

Improving Nutrition, Increasing Physical Activity in Preschools

Alex Zepeda, MPH



1 in 3



children ages 2-4 from low
income households
in California are

overweight or obese



Goals and objectives

Support preschool administrators in implementing policies supporting good nutrition and regular physical activity practices.

Support teachers in informing and encouraging healthy practices in the classroom and at home.

Integrate ready-to-use practices encouraging healthy choices in the classroom.

Educate parents on how to encourage healthy eating and physical activity and their effects on development.

Participants

- 20 LAUP preschools
- 33 teachers
- Over 400 children and their parents in the Spring cohort
- Over 400 children and their parents in the Fall cohort

Program description



Health and Wellness Specialist

provided workshops to Administrators, Teachers and Parents and served as a consultant to the preschool programs.



Preschool Administrators

attended one workshop, identified health and wellness policies their preschools would implement and developed a Policy Action Plan.



Teachers

attended workshops and implemented the new policies and strategies to teach children about healthy eating and encourage physical activity.



Parents

attended one workshop on the effects of nutrition and physical activity on brain development and learning.

Teacher Toolkit

- Guiding Principles
- Nutrition
- Positive Role Modeling
- Nutrition Activities: Getting Kids Involved
- Healthy Choices for Celebrations and Fundraising
- Healthy Recipes for Cooking with Kids
- Physical Activity
- Gardening

Be Choosy Be Healthy Activity Kit

- Music CDs with health-enhancing songs
- Inspiring posters
- Picture book to reinforce key ideas
- Play food
- Fruit and veggie beanbags
- Activity scarves
- Wrist ribbons
- Parachute
- Activity balls
- Movement activity mats and cards
- Grocery store activities
- Nutrition and movement activity cards
- Growth chart
- Pocket chart with fruit and veggie sorting cards

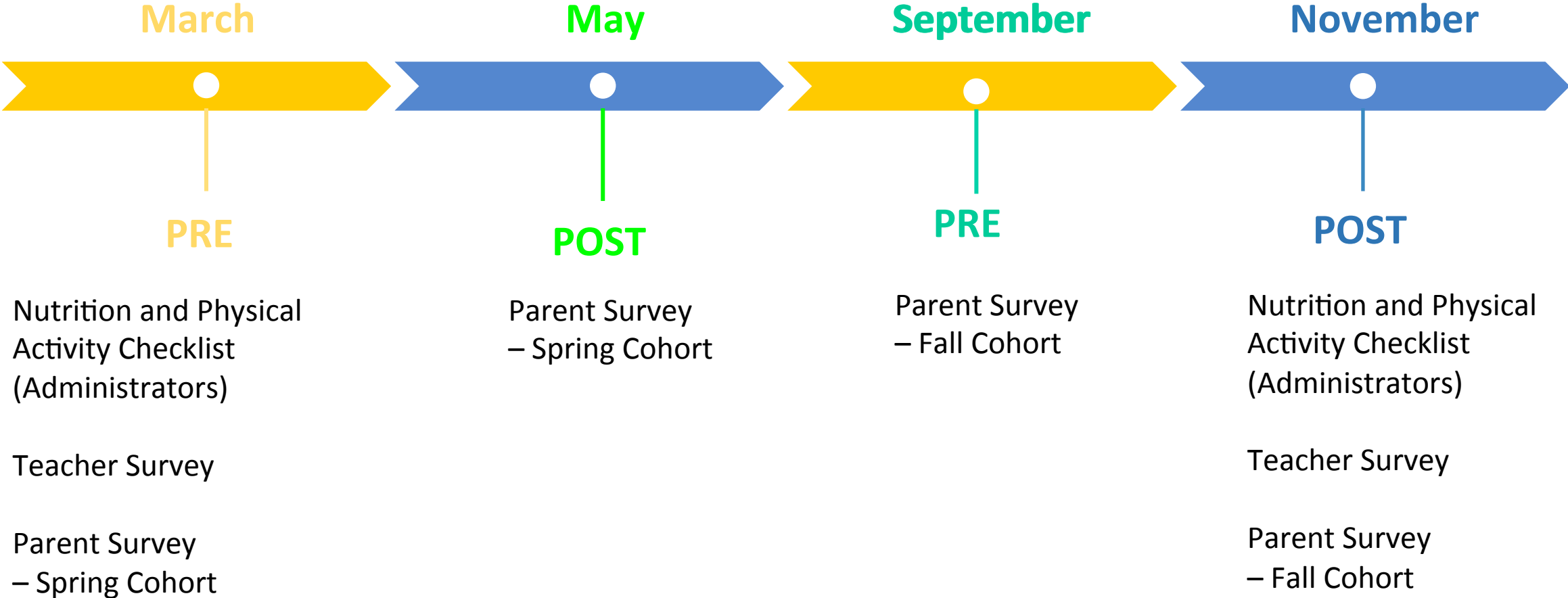
Increasing Children's Physical Activity



Starting a Preschool Garden



Pre and Post Data Collection



Administrative changes

- 44% administrators developed new formal Health and Wellness Policies for their preschool.
- 70% preschools inform the parent about their policies.

No changes in nutrition policies

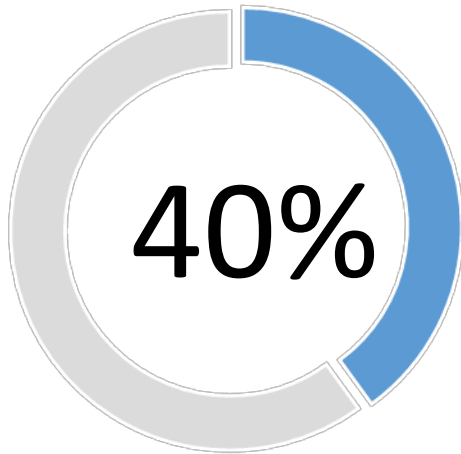


Little change in parent training practices

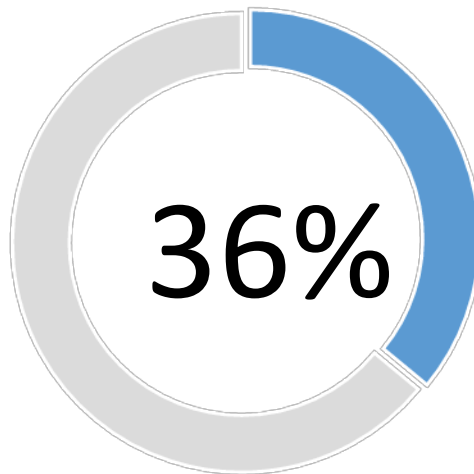


Staff serving as role models more often

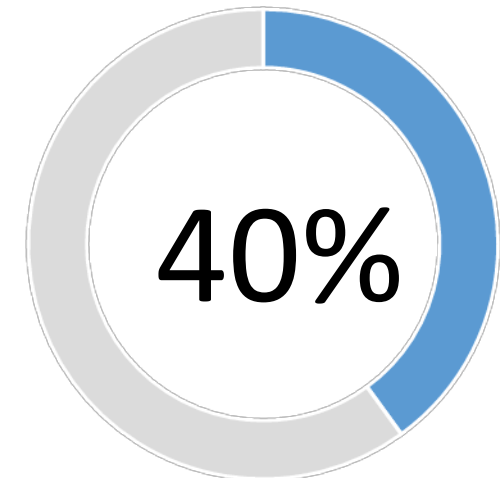
Staff modeling
healthy relationships
with food



Staff modeling
self-regulation

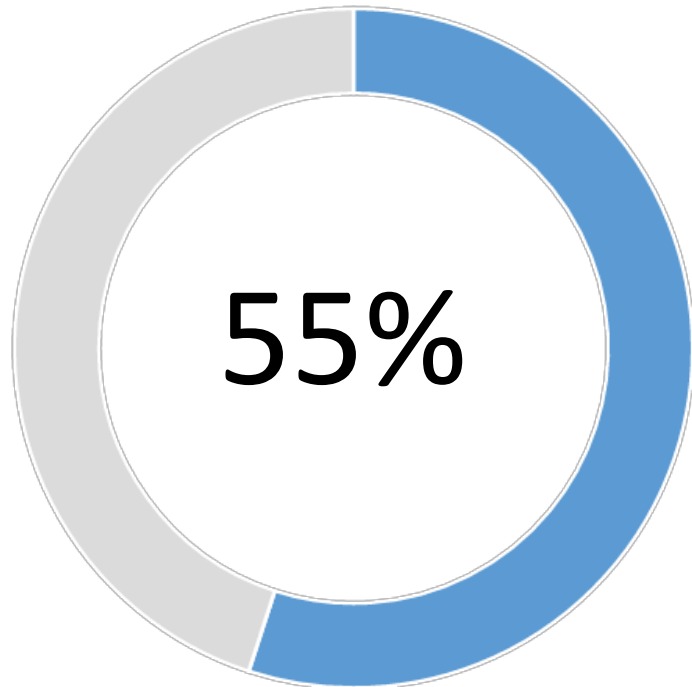


Teachers as physical
activity role models

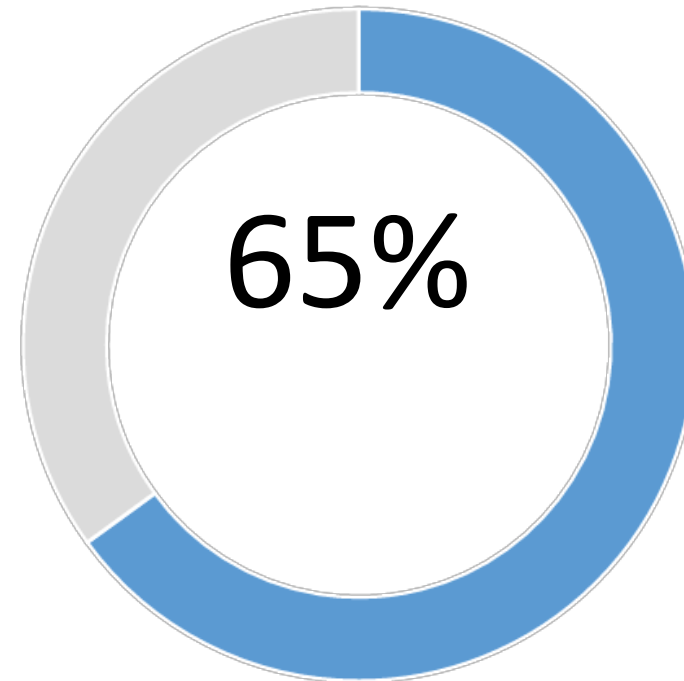


Practices to encourage healthy food and beverage choice

Culturally appropriate strategies

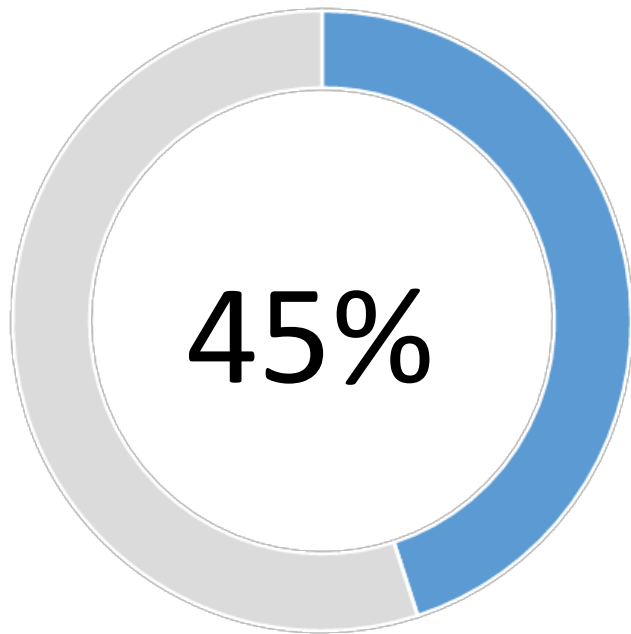


Age appropriate and culturally sensitive materials and activities

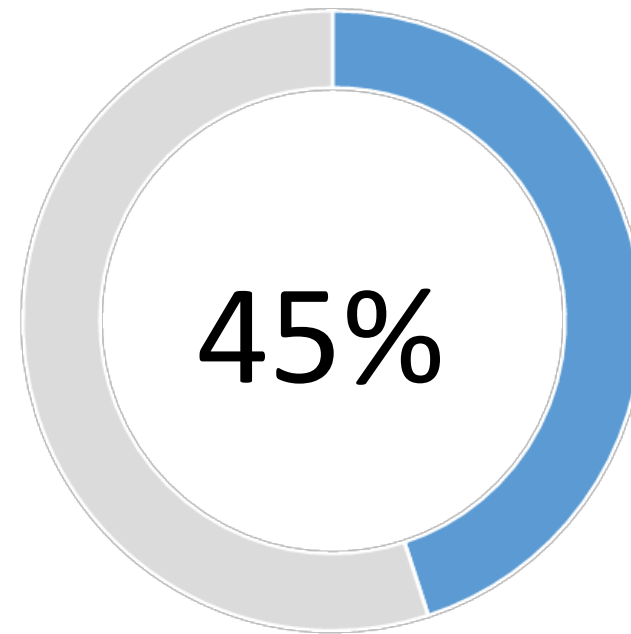


Instructional time includes planned activities

Build connections with moving and learning

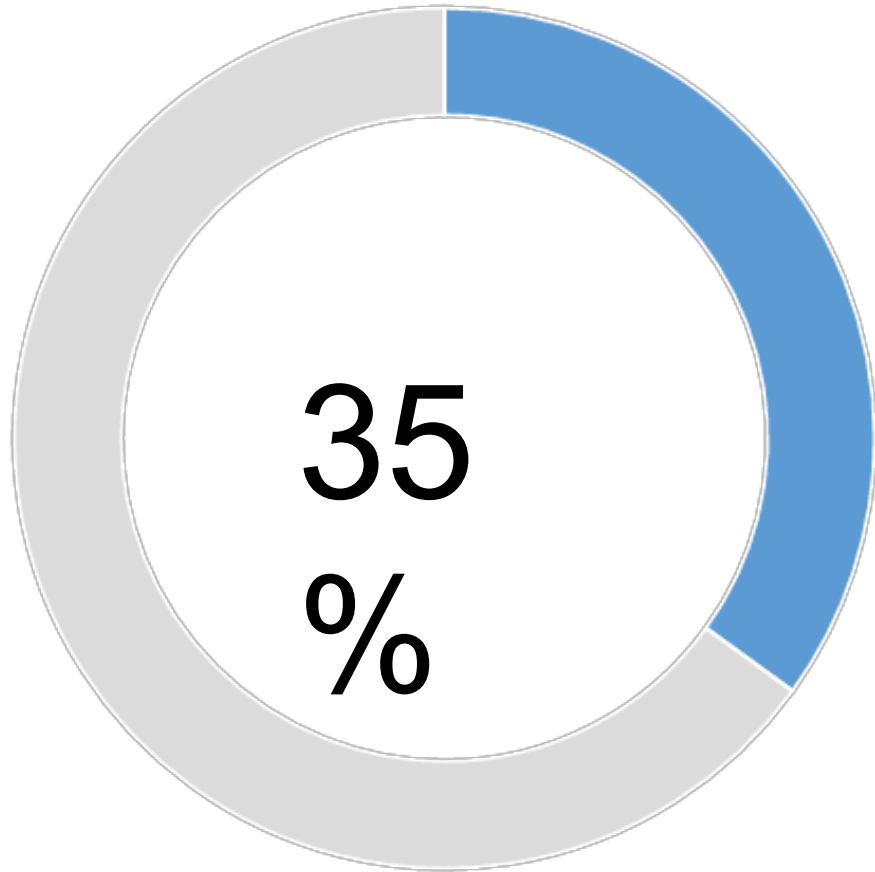


Balance physical and sedentary activities



Teachers
incorporated
physical
activity into
learning





Teachers modified physical activities for children with limited mobility or physical disability

Increase in teachers' confidence in their knowledge of :

- Recommendations for offering water
- Types of foods and beverages that enhance brain development
- Reasons for offering children a variety of fruits and vegetables
- Strategies for incorporating a variety of fruits and vegetables into meals and snacks
- Strategies for incorporating physical activity within the daily routine

Increase in parents' confidence in their knowledge of:



Foods that have a positive impact on brain development



Connections between nutrition and learning and nutrition and behavior

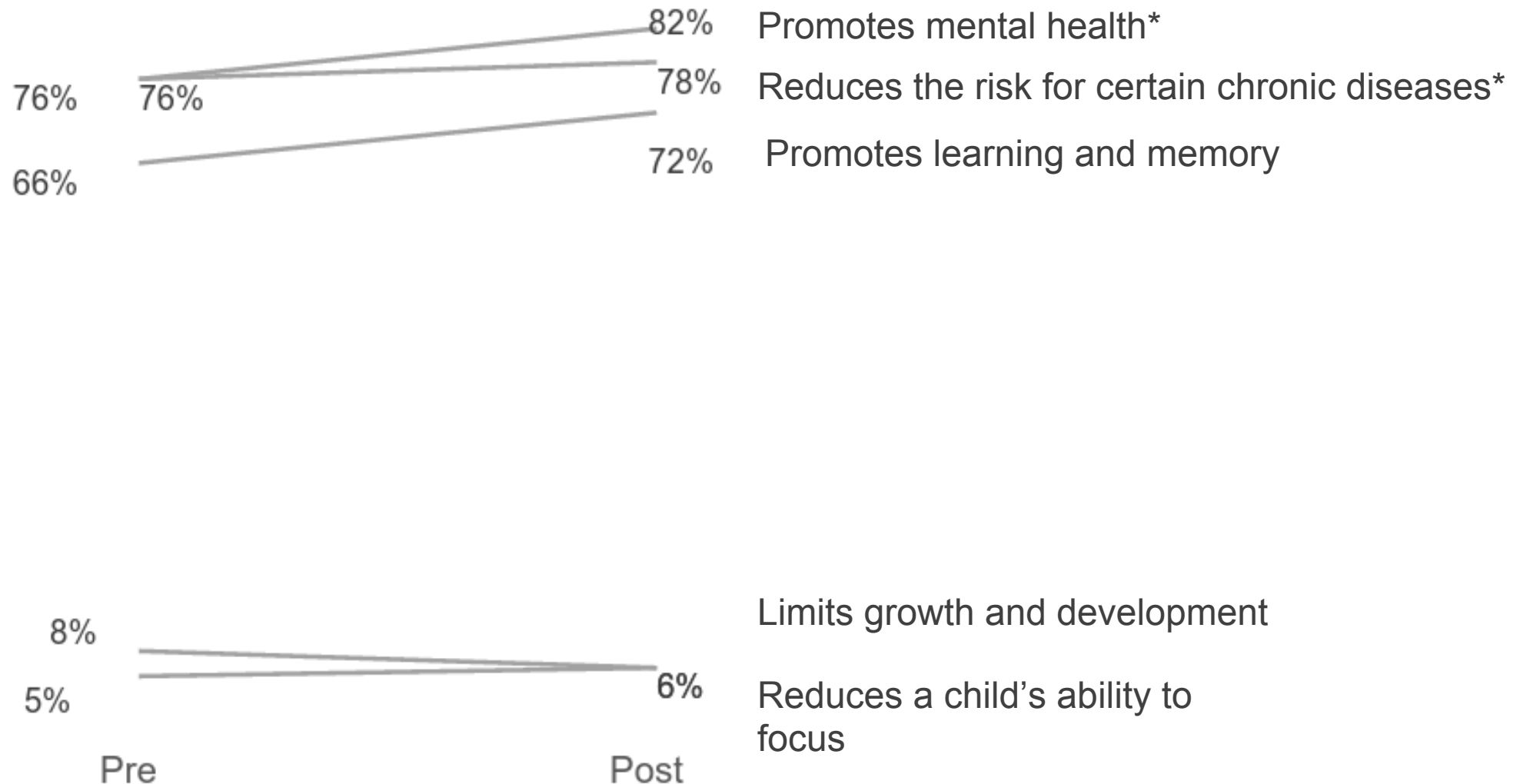


Foods that are healthier



How to encourage their child to be more physically active

Parents' beliefs about the effects of physical activity on young children



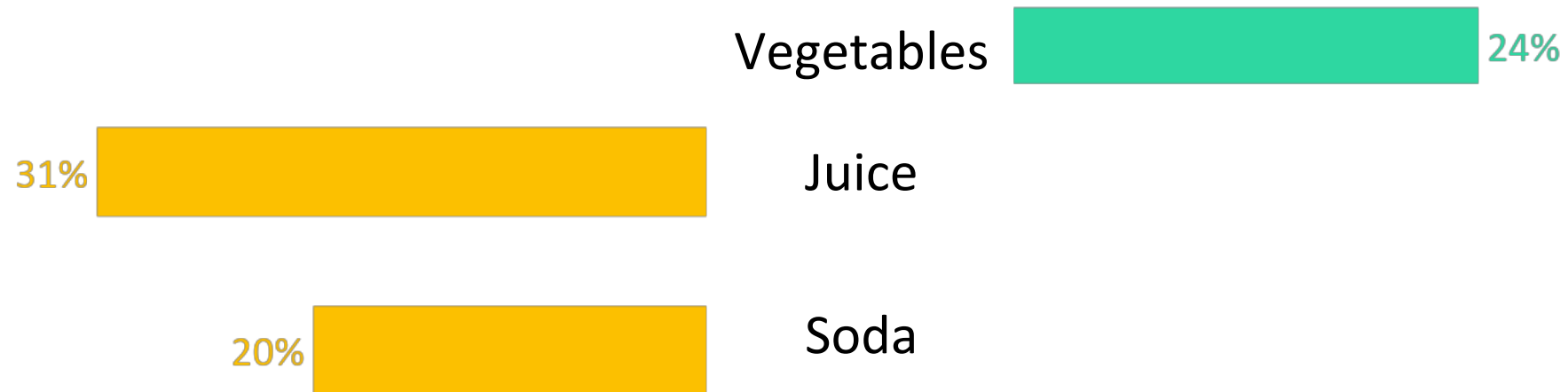
Increase in parents' familiarity of policies

- 27% parents were more familiar with the nutrition policies at their child's preschool
- 27% parents were more familiar with the policies about the foods for celebrations at their child's preschool

Changes in foods and beverages consumed

DECREASE

INCREASES



Changes in the foods and drinks consumed

7% ↑



8% ↓



Average numbers of the types of foods and beverages consumed by children

Food Groupings	Number of Items	Pre Mean	Post Mean	Change
Healthiest foods and beverages	37	17.0	17.5	0.5*
Moderately healthy foods and beverages	14	6.3	6.5	0.2
Unhealthy foods and beverages	14	4.1	3.9	-0.2

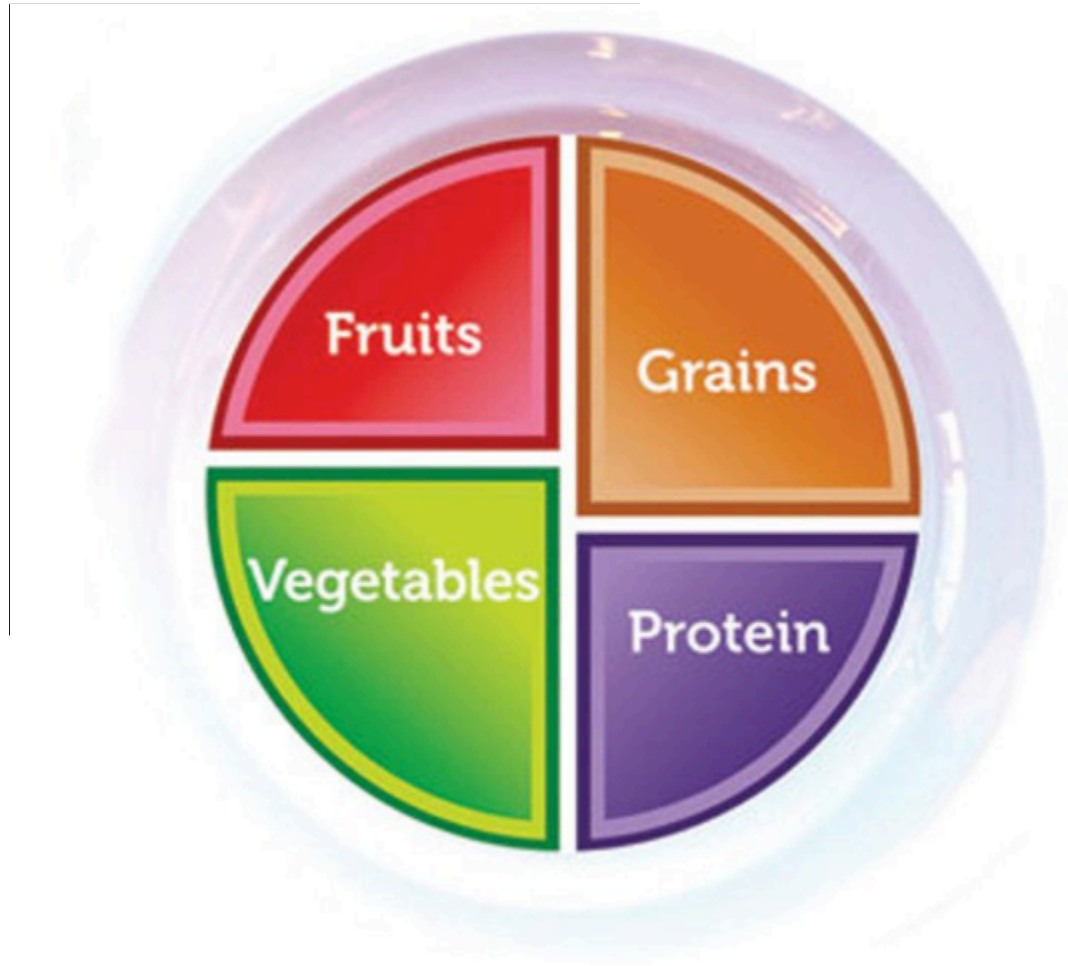
* Significant at $p < 0.05$

Average number of types of foods consumed by children

Food Groupings	Number of Items	Pre Mean	Post Mean	Change
Fruits	10	5.0	5.0	0.0
Vegetables	11	4.4	4.7	0.3 *

* Significant at $p > 0.05$

Children's dinner and USDA recommendations



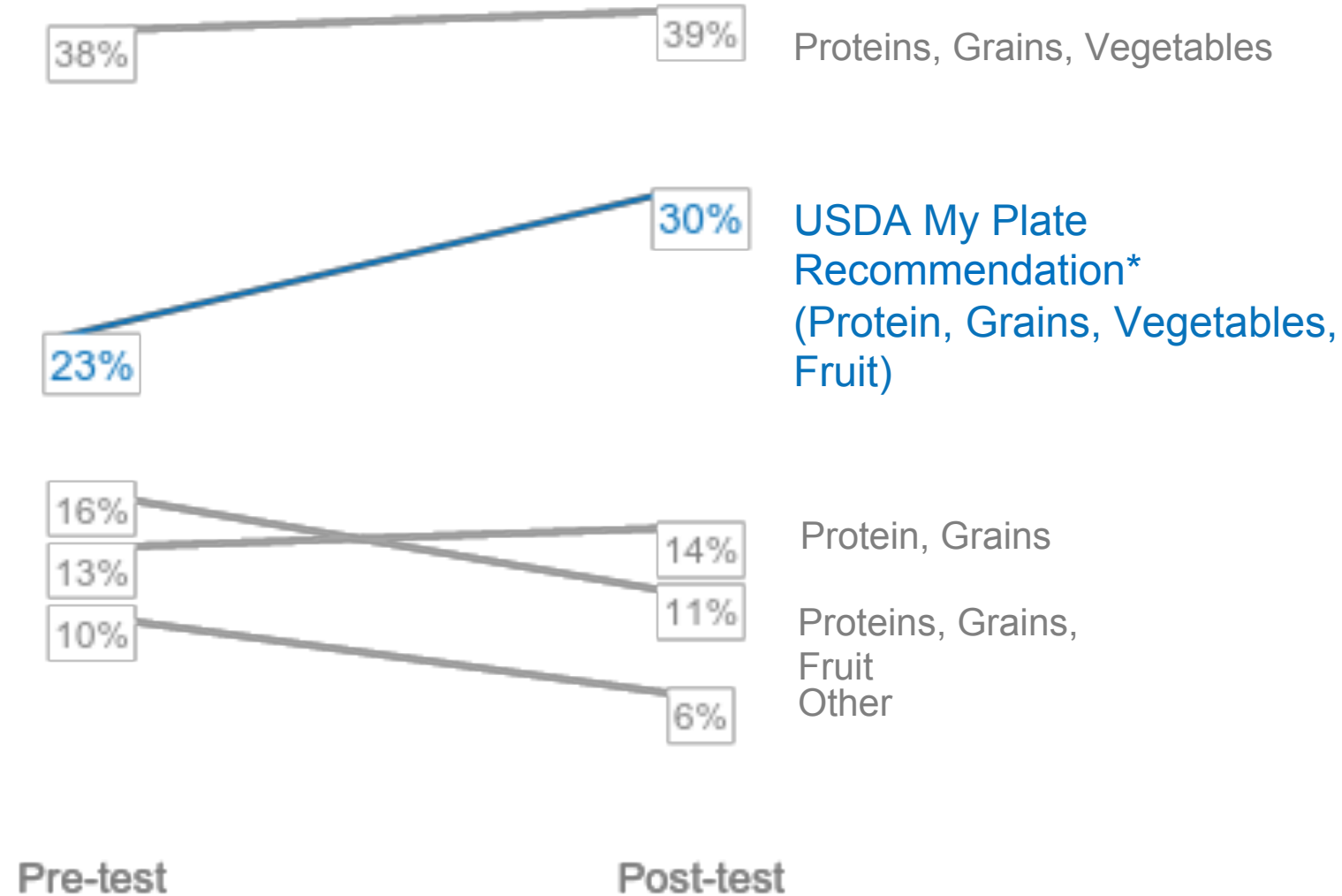
Proteins, Grains, Vegetables

USDA My Plate
Recommendation*
(Protein, Grains, Vegetables,
Fruit)

Protein, Grains

Proteins, Grains,
Fruit
Other

Children's dinner and USDA recommendations



Parents' beliefs about the recommended time for preschoolers' physical activity

Recommended Time	Pre	Post	Change
30 minutes	22%	17%	-5.1%
60 minutes	42%	43%	1.1%
90 minutes	20%	22%	2.0%
120 minutes	17%	19%	2.0%

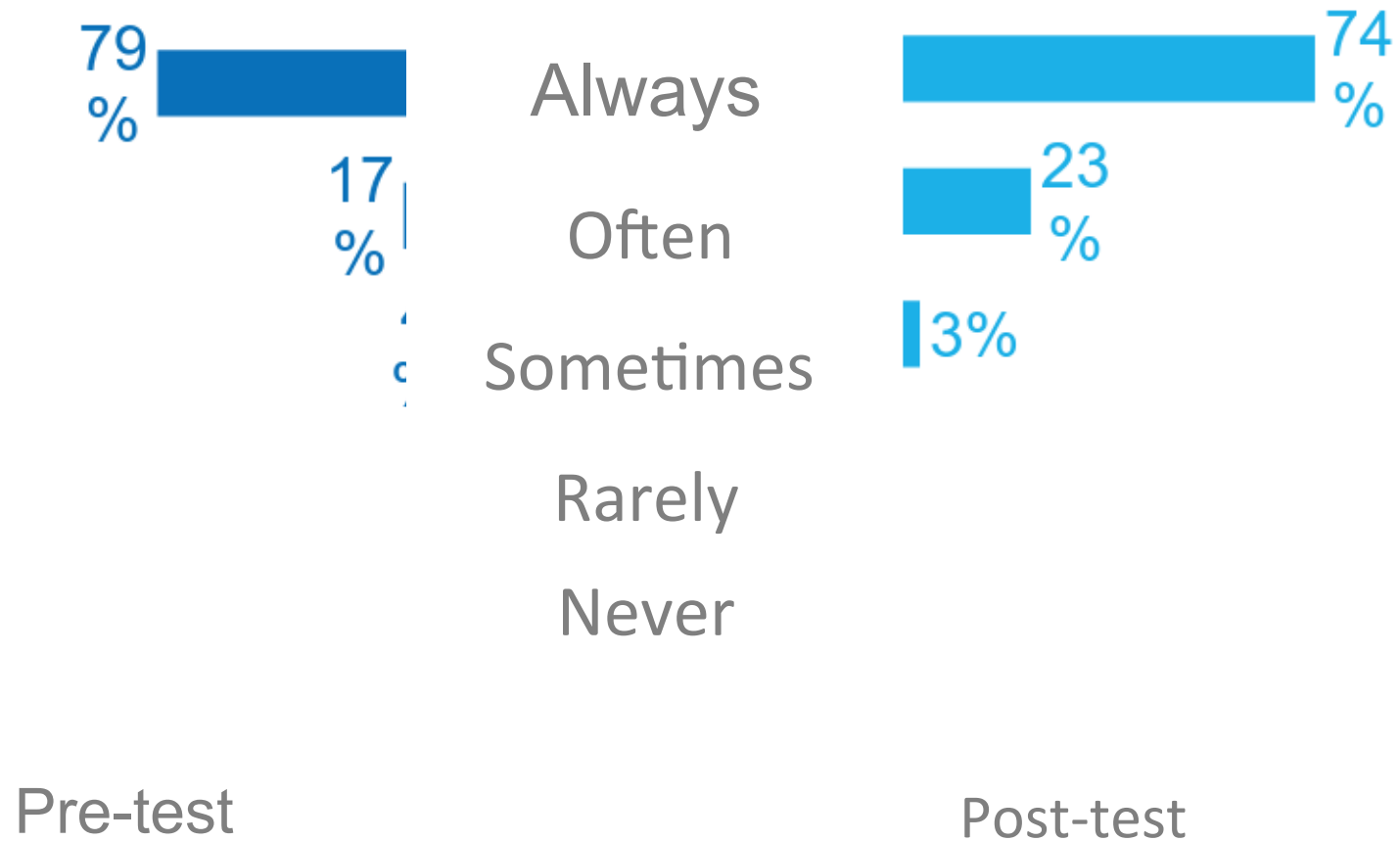


Changes in children's sedentary and physical activities

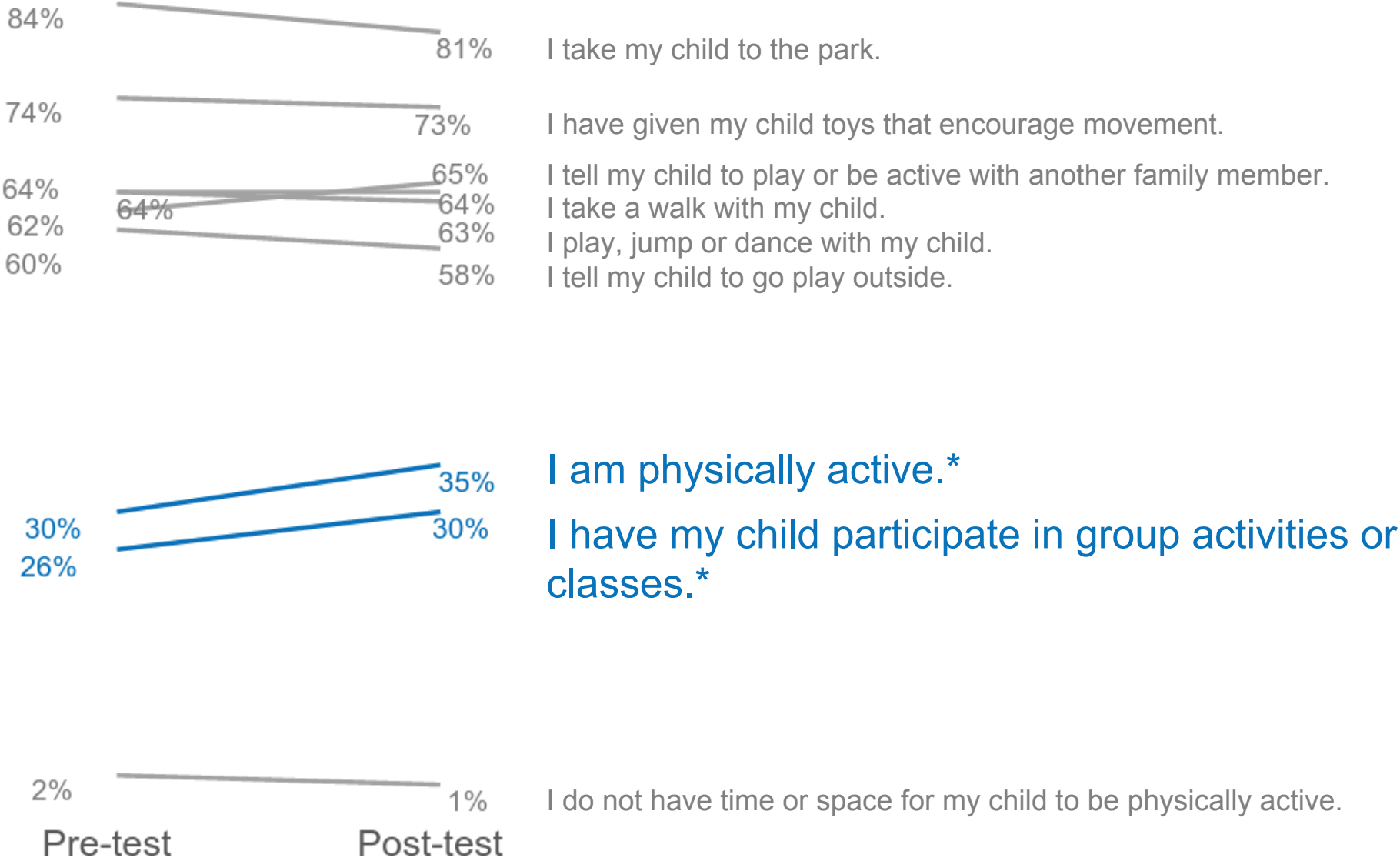
28% children decreased screen time



Percent of children who enjoy being active



How parents encourage their children to be physically active



Discussion Questions

What do you think the role is of preschool or early learning programs in obesity prevention?

What are your experiences with obesity prevention targeted for preschool age children?