

## **DISPOSABLE WATER BOTTLES**

### **Facts**

7 million barrels of oil (294 million gallons) are used to produce the disposable bottles Americans go through in one year. (Source: Bottled Water and Energy: "Getting to 17 Million Barrels," Pacific Institute, December 2007).

In the US 50 billion disposable water bottles are consumed per year. 137 thousand per day. 1585 per second. ("A Fountain On Every Corner", *New York Times*. Find A Fountain, May 23, 2008)

There are 307,006,550 people in the US, and the US uses 50,000,000,000 plastic water bottles annually. This equates to the average American using 162.86 bottles annually, or 3.13 bottles weekly, or 0.45 bottles daily. ("A Fountain On Every Corner", *New York Times*. Find A Fountain, May 23, 2008)

### **Measurements and images**

We measured one bottle of water to be 8 inches tall and 2.5 inches wide. In a square space, this takes up 50 cubic inches. A cubic foot has 1728 cubic inches, leaving us with 34.56 (round to 35) bottles per cubic foot. With this, we find that 50 billion bottles take up about 1,450,000,000 cubic feet.

**School bus** – 1706 cubic feet. So,  $1,450,000,000/1706 = 849,941.38$   
>>>> The bottles used in 2010 could fill 849,941.38 school buses, 1.8 times the 475,000 school buses used in the US.  
("School Bus Facts". National Association for Pupil Transportation. July 10, 2009.)

## **DISPOSABLE COFFEE CUPS**

### **Facts**

Unless we change our habits, 23 billion paper coffee cups will be thrown out in 2010. (Source: <http://www.sustainabilityissexy.com/facts.html> Aug 09)

$23 \text{ billion} / 365 = 63 \text{ Million a day}$

In 2010 we will use 23 billion cups, meaning 141.97 coffee cups annually consumed per coffee drinker. That is equal to 2.73 cups used each week,

or 0.39 cups daily. Or, you could say the average coffee drinker uses 1 coffee cup about every 2-and-a-half days. Source: National Coffee Association <http://www.coffeeresearch.org/market/usa.htm> and [http://www.ehow.com/about\\_4572236\\_how-many-americans-drink-coffee.html](http://www.ehow.com/about_4572236_how-many-americans-drink-coffee.html)

## Measurements and Images

If the height of a medium coffee cup is 5.5 inches, and 3 inches wide at the mouth, then one cup takes up 49.5 cubic inches in a square space, and we can fit 34.9 (round to 35) cups in a cubic foot. So, 23 billion / 35 = 657,142,857 cubic feet

### Houses – A 2000-square foot house

16,000 cubic feet. So  $657,142,857/16,000 = 41,071.43$  >>>> Cups would fill 41,071 houses

## DISPOSABLE FOOD CONTAINERS

### Facts

Packing a lunch can help you save \$2,250 a year. (Source: Back, David. Go Green, Live Rich.

An increase or decrease in 3500 calories is equal to approximately one pound of body weight.

<http://www.mayoclinic.com/health/calories/WT00011>

Average calories saved from typical packed lunch compared with typical eat out lunches: 200 calories (*for supporting materials, see below*)

#### **Eat out** (average taken from typical eat out lunch choices\*):

Chopped Chicken Cobb Salad w/reduced fat vinaigrette: 630

Strawberry Granola Parfait w/plain bagel: 700

6" Spicy Italian sandwich w/ tomato, provolone, mustard and mayo 680

#### **Average Eat Out Total: 670**

#### **Packed** (average taken from typical eat out lunch choices\*):

PBJ on Whole Grain: 410

Baby Carrots: 30

Banana: 72

*Total: 512*

Chicken Alfredo w/ broccoli: 300

Baked Potato Chips: 110

*Total: 410*

Tuna Salad (1-cup): 383

Celery Sticks: 2  
Fat Free Yogurt: 100  
Total: 485

**Average Packed Lunch Total: 470**

**Average Difference Between Packed & Eat: 200 calories**

### **Measurements & Illustrations:**

3500 [calories equal to one pound of weight loss] / 200 calories saved per day= 17.5 days to lose 1 pound.

260 [work days per year] / 15 saved lbs a year = 1 lbs saved every 17 work days or approximately every three weeks

On average, there are 260 work days in a year, thus 260 lunches. So in a year, someone could lose 15 pounds by simply packing a lunch [260/17.5=14.86].

### **MONEY**

#### **Facts**

Packing a lunch can help you save \$2,250 a year. (Source: Back, David. Go Green, Live Rich.)

A \$1 bottle of water (20oz) is \$0.05/ounce, which is \$6.40/gallon. (Compare that to gasoline.)

The average cost of tap water in the U.S. is \$1.50 per 1000 gallons. That's \$0.0015/gallon. >>>> Bottled water costs more than twice as much as gasoline, and 4266 times more than tap water. ( Fairfax County Water Authority: [http://www.fcwa.org/Story\\_of\\_water/html/costs.htm](http://www.fcwa.org/Story_of_water/html/costs.htm))

### **Measurements & Illustrations**

If you drink one \$3 coffee drink per day, you're saving \$1,095 per year.

If you buy spend \$1 on a bottle of water per day, you're saving \$365 per year.

If you spend \$7 on lunch per work day (260/year), you're saving \$1300 (assume that you're still packing \$2 of store bought food)

## **\*SUPPORTING MATERIALS**

### **Fast Food/Deli/Takeout Meal Calories:**

#### **Noodles and Co.**

Pasta Fresca (Med): 780  
Pasta Fresca (Sm.): 420  
Mediterranean Salad w/ Chicken (Reg): 440  
*Average Meal: 546.66*

#### **Panera Bread**

Chopped Chicken Cobb Salad: 500  
W/ Red. Fat Vinaigrette: 630  
Med. Veggie Sandwich: 610  
French Onion Soup and Everything Bagel: 540  
Everything Bagel W/ Reduced Fat Cream cheese and Apple: 510  
Strawberry Granola Parfait w/ plain bagel: 700  
*Average: 581.67*

#### **Wendy's**

Apple Pecan Chicken Salad: 540  
Small Chili w/ Sour cream and chives potato: 535  
Crispy Chicken Sandwich w/ ceaser side salad: 600  
*Average: 558.33*

#### **Chipotle:**

Chicken Salad (Romaine lettuce, beans, chicken) w/ corn salsa: 400  
Chicken Salad (Romaine lettuce, beans, chicken) w/ vinaigrette: 580  
Barbacoa burrito(Shredded beef, beans, rice, tomato salsa, lettuce, sour cream, cheese): 955  
*Average: 645*

#### **Subway**

6" Turkey Breast w/tomatoes, lettuce, and fat free honey mustard and packet of raisins: 435  
6" Spicy Italian w/ tomato, provolone, mustard and mayo 680  
Cheese and Broccoli Soup, Baked Lay's and cookie: 500  
*Average: 538.33*

### **Packed Lunch Calories ([www.calorieking.com](http://www.calorieking.com)):**

2 Slice of 12" pepperoni pizza (Domino's): 420  
Wheat thins: 130  
*Total: 550*

PBJ on Whole Grain: 410  
Baby Carrots: 30  
Banana: 72  
*Total: 512*

Chicken Alfredo w/ broccoli: 300  
Baked Potato Chips: 110  
Sparkling Green Tea: 0  
*Total: 410*

1-cup 5-cheese tortellini (Safeway): 250  
Gatorade: 50  
Grapes: 34  
*Total: 334*

Tuna Salad (1-cup): 383  
Celery Sticks: 2  
Yoplait Fat Free Yogurt: 100  
*Total: 485*