

A Statewide Examination of Beverage Policy Implementation Among Child Care Programs in Georgia



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**What % of US children spend
time in child care each day?**

A) 15%

B) 50%

C) 75%

D) 90%

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Early Care and Education (ECE) Setting



**Child Care
Learning
Centers**



**Family
Child Care
Homes**



**License
Exempt
Child
Care**

Any licensed or license-exempt program that provides care and education to children from birth to kindergarten

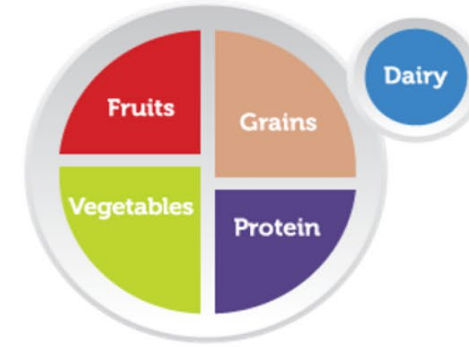
Early Care and Education (ECE) Setting is Critical for Obesity Prevention



75%



333,000



2/3+

Impact of Sugary Beverages (SBs) on Childhood Obesity



Any liquid
sweetened with
various forms
of added sugars



SB intake
contributes to
childhood
obesity



100% Juice
intake also
linked to higher
BMIs

National Beverage Recommendations for ECE Setting

National Organizations				
	CACFP	NAM*	CFOC	CDC
No SB's			✓	✓
4-6 oz 100% Fruit Juice	✓		✓	✓
Low-fat and Fat-Free Milk	✓	✓	✓	✓
All day water availability	✓	✓	✓	✓

*Follow CACFP Meal Pattern Guidelines

Georgia ECE Licensing Beverage Provisions

Rules That May Affect Beverage Policy Implementation in the Child Care Setting in Georgia

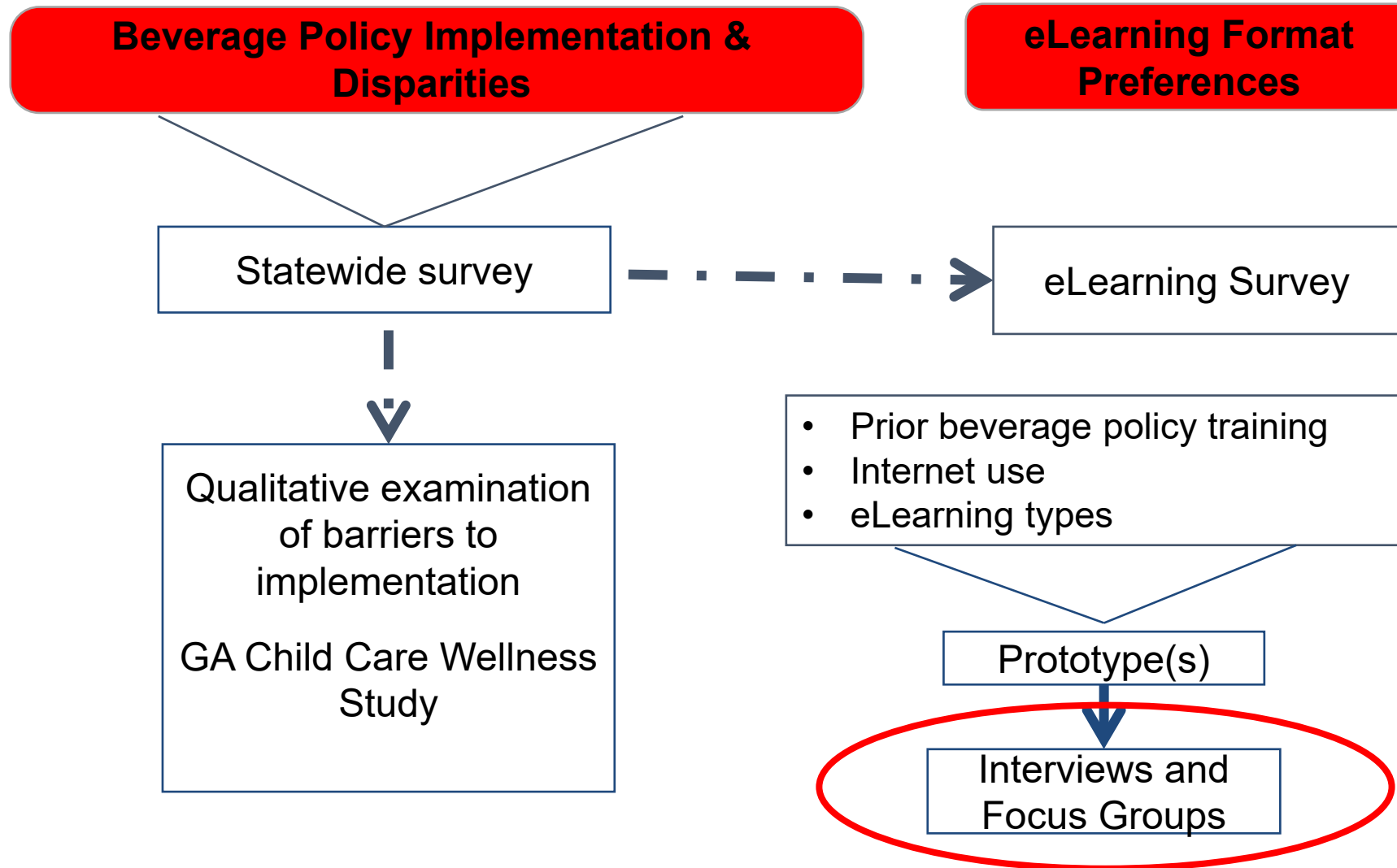
Policy/Regulation/Standard	Child Care Facility Type		
	Child Care Learning Center (CCLC)	Family Child Care Home (FCCH)	License Exempt Child Care (LECC)
Eligible for participation in CACFP	✓	✓	✓
State licensure requires adherence to CACFP standard regardless of participation in CACFP program	✓		
Eligible for voluntary participation in Quality Rated	✓	✓	

Research Questions

- 1) What is the current status of implementation of beverage policies and practices among child care programs in GA?**
- 2) Do disparities exist in the types of foods and beverages served in child care programs across GA?**
- 3) How can study findings inform the development of an eLearning training to improve beverage policy implementation among child care providers in GA?**

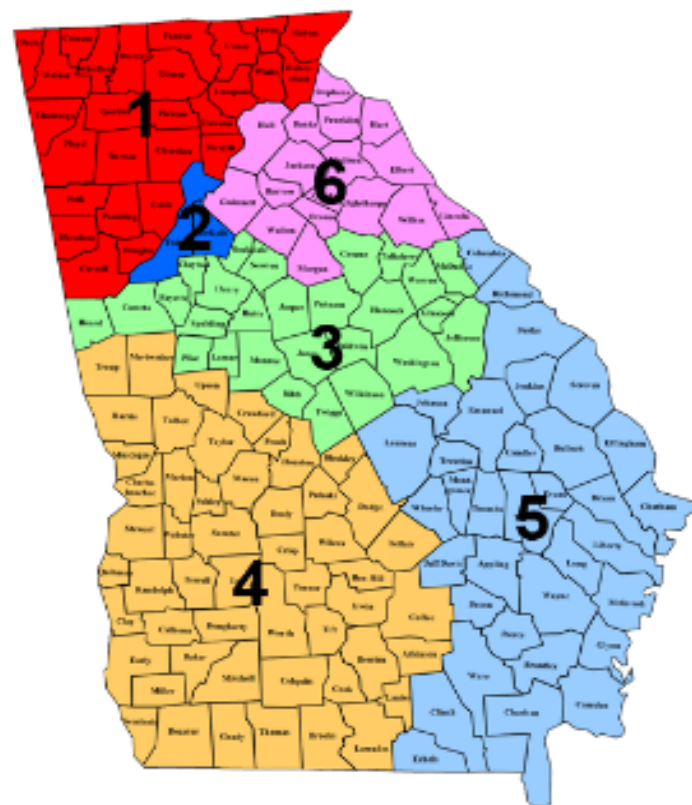


Methods Overview



Study Sample

- Partnership with GA Department of Early Care and Learning (DECAL)
- Random sample of child care programs in GA (N=3054)
- Stratified by 6 CCR&R regions in GA and program type



Survey Distribution



Frequency checklist of 21 foods and beverages served in child care programs (Ritchie et al, 2012)

Which were provided <i>YESTERDAY</i> to 1-5 year olds?				
Not Provided	Provided at Breakfast	Provided at Lunch	Provided at Dinner	Provided at Snack-time
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5



Incentives

Data Analysis

- Dichotomous variables created for whether or not programs were in compliance with beverage policies.
- Chi-square tests to compare CACFP vs. non-CACFP programs & program types.
- Fisher exact test (or the Freeman-Halton extension)
- Significance level of 0.05

Survey Demographics



Race/Ethnicity of Children Enrolled

49% Black
42% White
5.2% Hispanic
1.9% Asian/Pacific
Islander
1.6% Other



CACFP Participation

67% respondents
participate in CACFP



Program Types*

46% FCCH
39% CCLC
15% LECC



Income Level

54% of child care
programs served
families with an
income level of
\$35K or below



Response Rate

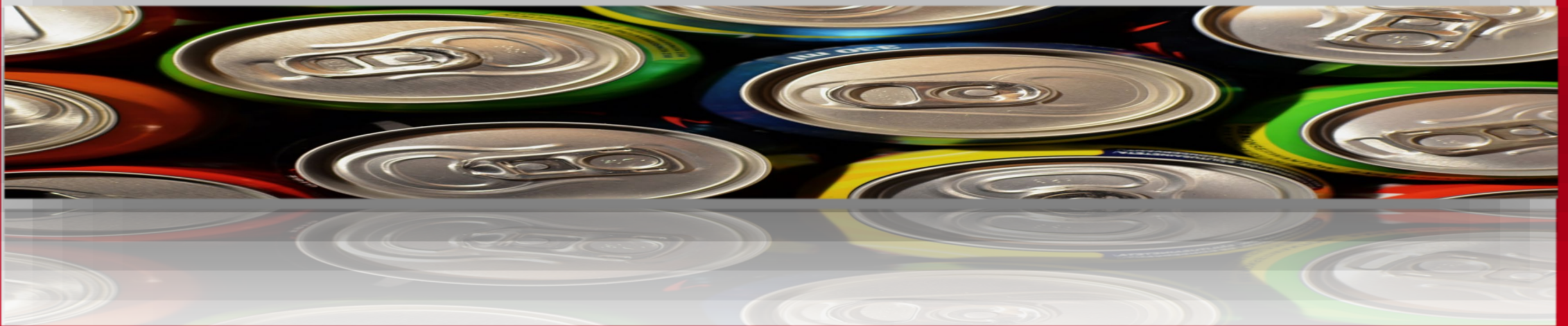
32%
Online Completion
63%



2017 CACFP Meal Patterns

34% "know a lot" about 2017
meal patterns
75% follow the 2017
guidelines
18% had not heard of
new 2017 CACFP
meal patterns

Are ECE Programs in Georgia Serving Sugary Beverages to Young Children?





96%

Are not

Current Beverage Policy Compliance in Georgia by CACFP Participation Status

Beverage Policy	% in Compliance ¹			Significant Comparisons ²
	ECE Providers	CACFP (C)	Non-CACFP (N)	
No SBs	96	98	92	C>N*
4-6oz 100% juice ³	85	83	90	C<N**
Whole milk to 12-35 months	42	57	46	C>N**
Skim or 1% to 2 years or older	57 ⁴	79 ⁵	29 ⁵	C>N**
All day water availability ⁶	31	36	23	C>N**

¹Percentages of total, CACFP participating, and non-CACFP participating ECE providers reporting compliance with beverage policies

²For CACFP (C) vs. non-CACFP (N) comparisons by cross-tabulations and Chi-square tests: * p<.05 **p<.001

³Percentages include scores for serving no juice and serving juice once a day

⁴Percentages include scores for serving skim and 1% milk

⁵Percentages include scores for serving 1% milk only

⁶Percentages combined scores of serving water 3 or more times per day

Beverages Served to Children in Georgia Aged 0-5 Years by Percent Race/Ethnicity

Beverage Best Practice	%Black ¹			% White ¹		
	OR ²	χ ² (1)	p	OR	χ ² (1)	p
Infants, Juice 0 times per day	0.995	3.718	0.054	1.005	3.819	0.051
Infants, Sugar-Sweetened Beverages ² 0 times per day	0.937	4.448	0.035	1.057	3.938	0.047
1-5 year olds, Juice 0 or 1 times per day	0.991	14.647	<0.001*	1.008	11.052	0.001
1-5 year olds, Sugar-Sweetened Beverages 0 times per day	1.000	0.005	0.943	1.000	0.000	0.984
Infants, breast milk or formula most often	0.994	0.619	0.431	1.010	1.595	0.207
Infants, breast milk or formula only	0.995	3.442	0.064	1.006	4.596	0.032
1-2 year olds, whole milk most often	0.992	20.173	<0.001*	1.010	27.466	<0.001*
2-5 year olds, skim or 1% milk most often	1.006	7.945	0.005	4.000	8.488	0.004
2-5 year olds, skim or 1% milk only, or skim or 1% + rice/soy	1.001	0.256	0.613	0.999	0.461	0.497
Water available for self serve, inside and outside	1.000	0.059	0.808	0.998	1.602	0.206

¹Each race has its own percentage, and is analyzed separately from all other races. Each race % is a continuous variable.

²in addition to reporting a Wald chi-square and p-value as for categorical variables, an odds ratio is also reported. Statistically significant odds ratio values indicated whether the provision of a certain beverage was more or less likely as the percent of a certain race/ethnicity increased by one percent.

² Includes beverages with added sugars (e.g., sweet tea, soda, lemonade)

*p < 0.001

Key Characteristics of an Online Training



Engaging



Concise



Relevant



Accountable

GOAL:
Create an interactive,
online training program
about beverage policy for
ECE Providers



Development of iBevSmart

Use of Articulate 360

eLearning Training-4 modules

SBs

Juice

Milk

Water

Modules Content:

Introduction

Background information

Interactive games, quizzes, video

Review of information covered



iBevSmart Training: CACFP Alerts

Menu

- ▼ Intro
 - Healthy Beverages for Children i...
 - Intro
 - Meet Lydia
 - Class Goals
 - Importance
 - Recommending Organizations
 - End Intro
- ▶ SSBs
- ▶ Juice
- ▶ Milk
- ▶ Water

Water

iBevSmartResources

CACFP specific information will be indicated by a CACFP alert, like the one below.

Next

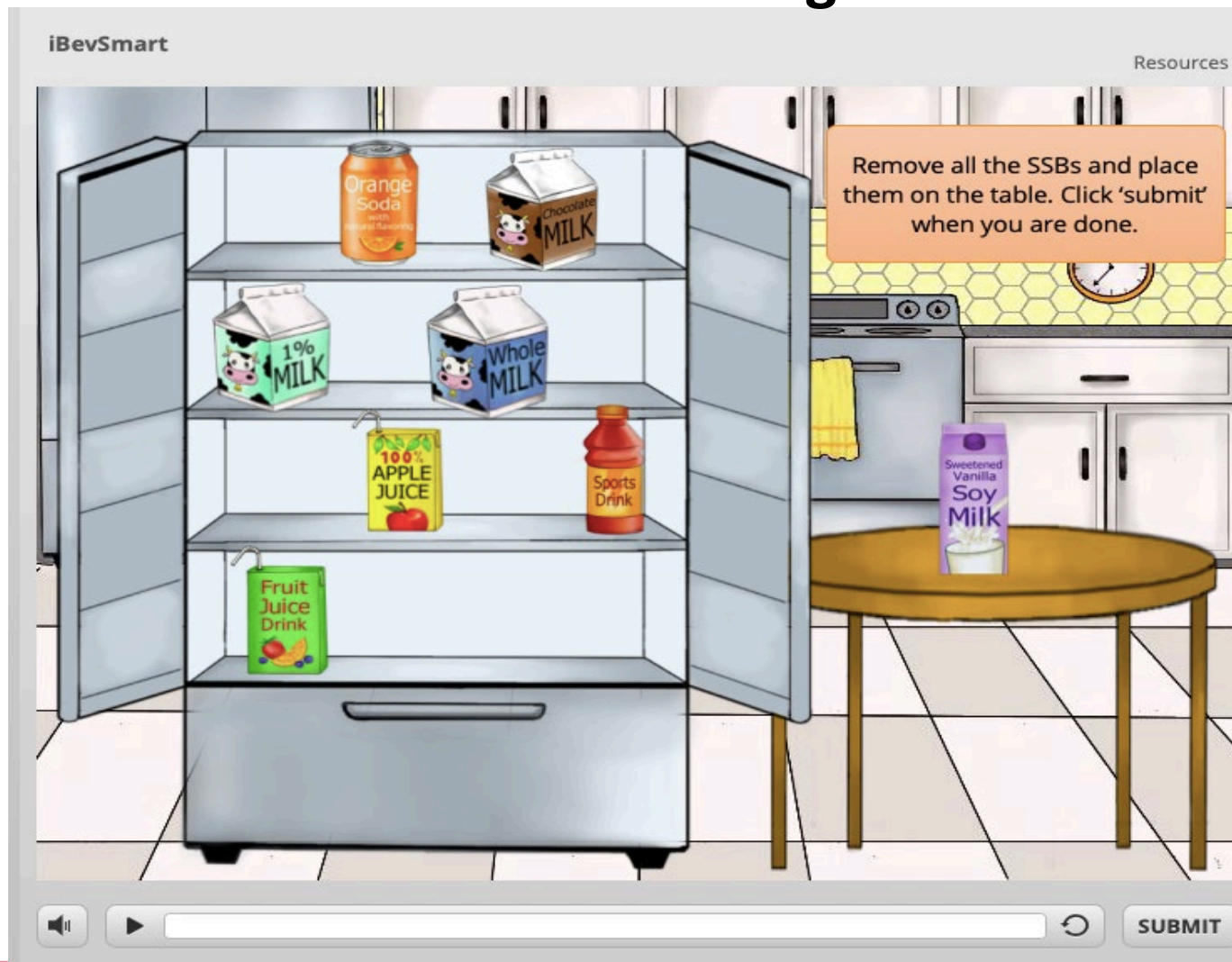
CACFP ALERT

PREV

iBevSmart Training: Interactive SB Learning Activities



iBevSmart Training: Interactive SB Learning Activities



Future Implications

Collaboration with DECAL to examine possible changes in state child care regulations related to CACFP

Higher level of analysis to further examine health disparities

Large scale examination of iBevSmart to improve knowledge and behavior relating to beverage quality

Qualitative study to inform the development of a messaging campaign focused on decreasing SBs and increasing water for African American families in GA

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