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Food Waste

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A top-down view of a hand holding a bunch of carrot peels over a blue-lined bag filled with food waste. The waste includes a whole avocado, corn cobs, carrot peels, and other vegetable scraps. A bright green square is in the top right corner.

Food Waste

BY DAMON COX

The Numbers of Food Waste

- ▶ Per capita food waste has increased 50% since 1974
- ▶ 1.6 billion tons of food wasted each year
- ▶ \$1.2 trillion worth of food is either lost or wasted every year
- ▶ North America has 200% of the food it needs
- ▶ 40% of all food produced each year is not eaten
- ▶ 870 million people worldwide are malnourished





Who is Wasting the Food?

- ▶ A single person household wastes more food per person per week than larger households
- ▶ Consumers aged 16-24 years waste more than twice as much food as consumers over the age of 65
- ▶ Reasons why younger consumers waste more:
 - ▶ New freedom (new driver, going to college, no longer at home with parents)
 - ▶ Only need to think of themselves
 - ▶ Lack of budget
 - ▶ Lack of awareness

Problems of Food Waste

- ▶ Wasted water, resources, and labor hours
 - ▶ It takes 27,154 gallons of water to irrigate one acre of crops and a cow drinks 3 to 30 gallons of water a day
 - ▶ 40% of all food produced is wasted
 - ▶ Putting water into food that is either not making the stores or thrown away
 - ▶ Resources such as land and machines cost money to operate
 - ▶ Money, machines and land could be put to better use
 - ▶ Farm hours are long and wasted hours could be spent doing task that need more attention
- ▶ People living in hunger
 - ▶ Grocery stores are scared to donate due to a fear of being sued
 - ▶ "Bill Emerson Good Samaritan Food Donation Act" protects them from being sued
 - ▶ A lot of food thrown out can be donated



Problems of Food Waste

- ▶ Unhealthy food consumption
 - ▶ 30% of the worldwide population as of 2017 is obese
 - ▶ United States has an obesity rate of 36.2%
 - ▶ Price is a huge factor
 - ▶ Cheeseburger and fries for \$2.50 vs salad for \$8 to \$15
 - ▶ Consumers on a healthy diet will spent \$550 more per year than a consumers on a non-healthy diet
- ▶ Environmental Problems
 - ▶ Landfills
 - ▶ Food waste and food packaging make up 45% of all landfills
 - ▶ Cause methane gas which leads to green house affect
 - ▶ Causes ice caps to melt
 - ▶ Trash in the ocean
 - ▶ 100 million die every year from trash in the ocean (food packaging, plastic)



Causes of Food Waste

- ▶ Packaging
 - ▶ Can be too hard to remove food from packaging
 - ▶ 25% of all residential food waste is because of the packaging size or design
 - ▶ Misleading expiration dates
- ▶ Portion sizes
 - ▶ Between 1983 and 2003:
 - ▶ Hamburgers expanded 23%, a plate of Mexican food grow 27%, and snacks are 60% larger
 - ▶ A dish that use to say, “serves eight” now only says “serves four”
 - ▶ On average, restaurants are serving portion sizes two and half times larger than standard sizes



Causes of Food Waste

- ▶ Products
 - ▶ Too many choices
 - ▶ Ten brands that make the same flavor
 - ▶ Appearance of the product
 - ▶ High standards of grocery store keeps food that is fine to eat out of the store
 - ▶ Overstocking
 - ▶ If a food item is by itself, consumers think there is something wrong with it
 - ▶ Need more items around it to make consumers want it
 - ▶ Promotions
 - ▶ Consumer gets a “two for one deal” on a food item
 - ▶ Does not end up eating it the second item, only bought it because of the deal
- ▶ Lack of awareness
 - ▶ Consumers do not connect actions to consequences
 - ▶ Younger consumers do not have as much knowledge



Recommendations

- ▶ Generating Awareness
 - ▶ Get communities to start a donation drive
 - ▶ Teach consumers at a young age
 - ▶ Encourage consumers to plan better on what they will eat for the week
- ▶ Get More Grocery Stores Donating
 - ▶ Make grocery stores aware of “Bill Emerson Good Samaritan Food Donation Act”
 - ▶ Add incentive for grocery stores
 - ▶ Set up programs for grocery stores
- ▶ Better Food Packaging
 - ▶ Designs that allow food to be exacted easier
 - ▶ More accurate expiration dates



Work Cited

- ▶ ABC News, ABC News Network, abcnews.go.com/WN/food-portion-sizes-grown-lot/story?id=129685.
- ▶ Baldwin, Grant, director. Just Eat It. 2015, <https://www.youtube.com/watch?v=BR1Y-iefjU>.
- ▶ Block, Lauren G., et al. "The Squander Sequence: Understanding Food Waste at Each Stage of the Consumer Decision-Making Process." Journal of Public Policy & Marketing, vol. 35, no. 2, 2016, pp. 292–304., doi:10.1509/jppm.15.132.
- ▶ Boyle, Samantha. "Lack of Awareness Leads to Abundance in Food Waste among Young Adults." The Daily Illini, 3 Sept. 2018, dailyillini.com/news/2018/09/04/lack-of-awareness-leads-to-abundance-in-food-waste-among-young-adults/.
- ▶ "Food Waste: Last Week Tonight with John Oliver (HBO)." Youtube, 19 July 2015, <https://www.youtube.com/watch?v=i8xwLWb0ILY>.
- ▶ Henn, Corrine. "These 5 Marine Animals Are Dying Because of Our Plastic Trash ... Here's How We Can Help." One Green Planet, One Green Planet, 22 Apr. 2019, www.onegreenplanet.org/animalsandnature/marine-animals-are-dying-because-of-our-plastic-trash/.
- ▶ "How Many Gallons of Water Does It Take to Cover 1 Acre of Land with 1 Inch of Water?" Big Sprinkler, 27 Mar. 2018, www.bigsprinkler.com/faq/how-many-gallons-water-does-it-take-cover-1-acre-land-1-inch-water.
- ▶ "How Much Water Do Cows Drink." UNL Beef, beef.unl.edu/amountwatercowsdrink.
- ▶ LaMagna, Maria. "This Is How Much Waste Americans Create - Just by Getting Takeout Food." MarketWatch, MarketWatch, 17 Jan. 2018, www.marketwatch.com/story/this-is-how-much-waste-americans-create-just-by-getting-takeout-food-2018-01-16.
- ▶ Marinelli, Janet, et al. "Food Waste Set to Increase to 2.1 Billion Tons Annually by 2030." Yale E360, 24 Aug. 2018, e360.yale.edu/digest/food-waste-set-to-increase-to-2-1-billion-tons-annually-by-2030.
- ▶ Most Obese Countries 2020, worldpopulationreview.com/countries/most-obese-countries/.
- ▶ Person. "9 Tips to Measure and Control Portion Sizes." Healthline, Healthline Media, 19 Nov. 2018, www.healthline.com/nutrition/portion-control#section4.
- ▶ Polis, Carey. "This Important Eating Habit Will Cost You More Than \$500 Extra Each Year." HuffPost, HuffPost, 23 Jan. 2014, www.huffpost.com/entry/eating-healthy-vs-unhealthy_n_4383633.
- ▶ Sifferlin, Alexandra. "Obesity: 30% of People In the World Are Obese or Overweight." Time, Time, 12 June 2017, time.com/4813075/obesity-overweight-weight-loss/.
- ▶ Suggitt, Jackie. "The Link between Food Waste and Packaging." GreenBiz, GreenBiz Group Inc., 23 Nov. 2018, www.greenbiz.com/article/link-between-food-waste-and-packaging.