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Children Food Advertising in English and in Spanish –
Does language create different appetites?

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Children Food Advertising in English and in Spanish

- Does language create different appetites?

by

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Report

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Abstract

Children Food Advertising in English and in Spanish – Does language create different appetites?

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This report observes food commercials within children programming on English and Spanish television networks (cable channels and broadcast channels). With advertisements greatly influencing food consumption, this report was based on the assumption that Spanish advertisements tailored to Hispanics differed from English advertisements in frequency and content. If so, could this be a contributing factor as to why Hispanic children tend to be more overweight compared to their general market? Through observation, analysis and reviewing past studies, this report established that there is a difference of frequency and content within food commercials aired on the two television categories. However, the difference was unexpected. In reality, Spanish channels air more PSAs and fewer food commercials compared to English networks. Besides the different frequency of food advertisements on these channels, the intended audiences also differed within Spanish and English television.

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INTRODUCTION

Diabetes, high cholesterol, high blood pressure, and obesity are all scenarios that many people believe describe adults; however, these are all terms that can also be applied to many children in America today. Maintaining one's weight at a healthy level is a battle many people are losing, particularly people under the age of 18 and as young as 2. While the health of young America looks bleak, the health of youth minorities is even worse, especially for Hispanic children. Recent surveys show that 20% of Hispanic children ages 2 – 19 are considered obese compared to 15% of Non-Hispanic Whites (CBS News, 2010). Research has also examined more than a dozen circumstances that can increase chances of being overweight, and nearly all were more common in minorities such as Latinos. There have also been other studies showcasing when all circumstances are equal across all ethnicities, such as social economics and environmental factors, Hispanic children still tend to be more overweight than the general population (CBS News, 2010). The question at hand is why? Why are Hispanics struggling more with weight problems compared to the rest of the population? Studies have shown that advertisements have a high correlation with eating patterns, especially with children. One such study was conducted by The Institute of Medicine, which stated that there is “strong evidence” that commercials shape children's food preferences and short-term eating habits (Chernin, 2008, 102). Yet nearly all of these studies only focus on English and general market advertisements.

One main factor that differentiates and at times defines Hispanics is language, a feature that directly influences advertisements. Advertisements are created to effectively communicate with a designated target. With advertisements greatly influencing food consumption, is it

possible that Spanish advertisements tailored to Hispanics differ from English advertisements in frequency and content?

If they do, could they be a contributing factor to why Hispanic children tend to be more overweight compared to their general market counterparts?

Today's Healthy Children

The dietary habits of today's children have significantly changed from past generations, creating astonishing statistics of obesity. In 2008, the National Health and Nutrition Examination Survey estimated that 17% of children ages 2-19 years are obese. Among pre-school children (age 2-5), obesity rates increased from 5% to 10.4%; 6-11 year olds jumped from 6.5% to 19.6%, and 12-19 year olds increased from 5% to 18.1% (CDC, 2008). Children within the US already tend to be overweight; however, Hispanics are even more so. A 2005 study indicated that Hispanic boys were the most overweight of all US children, while Hispanic girls took second place (Harrington, 2008). The term "Hispanic" includes many Spanish speaking nationalities within all the Americas, but one notable national origin that is directly impacting this dire statistic from the National Institute of Health is Mexico. The American Heart Association has concluded that, on average, more than 40% of Mexican American children (age 6-11) are considered overweight, greater than the national average and the national average for Hispanics in general (American Heart Association, 2009).

Being overweight can have many negative implications such as physical distress and even death. There is strong evidence stating that premature mortality rates are higher among adults who have been obese as children. Even if a healthy weight is achieved later in life, if an adult was obese as a child, his or her chance of dying due to poor health is still relatively high

compared to an adult who has never been obese (Dibbs, 2005). Besides physical harm, being overweight can affect the psyche of a child due to low self-esteem and bullying from others, which are highly correlated with being overweight (McCool and Dorey, 2009).

Children in general should be carefree and optimistic, not defeated and deprived. One study asked children directly what they thought of unhealthy eaters. First, they defined unhealthy eaters as overweight children. Then they went forth and described unhealthy/overweight children as undesirable, annoying, and more likely to be bullied and socially isolated (McCool and Dorey, 2009). This schoolyard study shows that it is no myth; overweight children have a harsher childhood compared to thinner kids.

As the health of kids and as the repercussions become more apparent, a recent movement to rectify this issue has taken hold. Many people have tried to define factors that directly contribute to this epidemic from school lunches to advertising geared toward children, with the latter achieving much attention. Childhood obesity has been linked to the spread of modernization, one modernization being television advertising (Harrison and Marske, 2005). Junk food snacks that advertisers promote have been shown to negatively affect the weight of children. One study found that fourth and fifth graders who had increased television viewing had poor nutritional habits, even controlling for social factors (Ford and Schor, 2007).

In 2005, an average adolescent could view more than 40,000 commercials on television per year, which consisted mostly of toys, cereal, candies and other fast foods (Harrison and Marske, 2005). The landscape has changed since 2005 in many ways, one being the amount of television children watch. Data states that kids are watching more TV now than in 2005, which means they are watching more commercials than they did 5 years ago. American children aged 2-5 years now spend more than 32 hours a week on average in front of a TV, while 6-11 year old

spend a little less time, about 28 hours per week watching TV (McDonough, 2009). The American Academy of Pediatrics recommends that kids under the age of 2 should not watch any television, yet the Kaiser Family Foundation found that 58% of children under two do, while 70% of toddlers (4-6 of age) watch television on an average day (Connor, 2006). All of this data showcases that children have a high probability of being exposed to food advertisements due to their extensive television viewing.

Breaking it down by ethnicity, in a 2005 study, African American children were found to watch an average of four hours and five minutes of TV daily, compared to two hours and forty-five minutes for Caucasian children. Hispanic children were in between, at three hours and twenty-three minutes (Ford and Schor, 2007). This high viewership among youth has translated to children spending billions of dollars per year, either of their own money or influencing their parents' money. The top four categories that a child has the greatest impact on are candy and snack foods, soft drinks, fast food, and cereal (Linn and Novosat, 2008), categories kids usually see commercials for on a daily basis.

Powerful Kids

A four year old, who does not drive, have a job, or even the ability to fully read yet, has great spending power because he or she is a great influencer within the household. A majority of children between the ages of 8 and 12 say that they do not need parental permission to purchase candies, snacks, soft drinks, or fast food (Stitt and Kunkel, 2008). Unofficial estimates state that in 1989 children age 4-12 spent \$6.1 billion in purchases from their own money, \$23.4 billion in 1997, and \$30 billion in 2002, for a total increase of four hundred percent (Ford and Schor, 2007). Others have stated that teenagers 12 – 19 years of age spent \$159 billion in 2005 (Powell,

2007). Some numbers may differ, yet the massive presence of children in the market place does not. Furthermore, youth buying power continues to grow as young children are estimated to directly influence \$330 billion of parental spending money (Powell, 2007).

Past Studies

Since the 1970s (Charles K. Atkins, 1978; Marvin Goldberg, 1980; Ariel Chernin, 2008; etc.), research has suggested a correlation between media viewing and children's purchase requests. Goldberg's historical study, based on observing parent-child interactions within a grocery store, stated that one-third of parent participants responded that children often ask for cereals after seeing television commercials (Linn and Novosat, 2008). These assumptions still hold as Stanford Researchers have found that one 30-second food commercial can affect the brand choices of kids as young as two years old (Linn and Novosat, 2008). Other researchers have also found that toddlers can correctly identify spokes-characters for certain products at a very high rate. These types of promotional characters are highly used in children's programming; they are seen twice as frequently during the programs most popular with 5–12 year old as compared to adults programs (Kelly et al, 2008).

One can imagine a toddler's excitement when he or she sees a favorite character outside of a television screen, such as within a grocer's aisle, on a macaroni and cheese box, or in front of a McDonald's. The main reason why advertisers promote to children is not only because they influence purchases but also because they will eventually grow up. The goal of branding is to create lifelong customers. Brand recognition can begin as early as 2 years of age, especially with a cartoon character like Tony the Tiger. The idea is that the younger the child is at when brand

awareness is established, the stronger this loyalty between brand and child will be as the child in question grows up (Connor, 2006).

Yet much of the research about advertising's effects on children has been done through Piaget's stage-based theory of child development and not branding. Stage based theory describes how humans gradually acquire, construct, and use knowledge overtime. There are 4 stages within this theory: sensory motor stage (ages 0 -2), preoperational stage (ages 2-7), operational stage (ages 7-11), and formal operational (ages 11 and above) (Warren, et all, 2008). The second stage, which is when most children start to have high exposure to television, asserts that children's development starts with sensory-motor skills. A young child below the age of 7 is more attentive to salient perceptual cues such as animation and lively music, all things that are frequented within kid's commercials. It also within this stage that children start to connect symbols with thought (ie Golden Arches equates to McDonald's). As children below 7 years of age begin watching kid's programming with fast, lively commercials, they now begin making connections with products and use. However they may not completely understand the product and the use of the product as their abstract reasoning is not fully developed. As children grow they gradually acquire logical and abstract reasoning skills through environment interaction, by a trial and error basis (Warren, et all, 2008). Between 2-11 years of age, a child's reasoning is still limited to physical or tangible objects. It is not until the age of approximately 12 that a child understands how to conceptualize and play with abstract reasoning. Piaget's theory suggests that children within the preoperational stage and below have difficulty understanding source, intention and motivation. Theory implies that children below the age of 12 are a vulnerable group when exposed to advertising messages. This is of great concern since children within the stages of 1 – 3 cannot be held responsible for their actions, as they do not fully understand the

repercussions of their actions. They do not have the capability to conceptualize the future from current hypotheses. For example, if a child sees a fast food commercial every day and acts upon his or her desire for this product every day, the child in question may not understand how the product is causing harm because the visual cues seen within the commercial are of happy and lively people.

Yet even though staged based theory has a strong following when it comes to persuasion and children, many have tentatively concluded that teenagers are more influenced by food advertising than younger children. One study showcased that older kids consistently report effects of advertising exposure, yet there were mixed results of effectiveness amongst younger children (Chernin, 2008). With this study, many suggest that younger and older children can be equally persuaded by commercials. This idea is something to take into consideration when looking at the advertising industry as whole.

Appeals

What makes a great commercial is not the product in question but the cues surrounding the product, like a score to a movie. Within certain studies, (Connor, 2006) appeals towards children were examined. Fun was the most common appeal within kids' advertisements. Fun was characterized by laughter, smiling, or playing. Sometimes these attributes were exhibited with a licensed character such as a smiling leprechaun. Another popular appeal that has been identified is action, anything associated with energy such as running and playing sports, which in turns translates to being social (Connor, 2006). These types of appeals have shown to change children's perception of junk food and shape how they conceptualize healthy food. For example, a study found that many children believed that healthy eaters lacked energy and were physically

weak (McCool and Dorey, 2009). These same children also believed that high calorie items gave high energy, a view that was consistent across all socioeconomic and gender groups (McCool and Dorey, 2009). A reason for this school of thought may be because sugary items are shown in advertisements while children are doing high-energy activities. For example, kids may assume that Mountain Dew really would give them energy to skateboard as most of Mountain Dew's commercials have some type of extreme sport featured. One needs to take notice of this trend as physical energy was a highly desired trait amongst children, making these sugary advertisements very effective (McCool and Dorey, 2009).

Food advertisers have become sophisticated anthropologists; many believe that advertisements are built on “basic social relationships and the connections of food to those relationships” (Ford and Schor, 2007, 16). Playing off desires and relationships can persuade children to eat particular foods not on the basis of their tastiness but because of their place in the social matrix. The same can be said about any target such as mothers. When talking to mothers, advertisers tap into the symbolic associations of food like maternal love and concern. The play of relationships is so strong that it is not only limited to food but to all categories (banking and responsibility, alcohol and being social, running shoes and health, etc.).

Regulation of Children Advertisements

During the 1970's, a public interest group named Action for Children's Television (ACT) berated networks for their lack of children programming and their failure to protect “children who are too young to effectively recognize and defend against commercial persuasion,” citing notable studies to justify their cause (Linn and Novosat, 2008, 135). ACT helped welcome the first federal policy restricting advertisements during children's television by requiring a clear

separation between program and commercial content. To strengthen this policy, in 1978, the Federal Trade Commission (FTC) ruled that “advertising directed to children too young to understand a message’s persuasive intent was inherently unfair and deceptive” (Linn and Novosat, 2008, 135). However, Congress rescinded FTC’s authority over the matter by deeming their newly formed policy “unfair,” therefore decreasing the restriction of advertising to children. As a result, for the FTC, it became easier to regulate adult advertisements than children’s advertisements, an unexpected and unwanted result of a genuine gesture. Advertising towards adults is regulated by deceptiveness and unfairness, while regulation for children’s advertising was now only based on deceptiveness. In 1984, the Federal Communication Commission “rescinded all restrictions on the amount of commercial content” in favor of a self-regulatory policy (Linn and Novosat, 2008, 135). Led by The Children’s Advertising Review Unit (CARU), a body founded by the advertising industry, there was no regulation within the industry.

A New Initiative of Self Regulation

Until recently, CARU did not have a clear statement, take any actions or have any agendas pertaining to food advertisements towards children. Studies done before 2007 (Lobstein and Dibb, 2005, Harrison and Markse, 2005; Kunkel and Gantz, 1992), have repeatedly mentioned that the majority of advertisements tailored towards children promoted empty calories. That changed with the Children’s Food and Beverage Advertising Initiative, a program the Better Business Bureau created that is fully supported by CARU. Seventeen advertisers have joined the Children’s Food and Beverage Advertising Initiative, promising to change their marketing agendas such as only promoting healthy items to children and at times avoiding advertisements for toddlers all together. Companies such as Kellogg, Burger King, and others

have reformulated their product's high sugar, fat, or sodium content to meet the new guidelines they bestowed upon themselves. As an outsider, one may think that the Initiative and the governing body is organized and consistent throughout; however, this is not the case. There are many aspects that need to be amended such as the lack of benchmarks and enforcement, vague language and, a lack of auditing within the Children's Food Beverage Advertising Initiative. Going through each participating company pledge reveals that there is no consistency among participant's pledges. For example, Burger King's pledge differs from McDonald's pledge. Even the very definition of targeting young children differs. While some companies promise not to advertise to children below the age of 6, others promise not to target youth below the age of 8. The discrepancies continue as certain food companies usually only focus on improving one aspect of a product instead of all elements (e.g., cereal companies decreasing sugar content but not fat nor sodium). Besides the inconsistency with the Initiative, it is very hard for the companies to be held accountable for their actions as they use vague language ("Champion Nutrition" – General Mills) throughout their own formulated pledges to describe what they will deliver. These are all issues that need to be rectified; however, there is no body within BBB that can audit or strongly enforce regulations among these food companies. Even CARU does not seem to enforce regulations. Looking back at staged based theory, it is suggested that children below the age of 7 or even 11 may not fully decipher an advertisement and its intentions. As a result, CARU frowns upon advertising towards children below the age of 6 but has no clear statement on what may happen if companies explicitly advertise towards this age group.

Yet even with these issues, today's advertising market towards children has significantly changed since the inception of these industry bodies. In an informal media study conducted by CFBAI in the Spring of 2010, during a 38 hour review of children's programming, only 24% of

ads were food related (Hampp, 2011). This is a great departure from the 83% of advertisements being of snacks and sweets before 2007 (Linn and Novosat, 2008).

Even though food ads are less frequent, they have not completely disappeared. They have merely been redirected, particularly to family oriented programming instead of kid specific programming. A good example is the case of Nickelodeon. Many advertisers are now spending their money in Nick at Night, a family oriented block within a kid specific channel. This programming block, sold separately from Nickelodeon, posted a 13.6% increase in revenue within 2010. Also within 2010, General Mills as a whole was Nickelodeon's biggest advertiser with \$74 million, while Kellogg was ranked number 7 with nearly \$27 million (Hampp, 2011). These two companies are notorious for children's advertisements. Another example of advertisers masterfully moving their money is participation in product placement. Product placement is prohibited by law within children programming but is frequent within primetime programming with large child audiences, such as in American Idol, which has ranked within the top 10 shows for children ages two to eleven (Linn and Novosat, 2008). In 2006 alone, food marketers were estimated to spend more than \$10 billion annually to promote products to youth (Stitt and Kunkel, 2008). Chances are these estimations have only increased within the past 5 years and are still reaching their audience, yet avoiding ad scrutiny. This loophole of family oriented vs. child oriented programming is something many advertisers are taking advantage of, as much of family programming is viewed by children under the age of 12.

METHODS

Examining Which Channels to Watch

Most of the concern about the TV-obesity link is based on correlational data from English channels. One content analysis study observed children's food advertisements on broadcast and cable channels. Comparing these two types of television networks, it was found that food advertisements appeared more frequently on broadcast networks instead of cable networks (Stitt and Kunkel, 2008). Using this study as guidance, the researcher viewed and analyzed nearly 25 hours of family and kid oriented programming within English and Spanish cable and broadcast channels. To keep things as equal as possible and to lessen discrepancies, only two English broadcast channels and two Spanish broadcast channels were examined, ABC/NBC and Telemundo/Univision. In addition, cable channels that had a Spanish counterpart were also observed in English and Spanish: Disney Channel, Cartoon Network, and MTV. However, due to Nickelodeon's grand popularity and presence, Nickelodeon was also observed. Even though Nickelodeon is not offered in Spanish, the researcher felt that such a big player amongst children's programming could not be ignored during this study.

Examining Content of Television

When deciphering which children's programming to observe, the researcher examined the type of show, rating of program, and likelihood of younger viewership (day and time of show). Due to the fact that television programs rated higher than TV-PG are not considered family friendly (TV-14 and above is defined unsuitable for children), this research is based on reviewing programming between TV-Y through TV-PG (TV Guideline, 2011). These types of

programs are more likely to attract children and contain advertisements that appeal to children. Within this study “children” is defined as below the age of 12 because many companies have bestowed the age of 12 as the universal threshold when defining children. Another reason why TV –Y through TV-PG ratings were chosen is because of the product categories advertised within these programs. As a television show becomes more suitable for a mature audience, the types of commercials become more varied from automobiles to financial services, all subjects that children below the 12 may have no interest in and at times may not fully comprehend.

There are particular blocks of time on broadcast television that are notorious for being kid specific such as the infamous Saturday morning time slot. For this reason, nearly all of the programming examined within broadcast networks was on the weekends in the morning or midday (before 3:00 PM) when programming was most likely rated as TV-PG or below. When it came to cable channels, nearly all the programs were rated as TV-PG or below, so programs were chosen base on the likelihood of containing high viewership on weekends and weekdays from 8:00am – 8:00 PM. Another criterion that was examined within the selected cable channels was the similarity of programming. Many shows within the selected English cable channels could also be found within Spanish cable (e.g. “America’s Best Dance Crew” or “Suite Life of Zack and Cody”).

Categorizing Commercials

After selecting which programs to watch, the researcher used older studies as inspiration on how to code and categorize commercials within chosen programs. Powell defined food advertisements as “cereal, sweets, snacks, drinks, and other food products” (2007, 576).

Therefore, these criteria, plus fast food restaurants, were used to define food commercials within

this study. Toy, movie, shoe, video game, and public service announcements were also selected as product categories due to their ubiquitous nature within children's programming. Beauty commercials became defined by the researcher as anything that pertains to hygiene products or vanity products (i.e. make-up), while a miscellaneous commercial is an advertisement that does not fit within the previous stated categories (ex. of misc. banking, travel, etc.)

FINDINGS

From Spanish cable to Spanish broadcast, the use of language differed, impacting how advertisements were seen and perceived. After examining 7 hours of shows within Spanish cable channels (Disney Channel en Espanol, Cartoon Network en Espanol, and MTV3), it became clear that the majority of the programming was in fact in English and not in Spanish. Of the programming observed, only 60 minutes of Disney's Spanish channel programming was indeed in Spanish, and all of the commercials were in English. Within Cartoon Network Spanish channel, all of the programming viewed was in English as were the advertisements. MTV3 was the only Spanish cable channel that did have a notable Spanish language presence as all of the shows that were observed had a bilingual element, (either having English audio and Spanish subtitles or vice versa). Most of the commercials were also in English, but there were notable Spanish language commercials as well, mostly for beauty products and movies. The only shows that were consistently in Spanish, as were their commercials, were programming on broadcast networks (Univision and Telemundo).

English vs. Spanish Broadcast Television

The commercials within televised kid specific programming varied between English language broadcast and Spanish language broadcast television. While ABC, Telemundo, NBC, and Univision all aired commercials within their respective children oriented programming, Telemundo's and Univision's commercial breaks had significantly more PSAs compared to ABC and NBC (23% of PSAs on Spanish broadcast vs. 6% on English broadcast, Table 1 and 2). Moreover, most of the PSAs in Spanish were directed toward parents and not children. The subjects of these PSAs in question were of the danger of asbestos, prevention of asthma, adoption, and vigilance over childcare, subjects that kids have no control over or say in. However, there was one PSA that greatly appealed to children due to its fast paced action and the interaction of licensed characters with children. The Shrek PSA, consisting of characters from the movie Shrek, urged children to go out and play and showcased children in high-energy activities. This PSA did not air as frequently as the other parent-oriented PSAs nor was it seen within English broadcast channels. In addition to the Shrek PSA, there was one other PSA that promoted healthy living and portion control amongst children. Yet unlike the Shrek PSA, this PSA did not have the appeal or tactics commonly used to attract young viewers. Instead, it showed a girl at the park, sitting down, wearing a soccer uniform, eating grapes, and making fun of her sleepy grandpa. It was more of an endearing commercial than a fun commercial. Both of these PSAs were in Spanish, and neither was witnessed on English broadcast channels. It is also interesting to note that there were English PSAs that did include cartoons, such as Tinker Bell to promote energy conservation or Beauty and the Beast to promote reading. There was also one cartoon English PSA that promoted a healthy lifestyle, which consisted of characters from the

Jungle Book. However this PSA only showcased the USDA food pyramid and did not have any lively action such as the Shrek PSA.

As mentioned before, food commercials do not air as frequently within children's programming as they did in the past (Hampp, 2011). However, they are still present and mostly consist of fast food restaurants such as Chuck E Cheese and McDonald's. This holds true for English and Spanish television channels. Within this observation, commercials varied within the allotted commercial breaks between program segments. Yet food related advertisements, defined as fast food, candies and other food related items, never dominated the commercial breaks. Items such as movies, toys and at times shoes had a stronger presence than food within Spanish and English channels. Journalist Andrew Hampp noted that in 2010, 24% of commercials were food related which is very similar to the percentage found within this study when observing English language networks, 26%. However this number differs when analyzing the amount of food related commercials on Spanish networks. In Table 1 and Table 2, there is a 9% difference in the amount of food related advertisements aired on English language and Spanish language television. In English television, 26% of commercials were food related while Spanish networks had 17% of food advertisements. On average, English television networks aired 6.25 food commercials per hour while Spanish television networks aired half with 3.04 food commercials per hour (Table 1 and 2).

Summary of Commercials on Spanish Television (Broadcast / Cable) – Table 1

SPANISH TELEVISION	Total Number of Commercials	Total Number of Food Commercials	Total Number of PSAs	Duration of Shows (mins)	% of Food Commercials	% of PSA Commercials	Average Number of Food Commercials per hour	Average Number of PSAs per hour
Total Spanish TV	221	38	20	750	17%	9%	3.04	1.6
Broadcast TV	73	18	17	300	25%	23%	3.6	3.4
Cable TV	148	20	3	450	14%	2%	2.666666667	0.4

Summary of Commercials on English Television (Broadcast / Cable) – Table 2

ENGLISH TELEVISION	Total Number of Commercials	Total Number of Food Commercials	Total Number of PSAs	Duration of Show (mins)	% of Food Commercials	% of PSA Commercials	Average Number of Food Commercials per hour	Average Number of PSAs per hour
Total English TV	291	75	11	720	26%	4%	6.25	0.9167
Broadcast TV	125	19	8	300	15%	6%	3.8	1.6
Cable TV	196	61	6	420	31%	3%	8.7143	0.857

When it came to family programming (TV G – PG), commercials within English and Spanish broadcast channels also differed as the intended audiences for the commercials were distinctively different. Within family oriented Spanish programming, nearly all of the food content commercials were meant for the parent. The parent has a wonderful bonding moment (Oscar Meyer creates a nice lunch for kids), or the parent benefitted from choosing a specific product (Hershey’s candy equates family togetherness). Hardly any commercials spoke directly toward children. Advertisers honed in on certain cues - breakfast/supper tables, family, gentle voice-overs, unified meals, smiles - anything that would depict a “loving feeling” within these advertisements. Nearly all the Spanish language food commercials consisted of family, and hardly had any friends present. These are tactics that a child may not easily pick up or be attracted to, but parents will surely enjoy them. These foods commercials showcased the product in an ideal way to evoke positive feelings for intended viewers, something that past researchers have noted (Caroli et al, 2004).

On the other hand, family oriented programming commercials in English spoke directly to kids. One example is the Dannon commercials, in English and in Spanish. The Spanish Dannon commercial showed numerous children playing within the playground with a mother directly speaking to the camera talking about how Dannon helps her children play. Within English Dannon commercials there are numerous kids at a school urging the stars of the children’s show “The Suite Life of Zack and Cody” to compete with one another in eating a Dannon product. No adult is visibly seen within the school halls. For the most part, in general, parents were not as present within English language commercials as they were within Spanish language commercials. From toys to video game commercials, children associated more with their friends in English commercials than in Spanish commercials. A perfect example is a

Caprisun commercial. The English Caprisun commercial, aired on an English broadcast channel, showcased children in a gym. Two boys, dressed in wrestling attire, are in the midst of a bout of arm wrestling. One boy is drinking Caprisun while wrestling and is seen as a cooler kid, indicating that Caprisun is giving the boy an upper hand. In the Spanish Caprisun commercial, there is a young girl ready to ride off on her bicycle as she has attached self-made wings to her mode of transportation. In the far distance, one sees the girl's mother lovingly staring at her daughter while a gentle voice-over directly speaks to the mom saying that with Caprisun she doesn't have to worry about her daughter. This is a perfect example how one product was advertised to two different audiences, but the final product use is intended for the same market (kids).

English vs. Spanish Cable Television

When comparing English and Spanish cable channels, there is a large difference of the exposure of food related commercials within this television segment. In English cable networks, food commercials made up 31% of all advertisements compared to 14% for Spanish cable networks (Table 1 and 2). Children's programming within English and Spanish cable did not vary much nor did the commercials, as they were mostly all in English. It isn't practical to call these Spanish cable channels "Spanish" since nearly everything was in English. From the intended audience to the certain types of appeals within the advertisements, there were hardly any differences of commercials within the cable segment. The only exception to this was MTV3. A channel advertised as the Spanish language version of MTV, this was the only cable channel that truly had some Spanish language within its programming either through audio or subtitles. Yet its food commercials were also all mostly entirely in English, but for the exception of a

Subway commercial as Subway was sponsoring a Latin music artists' tour. Even though there were limited Spanish language food commercials, there were plenty of Spanish language car, beauty and finance commercials. However, the frequency of certain types of commercials did vary. It was interesting to see that even though Spanish broadcast networks air more PSAs compared to English broadcast (23% Spanish broadcast vs. 6% on English broadcast), in cable, it is the opposite. English cable channels air more PSAs than Spanish cable channels (6% in English cable vs. 3% in Spanish cable, Table 1 and Table 2). Within Spanish broadcast, nearly 3.4 PSAs are aired every hour while Spanish cable airs less than one, 0.4. Regardless, on average English networks air less than one PSA every 60 minutes while Spanish television air approximately 1.6 PSAs per hour.

Cable vs. Broadcast TV in General

There was no notable language difference between English cable and Spanish cable channels. While Spanish broadcast was all in Spanish, Spanish cable was mostly in English (with the exception of MTV3 which was mostly bilingual). Another difference between cable channels and general broadcast channels was the amount of food content aired. Stitt and Kunkel (2008) proclaimed that there were some differences within the two types of television categories (broadcast and cable) when it comes to the frequency of food related commercials. One finding within this study was that Spanish broadcast networks actually aired more food related commercials than Spanish cable (25% vs. 14%, Table 1). Yet on average, Spanish broadcast air 3.6 food commercials per hour while Spanish cable only air one less commercial, 2.67. In general, Spanish broadcast networks air fewer commercials within children oriented programming, generating more weight for each commercial aired.

Within English television, it seems that English cable channels air more food related content than English broadcast channels (15% vs. 31%, Table 2). Astonishingly English cable channels air more than two times the amount of food commercials per hour, 8.7 commercials, compared to English broadcast channels that air 3.8 food commercials within the same time period. Cable channels as a whole, no matter the language, also hosted a plethora of advertisements that were not seen on broadcast television, such as certain cereal commercials (Lucky Charms, Trix, Cherrios) and certain candies (Fruit Roll Ups and Haribo candy). Yet the most significant discrepancy between these two types of television platforms (all language cable channels vs. all language broadcast channels) was the number of PSAs, 13% vs. 3% respectively or 2.5 PSAs per hour vs. 0.62 PSAs per hour (Table 3).

General Cable and Broadcast Channels (English and Spanish Combined) - Table 3

	Total Number of Commercials	Total Number of Food Commercials	Total Number of PSAs	% of Food Commercials	% of PSA Commercials	Average Number of Food Commercials per hour	Average Number of PSAs per hour
Cable TV (Spanish and English)	344	81	9	24%	3%	5.586	0.62
Broadcast TV (Spanish and English)	198	37	25	19%	13%	3.7	2.5

CONCLUSION

Discussion

After observing English and Spanish television channels, it seems that audiences are receiving different messages, yet the difference discovered was unexpected. It has been established that the foundations of good health start early in life. The lifestyle one lives during adolescence has a direct impact in adulthood (License, 2004). In addition, numerous large-scale reviews have concluded that exposure to food marketing affects children's food preferences and eating behavior. Considering that advertisements are tailored to different cohorts and audiences, the researcher thought that Spanish oriented advertisements might be more frequent in food commercials than English advertisements becoming a factor as to why Hispanic children tend to be more overweight than the general market. Through observation, it was discovered that there is a difference between Spanish and English advertisements; however, it is a positive difference. Spanish specific television networks, mostly on broadcast television, aired more PSAs and fewer food commercials targeting children. They targeted gatekeepers more, parents. In essence, Hispanic children are viewing more positive messages compared to the general market on broadcast television. Yet, Hispanic children are not solely exposed to Spanish language commercials. Many watch English language commercials too.

Another unexpected finding through observation concerns the cable channels in question that target Hispanic children. Nearly all of the Spanish cable channels were solely in English, from the programming to the commercials. Only MTV3, which mostly attracts adolescent audiences, consistently had content in Spanish. It was peculiar to note that most of the "Spanish" cable channels that were spin-offs of English cable channels were still, in fact, the very same as

English cable channels. From toys to food, no matter the subject, most of the commercials that were aired were in fact in English, as was the programming content. A reason for this may be the lack of Spanish language advertisements that are available. Not every company creates a Spanish version of a campaign, and multicultural ad agencies are still not as prominent as general market agencies. However, it is a mystery why the Spanish parent targeted commercials that were prominent on broadcast television were not shown on Spanish cable. One reason may be due to aesthetics and pace. Nearly all of the commercials, which were in English, on Spanish cable had salient cues to attract young viewers, such as fast cuts and bright colors, while the Spanish-language driven commercials did not follow this format. The Spanish commercials had a more sedentary feel with people sitting down and voice-overs speaking directly to a parent or a gatekeeper. It is also interesting to note how advertisers addressed audiences differently through language. Most of the food advertisements that were specifically in Spanish spoke to parents instead of children. From the feel to the perceptual cues (fast-paced vs. slow-paced, length of commercials, etc.), commercials in Spanish and in English varied greatly. One explanation for the difference may be due to stereotypes of Hispanics and their inclination of having more of a close-knit, matriarchal family unit. Parents, particularly mothers, have the last say in purchases, and not the children, which is why the advertisements may be highly targeted within kids programming.

While observing commercials for unhealthy food items, one cannot help but notice the lack of healthy food alternatives in the commercial segments. From 1972 to 1996, there were no commercials advertising fruits and vegetables (Ford and Schor, 2007). Even today, using this observation, there were hardly any fruits, vegetables, or lean meats promoted to kids. The one commercial, which was in Spanish, that did promote lean meat specifically spoke to parents and

not children. From the endearing setting of a cozy kitchen, to the smiling faces of children, to the image of a father feeding his children, this Oscar Meyer commercial spoke to adults and not kids. However, it is understandable why fruits and vegetables are not as prevalent as junk foods because, unlike unhealthy items, healthy items are not branded, making it difficult for children to create a mental relationship with them. Besides Del Monte, Dole, and Chiquita Banana, there really are few notable branded fruits and vegetables. If a product is not branded, consumers find it difficult to differentiate products within the same category. If companies do not have the means to differentiate themselves, they should perhaps consider working together to differentiate the category, much like the milk industry successfully did many years ago through their “Got Milk” ad campaign.

Another item that was observed was how products advertise themselves within different mediums. The researcher found it odd that most of the cereal commercials (Trix, Lucky Charms, Kelloggs) did not mention their grain content or fiber content, but this information is quite prominent on their boxes. This is another example on how advertisers excel as anthropologists. Advertisers have discovered that children are indeed great influencers on what they eat, yet parents still make the final decision on purchasing. If parents see the selected beneficial nutritional factors of a product, on the box at the point of purchase they may not experience buyer’s remorse from a sugary cereal since there is some nutritional value according to the box.

In the end, it seems that Spanish language advertisements may not play a significant role in the poor health of Hispanic children. Nonetheless, advertisements impact children by helping them become aware of certain unhealthy items. English channels should pay more attention to what Spanish broadcast channels are currently doing, such as airing more PSAs, limiting food commercials or speaking to parents instead of children. Even though Spanish broadcast channels

seem to air more food related commercials (since Spanish broadcasts air fewer commercials in general, food related advertisements have a stronger weighted average), these commercials do not explicitly target children. The issue of child obesity within the nation does not have a magic bullet solution, but it does have a solution. It is proven that advertisements affect the eating behavior of children and adolescents. If advertisers could only use their power of influence for nutritional items compared to empty calorie items perhaps morbid health related adult scenarios will once again be only for adults.

Appendix A– Coding Sheets for English and Spanish Television Research

English/Spanish Broadcast	Cable/Broadcast	Show	Channel	Rating	Type of Show	Types of Commercials and Amount	Food/PSA (Company/Subject) Commercials	Total amount of Commercials	Total amount of Food Commercials	Total amount of PSA	Duration of Show (mins)	% of Food Commercials	% of PSA Commercials
Spanish	Broadcast	Pinky Dinky Do	Univision	Y7	Cartoon	Misc - 2 Food - 1 Toys - 2	Chuck E Cheese	5	1	0	30	20%	0%
Spanish	Broadcast	Sheldon	Telemundo	Y7	Cartoon	PSA - 5 Misc - 2	PSA - Adoption, Asbestos, Asthma, Flu	7	0	5	30	0%	71%
Spanish	Broadcast	Willa's Wild Life	Telemundo	Y7	Cartoon	PSA - 5 Food - 1	Chuck E Cheese, PSA - exercise, adoption, childcare, family values	6	1	5	30	17%	83%
Spanish	Broadcast	Pearlie	Telemundo	Y7	Cartoon	Misc - 1 PSA - 6	PSA - Literacy, Exercise, Asthma, Flu, Asbestos, Healthy Portions	7	0	6	30	0%	86%
Spanish	Broadcast	High School Musical 3	Telemundo	G	Movie	Food - 16 Misc - 20 PSA - 1 Beauty - 11	Oscar Meyer, Dannon, Caprisun, Hersheys, Burger King, MM, Reeces Peanut Butter/Chips Ahoy, Denny PSA - Asbestos	48	16	1	180	33%	2%
Spanish	Cable	Quiero Mi Boda	MTV3	PG	Reality	Misc - 8 Food - 3 Beauty - 3 Movie - 2 PSA - 1	Skittles, Koolaid, Twix PSA - Asbestos	17	3	1	60	18%	6%
Spanish	Cable	Spongebob Square	MTV3	Y	Cartoon	Misc - 6	No PSA/No Food	6	0	0	30	0%	0%

		Pants												
Spanish	Cable	Pokemon	Cartoon Broadcast - Spanish	Y7	Cartoon	Toys - 8 Food - 4 Videogame - 1 Movie - 1	Chuck E Cheese, McDonald's, Airheads	14	4	0	30	29%	0%	
Spanish	Cable	Suite Life of Zack and Cody	Disney - Spanish	G	Live Action IN SPANISH	Movie - 1 Toys - 5 Food - 1 Game - 1	Chuck E Cheese	8	1	0	30	13%	0%	
Spanish	Cable	Chowder	Cartoon Broadcast - Spanish	Y7	Cartoon	Toys - 7 Movie - 3 Food - 2 Misc - 1	Chuck E Cheese, Buger King	13	2	0	30	15%	0%	
Spanish	Cable	Adventure Time	Cartoon Broadcast - Spanish	PG	Cartoon	Toys - 12 Movie - 2	No PSA/No Food	14	0	0	30	0%	0%	
Spanish	Cable	Zeke and Luther	Disney - Spanish	Y7	Live Action	Movie - 1 Toys - 6 Food - 2	Burger King, Kellogg	9	2	0	30	22%	0%	
Spanish	Cable	Americans Best Dance Crew	MTV3	PG	Reality	Misc - 10 Food - 1 Beauty - 5 Movie - 3 PSA - 2 (asbestos)	Chuck E Cheese	21	1	2	60	5%	10%	
Spanish	Cable	Parental Control	MTV3	PG	Reality	Misc - 4 Food - 2 Beauty - 2	Subway, Twix	8	2	0	30	25%	0%	

Spanish	Cable	Quieros Mis Quince	MTV3	PG	Reality	Food - 1 Beauty - 2 PSA - 1 Misc - 5	Burger King	11	1	0	30	9%	0%
Spanish	Cable	Quiero Mis Quince	MTV3	PG	Reality	Misc - 7 Food - 2 Beauty - 1	MM, Skittles,	10	2	0	30	20%	0%
Spanish	Cable	Phineus and Ferb	Disney Spanish	G	Cartoon - In SPANISH	Misc - 5 Movie - 1	No PSA/No Food	6	0	0	30	0%	0%
Spanish	Cable	Zeek and Luther	Disney Spanish	Y7	Live Action	Misc - 2 Food - 2 Video Games - 3 Toys - 3 Movie - 1	McDonald's, Burgerking	11	2	0	30	18%	0%

English/Spanish Channel	Cable/Broadcast	Show	Channel	Rating	Type of Show	Types of Commercials and Amount	Food/PSA (Company/Subject) Commercials	Total amount of Commercials	Total amount of Food Commercials	Total amount of PSA	Duration of Show (mins)	% of Food Commercials	% of PSA Commercials
English	Broadcast	Hannah Montana	ABC	G	Live Show	Video Games - 1 Food - 3 Movie - 2 Misc - 2 Toys - 3 Shoes - 3	Chuck E Cheese, Lunchables, McDonald's,	14	3	0	30	21%	0%
English	Broadcast	That's So Raven	ABC	G	Live Show	Food - 2 Misc - 1 Toys - 4 Shoes - 4	Chuck E Cheese, McDonald's	11	2	0	30	18%	0%
English	Broadcast	Suit life and Zack and Cody	ABC	G	Live Show	Video Games - 2 Food - 2 Movie - 2 Misc - 2 Toys - 1 Shoes - 5	McDonald's, Chuck E Cheese,	14	2	0	30	14%	0%
English	Broadcast	Willa's Wild Life	NBC	Y7	Cartoon	Misc - 1 Food - 1 Games - 1 PSA - 2	Chuck E Cheese PSA - Lets Move, Asbestos	5	1	2	30	20%	40%
English	Broadcast	The Replacements	ABC	G	Cartoons	Movie - 2 Shoes - 1 Food - 2 Toys - 6	McDonald's, Sunny D	11	2	0	30	18%	0%

English	Broadcast	The Magic School Bus	NBC	Y7	Cartoon	Misc - 4 PSA - 3 Food - 1	Chuck E Cheese PSA - Healthy Eating, Lets Move, Bullying	8	1	3	30	13%	38%
English	Broadcast	That's So Raven	ABC	G	Live Action	Toys - 5 Food - 1 Videogame - 1 Movie - 5 Shoes -4	McDonald's	16	1	0	30	6%	0%
English	Broadcast	Suite Life of Zack and Cody	ABC	G	Live Action	Food - 2 Shoes - 4 Movie - 5 Toys - 5	McDonald's, Sunny D	16	2	0	30	13%	0%
English	Broadcast	Hannah Montana	ABC	G	Live Action	Movie - 5 Shoes - 4 Food - 1 Toys - 6	McDonald's	16	1	0	30	6%	0%
English	Broadcast	Jack Hannas into the Wild	NBC	G	Live Action	Food - 4 PSA - 3 Beauty - 3 Misc - 4	Hershey's, Stoffers, Twizzlers PSA - Food Pyramid, Energy, Respect	14	4	3	30	29%	21%
English	Cable	Young Justice	Cartoon Broadcast	PG	Cartoon	Food - 3 PSA - 1 Videogame - 1 Toy - 2 Movie - 4	Goldfish, Kellogg, Chuck E Cheese PSA – Asbestos	15	3	1	30	20%	7%
English	Cable	Silent Library	MTV	PG	Game Show	Video Games - 3 Food - 5 Beauty - 2 Misc - 2	Butterfinger, SOBE, Cheetos, Twix, McDonald's	12	5	0	30	42%	0%

English	Cable	Victorious	Nickelodeon	G	Live Action	Movie - 1 Toys - 4 Food - 5 Misc - 1	Trix, McDonald's, Caprisun, Lucky Charms, Fruit Rolls	11	5	0	30	45%	0%
English	Cable	Chowder	Cartoon Broadcast	Y7	Cartoon	Toy - 4 Food - 3 Misc - 1 Movie - 3 Shoes -1 PSA - 1 Videogame - 1	Dannon, Burget King, Chuch E Cheese, PSA – Wildfire	13	3	1	30	23%	8%
English	Cable	Hole in the Wall	Cartoon Broadcast	G	Reality	Misc - 4 Food - 4 Shoe - 1 Movie - 1 Toy - 1	Popeys, Tootsie Roll, Hasbro candy, McDonald's,	11	4	0	30	36%	0%
English	Cable	Silent Library	MTV	PG	Game Show	Movie - 1 Food - 3 Beauty - 5 Misc - 5	Kellogs, Taco Bell, Popeyes	14	3	0	30	21%	0%
English	Cable	Looney Tunes	Cartoon Broadcast	G	Cartoon	Movie - 4 Shoes - 1 Food - 6 Toys - 7 Misc - 8 Video - 1	CHUCK E CHEESE, Tootsie Roll, Goldfish, McDonald's	27	6	0	60	22%	0%

English	Cable	America's Best Dance Crew	MTV	PG	Reality	Movie - 4 Food - 12 Beauty - 5 Misc - 7	Kellogg, Burger King, Minute Maid, Hot Pockets, McDonald's, Bisquick, Tic Tak, Subway, Hamburger Helper	28	12	0	60	43%	0%
English	Cable	Chill Out Scooby Doo	Cartoon Network	Y7	Cartoon	Movie - 4 Games - 1 Food - 13 Misc - 11 Toys - 5 PSA - 1	Churches, Lucky Charms, McDonald's, Kelloggs, Chuck E Cheese, Goldfish, Haribo candy PSA - Smokey Bear	24	13	1	90	54%	4%
English	Cable	Victorious	Nickelodeon	G	Live Action	Movie - 3 Food - 2 Shoes - 1 Toys - 5	Cheerios, Cinnamon Toast Crunch	11	2	0	30	18%	0%

Bibliography

American Heart Association. (2009). *Overweight and Obesity — Statistics* [2009 - Update].

Retrieved March 20, 2011, from American Heart Association website:

<http://www.americanheart.org/downloadable/heart/1236358025411OVRWGHT.pdf>

Caroli, M., Argentieri, L., Cardone, M., & Masi, A. (2004). Role of television in childhood obesity prevention. *International Journal of Obesity*. doi:10.1038/sj.ijo.0802802

CBS News. (2010, March 1). *Obesity Odds Stacked against Minority Kids*. Retrieved March 3, 2011, from CBS News website: <http://www.cbsnews.com/stories/2010/03/01/health/main6255395.shtml>

Centers for Disease Control and Prevention (CDC). (2011, March 3). Overweight and Obesity. In *Childhood Overweight and Obesity*. Retrieved April 7, 2011, from CDC website: <http://www.cdc.gov/obesity/childhood/index.html>

Chernin, A. (2008, January). The Effects of Food Marketing on Children's Preferences: Testing the Moderating Roles of Age and Gender. *The ANNALS of the American Academy of Political and Social Science*, 102-118. doi:10.1177/0002716207308952

Connor, S., PhD. (2006, October). Food-Related Advertising on Preschool Television: Building Brand Recognition in Young Viewers. *Pediatrics*, 118(4), 1478-1485. doi:10.1542/peds.2005-283

Dibbs, S., & Lobstein, T. (2005). Evidence of a possible link between obesogenic food advertising and child overweight. *Obesity Reviews*, 6, 203-208. Retrieved from Ebsco database.

- Ford, M., & Schor, J. (2007, Spring). From Tastes Great to Cool: Children's Food Marketing and The Rise of The Symbolic. *Journal of Law, Medicine & Ethics* , 10-21. Retrieved from Ebsco database.
- Hampp, A. (2011, March). Media Works. In *Kids' TV Up Despite Regulatory Challenges*. Retrieved April 4, 2011, from Advertising Age website: <http://adage.com/article/mediaworks/kids-tv-regulatory-challenges/149247/>
- Harrington, S. (2008, September/October). *Overweight in Latino/ Hispanic Adolescents: Scope of the Problem and Nursing Implications*. Retrieved March 19, 2011, from Pediatric Nursing website: <http://www.ajj.com/services/pblshng/pnj/ce/2010/Article34389394.pdf>
- Harrison, K., PhD., & Marske, A. (2005, September). Nutritional Content of Foods Advertised During the Television Programs Children Watch Most. *American Journal of Public Health* , 95(9), 1568 - 1574. Retrieved from Ebsco database.
- Kelly, B., Hattersley, L., King, L. & Flood, V. (August 2008). Persuasive food marketing to children: use of cartoons and competitions in Australian commercial television advertisements. *Health Promotion International*, 23(4) 337-334.
doi:10.1093/heapro/dan023
- Licence, K. (2004, August). Promoting and protecting the health of children and young people. *Child: Care, Health & Development*, 30(6), 623-635.
- Linn, S., & Novosat, C. (2008, January). Calories for Sale: Food Marketing to Children in the Twenty-First Century. *The ANNALS of the American Academy of Political and Social Science* , 133-155. doi:10.1177/0002716207308487
- McCool, J., & Dorey, E. (2009, May). The Role of the Media in Influencing Children's Nutritional Perceptions . *Qualitative Health Research* , 19(5), 645-654. doi:10.1177/1049732309334104

McDonough, P. (2009, October 26). *TV Viewing Among Kids at an Eight-Year High*. Retrieved March 20, 2011, from Nielsen website: http://blog.nielsen.com/nielsenwire/media_entertainment/tv-viewing-among-kids-at-an-eight-year-high/

Powell, L. M., Szczypka, G., Chaloupka, F., & Braunschweig, C. (2007). Nutritional Content of Television Food Advertisements Seen by Children and Adolescents in the United States . *Pediatrics*, 576 - 583. Retrieved from <http://www.pediatrics.org/cgi/content/full/120/3/576>

Stitt, C., & Kunkel, D. (2008). Food Advertising During Children's Television Programming on Broadcast and Cable Channels. *Health Communication*, 23(6), 573-584. doi:10.1080/10410230802465258

TV Parental Guidelines. TV Parental Guidelines. April 28, 2011. <http://www.tvguidelines.org/>

Warren, R., Wicks, R., Wicks, J. L., Fosu, I., & Chung, D. (2008, June). Food and Beverage Advertising on U.S. Television: A Comparison of Child-Targeted Versus General Audience Commercials. *Journal of Broadcasting & Electronic Media*, 52(2), 231-246. doi:10.1080/0883815080199203