

2017

# A Study of the Influence of Branded Messages on Non-branded Food Items When Presented to 10 to 14-year-old Children

Cassandra J. Chinn  
cassiejwatts@gmail.com

Follow this and additional works at: <https://mds.marshall.edu/etd>

 Part of the [Advertising and Promotion Management Commons](#), [Journalism Studies Commons](#), [Marketing Commons](#), and the [Mass Communication Commons](#)

---

## Recommended Citation

Chinn, Cassandra J., "A Study of the Influence of Branded Messages on Non-branded Food Items When Presented to 10 to 14-year-old Children" (2017). *Theses, Dissertations and Capstones*. 1133.  
<https://mds.marshall.edu/etd/1133>

This Thesis is brought to you for free and open access by Marshall Digital Scholar. It has been accepted for inclusion in Theses, Dissertations and Capstones by an authorized administrator of Marshall Digital Scholar. For more information, please contact [zhangj@marshall.edu](mailto:zhangj@marshall.edu), [beachgr@marshall.edu](mailto:beachgr@marshall.edu).

**A STUDY OF THE INFLUENCE OF BRANDED MESSAGES ON NON-BRANDED  
FOOD ITEMS WHEN PRESENTED TO 10 TO 14-YEAR-OLD CHILDREN**

A thesis submitted to  
the Graduate College of  
Marshall University  
In partial fulfillment of  
the requirements for the degree of  
Master of Arts

In  
Journalism

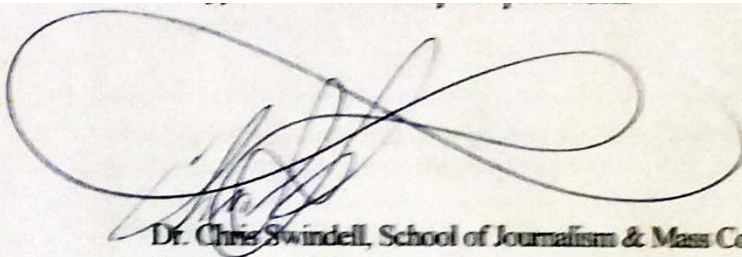
by  
Cassandra J. Chinn

Approved by  
Dr. Chris Swindell, Committee Chairman  
Allyson Goodman, MA  
Dr. Terry L. Hapney, Jr.

Marshall University  
December 2017

## APPROVAL OF THESIS

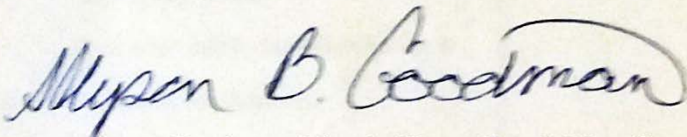
We, the faculty supervising the work of Cassandra J. Chinn, affirm that the thesis, *A Study of the Influence of Branded Messages on Non-Branded Food Items When Presented to 10 to 14-Year-Old Children*, meets the high academic standards for original scholarship and creative work established by the Master of Arts in Journalism and the School of Journalism and Mass Communications. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.



Dr. Chris Swindell, School of Journalism & Mass Communication  
Committee Chairperson

12-12-17

Date



Mrs. Allyson Goodman, School of Journalism & Mass Communication  
Committee Member

12-12-17

Date



Dr. Terry Hapney, School of Journalism & Mass Communication  
Committee Member

12-12-17

Date

## ACKNOWLEDGMENTS

My sincerest gratitude is given to those closest to this project, my committee members, for their unwavering support throughout the study: Dr. Chris Swindell, for ensuring me that if I did not end up with further and burning questions by the conclusion of the process, I was doing something terribly wrong; Dr. Terry Hapney and his green pen, by which this manuscript was formed and without which would have been another long and uninspired class paper.

I would also like to thank Dr. Rob Rabe, Dr. Del Chrol, Dr. Jeff Ruff and Dr. Dean Brand for reminding me that not every moment of the process is about writing and researching. Many of the moments are about sharing, enlightenment and friendship. For these moments, and these four, I am thankful. Special thanks to my personal mentor, boss and friend, Sam Perkey. Without his help I would not have had the time, energy, patience or grace to complete this task. Thank you for being a constant reminder to live a life of service and to always use whatever power I have been given for good.

To my amazing husband, James Chinn, who has not read a single word of this document but knows exactly what it all means to me—thank you. You have never once let me entertain the notion that a paper was so long, a class so hard or a concept so difficult that I could not tackle it. That unerring belief in me helped lay the foundation for this work. I am more grateful to you than you know.

Lastly, to the two amazing women who, twelve years ago, set me on the path of success, who never believed that I was anything other than fully capable, who convinced me I could be brilliant in my own right and who placed my personal success as a priority above their own work—Associate Dean Janet Dooley and Associate Professor Allyson Goodman. You are the educators I strive to be. Thank you for your ceaseless inspiration.

## **DEDICATIONS**

This research is dedicated to the students and staff of Crabbe Elementary School, Ashland Middle School and my two nephews, Jake and Zac. It is my hope that my work inspires them to ask more questions, as they have inspired me to ask more of my own.

## TABLE OF CONTENTS

List of Tables .....	vii
List of Figures .....	viii
Abstract .....	ix
Chapter 1 .....	1
Introduction.....	1
Chapter 2.....	7
Literature Review.....	7
Chapter 3.....	12
Methods.....	12
Research Problem .....	12
Objectives .....	12
Operational Definitions.....	12
Health.....	12
Research Questions.....	13
Strategy .....	13
Sample.....	14
Delivery.....	17
Video Stimulus.....	18
Analysis.....	19
Chapter 4.....	20
Data Analysis .....	20
RQ <sub>1</sub> /H <sub>1</sub> .....	20

RQ <sub>2</sub> /H <sub>2</sub> .....	22
Chapter 5 .....	25
Discovery .....	25
Demographic Information.....	25
Discussion .....	27
Limitations .....	28
Directions for Future Research .....	30
References.....	32
Appendix A: Office of Research Integrity Approval Letter .....	36
Appendix B: Research Instrument .....	37

## LIST OF TABLES

Table 1 Significance testing of paired Likert scale questions before and after a video stimulus .	21
Table 2 Prep help responses.....	22
Table 3 Significance testing of paired interest questions before and after a video stimulus .....	24
Table 4 Multi-answer question responses.....	27



## LIST OF FIGURES

Figure 1. Respondent ages .....	16
Figure 2. Respondent grades.....	17
Figure 3. Comparison of the responses for Interest 1 and Interest 2 .....	23
Figure 4. Outside meals each week.....	25
Figure 5. Source of lunch each day.....	26

## **ABSTRACT**

Children are more likely to create bonds with foods based on the environmental, socioeconomic and familial influences in their lives during early development stages. They gravitate to foods that are familiar to them and that are positioned with familiarity, creating an opportunity for branded food items to create more of a space in their psyche as part of their identity. Current research looks to reposition those energy-dense foods (commodity vegetables) that can often times be left unbranded, to see if immediate interest in the food items changes. Results found no significance to confirm nor deny a positive correlation in interest after viewing a branded stimulus, nor in respondents' assessment of a food's health value.

# CHAPTER 1

## INTRODUCTION

*“Advertisers are encouraged to capitalize on the potential of advertising to serve an educational role and influence positive personal qualities and behaviors in children.”*

- The Children’s Advertising Review Unit. (2009) Core Principle 7.

In 2013, the prepared foods industry spent \$1.68 billion on advertising in the United States. That figure includes cable and network television, magazine, spot television, Internet, radio, outdoor, business to business, out-of-home and every other major measurable category of sale (Kantar Media, 2017). According to a 2012 report, that spending actually came down slightly from the 2009 expenditures of food marketing targeting children aged 2-17. Cereal, carbonated and non-carbonated drinks, dairy drinks and yogurt, snacks, prepared foods, candy and frozen desserts and quick service restaurant foods are the biggest categories in consumables and grocery goods, accounting for \$1.79 billion in advertising spent to build brand recognition, loyalty and sales among youth (Federal Trade Commission, 2012, pp. 7-8). It should not be discounted that the marketing, advertising and public relations of the companies that feed Americans can, and do, influence public spending, public consumption and public health.

Quick service restaurants like McDonald’s, Pizza Hut, Starbuck’s and Chick-fil-A have an overwhelming share of the number of meals fed to American children every day. In fact, in 2015, fast food chain McDonald’s ranked fourth in domestic advertising dollars spent, spending \$718.7 million (*United States Securities and Exchange Commission Form 10-K*, 2016). The Los Angeles Times reported on 2015 CDC findings about the diets of American children ages 2 to 19, finding that one out of three children will eat a meal from a fast food restaurant on any given day (Kaplan, 2015). The gender of the diner makes no difference, as boys and girls eat the same

amount of food outside the home at a quick dining establishment. Neither are factors like weight statistically significant (Vikraman, Fryar & Ogden, 2015). Menus are notoriously limited at most restaurants, with options of foods that are deep fried, processed or high in energy-deficient calories. While some restaurants like Chick-fil-A and McDonald's have added "healthier" options—items like gourmet salads, fruit cups or fresh fruit as an addition to all meals—most have a lack of energy-rich nutrition.

That narrow focus is mirrored in school breakfast and lunch options as well. For schools, government programs subsidize only the meals that are purchased, according to Janet Poppendieck, author of *Free for All: Fixing School Food in America*. While children who participate in the National School Lunch Program tend to eat better and healthier meals than those who do not, Poppendieck (2010) argues the meals themselves are commodified, made to match students existing eating habits to guarantee purchase and subsequent school reimbursement:

School systems...try to maximize revenue by catering to children's tastes formed by the fast-food industry, which is why there are so many burgers, chicken nuggets, fries and pizza on the menu...(Because) schools are in the situation of selling food to children rather than having it as a regular part of the day, they treat students as customers (Gupta, 2010, para. 33).

While options for energy-rich foods remain few, children have fewer opportunities to establish a relationship with different fruits and vegetables. "Recent studies have shown that vegetable consumption is learned primarily from socialization, and the introduction of novel vegetables at younger ages leads to a greater likelihood of consuming those vegetables" (Trump, Connell & Finkelstein, 2015, p. 193). However, with fewer chances for introduction to energy-dense foods and more chances to form bonds with energy-deficient foods, children may have a more difficult time associating and forming bonds with foods that are unfamiliar.

Food marketing targeted at children encourages them to “eat...not on the basis of...tastiness, or other benefits, but because of (the food’s) place in the social matrix of meaning” (Schor & Ford, 2007, p. 16). For developing children, this idea of self and position in their society is often fluid and open to change. They look outward for definition and meaning and marketers spend billions on brands to help them define themselves and their place.

“Marketplace brands are included in the self. People often form strong relationships with brands...when this occurs, people come to identify with their most beloved brands incorporating these brands into their psychological selves” (Trump, Connell & Finkelstein, 2015, p. 193).

Pierce explains that humans come to understand meaning, process language and participate in communication, both inward and within their own social networks, through semiotics, or the use of visual and linguistic signs (Deely, 2015). Semiotics as a communication theory helps bridge the gap between constructed social meaning and communication, both of the self and within a population. UK-based advertising agency Sign Salad attempts to leverage its messages and its creative work in this theory and, thus, root them within the deepest social understandings:

Semiotics is an investigation into how meaning is created and how meaning is communicated. Its origins lie in the academic study of how signs and symbols (visual and linguistic) create meaning. It is a way of seeing the world, and of understanding how the landscape and culture in which we live has a massive impact on all of us unconsciously (Making Brands Meaningful, 2017, para. 1).

Interpretations and social understanding are deeply intertwined, with outward factors helping establish self and, in turn, establishing the identity of a society based on interpretations of included members.

Advertising, specifically branded individual items and companies, seeks to establish itself as different, as other, and as better while still being relevant to consumers. “Advertising puts

together a system of social expectations in a particular sector of social reality, relating to a given individual's consumption in accordance with his position in the social space" (Savel'eva, 2007, p. 47). The establishment of meaning through branding can become an intrinsic part of children forging their own identity, allowing them to build a meaningful relationship with a product or company, rather, what that company means to them.

Therefore, with an established connection between a brand and the self, the incorporation of energy-dense foods like fruits and vegetables is more likely to create a lasting bond if forged early in life and inclusive of a specialized and targeted message. Fruits, vegetables, dairy products and other commodities could be used to influence current and future behavior if those options are presented earlier and with a bit of help from a creative marketing team. However, most commodities are left unbranded from their point of origin. Those items also often need additional preparation before being ready to eat: either they need washed, chopped, cooked or prepared in some other way, unlike their prepared and quick-service counterparts. Therefore, foods of convenience in packages with characters they already love or are primed to accept have an upper hand on unpackaged, unbranded foods. "One unintended consequence of symbolically framing kid's food as fun is that healthy food is seen as plain – and drab" (Elliott, 2009, p. 362).

Research conducted within the last decade illuminates several important characteristics about adolescents and their behaviors with branded consumables. When given the opportunity, a child will choose an item that is familiar, lacking in nutritional density and coupled with the branding of a character they know and love (Keller et. al., 2012; Kotler, Schiffman & Hanson, 2012; Trump, Connell & Finkelstein, 2015). Children from 2 years old to 8 years old often process the messages regarding health and health foods in much the same way across age, gender, class and socioeconomic status (Privitera, Phillips, Zuraikat & Paque, 2015). Further

research explains that teens and older adolescents are more influenced by food familiarity, similar to younger children, as well as social acceptance and cultural trends when deciding their food options (Ault, 2003). Extensive research has been conducted with children at either end of the adolescent spectrum, either very young or nearly adult, but very little has been done focusing on children in the young teen range.

According to the Centers for Disease Control, more than one third of American adults and 17% of youth aged 2-19 years old are categorized as obese (Ogden, Carroll, Fryar, & Flegal, 2015). The percentages have either climbed or remained steady since the late 90s, with adult, lower-income women and Hispanic adults being most at risk. In its report on obesity rates from 2011-2014, the CDC defines obesity in adults and children based upon the individual calculation of Body Mass Index, or BMI:

BMI (is) calculated as weight in kilograms divided by height in meters squared, rounded to one decimal place. Obesity in adults (is) defined as a BMI of greater than or equal to 30. Obesity in youth (is) defined as a BMI of greater than or equal to the age-and-sex-specific 95<sup>th</sup> percentile of the 2000 CDC growth charts (Ogden, et. al., 2015, p. 6).

While efforts from local, state and federal governments help combat drug and alcohol addiction, Americans face a different type of challenge with obesity. While it is possible and often preferred to live completely free of drugs and alcohol, it is sometimes difficult to convince people to live with less food, which is required to sustain life.

Because these first years are the most formative, assuming that individual reasoning and decisions remain steady across such an age range should not be accepted. The assumption that children of this age act the same would conclude that a 2-year-old chooses after-school snacks for the same reasons as a 17-year-old. Understanding that they learn, grow and adapt from their experiences, the following research emphasizes those children who are old enough to be influencers or mature enough to prepare their own meals with foods that require more effort than

quick service or prepackaged options. Children in the 10 to 14-year-old range are old enough to understand the concepts of nutritious eating and living a healthy lifestyle as well as implement the strategies necessary. During an interview with KQED News, engineering professor and co-creator of Coursera's most popular course, Learning How to Learn, Barbara Oakley explains that students in this range are perfect for introduction of new concepts. Instructors can help children mitigate rejection of concepts simply because they are foreign or difficult (Kris, 2017). Can this group of people—armed with rudimentary understandings of commodity culture and society—be swayed to choose food items that are normally unbranded if they are presented with a socially-accepted brand?



## CHAPTER 2

### LITERATURE REVIEW

“Branding is a powerful marketing tool that is often resilient to interventions when people have strong relationships with brands” (Trump, Connell & Finkelstein, 2015, p. 198). Brands, along with social relationships, material possessions and characteristics become part of the conceptualization of the self. Establishment of this conceptualization and subsequent building of the self begin at awareness. Lindstrom (2011) explains that not only does self-conceptualization begins at awareness, but so does the influence of brands. He presents that at the moment of conception, mothers are influenced by brands and by products, passing on favor and disfavor to their children within the womb. While humans may not act upon or notice those preferences until years later, the notion and opinions of marketable companies find their way to them before they even open their eyes. “The younger the age at which brand awareness is established, the stronger the brand loyalty will be as a child grows” (Connor, 2006, p. 1479).

As newborns, the connection from child to mother begins immediately. The recognition of mother as caregiver and nourishment quickly establishes the cycle of semiosis in a life of communication. For baby, the presence of mother, either through smell, touch or sound, registers as a sign for *meal* or *comfort* then grows as their cognition and recognition develops. According to the theoretical underpinning of semiotics, it could be hypothesized that the understanding on behalf of the child that the mother is the link to care and life is the earliest learned and recognized form of branding. From that point forward, rudimentary understanding and learning spring from this initial linking. How quickly before differences between family and stranger are established? Experience leads to understanding, which then leads to learning. The physical

incarnation of mother evolves from a touch and a smell into an idea and an emotion over time for a child. The same could be argued for the preferences she passes down.

While Lindstrom (2011) and Connor (2006) contend that brand awareness and the structuring of loyalty begin extremely early, favor and taste undoubtedly change throughout a person's life. During development babies, toddlers, adolescents, teens and young adults often bounce from preference to preference. While preferences change over time, including feelings toward particular foods, a relationship with a brand can forge a bond so strong as to last a lifetime. Trump reflects on the possibility of a lack of strong, lifetime bonds with certain foods because they have been left unbranded.

People's group memberships and close relationship partners may be included in the psychological self. In line with this, marketplace brands are also included in the self...People come to identify with their most beloved brands, incorporating these brands into their psychological selves (Trump, Connell & Finkelstein , 2015, p. 193).

If Lindstrom's argument is to be entertained, and branded food items are introduced before even the establishment of the self, what then of the understanding of food choices once the self has been established? How do small children to young adults, capable of at least rudimentary forms of communication even if their reading and writing skills are still early in development, come to understand their food choices? "Recent studies have shown that vegetable consumption is learned, primarily, from socialization and the introduction of novel vegetables at younger ages leads to a greater likelihood of consuming those vegetables" (Trump et al., 2015, p. 193). Borrowing from philosopher Marshall McLuhan, Hawkes (2010) explains that in a traditional American supermarket, young children are not necessarily interested in the nutrition or perception of healthiness of the contents of a package: the package itself is the product. "A study on the perception of breakfast cereal packaging...found that children were not aware of the

nutrition label, suggesting that visuals have a much more powerful impact in conveying the perception of healthiness to children” (Hawkes, 2010, p. 298).

Most fresh produce is left unpackaged, largely unbranded and merchandised to highlight this lack of labelling. In a Federal Trade Commission report on marketing targeting children and adolescents in which only items from a package were considered, expenditures related to fruits and vegetables were consistently dropped to the bottom of measured items, even below dairy products and baked goods (2012). “In the ‘real-world’ advertisements for fresh fruits, vegetables and dairy products are rare. Part of the challenge in marketing these foods is that they are commodity products that are perishable; the ability of industry to profit from the sales of these goods is limited” (Keller et. al., 2012). Elliott (2009) purports that small children (kindergarten and first grade) are much more drawn to cross promotion with characters and mascots, fun shapes and bright colors. “Fun in food absolutely matters to these children, who fully appreciate the aesthetic, gustatory, tactile and/or interactive features that these foodstuffs offer” (Elliott, 2009). Where does this leave unpackaged and unlabeled produce in the decision-making process?

Working against the advancement of energy-dense foods is the natural predisposition for fatty, sweet and salty flavors over those more bitter, like vegetables (Drewnowski, 1997). Researchers found an inverse link to participants’ affinity for a particular brand and their choice of vegetables when the preferred brand was taken away. “When someone is forced to dissociate from a brand that they have made part of their self, they require more reserve from their tank of self-regulation. When this happens, participants in this study turned away from vegetables, those foods that are acquired tastes, and toward other foods in the salty, sweet or fatty categories” (Trump, Connell & Finkelstein, 2015, 197). One could posit that the self-regulatory system is

like a reserve, with a limit to how much can be removed before depletion. It could also be argued that children, with the lack of learned patience and exposure to self-denial, may have smaller reserves of self-regulation and cannot turn away from beloved brands as easily as an adult.

Familiarity often aids in item selection, Kotler, Schiffman and Hanson report in their study of food preference among 2 to 7-year-old children (2012). When given a food item branded with a familiar character, children were more likely to select said item over one branded with an unfamiliar character or one free from branding. The effect is particularly strong when the item being branded is a salty, sweet or fatty choice and paired against an item of nutritional density that is branded with an unknown or no character (Kotler, Schiffman & Hanson, 2012). The sales pitch of a well-liked and familiar face, coupled with a primal preference for foods lower in nutritional value, increases the likelihood of selection for those items. However, some studies on early adolescents focus on the selection of items based on personal preference but neglect to explain how those choices grow as the individual's social sphere of influence grows.

Though previous research has been done to understand the intersection of children and brand preference, the light was shined on those younger than seven or older than thirteen. Studies offer insight into how habits originate and develop in early childhood and then how they lead directly into adulthood. Research conducted for this project will shift the normal focus from early adolescence to mid-adolescence, highlighting those children who are learning how to choose foods based on social and personal factors, not simply on emotional or primal ideals. This group can read, write, understand and interpret messages better than their early adolescent counterparts and are beginning to have influence over purchasing decisions, both in their homes and with their own funds. While children younger than 14 may not control as much economic

share as their part-time job-working high school counterparts, they are learning the basics of commodity culture and the cost of participation within the social schema.

## **CHAPTER 3**

### **METHODS**

#### **Research Problem**

Children between 6 and 19 years of age, specifically those between the ages of 6 and 11, are more likely to be at risk to be overweight than those children between 2 and 5 years of age (Ogden et.al., 2006). As previously discussed, biology, socio-psychology, environment and cultural factors lead children to choose energy-dense but nutritionally-lacking food options. Much of the research for this study reflected a division of children in research age groups from 2 to 5 years old, 2 to 9 years old or 14 to 19 years old. However, none of these research groupings focus on tweens, or the 10 to 14-year-old range (Tweenager, 2017).

#### **Objectives**

This research attempted to measure the potential relationship between viewing a branded message on a food item when viewing a video stimulus and the participant's perception of that food item's nutritional quality, with a secondary focus on interest of preparation of the food item. The researcher studied an independent variable, consisting of a video stimulus of a recipe creation that was either branded or unbranded, and the dependent variable—the respondent's assessment of a food option's nutritional value and interest level in consuming a food item.

#### **Operational Definitions**

##### **Health**

The World Health Organization considers a person's overall well-being in their official appraisal of health. Not simply an absence of sickness, WHO includes physical, mental and social well-being in their assessment of an individual's health (What is the WHO definition of health, 2017). In the current study, health is defined as the participant's perception of the healthy

benefits (or lack thereof) of a particular food item when viewed before and after a video stimulus. When presented with a Likert scale, participants chose from six terminals to match their perception of health with the stated food item. The terminals were rated as 1 – Not Healthy, 2 – Somewhat Unhealthy, 3 – Neutral, 4 – Somewhat Healthy, 5 – Definitely Healthy and 0 – Not Sure.

### **Research Questions**

Research Question 1 (RQ<sub>1</sub>): When asked to assess the health value of certain food items then presented with a video stimulus (independent variable), will branded messaging influence youth's (ages 10 to 14) score (dependent variable) during follow up?

Research Hypothesis 1 (H<sub>1</sub>): Assessment score of the health value of food items will increase after viewing a branded video stimulus when compared to a similar group viewing an unbranded video stimulus.

H<sub>01</sub>: There is no statistically significant relationship between pre-test and post-test scores of health values among the group viewing the branded stimulus.

Research Question 2 (RQ<sub>2</sub>): When presented with a video stimulus (independent variable), will youth's (age 10 to 14) post-test interest score (dependent variable) be influenced by branded messaging during the stimulus?

Research Hypothesis 2 (H<sub>2</sub>): The post-test interest scores reported by respondents who viewed the branded message will be higher than those who viewed the unbranded video.

H<sub>02</sub>: There is no statistically significant relationship between pre- and post-test interest scores.

### **Strategy**

To assess the influence of marketing messages made for food companies, research consisted of three components: a short video stimulus bookended by a pre-test survey as well as

a post-test survey. The pre-test included demographic and filter questions to ensure participant eligibility as well as interest and Likert scale questions. Once participants proved to be within the strata of the proposed sample and answered the pre-test questions they were shown one of two possible stimuli: a how-to video for a branded food item or a how-to video for the same food item with no brand attachment. Assignment of the stimuli was randomized with a total of 50 respondents viewing the branded stimulus and 41 viewing the video with no brand. The post-test was administered immediately following the pre-test and video stimulus to test opinion about the nutritional value of particular food items as well as their proposed participation in meal preparation in the home.

## **Sample**

Previous research on the consumption habits, purchasing influence and brand preferences of American youth breaks the target populations down to three general groups: infants and toddlers, ages 0 to 2; young children, age 2 to 12; and young adults or teens, ages 12 to 20. More specifically, research on children older than toddler age focuses on age ranges between two specific groups: children between 5 and 9 and high school-age teens between 14 and 18 (Elliott, 2009; Kantar Media, 2017; Ault, 2003). These two groups yield great insight into the thinking and habits of those ages represented within, yet the results gleaned from research targeting those two specific groups leaves preadolescent children ages 10 to 14, or tweens, with a lack of focused research (Crowley, DeJong-Boots & Paladines, 2009).

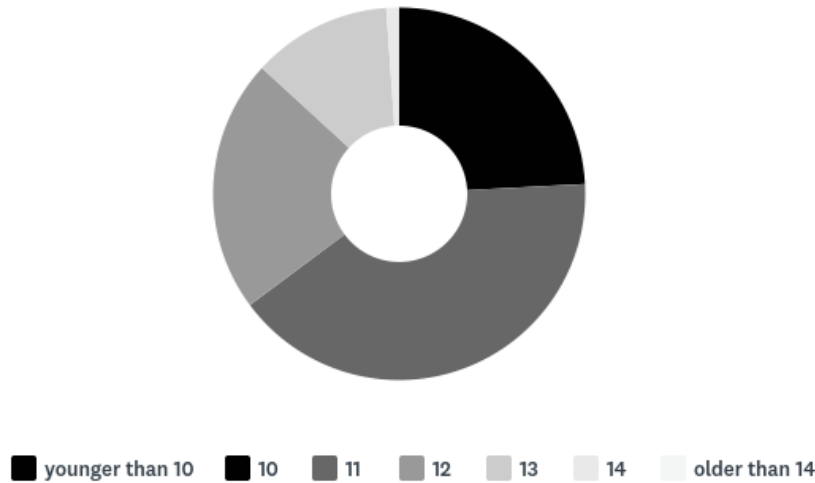
This study focused on highlighting this group of children, who are still influencers in their own right and are still in the process of learning and building lifelong behaviors, habits and relationships. The tween market is old enough to read and understand marketing messages, at least to a greater extent than the 5-9-year-old children; have buying power and purchase



influence, both with their own funds and through that of their caregivers; and are capable of “more autonomy” in performing certain tasks inside the home to secure their own well-being (Willens, 2013).

The participant population was drawn through convenience sampling and the designated video stimulus was chosen randomly for the participant via stratified random sampling. Two introductory questions asked at the beginning of the survey excluded any participant with demographic characteristics outside of the established age range of study. Participants were sourced from the population of students registered at two public K-12 institutions in one county in northeast Kentucky. Enrollment of students in the proposed age range is average when compared to the enrollment and population of adjacent counties in the region (5115 – Entrance Requirements, 2008; DeMaria, 2016; Devine, 2017; School Year 2014-2015 Head Count, 2017). Students aged 10 to 14 would generally fall between fourth and ninth grades in each of the three schools, therefore allowing focus to be placed on those grades represented in late elementary, middle or junior and early high school (5112 Entrance Requirements, 2008). Of the available population, a representative sample of students between fourth and eighth grades was selected.

Q1 Please choose the age you are today.

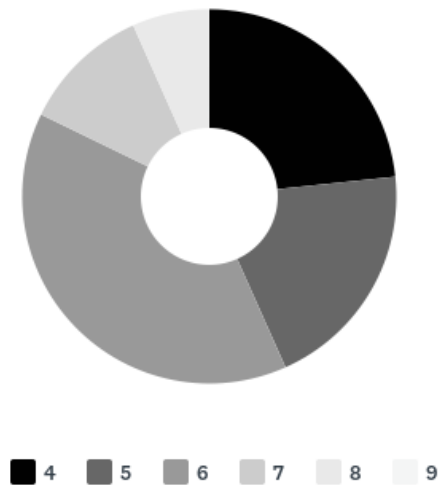


**Figure 1. Respondent ages**

Of the 108 total participants in the survey, 91 responses fell within the acceptable strata. Of those 91 participants, 24% (22 respondents) were age 10, 41% (37 respondents) were age 11, 22% (20 respondents) were age 12, 12% (11 respondents) were age 13 and 1% (1 respondent) was age 14, as shown in Figure 1. Gender information for each respondent was not collected for this experiment. All 91 respondents answered the questions regarding age. The median and the most often occurring age was 11 years ( $M=11.25$  years,  $SD=.995$  years).

Respondents represented each grade from the fourth year to eighth, represented in Figure 2. Of the 90 respondents who shared grade information (1 respondent failed to answer) 23% (21 respondents) were in the 4<sup>th</sup> grade, 20% (18 respondents) were in the 5<sup>th</sup> grade, 39% (35 respondents) were in the 6<sup>th</sup> grade, 11% (10 respondents) were in the 7<sup>th</sup> grade and 7% (6 respondents) were in the 8<sup>th</sup> grade.

## Q2 Respondent Grade



**Figure 2. Respondent grades**

Written consent was obtained from the principal of each school as well as teachers in charge of students immediately before experimentation began. This form, along with necessary and relevant modification for the research, was adapted from the IRB Parental Consent template to include language appropriate for faculty and administration. Written parental consent forms were sent home in duplicate with each student to be signed and returned before experimentation and child assent forms were explained and signed at the time of the study. All written parental consent and child assent forms were crafted using the IRB templates for Parental Consent and Child Assent.

### **Delivery**

All elements of the experiment were delivered to participants digitally on a computer during regular daytime school hours. Surveys and the video stimuli were administered online via SurveyMonkey, with the videos being hosted on YouTube. Once the experiment began, students were prompted with a single website to navigate the pre-test. Responses for any participant that

did not meet the defined age range were eliminated from the final data analysis. Each question was administered individually, both before and after the video stimulus. From start to finish, the average time spent with the study did not exceed 7 minutes per student.

The pre-test and post-test survey portions of the experiment contained both multiple choice questions as well as six-terminal Likert scale questions requiring respondents to choose a response based on their degree of agreement with a statement. In the post-test survey, each person was given the same Likert scale questions to assess the amount of impact the initial stimulus had on their opinion of certain foods as well as their possible behavioral change. Respondents were not allowed to move backward and change responses once a response had already been submitted.

An individual researcher visited the sample schools to perform the experiment in a single session with each participant. Due to their age, each respondent supplied parental consent to participate in the study before taking part, as well as their own assent form. Once all appropriate signatures were collected, students completed their portion of the research in person, with the researcher available to help answer questions or clarify concepts.

### **Video Stimuli**

Both videos were similar in production, length, style, lighting, subject matter, cooking method and participants. In each, a recipe for breaded vegetable nuggets is shown start to finish, from chopping vegetables to plating of the final dish. Each recipe was filmed with a top down camera rig, focusing on the action from the same viewpoint above the cooking surface so that only the preparer's hands are visible. Both recipes utilized similar ingredients as well as the same cooking method, either baking or pan frying shown on a split screen, and each video is well under 90 seconds in length. The variable to be introduced in one stimulus will be a corporate

sponsorship in two places during the video: first as part of the headline introduction and conclusion (“How to Make Chick-Fil-A’s NEW Veggie Nuggets”) and a floating Chick-Fil-A logo in the bottom right corner during the tutorial. The alternate video eliminated the headline introduction and conclusion and showed no branding during the recipe.

## **Analysis**

Questions regarding age, grade, frequency of eating away from home, lunch habits and a multi-answer question regarding meal preparation at home will be assessed by measure of central tendency and response percentage. A question regarding the respondent’s participation in meal preparation at home will be assessed by response percentage and against the two preparation interest questions. The pre-test meal interest question will be assessed by response percentage and against the second interest question in the post-test. Each of the interest questions will also be assessed by the age of the respondent and how each answered the multi-answer question as well as the participation question. The Likert scale questions will be assessed using a Paired Samples t Test, comparing the overall responses from the pre-test to only the group shown the branded video and the group shown the unbranded video.

## CHAPTER 4

### DATA ANALYSIS

The following chapter discusses the findings from the experimental research conducted over four sessions. The data collected was processed to glean insight into any possible correlation between a branded video stimulus and a change in reporting of interest in preparing a food item as well as the assessed value of health. All survey questions were written to assess one of three main categories: demographic information, assessment of RQ<sub>1</sub>/H<sub>1</sub> and assessment of RQ<sub>2</sub>/H<sub>2</sub>. Findings regarding the research questions and associated research hypotheses are presented from the analysis in this chapter. Those statistical illustrations demonstrate an insight into the selected sample; however, they should not be generalized to the entire population.

#### **RQ<sub>1</sub>/H<sub>1</sub>**

The seven pre- and post-test Likert scale groups that assessed Research Hypothesis 1 (H<sub>1</sub>) each contained the same seven questions in the same order with the same 1-6 scale of health values. Assessment utilizing a Paired Samples t Test was conducted and the full results are expressed in Table 1. The pairs of results referring to the respondents who viewed the branded stimulus Veggie nuggets had no linear relationship ( $r = .277$ ), but proved to be statistically significant ( $p \leq .002$ ).

*Paired Samples Test - All Samples*

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Assessment of health of Broccoli Before Stimulus - Assessment of health of Broccoli After Stimulus	.178	1.176	.124	-.069	.424	1.434	89	.155
Pair 2	Assessment of health of Kale Before Stimulus - Assessment of health of Kale After Stimulus	-.159	1.355	.144	-.446	.128	-1.101	87	.274
Pair 3	Assessment of health of Veggie Nuggets Before Stimulus - Assessment of health of Veggie Nuggets After Stimulus	-.778	1.527	.161	-1.098	-.458	-4.832	89	.000
Pair 4	Assessment of health of Strawberries Before Stimulus - Assessment of health of Strawberries After Stimulus	-.011	1.076	.113	-.236	.214	-.098	89	.922
Pair 5	Assessment of health of Cuties Mandarin Oranges Before Stimulus - Assessment of health of Cuties Mandarin Oranges After Stimulus	-.156	1.048	.111	-.375	.064	-1.408	89	.163
Pair 6	Assessment of health of McDonald's Small French Fries Before Stimulus - Assessment of health of McDonald's Small French Fries After Stimulus	-.056	.591	.063	-.181	.068	-.897	88	.372
Pair 7	Assessment of health of Dole Fruit Cup Before Stimulus - Assessment of health of Dole Fruit Cup After Stimulus	-.101	1.470	.156	-.411	.208	-.649	88	.518

**Table 1. Significance testing of paired Likert scale questions before and after a video stimulus.**

H<sub>1</sub> predicted that the assessment score of the healthy nature (or lack thereof) of food items would increase after viewing a branded video stimulus when compared to a similar group viewing an unbranded video stimulus. After statistical analysis of the variables involved in determining any such correlation, it is impossible to either reject or fail to reject the null

hypothesis. Therefore, the results for H<sub>1</sub> are inconclusive when considering all variables together.

**RQ<sub>2</sub>/H<sub>2</sub>**

Results from the pre-test preparation question (Prep Help), the pre-test interest question (Interest 1) and the post-test interest question (Interest 2) determined the assessment of H<sub>2</sub>. In the Prep Help respondents were asked simply if they helped in making meals at their home. Of the 91 responses, 84% (76 respondents) answered in the affirmative and 16% (15 respondents) answered in the negative. Table 2 shows a breakdown of how respondents from each age group answered Prep Help, with respondents from the 12-14 range reporting a higher percentage of meal preparation help than the 10-11 range.

*Do you help with meal prep at home? \* Age in years Crosstabulation*

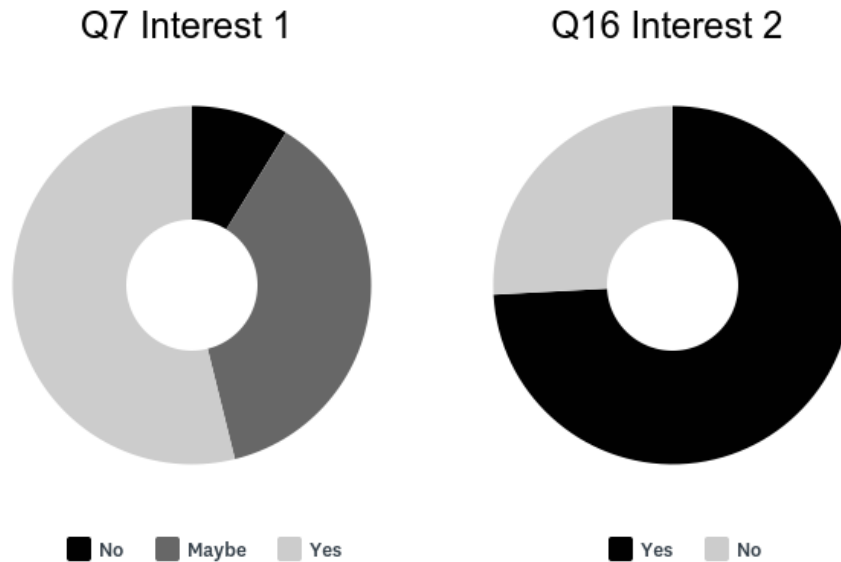
Count		Age in years					Total
		10	11	12	13	14	
Do you help with meal prep at home?	No	7	6	1	1	0	15
	Yes	15	31	19	10	1	76
Total		22	37	20	11	1	91

**Table 2. Prep Help responses**

Interest 1 in Figure 3 provided the pre-test data for H<sub>2</sub>. Of the 91 total respondents to the question, 54% (49 respondents) answered Yes, 37% (34 respondents) answered Maybe and 9% (8 respondents) answered No. Interest 2 provided the post-test data for H<sub>2</sub>. Of the 89 total respondents to answer this question 74% (66 respondents) answered Yes and 26% (23 respondents) answered No. When comparing the two groups of respondents who answered Interest 2 after viewing the stimulus, 75% (36 respondents) of those who viewed the branded video answered Yes and 25% (12 respondents) answered No. Conversely, 73% (30 respondents)



of those who viewed the unbranded stimulus answered in the affirmative and 27% (11 respondents) answered in the negative.



**Figure 3. Comparison of the responses for Interest 1 and Interest 2.**

When comparing the resulting statistical values from Interest 1 and Interest 2 responses in Table 3, variables were sorted by the stimulus that the respondent received. The resulting  $P$  value for the difference in paired population means of pre-test branded responses and post-test branded responses was found to be  $p < .001$ . The resulting  $p$  value for the difference in paired population means of pre-test unbranded and post-test unbranded responses was found to be  $p < .001$ . Also of note is the statistically significant relationship between results in Prep Help and Interest 1 for those respondents viewing the branded stimulus. This relationship yielded a  $p$  value of  $.001$ . Assessment of the paired samples correlation showed that for Interest 1 and Branded Interest 2,  $r = -.081$ . Assessment of the paired samples for Interest 1 and Unbranded Interest 2,  $r = .191$ . Both correlation coefficients represent a weak nonlinear relationship between the difference of the means.

Finally, when comparing the means of Interest 2 for branded and unbranded variable groups, the essential assessment for response to RQ<sub>2</sub> and H<sub>2</sub>, the calculated P-value derived from an independent samples test showed no statistical significance. H<sub>2</sub> predicted that the post-test interest scores reported by respondents who viewed the branded message would be higher than those who viewed the unbranded video. Analysis of Interest 1 and Interest 2 against one other

*Paired Samples Test<sup>a</sup>*

Stimulus			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Branded	Pair 1	Do you help with meal prep at home? - Would you make a recipe after watching a video tutorial of the recipe?	-.360	.693	.098	-.557	-.163	-3.674	49	.001
	Pair 2	Do you help with meal prep at home? - Interest 2	.125	.489	.071	-.017	.267	1.770	47	.083
	Pair 3	Would you make a recipe after watching a video tutorial of the recipe? - Interest 2	.500	.772	.111	.276	.724	4.488	47	.000
Unbranded	Pair 1	Do you help with meal prep at home? - Would you make a recipe after watching a video tutorial of the recipe?	-.561	.896	.140	-.844	-.278	-4.010	40	.000
	Pair 2	Do you help with meal prep at home? - Interest 2	.049	.590	.092	-.137	.235	.530	40	.599
	Pair 3	Would you make a recipe after watching a video tutorial of the recipe? - Interest 2	.610	.862	.135	.338	.882	4.527	40	.000

a. No statistics are computed for one or more split files

showed no statistical significance and, therefore, the null hypothesis cannot be rejected.

**Table 3. Significance testing of paired interest questions before and after a video stimulus N=91**

## CHAPTER 5

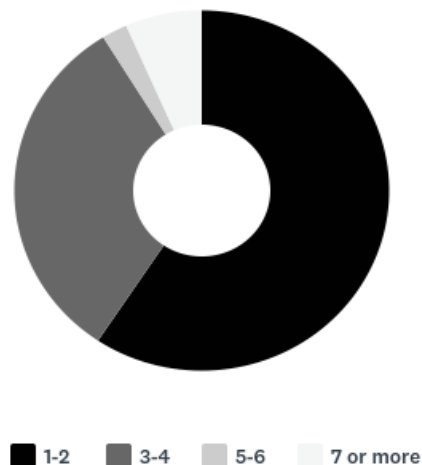
### DISCOVERY

#### Demographic Information

Several demographic questions, unrelated to either of the research hypotheses, were included in the pre-test directly following age and grade level responses. While the analysis of these questions was of no direct influence on the interest and assessment of health value questions, they still offer insight into the habits of the sample group and possible motivations for the responses given later. Each respondent was asked about the frequency of eating meals away from their home each week, specifically noting to eliminate responses for school lunch; then they were asked if they ate a school-provided lunch or packed from home. Lastly, each respondent was asked to give information on who prepared meals in their homes.

Each respondent answered the question concerning how many meals they ate away from home each week, not including meals at school. Figure 4 illustrates that of the 91 responses, 59%

Q3 Weekly Meals Away From Home



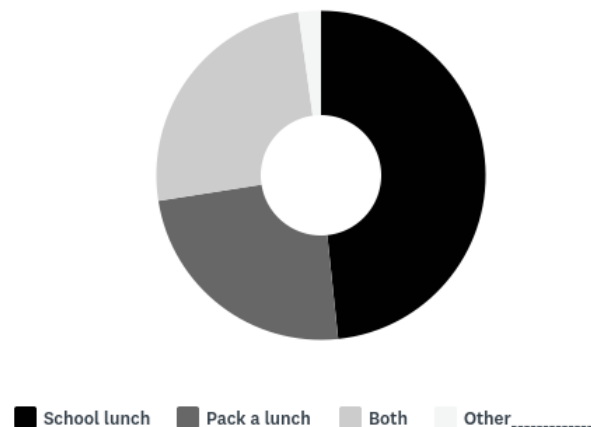
**Figure 4. Outside meals each week**

School lunch was intentionally excluded as part of the question prompt.

(54 respondents) answered 1-2 meals per week, 32% (29 respondents) answered 3-4 meals per week, 2% (2 respondents) answered 5-6 meals per week and 7% (6 respondents) answered 7 or more meals per week.

Each respondent submitted a response to a question regarding the source of their daily lunch. When asked if they ate a school-provided lunch only, 48.35% (44 respondents) answered Yes. When asked if they ate a packed lunch, 24.18% (22 respondents) answered Yes. When asked if they ate both a school-provided lunch and a packed lunch, 25.27% (23 respondents) answered Yes. When asked if they chose some other option for their daily lunch, 2.20% (2 respondents) answered Yes. Other options were not assessed.

Q4 Source of lunch each day



**Figure 5. Source of lunch each day**

Respondents were asked, “Who prepares meals at your home?” and given the option to choose all responses that corresponded with meal preparation in their homes. Each respondent gave at least one response and a total of 137 responses were collected. Table 4 shows that for the option “I prepare my own meals” nearly one quarter (24%) of respondents replied and more than three quarters (76%) reported their mother prepared the meals.

*At-Home Meal Preparation*

		Responses		Percent of Cases
		N	Percent	
Who prepares meals at your home <sup>a</sup>	Respondent prepares meals at home	22	16.1%	24.2%
	Mother prepares meals at home	69	50.4%	75.8%
	Father prepares meals at home	23	16.8%	25.3%
	Sibling(s) prepare meals at home	7	5.1%	7.7%
	Other meal preparation	16	11.7%	17.6%
Total		137	100.0%	150.5%

a. Dichotomy group tabulated at value 1.

**Table 4. Multi-answer question responses**

**Discussion**

The variable of interest in the current study was the possible influence of a brand name and logo on the population. Demographic, interest and Likert scale questions, as well as the video stimulus, were based on two hypotheses from secondary research: first, that late-elementary and middle school students were knowledgeable enough to make their own assessments of the health value of foods and, second, that their assessment and their interest would be influenced by a well-known brand. Both hypotheses derive from reviewed primary research conducted across the United States and internationally with children from birth to 18 (Ault, 2003; Connor, 2006; Elliott, 2009; Hawkes, 2010; Kotler, Schiffman and Hanson, 2012; Longacre et. al., 2017). The results of this study would appear to support parts of each of the above ideas, but leave other portions unsupported.

The assessment of the results for H<sub>1</sub> require a valuation of six different figures: the significance value derived from the subject of each Likert scale question. The P-value from the analysis of each pair was assessed independently before a final assertion that the null hypothesis

can neither be rejected nor could it fail to be rejected. Of the seven pairs of results analyzed for  $H_1$ , six disconfirmed statistical significance. However, the pair of results that did show significance was that pair that studied the item of interest in the stimulus video. For the respondents who viewed the branded stimulus,  $p \leq .002$  and for the respondents who viewed the unbranded stimulus,  $p \leq .001$ . Because both the branded and the unbranded pairs report significance it is impossible to postulate that the branded stimulus had more effect than the unbranded stimulus.

When considering the pre-test and post-test interest factors involved with the analysis of  $H_2$ , Pair 3 from Table 1 shows that each analysis gives a significance level within the range of acceptance. However, when the two sets of data were compared to each other using an Independent Samples t Test, the results disconfirmed the hypothesis. Again, as with  $H_1$ , both the branded and the unbranded results showed significance, but the comparison of the two failed to reject the null.

Even though the assessment of health of the food item from the stimulus video and the interest scores from the pre- and post-tests change significantly, overall, the inclusion of a branded message did not appear to make more of an impact on any decisions or responses than the unbranded message. For the purposes of the current study and its focus on mass communication, the given instrument did not glean enough information to reject both null hypotheses for insight into those queries. Nonetheless, the results could help formulate further questions about the influence of branded messaging on this age group as well as highlight potential understanding of alternate machinations at work.

### **Limitations**

The verbiage of the study never explicitly defined health value for the participant, leaving

any interpretation of the meaning of the word, and any subsequent use of it, up to the individual respondent. For example, each Likert scale group was prefaced by the following statement: “The next few questions will ask you how healthy you feel a food item is. Pick an option between definitely healthy and not healthy. If you’re not sure if an item is healthy or not, pick N/A.” With a lack of definition of the term as well as a prevalence to use a single term for multiple purposes when referring to wellness (Stvan, 2007), respondents’ exact interpretations of each item cannot be known. It is possible that the assessments of health value were made by vastly different operationalized versions of the same term/phrase.

In the future, it could be more beneficial to give clarity as to what is meant by the phrase “health value,” allowing future respondents the ability to judge an item according to the definition set forth by the researcher. Performing a pre-test survey to gather key words associated with health value among the target population could be a valuable resource for determining terms with greater strength and meaning with the population.

Budget, time constraints and access to the sample all played a crucial role in limiting the scope of the current study. When collecting the sample, students in grades 6-8 required incentivized participation, proving costly, while the students in grades 4-5 were far more agreeable with no incentive. The acting guardian of the middle school students, their PE/Cooking instructor, democratically facilitated a vote in which the chosen incentive was an in-class smoothie party, which complemented the tone of the study well. Future research with this audience should allow flexibility in budget to counter any potential issues in low enrollment.

Budget aside, the greatest factor that hindered the gathering of appropriate data was the access to the population and the longevity of the study. After thorough review of all statistics and interpretation, the study could have been better served had the respondents been studied over a

period of weeks with multiple video stimuli. As they are currently reported, the statistics seem to show a magnified portion of an entire picture. A longevity study, even as short as a few weeks, may give an opportunity to zoom out and look at the bigger picture with possible interpretation of interest and assessment as they change over time.

Two factors played to the strengths of such a young and tech-savvy population: digital administration and the inclusion of a participatory video stimulus. Digitally administering the entire exposure was very successful once the website host was made available to each student. Navigating the site was straightforward and most students had no trouble, but the study may have worked better for this target if it were administered on a mobile screen in lieu of a desktop screen. This adeptness with current technology, the hands-on nature of video tutorials and the popularity of YouTube as a social medium for children led the formatting decision in the current research (Chau, 2010). During research, positive audible feedback was noted from various students. They had opinions on what they were viewing, both positive and negative, but those 60-70 seconds while watching the stimulus were insightful. Therefore, choosing an element that allows for that interaction could help stimulate respondents to give more honest and free responses.

### **Directions for Future Research**

Both stimulus groups reported an increased level of interest in preparing the recipe after they viewed the video. Future research may focus on children's interest in being part of their meal preparation, either in school or at home. Participants in the sample group from grades six through eight were sampled only from a middle school P.E./Life skills course, half of which took place in a kitchen environment at the school. Additional assessment of children outside of this



class type could yield different or continued results. If different, the association of the school's influence on a child's interest levels could be assessed.

Overall, more research is needed on children in the 10 to 14-year-old range, particularly as it applies to food choices and purchasing preferences. In a few short years, this group goes from complete dependence upon caregivers to the trial and error of adult decision making, laying the foundation for habits they may have far into their future. Secondary research cited previously in the current study suggests that the earlier and more frequently children are exposed to certain food items, the more likely they are to adopt them long-term. This is true for any item, be it healthy or unhealthy, branded or unbranded, familiar or unfamiliar. Because this group is adaptive and impressionable, constantly reworking their understanding of the world, their opinions on brands and branded content is constantly changing and growing. The relational level between a brand and a person, a brand and social group, and a brand and an entire society are also highlighted in literature, pop culture, social schema and nearly all facets of first-world daily life (Lindstrom, 2011). Therefore, the responsibility of doing work that will benefit a sensitive and malleable audience falls to future researchers and mass communicators who seek first to do no harm.

## REFERENCES

- 5112 - ENTRANCE REQUIREMENTS. (2008). In Cabell County Schools Bylaws & Policies. Retrieved February 12, 2017, from <http://www.neola.com/cabell-wv/search/policies/po5112.htm>
- Ault, S. (2003). For Marketers, Teens Are Moving Target. *Billboard*, 115(45), 6-61.
- Chau, C. (2010). Youtube as participatory culture. *New Directions for Youth Development*, 128, 65-74. doi:10.1002/yd
- Connor, S. (2006, October). Food-related advertising on preschool television: building brand recognition in young viewers. *Pediatrics*, 118(4), 1478-1485. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/17015538>
- Crowley, A., DeJong-Boots, D., & Paladines, M. (2009). So what is a “tween,” anyway? Retrieved February 12, 2017, from [http://courseweb.ischool.illinois.edu/~crowley8/506twens/Tween\\_Programming/Home.html](http://courseweb.ischool.illinois.edu/~crowley8/506twens/Tween_Programming/Home.html)
- Deely, J. (2015). Semiotics Today: The Twentieth-Century Founding and Twenty-First-Century Prospects. In *International Handbook of Semiotics* (pp. 29-38). Dordrecht, Canada: Springer.
- DeMaria, P. (2016). Fall Enrollment (Headcount) - October 2016 Public Districts and Buildings. In Ohio Department of Education. Retrieved February 12, 2017, from <http://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Enrollment-Data>
- Devine, R. (2017, January 27). Superintendent’s Annual Attendance Report (SAAR) . In Kentucky Department of Education. Retrieved February 12, 2017, from [http://education.ky.gov/districts/enrol/Pages/Superintendent's-Annual-Attendance-Report-\(SAAR\).aspx](http://education.ky.gov/districts/enrol/Pages/Superintendent's-Annual-Attendance-Report-(SAAR).aspx)
- Drewnowski, A. (1997). Taste Preferences and Food Intake [Electronic version]. *Annual Review of Nutrition*, 17, 237-253.
- Elliott, C. D. (2009). Healthy Food Looks Serious: How Children Interpret Packaged Food Products [Electronic version]. *Canadian Journal of Communication*, 34(3), 359-380.
- Federal Trade Commission. (2012). *A Review of Food Marketing to Children and Adolescents: Follow Up Report* (). In J. Liebowitz, J. Rosch, E. Ramirez, J. Brill & M. Olhausen . (Eds.). N.p.: Author. Retrieved from <https://www.ftc.gov/sites/default/files/documents/reports/review-food-marketing-children-and-adolescents-follow-report/121221foodmarketingreport.pdf>

- Gupta, A. (2010, April 7). How TV Superchef Jamie Oliver's 'Food Revolution' Flunked Out. In *Alternet*. Retrieved January 17, 2017, from [http://www.alternet.org/story/146354/how\\_tv\\_superchef\\_jamie\\_oliver's\\_'food\\_revolution'\\_flunked\\_out](http://www.alternet.org/story/146354/how_tv_superchef_jamie_oliver's_'food_revolution'_flunked_out)
- Hawkes, C. (2010, February). Invited commentary: Food packaging: the medium is the message. *Public Health Nutrition*, 13(2), 297-299. Doi:10.1017/S1368980009993168
- Healthy Food Environments (2015, October 22). In *Centers for Disease Control and Prevention*. Retrieved January 24, 2017, from <https://www.cdc.gov/obesity/strategies/healthy-food-env.html>
- Kantar Media, & OAAA. (n.d.). Advertising spending of the prepared foods industry in the United States in 2013, by medium (in thousand U.S. dollars). In *Statista - The Statistics Portal*. Retrieved January 24, 2017, from <https://www.statista.com/statistics/317663/prepared-foods-ad-spend-medium/>.
- Kaplan, K. (2015, September 18). CDC reveals just how much fast food American kids eat each day. In *Los Angeles Times*. Retrieved February 7, 2017, from <http://www.latimes.com/science/la-sci-sn-fast-food-calories-kids-20150915-story.html>
- Keller, K. L., Kuilema, L. G., Lee, N., Yoon, J., Mascaro, B., Combes, A., & Deutsch, B. (2012). The Impact of Food Branding on Children's Eating Behavior and Obesity [Electronic version]. *Physiology & Behavior*, 106, 379-386.
- Kotler, J. A., Schiffman, J. M., & Hanson, K. G. (2012). The Influence of Media Characters on Children's Food Choices. *Journal of Health Communication*, 17, 886-898. doi:10.1080/10810730.2011.650822
- Kris, D. F. (2017, November 20). 5 Strategies to Demystify the Learning Process for Struggling Students. In *MindShift: How we will learn*.
- Lindstrom, M. (2011). *Brandwashed*. New York: Crown Business.
- Longacre, M. R., Drake, K. M., Titus, L. J., Harris, J., Cleveland, L. P., Langeloh, G., & Hendricks, K. (2017). Child-Targeted TV advertising and preschoolers' consumption of high-sugar breakfast cereals [Electronic version]. *Appetite*, 108, 295-302.
- Making Brands Meaningful (2017). In *SignSalad*. Retrieved October 1, 2016, from <http://www.signalsalad.com/semiotics-explained/>
- Ogden, C. L., Carroll, M. D., Fryar, C. D., & Flegal, K. M. (2015, November). Prevalence of Obesity Among Adults and Youth: United States, 2011–2014 [Electronic version]. *NCHS Data Brief*, 219.

- Ogden, C. L., Carroll, M. D., Curtin, L. R., McDowell, M. A., Tabak, C. J., & Flegal, K. M. (2006, April 5). Prevalence of Overweight and Obesity in the United States, 1999-2004 [Electronic version]. *Journal of the American Medical Association*, 295(13), 1549-1555.
- Poppendieck, J. (2010). *Free for All: Fixing School Food in America*. N.p.: University of California Press.
- Privitera, G. J., Phillips, T. E., Zuraikat, F. M., & Paque, R. (2015, May 22). Emolabeling increases healthy food choices among grade school children in a structured grocery aisle setting. *Appetite*, 92, 173-177. Retrieved from Academic Search Premier.
- Savel'eva, O. O. (2007, March). Prospects of Change in Russians' Attitudes Toward Advertising [Electronic version]. *Sociological Research*, 46(2), 47. doi:10.2753
- School Year: 2014 - 2015 Head Count. (n.d.). In West Virginia Department of Education. Retrieved February 12, 2017, from <http://wveis.k12.wv.us/nclb/pub/enroll/esumdatap04v2.cfm?sy=15&month=2&rptnum=2b06&county=002&r1=1&et=0&rpge=../index.cfm&month=2&year=15>
- Schor, Juliet, & Ford, Margaret. (2007). From tastes great to cool: Children's food marketing and the rise of the symbolic. *Journal of Law, Medicine & Ethics*, 35 (1), 78-89.
- Stvan, L. S. (2007). Lexical Conflation and Edible Iconicity: Two sources of ambiguity in American vernacular health terminology [Electronic version]. *Communication and Medicine*, 4(2), 189-199.
- The Children's Advertising Review Unit. (2009). *Self-Regulatory Program for Children's Advertising* (5). In . (Ed.). New York, NY: Council of Better Business Bureaus, Inc.
- Tweenager. (2017). In *Oxford Living Dictionaries*. Retrieved September 10, 2017, from <https://en.oxforddictionaries.com/definition/tweenager>
- Trump, R. K., Connell, P.M., & Finkelstein, S. R. (2015). Dissociation from beloved unhealthy brands decreases preference for and consumption of vegetables [Electronic version]. *Appetite*, 92, 192-199.
- United States Securities and Exchange Commission Form 10-K: McDonald's Corporation: Investor's 2015 Annual Report* (p. 35). (2016). Washington, DC: United States Securities and Exchange Commission. Retrieved from <http://corporate.mcdonalds.com/content/dam/AboutMcDonalds/Investors%202015%20Annual%20Report.pdf>
- Vikraman, S., Fryar, C. D., & Ogden, C. L. (2015, September). Caloric Intake From Fast Food Among Children and Adolescents in the United States, 2011–2012. In *NCHS Data Brief*.

What is the WHO definition of health? (2017). In *World Health Organization*. Retrieved November 16, 2017, from <http://www.who.int/suggestions/faq/en/>

Willens, M. (2013, November 1). Ninth Grade: The Most Important Year in High School [Electronic version]. The Atlantic.

**APPENDIX A: OFFICE OF RESEARCH INTEGRITY APPROVAL LETTER**



**Office of Research Integrity**  
Institutional Review Board  
One John Marshall Drive  
Huntington, WV 25755

FWA 00002704  
IRB1 #00002205  
IRB2 #00003206

November 2, 2017

Allyson Goodman, MA  
Marshall University, School of Journalism & Mass Communications

RE: IRBNet ID# 1119930-1  
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Goodman:

**Protocol Title:** [1119930-1] A study of the influence of branded messages on non-branded food items when presented to 10-14 year-old children

**Expiration Date:** November 2, 2018

**Site Location:** MU

**Submission Type:** New Project **APPROVED**

**Review Type:** Expedited Review

In accordance with 45CFR46.110(a)(7), the above study was granted Expedited approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair for the period of 12 months. The approval will expire November 2, 2018. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day at 304-696-4303 or [day50@marshall.edu](mailto:day50@marshall.edu). Please include your study title and reference number in all correspondence with this office.

## APPENDIX B: RESEARCH INSTRUMENT

Thank you for being part of my quick study. Let's begin with a few questions to help me understand a little bit more about you.

Please choose the age you are today.

- younger than 10     10     11     12     13     14     older than 14

Please choose the grade you are in today.

- 5     6     7     8     9

Not including school, how many meals do you eat from a restaurant, fast food drive-thru or other place that isn't your home every week?

- 1-2     3-4     5-6     7 or more

Do you eat school-provided lunches, pack a lunch or another option?

- School lunch     Pack a lunch     Both     Other

Who makes the meals at your home? Choose all that apply.

- I prepare my own meals
- My mom prepares meals
- My dad prepares meals
- My siblings prepare meals
- Other \_\_\_\_\_

Do you help with making meals at home?

- Yes
- No

The next few questions will ask you how healthy you feel a food item is. Pick an option between definitely healthy and not healthy. If you're not sure if an item is healthy or not, pick N/A.

1. Would you be interested in making a recipe after viewing a how-to video for it?
  - Yes
  - No
  - Maybe

Broccoli

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Kale

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Veggie Nuggets

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Strawberries

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Cuties Mandarin Oranges

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

McDonald's Small French Fries

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Dole Fruit Cup



<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Almost done! Let's watch a quick video.

Option 1 Video – Branding during instruction. Respondents watch a recipe video of how to make veggie nuggets tagged with a Chick-fil-A logo.

<https://www.youtube.com/watch?v=cV7Bmtpsun4>

Option 2 Video – No branding during instruction. Respondents watch a recipe video of how to make veggie nugget.

<https://www.youtube.com/watch?v=7Aw5zFD6eo8>

Let's take another look at those questions from earlier. Pick an option between definitely healthy and not healthy. If you're not sure if an item is healthy or not, pick N/A.

Would you be interested in making the recipe you just saw?

- Yes
- No

#### Broccoli

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

#### Kale

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

#### Veggie Nuggets

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Strawberries

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Cuties Mandarin Oranges

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

McDonald's Small French Fries

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A

Dole Fruit Cup

○	○	○	○	○	○
Not healthy	Somewhat Not Healthy	Neutral	Somewhat Healthy	Definitely Healthy	N/A