



child obesity180
reverse the trend.



The Effectiveness of the Healthy Kids Out of School Initiative

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In collaboration with  **Tufts**
UNIVERSITY

Healthy Kids Out of School

The Opportunity

- Out-of-school time (OST) programs are well positioned to contribute to the establishment of healthy habits. They engage millions of children, including large numbers of minority youth.

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- Research suggests opportunities for healthy eating and physical activity in the OST setting have room for improvement. To date, most research has focused on structured, staff-led after-school programs.

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- Research suggests opportunities for healthy eating and physical activity in the OST setting have room for improvement. To date, most research has focused on structured, staff-led after-school programs.
- Healthy Kids Out of School (HKOS) identified, developed and supported the implementation of principles to improve nutrition and physical activity practices in volunteer-led OST programs.

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Three Guiding Principles



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Three Guiding Principles



Drink Right: Choose water instead of sugar-sweetened beverages.



Move More: Boost movement and physical activity in all programs.



Snack Smart: Fuel up on fruits and vegetables.



4th H for Health Challenge Tracker

Congratulations for taking on the 4th H for Health Challenge! Use this tracker to record the dates of the meetings or gatherings when your club has water, a healthy snack, or performs 15 minutes of physical activity.



Name: _____ # of Participants: _____

Healthy Meeting Activities:



3

Serve a fruit or vegetable snack at **3 meetings.***



6

Serve water as the primary beverage at **6 meetings.**



9

Do 15 minutes of physical activity at **9 meetings.**

Meeting or Gathering Dates:

1	2	3
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**Snacks served at events or other gatherings can fulfill this requirement.*

☐ There is no food at my meetings.

1	2	3	4	5	6
---	---	---	---	---	---

1	2	3	4	5	6	7	8	9
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Quick Tips: Snack Smart

Ask volunteers to rotate bringing in a fruit or vegetable snack. Check out the Snack Smart handout for ideas and activities.

Quick Tips: Drink Right

Make sure water is in plain sight and easily accessible during meetings. Encourage youth to bring a water bottle to meetings and show them where they can refill it.

Quick Tips: Move More

Make physical activity fun! Try music or props, like balls or jump ropes. Keep all games and activities non-competitive and encourage all youth to participate.

Completed the Challenge? Contact your local 4-H staff member to request a certificate for your club!

Coaching Healthy Habits Training



Coaching Healthy Habits



Time: 6 minutes

Healthy Kids Out of School Evaluation

GOAL: To assess the extent to which the three healthy practices were being met before and after the implementation of the HKOS interventions promoting them.

METHODS: Validated online survey (Out-of-School-Time Snacks, Beverages, and Physical Activity Questionnaire) measuring nutrition and physical activity offerings as reported by OST program leaders in Maine, Massachusetts and New Hampshire.

ANALYSIS: Frequencies were calculated to the extent to which healthy snack, beverage, and physical activity criteria were met at baseline and follow-up.

Healthy Kids Out of School

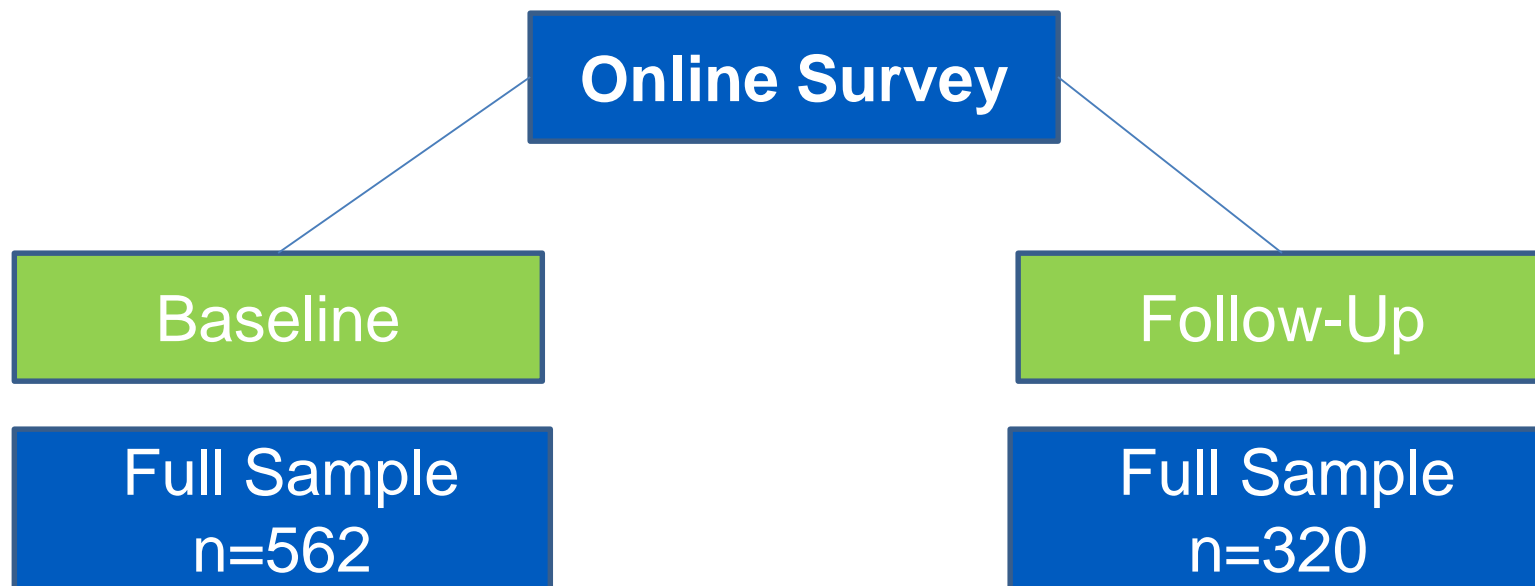
Defining Success

- Success variables were created to indicate implementation of healthy snack, beverage, and PA practices as defined by the evidence-based HKOS principles.
- Successful typical meeting practices:
 - Offer water as the only beverage.
 - Serve fruits and/or vegetables for snack.
 - Include physical activity during programming time.



HKOS Evaluation: Enrichment Programs

Sample Overview



Anzman-Frasca S, Boulos R, Hofer T, Foltz SC, Koomas A, Nelson ME, Satchek JM, Economos CD:
Validation of the Out-of-School-Time Snacks, Beverages, and Physical Activity Questionnaire. *Child
Obes* 2015.

Child Demographics: Enrichment Programs

Baseline vs Follow-up

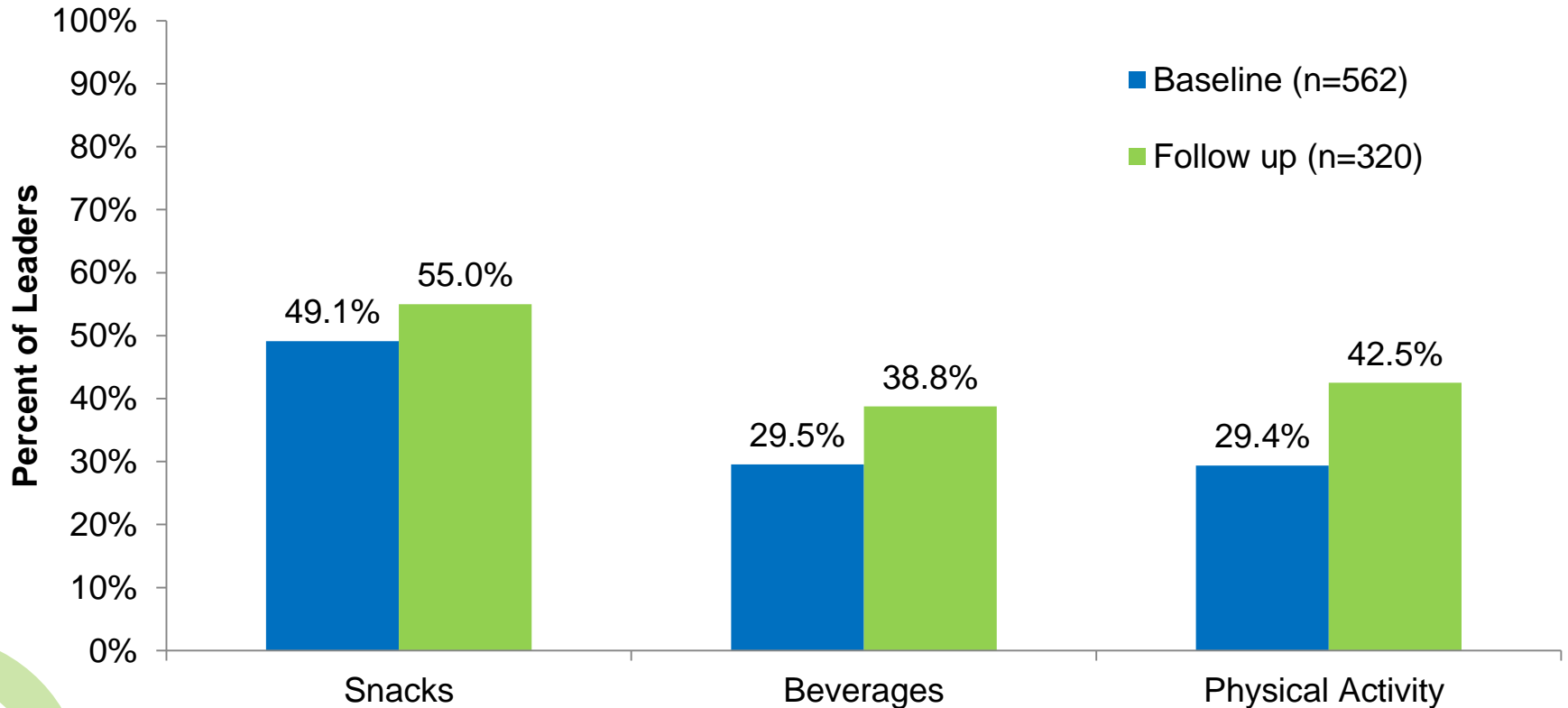
	Baseline (n=530)		Follow-up (n=294)	
Participant Characteristics	Mean (%)	Median	Mean (%)	Median
Race/Ethnicity				
White	90.5	99	89.6	99
Black	3.1	0	2.8	0
Hispanic	2.3	0	1.9	0
Other	2.2	0	3.2	0
Asian	1.9	0	2.6	0
Gender				
Boys	79.5	100	80.5	100
Girls	20.5	0	19.6	0
Age (years)				
< 5	0.5	0	0.5	0
5-7	17.5	0	16	0
8-12	54.6	50	49.7	50
> 13	27.5	6	33.8	25



HKOS Success Indicators: Enrichment Programs

Baseline vs Follow-up

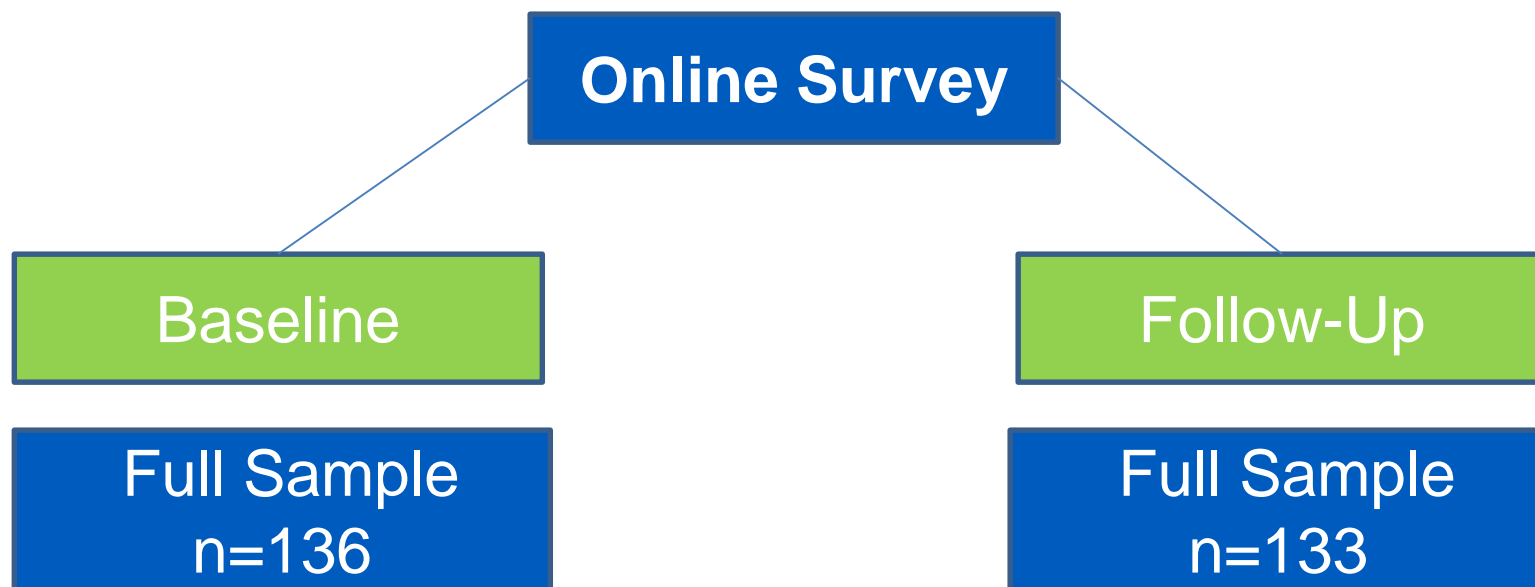
Success Indicators



Percent Meeting Two or More
27.6% Baseline vs 40.6% Follow-up

HKOS Evaluation: Sports Programs

Brief Overview



Anzman-Frasca S, Boulos R, Hofer T, Foltz SC, Koomas A, Nelson ME, Satchek JM, Economos CD:
Validation of the Out-of-School-Time Snacks, Beverages, and Physical Activity Questionnaire. *Child
Obes* 2015.

Child Demographics: Sports Programs

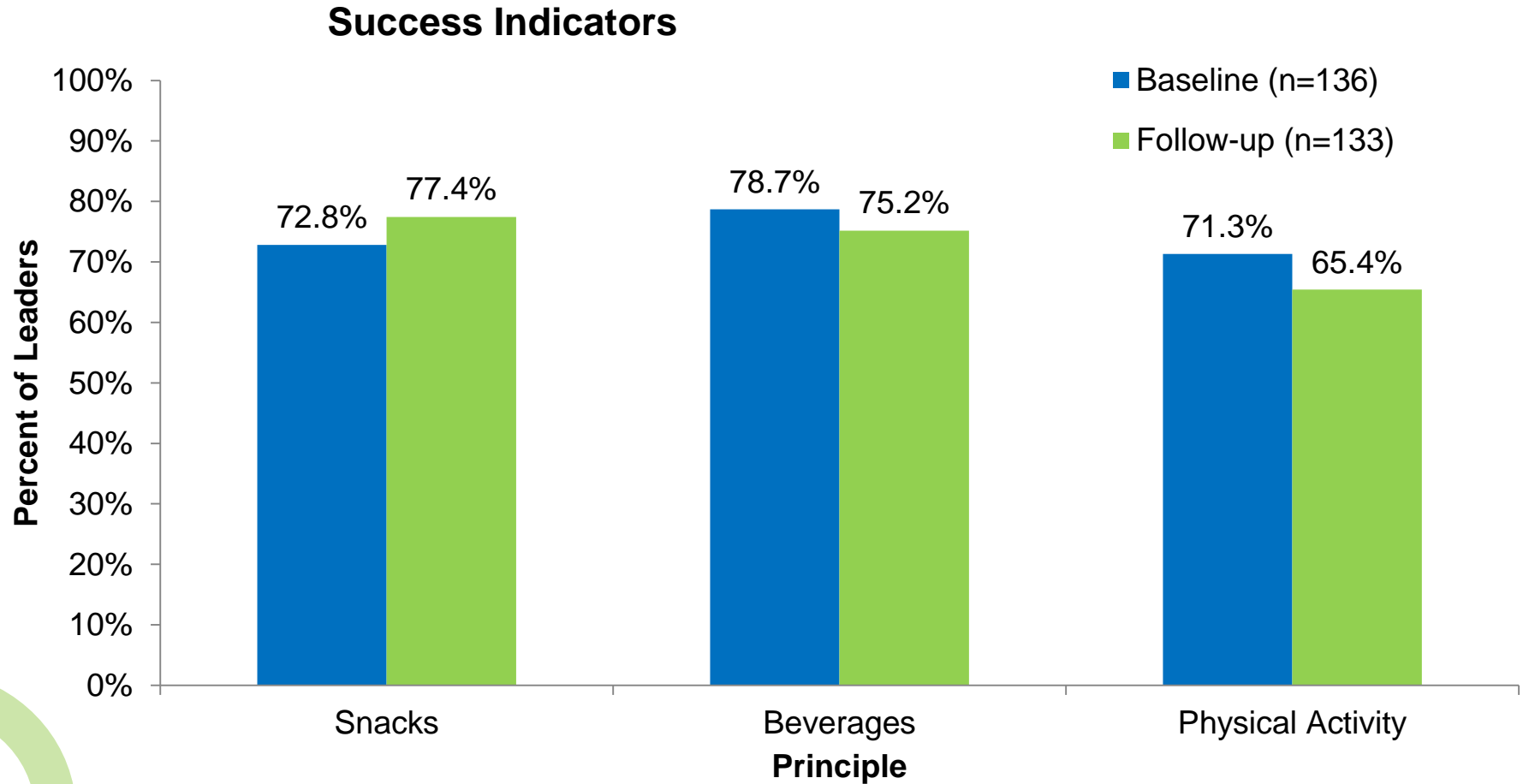
Baseline vs Follow-up

	Baseline (133)		Follow-up (n=127)	
Participant Characteristics	Mean	Median	Mean	Median
Race/Ethnicity				
White	81.8	90	83.1	90
Black	5	0	3.7	0
Hispanic	4.7	0	4.2	0
Other	4.8	0	3.9	0
Asian	3.7	0	5.1	0
Gender				
Boys	52.1	60	43.4	40
Girls	47.9	40	56.6	60
Age (years)				
< 5	0.9	0	4.6	0
5 - 7	12.7	0	23.8	0
8 - 12	82.6	100	68.7	100
> 13	3.8	0	2.8	0



HKOS Sports Success Indicators

Baseline vs Follow-up



Percent Meeting Two or More

82.4% Baseline vs 78.9% Follow-up

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Conclusions

- Volunteer-led out-of-school time (OST) programs can promote nutrition and physical activity by implementing three simple, actionable principles.
 - Our national partner organizations have enthusiastically adopted the evidence-based principles based on the success of our pilot-program.
- These programs are relevant from a public health standpoint given the large population of children regularly participating in these programs, many for multiple years, and the potential for repeated exposure.
- More research in other geographic areas can further elucidate the generalizability of the current results.



Acknowledgements

- Harvard Pilgrim Healthcare Foundation (funding organization)
- Partner OST organizations:
 - Boy Scouts of America
 - 4-H
 - US Youth Soccer
 - Pop Warner Football
- Healthy Kids Out of School Team: Alyssa Koomas, Megan Halmo, Anna Marie Finley, Karen Fullerton, Diane Gonsalves

<http://www.healthykidshub.org>

Questions?

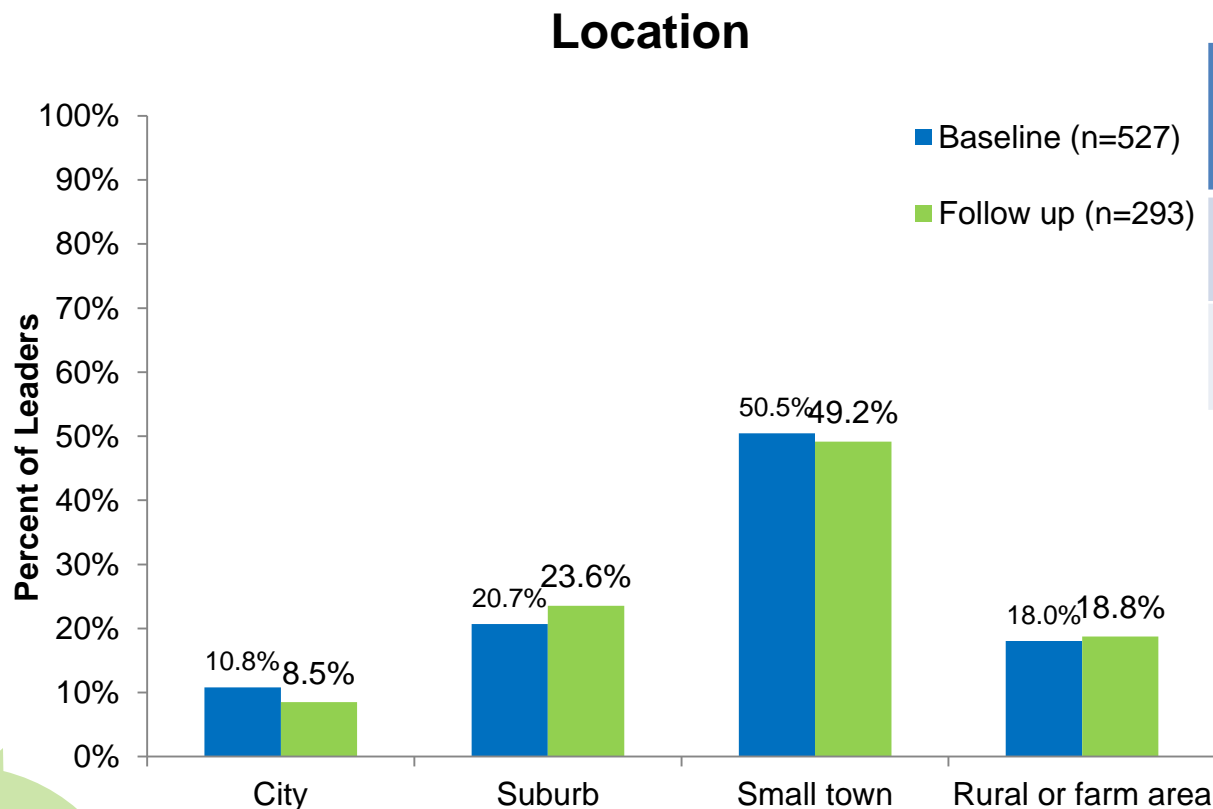


Supplementary Slides



Leader Demographics: Enrichment Programs

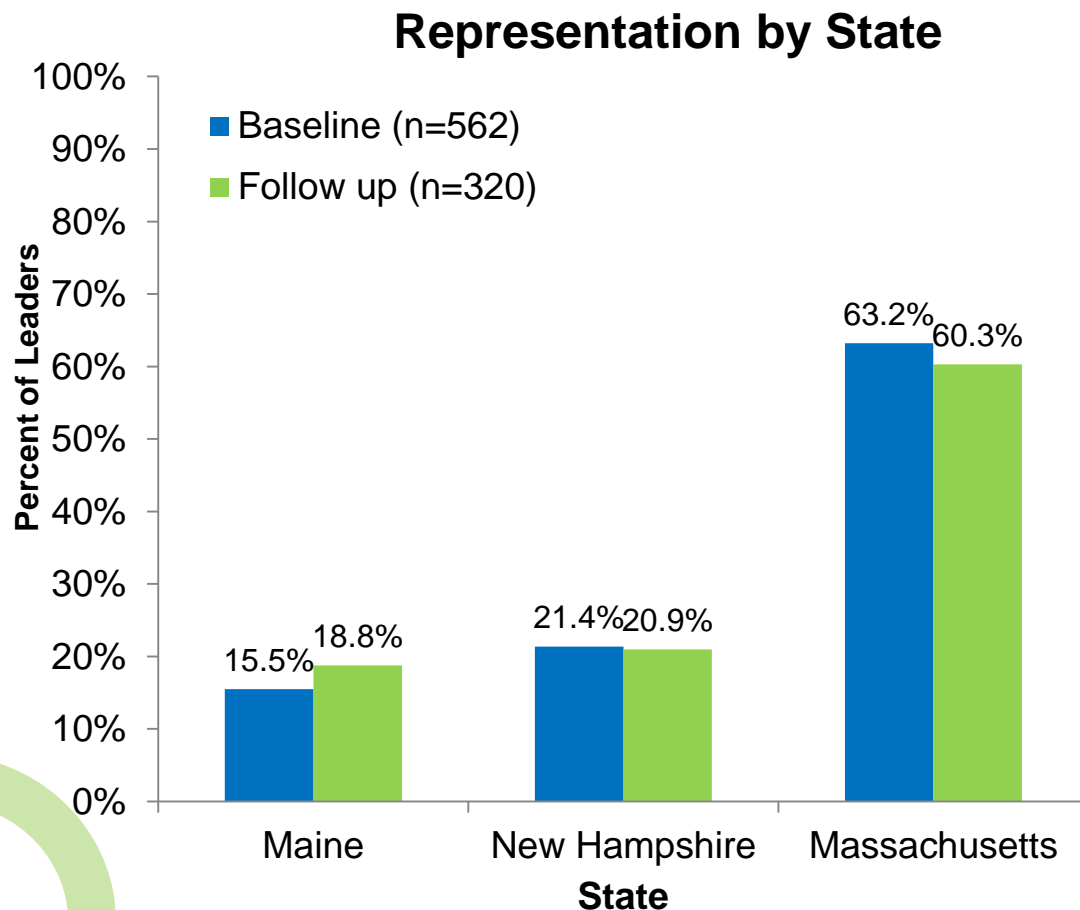
Baseline vs Follow-up



Age of Leaders	Mean (years)	Standard Deviation
Baseline (n=525)	48	9.5
Followup (n=292)	48.5	8.8

Leader Demographics: Enrichment Programs

Baseline vs Follow-up

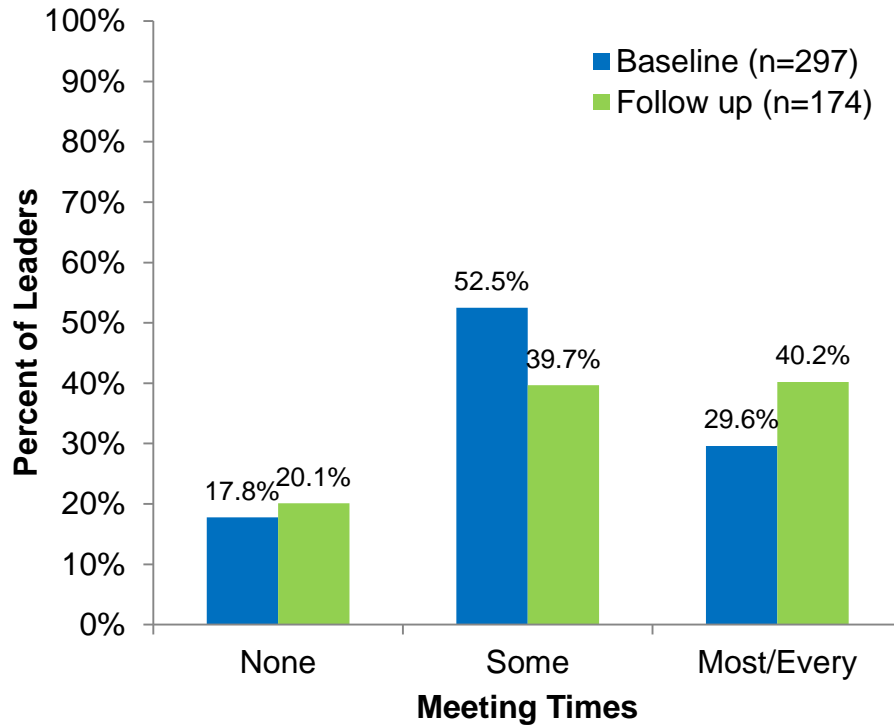


Race of Leaders	Baseline Frequency (n=503)	Follow-up Frequency (n=281)
White	494	271
Other	7	2
Black	0	1
Asian	0	2
American Indian or Alaskan Native	2	5

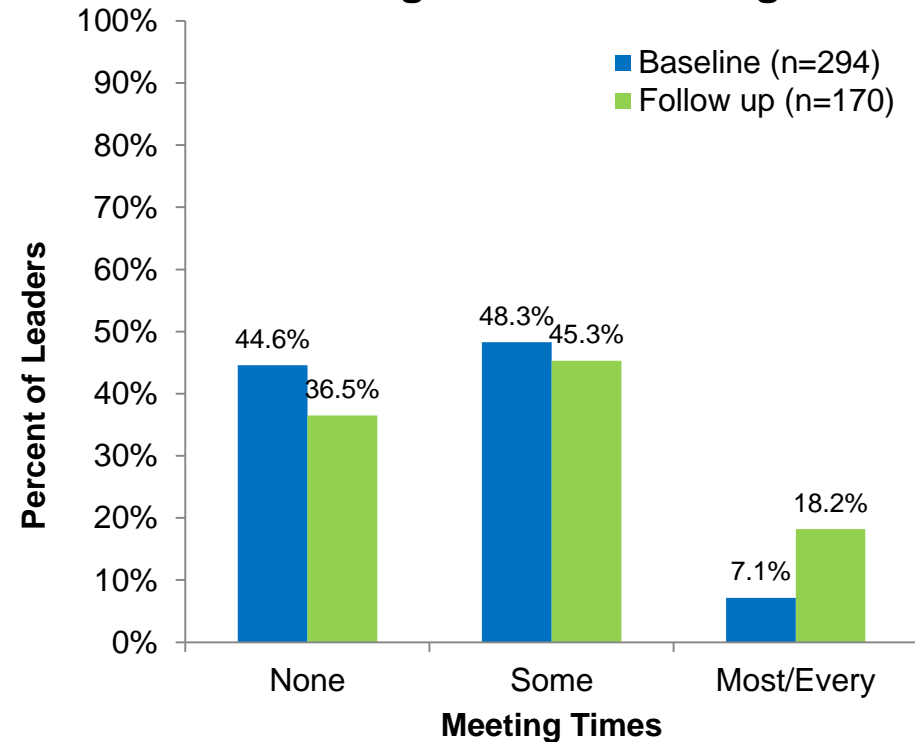
Enrichment Results: Snacks Provided for Group

Baseline vs Follow-up

Fresh Fruits and Vegetables

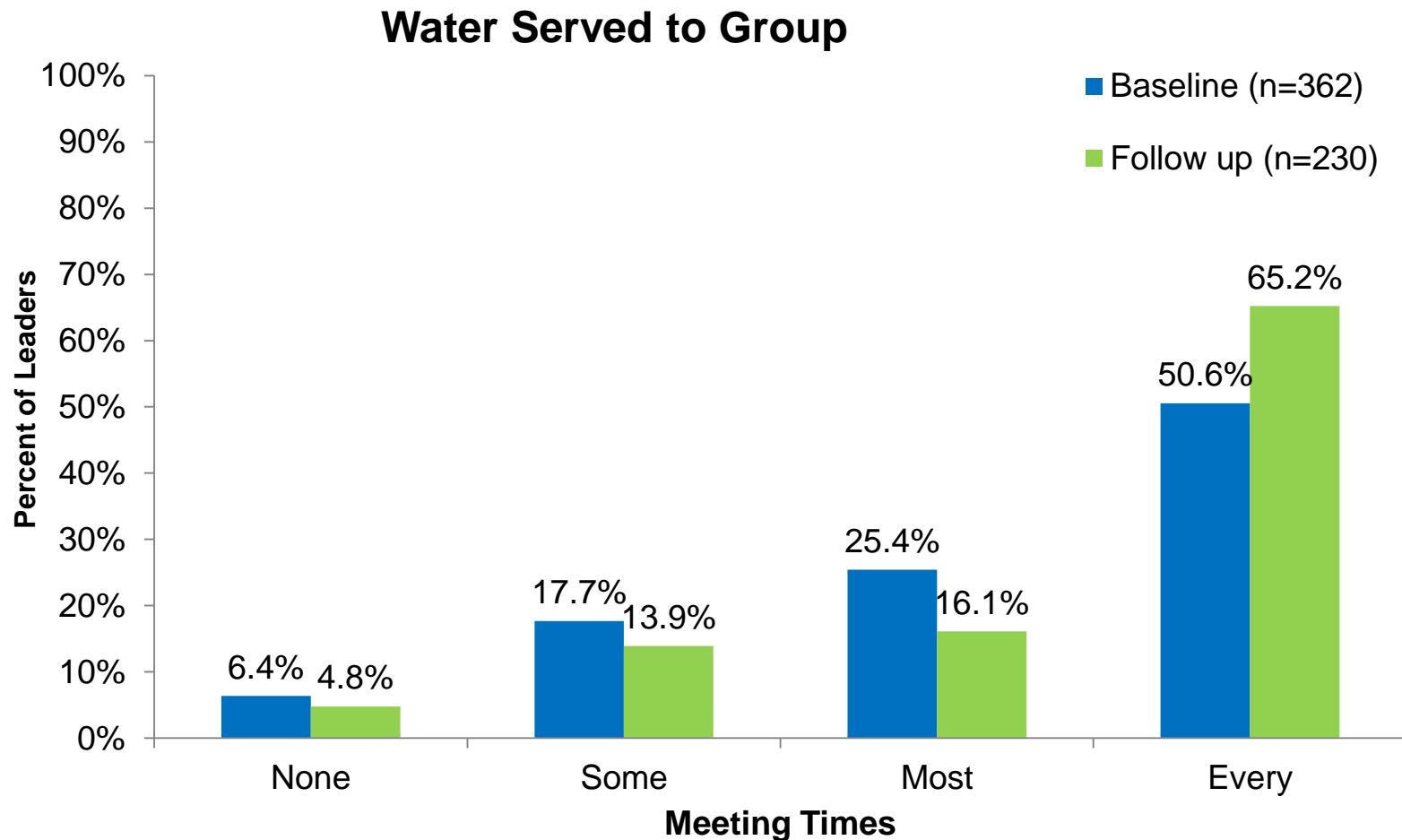


Packaged Fruits and Vegetables



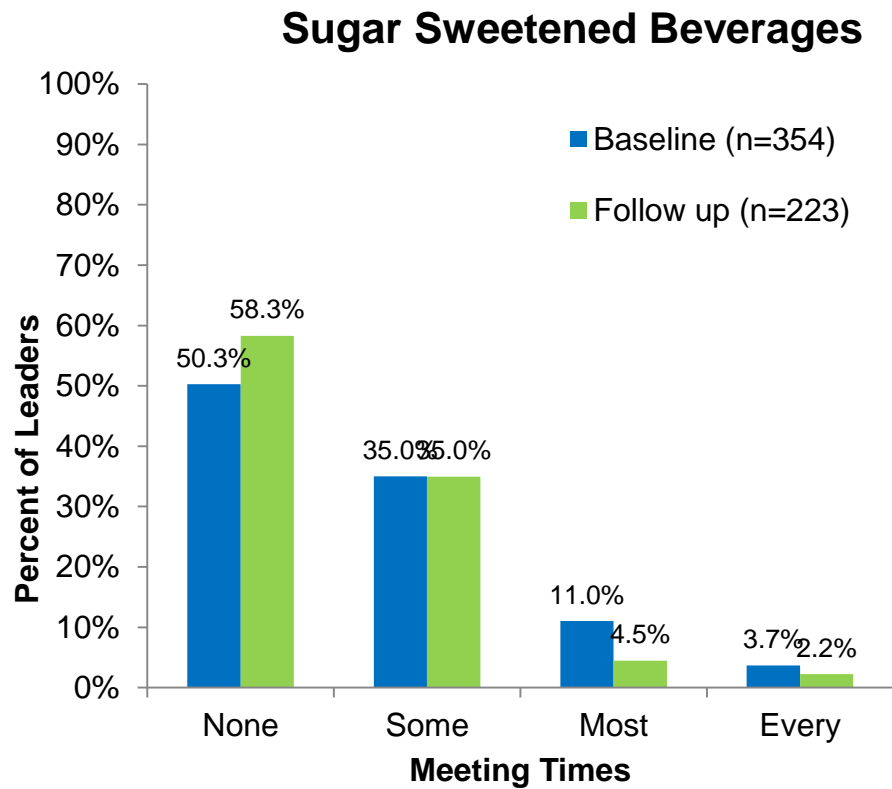
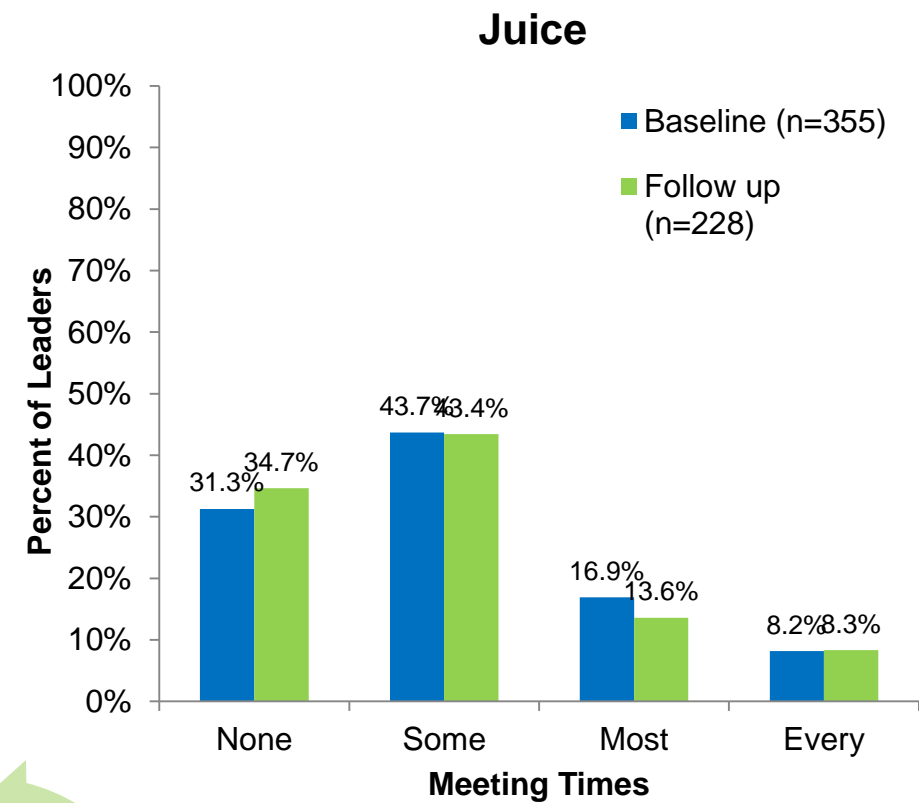
Enrichment Results: Beverages Provided for Group

Baseline vs Follow-up



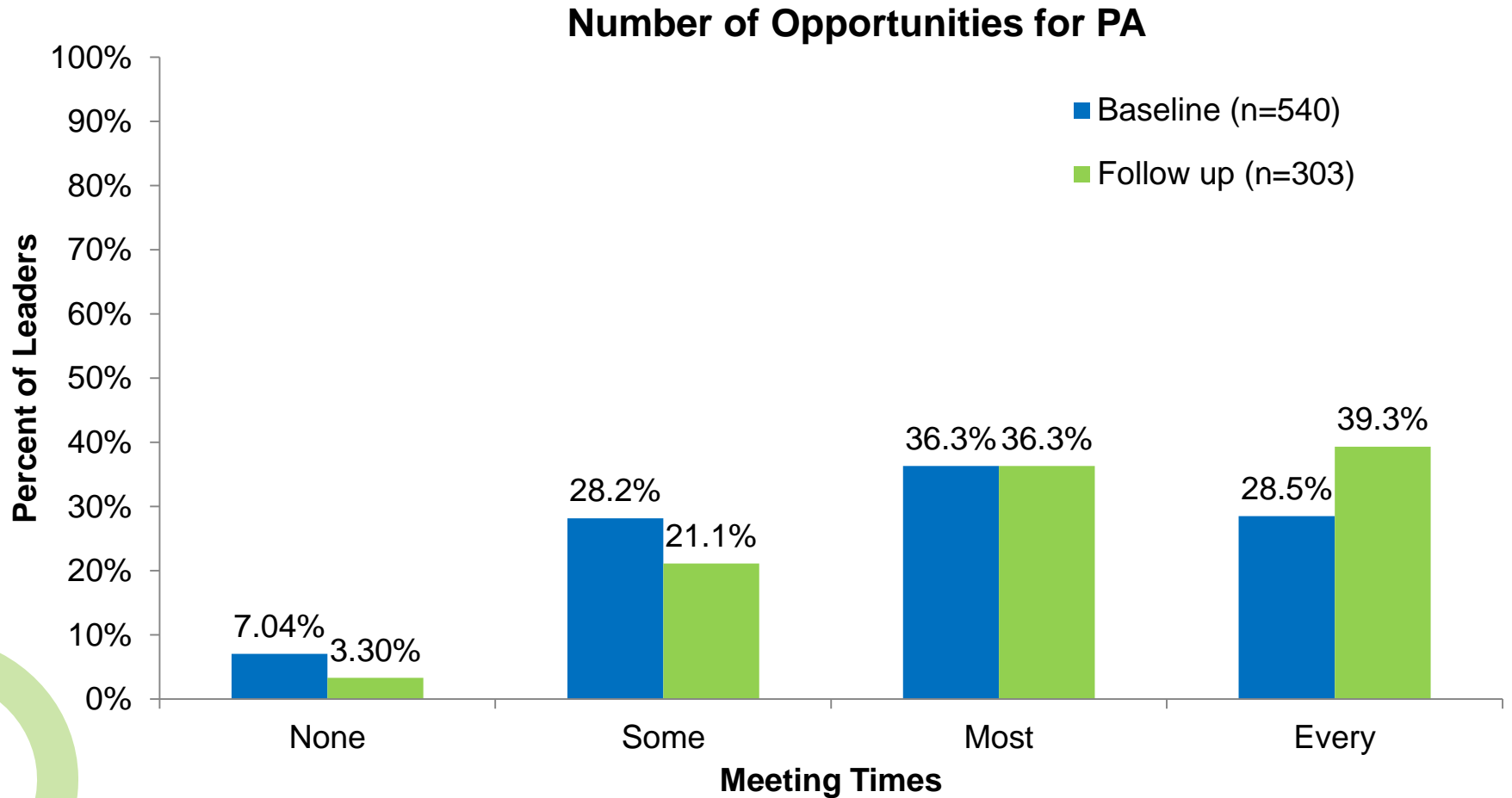
Enrichment Results: Beverages Provided for Group

Baseline vs Follow-up



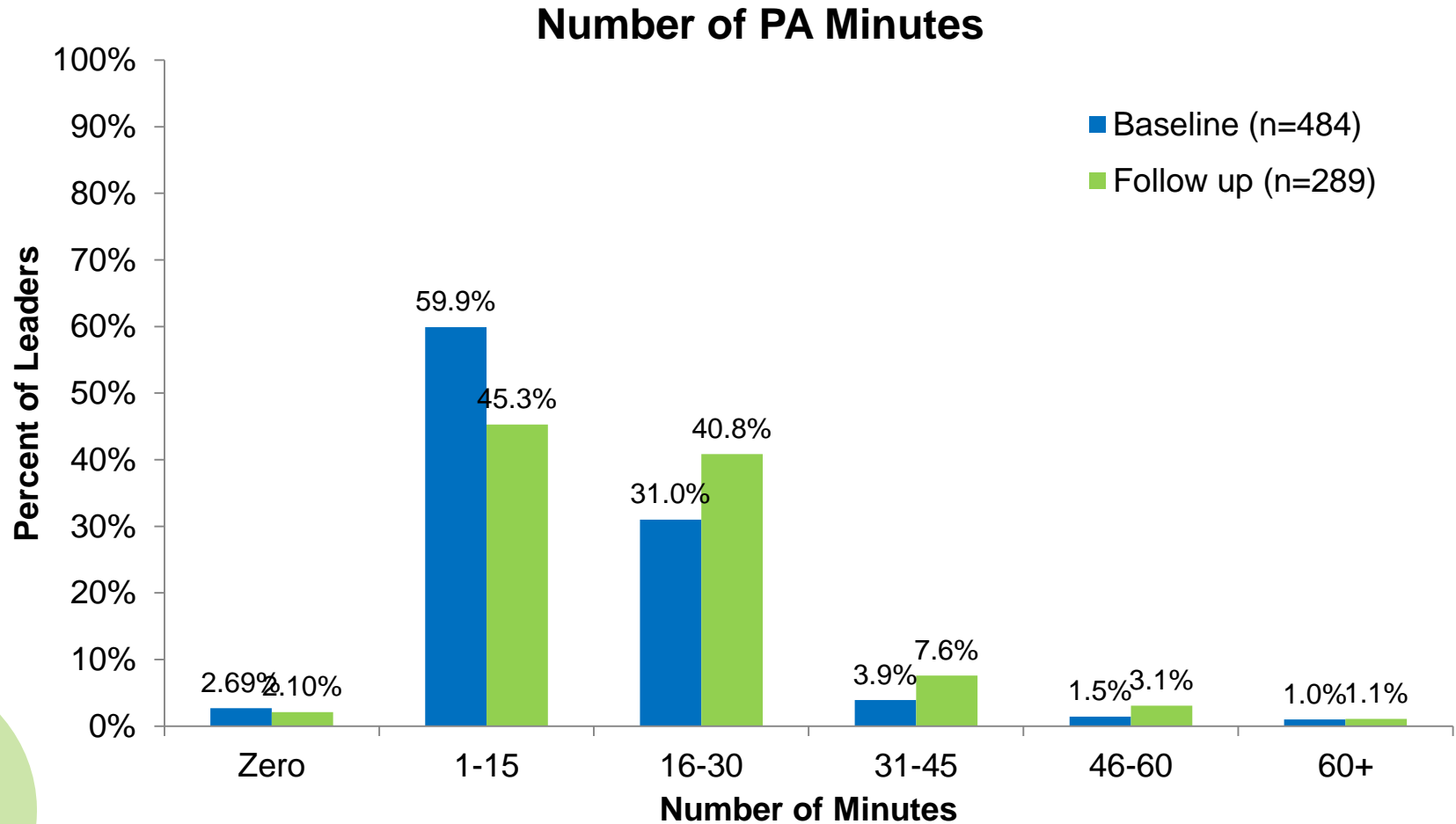
Enrichment Results: Physical Activity

Baseline vs Follow-up



Enrichment Results: Physical Activity

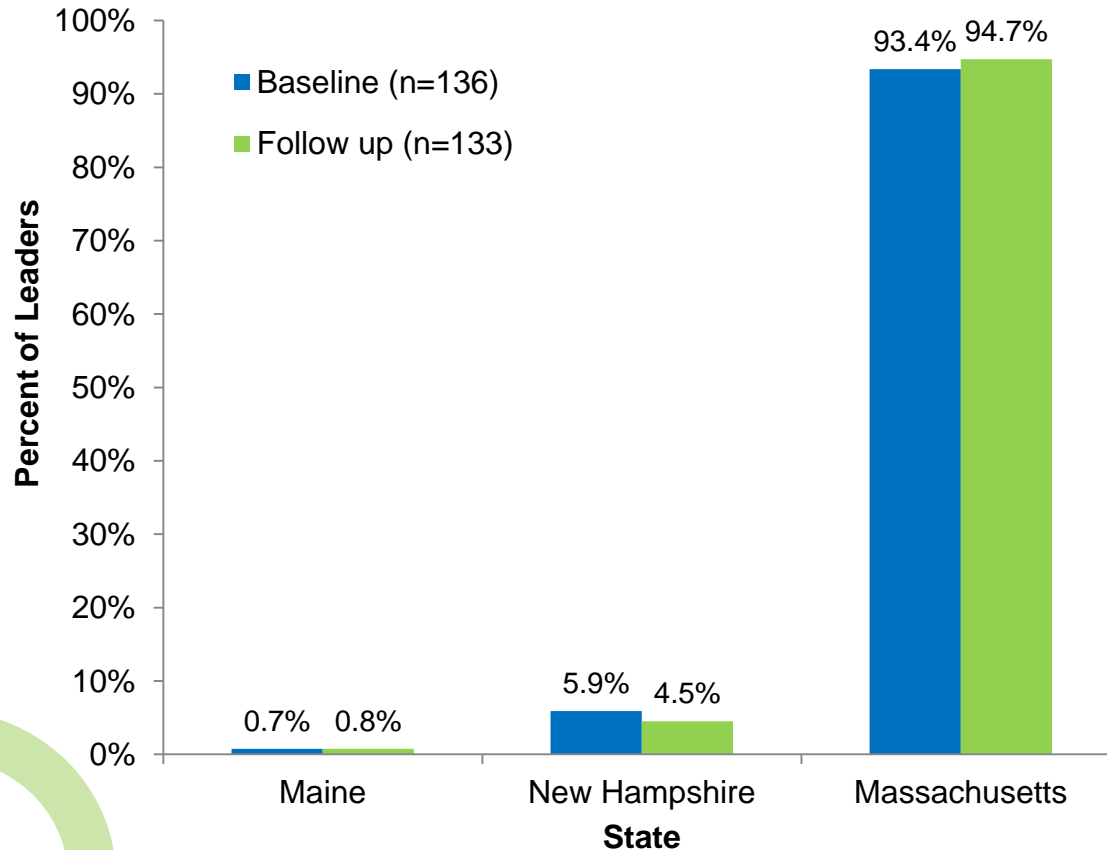
Baseline vs Follow-up



Leader Demographics: Sports Programs

Baseline vs Follow-up

Representation by State

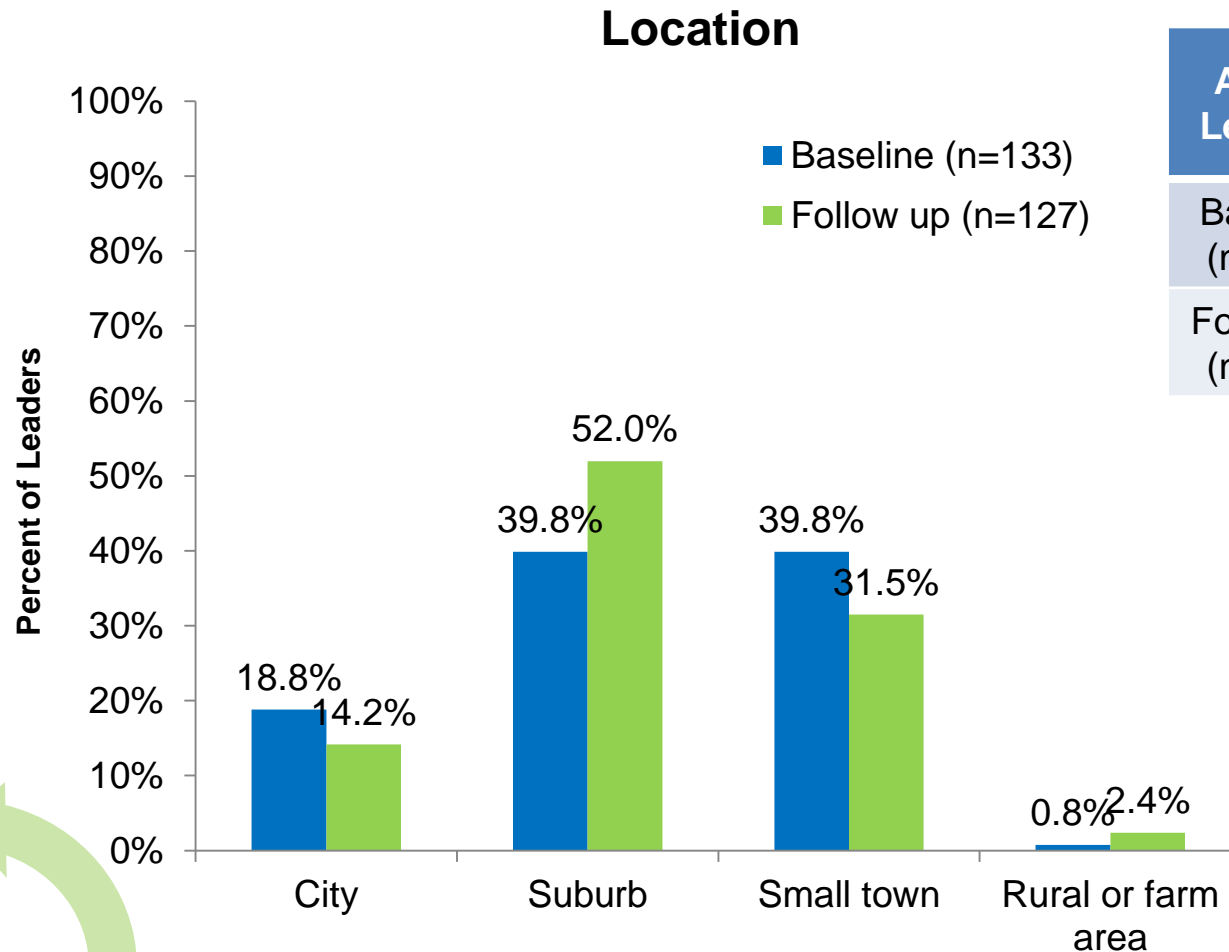


Race of Leaders	Baseline (n=133) Frequency	Follow-up (n=127) Frequency
White	117	108
Other	4	4
Black	5	2
Asian	4	9
American Indian or Alaskan Native	2	0

Leaders of Hispanic or Latino Background	Percent
Baseline (133)	5.3%
Followup (127)	3.2%

Leader Demographics: Sports Programs

Baseline vs Follow-up



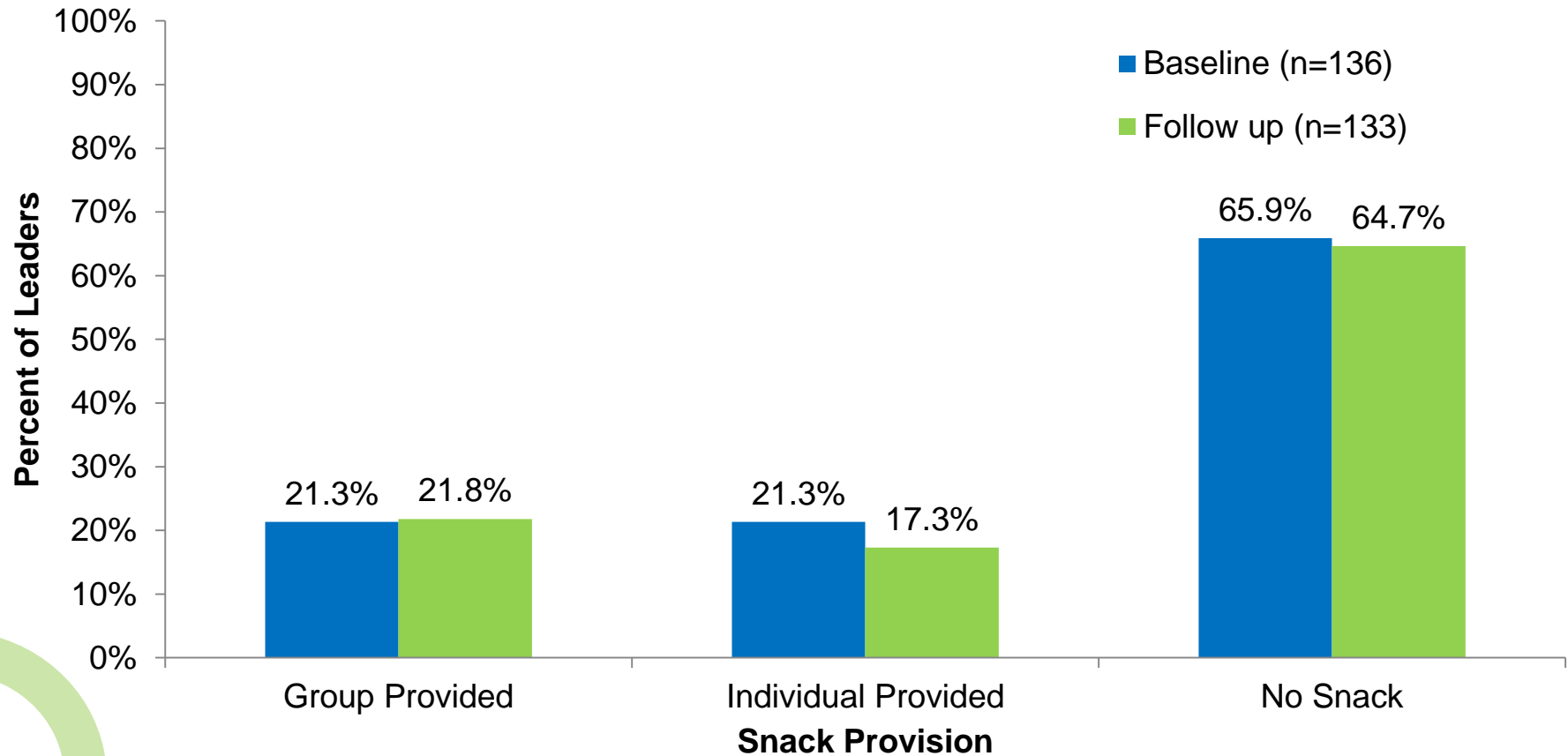
0.8% baseline & 0.0% follow-up responded 'prefer not to answer'.

Age of Leaders	Mean (years)	Standard Deviation
Baseline (n=131)	42.1	6.3
Follow-up (n=124)	41.5	6.4

Sports Results: Snacks

Baseline vs Follow-up

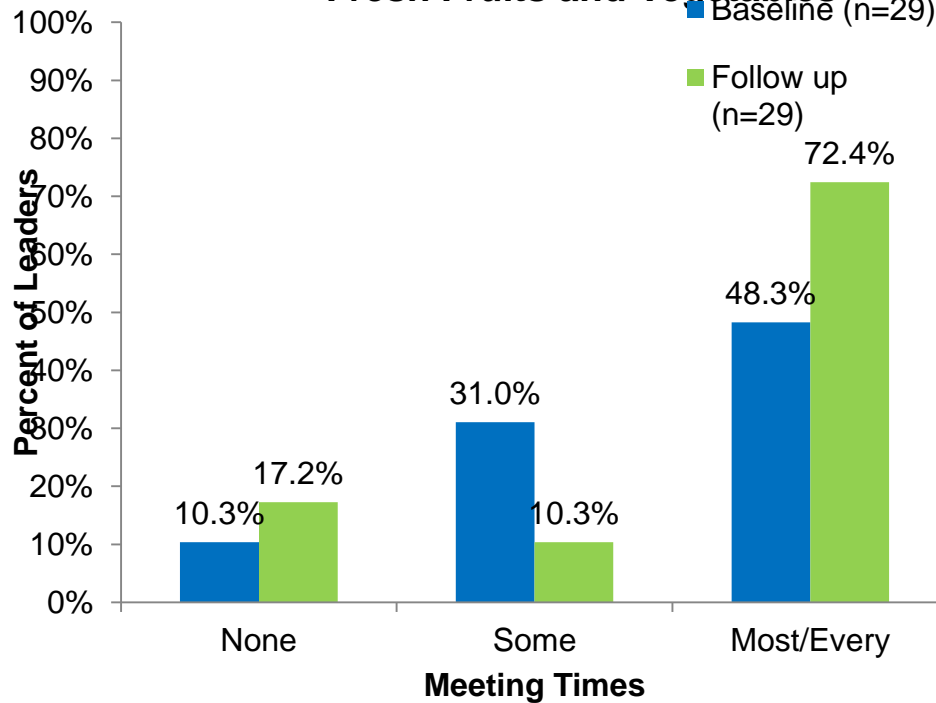
Snacks at Typical Meetings



Sports Results: Snacks Provided for Group

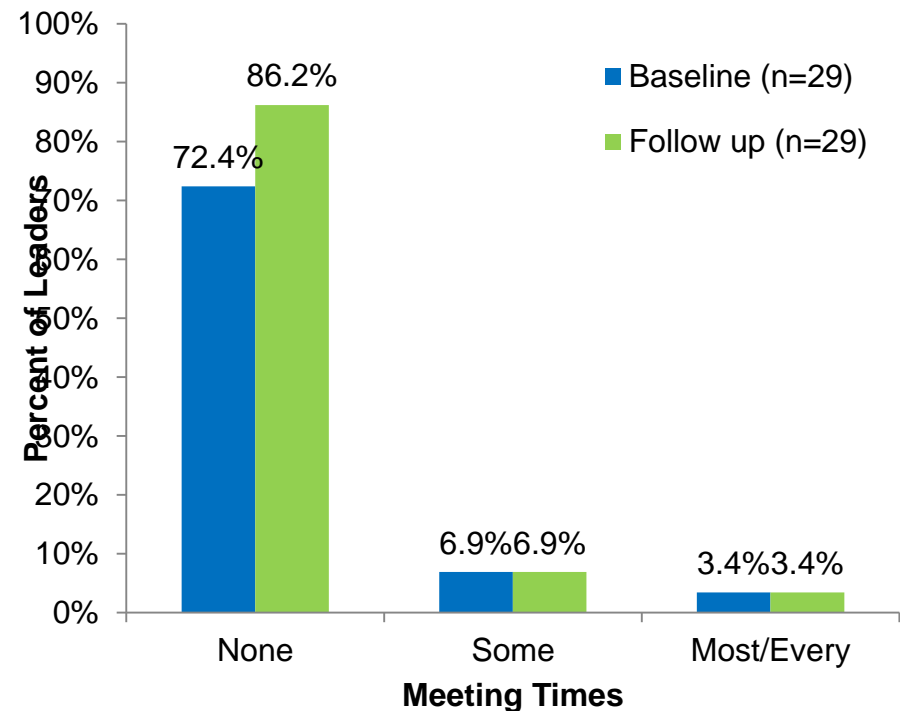
Baseline vs Follow-up

Fresh Fruits and Vegetables



10.3% baseline & 0.0% follow-up responded 'don't know'.

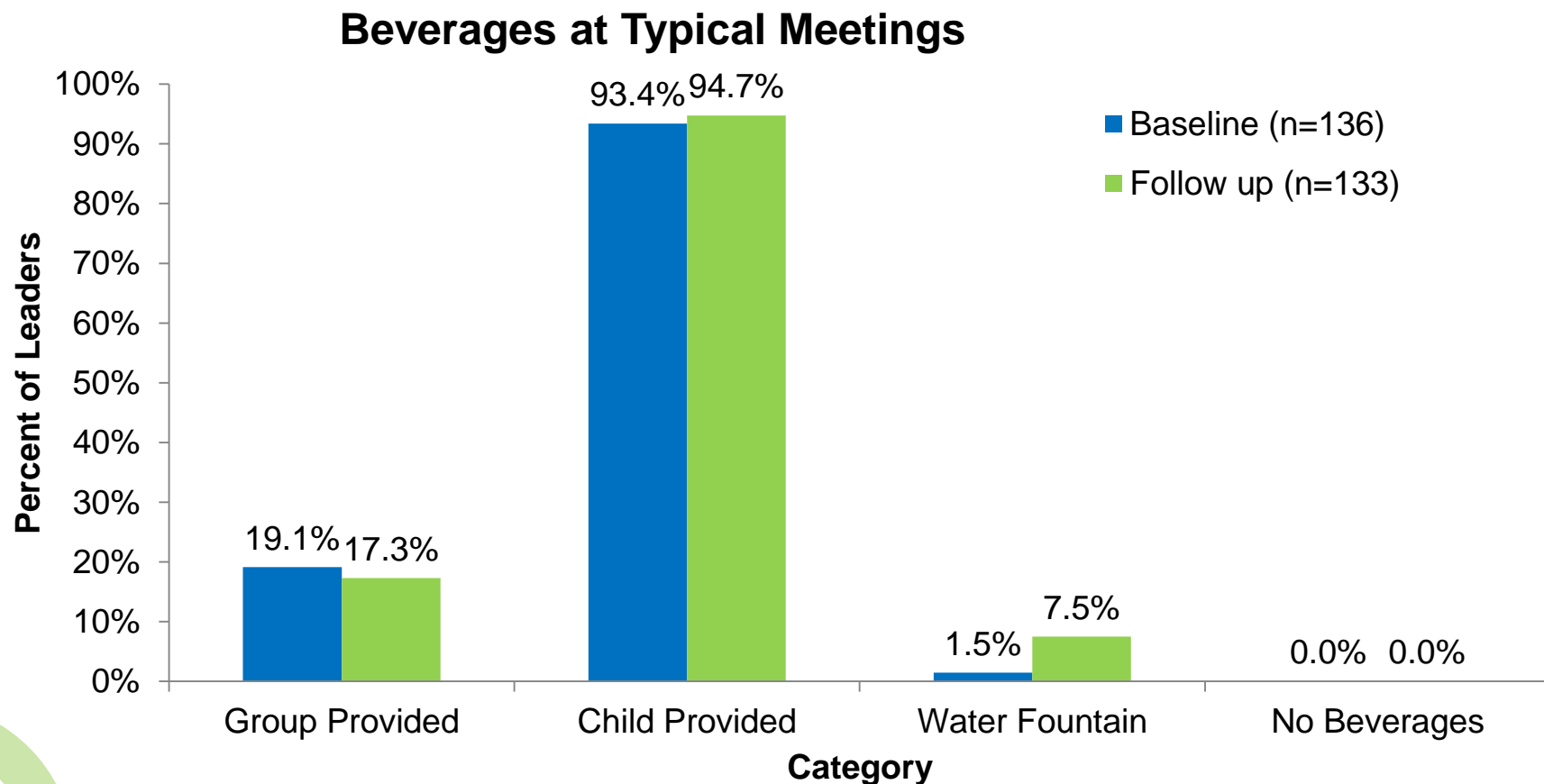
Packaged Fruits and Vegetables



17.2% baseline & 3.4% follow-up responded 'don't know'.

Sports Results: Beverages

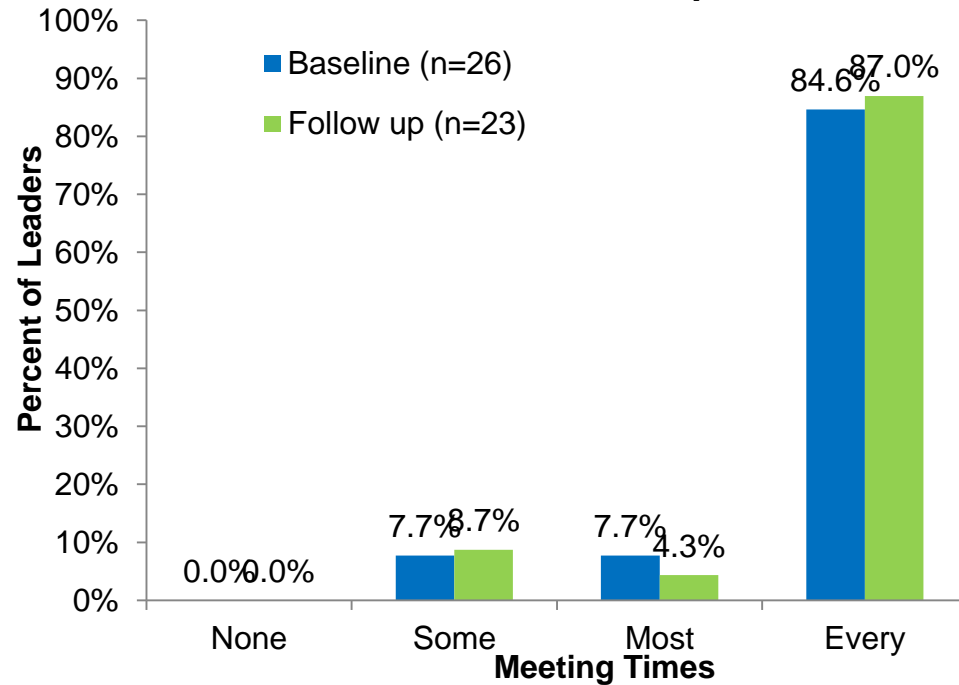
Baseline vs Follow-up



Sports Results: Beverages Provided for Group

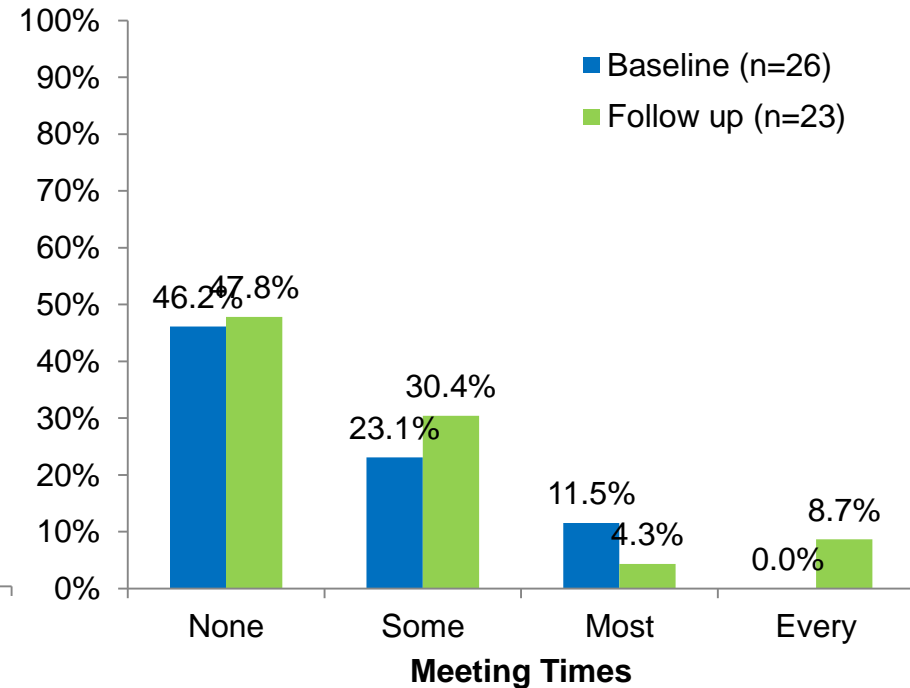
Baseline vs Follow-up

Water Served to Group



0.0% baseline & 0.0% follow-up responded 'don't know'.

Sugar Sweetened Beverages

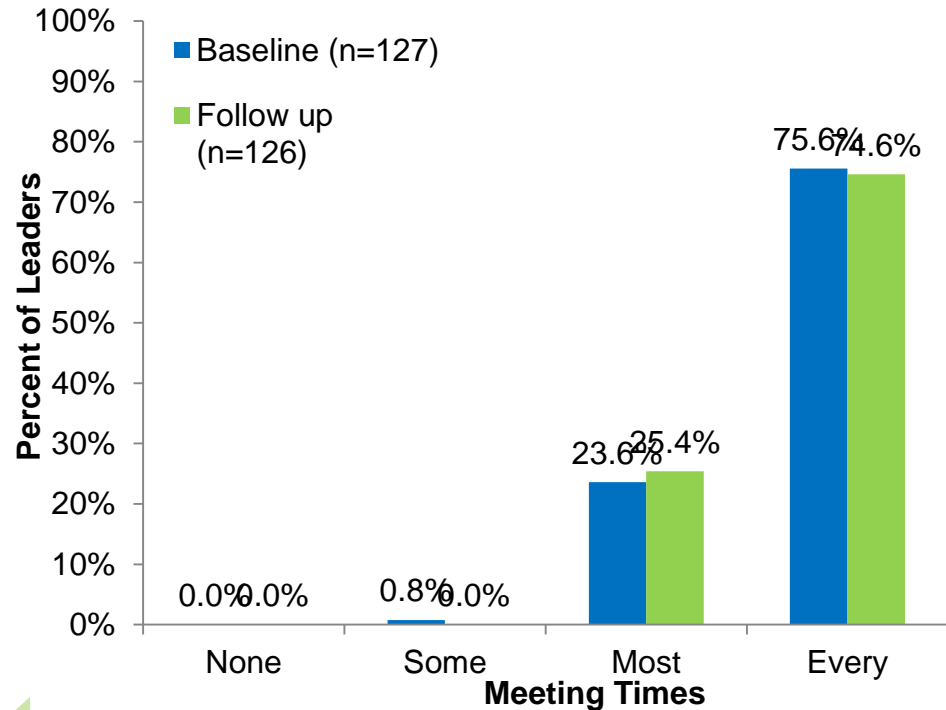


19.2% baseline & 8.7% follow-up responded 'don't know'.

Sports Results: Individual Beverages

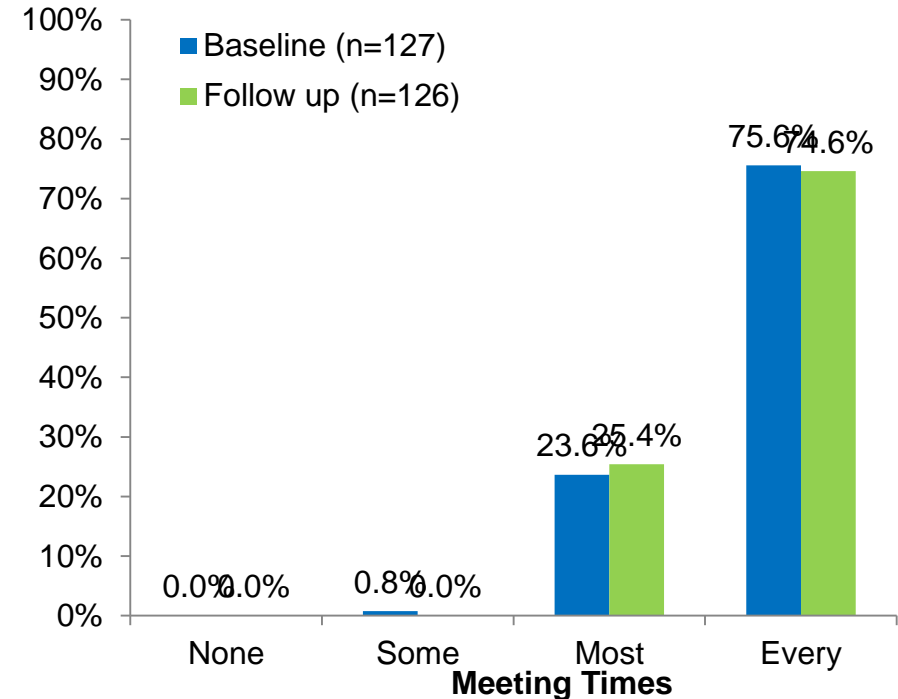
Baseline vs Follow-up

Water Served to Group



0.0% baseline & 0.0% follow-up responded 'don't know'.

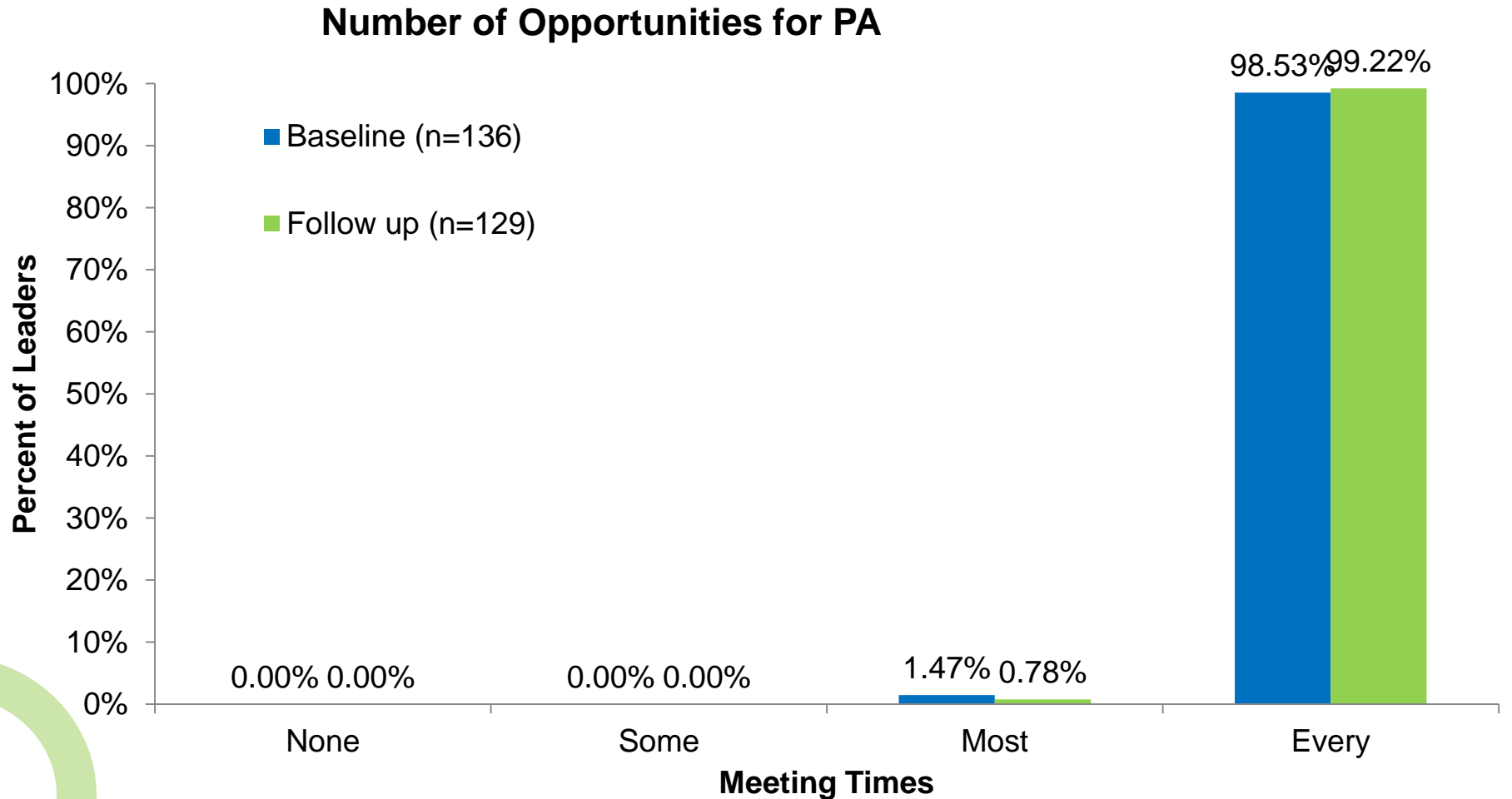
Water Served to Group



11.0% baseline & 11.1% follow-up responded 'don't know'.

Sports Results: Physical Activity

Baseline vs Follow-up

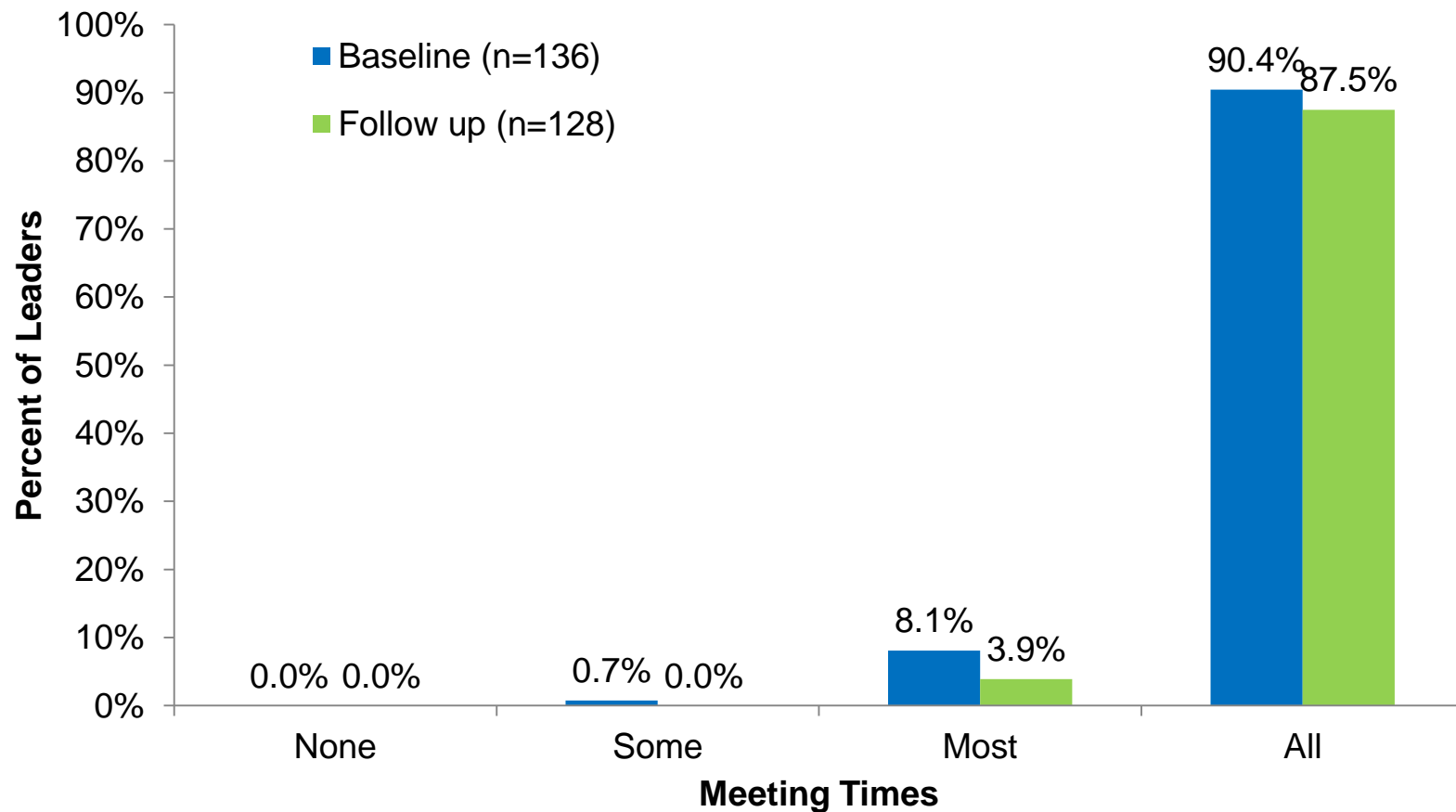


0.0% baseline & 0.0% follow-up responded 'don't know'.

Sports Results: Physical Activity

Baseline vs Follow-up

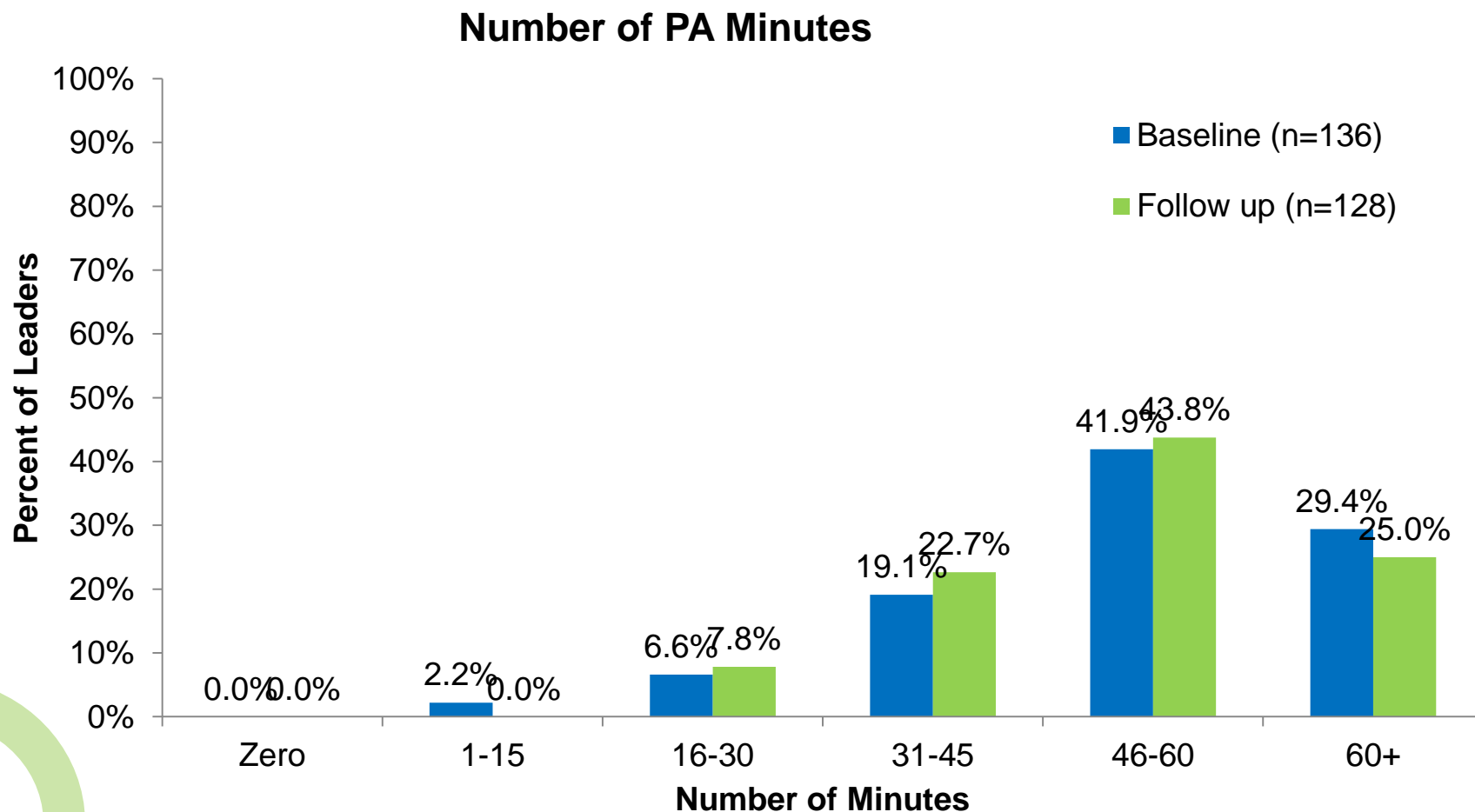
Children Participating in Physical Activity



0.7 % baseline & 0.8% follow-up responded 'don't know'.

Sports Results: Physical Activity

Baseline vs Follow-up

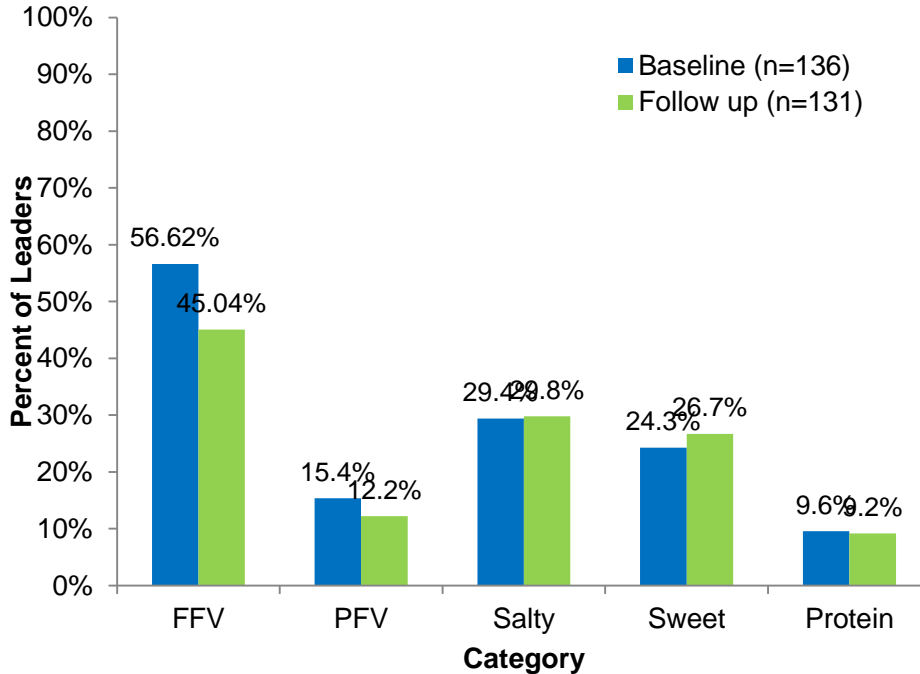


0.7 % baseline & 0.0% follow-up responded 'don't know'.

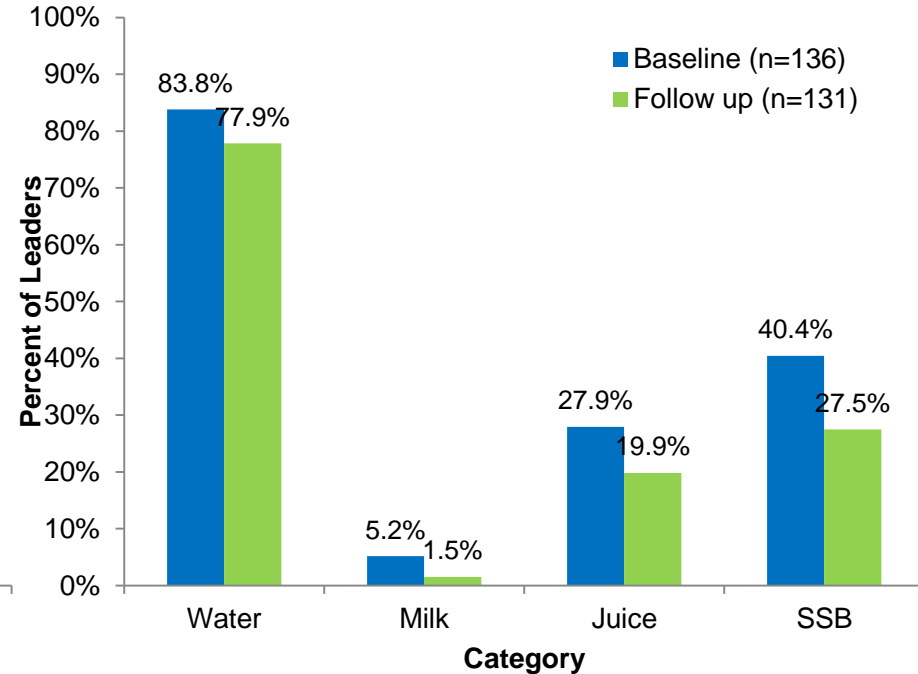
Sports Results: Special Events

Baseline vs Follow-up

Snacks at Special Events



Beverages at Special Events



Qualitative Analysis

Key Informant Interviews

Actions Taken

The majority of program leaders indicated that they had adopted all 3 of the principles in some form.



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All leaders expected to maintain the changes that they had made, and some anticipated additional changes.



But it was so easy, honestly, to incorporate -- you know, water? Boom. Done. That's an immediate change. The 15 minutes of physical activity? What boy doesn't like to get out there and, you know, mess around? (BSA)