



# Snacking in Youth Sports

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## Introduction

- In the United States, about 45 million children participate in youth sports.
- Snacks make up about 28% of a child’s daily energy intake.
- Children who participate in sports are more physically active when compared to children who do not participate.
  - Participating does not ensure that children are meeting the physical activity recommendations.
- Children who participate in sports consume more unhealthy foods and a greater number of calories overall.
- Snacks brought to youth sports events are often pre-packaged convenience foods.
  - Snacks usually equate to 300-500 or more calories.
- A small percentage of parents are dissatisfied with snacks found in recreational sports.

### Purpose Statement

- The purpose of this thesis was to evaluate factors that influence parents’ choices on team snacks selection for children after participating in an organized basketball program.

### Research Questions

1. What factors influence parents’ decision in snack selection for kids participating in youth sports?
2. How do parents perceive the current snack environment?
3. What do parents consider a “healthy” snack?

## Methods

### Sample

- Convenience sampling
- Parents with children between 4 and 13 years, participating in Orange Coast Optimist youth basketball program were eligible to participate

### Instrumentation

- 13 Item survey was created
  - 3 Closed-ended questions
  - 4 Open-ended questions
  - 6 Demographic questions

### Procedures

- Parents were recruited in person, on-site the day of their child’s practice.
- Invitation to participate was done orally.
- Interested parents were given an informed consent form.
- Parents who returned the consent form back signed were given a survey.
- Parents returned the survey to the principal investigator when they were finished.

### Data Analysis

- Descriptive statistics was used to analyze closed-ended and demographic questions.
- Thematic analysis was used to analyze open-ended questions.

## Results

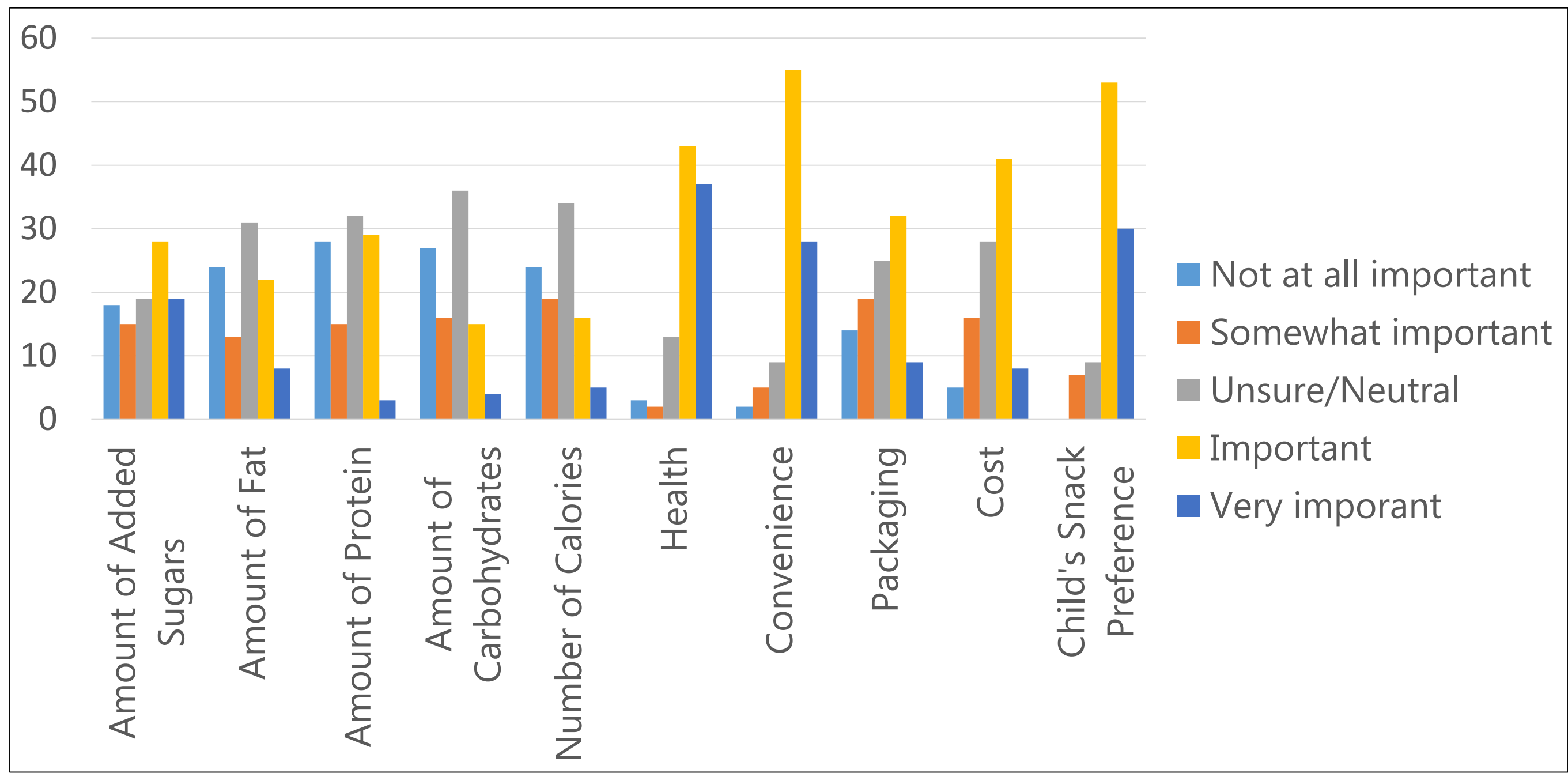
### Sample Demographics

- A total of 99 parents completed the survey.
  - Of those that responded, (42% ( $n=42$ ) were female, and 54% ( $n=54$ ) were male.
  - Looking at age, 3% ( $n=3$ ) were between 25-34 years, 57.6% ( $n=57$ ) between 35-44 years, and 36.4% ( $n=36$ ) between 45-55 years.
  - Nearly all participants packed a team snack at least once during the season ( $n=93$ , 94%), while only 6% ( $n=6$ ) did not.
  - More than half of the parents did not want to see changes made to team snacks ( $n=63$ , 63.6%), while 35.4% ( $n=35$ ) reported they would like to see changes.

### Factors Influencing Parental Decision on Team Snack Selection

- Two closed-ended questions were used to answer research question 1.
- Parents were asked to list their three most important factors that affected team snack selection.
  - For the first factor, a majority listed child snack preference ( $n=28$ , 28.3), followed by convenience ( $n=20$ , 20.2%) and health ( $n=19$ , 19.2%).
  - For their second factor, most listed health ( $n=36$ , 36.4%), child preference ( $n=21$ , 21.2%), and convenience ( $n=19$ , 19.2%).
  - For the third factor, most listed cost ( $n= 25$ , 25.3%) followed by health ( $n=18$ , 18.2) and convenience ( $n=18$ , 18.2).
- Parents were also asked to rank the level of importance of various factors when choosing team snacks.
  - Convenience ( $n=55$ , 55.6%), child’s snack preference ( $n=53$ , 53.5%), health ( $n=43$ , 43.4%), and cost ( $n=41$ , 41.4%) were most frequently reported as “important.”
- Figure 1 displays the rest of the results.

Figure 1. Frequency of levels of importance of factors affecting team snack selection.



### Emerging Themes

- Responses to the 4 open-ended questions were used to answer research questions 2 & 3.
- Table 1 below provides identified themes and supporting quotes.

## Table 1. Themes and supporting quotes.

### Theme $n$ Supporting Quote

#### Question 4: What is your opinion on the team snack bags given to your child(ren)

Acceptance	20	"They are just about right. Occasionally, I may not agree with all the content, but not to the point I will ask him not to eat."
Age	9	"For the younger players I believe it's a nice treat for them, however for the older players not so much."
Frequency	3	"OK overall. They are mostly good and it's only once a week so the snacks I didn't like were still ok to have because it's once a week."
Timing	6	"They are great but prefer not to have snacks after practice."
Enjoyment	20	"I think it's great because the kids look forward to it. Personally, I am indifferent."
Reward/treat	4	"They are fine. We eat healthier at home. Se we are fine with this as a special treat
Sugar	19	"Most of the time they have too much sugar..."
Health	31	"Not very health conscious."
Parent Burden	5	"...stressful responsibility."
Example Snack Content	14	"Drink, fruit, chips, candy."

#### Question 5: Would you like to see changes in team snack bags packed by parents in the future? If yes, indicate what types of changes.

Allergy	3	"Make sure "allergy" notifications from team are addressed."
Health	5	"Health based and more fruit."
Sugar	18	"Less sugar drinks; maybe replace with toys or inexpensive rewards rather than excessive sugar snacks."
Organic	1	"All organic and more fruit..."
Fruit/Veg	6	"Would like to see more fruit items."
Water	1	"More water"
Portions	4	"less choices/less portions."
Timing	1	"...Would like to see consideration on the time of the day..."

#### Question 6: In your opinion, what would be the ideal foods and drinks to give out as team snacks to children. Why?

Enjoyment	8	"Chips, fruit juice box, kids love it."
Sugar	29	"... No sugar or low sugar drinks"; "Low sugar-no candy"
Healthy	35	"Healthier provides good energy, get the children accustomed to tasting fruit and vegetables."
Treat	6	"Whatever kids want... As I said before this is a treat so eating something unhealthy isn't much of a concern."
Convenience	4	"Would love to hand out fruits, go gurt, carrots, but with multiple kids and being out all day can make packing difficult."
Refuel/ Recovery	7	"Water or electrolyte drink- to refuel loss electrolyte something with protein for."

#### Question 7: Are there any foods and/or drinks you think should never be given out as team snacks to children? If so, what are those foods, and why should they not be in team snacks?

Nuts/Allergies	16	"Nuts and peanuts- in case of allergies."
Sugar	9	"Anything with more than 20 g sugar per snack."
Soda	20	"No Soda- too much sugar."
Candy	28	"Candy- Sugar and too many empty calories."
Desserts	9	"Ice cream, brownies, desserts."
Artificial Ingredients	5	"...Anything with high fructose corn syrup, MSG, artificial ingredients, food coloring."
Gum	3	"... with younger kids it ends up on court!"

### Broad Themes

Balance	13	"Snack bags are tricky because it's a balancing act between finding something "healthy" vs. giving kids food that is "fun" and something they will actually eat :)"
Shared Values	10	"...I trust the other parents to have the same concerns in our children's health and to make the same decisions I would make."
Guidelines/Structure	7	"Parents be given a list of preferred snacks."
Cons	1	"...Would love to have all healthy items but snacks is "voluntary" and challenging to place too many constraints."
Eliminate	9	"There are no healthy snacks that the kids would like, that's the problem and why I don't like snacks. Better not to have snacks and go out to lunch or dinner instead."

## Conclusion

- Youth sports offer an opportunity to establish healthy lifestyle habits.
- Sports promote physical activity, however, the food environment that surrounds it may not be conducive to fitness and health.
- Overall, most parents listed health, convenience, child’s snack preference, and cost as main factors that influence team snack selection.
- More than half ( $n=63$ , 63.6%) of parents do not wish to see changes made to team snacks.
- Of the 35% ( $n=35$ ) that did not want changes, parents generally desired healthier snacks and snacks lower in sugar.
- Fruit was commonly mentioned as an appropriate snack.
- Almost all parents agreed that snacks high in sugar and snacks that contain common allergens should never be given out as part of team snacks.

### Recommendations for Future Research

- Future research may want to use focus groups within this population to develop more complete answers.
- Future research may also want to look into parental opinion on snacking guidelines
  - Focus on how parents would like to receive this information.
  - Also, on what types of information parents would like to receive.

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