A Qualitative Study to Explore how Parental Expectations and Rules Influence Beverage Choices in Early Adolescence

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Sugar-Sweetened Beverage Views

• **2005 USDA Dietary Guidelines for Early Adolescents (EAs; 10-14 y)**
  
  – Growth Spurt and Varying Activity Levels
    • Boys: 1576 – 3258 kcals/d
    • Girls: 1445 – 2806 kcals/d
  
  – Wide Range of Allowed Daily Sugar Amounts
    • Boys: 3 tsp – ½ cup
    • Girls: 3 tsp – ¼ cup

• **2009 American Heart Association (2005-2006 NHANES Data)**
  
  – Adult Cardiometabolic Health SSB Guidelines: Drink 36 oz or less per week based on 2000 kcals/d
  
  – Early & Older Adolescents
    • Boys: 20% @ 15-19 y: 13%
    • Girls: 32% @15-19 y: 27%

• **SSB Consumption develops into long-term habits**
Social Cognitive Theory: Parent Factors

**Personal**
- Beverage knowledge
- Self-efficacy contingencies
- Beliefs & attitudes about EA feeding practices

**Behavioral**
- Purchases
- Role modeling intake
- Parenting practices

**Socio-environmental**
- Home availability & accessibility
- Family mealtime monitoring

EAs Improved beverage intake

Adapted from: Larson, Story, Wall, & Neumark-Sztainer, 2006.
Focus Group Research Objective

Understand how parents of 10 to 13 year-olds set and enforce expectations and rules surrounding healthy and unhealthy beverage consumption behaviors
Webinar Objectives

1. Name 3 beverage management practices reported by parents that encourages healthy beverage consumption at home.

2. Identify a parenting behavior practice that doesn’t encourage EAs to drink healthy beverages away from home.

3. Describe an intervention component that would most likely improve parent and EAs healthy beverage consumption.
Community Flyer
(Spanish & English)

WHO:
A Mom OR Dad OR Caregiver of children, 10-13 years
(ONLY ONE ADULT FAMILY MEMBER)

WHERE

WHEN

TIME
You must call one of the numbers below to reserve your spot. A reservation is required. Space is limited.

Light refreshments will be served.

A gift card will be given to each participant after the discussion (1 per family).
Method/ Método

1. Questions were developed and reviewed by nutrition experts

2. Sessions were audio-taped

3. Moderator recorded notes and quotes

4. Audio conversations were transcribed (Spanish transcripts were back-translated)

5. Saturation level achieved when no new information was shared
   (n=4 English-speaking; n=2 Spanish-speaking)

Introductory Question:
What beverages does your child like to drink?
### Demographic Characteristics, n=49

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age group, years</th>
<th>Racial &amp; Ethnic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
<td></td>
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<tr>
<td>Male</td>
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<tr>
<td>18-30</td>
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<td>31-40</td>
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<td>&gt;= 51</td>
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</tr>
<tr>
<td>American Indian</td>
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<tr>
<td>Black / African American</td>
<td>6 (12%)</td>
<td></td>
</tr>
<tr>
<td>Hispanic / Latino</td>
<td>6 (12%)</td>
<td></td>
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<tr>
<td>White</td>
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Sample, n

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>18-30</th>
<th>31-40</th>
<th>41-50</th>
<th>&gt;= 51</th>
<th>American Indian</th>
<th>Black / African American</th>
<th>Hispanic / Latino</th>
<th>White</th>
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<tbody>
<tr>
<td>Female</td>
<td>42 (86%)</td>
<td>7 (14%)</td>
<td>22 (45%)</td>
<td>14 (30%)</td>
<td>6 (12%)</td>
<td>5 (10%)</td>
<td>6 (12%)</td>
<td>16 (33%)</td>
<td>24 (49%)</td>
</tr>
<tr>
<td>Male</td>
<td>7 (14%)</td>
<td>7 (14%)</td>
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</table>

The sample size is 49 individuals, with 42 females (86%) and 7 males (14%). The age groups range from 18-30 to 50 and over. The racial and ethnic composition includes American Indian (5%), Black/African American (12%), Hispanic/Latino (12%), and White (49%).
Economic Characteristics, n=49

- Employment
  - No: 21 (43%)
  - Part-time: 11 (22%)
  - Full time: 16 (33%)

- Education
  - < High school: 4 (8%)
  - High school, GED: 12 (24%)
  - Some college: 24 (49%)
  - College/Advanced degree: 7 (14%)

- Federal assistance
  - Yes: 26 (53%)
  - No: 23 (47%)
Constant Comparison Analysis - 2

Transcripts 2-6

Researcher #1: Independent Coding

Researcher #2: Independent Coding

Inter-coder reliability:
Every 10\textsuperscript{th} statement 83-92\% agreement

Constant Comparison Analysis - 3

7 Major Theoretical Categories

10 Themes

3 Major Concepts + Intervention Ideas + Reconciled Representative Quotes

Health Concerns
Beliefs
Expectations
Knowledge
Practices*
Rules
Intervention Topics

Parent Health & Cost Concerns
Parent Management of Beverage Expectations for EAs at home
Parent Management of Beverage Expectations away from home
Intervention Topics

Beverage Expectations for EAs

Theme #1: Health Beliefs

**Milk:** “Strong bones” [milk]

**Water:** “Sharp in class” “Build healthy bodies”

Theme #2 Beverage Cost Beliefs

**Milk:** “I would like my daughter . . Drink 3 -12 oz glasses but because of cost . We can’t do it in the summer.”

**Water:** “. . . is Free”

**Fruit Drinks vs. Fruit Juice:** “2-24 packs [of fruit drinks] is $1 . . fruit juice, it’s almost $4!”

Social Cognitive Theory

Health beliefs may help parents promote recommended beverages whereas cost may limit their ability to purchase. As a result,

Reduced home availability and offering milk and 100% fruit juice at meals may be moderated by income. Water could be a practical healthy beverage choice. When money is limited, serving water at mealtimes may be challenged by providing more flavorful and colorful fruit drinks.
Themes for Parent Management of Beverage Expectations at Home

**Theme #1: Availability**

- **Making healthy & unhealthy beverages available**
  - “Try to make things available and . . . You can’t make their decisions for them. . You have to try to start letting go and try to let them make their own decisions.”

**Theme #2: Accessibility**

- **Making selected beverages accessible promoted intake**
  - “Put water in the refrigerator”
  - “Wash and fill water bottle”
  - “Filter water.”
  - “Add ice to a jug”
  - “Add lemonade packets for flavor.”
  - “Put tap water in empty water bottles to make it look like bottled water.”
Theme #3 Offering/Allowing

Milk/Water: “Do you want water or milk?”

Theme #5: Role-modeling

Milk: “I’d want them to drink more [milk] because I don’t drink milk and . . . I don’t want them to grow up into . . Not drink milk.”

Theme #4 Monitoring

Milk: “You’re looking at your kid drinking something healthy . . As opposed to what they’re drinking all day, now you know at least they’re drinking something healthy.”

Social Cognitive Theory

Eating meals together enables parents to monitor the consumption of healthy beverages. However, EAs may find it more difficult to choose healthier beverages when SSB are available with limited parent role-modeling.
Parent Management of Beverage for EAs Expectations Away from Home

3rd Concept

Theme 1: Liked Beverage Availability +/- or Accessibility

“When we go out to eat, they can drink what they want. [brand name] . . We’re not in the house where I tell them. . . ”

“They have pop machines [at the school]. They have juice and water, [Gatorade and juice in the vending machine].”

Theme 2: Offer/Allow SBs treats

“I use soda pop as a treat.”

@ restaurants:
- “You can have whatever you want to drink”

Theme 3: Certain practices were used when parents were unable to monitor intake away from home

Unequivocal rule: “You jus gotta say ‘No’ and if I catch you, you’re grounded”

Ambiguity: It’s going to get down to the point where they aren’t going to talk to you anymore”

Acquiescence: “They wanna be an adult, kind of they want to be on their own and make decisions.”
Ethnicity Differences

Spanish
• Identified fruit juice variety @ breakfast

• Expected milk OR juice at school lunch

English
• Mentioned ‘juice’ without flavors & most often expected milk @ school lunch
Strengths & Limitations

**Strengths**

- Social Cognitive Theory guided analysis of parent & EA conversations
- Fair diversity representation of low-income parents
- Professional Spanish-speaking moderator, translators & transcriber

**Limitations**

- Convenient sample from a single metropolitan area
- Male parents were underrepresented
- Unable to complete question sequence asking beverage consumption differences between weekdays vs. weekends
Implications

• Beverage availability and accessibility leads to increased consumption (healthy and unhealthy).

• Educational activities that help parents initiate interactive conversations about making *cold* water available at home can begin in early adolescence.

• Parents need direction and practice at communicating with EAs over rules and expectations in a trustworthy atmosphere.

• Family mealtime conversation starters are needed. Interventions promoting healthy beverage consumption can potentially reduce SSBs at mealtimes (home AND away).
Intervention Conversation Idea
Refrigerator Magnet (English or Spanish)

### TRACKING YOUR WATER INTAKE

Place a check mark (✓) each time you or a family member is drinking water!

<table>
<thead>
<tr>
<th>Day</th>
<th>My Water Intake</th>
<th>Family member</th>
</tr>
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<tbody>
<tr>
<td>Monday</td>
<td>●●</td>
<td>❌</td>
</tr>
<tr>
<td>Tuesday</td>
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<tr>
<td>Sunday</td>
<td>●●●● attrib</td>
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Future Research

• Increase understanding of how to promote cold water consumption in different settings (e.g., schools and community centers)?

• Longitudinal parent-EA intervention studies addressing health concerns and cost, availability and accessibility of healthy beverages at home and away from home
Acknowledgements

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• Yen Li Chu, Doctoral Candidate, Department of Food Science & Nutrition, University of Minnesota @ the time of the focus group study


