

**National Food and Nutrition  
Survey (NATFAN)  
WIC Food Package Rollout  
Questionnaire**

Marisa Lara, MPH  
November 16, 2011

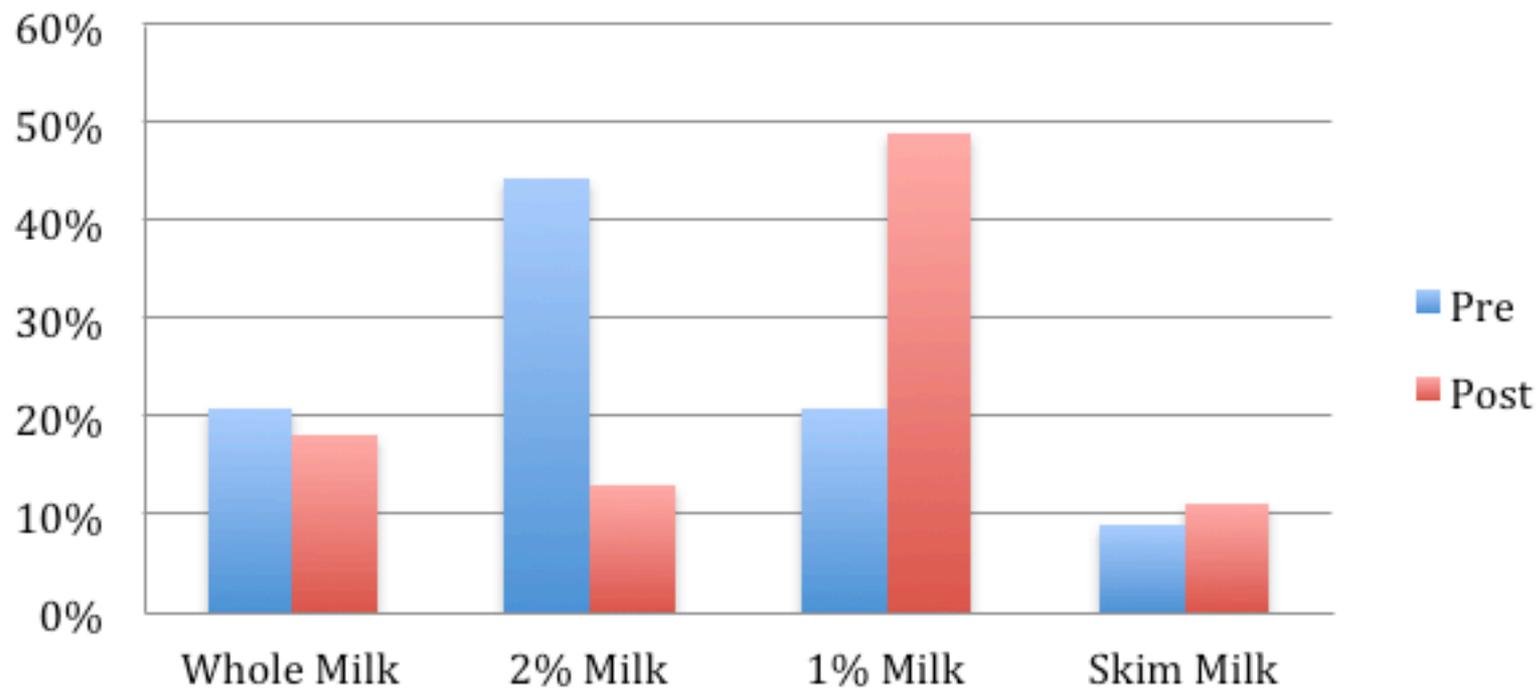
*“The National Food and Nutrition (NATFAN) questionnaire was developed to examine WIC participants’ food/beverage consumption patterns and attitudes prior to and after the rollout of the new WIC food package”*

Today’s presentation will highlight some of the key findings for New Hampshire, including a comparison to national data.

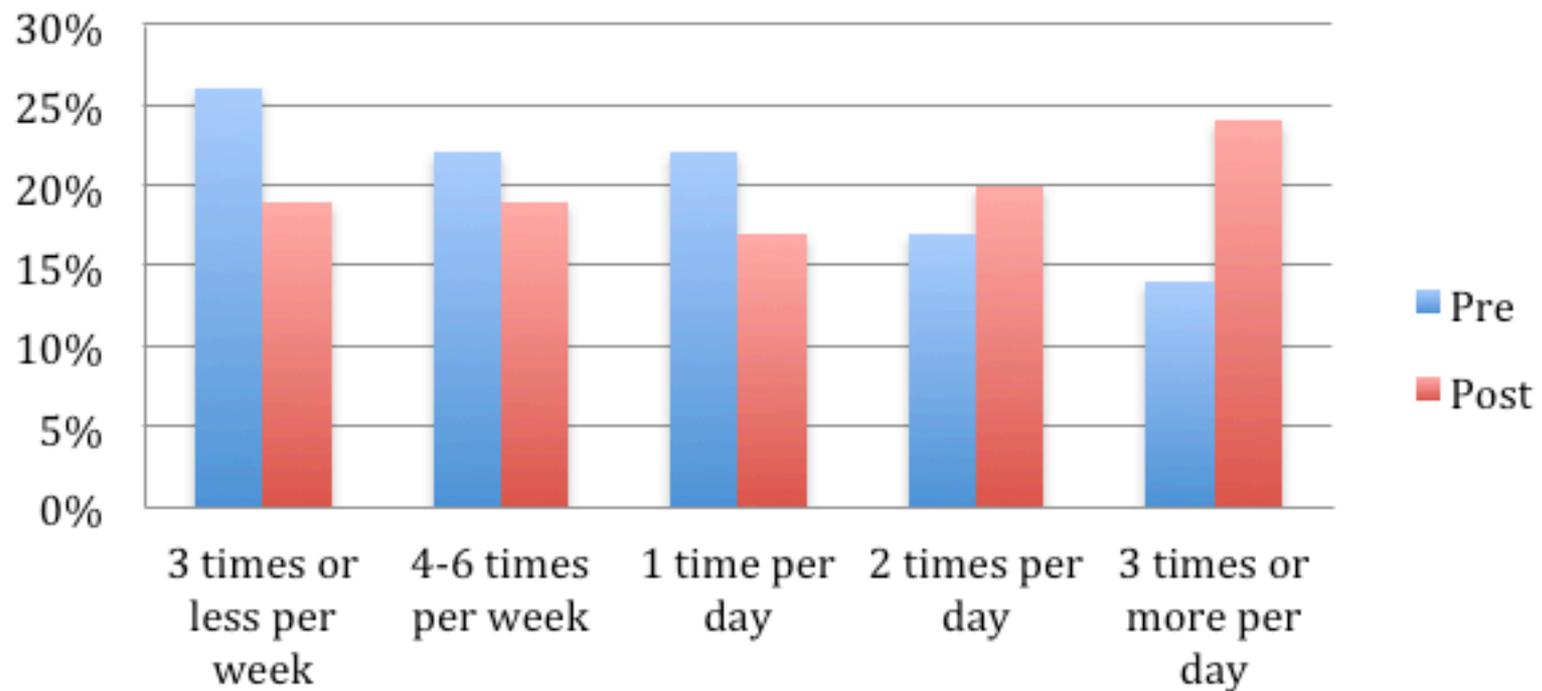
# Summary - Women

- ✓ Increase in consumption of 1% and skim milk
- ✓ Increase in consumption of whole wheat/whole grain bread, whole wheat tortillas, brown rice
- ✓ Consumption of vegetables 3 or more times per day increased from 14% to 24%
- ✓ Consumption of fruit 3 or more times per day ALSO increased from 14% to 24%

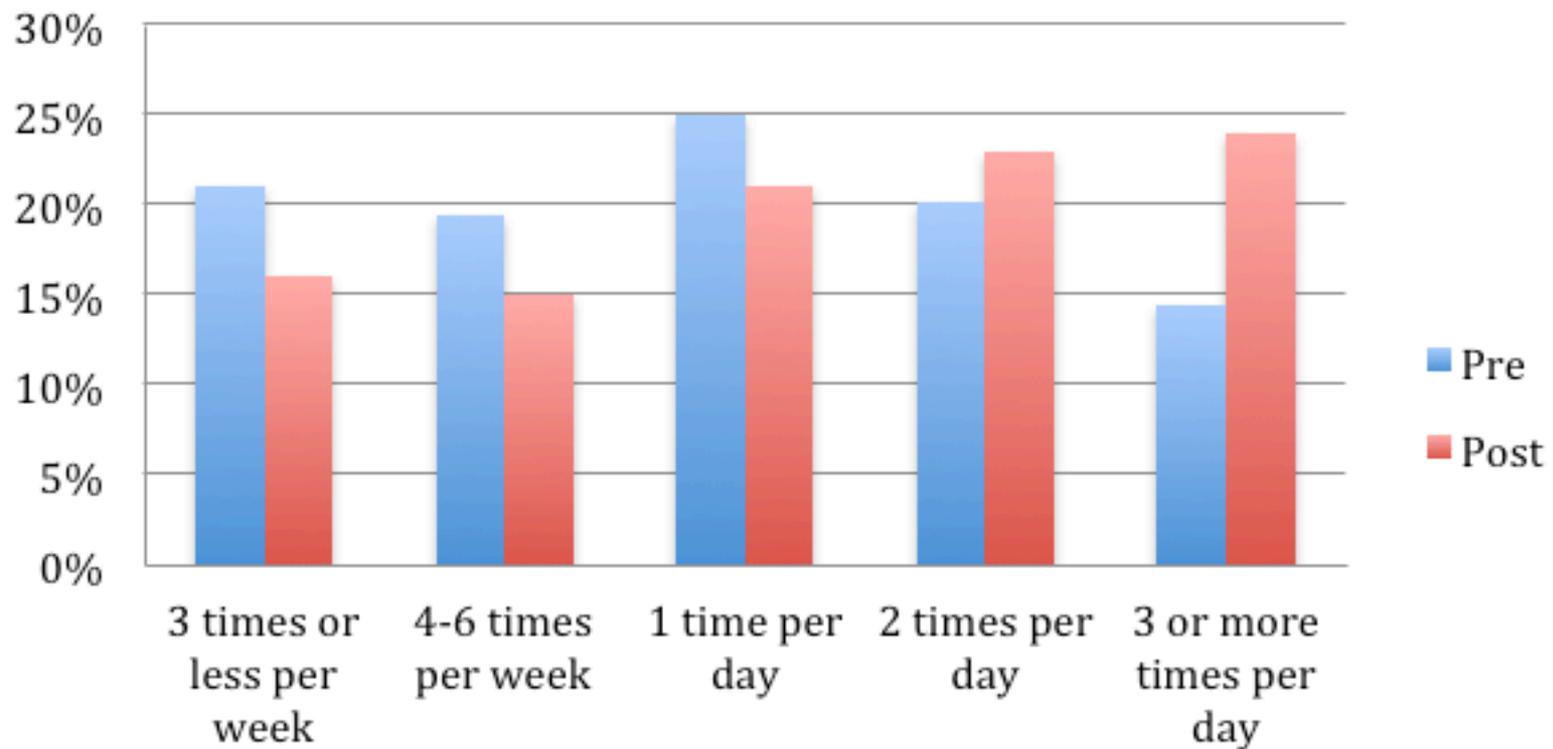
## Type of cow's milk usually consumed by NH women, NATFAN, 2009 and 2011



## Frequency of fruit consumption among NH women, NATFAN, 2009 and 2011



## Frequency of vegetable consumption among women, NATFAN, 2009 and 2011



# Women – Whole Grain Consumption

	Pre	Post
Brown rice 1-3 times per week	21%	27%
Brown rice 4-6 times per week	6%	12%
WW/WG Bread 1 to 3 times per week	28%	29%
WW/WG Bread 4-6 times per week	20%	22%
WW/WG Bread 1 time per day	18%	24%
WW tortilla 1 to 3 times per week	15%	27%
Corn tortilla 1 to 3 times per week	27%	29%

## Refined grains: from pre- to post-survey

- Consumption of white rice among women decreased
- White bread 1 time per day decreased from 16% to 8%. -
- White bread 4-6 times per week increased from 18% to 22%

# Summary - Infants

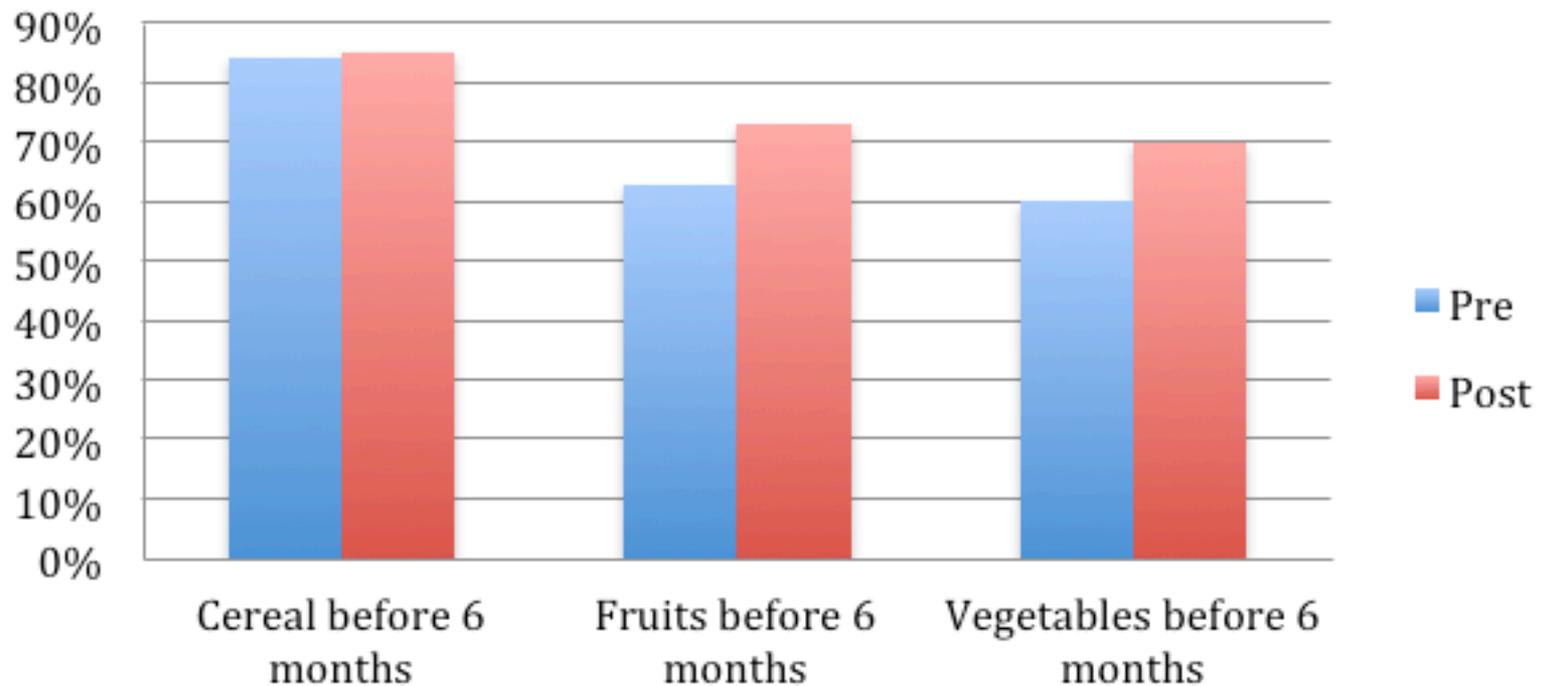
- ✓ No change in age of infant at breastfeeding cessation from pre- to post-survey
- ✓ Majority of infants are starting Fruits, vegetables, and cereal before 6 months of age. Higher percentage of infants starting solids earlier in the post-survey.
- ✓ Although juice was eliminated from the new infant food package, 35% (post-survey) consume 1 or more times per week (43% pre-survey)

# Infants – age at breastfeeding cessation\*

	Pre	Post
Stopped less than 1 month	47%	44%
1 to 2 months old	25%	28%
3 to 4 months old	15%	15%
5 to 6 months old	6%	5%
7 to 8 months old	2%	3%
9 to 10 months old	0%	2%
11 months old	4%	2%

\*Recalculated to exclude those who were still breastfeeding

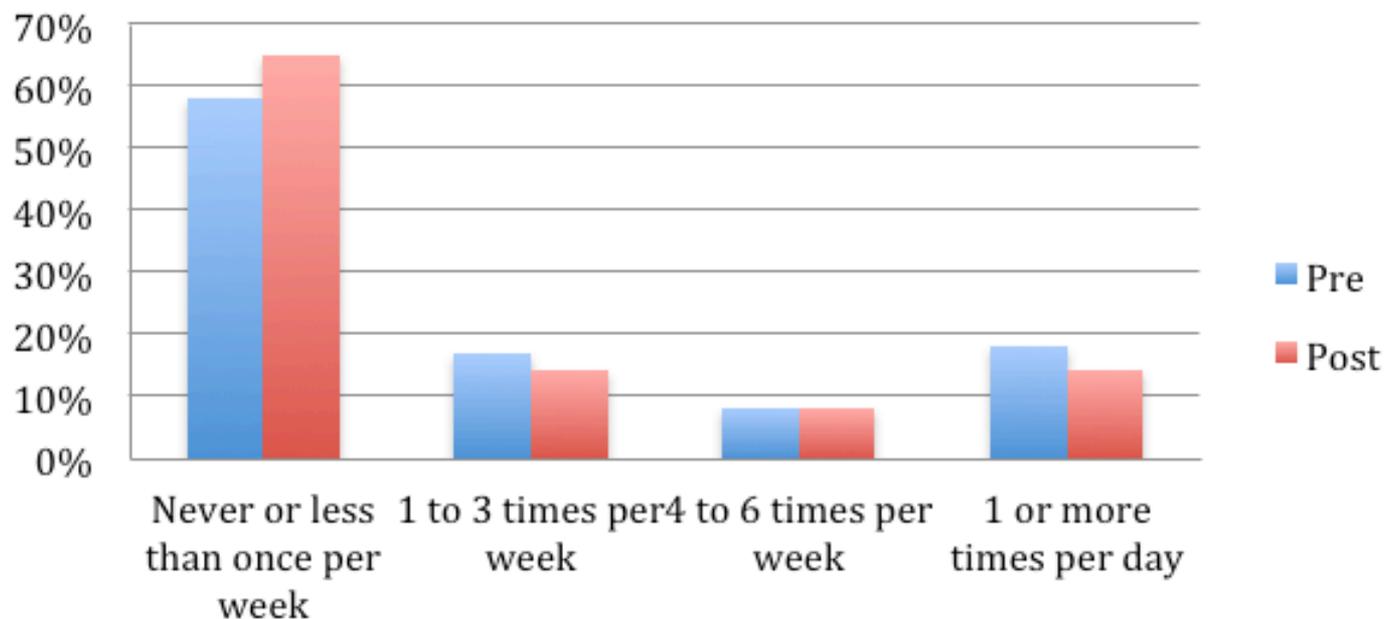
## Infant age at introduction to cereal, fruits, and vegetables, NATFAN, 2009 and 2011



31% of infants are consuming cereal before 4 months of age  
27% of infants (all ages) are consuming desserts, majority starting at 6 months

\*Recalculated to exclude infants who are not fed cereal, fruits, or vegetables

## Frequency of juice consumption among NH infants, NATFAN, 2009 and 2011



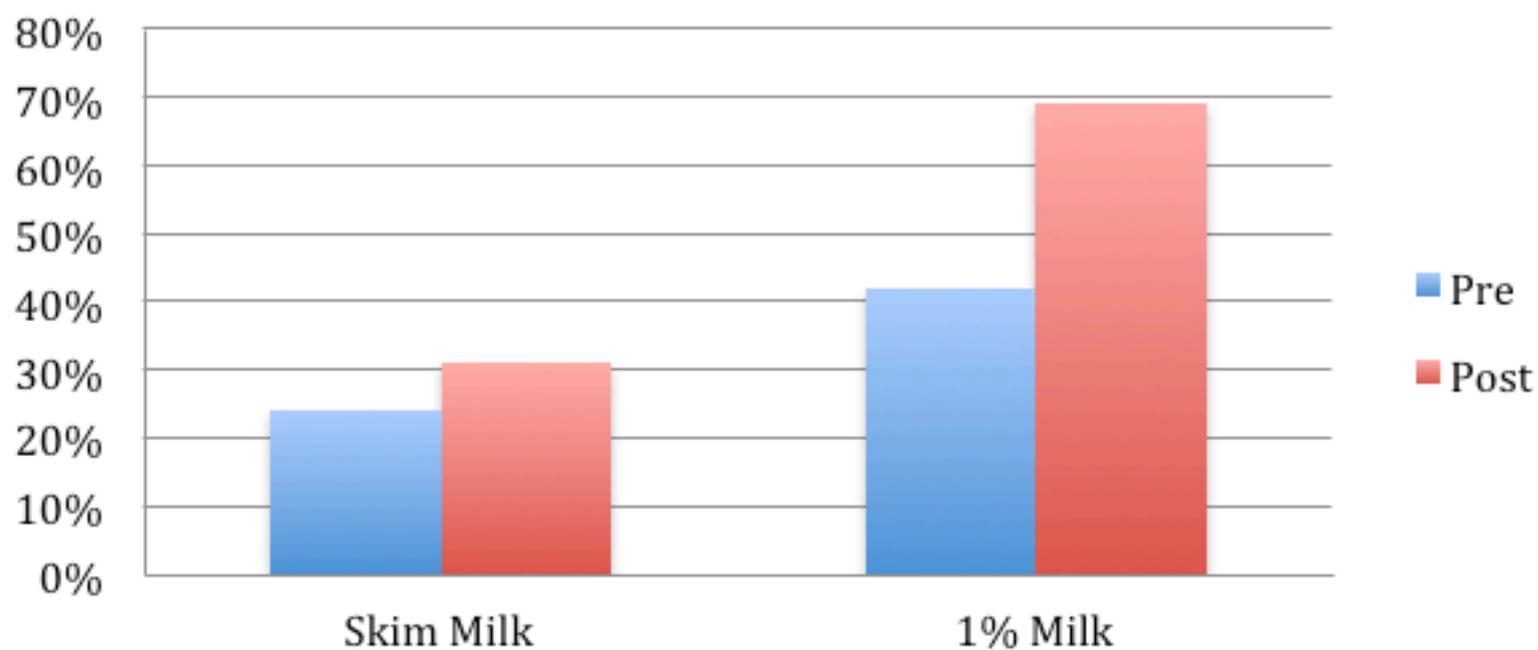
Age of infant at introduction to juice	Pre	Post
Juice before 4 months*	14%	17%
Juice 4-5 months*	27%	25%
Juice 6 months or older*	60%	58%

\* Age of introduction recalculated to exclude infants that do not consume juice

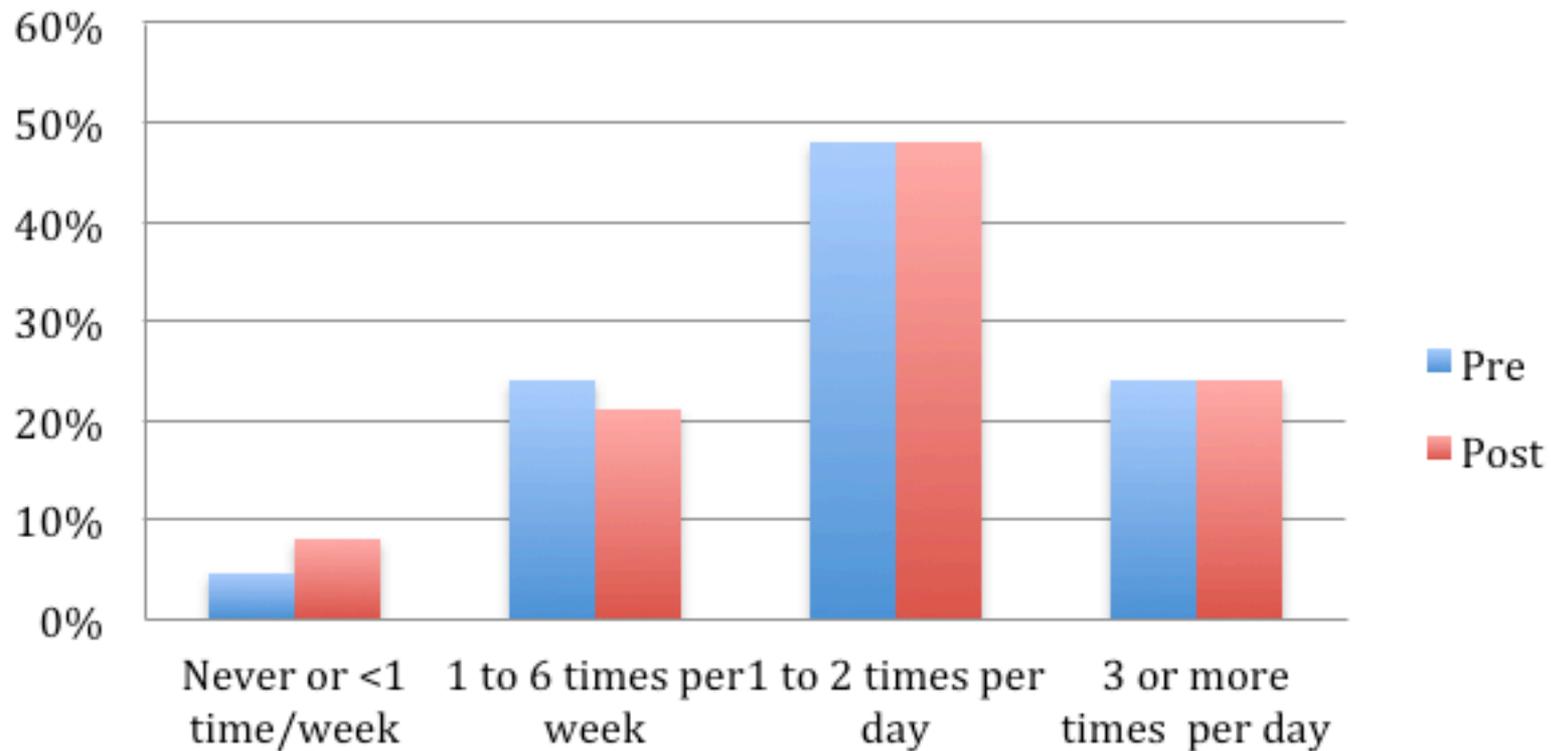
# Summary - Children

- ✓ Post-survey results indicate an increase in willingness of parent/caregiver to offer skim or 1% milk to children over 2 years of age
- ✓ Although amounts were reduced in the new food package, there was no change overall in frequency of juice consumption
- ✓ Fruit consumption 3 or more times per day increased from 21% to 29%
- ✓ Vegetable consumption 3 or more times per day increased from 15% to 26%

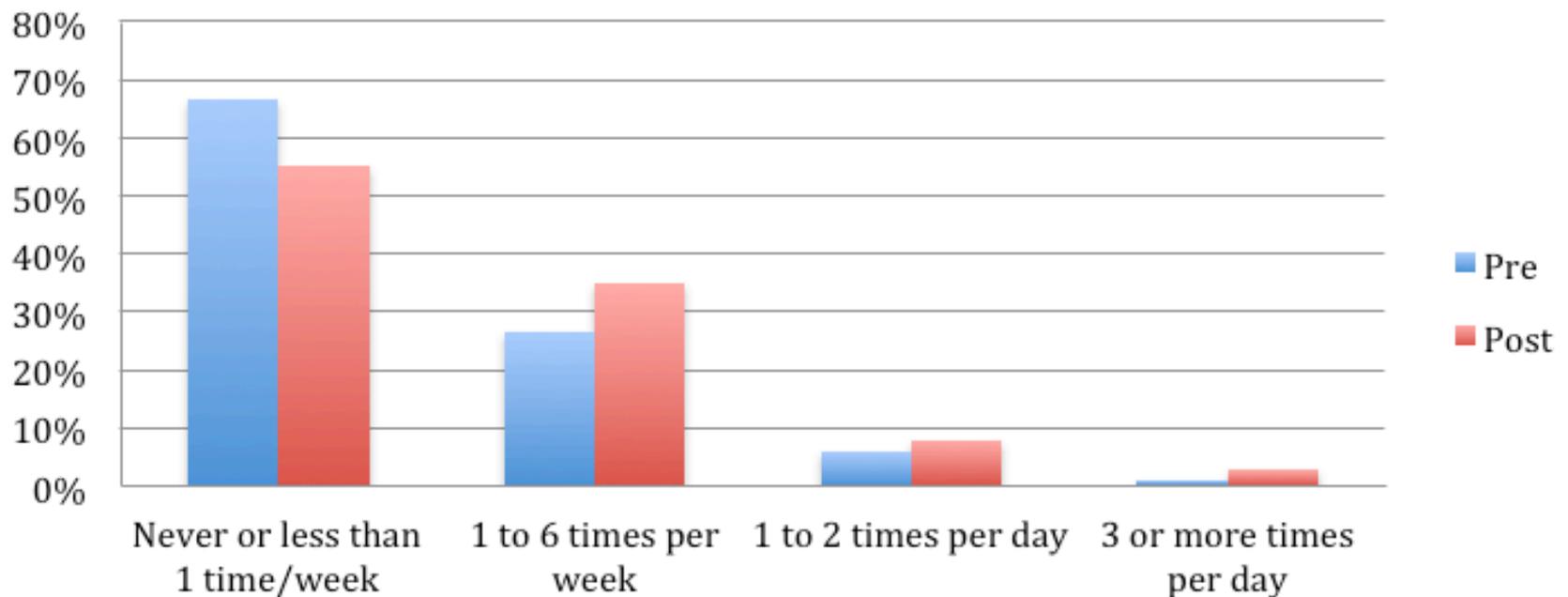
**Willingness of NH parents/caregivers to offer skim  
or 1% milk to children 2 years of age or older,  
NATFAN, 2009 and 2011**



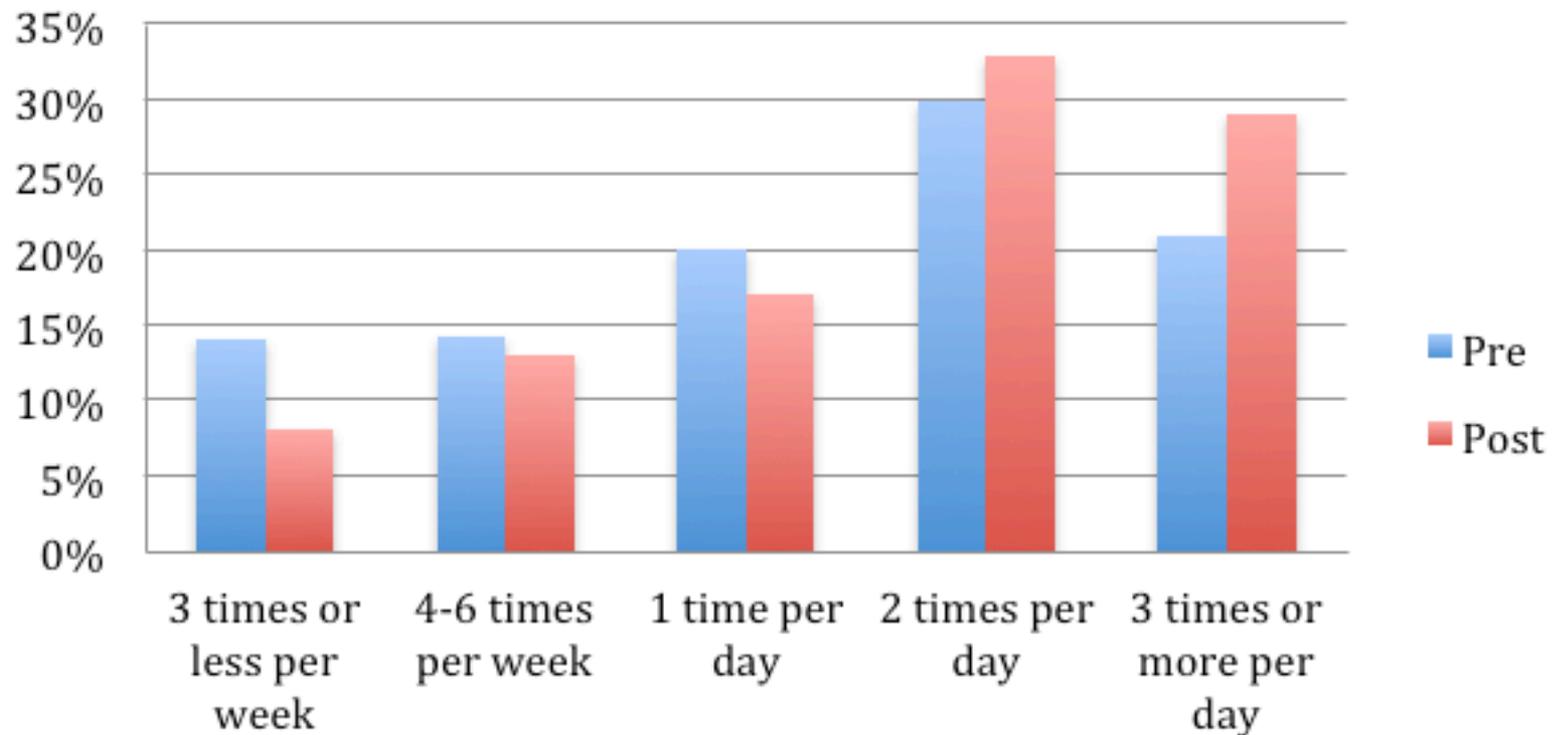
## Frequency of juice consumption among NH children, NATFAN, 2009 and 2011



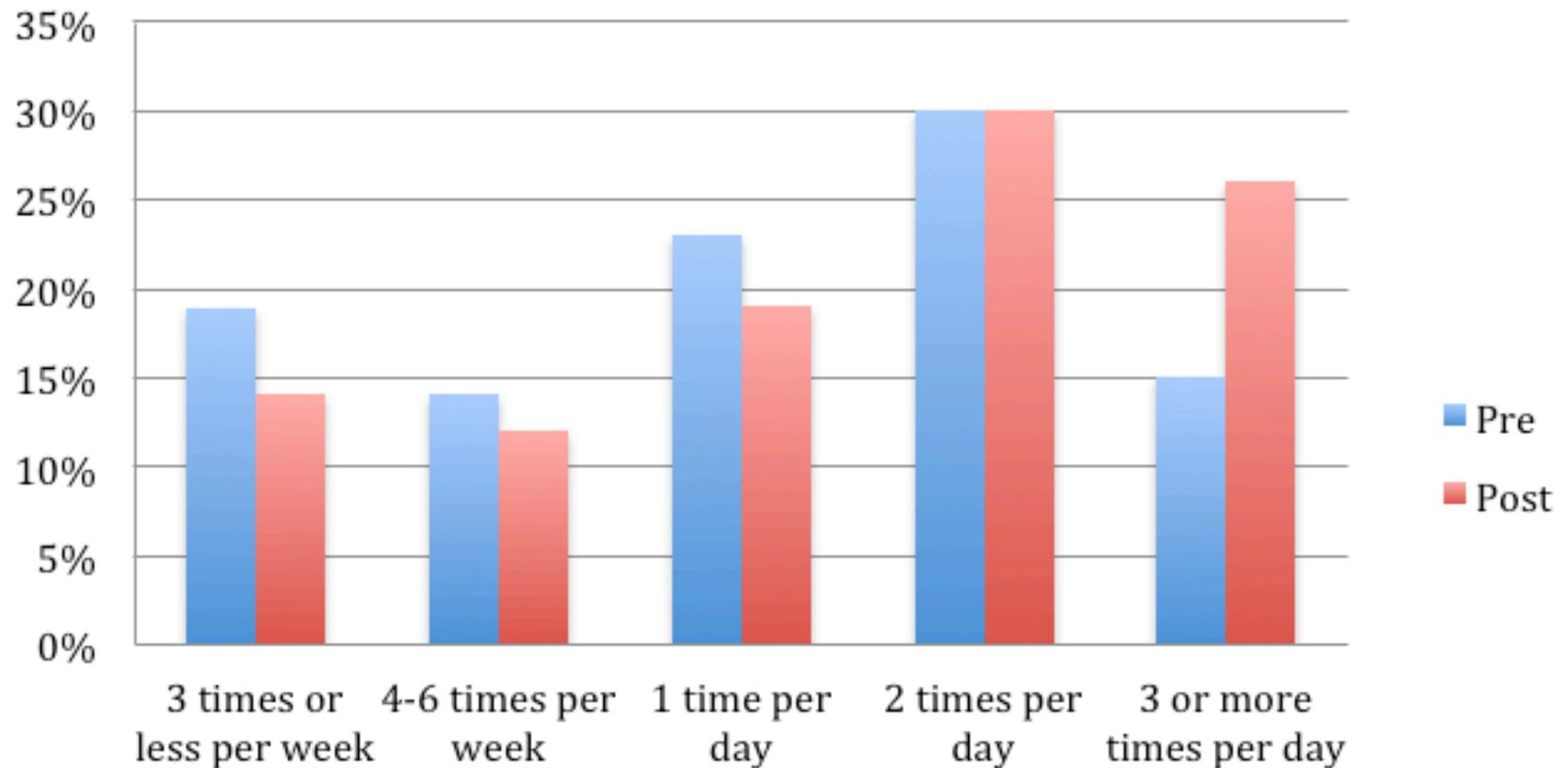
## Frequency of sugar-sweetened beverage consumption among NH children NATFAN, 2009 and 2011



## Frequency of fruit consumption among NH children, NATFAN, 2009 and 2011



## Frequency of vegetable consumption among NH children, NATFAN, 2009 and 2011



# Children – Consumption of Whole Grains

	Pre	Post	
Brown rice 1 to 3 times per week	31%	40%	←
Brown rice 4 to 6 times per week	6%	8%	
Oatmeal 1 to 3 times per week	41%	38%	
Oatmeal 4 to 6 times per week	13%	9%	
WW/WG Bread 1 to 3 times per week	24%	25%	
WW/WG Bread 4 to 6 times per week	18%	26%	←
WW tortilla 1 to 3 times per week	17%	24%	←
Corn tortilla 1 to 3 times per week	27%	26%	

Consumption of white bread 4-6 times per week decreased from 18% to 17% where as 1-3 times per week increased from 24% to 26%

A faint, light blue map of the state of New Hampshire is visible in the upper half of the slide, centered horizontally. The map shows the state's outline and some internal details like the location of the state capital.

How does New Hampshire  
compare to national?

Women	New Hampshire		National	
	Pre	Post	Pre	Post
Milk Consumption by Type				
Whole Milk	21%	18%	36%	20%
2% Milk	44%	13%	44%	55%
1% Milk	21%	49%	9%	13%
Skim Milk	9%	11%	6%	6%
Fruit Consumption				
3 times or less per week	26%	19%	26%	21%
4-6 times per week	22%	19%	18%	18%
1 time per day	22%	17%	18%	17%
2 times per day	17%	20%	20%	22%
3 times or more per day	14%	24%	18%	22%
Vegetable Consumption				
3 times or less per week	21%	16%	28%	26%
4-6 times per week	20%	15%	19%	18%
1 time per day	25%	21%	20%	20%
2 times per day	20%	23%	18%	20%
3 or more times per day	14%	24%	14%	16%
Whole Grains				
Brown rice 1-3 times per week	21%	27%	22%	24%
Brown rice 4-6 times per week	6%	12%	5%	5%
WW/WG Bread 1 to 3 times per week	28%	29%	28%	29%
WW/WG Bread 4-6 times per week	20%	22%	18%	20%
WW/WG Bread 1 time per day	18%	24%	16%	18%
WW tortilla 1 to 3 times per week	15%	27%	18%	21%
Corn tortilla 1 to 3 times per week	27%	29%	30%	28%



Infants	New Hampshire		National	
	Pre	Post	Pre	Post
Age at Breastfeeding Cessation*				
Stopped less than 1 month	47%	44%	43%	43%
1 to 2 months old	25%	28%	26%	26%
3 to 4 months old	15%	15%	17%	18%
5 to 6 months old	6%	5%	7%	7%
7 to 8 months old	2%	3%	3%	3%
9 to 10 months old	0%	2%	2%	2%
11 months old	4%	2%	2%	1%
Age of Introduction - Solids				
Cereal before 6 months*	84%	85%	79%	76%
Fruit before 6 months*	63%	73%	59%	58%
Vegetables before 6 months*	60%	70%	58%	56%
Eats meat (any age)	35%	34%	34%	33%
Eats desserts (any age)	27%	28%	31%	28%
100% Juice - age of introduction and frequency				
Juice before 4 months*	14%	17%	16%	15%
Juice 4-5 months*	27%	25%	33%	31%
Juice 6 months or older*	60%	58%	52%	54%
ever or less than once per week	57%	65%	57%	60%
1 to 3 times per week	17%	14%	18%	18%
4 to 6 times per week	8%	8%	7%	6%
1 or more times per day	18%	14%	19%	17%

NH BF cessation similar to national

NH infants are starting solids earlier when compared with national

NH post-survey results showed increased % infants starting fruit/vege before 6 months

Children	New Hampshire		National	
	Pre	Post	Pre	Post
Willingness to offer skim or 1% milk (2 years or older, agree/strongly agree)				
Skim Milk	24%	31%	25%	28%
1% Milk	42%	69%	40%	46%
100% Juice				
Never or less than 1 time/week	5%	8%	4%	5%
1 to 6 times per week	24%	21%	33%	34%
1 to 2 times per day	48%	48%	42%	42%
3 or more times per day	24%	24%	32%	18%
Sugar-Sweetened Beverages				
Never or less than 1 time/week	67%	55%	45%	44%
1 to 6 times per week	26%	35%	40%	41%
1 to 2 times per day	6%	8%	12%	12%
3 or more times per day	1%	3%	3%	3%
Fruit Consumption				
3 times or less per week	14%	8%	17%	14%
4-6 times per week	14%	13%	18%	17%
1 time per day	20%	17%	18%	17%
2 times per day	30%	33%	27%	28%
3 times or more per day	21%	29%	21%	25%
Vegetable Consumption				
3 times or less per week	19%	14%	25%	23%
4-6 times per week	14%	12%	17%	16%
1 time per day	23%	19%	20%	20%
2 times per day	30%	30%	24%	24%
3 or more times per day	15%	26%	15%	17%
Grains				
Brown rice 1 to 3 times per week	31%	40%	24%	28%
Brown rice 4 to 6 times per week	6%	8%	5%	6%
Oatmeal 1 to 3 times per week	41%	38%	39%	39%
Oatmeal 4 to 6 times per week	13%	9%	13%	12%
WW/WG Bread 1 to 3 times per week	24%	25%	32%	31%
WW/WG Bread 4 to 6 times per week	18%	26%	15%	19%
WW tortilla 1 to 3 times per week	17%	24%	17%	22%
Corn tortilla 1 to 3 times per week	27%	26%	30%	30%

