

An Evaluation of Alaska's
Play Every Day 2014 Public Education Campaign and
Knowledge, Attitudes, & Behaviors about Sugary Drinks

October, 2014

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Introduction

In 2012, the Alaska Obesity Prevention and Control Program (OPCP) launched the Play Every Day campaign to increase public awareness about the risks of childhood obesity and the importance of physical activity to prevent and reduce childhood obesity. The goal was to promote and support physically active families and children. OPCP partnered with Healthy Futures, an organization that runs the Healthy Futures Challenge for elementary-age children. Together, OPCP and Healthy Futures work with schools to promote the Challenge and ask parents to make physical activity a part of their family's day.

The Play Every Day campaign consisted of several flights of campaign ads that aired during 2012, 2013, and early 2014. Campaign media included T.V., radio, online, print, out of home, and social media. The campaign targeted parents of children ages 5 to 12.

This report presents findings from an evaluation of the recall and reaction to T.V. ads that aired during early 2014. Evaluation of earlier flights of the campaign was conducted separately. In addition, this report presents baseline survey data on knowledge, attitudes, and behaviors about sugary drinks, intended to inform future campaign development on the topic.

Methods

Overview

In June 2014, Hays Research Group was contracted by OPCP to conduct a survey of Alaska adults' knowledge, attitudes, and behaviors regarding sugary drinks, along with asking questions related to ad-specific recall and reaction to Play Every Day television ads that ran February-May 2014.

Sample

Sampling used a statewide, random-digit-dial (RDD) procedure to survey Alaska adults with at least one child between the ages of 5 and 12. The survey data collection procedure was designed to obtain 750 completed surveys, with approximately 20% completed on cell phones and 80% completed on landlines. Based on the U.S. Census distribution of adults with children ages 5-12, approximately 50% (373) of all completed surveys were obtained from the Anchorage/Mat-Su region, 13% (98) from the Fairbanks region, 9% (69) from the Southeast region, 10% (78) from the Gulf Coast region, and about 18% (132) from the Rural region.

Survey Procedures

Final disposition was determined after at least 3 calling occasions, each consisting of no more than 3 attempts at least one hour apart, for a minimum of 9 call attempts, with times varying between day, evening, and weekend. Call attempts were made over about one week, and the final disposition code was determined at the end of this period. A maximum of two voicemail messages per potential participant were allowed.

Measures

T.V. Recall and Reaction

The recall and reaction section of the survey asked about two sets of T.V. ads: (1) Play Every Day series – “A mom talks about how her family finds ways to make physical activity a priority. The family is shown doing various activities like walking, running, playing soccer and football, and going for a bike ride;” and (2) Childhood obesity – “In this ad, you are asked to look within the body of an overweight child and see the impact on the heart, lungs, and blood. You are also told that weight-related diseases like heart disease, diabetes and asthma begin in childhood.” Respondents were first asked a general recall question: “Thinking about the last 90 days, have you seen any ads on T.V. about getting kids to Play Every Day?” Respondents who answered “yes” were then asked

more specifically, “Thinking about the last 90 days, have you seen any ads on T.V. about a family being physically active together?” or “Thinking about the last 60 days, have you seen an animated ad on T.V. about the health effects of being an overweight child?” Again, if the respondent answered “yes,” the interviewer then asked what they remembered about the ad. Respondents who answered “no” to the initial recall question, or who could not remember a specific element of the ad were asked an aided recall question that described specific elements of the spot and then asked whether or not they recalled the ad.

Respondents who either correctly identified a specific element of the ad (unaided recall), or who recalled the ad once it was described by the interviewer (aided recall) were considered to have recalled the ad, and were then asked a series of reaction questions. Specifically:

1. Have you talked about or shared these ads with friends, family or co-workers?
2. Would you say these ads gave you new information or perspective?
3. Did these ads make you want to get your child more physically active?
4. Did these ads make you want to be more physically with your child?
5. Did you or your child do any physical activity because of these ads?
6. Did this ad make you want to learn more about how to prevent or treat childhood obesity? (for childhood obesity ad only)
7. What do you think was the main message of these ads? Response options, in randomized order: a) inspire your kids to play every day, b) childhood obesity is a public health problem, c) kids eat too much junk food (Play Every Day ads); d) overweight children face health risks during childhood, e) drinking sugary drinks is linked to obesity, f) kids need less “screen time” (childhood obesity ad).
8. Would you like to see more ads about a) ways families can be active together (Play Every Day ads), b) the health risks of childhood obesity (childhood obesity ad)?

General recall

Respondents who responded “yes” they had seen any ads on T.V. about getting kids to play every day were considered to have general recall of the Play Every Day campaign.

Ad-specific recall

Respondents who either correctly identified a specific element of the T.V. ad about a family being physically active or about the health effects of being an overweight child (unaided recall), or who recalled these T.V. ads once they were described by the interviewer (aided recall) were considered to have ad-specific recall of the Play Every Day campaign.

Website

Respondents were asked “Have you heard of the website PlayEveryDay.Alaska.gov?” Respondents who answered “yes” were then asked “Have you visited the ‘PlayEveryDay.Alaska.gov’ website?”

Knowledge

Respondents were asked 13 questions to assess their knowledge about added sugars in drinks, the health-related harms of added sugars, recommendations for added sugars for young children, identification of added sugars in product ingredient lists, and sugar equivalency between sugary drinks and sugary food items. They were also asked 2 questions about their knowledge of physical activity recommendations for children. Respondents were asked if they agreed or disagreed with the following statements. If a respondent indicated they agreed with a statement, he or she was then asked if they strongly or somewhat agreed. Although the option was not read by the interviewer, responses of “don’t know” were retained and coded separately for all questions.

Added Sugar Questions

1. Non-diet soda or pop such as Coca Cola, Pepsi, Mountain Dew, Sprite, and Dr. Pepper contain added sugars.
2. Sports drinks such as Gatorade and Powerade contain added sugars.
3. Non-diet Vitamin Water contains added sugars.
4. Non-diet fruit flavored or powdered drinks such as Sunny-D, Tang, Capri Sun, or Kool-Aid contain added sugars.
5. Sugary drinks are linked to tooth decay and cavities.
6. Sugary drinks are linked to diabetes, even in young children.
7. Sugary drinks are linked to weight gain and obesity in adults.
8. Sugary drinks are linked to heart disease.
9. Young children should have no more than 4 teaspoons of added sugar each day.
10. Water or low-fat milk are the healthiest drink options for my family.
11. I know how to identify added sugars on the ingredient list of a drink.
12. If added sugars are named in the first three ingredients of a drink, that drink is high in sugar.
13. A 20-ounce bottle of non-diet soda has as much sugar as 16 chocolate mini donuts.

Physical Activity Questions

14. Have you heard any recommendations about the amount of physical activity or exercise a child or youth should get each day for good health?
15. How many days per week/minutes per day have you heard that a child or youth should be physically active?

Attitudes/Beliefs

Respondents were asked 4 questions to assess their attitudes/beliefs related to sugary drinks and physical education in elementary school.

1. It is important for me to set an example for my child by consuming fewer sugary drinks.
2. In your opinion, should elementary school students have physical education, or PE, in school?
3. In your opinion, out of a 5 day school week, how many days a week should elementary school students have PE?
4. On those days, in your opinion, how many minutes of PE should elementary school students have?

Behaviors

Respondents were asked 14 questions to assess consumption of sugary drinks by their children or themselves, as well as behaviors related to purchasing and limiting access to sugary drinks at home. Respondents were also asked about their child's participation in the Healthy Futures Challenge (if the child's school also participated).

1. I make decisions about drinks I buy based on their ingredients. (agree or disagree)
2. I limit the amount of drinks that I serve to my family that contain added sugars in the ingredient list. (agree or disagree)
3. Now I'd like to ask you some questions about sugary drinks at mealtimes, including packed lunches, or outside of meals. First I'd like to ask you about what your child (you) drinks....During the past 7 days, how often did you provide (did you drink) non-diet soda like Coco-Cola or 7-UP to your child?
4.During the past 7 days, how often did you provide (did you drink) non-diet fruit flavored or powdered drinks like Sunny-D, Tang, Capri Sun, or Kool-Aid to your child? Do not include 100% fruit juice.
5.During the past 7 days, how often did you provide (did you drink) non-diet sports drinks like Gatorade or Vitamin Water to your child?
6.During the past 7 days, how often did you provide (did you drink) non-diet energy drinks like Red Bull or Rock Star to your child?
7.During the past 7 days, how often did you provide (did you drink) non-diet coffee drinks like mochas or Frappuccinos to your child?
8.During the past 7 days, how often did you provide plain low- or non-fat milk to your child?
9.During the past 7 days, how often did you provide water to your child?

Demographic characteristics

The survey assessed the demographic characteristics of each respondent. For analyses, we examined region (Anchorage, Mat-Su, Fairbanks, Southeast, Rural); race (non-Hispanic White, Alaska Native-American Indian (ANAI) – any mention, and Other – includes multiple races/ethnicities but not ANAI); gender (male, female); age (20-29,30-39,40-49,50+ and continuous); household income (\$0-\$19,999, \$20,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000+, and above or below 185% of poverty guidelines for Alaska¹); education (high school/GED or less, some college or technical school, college graduate +); and phone type (landline, cell).

Analysis

Descriptive analyses

We conducted frequencies and bivariate analyses with chi-square tests of demographic characteristics, campaign recall, and knowledge, attitudes, and behaviors (KAB) about sugary drinks and physical activity and physical education (PA/PE). For each question, responses of “don’t know/not sure,” and refusals were coded as missing; therefore, the denominator for each question varied depending on the number of responses other than “don’t know/not sure” or refusals and on skip patterns in the survey. There were several exceptions. We included respondents who answered “don’t know/not sure” or refused in the denominator for (1) heard about physical activity recommendation for children/youth, (2) knowledge about physical activity recommendation (e.g., 7 days/week and 60-120 minutes/day), (3) opinion that PE should be provided in elementary school, (4) opinion that PE should be at least 150 minutes per week, (5) child’s school participates in Healthy Futures, and (6) heard about the Play Every Day website. Thus, for these items, the denominator was the full sample of 750. We also included “don’t know/not sure” respondents and refusals in the general and specific ad recall questions.

Multivariable models

We used logistic regression to determine the impact of SES and race on all KAB and recall outcomes. For all logistic models, we dichotomized the response categories for all survey items; responses of “don’t know/not sure” and refusals were excluded from the analyses, except for where noted above. All models were adjusted for respondent age (as a continuous variable) and gender. No adjustments were made for region or cell/landline, as they were determined in the

¹ The poverty guidelines, issued each year in the Federal Register by the Department of Health and Human Services (HHS), are a simplified version of the federal poverty thresholds and are used to determine financial eligibility for federal programs. The Alaska-specific guideline totals are used to create a cut-point of household incomes at or below the 185% poverty guideline for this report because this percent corresponds with eligibility criteria for the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and some parts of Medicaid.

bivariate analyses to provide limited information. Results from the logistic regression models are presented as odds ratios (OR) with 95% confidence intervals (CI).

All analyses were performed with unweighted data.

Results

Respondent Demographics

Expected number of completes by region compared to actual are shown in Table 1.

Table 1. Respondents by Region

Region	Actual		Planned	
	%	N	%	N
Anchorage/Mat-Su	45.8	343	49.7	373
Gulf Coast	15.2	114	10.4	78
Southeast	12.9	97	9.2	69
Rural Alaska	12.9	97	17.6	132
Fairbanks/North Star	13.2	99	13.1	98

Table 2 shows demographic characteristics of respondents.

Table 2. Demographics of Survey Respondents^a

	%	N
Race^b		
White	77.6	572
ANAI	11.5	85
Other	10.9	80
Gender		
Male	31.3	235
Female	68.7	515
Age^c		
20-29	13.1	98
30-39	43.6	327
40-49	37.6	282
50+	4.3	32
Household Income		
\$0-\$19.9k	3.0	21
\$20-\$49.9k	18.1	126
\$50-\$74.9k	17.8	124
\$75-\$99.9k	21.4	149
\$100k+	39.6	275
< 185% PGL ^d	21.6	150

	>185% PGL ^d	78.4	545
Education			
	< H.S.	3.0	22
	H.S. or GED	19.6	146
	Some college	28.2	210
	College +	49.2	366
# Children 5-12 in Household	4 days/week ^e		
	1	49.9	374
	2	35.1	263
	3	10.0	75
	4	3.9	29
	5	0.9	7
	6	0.3	2
Child Age ^f			
	5	12.3	92
	6	9.5	71
	7	13.2	99
	8	11.3	85
	9	13.0	97
	10	13.8	103
	11	13.0	97
	12	14.0	105
Phone Type			
	Landline	80.0	600
	Cell Phone	20.0	150

^aExcludes respondents who answered don't know/not sure or refused.

^b"ANAI" includes all survey respondents who report being Alaska Native/American Indian, alone or in combination with another race. "White" includes only non-Hispanic White. "Other" includes those who report all other races/ethnicities or multiple race groups, not including ANAI.

^cMedian age of respondents = 41

^dAlaska Poverty Guidelines. See also footnote on page 6 of this report.

^eMedian # children 5-12 = 1

^fMedian age of children 5-12 = 9

Ad Recall

Overall recall of the Play Every Day campaign was about 58% (Table 3). Ad-specific recall for the physically active family ads was 59%, and ad-specific recall for the animated childhood obesity ad was 18%. Respondents' recall of and reactions to the ads are shown in Table 3.

Table 3. Play Every Day Campaign Recall

	General Play Every Day	Specific Active Family Ads	Specific Animated Overweight Ad

	%	N	%	N	%	N
General Recall ^a	57.5	431	-	-	-	-
Ad Specific Recall	-	-	58.9 ^b	442	18.4 ^c	138
Talked about ads with others ^d	-	-	17.4	77	21.7	30
Ads gave new information or perspective ^d	-	-	27.7	121	47.1	64
Ads made respondent want to get child more physically active ^d	-	-	48.0	208	52.2	71
Ads made respondent want to get more active with child ^c	-	-	63.5	275	59.4	82
Did physical activity because of ads ^d	-	-	26.3	114	28.7	39
Main message of family active ads ^d	-	-			-	-
Inspire your kids to play every day	-	-	79.9	345	-	-
Childhood obesity is a public health problem	-	-	16.0	69	-	-
Kids eat too much junk food	-	-	4.2	18	-	-
Main message of animated child overweight ad ^d						
Overweight children face health risks during childhood	-	-	-	-	75.8	97
Drinking sugary drinks is linked to obesity	-	-	-	-	15.6	20
Kids need less screen time	-	-	-	-	8.6	11
Like to see more ads about... ^d						
...ways families can be active	-	-	84.5	359	-	-
...health risks childhood obesity	-	-	-	-	78.5	106
Ad made respondent want to learn more about prevent/treat childhood obesity ^d	-	-	-	-	46.0	63
Website						
Heard of website "PlayEveryDay.Alaska.gov" ^e	38.0	285	-	-	-	-
Visited website "PlayEveryDay.Alaska.gov" ^f	17.2	49	-	-	-	-

^aDenominator = 750, which includes 34 "don't know/not sure" and 1 refusal.

^bDenominator = 750, which includes 33 "don't know/not sure" and 2 refusals.

^cDenominator = 750, which includes 34 "don't know/not sure" and 1 refusal.

^dTarget denominator for active family ads = 442; target denominator for animated overweight ad = 138; however, each item excludes don't know/not sure and refused which causes denominator to vary for each question.

^eDenominator = 750, which includes 14 don't know/not sure and 0 refusals.

^fDenominator = 285, which includes 1 don't know/not sure and 0 refusals.

Knowledge, Attitudes, Behaviors – Sugary Drinks and PA/PE

Table 4 shows respondents' agreement with statements about knowledge, attitudes, and behaviors regarding sugary drinks and child physical activity/physical education.

Knowledge. About 90% or more of respondents knew about added sugars in drinks and the potential harms of sugary drinks. One exception: Vitamin Water. Only 83% agreed that Vitamin Water contains added sugars. Similarly, over 90% of respondents had heard about physical activity recommendations, but only a third (32%) correctly answered 7 days per week and 60-120 minutes per day.

Attitudes. Most (98%) agreed that it is important to set an example for their child by consuming fewer sugary drinks, and nearly everyone (99%) agreed that it is important for elementary schools to provide PE. The majority (71%) thought PE should be offered at least 150 minutes per week.

Behaviors. Soda and fruit drinks were the types of sugary drinks most commonly provided to children at least once a week (37% and 35%, respectively), followed by sports drinks(26%). Very few respondents provided energy drinks (1%) or coffee drinks (3%) to their children. About 70% of respondents said they provided lowfat milk to their child at least once per day; nearly all provided water every day.

Table 4. Knowledge, Attitudes, Behaviors - % Agree

KAB Survey Item	%	N
KNOWLEDGE		
Knowledge – Sugary Drinks^a		
Non-diet soda or pop such as Coca Cola, Pepsi, Mountain Dew, Sprite, and Dr. Pepper contain added sugars.	91.5	678
Sports drinks such as Gatorade and Powerade contain added sugars.	93.6	683
Non-diet Vitamin Water contains added sugars.	83.1	507
Non-diet fruit flavored or powdered drinks such as Sunny-D, Tang, Capri Sun, or Kool-Aid contain added sugars.	94.9	700
Sugary drinks are linked to tooth decay and cavities.	98.1	736
Sugary drinks are linked to diabetes, even in young children.	95.8	700
Sugary drinks are linked to weight gain and obesity in adults.	97.7	729
Sugary drinks are linked to heart disease.	89.1	575
Young children should have no more than 4 teaspoons of added sugar each day.	91.6	642
Water or low-fat milk are the healthiest drink options for my family.	96.5	722
I know how to identify added sugars on the ingredient list of a drink.	97.8	724

If added sugars are named in the first three ingredients of a drink, that drink is high in sugar.	97.0	705
A 20-ounce bottle of non-diet soda has as much sugar as 16 chocolate mini donuts.	89.7	506
Knowledge – Physical Activity/Physical Education		
Have you heard any recommendations about the amount of physical activity or exercise a child or youth should get each day for good health?	90.5	679 ^b
How many days per week/minutes per day have you heard that a child or youth should be physically active?		
7 days/wk and 60-120 min/day	32.1	241 ^c
1-2 days	1.6	11 ^d
3-4 days	12.5	84 ^d
5-6 days	24.5	164 ^d
7 days	61.3	411 ^d
1-29 min/day	8.3	55 ^e
30-59 min/day	35.2	233 ^e
60-120 min/day	55.4	366 ^e
>120 min/day	1.1	7 ^e
ATTITUDES		
Attitudes/Opinions – Sugary Drinks^a		
It is important for me to set an example for my child by consuming fewer sugary drinks.	97.5	731
Attitudes/Opinions – Physical Education		
In your opinion, should elementary school students have physical education, or PE, in school?	98.8	741 ^b
In your opinion, out of a 5 day school week, how many days a week should elementary school students have PE? On those days, in your opinion, how many minutes of PE should elementary school students have?		
At least 150 minutes/week (combined days + minutes)	71.3	535 ^c
1-2 days	5.5	41 ^f
3 days	23.8	176 ^f
4 days	3.1	23 ^f
5 days	67.6	500 ^f
1-29 min/day	3.7	27 ^g
30-44 min/day	45.7	336 ^g
45-59 min/day	26.0	191 ^g
60+ min/day	24.7	182 ^g
BEHAVIORS		
Behaviors – Added Sugars, Sugary Drinks, Water, Milk^a		
I make decisions about drinks I buy based on their ingredients.	92.0	688

I limit the amount of drinks that I serve to my family that contain added sugars in the ingredient list.	95.9	717
During the past 7 days, how often did you provide (did you drink) non-diet soda like Coco-Cola or 7-UP to your child?		
Provide to Child		
None	62.6	466
1-2/wk	26.5	197
3-6/wk	5.0	37
1/day	3.8	28
>1/day	2.2	16
Adult consume		
None	63.2	470
1-2/wk	21.1	157
3-6/wk	6.5	48
1/day	5.9	44
>1/day	3.8	28
During the past 7 days, how often did you provide (did you drink) non-diet fruit flavored or powdered drinks like Sunny-D, Tang, Capri Sun, or Kool-Aid to your child? Do not include 100% fruit juice.		
Provide to Child		
None	64.8	484
1-2/wk	21.3	159
3-6/wk	4.6	34
1/day	5.1	38
>1/day	4.3	32
Adult consume		
None	86.1	643
1-2/wk	8.4	63
3-6/wk	1.9	14
1/day	2.4	18
>1/day	1.6	12
During the past 7 days, how often did you provide (did you drink) non-diet sports drinks like Gatorade or Vitamin Water to your child?		
Provide to Child		
None	73.6	550
1-2/wk	17.9	134
3-6/wk	4.3	32
1/day	3.1	23
>1/day	1.1	8
Adult consume		
None	80.7	603
1-2/wk	11.4	85
3-6/wk	4.6	34
1/day	2.5	19
>1/day	1.1	8

During the past 7 days, how often did you provide (did you drink) non-diet energy drinks like Red Bull or Rock Star to your child?		
Provide to Child		
None	99.2	742
1-2/wk	0.3	2
3-6/wk	0.1	1
1/day	0.3	2
>1/day	0.1	1
Adult consume		
None	92.9	695
1-2/wk	3.5	26
3-6/wk	1.9	14
1/day	1.5	11
>1/day	0.4	3
During the past 7 days, how often did you provide (did you drink) non-diet coffee drinks like mochas or Frappuccinos to your child?		
Provide to Child		
None	97.2	728
1-2/wk	2.0	15
3-6/wk	0.0	0
1/day	0.7	5
>1/day	0.1	1
Adult consume		
None	63.6	476
1-2/wk	11.1	83
3-6/wk	6.3	47
1/day	13.8	103
>1/day	5.2	39
During the past 7 days, how often did you provide plain low- or non-fat milk to your child?		
None	12.2	91
1-2/wk	3.9	29
3-6/wk	14.3	107
1/day	37.2	278
>1/day	32.4	242
During the past 7 days, how often did you provide water to your child?		
None	0.1	1
1-2/wk	0.4	3
3-6/wk	0.8	6
1/day	27.1	200
>1/day	71.5	528
Sugary Drink Score: Total of all sugary drinks provided to a child in the past 7 days		
None	35.2	260
1-2/wk	28.7	212
3-6/wk	16.8	124

	1/day	7.3	54
	>1/day	12.0	89
Behaviors – Physical Activity			
Child’s school participated in Healthy Futures Challenge - %			
	yes	55.5	416 ^h
Child participated in Healthy Futures Challenge - % yes			
		83.8	341 ⁱ

^aExcludes don’t know/not sure, refused.

^bDenominator = 750, includes 5 don’t know/not sure and 0 refusals.

^cDenominator = 750

^dAmong the 679 who had heard recommendations and were eligible to answer the question (because of the skip pattern in the survey), 670 responded (denominator); excludes 8 don’t know/not sure and 1 refusal.

^eAmong the 670 who had heard recommendations, responded to number of days, and were eligible to answer the question (because of the skip pattern in the survey), 661 responded (denominator); excludes 8 don’t know/not sure and 1 refusal.

^fAmong the 741 who said elementary school students should have PE and were eligible to answer the question (because of the skip pattern in the survey), 740 responded (denominator); excludes 1 don’t know/not sure and 0 refusals.

^gAmong the 740 who said elementary school students should have PE and were eligible to answer the question (because of the skip pattern in the survey), 736 responded (denominator); excludes 3 don’t know/not sure and 1 refusal.

^hDenominator = 750, includes 167 don’t know/not sure and 0 refusals.

ⁱAmong the 416 who said their child’s school participated in Healthy Futures; excludes 9 don’t know/not sure and 0 refusals.

Bivariate Analyses

We examined each set of outcomes (knowledge, attitudes, behaviors, recall) by key demographic characteristics to determine significant associations. Table 5 shows the percentage who agreed (or % said yes or % >1 per week) for SES-related demographics. We also examined these outcomes by region, gender, and telephone type, which are not shown in the Table 5 but are described below.

Income. For most knowledge items, smaller proportions of lower income respondents agreed with each statement compared to higher income respondents; about half of the proportions were statistically significantly different between the two groups. There was one significant difference between income groups on attitudes: a smaller proportion of lower income respondents were of the opinion that elementary students should have at least 150 minutes of PE per week. There were also significant behavioral differences between income groups. Compared to higher income respondents, lower income respondents were significantly less likely to make buying decisions based on ingredients; significantly more likely to provide fruit drinks, sports drinks, or any combination of sugary drinks to a child; significantly less likely to provide one or more servings of low-fat milk each day; and significantly more likely to consume soda, fruit drinks, sports drinks, and energy drinks. Regarding the Play Every Day campaign, there were no significant differences between income groups on ad recall or having heard about the Play Every Day website.

Education. Lower educational attainment was associated with lack of agreement on 11 of 15 of the knowledge items. In addition, lower educational attainment was associated with buying decisions; providing one or more sugary drinks to a child, especially sugary fruit drinks; and consuming soda, fruit drinks, sports drinks, and energy drinks. Although there were no differences in campaign recall among the three education groups, respondents with high school education or less were significantly less likely to have heard about the Play Every Day website.

Race. Race was a factor in many of the knowledge items. Significantly smaller percentages of ANAI respondents compared to non-ANAI respondents agreed with 5 of 15 knowledge items. There were also differences among race groups regarding sugary drink behaviors. Notably, ANAI respondents were significantly less likely to make buying decisions based on ingredients; significantly more likely to provide any sugary drink, fruit drinks, or sports drinks to a child; and significantly more likely to consume soda, fruit drinks, sports drinks, and energy drinks. There were differences by race group for ad-specific recall. Significantly smaller proportions of white respondents recalled the ads compared to ANAI or other race respondents. Among those who had heard of the Play Every Day website, ANAI respondents were significantly less likely to have used it.

Table 5. Crosstabs for Knowledge, Attitudes, Behaviors by Selected Demographics
% Agree, % Yes, or % > 1 per Week^a

Outcomes ^b	Income		Education			Race		
	<=185%	>185%	<=H.S.	Some College	College+	White	ANAI	Other
Knowledge								
Added sugars - soda	87.9	92.2	83.0*	92.8*	94.8*	92.6	86.9	88.6
Added sugars – sports drinks	86.4*	95.3*	82.6*	96.6*	96.8*	95.3*	84.3*	91.1*
Added sugars – Vitamin Water	72.8*	85.0*	71.1*	87.3*	85.9*	84.5	75.0	83.1
Added sugars – fruit drinks	89.9*	95.7*	89.1*	96.1*	96.7*	95.7*	88.1*	94.9*
Sugary drinks - tooth decay	97.3	98.2	94.6*	99.5*	98.9*	98.8*	95.3*	96.3*
Sugary drinks - diabetes	93.8	96.1	92.6*	95.1*	97.5*	95.7	95.2	96.3
Sugary drinks – obesity	95.3*	98.2*	95.8	97.6	98.6	97.6	98.8	97.5
Sugary drinks – heart disease	86.2	89.8	80.7*	90.8*	92.2*	89.9	87.0	89.0
Young children 4 tsp sugar	90.1	92.1	89.7	93.5	91.2	92.3	91.5	88.2
Water/milk healthiest options	96.7	96.1	97.0	97.1	95.9	96.0	100.0	96.3

Identify sugars ingredient list	96.6	98.1	94.6*	98.1*	99.2*	98.4	96.4	94.9
Sugars first three ingredients	94.4*	97.7*	92.6*	98.5*	98.0*	97.7	95.1	93.7
20 oz soda = 16 mini donuts	84.2*	91.2*	80.3*	96.1*	90.7*	92.5*	84.1*	81.7*
Heard PA recommendations ^c	82.7*	93.0*	79.8*	89.5*	95.9*	92.5*	80.0*	87.5*
Knows PA 7 days per wk, 60-120 min per day ^c	28.0	33.2	28.6	32.4	33.6	33.0	28.2	30.0
Attitudes								
Important set example fewer sugary drinks	95.3	97.8	96.4	97.6	97.8	98.1	97.7	95.0
PE in elementary school ^c	99.3	98.5	98.2	98.1	99.5	98.8	97.7	100.0
PE 150+ minutes per week ^c	64.7*	74.3*	69.1*	66.2*	75.4*	70.3	70.6	77.5
Behaviors								
Buying decisions based on ingredients	84.5*	93.8*	82.6*	91.9*	96.2*	94.1*	81.0*	88.8*
Limit drinks with added sugars	94.0	96.2	94.0	94.3	97.5	96.9	91.7	94.9
Provide soda to child (% at least 1/wk)	37.8	36.6	35.9	42.4	34.6	37.5	37.7	32.5
Consume soda – adult (% at least 1/wk)	48.3*	35.2*	49.1*	41.4*	29.1*	34.6*	56.0*	36.3*
Provide fruit drinks to child (% at least 1/wk)	49.0*	31.3*	47.3*	36.4*	29.0*	31.1*	58.8*	38.8*
Consume fruit drinks – adult (% at least 1/wk)	27.3*	10.3*	23.8*	12.9*	10.7*	10.1*	36.5*	18.8*
Provide sports drinks to child (% at least 1/wk)	32.7*	24.9*	31.0	26.0	24.9	23.9*	32.9*	38.8*
Consume sports drinks – adult (% at least 1/wk)	28.0*	17.3*	29.2*	21.9*	14.0*	17.7*	32.9*	17.5*
Provide energy drinks to child (% at least 1/wk)	0.7	0.9	1.2	0.5	0.8	0.7	1.2	1.3
Consume energy drinks – adult (% at least 1/wk)	13.3*	5.5*	15.5*	8.1*	3.0*	6.7*	14.1*	5.0*
Provide coffee drinks to child (% at least 1/wk)	1.3	3.5	3.0	2.9	2.7	2.8*	0.0*	6.3*
Consume coffee drinks – adult (% at least 1/wk)	32.9	38.2	34.1	39.2	35.8	37.0	28.8	42.5
Provide milk to child (% at least 1 per day)	62.7*	70.9*	68.5	70.3	69.5	70.6	64.7	65.4
Provide water to child (% at least 2 per day)	68.0	71.1	70.3	66.4	72.4	72.3	62.2	63.6

Provide any sugary drink to child (% at least 1/wk)	74.2*	61.7*	69.9*	68.0*	60.4*	62.2*	77.7*	67.5*
Healthy Futures Challenge – school ^c	50.0	56.2	51.2	52.4	59.0	56.8	44.7	60.0
Healthy Futures Challenge - child	84.7	83.3	85.5	82.4	83.5	83.0	92.0	81.3
Ad Recall								
General recall Play Every Day ^c	54.0	58.2	55.4	63.3	54.9	56.8	57.7	63.8
Ad-specific recall active family ^c	57.3	58.9	58.9	65.2	55.5	55.9*	67.1*	72.5*
Ad-specific recall childhood obesity ^c	23.3	17.8	19.1	22.4	16.1	16.6*	23.5*	28.8*
Play Every Day website – heard ^c	31.3	39.8	25.6*	44.8*	39.9*	38.5	30.6	41.3
Play Every Day website - used	23.4	14.3	18.6	8.5	21.9	16.4*	7.7*	30.3*

^aAsterisk (*) indicates statistically significant different proportions within each demographic group at the $p \leq 0.05$ level.

^bEach survey item excludes don't know/not sure and refusals from the denominator except: (1) heard PA recommendations, (2) knows PA recommendations for 7 days/60-120 minutes, (3) PE in elementary schools, (4) 150+ PE minutes per week, (5) Healthy Futures – school, (6) general and specific ad recall, and (7) heard about Play Every Day website.

^cDenominator = 750; includes don't know/not sure and refusals.

Region. There were 4 significant differences in outcomes by region.

- Fewer respondents in Southeast (86%) and Rural (84%) had heard about PA recommendations compared to other regions (92% and higher).
- Substantially fewer respondents in Rural (33%) said their child's school participated in the Healthy Futures Challenge compared to other regions (Fairbanks 47%, Anchorage/Mat-Su 62%, Gulf Coast 64%, Southeast 54%).
- Rural respondents were more likely to have provided at least one fruit drink in the past week to their child compared to respondents in other regions (55% versus 24%-35%).
- Rural respondents were more likely to have provided one or more sugary drink in the past week to their child compared to respondents in other regions (75% versus 54%-68%).
- Rural respondents were more likely to have consumed fruit drinks compared to respondents in other regions (32% versus 14% and lower).

Gender. There were numerous significant differences in outcomes by gender.

- Females were more likely than males to agree that sodas contain added sugars (93% vs. 88%) and Vitamin Water contains added sugars (86% vs. 76%); more likely to agree that sugary drinks are linked to tooth decay (99% vs. 97%), diabetes (97% vs. 92%), obesity

(98% vs. 96%), and heart disease (92% vs. 83%). Females were also more likely to know how to identify added sugars on an ingredient list (99% vs. 96%) and know that sugar listed in the first three ingredients indicates a drink high in sugar (99% vs. 93%).

Considerably more females than males agreed that a 20-oz. soda contains the same amount of sugar as 16 mini donuts (92% vs. 84%).

- A significantly larger proportion of females thought that it is important to set an example for a child by consuming fewer sugary drinks (99 % vs. 95%).
- A significantly larger proportion of females than males make buying decisions based on ingredients (93% vs. 89%) and limit the amount of drinks with added sugars they serve their families (97% vs. 94%).
- A significantly smaller proportion of females than males provided at least one fruit drink to a child in the past week (30% vs. 47%) or provided at least one of any type of sugary drink to a child in the past week (60% vs. 75%).
- Females were significantly less likely than males to consume at least one soda (31% vs. 48%), fruit drinks (11% vs. 22%), sports drinks (16% vs. 27%), or any sugary drink (60% vs. 75%). There were no differences for energy drinks or coffee drinks.
- Significantly more females than males said their child's school participated in the Healthy Futures Challenge (59% vs. 48%).
- Although there were no differences between genders on campaign ad recall, a larger proportion of females had heard about the Play Every Day website (41% vs. 32%).

Cell/Landline. There were three significant differences by telephone type.

- A significantly larger proportion of cell phone users agreed that sugary drinks are linked to heart disease (95% vs. 88%).
- A significantly larger proportion of landline users know how to identify added sugars on an ingredient list (99% vs. 93%).
- Landline users were more likely to have heard about the PA recommendations for youth (92% vs. 86%).

Multivariable Logistic Regression

The results of the multivariable logistic regressions are shown in Table 6. Respondents with high school education or less were less likely than respondents with some college education or higher to agree with statements about added sugars on nearly all survey questions about added sugars, controlling for income, race, gender, and age.

Income was significantly associated with attitudes about having 150 minutes or more of PE per week. Respondents with lower income were significantly less likely to say elementary students should have 150+ minutes of PE compared to respondents with higher income.

With regard to providing or consuming sugary drinks, ANAI respondents were significantly more likely to provide fruit drinks or any combination sugary drinks to children, and significantly more likely to consume soda and fruit drinks than non-ANAI respondents. Independently, lower income respondents were significantly more likely to provide fruit drinks or any combination of sugary drinks to children and more likely to consume fruit drinks than higher income respondents; respondents of other races/ethnicities were significantly more likely to consume fruit drinks as well as more likely to provide sports drinks to children. Finally, respondents with lower educational attainment were significantly more likely to consume energy drinks.

There was a significant positive association between respondents of other races/ethnicities and general and specific ad recall compared to white and ANAI race groups. In addition, respondents with lower educational attainment were less likely to have heard of the Play Every Day website.

Table6. Logistic Regressions for Knowledge, Attitudes, Behaviors by Income, Education, and Race, Controlling for Age^a and Gender^b

Outcomes	Odds Ratios (95% CI)			
	Income ≤185% PGL ^c	Education ≤H.S. ^d	Race ANAI ^e	Race Other ^f
Knowledge				
Added sugars - soda	.97 (.49-1.94)	.35 (.19-.65)*	.85 (.36-1.98)	.68 (.31-1.52)
Added sugars – sports drinks	.63 (.30-1.31)	.22 (.10-.44)*	.65 (.27-1.55)	.69 (.27-1.76)
Added sugars – Vitamin Water ^{a,b}	.59 (.34-1.02)	.47 (.28-.80)*	.88 (.45-1.73)	1.29 (.61-2.74)
Added sugars – fruit drinks	.67 (.30-1.48)	.44 (.21-.95)*	.54 (.22-1.36)	1.01 (.33-3.08)
Sugary drinks - tooth decay	2.25 (.56-9.05)	.19 (.06-.63)*	.29 (.07-1.26)	.33 (.08-1.38)
Sugary drinks – diabetes ^b	.76 (.30-1.91)	.50 (.21-1.18)	1.24 (.36-4.25)	1.29 (.36-4.56)
Sugary drinks – obesity	.35 (.12-1.05)	.50 (.17-1.50)	4.56 (.53-39.50)	1.36 (.29-6.50)
Sugary drinks – heart disease ^b	.91 (.46-1.81)	.43 (.23-.79)*	1.16 (.49-2.78)	1.0 (.43-2.30)
Young children 4 tsp sugar	.78 (.38-1.60)	.85 (.41-1.74)	1.15 (.43-3.10)	.62 (.28-1.36)
Water/milk healthiest options	.81 (.29-2.29)	1.02 (.36-2.94)	^g	1.10 (.32-3.84)
Identify sugars ingredient list	.94 (.27-3.33)	.29 (.09-.93)*	1.21 (.21-6.88)	.36 (.10-1.26)
Sugars first three ingredients ^b	.64 (.22-1.89)	.34 (.12-.95)*	1.05 (.24-4.52)	.40 (.13-1.28)
20 oz soda = 16 mini donuts ^{a,b}	.73 (.35-1.53)	.40 (.20-.80)*	.57 (.24-1.36)	.37 (.16-.82)*

Heard PA recommendations ^a	.59 (.31-1.09)	.31 (.17-.56)*	.83 (.38-1.80)	.80 (.36-1.80)
Know PA 7 days per wk, 60-120 min per day ^a	.83 (.53-1.30)	.90 (.59-1.39)	.84 (.46-1.51)	.87 (.51-1.49)
Attitudes				
Important set example fewer sugary drinks ^b	.40 (.13-1.22)	.90 (.28-2.90)	1.27 (.23-6.91)	.42 (.12-1.44)
PE in elementary school	4.32 (.42-44.48)	.51 (.11-2.43)	.39 (.06-2.41)	^g
PE 150+ minutes/wk ^a	.60 (.29-.93)*	.92 (.59-1.42)	1.53 (.83-2.80)	1.44 (.81-2.55)
Behaviors				
Buying decisions based on ingredients ^{a,b}	.61 (.31-1.20)	.37 (.19-.70)*	.60 (.26-1.34)	.71 (.30-1.67)
Limit drinks with added sugars	.74 (.28-1.94)	.89 (.34-2.32)	.48 (.16-1.49)	.60 (.19-1.89)
Provide 1+ soda to child	1.13 (.74-1.73)	.84 (.55-1.27)	.92 (.53-1.60)	.85 (.51-1.44)
Consume 1+ soda – adult ^{a,b}	1.30 (.85-1.98)	1.46 (.97-2.20)	1.77 (1.02-3.06)*	.96 (.57-1.62)
Provide 1+ fruit drinks to child ^b	1.62 (1.06-2.48)*	1.20 (.79-1.83)	2.76 (1.60-4.79)*	1.26 (.76-2.12)
Consume 1+ fruit drinks – adult ^{a,b}	2.28 (1.32-3.96)*	1.06 (.60-1.6)	4.31 (2.27-8.23)*	2.06 (1.04-4.06)*
Provide 1+ sports drinks to child ^b	1.29 (.82-2.02)	1.05 (.67-1.63)	1.42 (.80-2.52)	1.76 (1.04-2.97)*
Consume 1+ sports drinks – adult ^{a,b}	1.40 (.84-2.31)	1.38 (.85-2.24)	1.82 (.98-3.38)	.83 (.42-1.63)
Provide 1+ energy drinks to child	.44 (.04-5.01)	1.76 (.26-11.71)	1.85 (.15-22.40)	1.81 (.19-16.91)
Consume 1+ energy drinks – adult ^a	1.52 (.74-3.15)	3.14 (1.57-6.27)*	.77 (.30-1.94)	.40 (.11-1.41)
Provide 1+ coffee drinks to child	.43 (.09-2.00)	1.57 (.53-4.65)	^g	1.96 (.62-6.18)
Consume 1+ coffee drinks – adult ^a	.86 (.56-1.32)	1.0 (.66-1.52)	.68 (.38-1.22)	1.22 (.75-2.02)
Provide 1+ sugary drinks to child ^b	1.64 (1.05-2.60)*	.83 (.54-1.27)	1.92 (1.04-3.54)*	1.24 (.73-2.10)
Provide 1+ per day milk to child	.70 (.46-1.08)	1.09 (.71-1.68)	.93 (.53-1.63)	.85 (.51-1.42)
Provide 2+ per day water to child	.99 (.64-1.55)	1.07 (.69-1.67)	.61 (.34-1.07)	.61 (.36-1.03)
Healthy Futures Challenge – school ^b	.83 (.55-1.25)	.96 (.64-1.42)	.78 (.46-1.33)	1.16 (.70-1.91)
Healthy Futures Challenge - child	.96 (.43-2.15)	.92 (.42-2.00)	2.60 (.71-9.55)	.95 (.41-2.20)

Ad Recall				
General recall Play Every Day	.77 (.51-1.15)	.87 (.58-1.30)	1.36 (.80-2.33)	1.48 (.89-2.46)
Ad-specific recall active family	.78 (.52-1.18)	.99 (.66-1.49)	1.69 (.97-2.94)	2.27 (1.31-3.92)*
Ad-specific recall childhood obesity	1.28 (.78-2.11)	.89 (.54-1.47)	1.50 (.80-2.82)	2.17 (1.25-3.76)*
Play Every Day website – heard ^a	.80 (.52-1.25)	.49 (.31-.76)*	.97 (.55-1.73)	1.15 (.69-1.92)
Play Every Day website - used	2.02 (.86-4.76)	.73 (.24-2.19)	.43 (.09-2.11)	2.01 (.80-5.03)

^a Age significant $p \leq 0.05$

^b Gender significant $p \leq 0.05$

^c Referent category is > 185% PGL

^d Referent category is > H.S.

^e Referent category is Not ANAI

^f Referent category is Not Other Race

^g Omitted. 100% agreement

Key Take-Aways

Play Every Day Recall and Reaction

The results of this evaluation provide evidence that the Play Every Day campaign reached about 58% of Alaskans surveyed. About three times as many respondents recalled the active family ads as the childhood obesity animated ad. The ads appeared to be successfully communicating their key message, as over three-quarters of those who recalled the specific ads were able to identify the main message. Most respondents indicated they were interested in seeing more similar ads in the future.

Sugary Drinks

Overall knowledge about added sugars in drinks was high; however, fewer respondents were aware of the added sugars in Vitamin Water.

Educational attainment was the dominant SES-related variable associated with knowledge and purchasing behaviors related to added sugars.

Regarding consumption, ANAI respondents were more likely to consume soda or fruit drinks, as well as more likely to provide fruit drinks or multiple sugary drinks to their children than non-ANAI respondents.

Healthy Futures

More than half (56%) of the respondents said their children's schools participate in the Healthy Futures Challenge. Among these respondents, 84% said their child participates also.

PA/PE

Over 90% of respondents said they had heard generally about physical activity recommendations for children, but only about 32% were able to specifically identify the 7-day, 60-minute² recommendation.

There was almost unanimous agreement (99%) that elementary school students should have PE in school, but only 71% said PE should be 150 or more minutes per week.

² We allowed 60 to 120 minutes as a correct response.

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Acknowledgements

We wish to acknowledge Erik Everson for data cleaning and report review and Kathy Pickle for methodological consultation.