



FitArlington Healthy Vending Initiative

Arlington County Department of Parks and Recreation
Office of Community Health

Erica M. Krepp, MS, CHES
August 12, 2014

#FitArlington #SmartSnacks

Overview

- USDA Smart Snacks in School Standards
 - Why vending matters (students)
- FitArlington's Healthy Vending Initiative
 - Why vending matters (staff)
- Dangers of energy drinks (using National Soda Summit resources)

Introduction- USDA Video

<https://www.youtube.com/watch?v=TMIJz6RF6C0&feature=youtu.be>

Background

- Healthy Hungry Free Kids Act (HHFKA) of 2010
 - School Meals (Breakfast & Lunch)
 - Competitive Foods (Al la carte, Vending)
- Long overdue!
 - Last updated in 1979 when fewer than 1 in 10 children were overweight or obese and vending machines in schools less prevalent
- Ensure all school foods align with the latest nutrition science

Why important for students?

- Many kids consume half their daily calories in school
- The average child who buys snacks at school eats nearly 300 calories per day from those foods- a significant amount considering that as little as 165 additional calories per day may be responsible for the rise in childhood obesity
- In states with strong snack food laws, children gained less weight over a 3 year period compared to states without strong laws
- Participation in school meals tend to increase when there is less access to unhealthy foods sold elsewhere in the school building

USDA Smart Snacks in Schools*

- Main ingredient must be whole grain, fruit, vegetable, dairy or protein
- <200 calories
- <35% of calories from total fat per package
- <10% calories from saturated fat as served
- No trans fat
- ≤35% of weight from total sugar as served
- ≤200 mg sodium per item as served

What's in your snacks??

*See full document for details. This is a simplified version of the standards.

USDA Smart Snacks in School- Beverages*

- Plain water or plain carbonated water
- Low fat or non-fat milk, and/or nutritionally equivalent milk alternatives (soy, rice), unflavored (<8 oz elementary, <12 oz middle/high)
- 100% fruit/vegetable juice (<8 oz elementary, <12 oz middle/high)
- High schools: Other flavored and/or carbonated beverages ≤ 20 fl oz (labeled to contain ≤ 5 calories per 8 fl oz, or ≤ 10 calories per 20 fl oz).



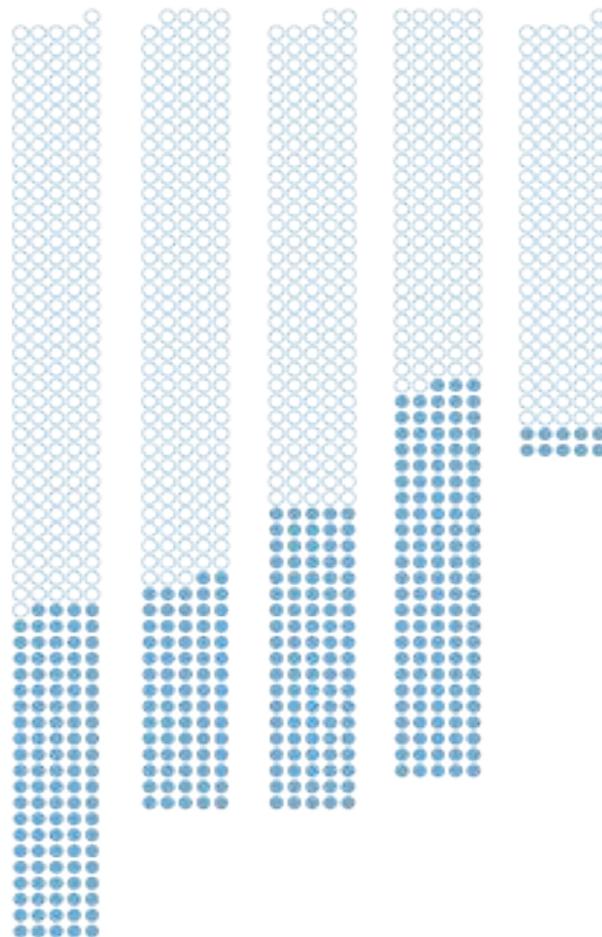
*See full document for details. This is a simplified version of the standards.

Before the New Standards



286 TOTAL CALORIES	249 TOTAL CALORIES	242 TOTAL CALORIES	235 TOTAL CALORIES	136 TOTAL CALORIES
Chocolate Sandwich Cookies (6 medium)	Fruit Flavored Candies (2.2 oz. pkg.)	Donut (1 large)	Chocolate Bar (1 bar-1.6 oz.)	Regular Cola (12 fl. oz.)

182 Empty Calories	177 Empty Calories	147 Empty Calories	112 Empty Calories	126 Empty Calories
------------------------------	------------------------------	------------------------------	------------------------------	------------------------------

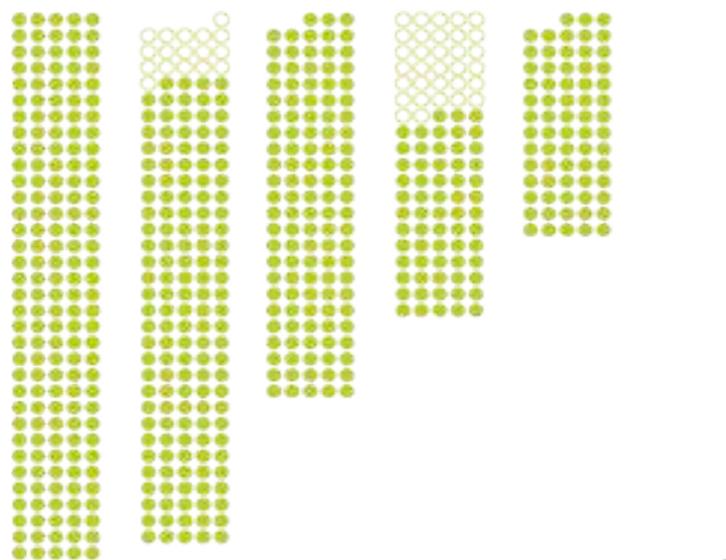


After the New Standards



170 TOTAL CALORIES	161 TOTAL CALORIES	118 TOTAL CALORIES	95 TOTAL CALORIES	68 TOTAL CALORIES	0 TOTAL CALORIES
Peanuts (1 oz.)	Light Popcorn (Snack bag)	Low-Fat Tortilla Chips (1 oz.)	Granola Bar (oats, fruit, nuts) (1 bar-8 oz.)	Fruit Cup (w/100% Juice) (Snack cup 4 oz.)	No-Calorie flavored Water (12 fl. oz.)

0 Empty Calories	17 Empty Calories	0 Empty Calories	32 Empty Calories	0 Empty Calories	0 Empty Calories
----------------------------	-----------------------------	----------------------------	-----------------------------	----------------------------	----------------------------



● Equals 1 calorie ○ Shows empty calories*

USDA
United States Department of Agriculture

**SMART
SNACKS
IN SCHOOL**

Where and when do the USDA standards apply?

- Where: school campus
 - All areas of the property under the jurisdiction of the school that are accessible to students during the school day
- When: school day
 - From the midnight before, to 30 minutes after the end of the official school day
- Joint use facilities
 - Afterschool programs
 - Libraries
 - Community Centers



What is the FitArlington Healthy Vending Initiative?

- To improve the nutritional content of food and drink options in vending machines in Arlington County Department of Parks and Recreation (DPR) sites
- Funding support provided by Virginia Foundation for Healthy Youth Grant (VFHY)
- DPR Healthy Vending Operational Memorandum (OME-29)
 - Community centers (also County employee offices), parks, etc.- 100% healthy
- Expansion to employee sites- 50% healthy with quarterly increases to 100% healthy



FITARLINGTON
Promoting a Culture of Fitness

Nutrition standards for snacks- adults only

- 50% (increased by 25% quarterly until 100%) must meet USDA standards:
 - <200 calories, <35% of calories from total fat per package, etc.
- Other conditions:
 - No more than 1 slot may have a candy bar that does not meet the USDA Standards
 - No more than 1 slot may have regular potato chips that does not meet the USDA Standards
 - No more than 2 slots may have cookies that does not meet the USDA Standards
 - Require at least 3 slots of dried whole fruits or vegetables
 - Require at least 2 slots of nuts and/or seeds with no added nutritive sweeteners or fats
 - Preference will be given to products with ≥ 2 grams of fiber per serving
 - Recommend not stocking products that contain artificial flavors, artificial colors, artificial sweeteners, or other non-nutritive sweeteners

Nutrition standards for beverages- adults only



- Plain water or plain carbonated water
- Low fat or non-fat milk
- 100% fruit/vegetable juice
- Diet teas, sodas, and other low calorie beverages (less than 40 calories per 8 fl oz)
- Other conditions:
 - Require at least 2 slots/buttons water
 - Require a maximum of 2 slots/buttons to stock high calorie beverages (more than 40 calories per 8 fl oz), such as 100% juice
 - Require water be placed at eye level, or in the highest selling position
 - High calorie beverages should be placed farthest from eye level, or in the lowest selling position
 - Require calorie information is posted for each beverage, as packaged

Nutrition standards for hot beverages- adults only

- Regular coffee
- Decaffeinated coffee
- Unsweetened hot tea
- Hot cocoa <150 cal and <20 g sugar per 12 fl oz.



- In addition to meeting the above standards, the following apply:
 - Cups and portions served are no larger than 12 fl oz.
 - Calorie information posted for each beverage
 - Signage shouldn't encourage adding sugar or cream

Why is healthy vending in the workplace important?

- The need
 - Historically only offered snacks that have high calories, fat, etc. and beverages with lots of sugar
 - Ignored for decades: Long term contracts and are rarely questioned about contents, most employees don't know how they got there or who manages them
- The opportunity
 - Policy, Systems and Environmental (PSE) change
 - High usage due to convenience
 - Access to healthy foods
 - Contract control

Why is healthy vending in the workplace important?

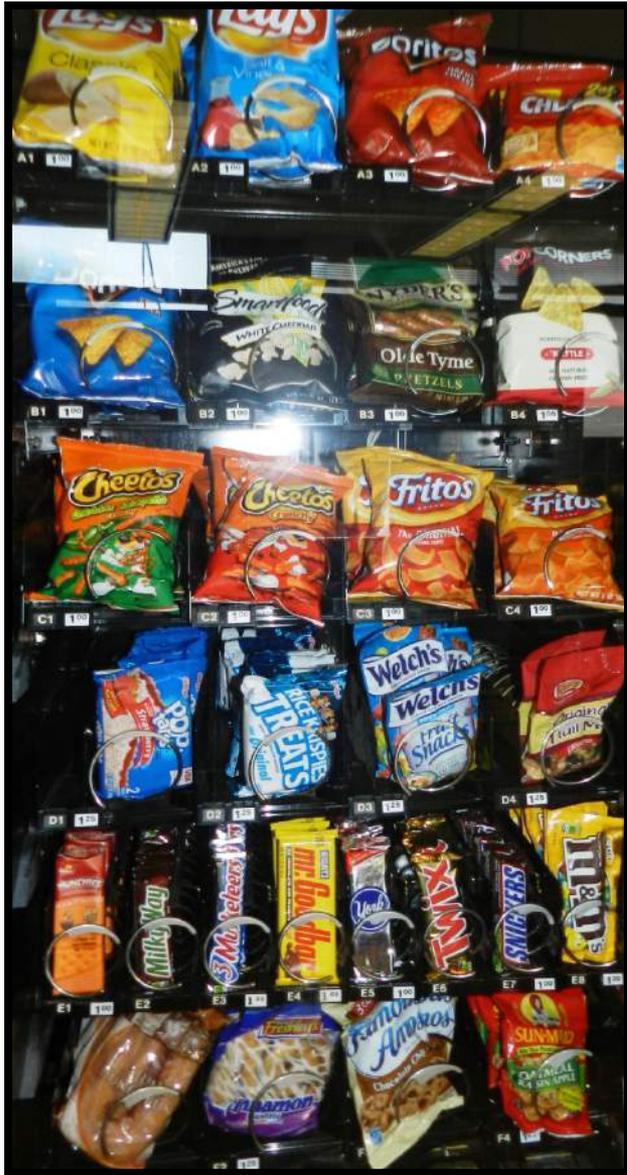


SOURCES:

(1) (3) Snack Food Association Study, Food Institute Report, 2010. <http://www.foodinstitute.com/comp31510.pdf> (2) Missouri Dept. of Human and Senior Services (4) Making Change: A Guide to Healthier Vending for Municipalities, Change Lab Solutions. http://changelabsolutions.org/sites/default/files/MakingChange_HealthierVending_Guide_FINAL_20120806.pdf (5) Center for Science in the Public Interest http://cspinet.org/new/pdf/revenue_fact_sheet.pdf



Before and after employee sites



VS.



Marketing, education and communication

better portion

Did you know that for many items, the recommended daily intake is only 1 ounce or less. Aim for **one ounce** or less.

Take control of how much you eat by reading the **nutrition facts** label on these **single** serving sizes.

- 100 Calorie Oreos Thins
- Pirates Booty (1.0 oz)
- RF Doritos Cool Ranch
- RF Doritos Nacho Chee
- Wheat Thins (1.0 oz)



better snacking

Did you know a candy bar can contain the **same amount of calories** as **four times the sugar**.

Satisfy your hunger with **whole grains, nuts, seeds** for a meal.

- Bare Fru
- Bare Fru
- David P
- Kars Nut
- Kellogg I
- Lances I
- Nature V



better crunch

Did you know most Americans eat **more than twice** the recommended amount of **salt** per day, with about **processed foods**.

Help lower your blood pressure by switching to these **lower** sodium options.

- Baked I
- Baked
- Kettle E
- Popchij
- RF Dor
- RF Dor
- Smartf
- Cinnam
- Sunchij

better hydration

Did you know drinking one can of **regular soda** a day can lead to an extra **14 pounds** a year?

Quench your thirst and **cut the calories** with a drink of **water** or try these other **no calorie** beverage options.



zero calories & unsweetened

- Water
- Seltzer
- Unsweetened Iced Tea

zero calories

- Diet Coke
- Diet Dr. Pepper
- Diet Iced Tea
- Diet Mountain Dew
- Diet Pepsi
- Diet Sprite
- Sprite Zero





Compliance monitoring

- Learn what belongs in the machines
- Create a coalition of employees interested in health
- Divide and conquer!
Visiting every machine regularly



Current status



- Community
- Employee
- APS

Smart Snacks Resources

- [Center for Science in the Public Interest \(CSPI\)](#)
- [Alliance for a Healthier Generation Smart Snacks Product Calculator](#)
- [John C. Stalker Institute of Food and Nutrition](#)
- [USDA Smart Snacks in Schools](#)

The Risks of Energy Drinks for Children



ENERGY DRINK

Marketing to Kids

Energy Drink Companies Say They Don't Market To Children



but that's just an **illusion**.
They may not market to children using traditional media like TV or radio...



but they find other **creative** ways to reach **kids**.



Like...



Promotional Events



Tents at a Waterpark



YouTube

SOCIAL MEDIA

By the Numbers

- The American Academy of Pediatrics says no one under 18 should consume energy drinks.

Yet, energy drinks are heavily marketed through social media where kids spend a lot of their time.



68

tweets
per day



114%

increase of
Facebook likes
since 2011

520

YouTube
videos

539%

increase in
Twitter
followers
since 2011



437

Facebook
posts
per year



331%

increase in
Youtube
videos

904%

increase in
Twitter
followers
since 2011

204%

increase of
Facebook likes
since 2011

Energy Drinks Directly Marketed to Kids

Screenshot of 6-Year-Old's "Monster Army Reserve" Profile



And Student Athletes

Monster Energy Players of the Game



WHY KIDS SHOULDN'T BE DRINKING THEM



20 ounces

68 grams of sugar



17 tsp of sugar

275 calories



about one Snickers bar

200 milligrams of caffeine



about six cans of soda



YALE RUDD CENTER
FOR FOOD POLICY & OBESITY

Learn the facts:

YaleRuddCenter.org/EnergyDrinks

Created by: Adam Chiara

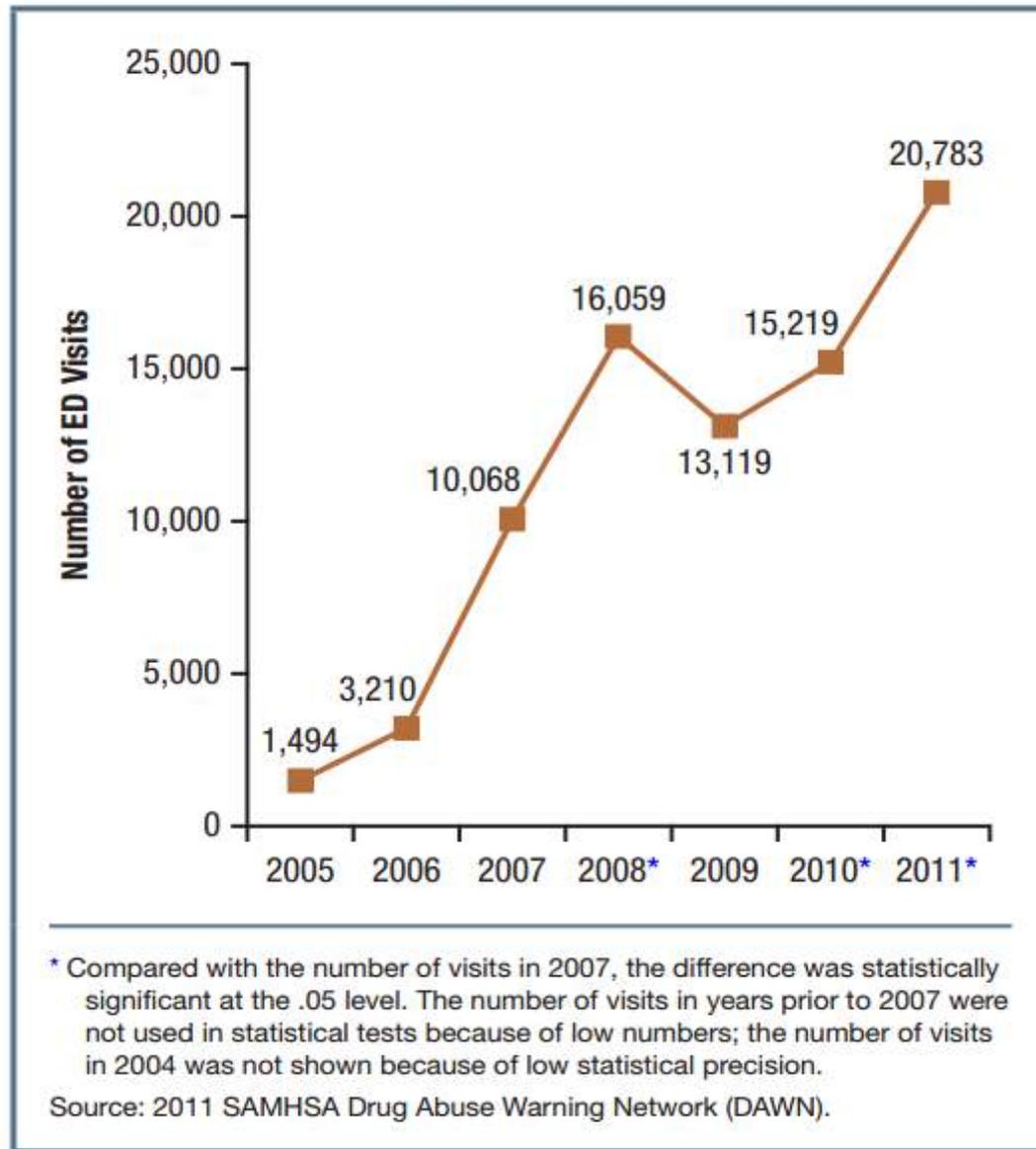
Dangers to Children



Children are generally smaller and frequently are not used to caffeine. The DSM-5 states caffeine intoxication can occur “with low doses (e.g., 200 mg) in vulnerable individuals such as children, the elderly, or individuals who have not been exposed to caffeine previously.”

Of the 5,448 U.S. caffeine overdoses reported in 2007, **46% occurred in those younger than 19 years.**

Figure 1. Energy Drink-Related Emergency Department (ED) Visits, by Year: 2005 to 2011



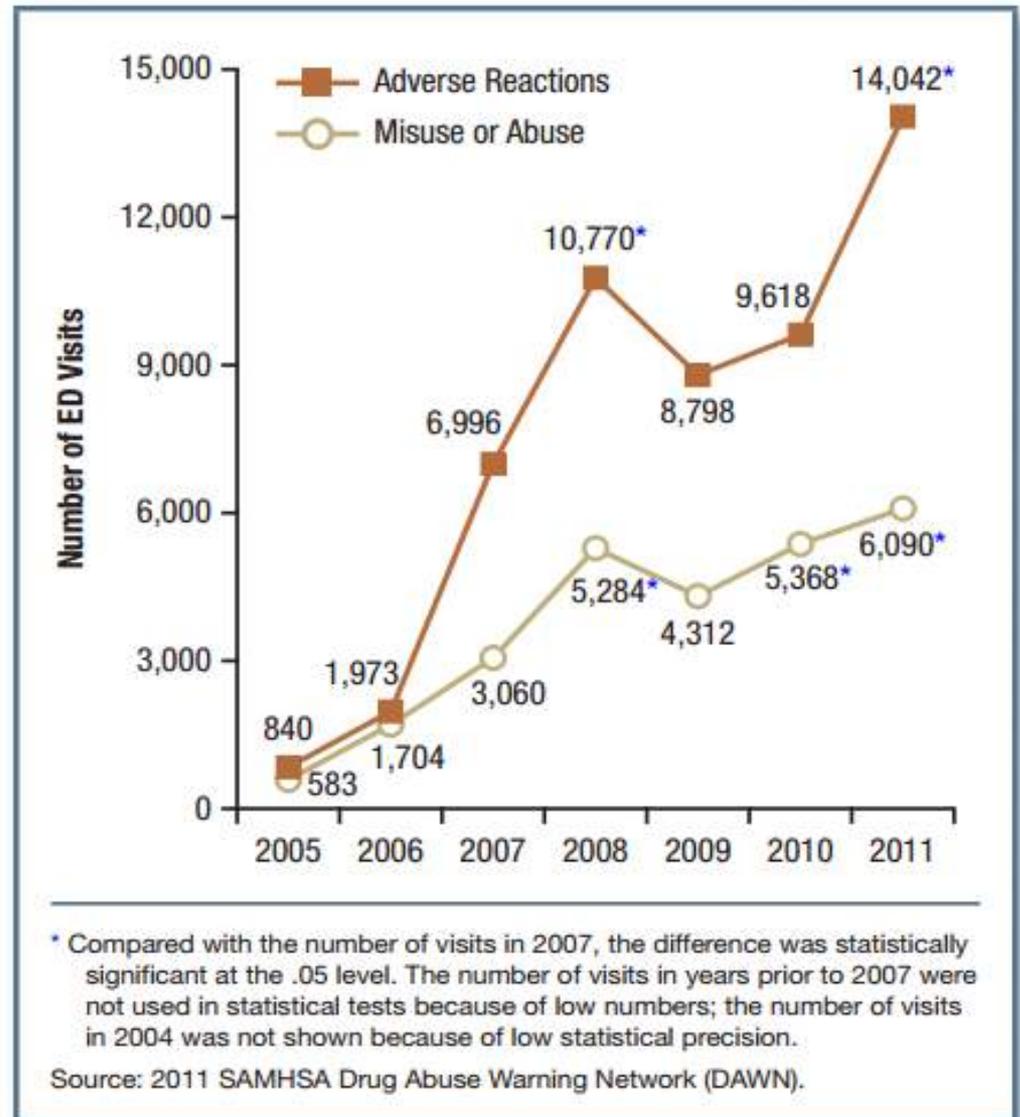
ER Visits on the Rise

Source:

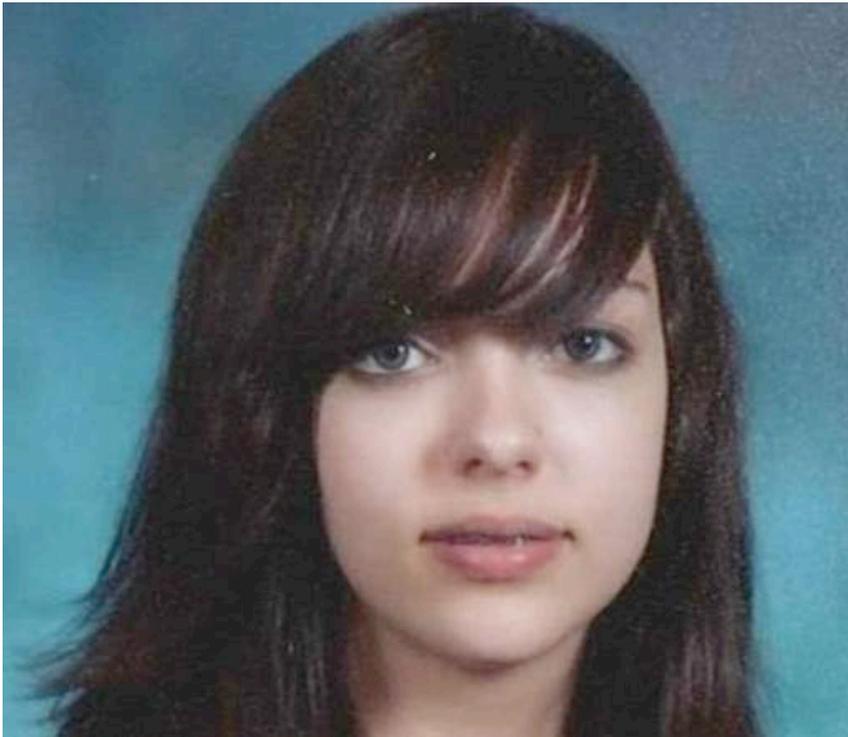
THE DAWN REPORT: Update on Emergency Department Visits Involving Energy Drinks: A Continuing Public Health Concern, the Substance Abuse and Mental Health Services Administration, January 2013

Other
Substance
Abuse Is a
Factor in
Less than
Half of
ER Incidents

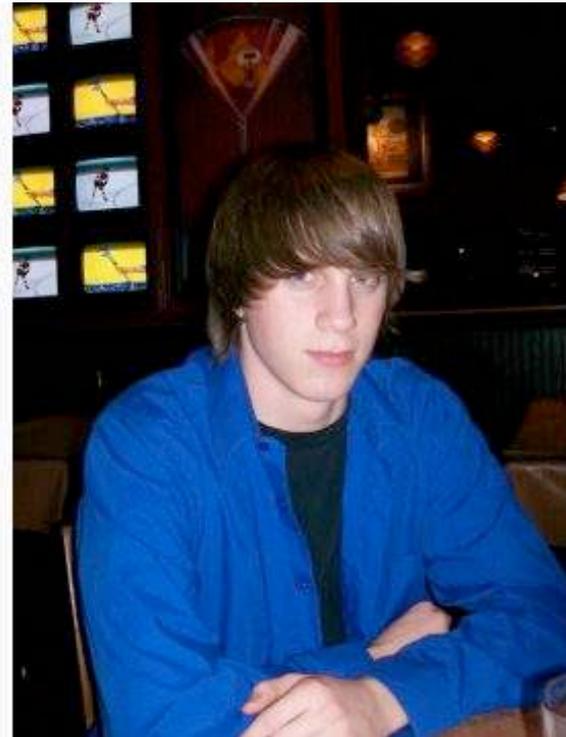
Figure 2. Reason for Energy Drink-Related Emergency Department (ED) Visits, by Year: 2005 to 2011



32 Deaths in U.S. and Canada Since 2009



Anais Fournier, 14, died after drinking Monster energy drinks. She had a cardiac arrhythmia.



Brian Shepherd, 15, died after drinking a Red Bull energy drink on Jan. 6, 2008.

EDs Not Regulated like Soda



- The only food additive regulation approving the use of caffeine in food or beverages is the regulation adopted for colas in the 1950s.
- Under that regulation, caffeine is approved for use in "cola-type beverages" in concentrations no greater than 200 parts per million (ppm), or 71 mgs per 12 ounces.
- While a typical 12-ounce can of cola contains approximately 35-50 mgs of caffeine, a 16-ounce can of Monster Energy Drink contains 160 mgs and a 24-ounce can contains 240 mgs of caffeine.

No Redeeming Qualities: High in Caffeine, Sugar and Sodium

Table 1: Caffeine, calorie, sugar, and sodium content of common sugar-sweetened energy drinks^a

<i>Product^b</i>	<i>Additional varieties^c</i>	<i>Manufacturer</i>	<i>ABA member company</i>	<i>Can size (oz.)</i>	<i>Caffeine per can (mg)</i>	<i>Calories per can (kcal)</i>	<i>Sugar per can (g)</i>	<i>Sodium per can (mg)</i>
Amp Energy	4	PepsiCo	X	16	142	220	58	140
AZ Energy	3	Arizona	—	15	188	188	49	20
Full Throttle (Red Berry)	2	Coca-Cola	X	16	200	230	58	160
Monster Energy	24	Hansen Beverage Company	—	16	160	200	54	180
Monster Energy	24	Hansen Beverage Company	—	24	240	300	81	270
Monster Energy	24	Hansen Beverage Company	—	32	320	400	108	360
NOS	4	Coca-Cola	X	16	260	210	54	410
Red Bull	0	Red Bull	X	8.4	80	110	27	99
Red Bull	0	Red Bull	X	12	114	160	39	142
Red Bull	0	Red Bull	X	16	154	220	54	189
Red Bull	0	Red Bull	X	20	192	275	68	237
Rockstar	11	Rockstar	—	8	80	140	31	40
Rockstar	11	Rockstar	—	16	160	280	62	80
Rockstar	11	Rockstar	—	24	240	420	93	120
Venom Energy (Black Mamba)	3	Dr. Pepper Snapple	X	16.9	170	250	57	320

^aNutrition information as of September 2012 for each available can size for nationally advertised energy drink brands identified in the 2011 Sugary Drink FACTS report from the Rudd Center for Food Policy & Obesity.

^bInformation given for original variety of drink brand. For those brands that do not have an original variety, the flavor is specified.

^cNumber includes additional sugar-sweetened unique flavor varieties within each listed brand, not including multiple can sizes.

Energy drinks: An emerging public health hazard for youth, Jennifer Pomeranz, Christina Munsell and Jennifer Harris, Rudd Center for Food Policy & Obesity, Yale University, Journal of Public Health Policy, 14 March 2013

What's the Cause of Health Harms?

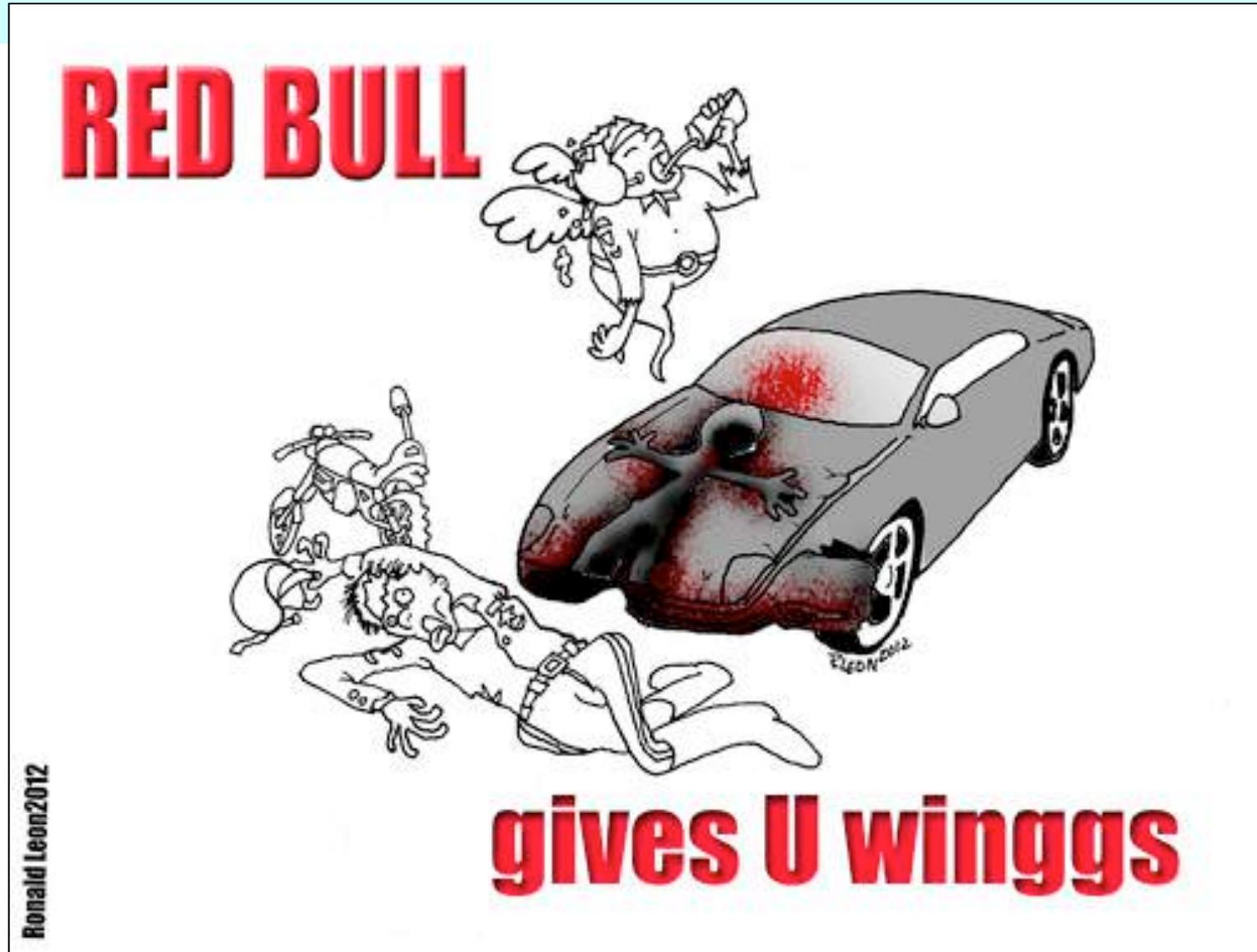
- Doctors note that “[i]n overdose, caffeine toxicity can mimic amphetamine poisoning and lead to seizures, psychosis, cardiac arrhythmias and, potentially but rarely, death.”
- We lack information on cumulative effects of additives like guarana, which contains caffeine, and taurine, which has multiple interactions with the heart and cardiovascular system.
- The rate of consumption is also faster than coffee.

Gunja, Naren, and Brown, JA, “Energy drinks: health risks and toxicity,” 196 *Med J Aust* 2012 (47).

Caffeine, Caffeine Everywhere

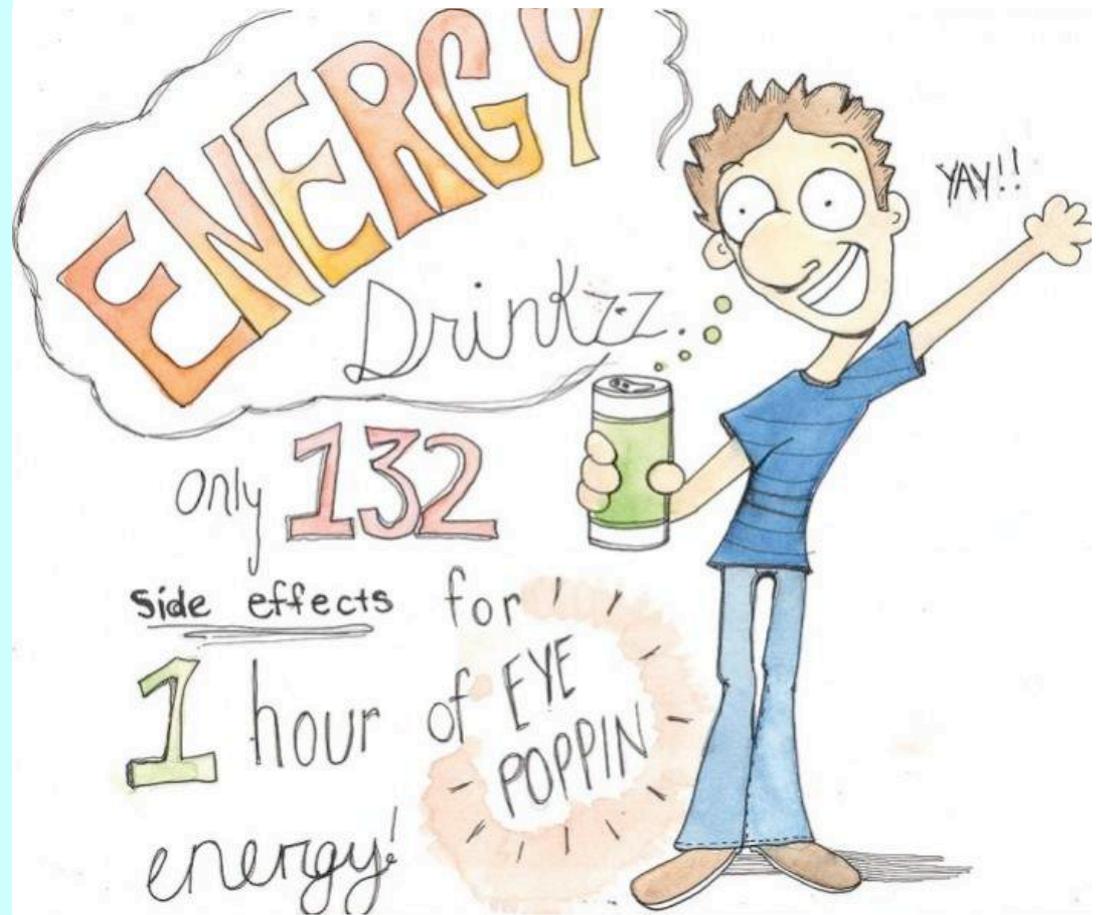


What Can We Do?



How You Can Help

- Share your new knowledge with everyone you know... especially students!
- Lead by example!



Energy Drink Resources

- [Center for Science in the Public Interest \(CSPI\)](#)
- [Rudd Center for Food Policy](#)
- [National Soda Summit](#)



Call to action

- Selling unhealthy foods in schools undermines nutrition education and sends children the message that good nutrition is unimportant. It also undermines parents' efforts to help their children eat healthfully.
- Parents shouldn't have to worry how their children will spend their lunch money. All foods sold in schools should be healthful.
- The more employers that use healthy vending policies, the greater demand it will place on the marketplace to manufacture healthy snacks and beverages, provide more variety, create competition to lower prices, thus making policies easier to implement
- We challenge you to join the movement!

References

- Gleason P, Suitor C. Food for Thought: Children's Diets in the 1990s. Princeton, NJ: Mathematica Policy Research, Inc., 2001. Briefel RR, Wilson A, Gleason PM. "Consumption of low-nutrient, energy-dense foods and beverages at school, home, and other locations among school lunch participants and nonparticipants." *J Am Diet Assoc* 2009;109:Suppl-90.
- Fox MK, Gordon A, Nogales R, and Wilson A. Availability and consumption of competitive foods in US public schools." *J Am Diet Assoc* 2009;109:S57-S66.
- Taber DR, Chriqui JF, Perna FM, Powell LM, Chaloupka FJ. "Weight Status among adolescents in states that govern competitive food nutrition content." *Pediatrics* 2012;130:437-444.
- www.pewtrusts.org/en/research-and-analysis/reports/0001/01/01/health-impact-assessment-national-nutrition-standards-for-snack-and-a-la-carte-foods-and-beverages-sold-in-schools
- Gunja, Naren, and Brown, JA, "Energy drinks: health risks and toxicity," 196 *Med J Aust* 2012 (47).

Questions? Comments?



FITARLINGTON
Promoting a Culture of Fitness

Erica M. Krepp, MS, CHES
Office of Community Health
Department of Parks and Recreation
3308 S. Stafford Street
Arlington, VA 22206

ekrepp@arlingtonva.us

703.228.6589

For more information, please visit the FitArlington
Healthy Vending Initiative website at

[http://www.arlingtonva.us/portals/topics/
HealthyVending.aspx](http://www.arlingtonva.us/portals/topics/HealthyVending.aspx)