

# “Watching” What We Eat: What television is modeling

Katherine Cavallo, MS4

University of Arizona College of Medicine Phoenix

## Research Question

To what degree do today's top sitcoms model healthy and unhealthy lifestyle behaviors as recommended by the Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), United States Department of Agriculture (USDA)?

## Introduction

- Almost two-thirds of the adult American population is obese or overweight<sup>1</sup>.
- Obesity is a large risk factor for many disease processes, specifically heart disease, type 2 diabetes, asthma, and sleep apnea<sup>2</sup>.
- In 2008, the medical care costs of obesity alone in the US totaled over \$140 billion<sup>3</sup>.
- Millions of people tune into watch their favorite television sitcoms each week<sup>4</sup>. This is a huge opportunity to portray and normalize healthy living across all age groups.
- Depicting healthy behaviors in some of today's most viewed shows may be one tool to help combat an obesogenic lifestyle.

## Methods

- The top three, most-watched sitcoms of the 2013-2014 season as determined by TV Guide were analyzed: The Big Bang Theory, The Millers, and Modern Family<sup>5</sup>.
- A scorecard with 11 behaviors (6 healthy and 5 unhealthy) was created using publically published recommendations from the CDC, WHO, and USDA.
- Every episode from the 2013-2014 season of each show was viewed and evaluated for each behavior by a single evaluator.

## Results

- 532 healthy behaviors were observed.
- 898 unhealthy behaviors were observed.

- The average number of healthy behaviors per episode was:
  - The Big Bang Theory: 16.75
  - The Millers: 1.65
  - Modern Family: 3.83
- The average number of unhealthy behaviors per show was:
  - The Big Bang Theory: 19.13
  - The Millers: 6.21
  - Modern Family: 12.33

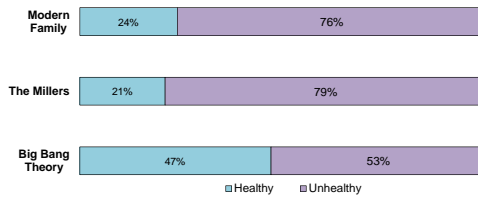


Figure 1: Overall Total of Healthy and Unhealthy Behaviors by Show

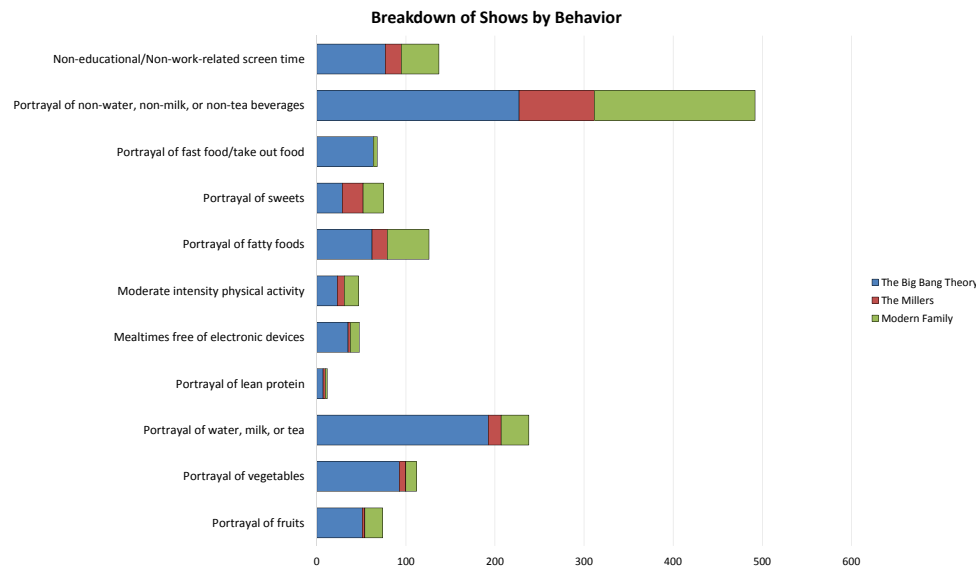


Figure 2: Breakdown of Shows by Behavior

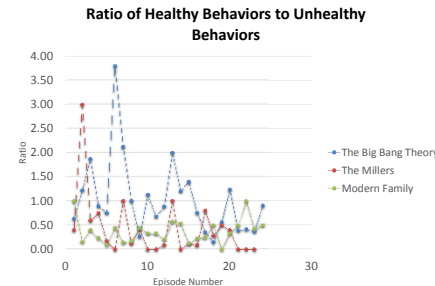


Figure 3: Ratio of Healthy to Unhealthy Behaviors by Episode for Each Show

- Unhealthy beverage choice was portrayed in 93.0% of all episodes
- Even though the CDC recommends an average of 30 minutes of moderate intensity exercise five days per week for adults<sup>6</sup>, this healthy habit had one of the lowest depiction rates of healthy behaviors.

	The Big Bang Theory:	The Millers:	Modern Family:	Total:
Healthy Behaviors:	402	38	92	532
Unhealthy Behaviors:	459	143	296	898

Figure 4: Total Number of Healthy and Unhealthy Behaviors by Show

## Discussion and Conclusions

- Viewers of today's top three sitcoms are exposed to a considerable number of healthy and unhealthy behaviors during the course of a 22-minute show.
- Beverage choice was the most common healthy and unhealthy behavior portrayed.
- More unhealthy behaviors are shown than unhealthy behaviors.
- More research is needed to determine if portrayal of these behaviors affects a viewer's behaviors.

## Acknowledgements

I wish to thank my mentor, Dr. Sarah Coles.

## References:

1. U.S. Department of Health and Human Services, Center for Disease Control and Prevention. (2010). *Overweight and obesity* <<http://www.cdc.gov/healthyweight/children/index.html>>
2. "Tips for Parents – Ideas to Help Children Maintain a Healthy Weight." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, 31 Oct. 2011. Web. 29 Sept. 2014.
3. ST Jeor, S., Perumean-Chaney, S., & Sigman-Grant, M. (2002). Family-based interventions for the treatment of childhood obesity. *J Am Diet Assoc.* 102(5), 640-644.
4. "America's Most Watched: The Top 50 Shows of the 2013-2014 TV Season." TV Guide. 6 June 2014. Web. 29 Sept. 2014. <<http://www.tvguide.com/news/most-watched-shows-2013-2014-1082628.aspx>>
5. Schneider, M. (2014, June 6). America's Most Watched: The Top 50 Shows of the 2013-2014 TV Season. Retrieved September 18, 2014, from <http://www.tvguide.com/news/most-watched-shows-2013-2014-1082628.aspx>
6. How much physical activity do adults need? (2014, March 3). Retrieved January 26, 2015, from <http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html>