

Introduction

American children are consuming an increasing number of calories from snacks, with a 22% increase of snacking instances in 2005-2006 compared to 1977-1879 (What We Eat in America (WWEIA), 2010). Piernas and Popkin (2010) suggested that typical frequency of childhood snacking is approaching three snacks per day, and more than 27% of children's daily calories are coming from snacks. Though snacking on fruits and vegetables may positively contribute to a child's total caloric intake (Wansink, Shimizu, & Brumberg, 2011; Keast, Nicklas, & O'Neil, 2010), the current foods selected for snacks often include foods high in sugar and fat (WWEIA, 2010; Larson, DeWolfe, Story, & Neumark-Sztainer, 2014).

In 2013 alone there were nearly 62 million people in the United States playing at least one team sport (SFIA, 2014). A common component of youth sports includes the distribution of snacks at the conclusion of games. These snacks are typically composed of processed foods such as sugarsweetened beverages and packaged snack foods (i.e. rice crispie treats, granola bars, and fruit gummies). Thomas, Nelson, Hardwood, & Neumark-Sztainer (2012) found that parents were aware of the unhealthful foods their children consumed at basketball games, but encountered barriers to make changes.

Currently there is limited research investigating parental perceptions regarding snack items provided to participants of organized youth sports. The current study investigated parental perceptions towards typical snacks offered by parents to teams in youth sports, and parental receptiveness to a snack guideline that would promote healthy snacking after youth sport events. Findings from this study can be used to further help future research develop guidelines for other youth sports, as well as help tailor those guidelines to the specific needs and values of that population.

Methods

This study was part of a larger survey which assessed parental knowledge of and reactions to Healthy Snack Guidelines implemented in the Fall 2014 soccer season in a Southern California league of the American Youth Soccer Organization (AYSO). This study focused on analyzing seven open ended questions included in the survey, which explored perceived importance of guidelines to promote healthy snacks, changes in snacks resulting from the guidelines, and additional informational needs. All parents/guardians who registered a soccer player in AYSO Region 16 (North Torrance) were eligible to participate; recruitment for the study was accomplished via email.

Survey responses for each open ended question were analyzed for a priori themes (based on survey questions) and emergent themes by two independent reviewers, using the sensitizing concepts approach (Blumer, 1954). The *a priori* themes included: health, convenience, time constraints, perceived importance of healthy snacks, and child preferences. Emerging themes included: respondents stating that guidelines won't matter, adding more water to snacks, and respondents not being aware of the guidelines.

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Results

A total of 77 parents/guardians who had a child playing on a team in AYSO Region 16 participated in the study. Of the respondents, 69% (n=53) were female, and 31% (n=24) were male. The ages of respondents varied with 12% age 25 to 34, 53% were age 35 to 44, 33% were age 45 to 55, and 1% were 56 or older. A significant proportion of the sample (40.3%, n= 31) were team parents, followed by 23% (n=20) being other, 16% (n=14) being coaches, 10% (n=8) being referees, and 5% (n=4) being AYSO board members. The majority of respondents ranked guidelines for promoting healthy snacks as "very important" (58%, n=45); an additional 39% (n=30) ranked them as "somewhat important", and 3% (n=2) ranked them as "not important." Many participants (23) indicated they had already made changes prior to the guidelines.

Responses across survey questions indicated that participants related snacking guidelines in youth sports with improved health. For example, when asked "Why is it important to provide nutrition guidelines," the majority of the responses (35) focused on how the guidelines promote better eating and healthier habits. Many of the respondents gave answers that revolved around general health, bringing less candy, adding more fruits and vegetables, and basic nutrition facts and values. Refer to Table 1 for supportive quotes of these themes.

When asked why having nutrition guidelines was important, 16 respondents stated that the guidelines provided some form of structure to the snacking process, and can help guide parents with selection appropriate snack choices. A number of respondents wanted to be given specific examples of snacks or food combinations, as well as having a set list of appropriate snacks, foods, and beverages that could be brought.

Table 1. Themes and Notable Quotes related to perceptions about yout	
Theme	Quote
Better Eating/Health	 "I think it's important because children
	food. This just contributes to the obesi
	parents only bring healthy snacks such
	 "Kids eat too much junk food and this w
	 "To teach children healthy choices for t
	 "Importance of good nutrition and ben
	Less Candy/Junk Food
	 "No candy or chocolates, more fruits and
	• "No bags filled with chips, cookies and
	 "The harm that junk food causes vs the
	More Fruits/Vegetables
	 "Replaced juice with water, gave a prot
	fruit."
	 "Some brought only a bag of fruit. Kids
Provides Structure	 "I think it is important for a league to h
	the collective families involved to CHAN
	is the league urging a policy of parents
	down on the escalation that we see in t
	 "sets a good example of healthy eating
	 "There is so much garbage given out to
	children because of the problems it cau
	Examples of Foods to Pack
	 "Instead of just giving ideas of healthy
	choose from for 1/2 time and after the
	does), but making healthy snacks "not
	healthy snack choices."
	 "snack combos that fit with a healthy p
Already Followed the Guidelines	 "As the mom, I stressed to my parents
	info, my parents did a great job with pr
	 "I have always been pro-healthy as far a "To moving the second pro-healthy as far a
	 "To me its common sense to bring heal "I already practice healthy analy practice
	 "I already practice healthy snack practice

th sports, snacking, and healthy snack guidelines (n=77)

are exercising, however, oftentimes parents bring a lot of junk cy problem that we have in our children. I would prefer that

- as fruit an whole grain items or vegetables"
- ill reduce obesity and make our athletes healthier."
- heir future."
- efits that come from good nutrition."
- nd water."
- candy."
- benefits of healthy snacking."

ein (new) like yogurt or cheese and a carb (less calorie) some

were not happy."

nave a position on snacks at games, but it is more important for NGE THE CULTURE around snacks. What I would really like to see simply bringing snacks for their own child only, which would cut the snack bags to "keep up with the Joneses.""

not just sugary water and junk food"

o kids after the games. I wish we were responsible for our own uses with my children wanting to eat it all."

snack options, give very specific 'menus' that parents need to games. There is no way to truly enforce this (unless the coach optional" might get more people on board with encouraging

protein, carb and fat grouping for better overall performance." to provide healthy snacks for our kids... Because I received the roviding healthy snacks!"

a snacks for my kids and try to keep things as healthy as I can" Ithy snacks instead of candy or chips."

ices. More important"

Through qualitative analysis of the survey responses, it became clear that having nutritional guidelines to promote healthy snacks was valued by the participants of the current study, and resulted in some behavioral changes. The findings of this study are congruent with previous research stating that parents are aware of the unhealthy food environment surrounding youth sports (Thomas, Nelson, Hardwood, & Neumark-Sztainer, 2012), however only 10% of the polled population responded to the survey, so results cannot be generalized.

This study is a step towards understanding practices that affect food consumption and food selection of youth involved in sports, both physically and nutritionally. Youth sports is a promising setting to promote physical activity and dietary habits, but considerable room for improvement exists for promoting healthful eating (Larson et al., 2014). More research is needed to investigate the effects of efforts to promote healthy snacking in youth sports in a broader audience (i.e., other sports and regions). Furthermore, research is needed to identify effective means of promoting healthier norms in snacking in the youth sports setting (Higgs, 2015; Robinson, 2015; Pedersen, Grønhøj, & Thøgersen, 2015; Larson et al., 2014).

3-10.



Conclusion

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