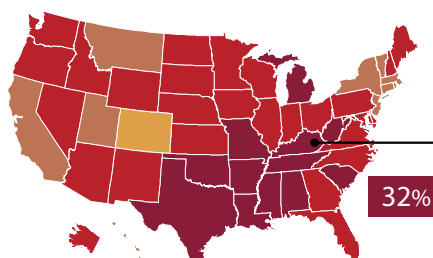
Percent of obese adults (Body Mass Index of 30+)

No Data 0-9.9% 10-14.9% 15-19.9% 20-24.9% 25-29.9% 30-34.9% 35%+

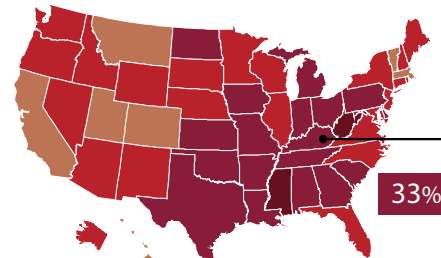
ALL STATES OVER 20%



— 2005 —

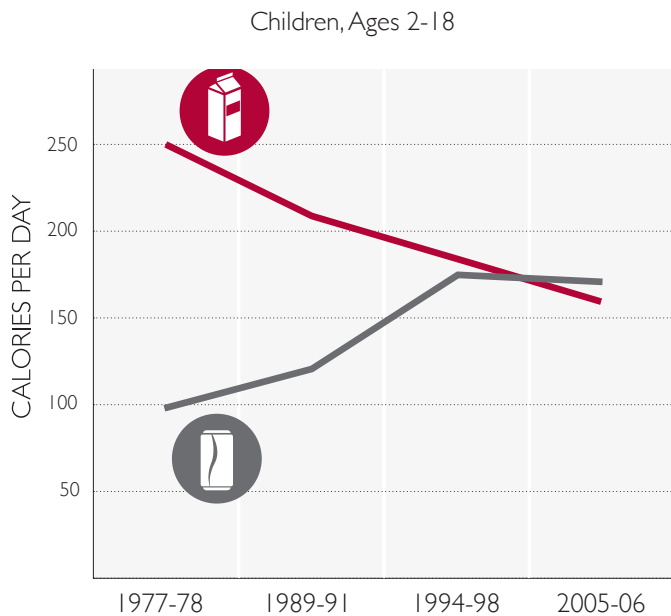


— 2010 —



— 2013 —

Trends in calories consumed from sugary drinks and milk



Source: Trust for America's Health

Lower consumption of calcium and vitamin D coupled with less exercise leads to more stress fractures.

Today, however, children are surrounded by too many calories and not enough opportunities for exercise, a combination that has played a major role in the tripling of childhood obesity rates over the past three decades.

Young American men as a whole are now 20 pounds heavier than the average male in his twenties was in 1960.⁵

Obesity is one of the main reasons why 73 percent of young adults in Kentucky and more than 70 percent nationwide are unable to serve in today's military. This includes young adults in families with generations of military service, and others who have the critical skills our military needs but cannot join simply because of too many extra pounds.⁶

WHAT HAS HAPPENED?

Children's biology has not changed in the course of a single generation. What has changed dramatically is our nutritional and exercise environment. Things that would have been considered absurd in the 1960s are now commonplace in American society, such as drinking sugary drinks daily instead of milk or water, or watching

television and playing video games all afternoon instead of riding bikes and playing outside with friends.

Obesity is not the only problem. During the critical adolescent years for bone growth—ages 11 to 14 for girls and 13 to 17 for boys—children have a heightened need for calcium, vitamin D and exercise. But 85 percent of girls and 58 percent of boys at these ages are not getting enough calcium and nearly half of boys and girls in those age groups are not getting enough vitamin D in their diets.⁷ One reason for this problem is that consumption of milk has dropped and been overtaken by rising consumption of sugary drinks.⁸ Compounding the problem, **more than two-thirds of adolescents nationwide and 78 percent in Kentucky do not get the recommended hour of exercise daily.**⁹ More exercise will help with our national problem of obesity, but that is only one part of the equation.¹⁰

THE MILITARY IS NOT IMMUNE

Our country should rightly be proud of everyone serving in uniform. The majority of the men and women in the military are very fit and form the strongest overall fighting force in America's history.

Yet even the military is not immune to rising weight problems among some troops. These problems are not only a challenge for military recruiters looking for enough fit individuals, but they are also leading to increased injuries and dismissals among those who serve.

For example, the military's basic training programs work wonders to get young men and women into shape rapidly by replacing fat with muscle. But many recruits enter basic training with significant challenges:

- Each year, thousands of recruits lose 20 pounds or more to join the military, and they are at a higher risk of gaining that weight back once they leave basic training.¹¹
- According to one study, one out of every seven male Army recruits reported that they had not exercised or played any sports in a typical week prior to joining.¹²

Keeping young men and women in shape after basic training is another challenge:

- One study of more than 2,000 men in a U.S. Army

There were more medical evacuations from Afghanistan and Iraq to Germany for stress fractures, serious sprains and other similar injuries than for combat wounds. Excess weight can lead to more injuries.



light-infantry brigade in Afghanistan found that 14 percent were obese.¹³

- Across the military, too many men and women are not just overweight but actually obese. In 2002, less than eight percent of active duty service members were obese, but by 2011 that figure had jumped to more than 12 percent—a 61 percent increase.¹⁴

Basic training can help to build a lot of muscle, but strengthening bones is not as easy. The military is facing an unprecedented rise in the type of injuries that stem, in part, from poor nutrition and lack of physical activity in adolescence:

- The obese service members in the brigade in Afghanistan were 40 percent more likely to experience an injury than those with a healthy weight, and slower runners were 49 percent more likely to be injured.¹⁵
- This higher risk of injuries has serious consequences for our forces in combat: there were 72 percent more medical evacuations from Afghanistan and Iraq to

Germany for stress fractures, serious sprains and other similar injuries than for combat wounds.¹⁶

Finally, problems with weight and fitness are leading to dismissals among those who serve, and are placing significant burdens on our defense budget:

- Thousands of unfit personnel are let go each year at a great cost to taxpayers. In 2012, for example, the Army dismissed 3,000 soldiers and the Navy and Air Force each dismissed 1,300 service members for being overweight or out of shape. The cost to recruit, screen and train their replacements amounts to nearly half a billion dollars.¹⁷
- The military spends well over \$1 billion a year to treat weight-related health problems such as heart disease and diabetes through its TRICARE health insurance for active duty personnel, reservists, retirees and their families.¹⁸
- Obesity is contributing greatly to rising health care spending within the military, which now accounts for 10 percent of the total defense budget.¹⁹

THE TRANSITION TO HEALTHIER MEALS IN SCHOOLS IS WORKING

Good nutrition starts at home, and parents play a central role. But with children consuming up to half of their daily calories while at school and out of sight of their parents, schools should be a focal point in the nation's effort to combat childhood obesity.

Since the bipartisan enactment of the Healthy, Hunger-Free Kids Act in 2010, the vast majority of schools have implemented updated nutrition standards successfully. USDA is providing kitchen equipment grants and technical assistance to schools that are facing challenges implementing the updated standards. We should continue to support any schools that are having a tougher time, but like our armed forces, we should not stop when the going gets tough.

The new approach of serving healthier food and drinks in schools is working, according to available research and data:

- According to the U.S. Department of Agriculture (USDA), **more than 95 percent of schools nationwide and 100 percent in Kentucky are successfully serving healthier meals.**²⁰
- In a study published in *Childhood Obesity*, 70 percent of elementary school administrators concluded that “students like the new lunches” and that acceptance of



the changes had grown over time.²¹

- A recent poll showed that, across party lines, the majority of parents support the updated nutrition standards for school meals and snacks. **Ninety-seven percent of Kentucky parents also support requiring schools to include a serving of fruits or vegetables with every meal.**²²
- A study by Harvard University researchers found that plate waste (food thrown away) decreased when the updated nutrition standards were put in place in a large, urban school district.²³
- The same Harvard study found that under the new guidelines, children added 23 percent more fruits to their

THE MILITARY'S INNOVATIVE EFFORTS TO ADDRESS OBESITY

Our armed services are working hard to change the nutritional and exercise environment within the military.

In 2013, the military launched a campaign called Operation Live Well to improve the health of our troops and their families. Chief among these efforts is the Healthy Base Initiative at 14 pilot sites across the country, aimed at promoting health among troops and their families by educating them about the dangers of a sedentary lifestyle and poor nutrition and creating environments that support healthy behavior. The initiative will allow the military to see which innovations are working at different bases and identify the ones that could be expanded service-wide. The Department of Defense is currently collecting and evaluating results from the first phase, which will be reported by August 2015.³³

Services have also launched their own initiatives. The Army's “Go for Green” initiative, for example, uses food and beverage labels to point out “high performance food” (marked in green) and “performance limiting food” (marked in red) in meal lines and



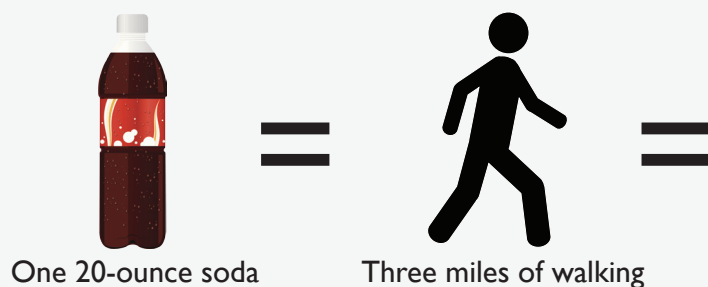
vending machines. It has also changed menus to include more nutrient-dense foods, including whole grains, green vegetables and reduced-fat milk, as well as fewer fried foods and sugary beverages than in the past.³⁴ Meanwhile, the Air Force offers courses to parents living on bases about how to encourage their young children to eat healthier foods and become more active. Another class provides health coaches to retirees who are at risk for obesity-related health problems.³⁵ In response to the consequences of obesity and lack of fitness, the Navy has made accommodations for individuals who are less fit or more prone to injuries by giving every recruit custom-fitted running shoes and using more forgiving materials on their tracks.³⁶

Experts in the military know that this problem did not emerge overnight and will not go away overnight, but they are committed to coming up with long-term solutions that provide real results. However, the military cannot reverse the nation's obesity epidemic on its own.

KNOWLEDGE IS POWER: EDUCATING PARENTS AND CHILDREN

Serving healthier foods and drinks in schools can have a ripple effect; for example, school nutrition directors have reported that parents sometimes request recipes after their children come home asking that they make the meal they had in school.³⁷ But in addition to serving children healthier food in schools, we need to make sure children and their parents have access to

information as well. For example, 51 percent of parents of overweight or obese children think their child's weight is normal or even underweight.³⁸ Also, too many children and adults are unaware that a typical, 20-ounce bottle of soda sold in most public vending machines includes the equivalent of up to 18 teaspoons of sugar.³⁹



44 times around the bases at Louisville Slugger Field

Data source: New York City Health Department
Photo credit: Jason Meredith

- plates, and children ate 16 percent more vegetables.²⁴
- Another study found that, under the new guidelines, students ate nearly 20 percent more of the entrees and 40 percent more of the vegetables they took, effectively decreasing the amount thrown away.²⁵
- Schools received an additional \$200 million in revenue during the first year of implementation of the updated standards due to increased reimbursement rates. USDA has also provided \$36 million in kitchen equipment grants and targeted technical assistance to help struggling schools achieve implementation.²⁶
- Based on USDA projections, it is likely that as children shift from buying snacks for lunch to buying more meals, the additional revenue generated will be higher than the costs of providing healthier options.²⁷
- Schools with modern and adequate food storage and kitchen equipment have adjusted more easily to the updated nutrition standards. Providing funding for schools in need of new kitchen equipment is one effective strategy to improve compliance with the new standards.²⁸
- While school lunch participation declined slightly overall from 2010 to 2013, participation among those

receiving free lunches actually increased. Moreover, declines appear to have been concentrated in relatively few schools, as 84 percent of school administrators reported that the number of students purchasing lunches remained steady or increased following implementation of the updated guidelines. For example, the Los Angeles Unified School District (one of the nation's largest school districts) experienced a 14 percent increase in participation following implementation of the updated standards.²⁹



A local farmer delivering vegetables to a Fort Campbell middle school.

Photo credit: Fort Campbell Courier

EXAMPLES OF SCHOOLS THAT ARE MAKING IT WORK

Kentucky's Fort Campbell Schools is a Department of Defense Education Activity (DoDEA) school district with nine schools and 4,700 students located on the Fort Campbell Army base. Like most DoDEA schools, the Fort Campbell district participates in the National School Lunch Program. To begin implementing the updated standards, the district formed a partnership with registered dietitians at a nearby Army hospital, which helped each school develop an action plan to achieve its nutrition goals. The district made sure that

food service workers received extensive training on the standards and created a competition to reward an "outstanding cafeteria." The food service director also got creative, changing the vegetable selection every day after students reported that they liked the variety. With help from the dietitians, the district also launched a Farm-to-School program to get more

fresh produce into lunches—“the first Department of Defense school system to undertake such an effort.”³⁰

Kentucky’s **Daviess County Public Schools** are demonstrating how to get more students eating healthier school lunches—even their apples. This district has 18 schools and 11,500 students, half of whom receive free or reduced-price lunches. District leaders took some important steps to implement the new standards, such as gradually replacing kitchen equipment (swapping out deep fryers for steamers, for example) and training food service staff to prepare and serve the healthier foods in an appealing way. They also took a creative approach by hiring a professional chef to develop district-wide recipes. In 2013, the chef helped to address new sodium limits by developing tasty no-salt seasonings and reduce plate waste by slicing apples after finding that some students threw away the whole fruit. District leaders hope to have her perform culinary demos for students and “become that icon for the cafeteria.” These changes are working: the number of students eating school lunches rose from 66 percent in 2004 to 73 percent in 2013 and, during the first month of the 2014 school year, the district reported an increase of 475 lunches compared to the same period in 2013.³¹

CONCLUSION

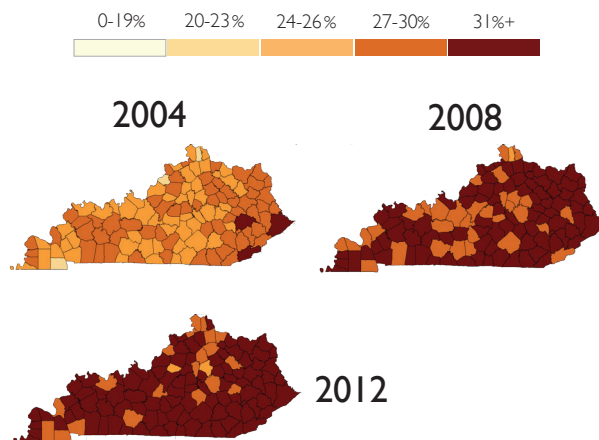
We all want our children to grow up stronger and healthier, not weaker and sicker.

That will require improving the eating and exercise habits that have led to the tripling of childhood obesity rates since 1980, military obesity rates increasing by 61 percent in less than a decade, and countless billions of dollars spent treating preventable illness and disease.

There are signs that recent efforts to provide children with healthier food and beverages at school, more nutrition education, and more exercise opportunities may be beginning to cause this dangerous epidemic to level off among most children and even some encouraging evidence that obesity is beginning to fall among our youngest children. Unfortunately, adult obesity increased in some states in 2013 and remained high overall.³² We need to do more, however, to make the healthy choice the easy and accessible choice for every child in every community.

We must continue building on these signs of progress for the sake of our children’s health, our economic competitiveness and our national security. The more than 500 retired admirals and generals who are members of MISSION: READINESS are standing strong to keep school nutrition standards on track, because when our national security and our children’s health are at stake, retreat is not an option.

PERCENT OF OBESE ADULTS IN KENTUCKY BY COUNTY



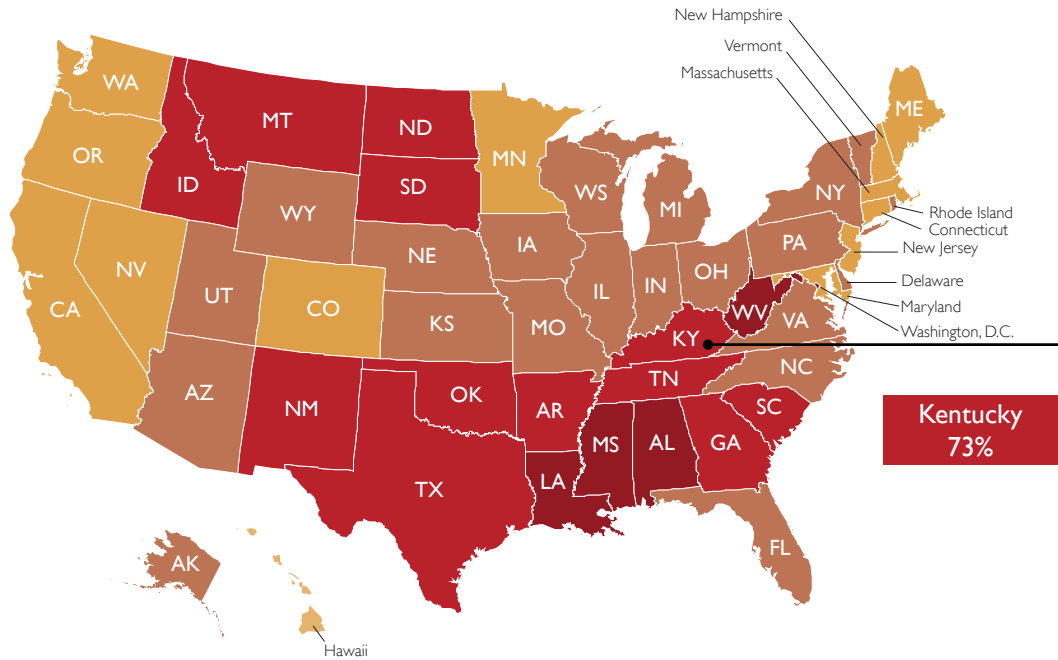
2012 OBESITY RATES BY COUNTY

Statewide	31%	Graves	29	McLean	36
Adair	32	Grayson	36	Meade	36
Allen	35	Green	33	Menifee	33
Anderson	33	Greenup	39	Mercer	32
Ballard	35	Hancock	33	Metcalfe	34
Barren	33	Hardin	31	Monroe	31
Bath	31	Harlan	36	Montgomery	33
Bell	36	Harrison	29	Morgan	35
Boone	29	Hart	35	Muhlenberg	37
Bourbon	34	Henderson	32	Nelson	32
Boyd	37	Henry	31	Nicholas	32
Boyle	31	Hickman	35	Ohio	40
Bracken	30	Hopkins	35	Oldham	30
Breathitt	43	Jackson	41	Owen	31
Breckinridge	37	Jefferson	31	Owsley	37
Bullitt	32	Jessamine	31	Pendleton	29
Butler	36	Johnson	39	Perry	38
Caldwell	33	Kenton	27	Pike	37
Calloway	28	Knott	40	Powell	35
Campbell	32	Knox	37	Pulaski	35
Carlisle	33	Larue	30	Robertson	35
Carroll	38	Laurel	35	Rockcastle	39
Carter	33	Lawrence	42	Rowan	34
Casey	37	Lee	29	Russell	34
Christian	37	Laurel	40	Scott	30
Clark	32	Lawrence	38	Shelby	34
Clay	33	Lee	29	Simpson	32
Clinton	33	Leslie	40	Spencer	27
Crittenden	32	Letcher	38	Taylor	37
Cumberland	34	Lewis	37	Todd	33
Daviess	29	Lincoln	29	Trigg	28
Edmonson	35	Livingston	31	Trimble	34
Elliott	35	Logan	35	Union	33
Estill	31	Lyon	33	Warren	29
Fayette	26	Madison	29	Washington	33
Fleming	35	Magoffin	33	Wayne	35
Floyd	38	Marion	33	Webster	33
Franklin	33	Marshall	33	Whitley	36
Fulton	35	Martin	41	Wolfe	32
Gallatin	31	Mason	34	Woodford	30
Garrard	34	McCracken	32		
Grant	34	McCreary	34		

MILITARY INELIGIBILITY AMONG YOUNG AMERICANS AGES 17-24

Source: Department of Defense, 2014

Three leading preventable causes of not being able to join the military include being overweight, lacking adequate education and having a history of crime or drug use.⁴⁰



RANK	STATE	PERCENT INELIGIBLE
51	Mississippi	78%
50	District of Columbia	78%
49	Louisiana	76%
48	Alabama	75%
47	West Virginia	75%
46	Arkansas	74%
45	South Carolina	74%
44	Tennessee	74%
43	North Dakota	73%
42	Montana	73%
41	South Dakota	73%
40	Kentucky	73%
39	New Mexico	73%
38	Oklahoma	73%
37	Texas	73%
36	Georgia	73%
35	Idaho	73%
34	Rhode Island	72%
33	North Carolina	72%
32	Missouri	72%
31	Indiana	72%
30	Arizona	72%
29	Pennsylvania	72%
28	Utah	72%
27	Ohio	72%

RANK	STATE	PERCENT INELIGIBLE
26	Michigan	71%
25	Florida	71%
24	Vermont	71%
23	Virginia	71%
22	Wisconsin	71%
21	Delaware	71%
20	Nebraska	71%
19	Wyoming	71%
18	New York	71%
17	Iowa	71%
16	Kansas	71%
15	Alaska	71%
14	Illinois	71%
13	Maine	70%
12	Nevada	70%
11	Oregon	70%
10	New Hampshire	70%
9	Maryland	70%
8	California	70%
7	Massachusetts	70%
6	Colorado	70%
5	Minnesota	69%
4	Connecticut	69%
3	Washington	69%
2	New Jersey	69%
1	Hawaii	62%

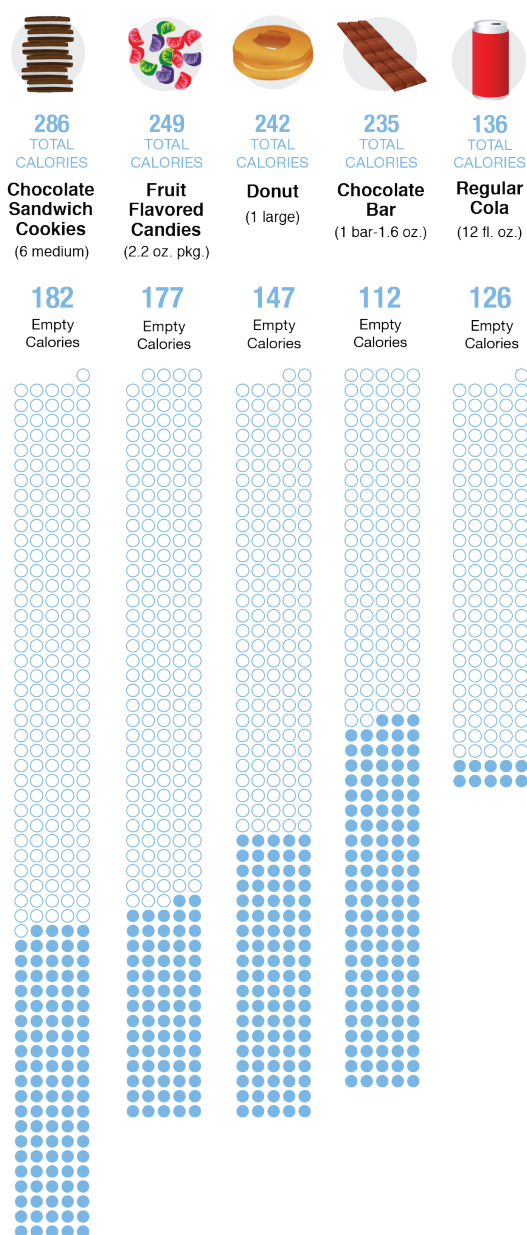


United States Department of Agriculture

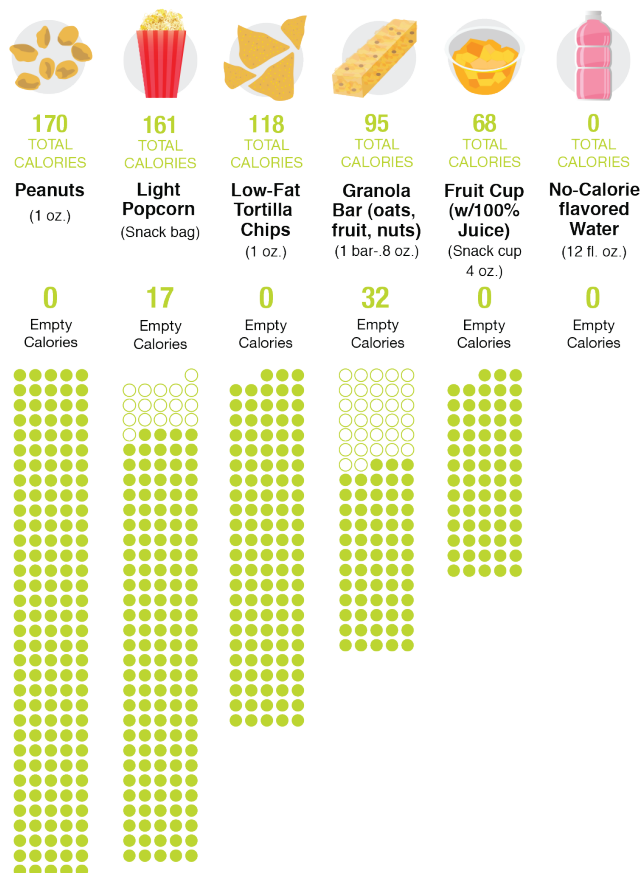
SMART SNACKS IN SCHOOL

The Healthy, Hunger-Free Kids Act of 2010 requires USDA to establish nutrition standards for all foods sold in schools — beyond the federally-supported meals programs. This new rule carefully balances science-based nutrition guidelines with practical and flexible solutions to promote healthier eating on campus. The rule draws on recommendations from the Institute of Medicine, existing voluntary standards already implemented by thousands of schools around the country, and healthy food and beverage offerings already available in the marketplace.

Before the New Standards



After the New Standards



Equals 1 calorie



Shows empty calories*



*Calories from food components such as added sugars and solid fats that provide little nutritional value. Empty calories are part of total calories.

ENDNOTES

1 12.4% in 2011 vs. 7.7% in 2002 according to: Department of Defense (2013, February). 2011 Health Related Behaviors Survey of Active Duty Military Personnel. TRICARE Management Activity, Fairfax, VA. Smith, TJ, Marriot, BP, White, A, Hadden, L. et al (2013, June). Military Personnel Exhibit a Lower Presence of Obesity than the General U.S. Adult Population. Military Nutrition Division, U.S. Army Research Institute of Environmental Medicine. Natick, MA.

2 Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. JAMA, 311(8), 806-814. For the estimate that nearly a third of young Americans are too heavy to qualify, see: 2013 Qualified Military Available (QMA) acquired through personal communication with the Accession Policy and Joint Advertising, Market Research and Studies teams at the Department of Defense (DoD) in July 2014.

3 See endnotes 17 and 18

4 U.S. Congress. (1945). House of Representatives 49th Congress 1st Session, Hearings Before The Committee on Agriculture on H.R. 2673, H.R. 3143 (H.R. 3370 Reported). Bills Relating to the School Lunch Program, March 23-May 24, 1945. Testimony of Major General Lewis B. Hershey.

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10 Centers for Disease Control and Prevention (n.d.) "Nutrition, Physical Activity, and Obesity." Retrieved from <http://www.cdc.gov/winnablebattles/obesity/index.html>

11 Department of Defense (2013, February). 2011 Health Related Behaviors Survey of Active Duty Military Personnel. TRICARE Management Activity, Fairfax, VA.

12 Swedler, D.I., Knapik, J.J., Williams, K.W., Grier, T.L., & Jones, B.H. (n.d.). Risk factors for medical discharge from United States Army basic combat training. Aberdeen Proving Ground, MD: US Army Center for Health Promotion and Preventive Medicine.

13 Anderson, MK, Grier, T, Canham Chervak, M, Bushman, TT & Jones, BH, Army Institute of Public Health. Association of health behaviors and risk factors for injury: A study of military personnel. Poster session presented at: 141st American Public Health Association Annual Meeting and Expo; 2013 Nov 2-6. Boston, MA.

14 Department of Defense (2003, October). 2002 Health Related Behaviors Survey of Active Duty Military Personnel. RTI International. Research Triangle Park, NC; Department of Defense (2013, February). 2011 Health Related Behaviors Survey of Active Duty Military Personnel. TRICARE Management Activity, Fairfax, VA.

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