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State of the Plate 2010

America's Consumption of Fruit & Vegetables

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NPD Group

Prepared for
Produce for Better Health Foundation


March 2010

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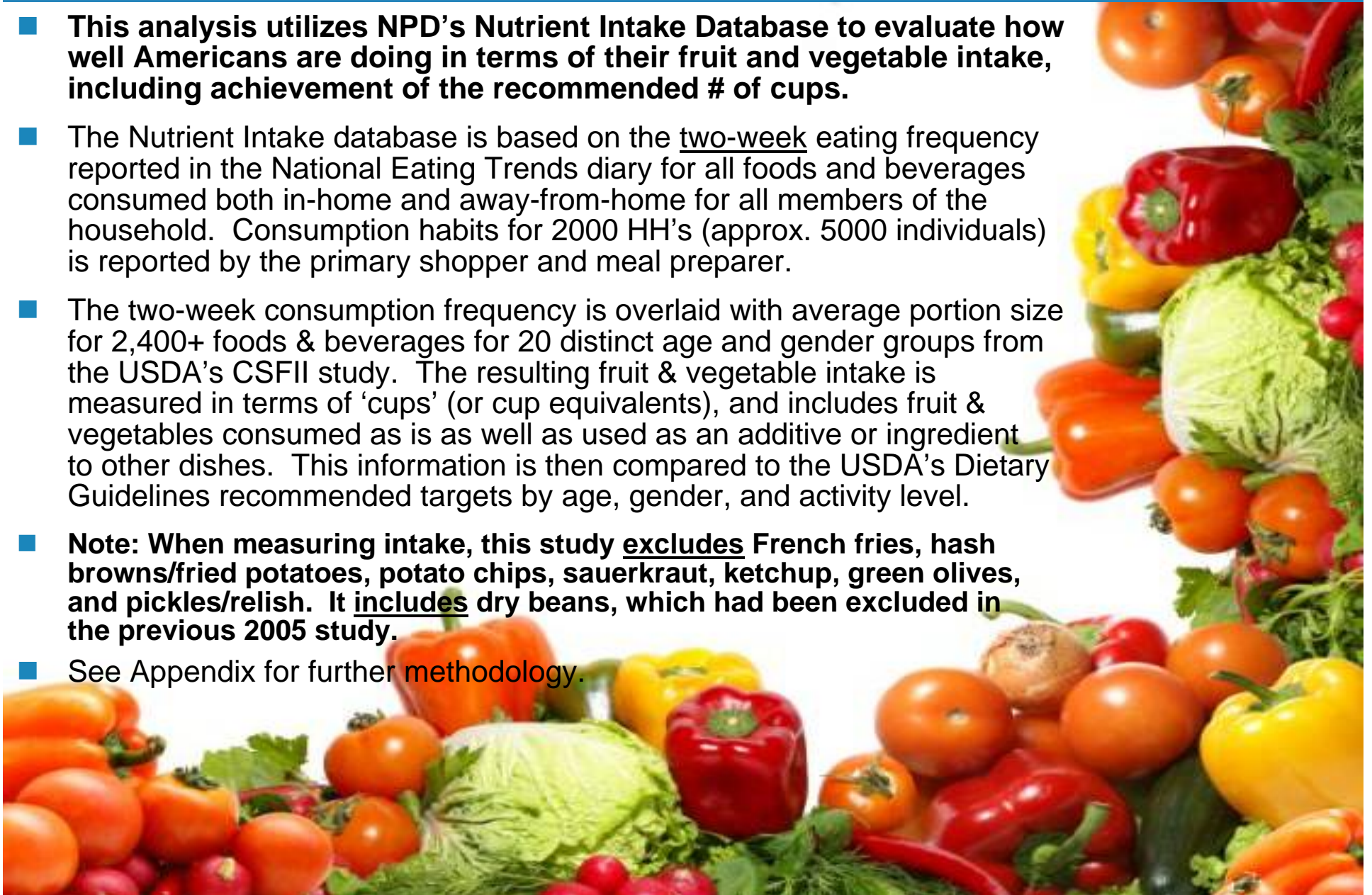


Objective for this Study

- 
- Produce for Better Health would like to examine trends in fruit & vegetable consumption to determine the ‘State of the Plate’ for Americans.
 - The following fruit/vegetable trends will be examined:
 - Consumption by Age/Gender and LifeCycle
 - Focus on Individuals in HH’s with a Gen X Mom (aged 30-44)
 - Working vs. Non-Working, also New vs. Experienced Moms
 - What % of individuals are achieving the recommended # of cups?
 - Who are they and how are they doing it?

In addition, trends in meal occasion, form, & in-home vs. AFH habits will be examined, as well as a few attitudes/perceptions about fruit.

- **This analysis utilizes NPD's Nutrient Intake Database to evaluate how well Americans are doing in terms of their fruit and vegetable intake, including achievement of the recommended # of cups.**
- The Nutrient Intake database is based on the two-week eating frequency reported in the National Eating Trends diary for all foods and beverages consumed both in-home and away-from-home for all members of the household. Consumption habits for 2000 HH's (approx. 5000 individuals) is reported by the primary shopper and meal preparer.
- The two-week consumption frequency is overlaid with average portion size for 2,400+ foods & beverages for 20 distinct age and gender groups from the USDA's CSFII study. The resulting fruit & vegetable intake is measured in terms of 'cups' (or cup equivalents), and includes fruit & vegetables consumed as is as well as used as an additive or ingredient to other dishes. This information is then compared to the USDA's Dietary Guidelines recommended targets by age, gender, and activity level.
- **Note: When measuring intake, this study excludes French fries, hash browns/fried potatoes, potato chips, sauerkraut, ketchup, green olives, and pickles/relish. It includes dry beans, which had been excluded in the previous 2005 study.**
- See Appendix for further methodology.



The measurement used in this study is cups (or cup equivalents*) ... some examples include:



How Fruit/Veg Intake is Measured ...

A 'cup' is equivalent to:

- 1 cup of fresh, frozen, or canned fruit or veg.
- 1 large banana
- 1 small apple or ½ large apple
- 32 grapes
- 8 large strawberries
- 1 cup (8 ozs.) of 100% fruit or vegetable juice
- 2 cups raw leafy vegetables
- 1 cup cooked dry peas or beans
- 1/2 cup dried fruit

*Examples of a 'cup equivalent' include:

- 2 cups of raw leafy vegetables = 1 cup

- ½ cup of dried fruit = 1 cup

The recommended number of cups per day varies by age, gender, and activity level. For example, the target for a moderately active 40 yr old female is 2 cups of fruit & 3 cups of vegetables.

Activity Level	Age	Fruits (cups)	Veggies (cups)
WOMEN			
Less Active	19-30	1 1/2	2 1/2
	31-50	1 1/2	2 1/2
	51+	1 1/2	2
Moderately Active	19-50	2	3
Active	51+	1 1/2	2 1/2
Active	19-50	2	3
	51+	2	3

Activity Level	Age	Fruits (cups)	Veggies (cups)
MEN			
Less Active	19-50	2	3 1/2
	51+	2	3
Moderately Active	19-30	2	3 1/2
Active	31+	2	3 1/2
Active	19-30	2 1/2	4
	31-51	2 1/2	4
	51+	2 1/2	3 1/2

Activity Level	Age	Fruits (cups)	Veggies (cups)
GIRLS			
Less Active	2-3	1	1
	4-8	1	1 1/2
	9-13	1 1/2	2
	14-18	1 1/2	2 1/2
Moderately Active	2-3	1	1 1/2
Active	4-8	1 1/2	2
	9-13	1 1/2	2 1/2
	14-18	2	2 1/2
	Active	2-3	1
4-8		1 1/2	2 1/2
9-13		1 1/2	3
14-18		2	3

Activity Level	Age	Fruits (cups)	Veggies (cups)
BOYS			
Less Active	2-3	1	1
	4-8	1	1 1/2
	9-13	1 1/2	2 1/2
	14-18	2	3
Moderately Active	2-3	1	1 1/2
Active	4-8	1 1/2	2
	9-13	1 1/2	3
	14-18	2	3 1/2
	Active	2-3	1
4-8		1 1/2	2 1/2
9-13		2	3 1/2
14-18		2 1/2	4



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Less Active = less than 30 minutes per day
 Moderately Active = 30-60 minutes per day
 Active = more than 60 minutes per day

Kids and younger adults (<45) are showing improvement ... older adults are eating less!



- The average person consumes **1.8 cups of fruit/veg per day**, or about 660 cups annually. Vegetables account for 60%, fruit represents 40%.
- Per capita fruit & vegetable consumption (in cups) has remained fairly stable overall over the past 5 years (fruit +2%, veg -2% '09 vs. '04). Berries, apple juice, and bananas have all shown growth vs. '04.
 - Several groups have increased their fruit consumption by at least 5% vs. '04 ... **kids 2-12, males 18-34, & females 18-54.**
 - Older adults are eating fewer fruit & vegetables vs. just 5 years ago. Men & women aged 65+ have decreased their intake ~10% vs. '04.
- Kids in HH's with a **Gen X Mom*** consume fruit/veg at average rates ... however, the adults in those households consume ~20% less fruit than the average adult. It appears that parents are making sure their kids are eating right, but aren't taking time to keep their own intake on track.
- **Individuals in HH's with a "new" Gen X Mom** (have only younger kids <6) are getting the message ... **they consume ~30% more fruit** than individuals in HH's with an "experienced" Gen X Mom (have kids >6). They have also increased their fruit consumption by **10%** in past decade. **They appear to be heeding the message that "more matters"!** This will hopefully bode well for future F/V consumption levels as they age.
- Moms' employment status in a Gen X Mom HH does not have much impact on fruit/veg consumption among individuals in the household.⁷

Only 6-8% of individuals achieve their vegetable & fruit targets, skewing to kids and 55+.



- Only **6%** of individuals achieve the recommended target for vegetables ... **8%** achieve the recommended target for fruit in an average day.
- Vegetable achievement (vs. target) follows a standard bell shaped curve, with half of individuals consuming between 40-70% of their target. The picture is less favorable for fruit however, as 2/3rds don't even consume half of their recommended number of cups of fruit.
- **Kids <12 & females 55+ are most likely to achieve their fruit target ... males 55+, teens, kids <6 are most likely to achieve veg target.**
- Individuals who achieve their vegetable target consume **1.1 more** cups of vegetables in a typical day, driven by dinner (and lunch), eaten "as is", weekday & weekend use, sourced from home.
- Individuals who achieve their fruit target consume **1.5 more** cups of fruit in a typical day, driven by breakfast & lunch (dinner and snack use is also higher), eaten "as is", weekday & weekend, sourced from home.
- **In summary:** It appears that younger adults (<45) are hearing the message that "more matters" and are incorporating somewhat more fruit in their diet, as well as the diets of their younger children (<12). They're currently acting on this in terms of their fruit behavior, but not necessarily translating this message into action for their vegetable behavior.
- Repeated messaging and education is necessary to maintain momentum for this group (also to adults aged 45+ to stall their recent declines). Continuing to stress the convenient options for many fruits and vegetables should resonate well with their busy lifestyles. In addition, working with marketers to incorporate more fruit/veg into convenient fresh & frozen meal solutions ⁸ will help drive increased intake for all age groups.



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NPD/Nutrient Intake Database

Fruit and Vegetable Trends

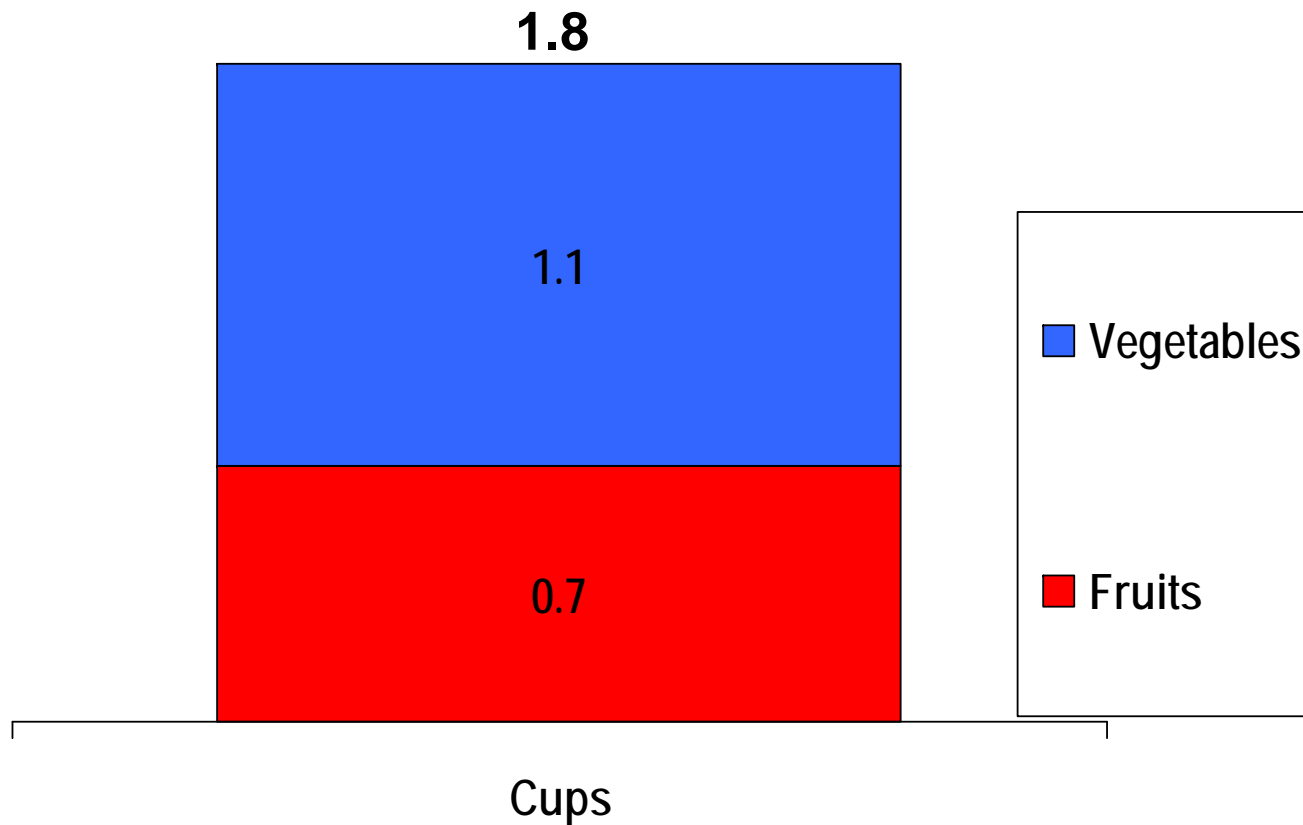


Trend in:
Fruit vs. Vegetables
Meal Occasion
Form
How Used
In-Home vs. A-F-H



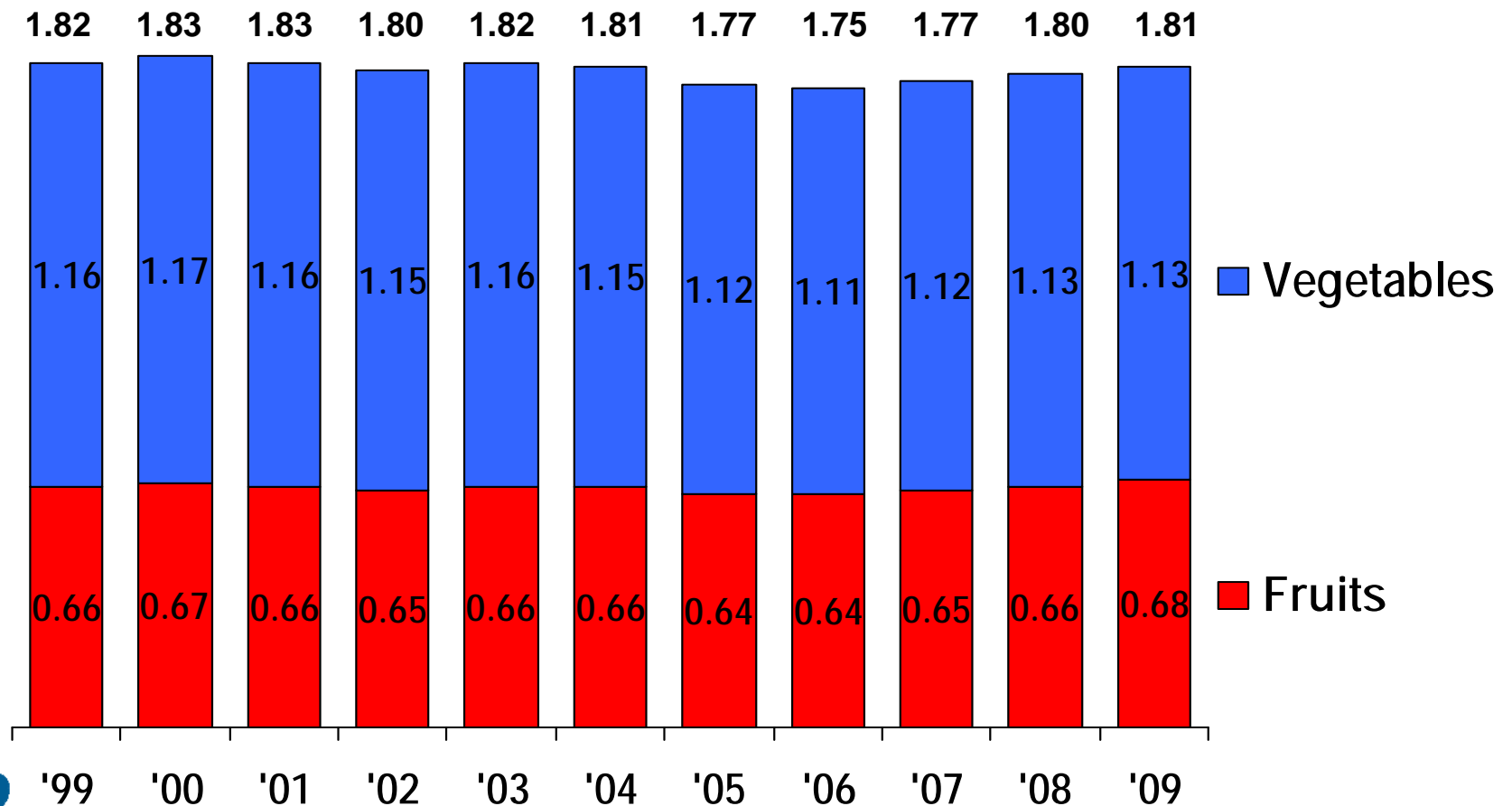
The average person consumes just under 2 cups of fruit/vegetables in a typical day. Vegetables account for 60% of this, with fruit at 40%.

Fruit/Vegetable Cups per Capita in Avg. Day



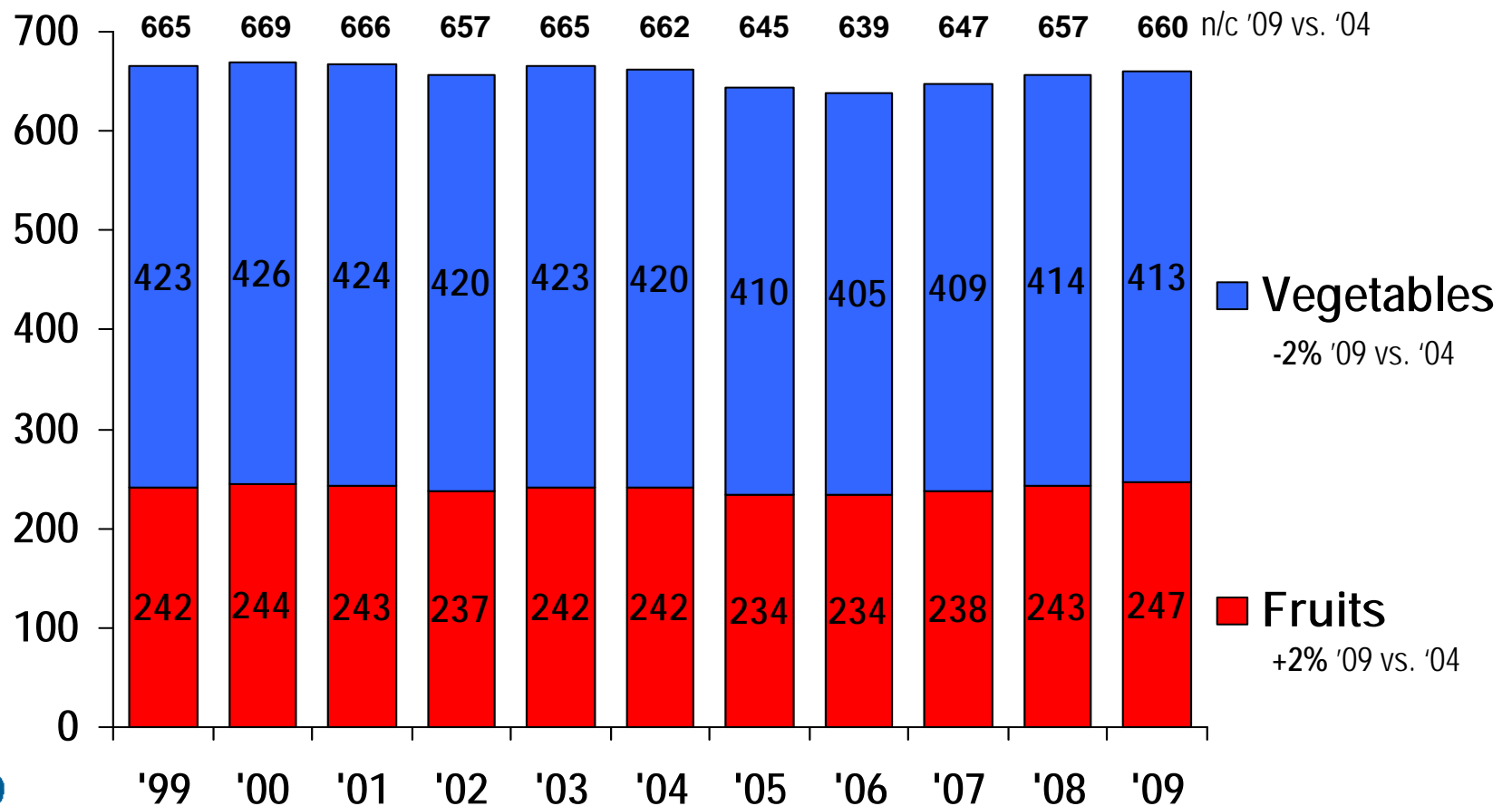
Fruit and vegetable consumption has remained quite stable at just under 2 cups per person per day across the total population.

Fruit/Vegetable Cups per Capita in Avg. Day



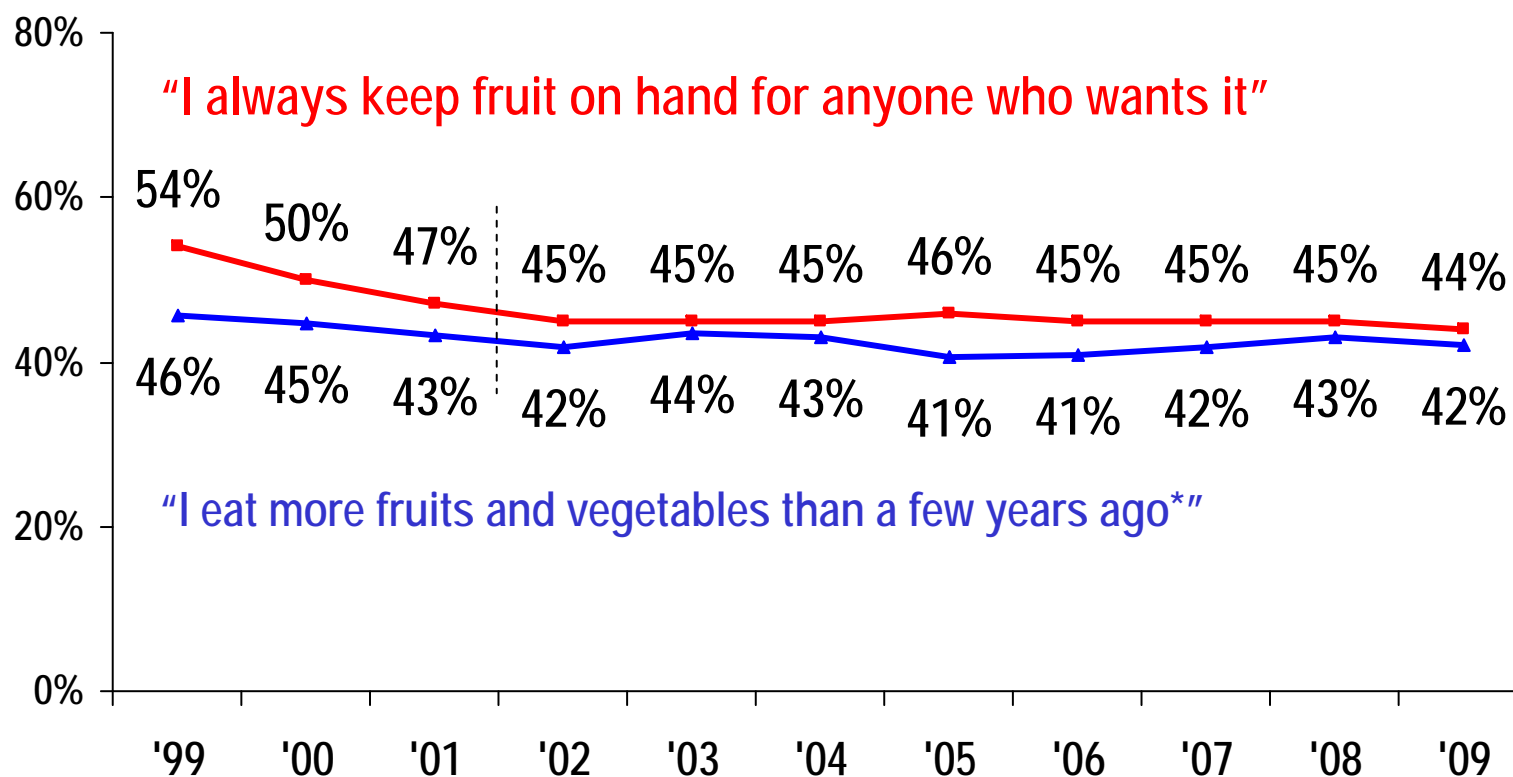
This translates to just over 400 cups of vegetables and roughly 250 cups of fruit per year for the average person. Slight gains for fruit have offset a slight softening for veg. vs. '04.

Annual Fruit/Vegetable Cups per Capita

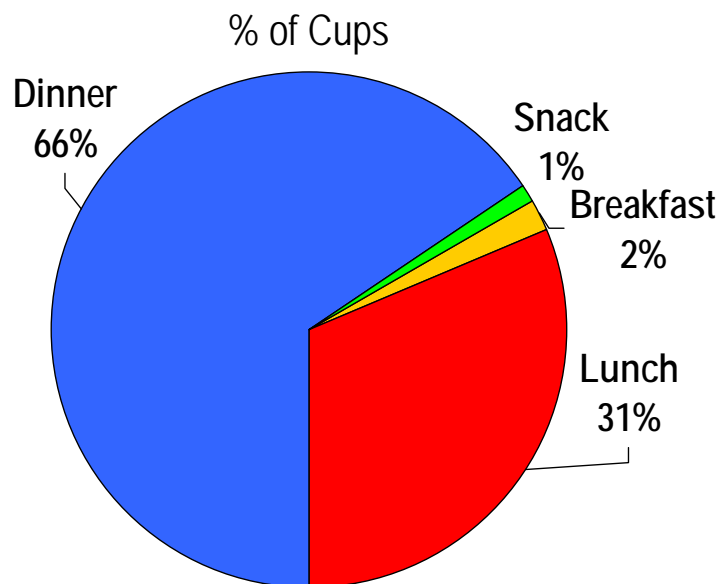


After a decline early in the decade, the percent of adult females who say they keep fruit on hand has remained fairly stable at 45%. Just over 40% of adult females say they're eating more fruit/vegs than a few years ago.

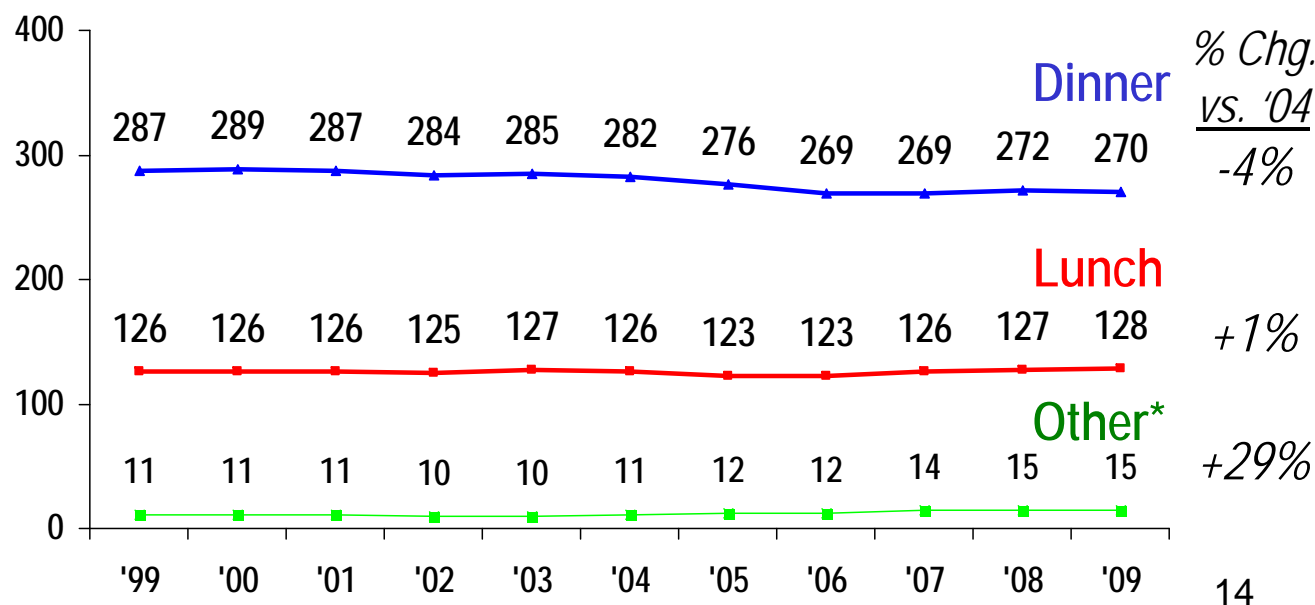
Trend in Attitudes Regarding Fruit/Vegetables



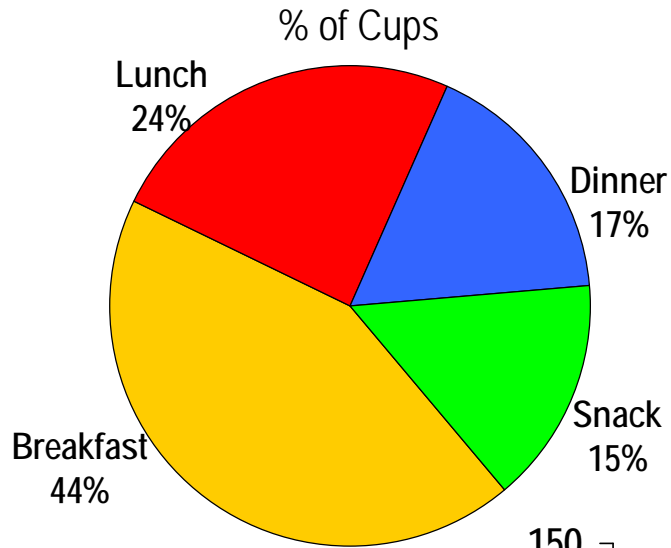
Two-thirds of all vegetables are eaten at dinner, but this meal has also been most responsible for vegetables' declines. Though a smaller behavior, gains have been posted at breakfast and snack.



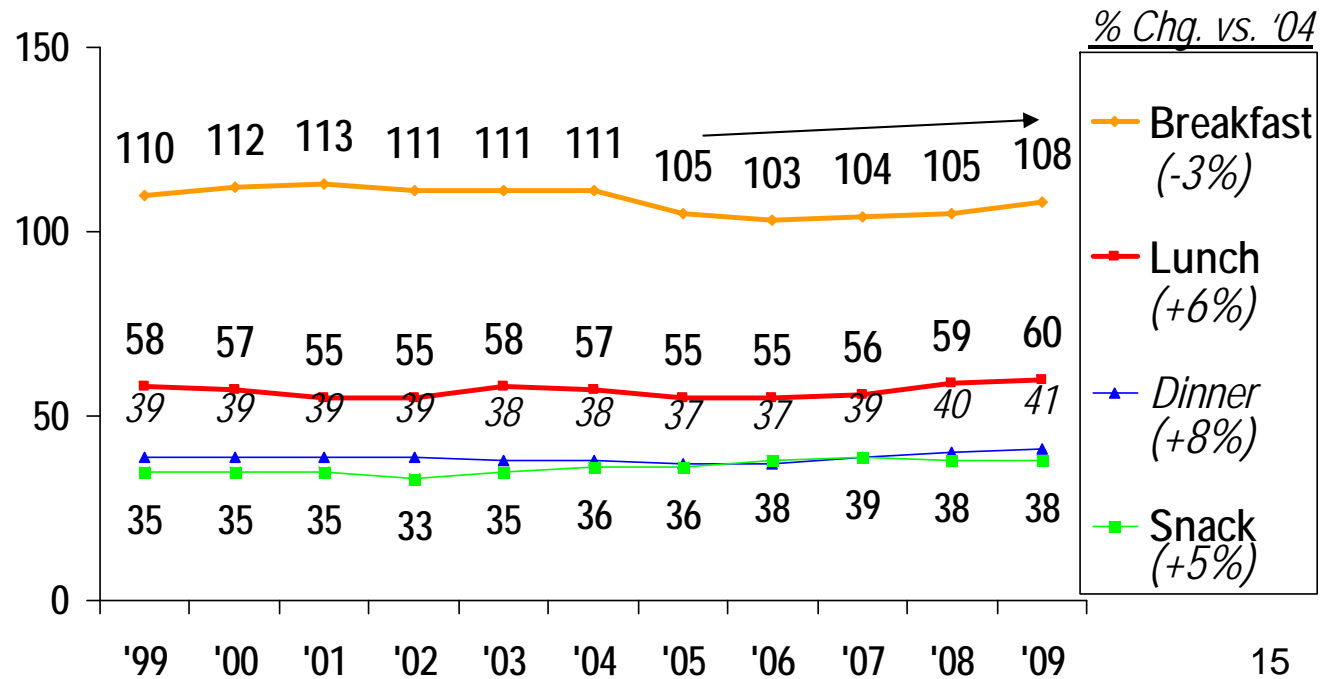
Annual Vegetable Cups per Capita



Fruit is eaten throughout the day ... and has gained popularity at lunch, dinner, and snack occasions vs. '04. Breakfast has shown a slight rebound from low in '06.

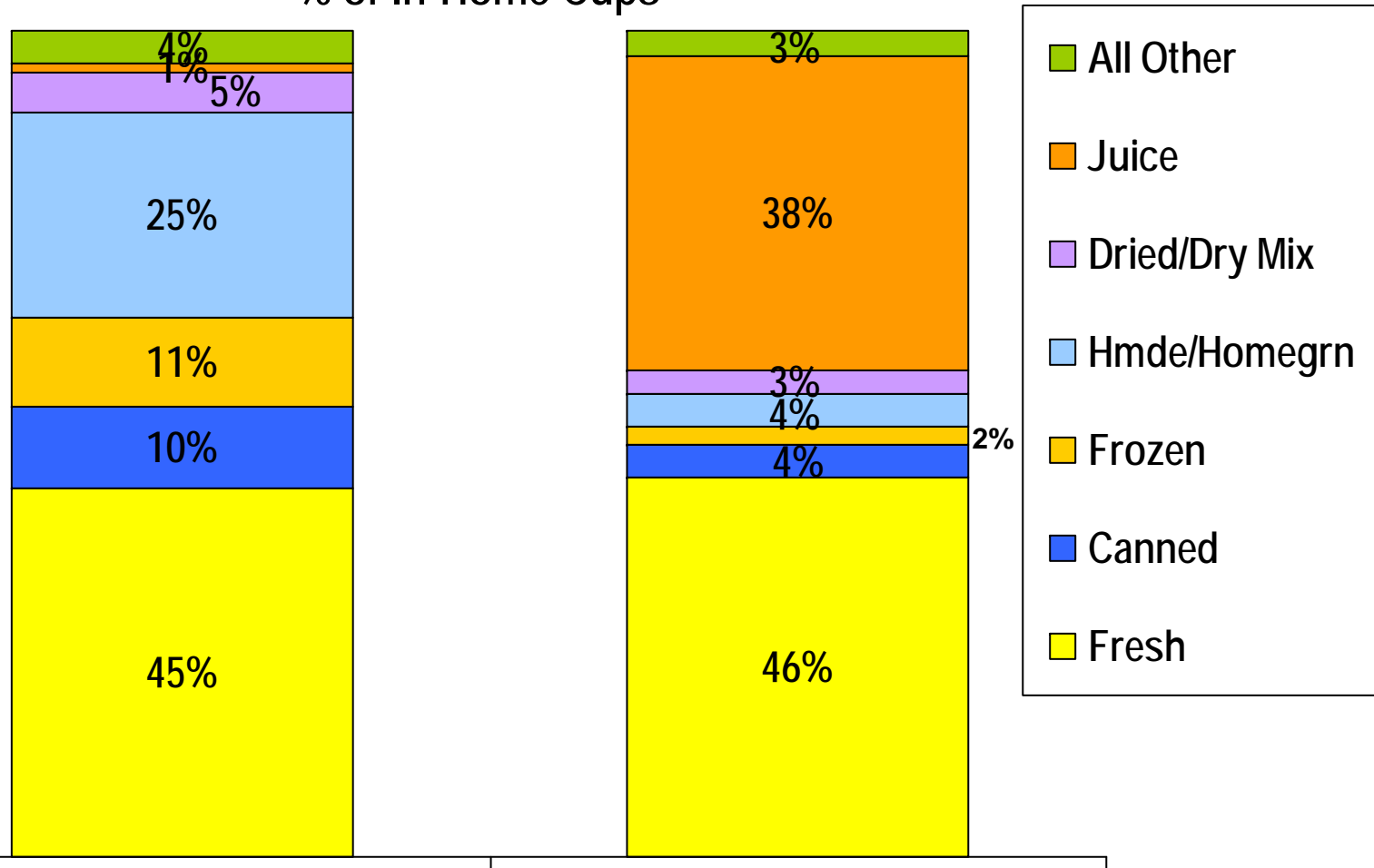


Annual Fruit Cups per Capita



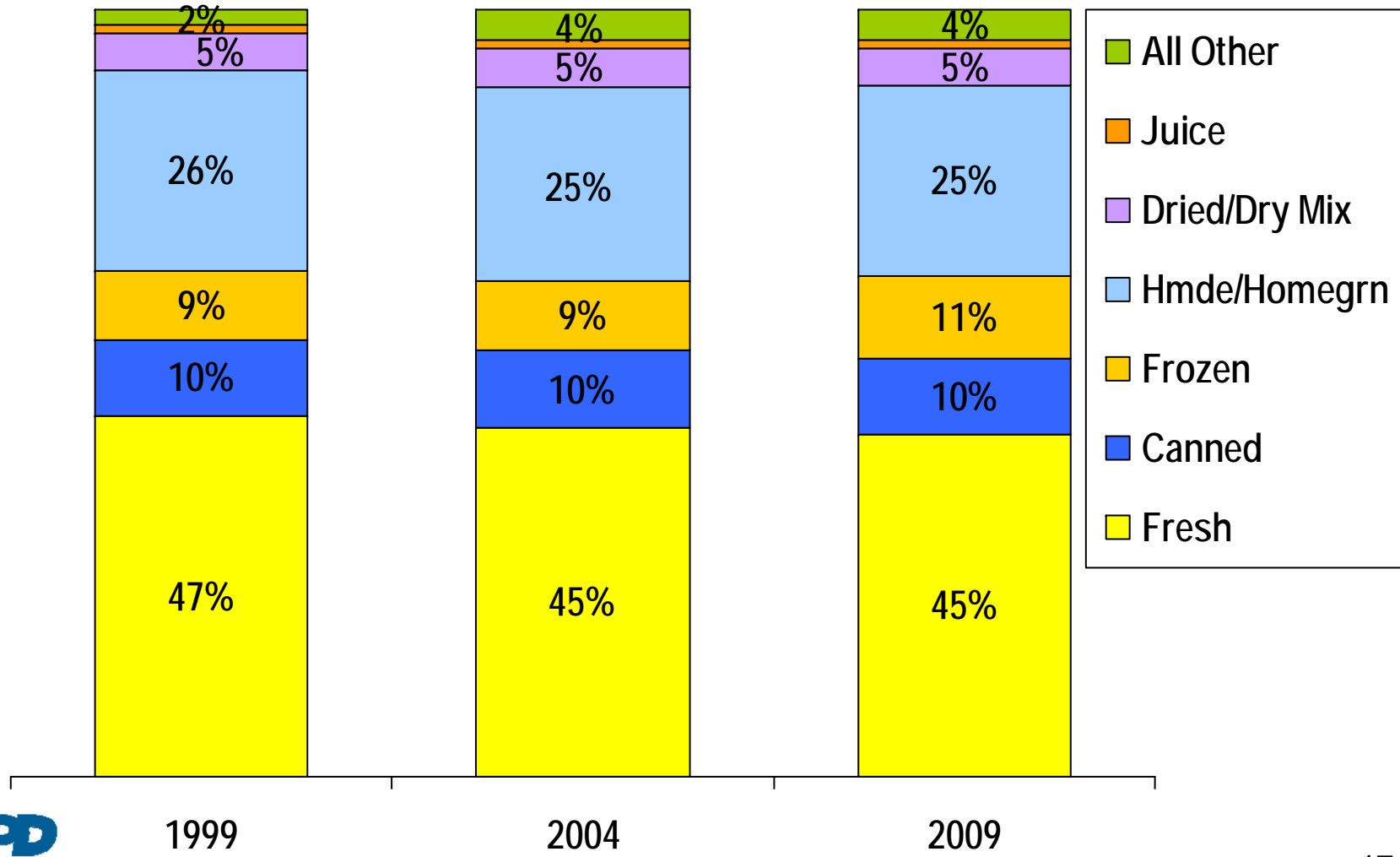
Fresh dominates for both fruit and vegetables ... juice accounts for almost 40% of all cups of fruit consumed. Canned and frozen each account for roughly 10% of all vegetable intake.

% of In-Home Cups



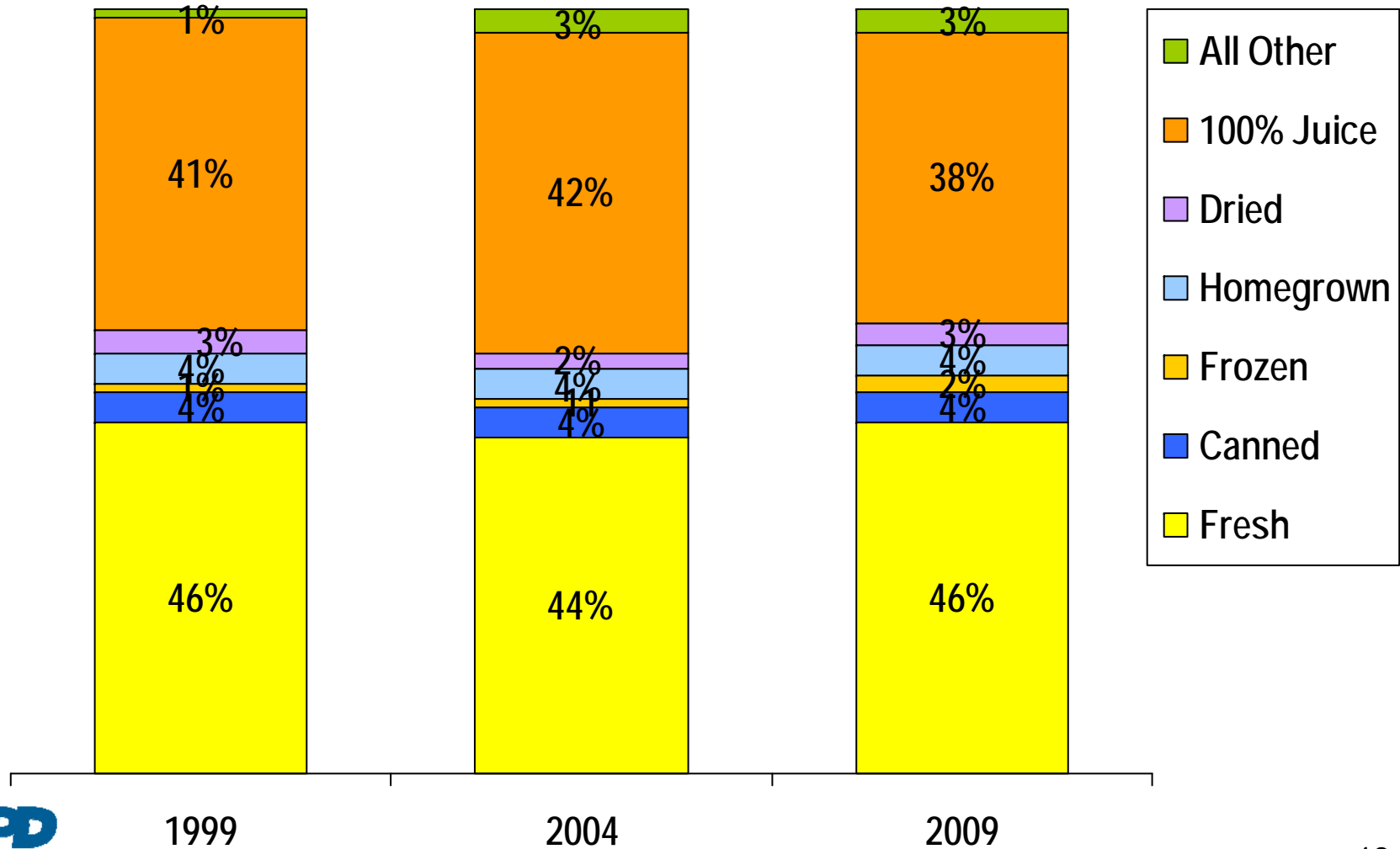
Fresh vegetables have lost a few share points at the expense of frozen, but otherwise shares for the various forms of vegetables have remained fairly stable over time.

% of In-Home Vegetable Cups



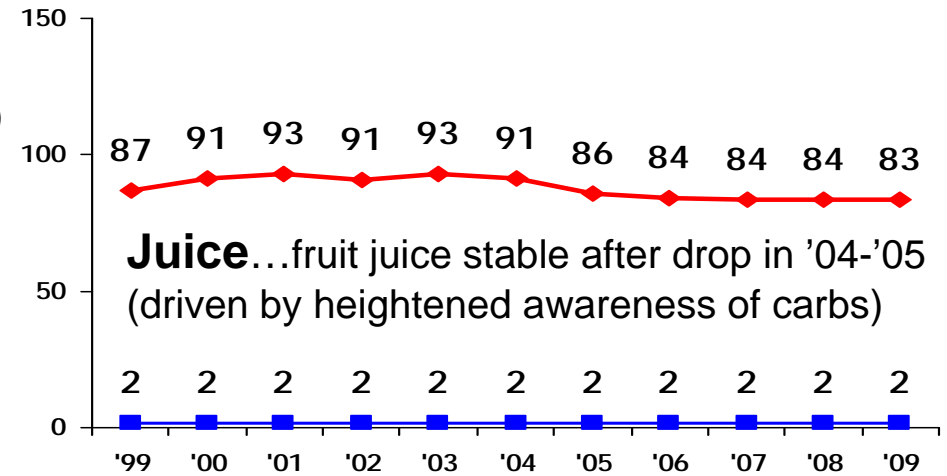
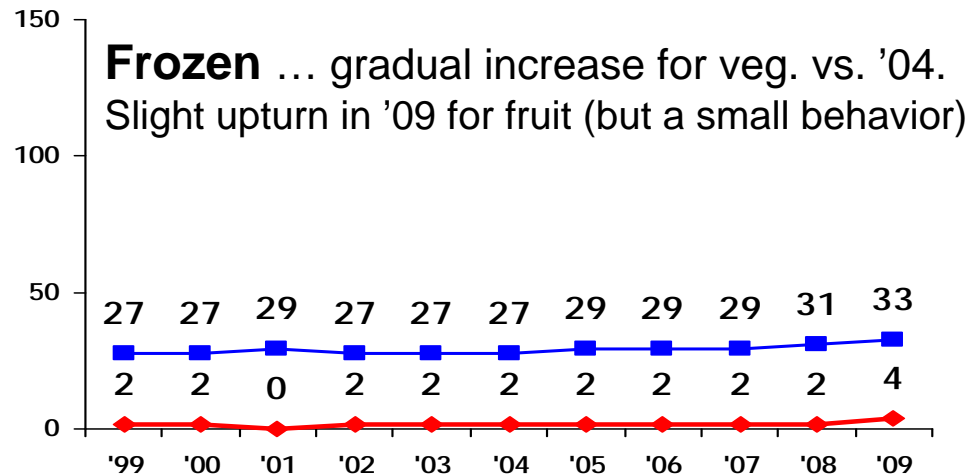
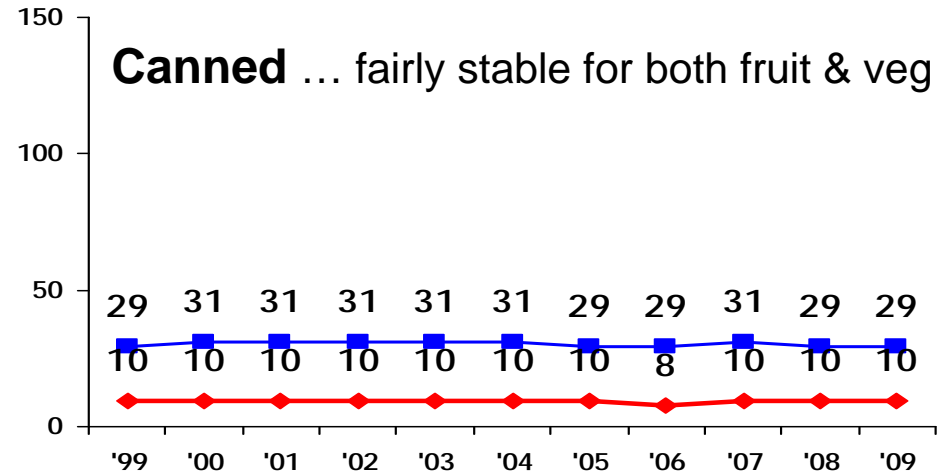
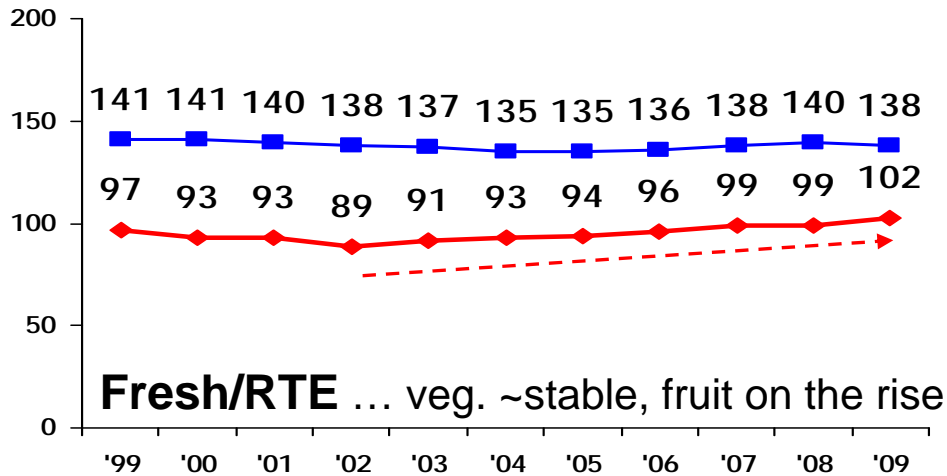
Shares for the various forms of fruit have also remained quite stable over the past decade
 ... fresh and juice together continue to account for 85-90% of all fruit intake.

% of In-Home Fruit Cups



Fresh fruit consumption has risen steadily since '02 ... frozen vegetables have posted modest gains (as has frozen fruit in '09). Fruit juice's earlier drop has stabilized.

Trends in Form of **Fruit** vs. **Vegetables** - Annual In-Home Cups per Capita



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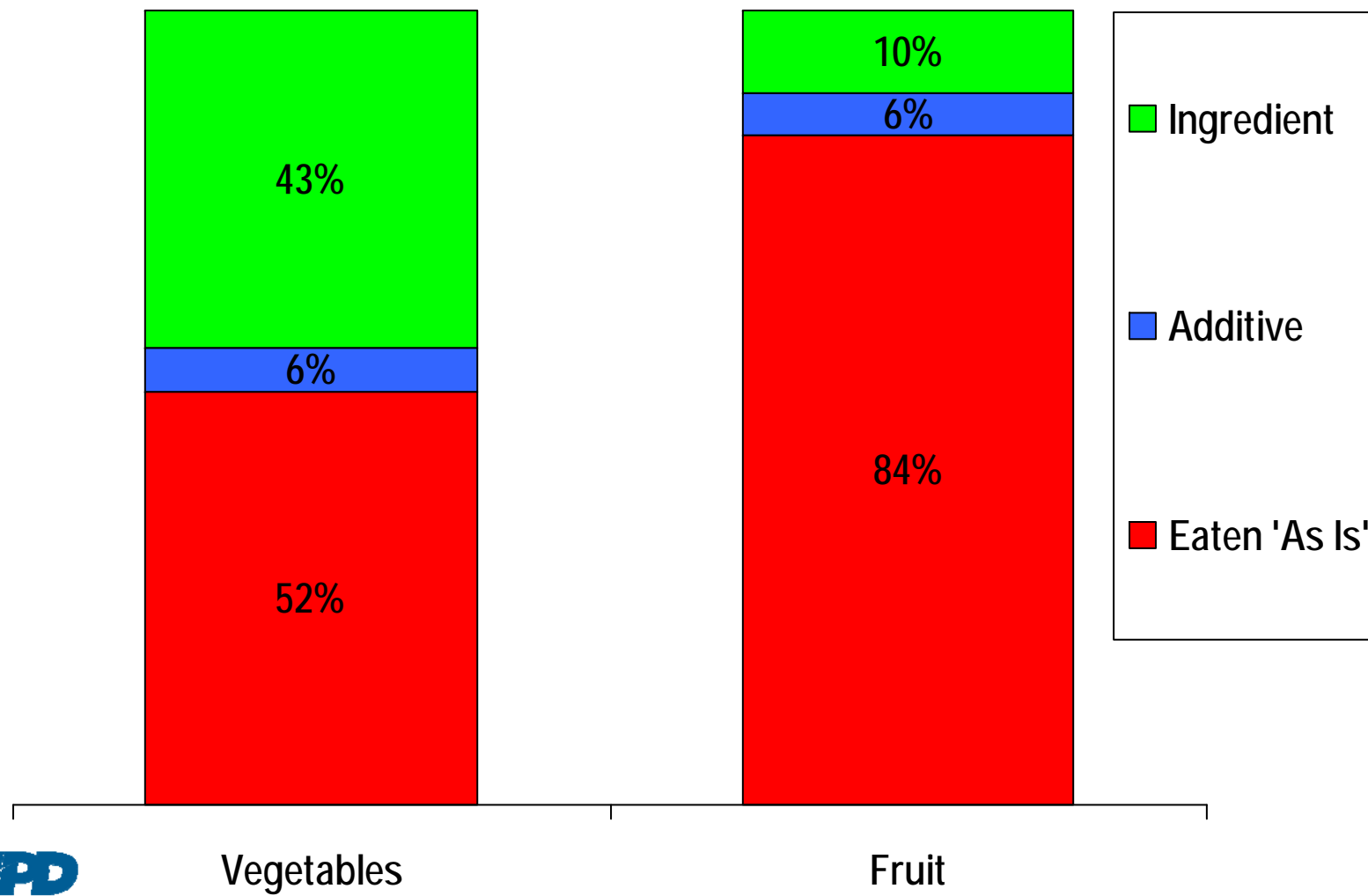
Dried Fruit: 6 cups in '09 (+2 vs. '04)

Dried/Mix* Veg: 15 cups (-2 vs. '04)

*incl. beans, instant/mix potatoes

Almost 85% of all fruit is eaten 'as is', vs. roughly half of all vegetables. Ingredient use is much more prevalent for vegetables, which tend to be used in mixed dishes, sandwiches, etc. This distribution has remained quite stable over the past decade for both fruit & veg.

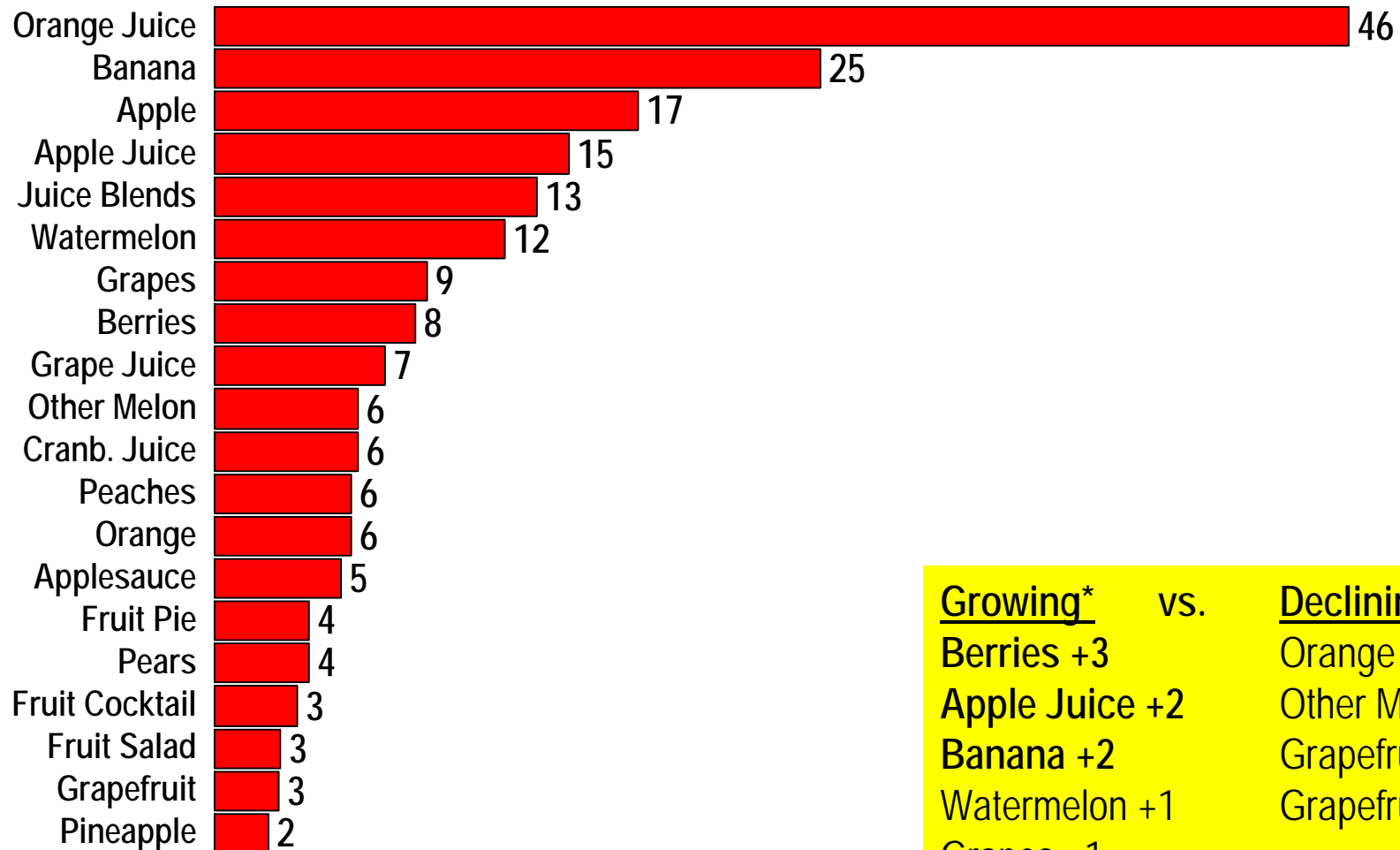
% of Fruit/Vegetable Cups



Orange juice tops the list of most popular fruit types, but has lost favor vs. '04. Bananas, the #2 choice, have posted gains, as have berries and apple juice.

OJ = 19% of tot. fruit cups

Annual Cups of Fruit per Capita

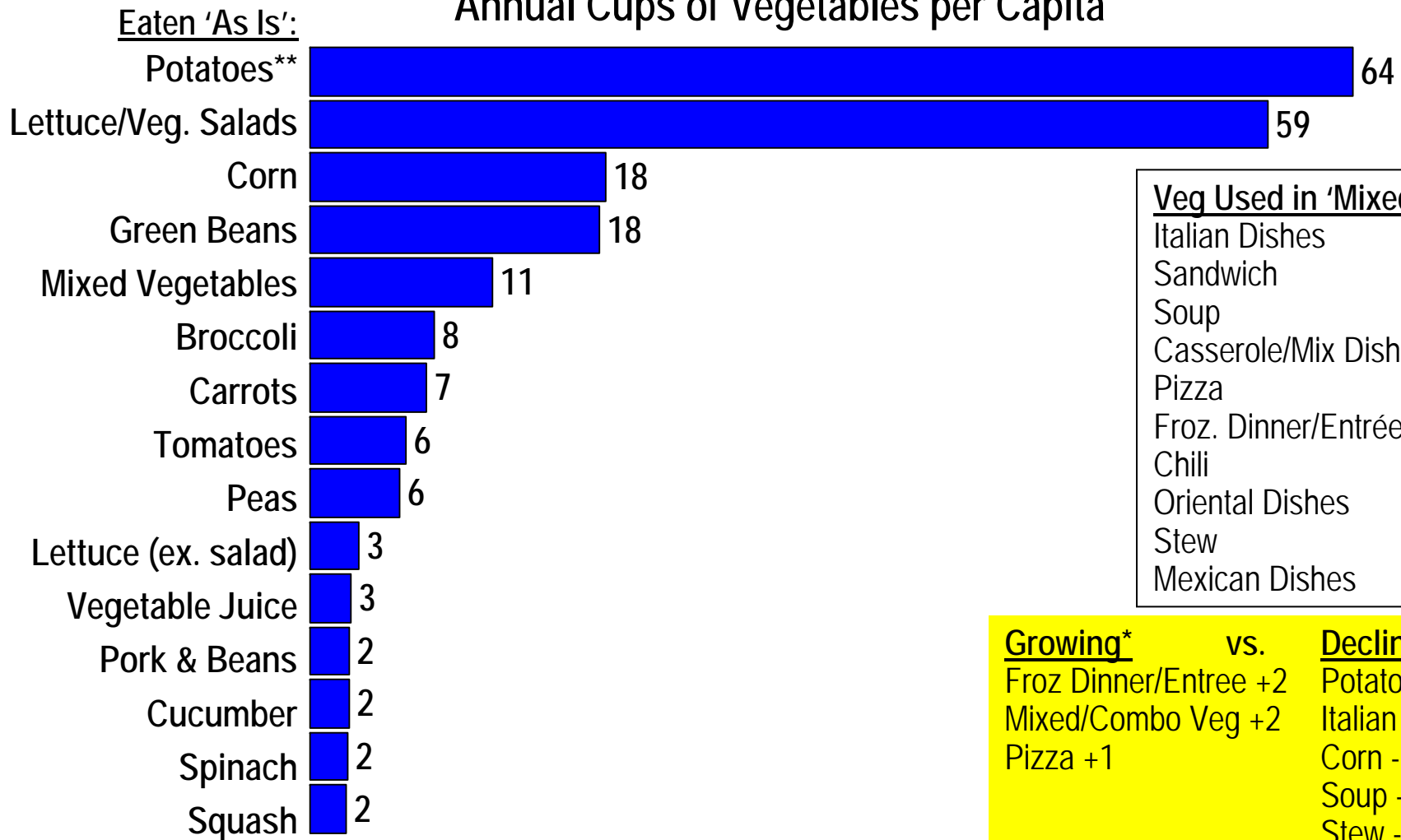


<u>Growing*</u>	vs.	<u>Declining*</u> :
Berries +3		Orange Juice -9
Apple Juice +2		Other Melon -2
Banana +2		Grapefruit -1
Watermelon +1		Grapefruit Juice -1
Grapes +1		



Potatoes and salad top the list of most popular vegetables consumed eaten 'as is' ... corn and green beans follow as a distant 3rd. Italian dishes, sandwiches, and soup are the sources of vegetables used as ingredients in mixed dishes.

Annual Cups of Vegetables per Capita



Veg Used in 'Mixed Dishes'

Italian Dishes	26
Sandwich	23
Soup	21
Casserole/Mix Dish	17
Pizza	13
Froz. Dinner/Entrée	9
Chili	6
Oriental Dishes	5
Stew	5
Mexican Dishes	5

<u>Growing*</u>	vs.	<u>Declining*</u> :
Froz Dinner/Entree +2		Potato -6
Mixed/Combo Veg +2		Italian Dishes -4
Pizza +1		Corn -2
		Soup -2
		Stew -1
		Peas -1

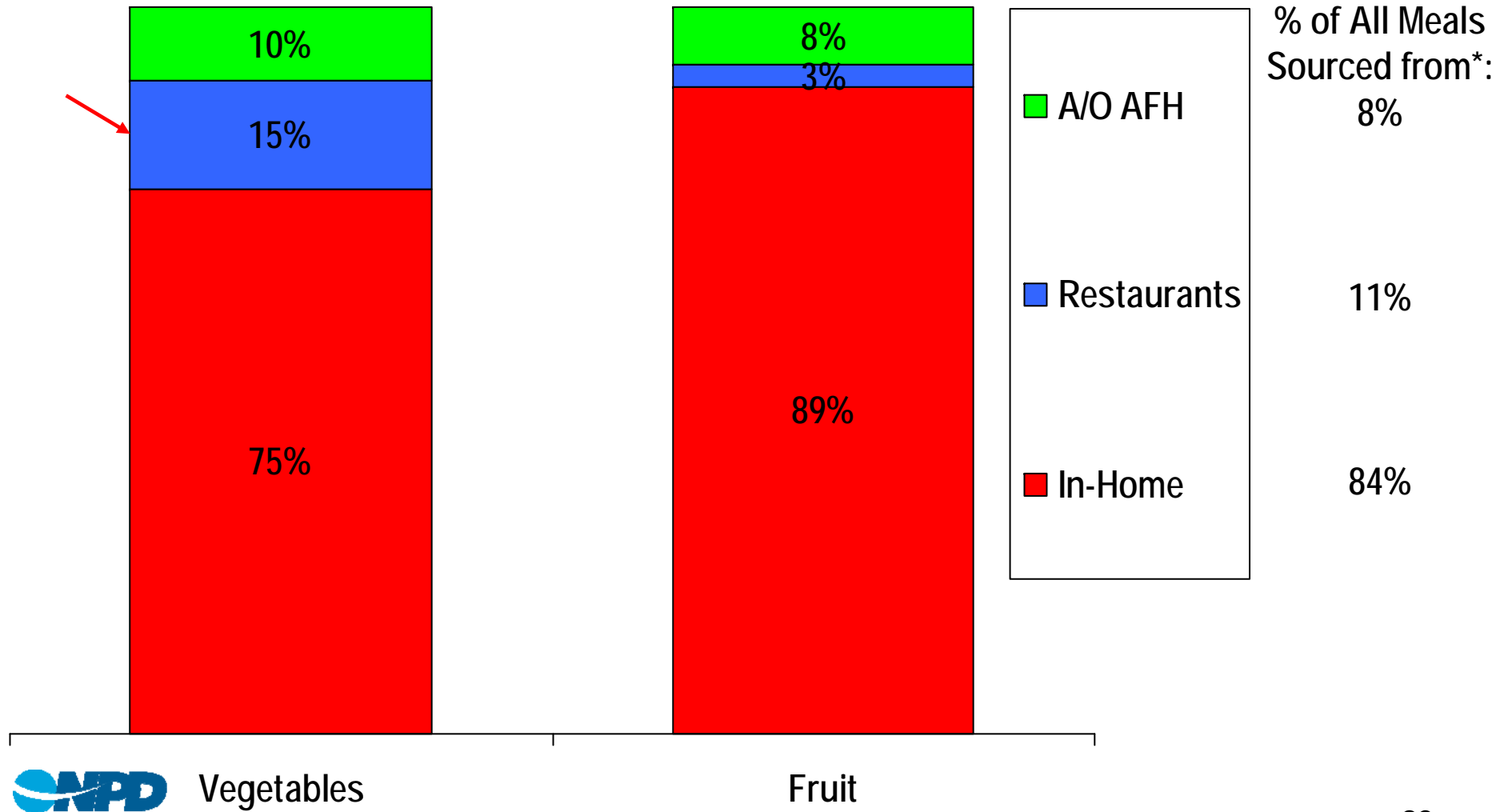


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**excl Fr. Fries, fried potatoes, chips; incl. potato salad
Proprietary and Confidential

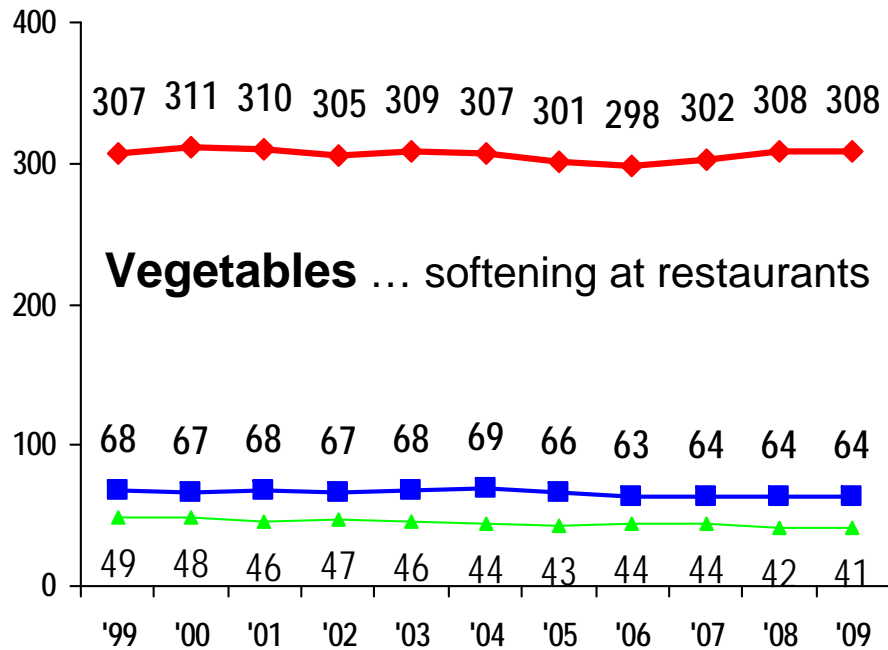
In-home dominates for both fruit and veg. Restaurants account for 15% of all vegetables consumed, but only 3% of fruit. Fruit is an under-developed behavior at restaurants.

% of Fruit/Vegetable Cups

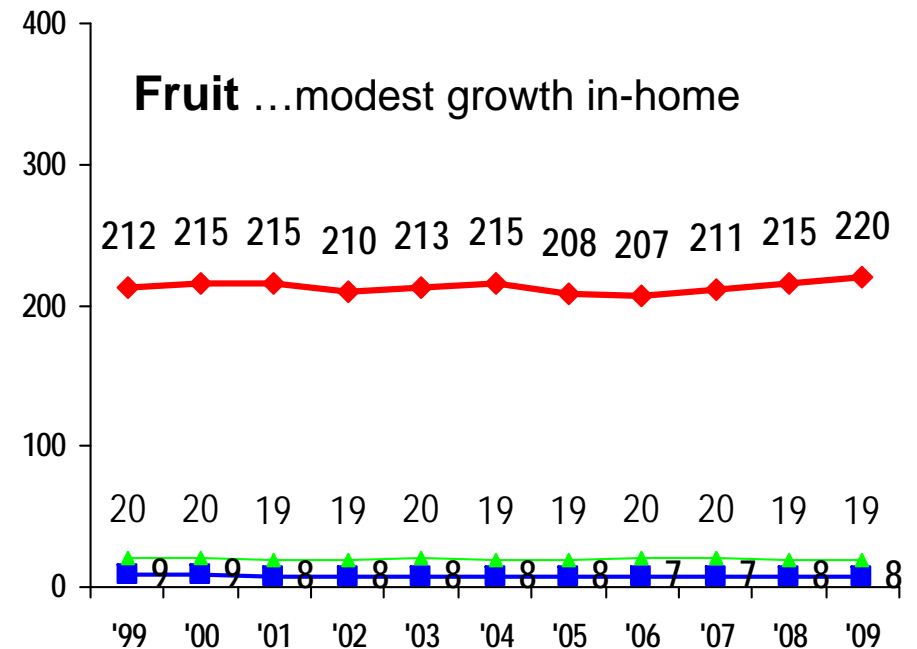


Vegetable consumption has remained stable in the home vs. '04 ... the softening has been at restaurants and other AFH outlets. Fruit has increased modestly in-home (and a slight upturn at restaurants).

Trend in In-Home/AFH Consumption of Fruit vs. Vegetables - Annual Cups per Capita



Vegetables ... softening at restaurants



Fruit ...modest growth in-home

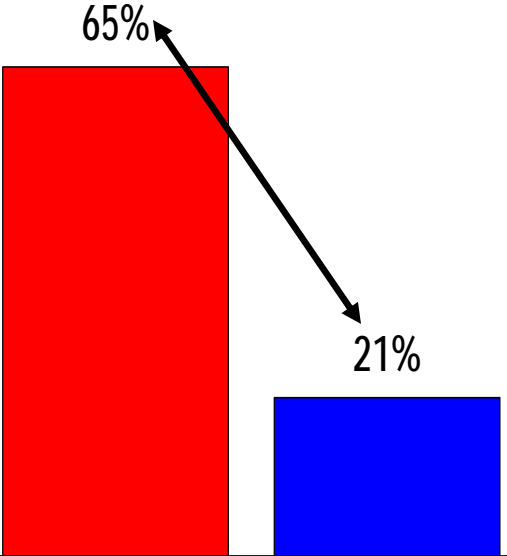
	% Chg. vs '04	
	Vegetable	Fruit
In-Home	nc	2%
Restaurant	-7%	10%
A/O AFH	-7%	-4%



There is a huge opportunity gap for fruit/vegetables at commercial restaurants ... particularly at fast food outlets.

Two-thirds of individuals visit a fast food outlet in an average two-week period, but only one out of five order fruit or vegetables there.

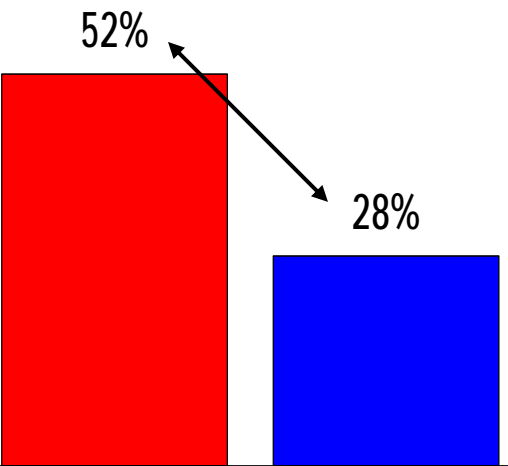
Fast Food Outlets



% of Individ. Who Visit in 2 Wks. (on premise)
 % of Individ. Who Order Fruit/Veg.* in 2 Wks.

Pt. Chg. vs. '03/04: -1 +1

Family Style/Coffee Shop



% of Individ. Who Visit in 2 Wks.
 % of Individ. Who Order Fruit/Veg.* in 2 Wks.

-3 -3



Focus on Age & Gender

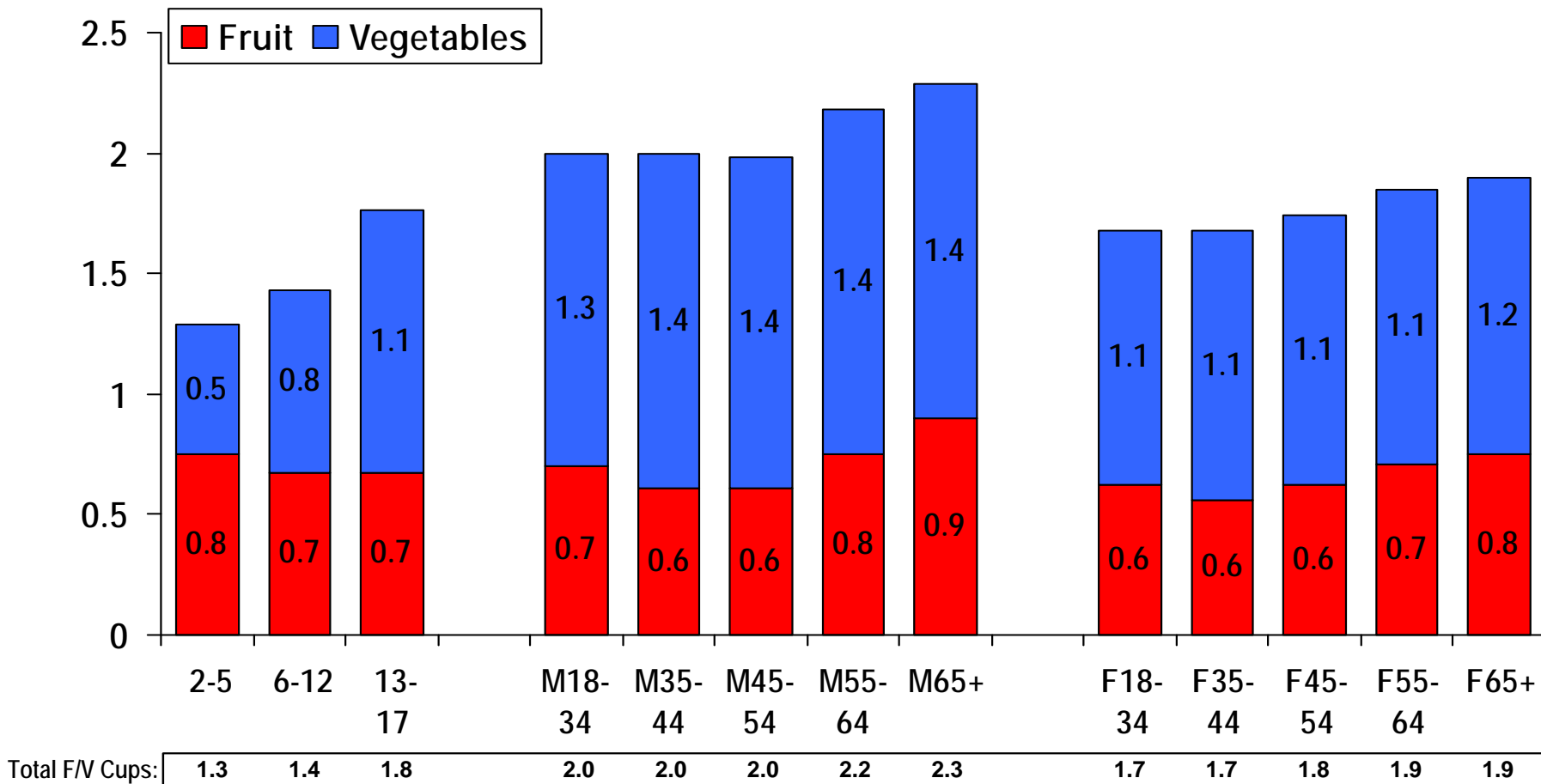
Consumption of Fruit/Veg by Age
Who's Consuming More/Less vs. '04?



Adult males aged 55+ consume the most total fruit & vegetables ... just over 2 cups per day. This is driven by slightly higher vegetable intake (as well as fruit for males aged 55+).

Males tend to have larger portion sizes, while children <12 have smaller portion sizes.

Fruit/Vegetable Cups per Capita in Average Day

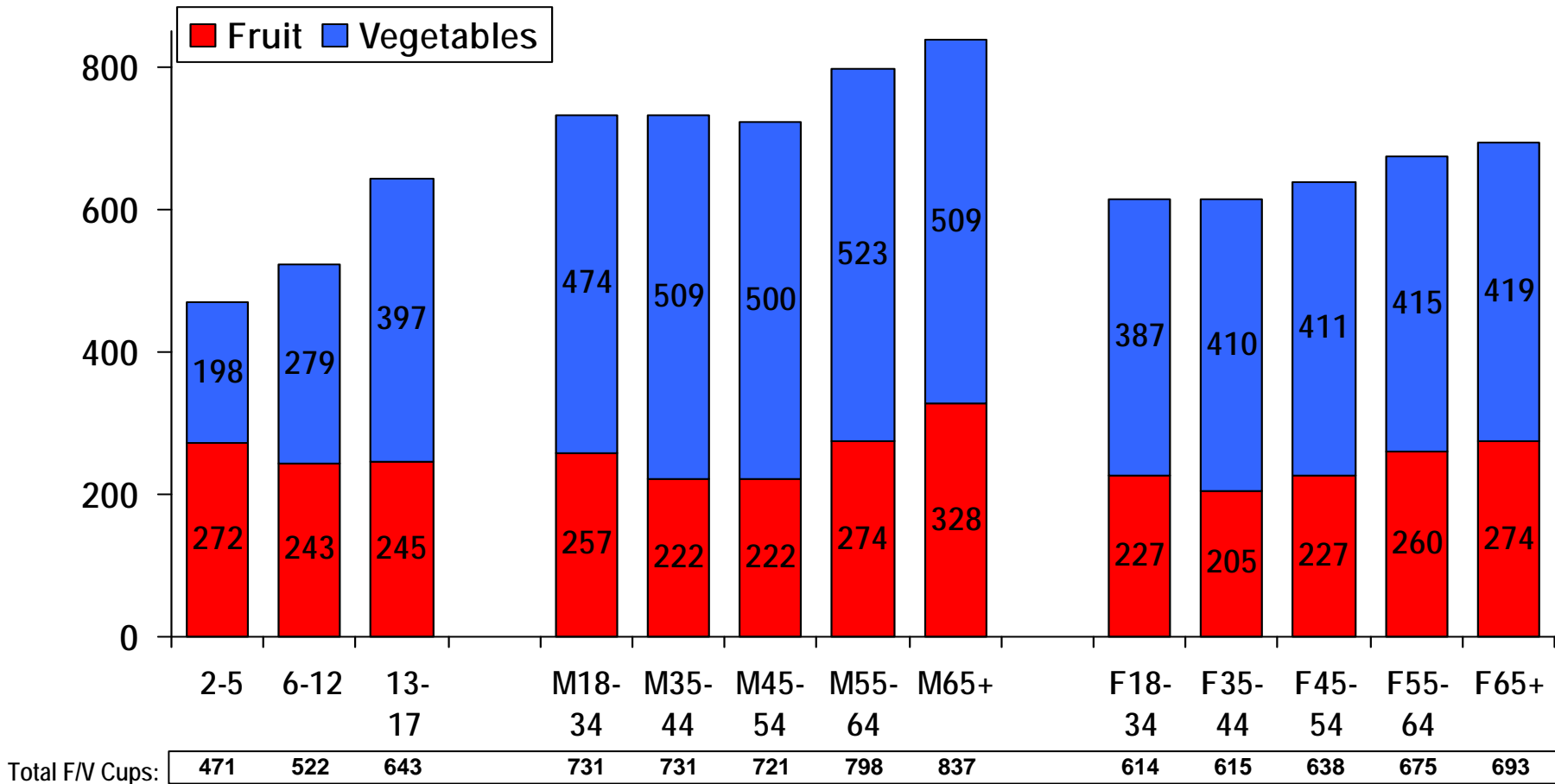


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NPD/Nutrient Intake Database; 2 YE Feb. '09

Adult males aged 55+ consume the most vegetables and fruit ... over 800 total cups per year.

Annual Fruit/Vegetable Cups per Capita

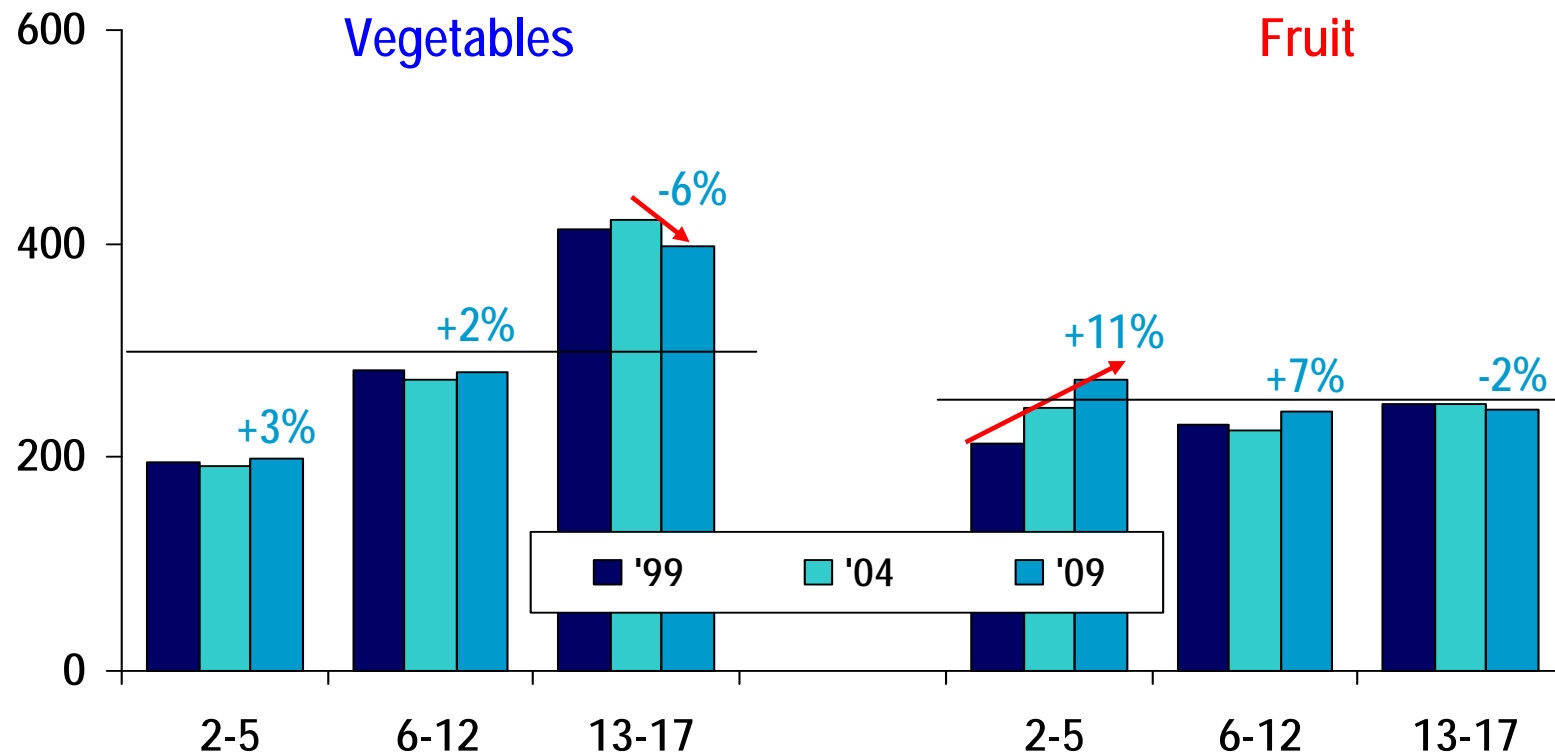


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NPD/Nutrient Intake Database; 2 YE Feb. '09

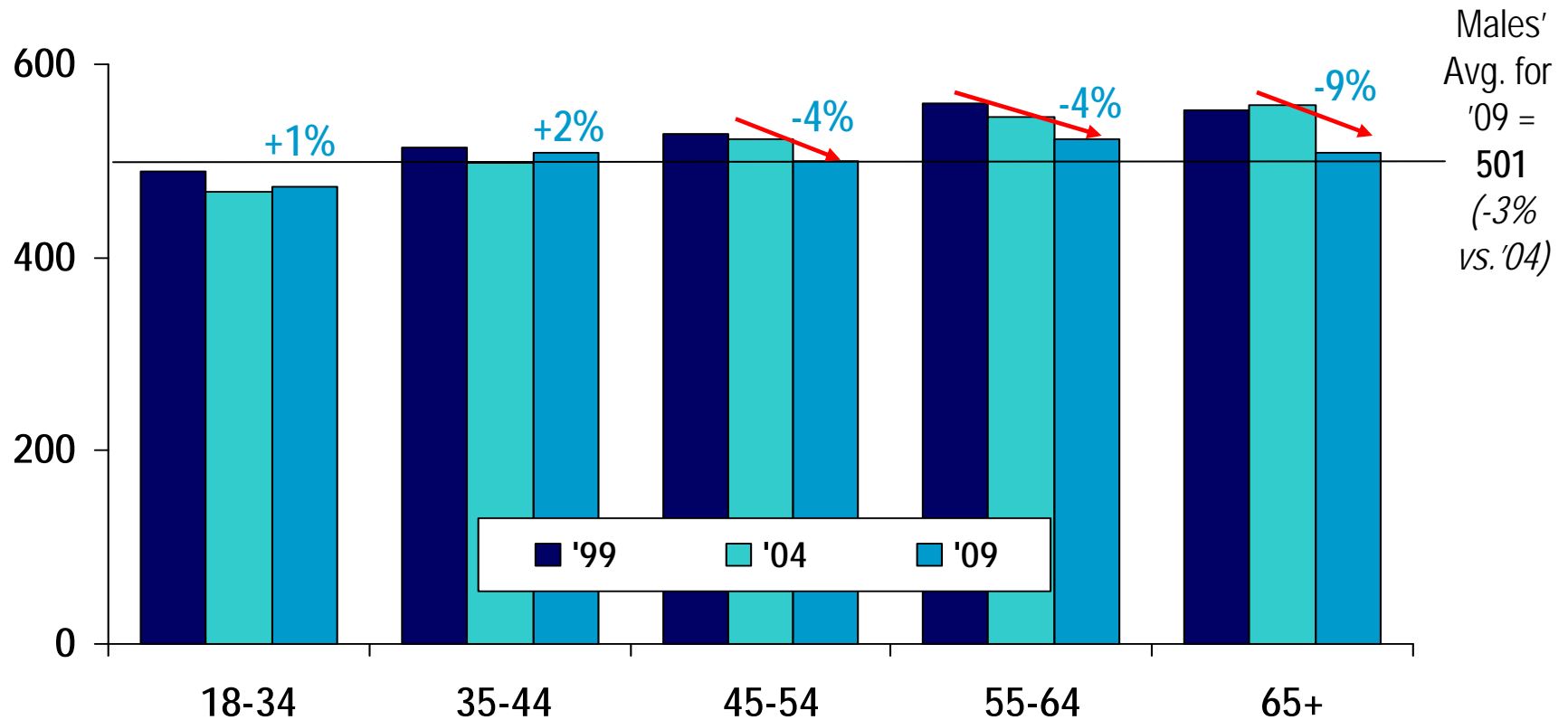
Good news ... kids 2-12 are consuming more fruit and vegetables vs. '04. Kids 2-5 have shown double digit gains for fruit. Teens are consuming fewer cups, however, especially for vegetables.

Kids' Annual Cups per Capita



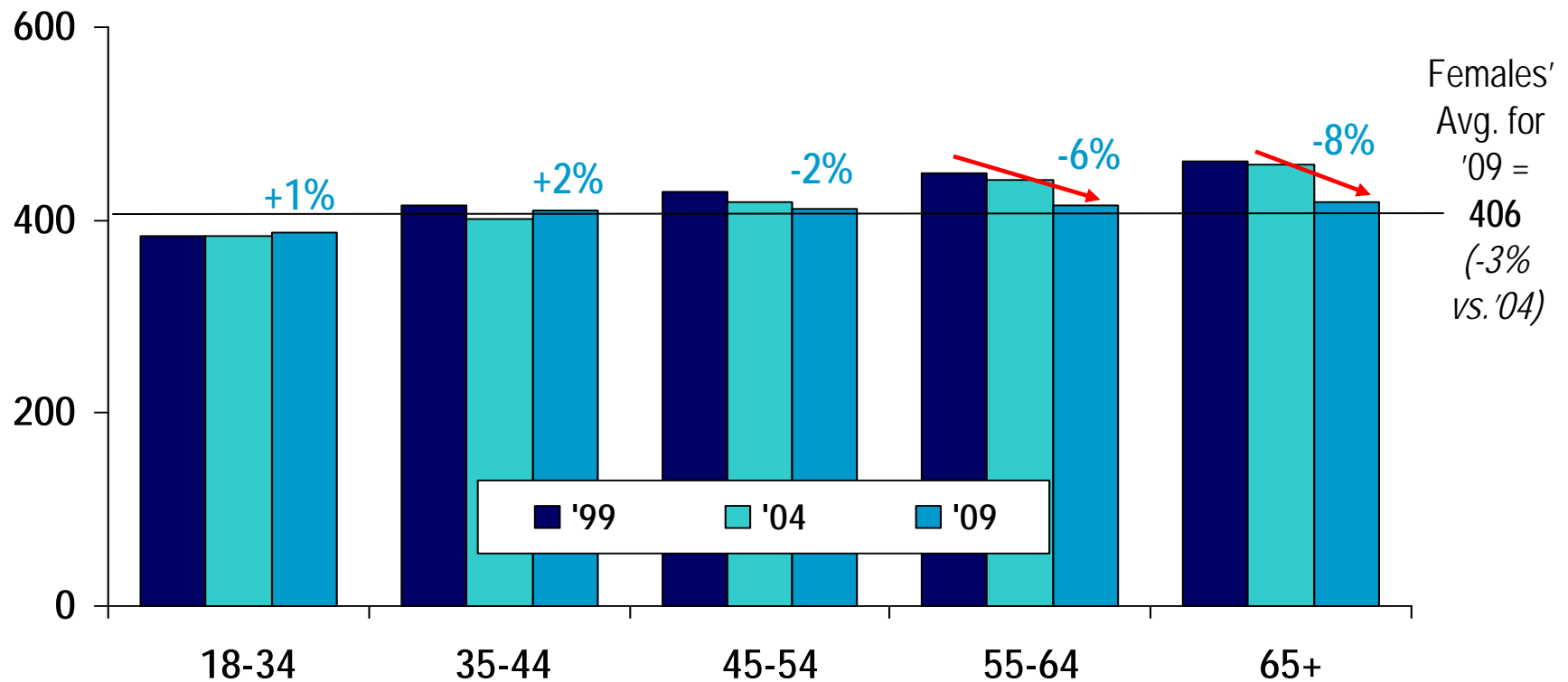
Males aged 45+ are consuming fewer cups of vegetables vs. '04, especially 65+. Veg consumption among younger males (18-44) is stable to up slightly during this time.

Adult Males' Annual Vegetable Cups per Capita



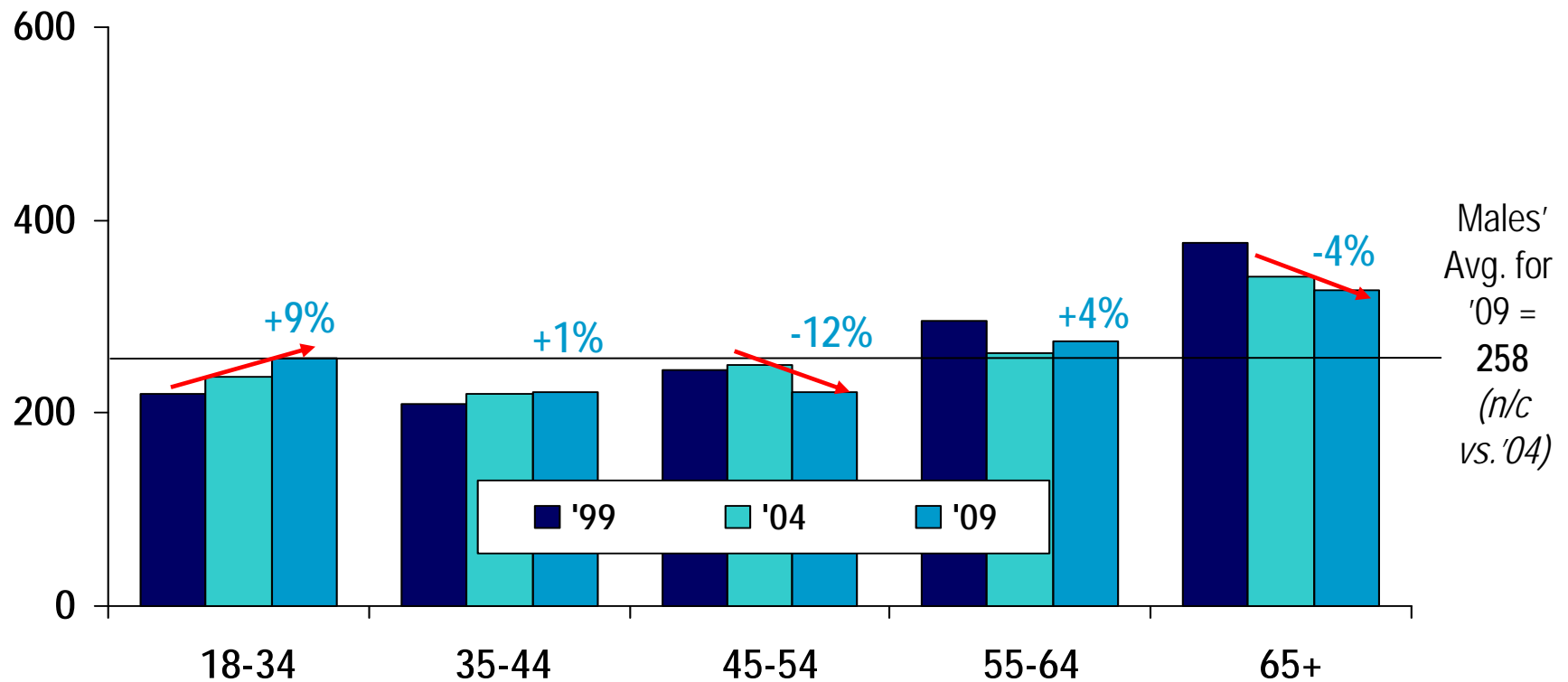
Females aged 55+ are also consuming fewer vegetables ... consumption among those aged 18-44 has remained stable to up slightly during this time.

Adult Females' Annual Vegetable Cups per Capita



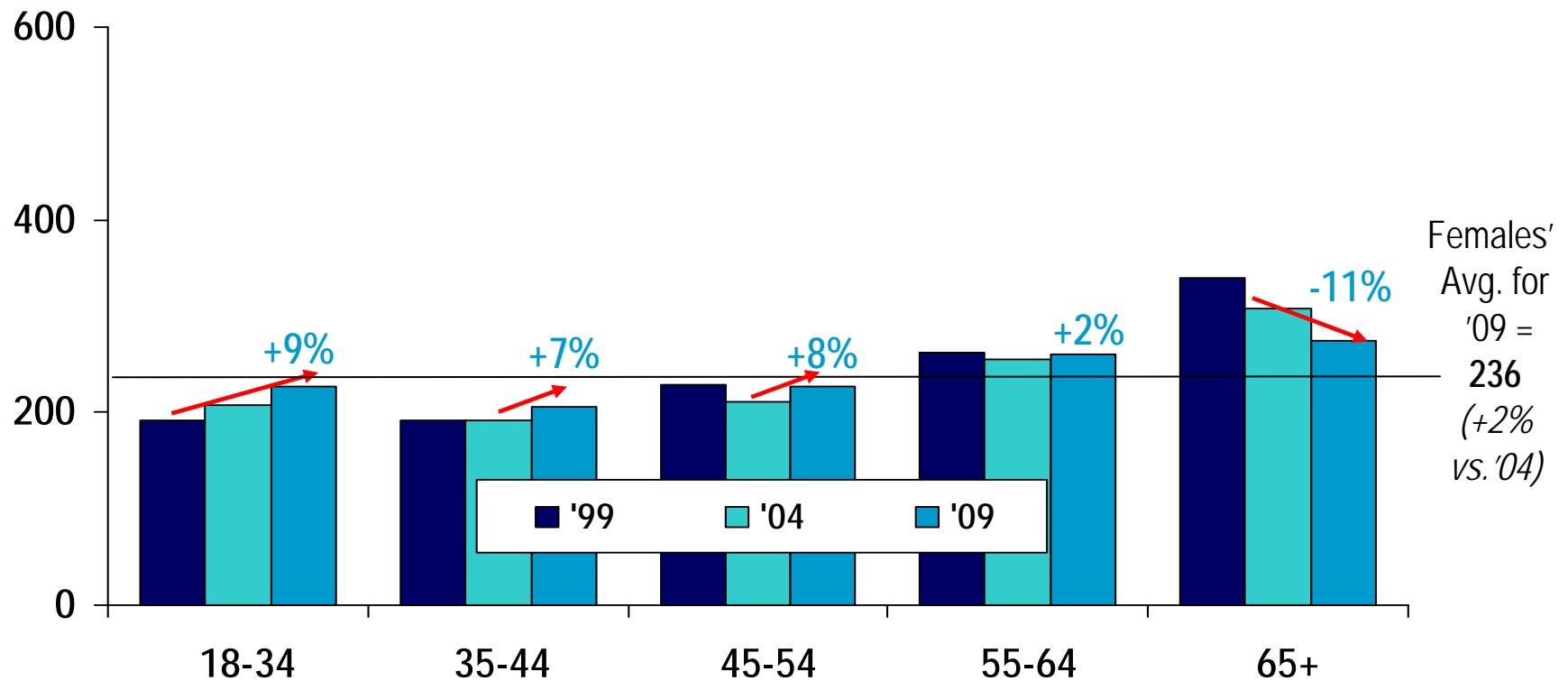
Males aged 18-34 are consuming more fruit in the past decade (9% more vs. '04 and 17% more vs. '99) ... however, males aged 45-54 and 65+ are consuming less fruit.

Adult Males' Annual Fruit Cups per Capita



Females aged 18-54 are consuming almost 10% more fruit vs. '04 ... however, those aged 65+ are consuming about 10% less fruit.

Adult Females' Annual Fruit Cups per Capita



Summary: Who's consuming more (vs. less) fruit?

Based on % Change of +/- 5% in Annual Cups per Capita*

Individuals
In HH's w/:

<u>More Fruit:</u>	<u>Less Fruit:</u>
<ul style="list-style-type: none"> ■ Kids 2-5, 6-12 ■ Males 18-34, Females 18-54 	<ul style="list-style-type: none"> ■ Males 45-54 ■ Females 65+
<ul style="list-style-type: none"> ■ Incomes <\$20K ■ 3 or 5 members ■ Homemaker 25-54 ■ Hmkr. Employed (esp. part time) ■ Hmkr. w/out college education ■ White or blue collar head ■ African American or Asian HH's ■ Both East & West North Central ■ LifeCycle: Singles/DINKS, Working Parents, Single Parents 	<ul style="list-style-type: none"> ■ Homemaker 65+ ■ New England ■ LifeCycle: Seniors, 75+

Summary: Who's consuming more (vs. less) vegetables?

Based on % Change of +/- 5% in Annual Cups per Capita*

Individuals
In HH's w/

<u>More Vegetables:</u>	<u>Less Vegetables:</u>
<ul style="list-style-type: none"> ■ None 	<ul style="list-style-type: none"> ■ Teens 13-17 ■ Males 65+, Females 55+
<ul style="list-style-type: none"> ■ Incomes <\$10K ■ 3 members 	<ul style="list-style-type: none"> ■ Incomes >\$30K ■ 2 members
<ul style="list-style-type: none"> ■ Hispanic or Asian HH's 	<ul style="list-style-type: none"> ■ Homemaker 55+ ■ Retired Head
<ul style="list-style-type: none"> ■ Mid-Atlantic 	<ul style="list-style-type: none"> ■ West South Central, Mountain
	<ul style="list-style-type: none"> ■ LifeCycle: Empty Nesters, Seniors, 75+

Focus on Individuals in HH's with Gen X Moms Aged 30-44



Working Moms vs. Stay at Home Moms

More than 7 out of 10 Moms work part or full time



This section will further examine moms by their employment status and whether they're new or experienced at being a mom.



New Moms vs. Experienced Moms

New Moms have only children <6 in the home

Experienced Moms have at least one child aged 7+



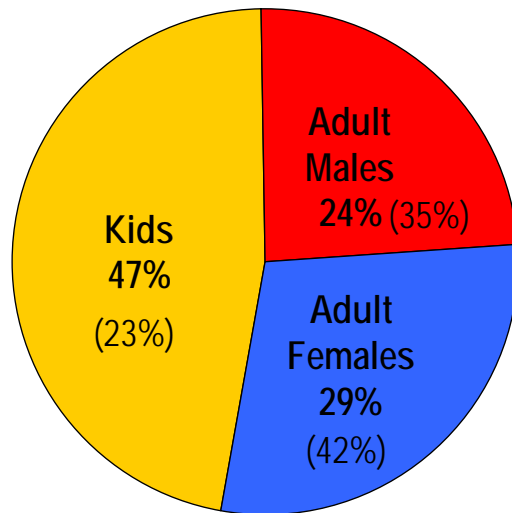
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NPD/Nutrient Intake Database; Gen X Mom = 30-44 in '09

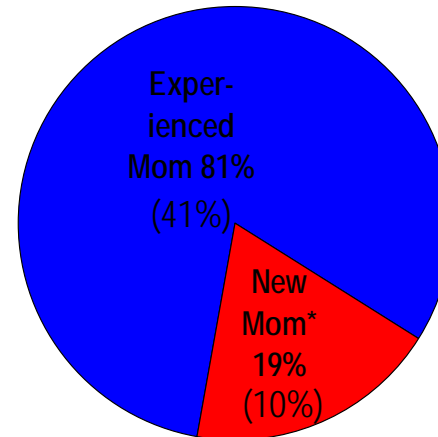
Composition of HH's with a Gen X Mom: Kids account for almost half of all individuals in 'Gen X Mom HH's' (vs. just 23% of individuals overall).

% of Sample Individuals in HH's with a Female Head (Mom) Aged 30-44

Age/Gender

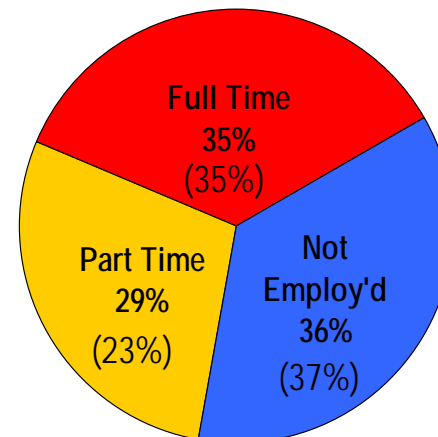


'New'* vs. 'Experienced' Mom



(49% of total sample individuals reside in HH's with no kids <18 present)

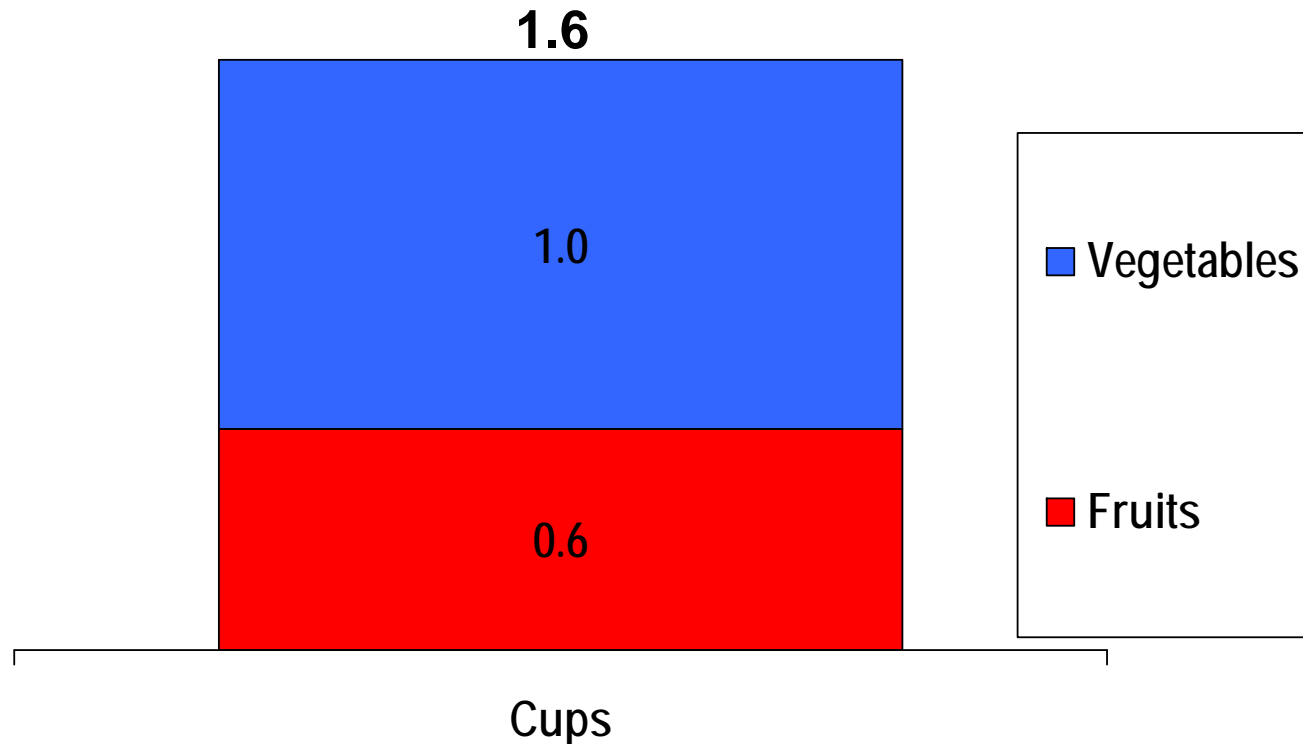
Employment of Female Head



Individuals in households with a Gen X mom consume an average of 1.6 cups of fruit/vegetables per day ... just slightly lower than that for the 'average' person (1.8 cups), but this is due to presence of children (who tend to have smaller portion sizes).

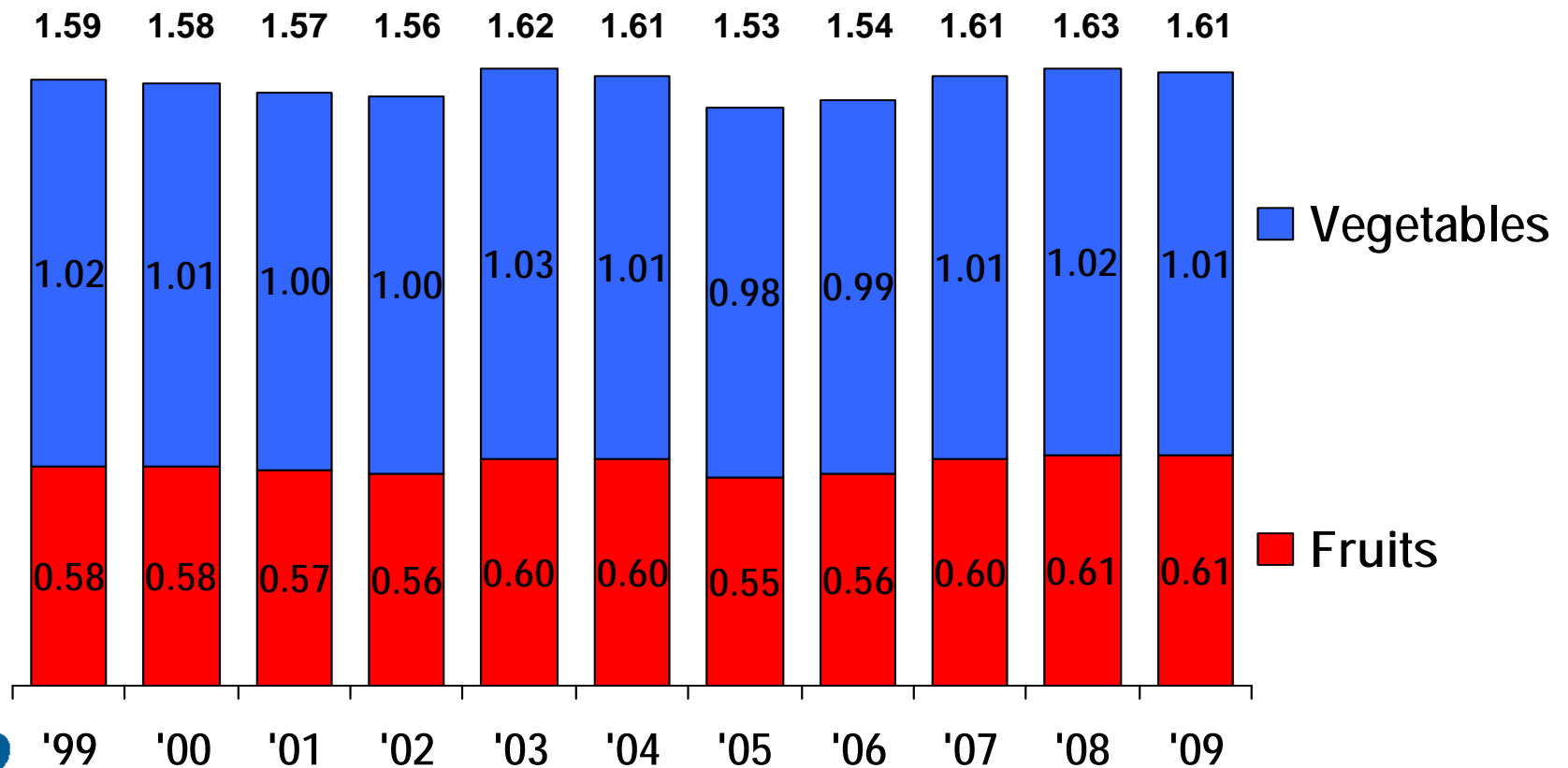
The average person (across all HH types – those with and without children) consumes 1.8 cups of fruit/vegetables per day ... 0.7 cups of fruit and 1.1 cups of vegetables. The average number of cups per individual is lower in HH's with a Gen X Mom as these HH's by definition have one or more children present, who tend to have smaller portion sizes.

Fruit/Vegetable Cups per Capita in Avg. Day Among Individuals in HH's with a Female Head (Mom) Aged 30-44



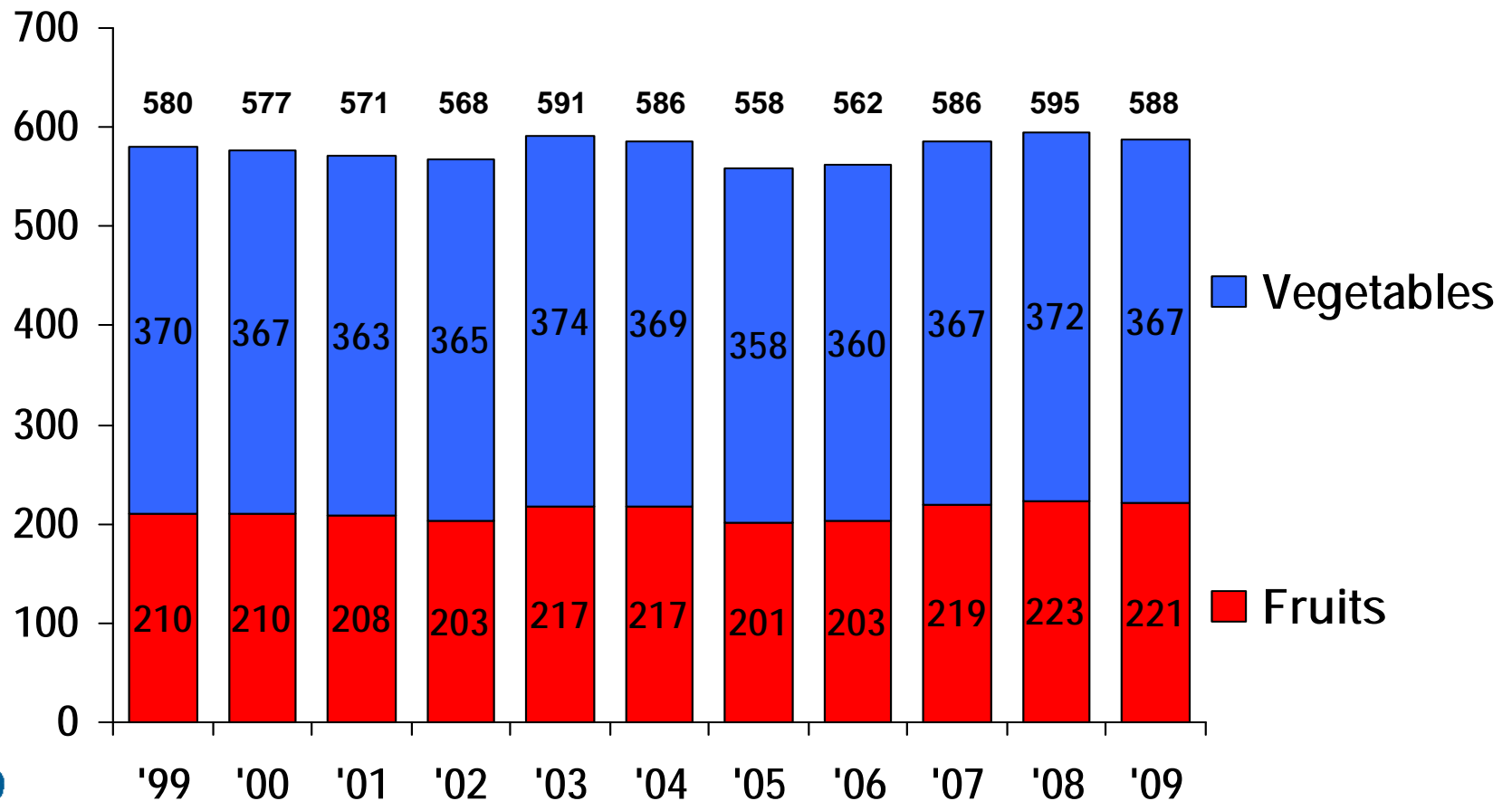
Fruit and vegetable consumption among individuals in HH's with a female head (mom) aged 30-44 has remained fairly stable between 1.5 to 1.6 cups of fruit/veg in a typical day.

Fruit/Vegetable Cups per Capita in Avg. Day
Among Individuals in HH's with a Female Head (Mom) Aged 30-44



This translates to roughly 370 cups of vegetables and 220 cups of fruit per year for the average person in HH's with a female head (mom) aged 30-44.

Annual Fruit/Vegetable Cups per Capita
Among Individuals in HH's with a Female Head (Mom) Aged 30-44

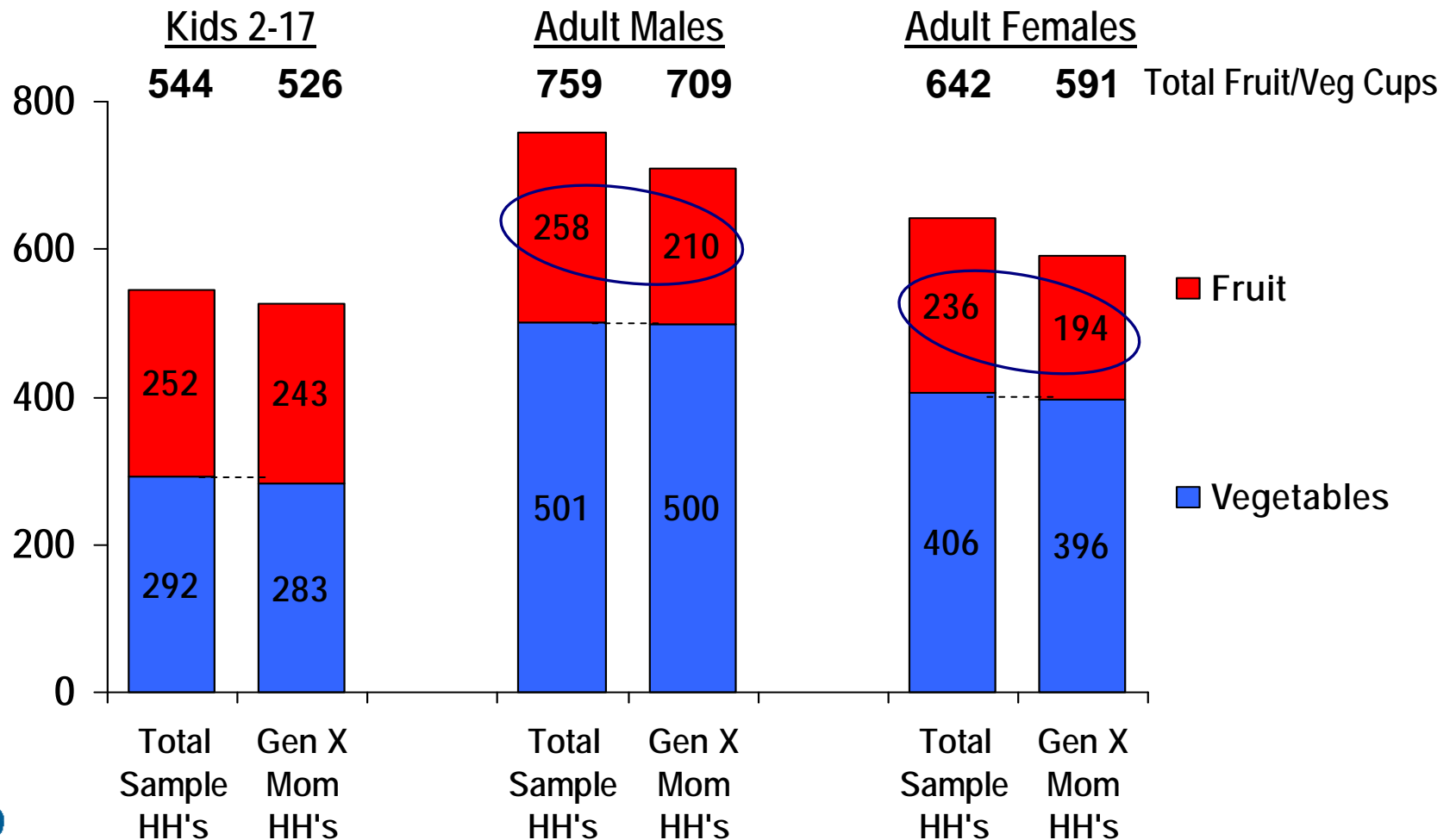


Behind Every Business Decision

NPD/Nutrient Intake Database; 2 YE Feb.

Individuals in HH's with a Gen X Mom consume vegetables at a similar rate as the average person; however, adults in 'Gen X Mom' HH's, consume ~20% fewer cups of fruit annually.

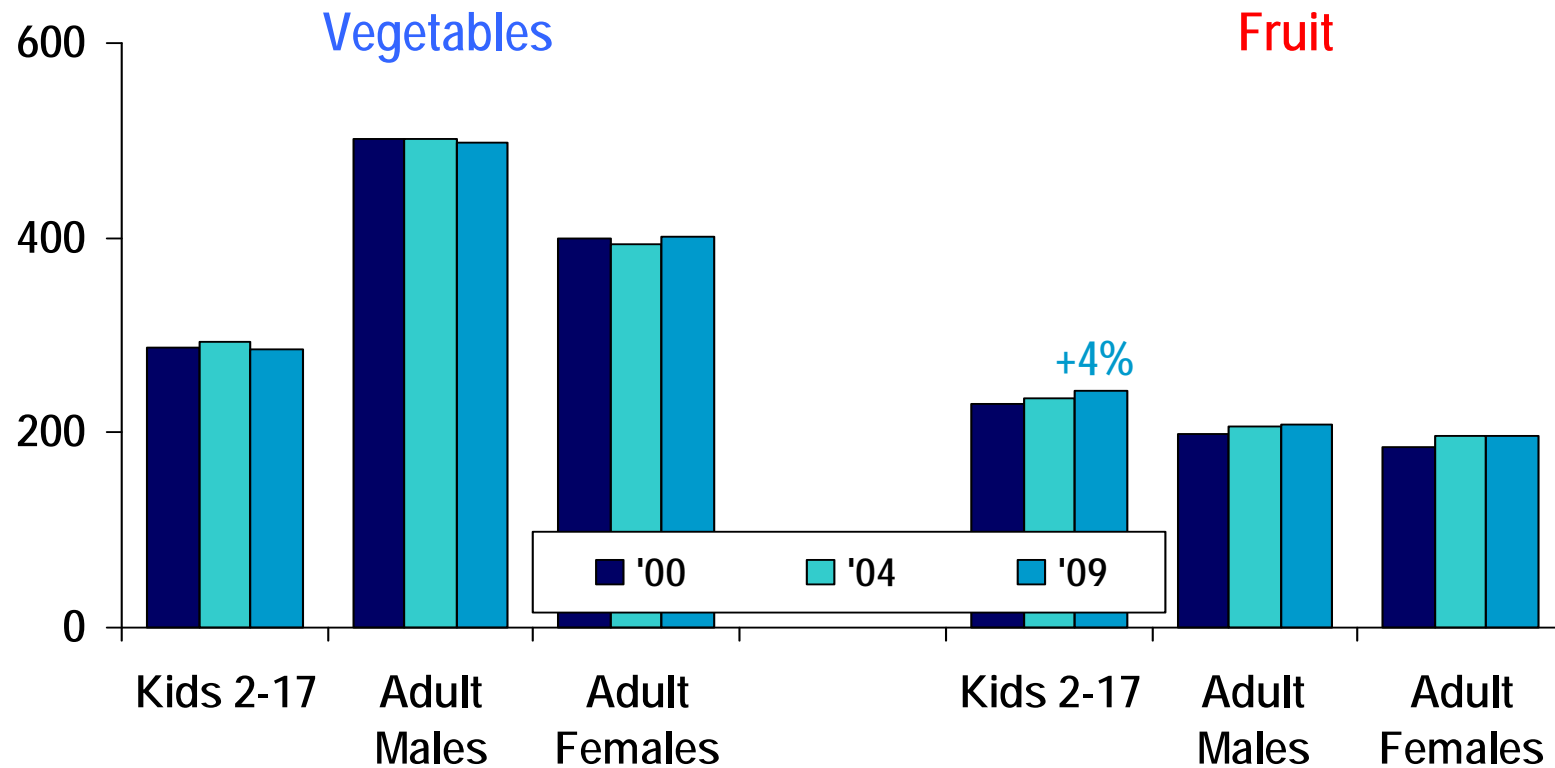
Annual Fruit/Vegetable Cups per Capita by Age



NPD/Nutrient Intake Database; 2 YE Feb. '09; Gen X Mom = 30-44 in '09

Fruit and vegetable consumption has remained fairly stable among kids, adult males, & adult females in HH's with a mom aged 30-44.

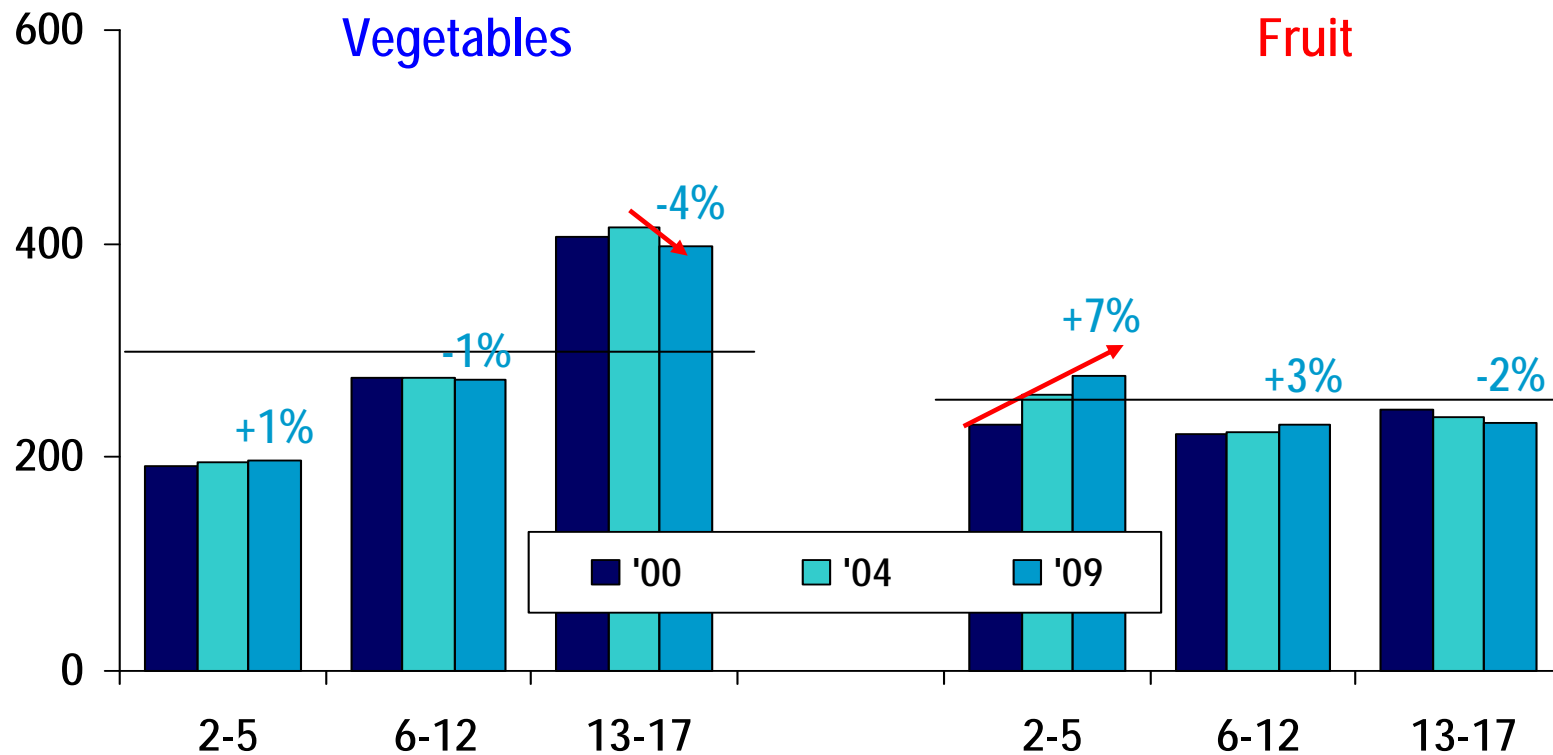
Annual Fruit/Vegetable Cups per Capita by Age
Among Individuals in HH's with a Female Head (Mom) Aged 30-44



NPD/Nutrient Intake Database; 3 YE Feb; % change '09 vs. '04

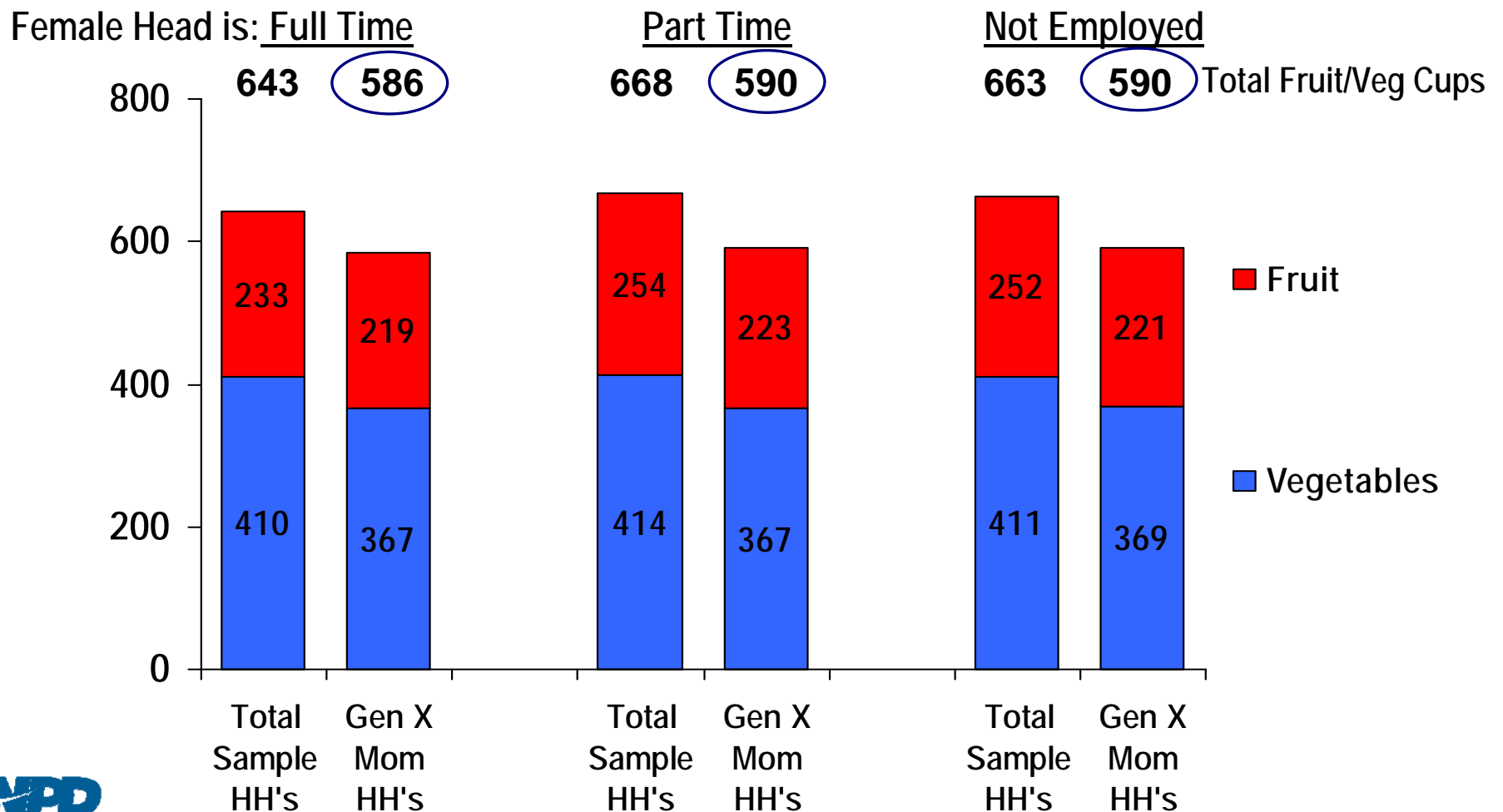
Examining the age of kids within a HH with a Gen X Mom reveals that kids aged 2-5 are consuming more fruit vs. '04 (as are 6-12 to a lesser degree). Teens are consuming fewer cups, however, especially for vegetables.

Annual Fruit/Vegetable Cups per Capita by Age Among Individuals in HH's with a Female Head (Mom) Aged 30-44



Employment status of a Gen X Mom doesn't have much impact on produce consumption. Individuals with a 'Gen X Mom' consume just under 600 cups of fruit & vegetables per year regardless of mom's employment status.

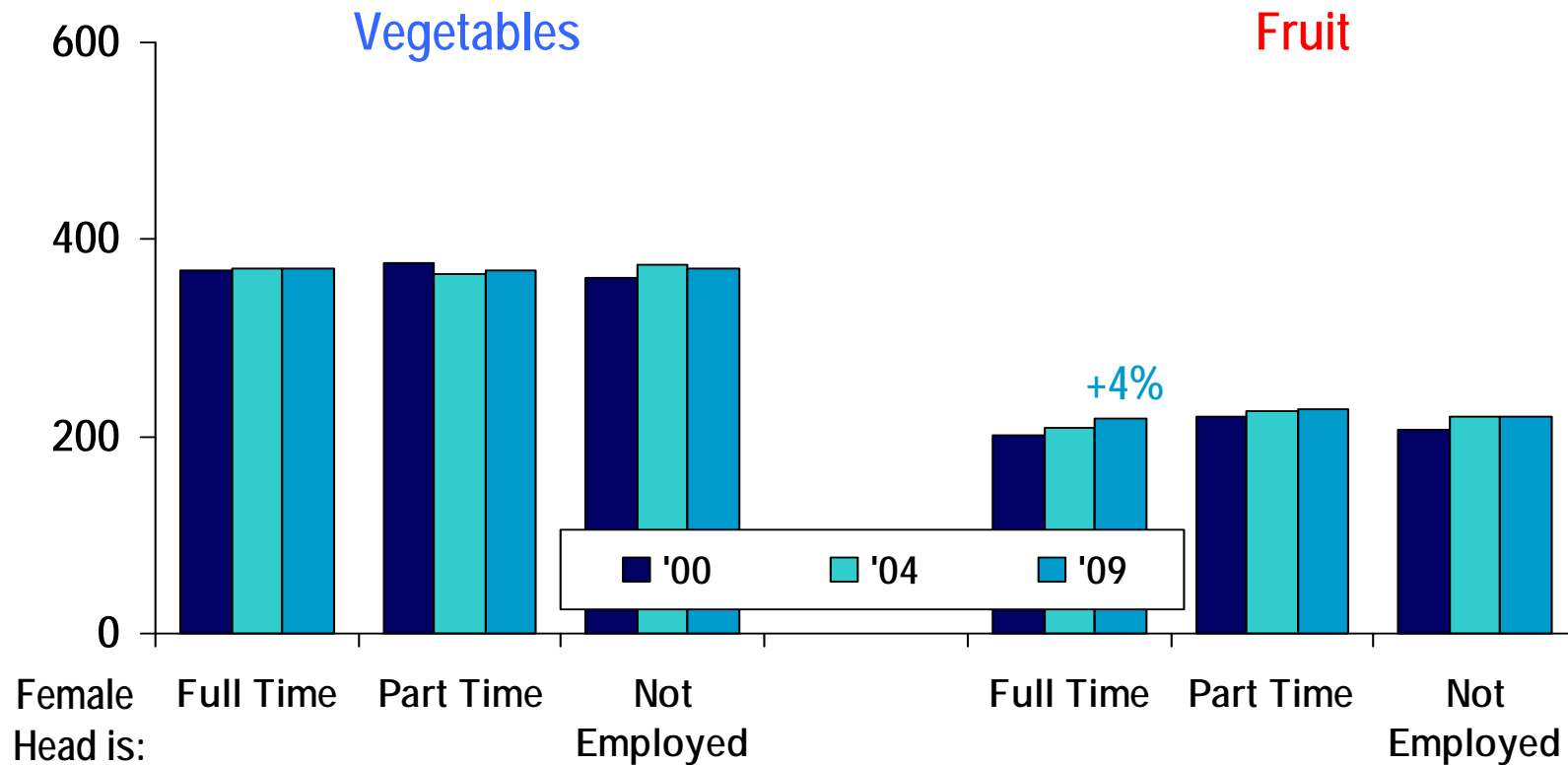
Annual Fruit/Vegetable Cups per Capita by Employment Status



NPD/Nutrient Intake Database; 2 YE Feb. '09; Gen X Mom = 30-44 in '09

Fruit and vegetable consumption has remained quite stable among individuals in HH's with a female head (mom) aged 30-44, regardless of her employment status.

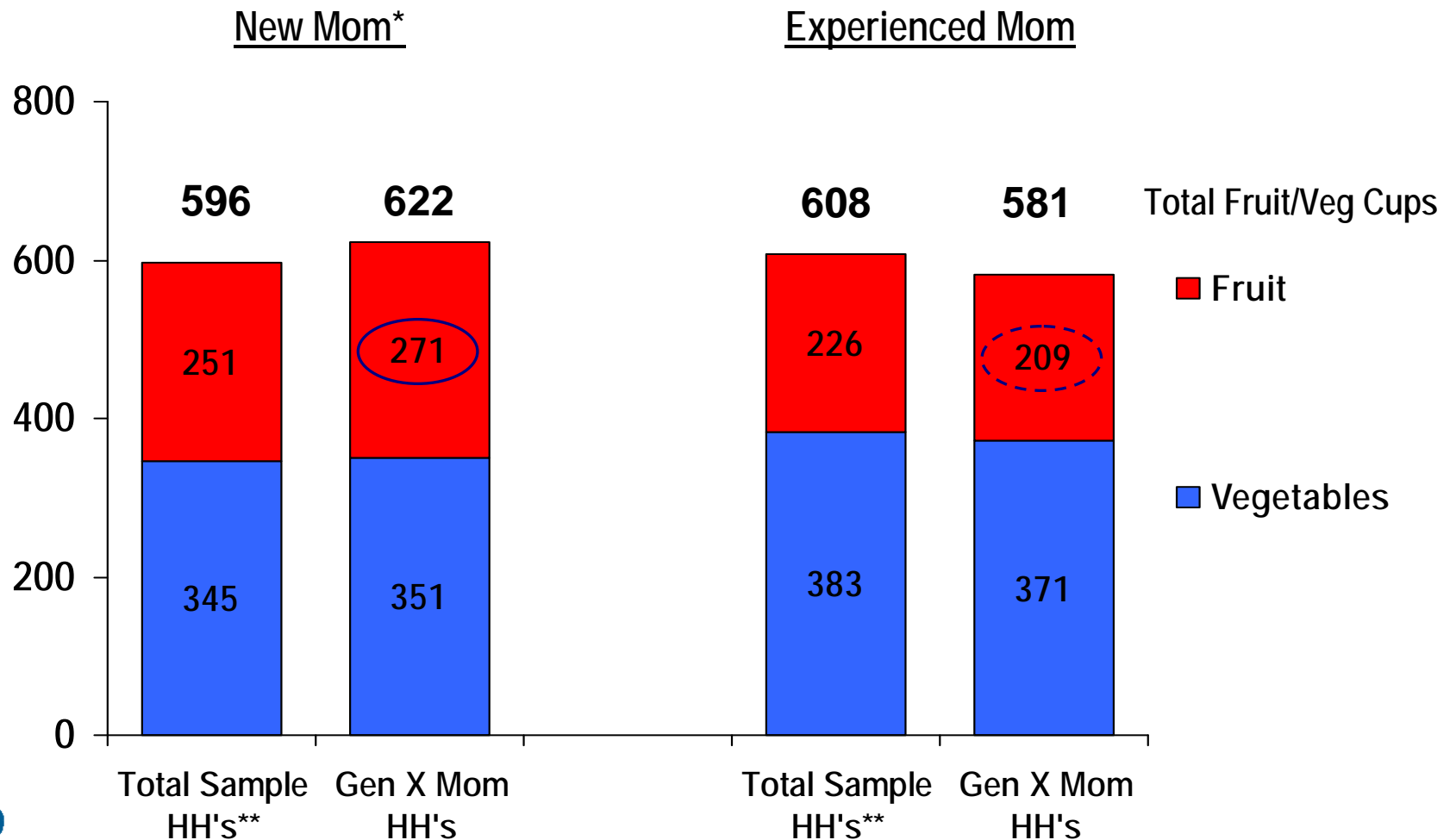
Annual Fruit/Vegetable Cups per Capita by Employment Status Among Individuals in HH's with a Female Head (Mom) Aged 30-44



NPD/Nutrient Intake Database; 3 YE Feb; % change '09 vs. '04

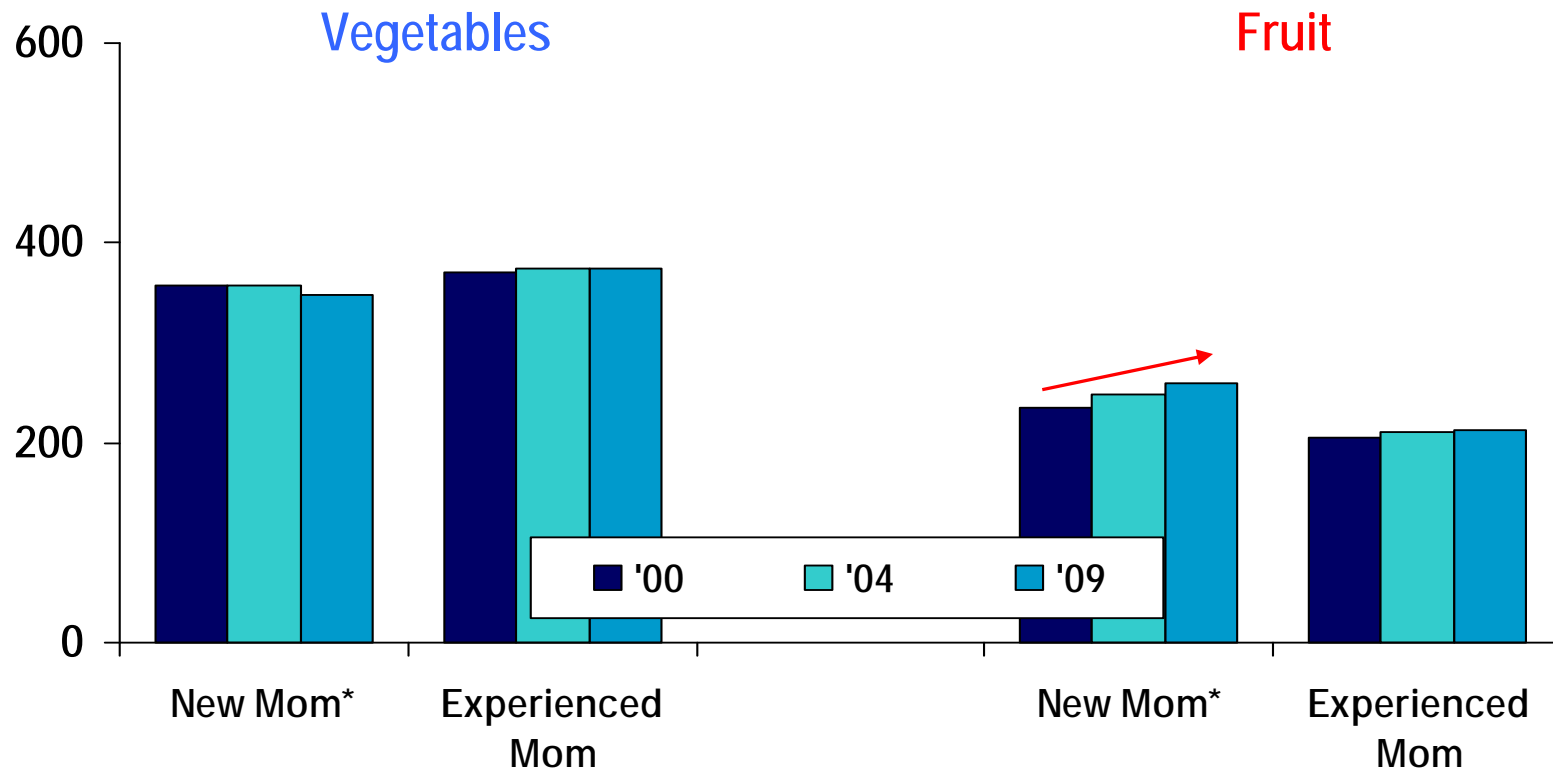
Individuals in HH's with a 'new' Gen X mom consume 30% more fruit per capita than those with an 'experienced' Gen X mom ... 271 cups annually vs. 209 cups, respectively.

Annual Fruit/Vegetable Cups per Capita by New* vs. Experienced Moms



Not only is their fruit consumption higher overall, but individuals in HH's with a 'new' mom aged 30-44 have increased their consumption of fruit by 10% over the past decade.

Annual Fruit/Vegetable Cups per Capita by New* vs. Experienced Moms Among Individuals in HH's with a Female Head (Mom) Aged 30-44



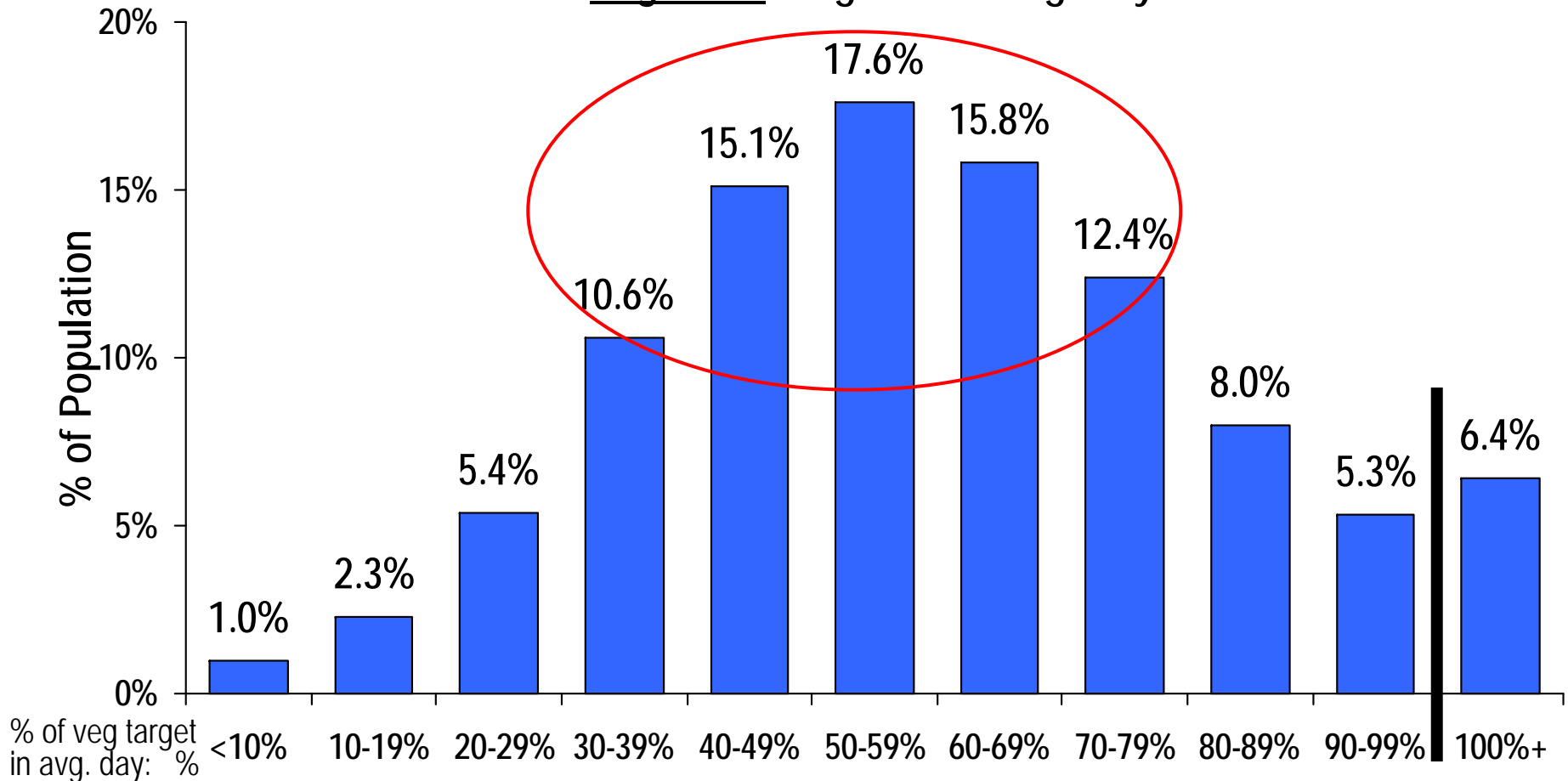
Achievement of Recommended Targets for Fruits & Vegetables



**Distribution of Achievement
Who's Achieving Fruit vs. Veg Targets
Fruit/Veg Habits Among Achievers**

Most Americans consume anywhere from 30% to 80% of their recommended number of vegetables in a typical day. Just 6% achieve their target in an average day.

Dist. of Individuals by % Achievement of Vegetable Target in an Avg. Day

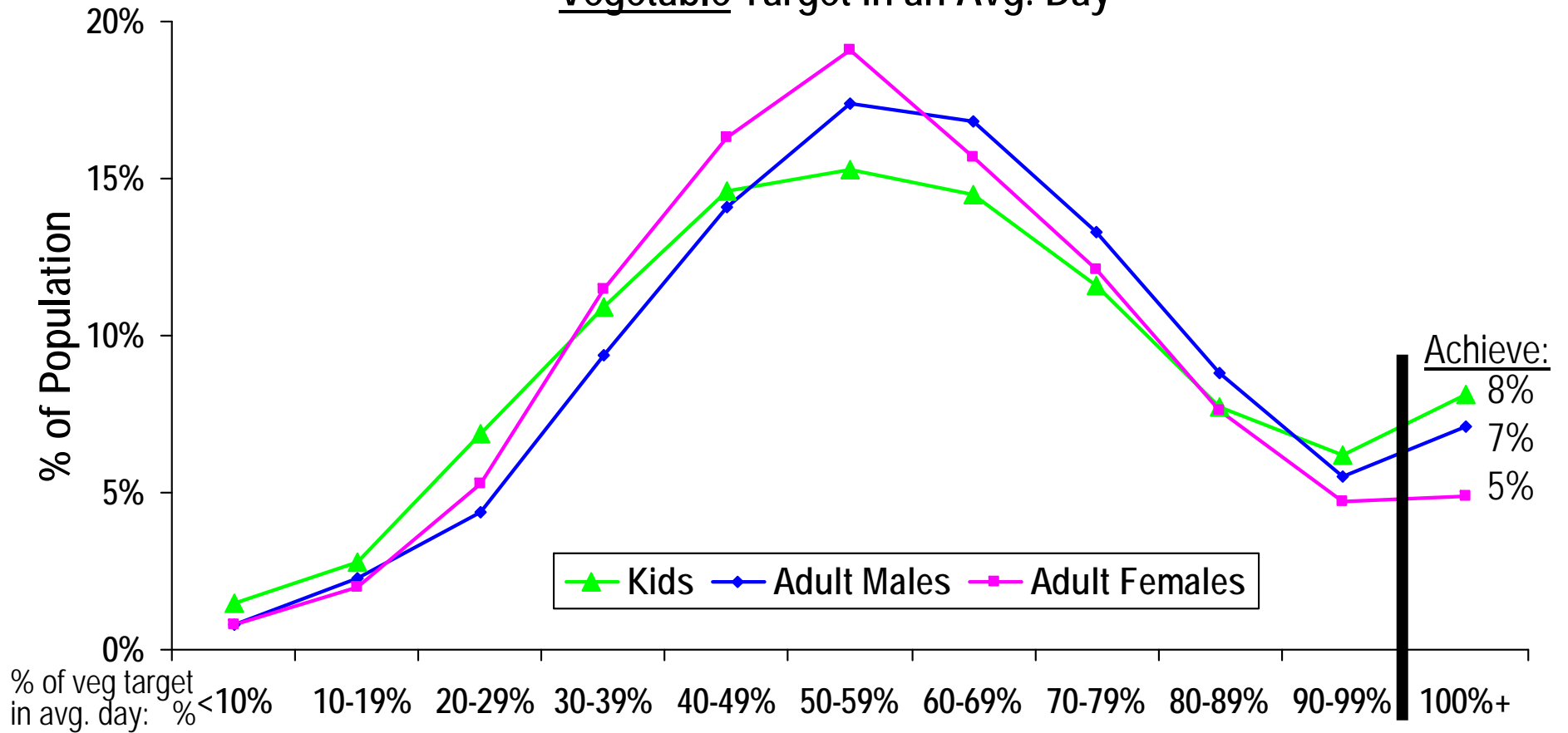


Behind Every Business Decision

NPD/Nutrient Intake Database; 2 YE Feb '09

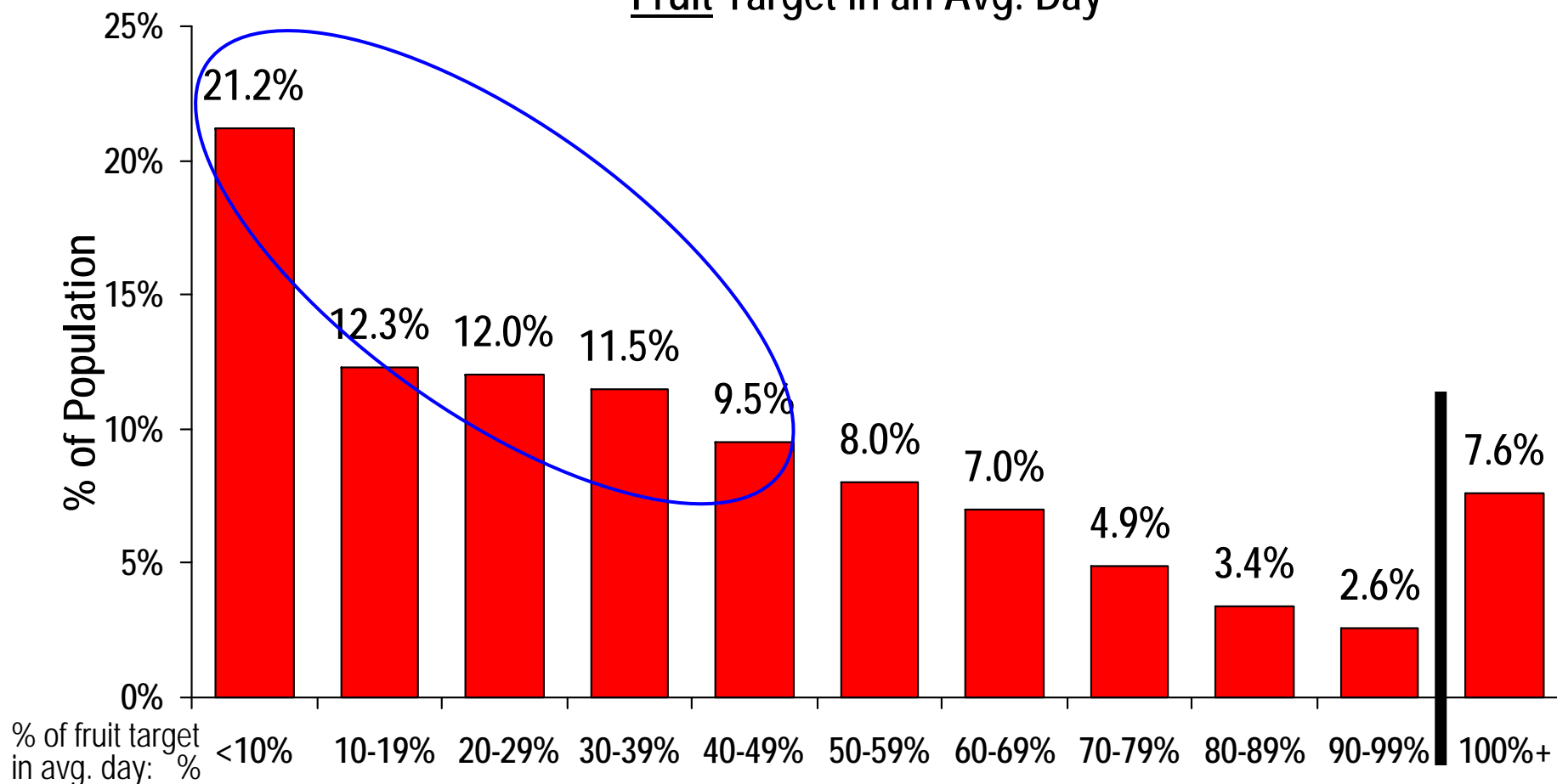
Kids, adult males, and adult females show a similar curve in terms of their achievement level for vegetable targets.

Dist. of Individuals by % Achievement of Vegetable Target in an Avg. Day



The picture is less favorable for fruit. 2 out of 10 of individuals don't consume even 10% of their recommended number ... two-thirds don't even consume 50% of the target. Just 8% achieve their fruit target in a typical day.

Dist. of Individuals by % Achievement of Fruit Target in an Avg. Day

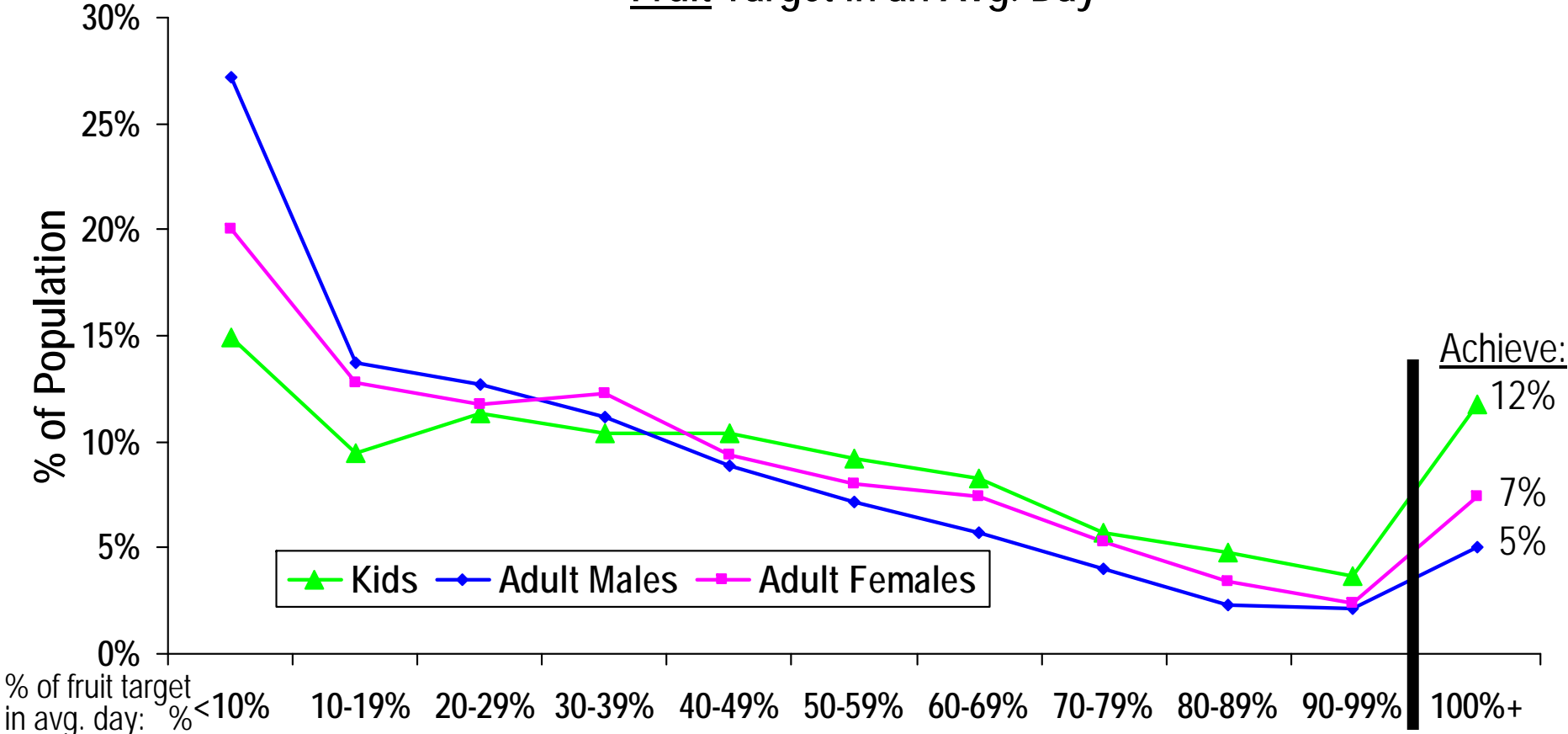


Behind Every Business Decision

NPD/Nutrient Intake Database; 2 YE Feb '09

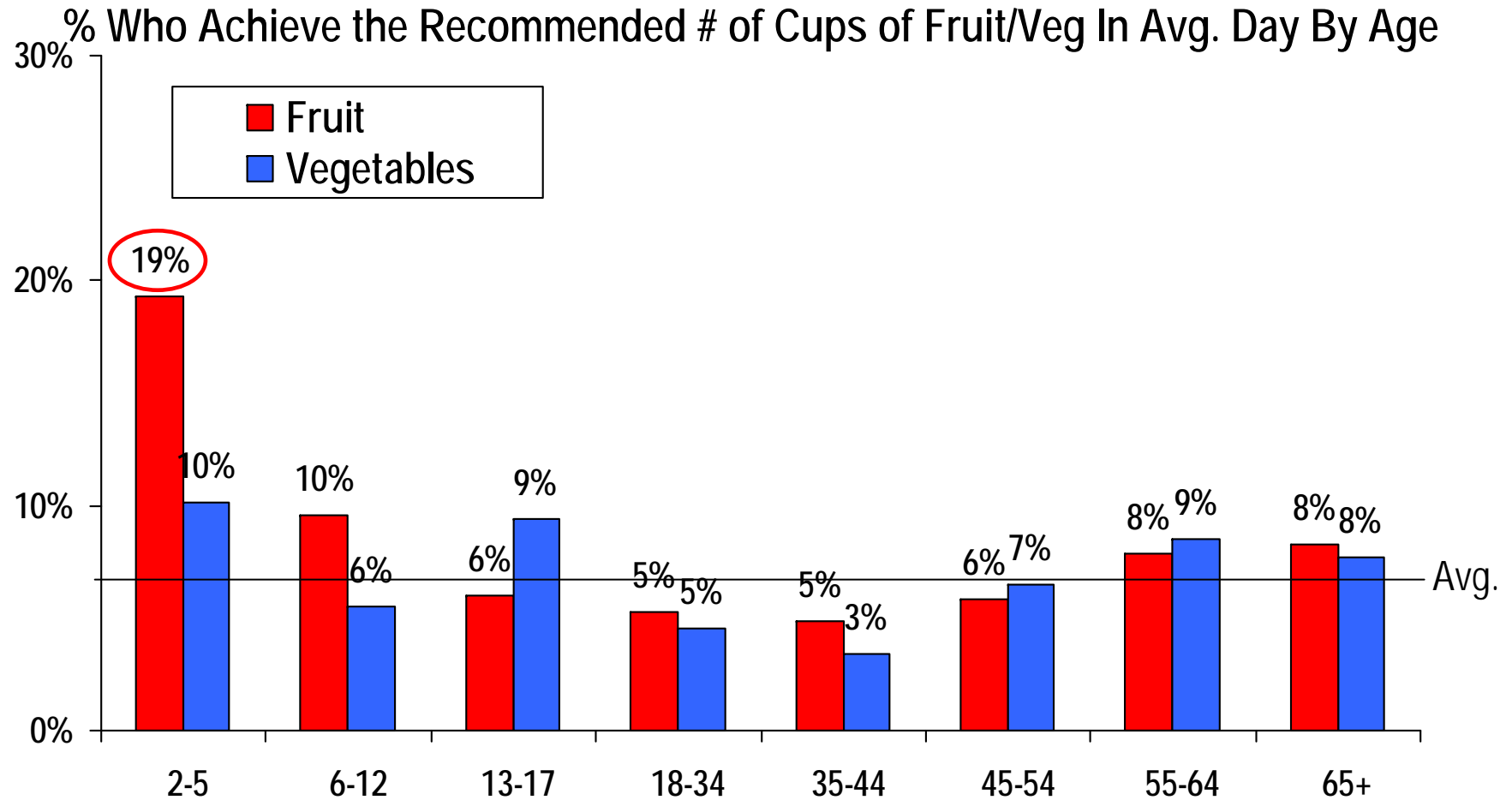
Kids are most likely to achieve their recommended number of fruit ... 12% do so compared to only 7% of females and 5% of males. Keep in mind that the targets are lower for younger kids.

Dist. of Individuals by % Achievement of Fruit Target in an Avg. Day



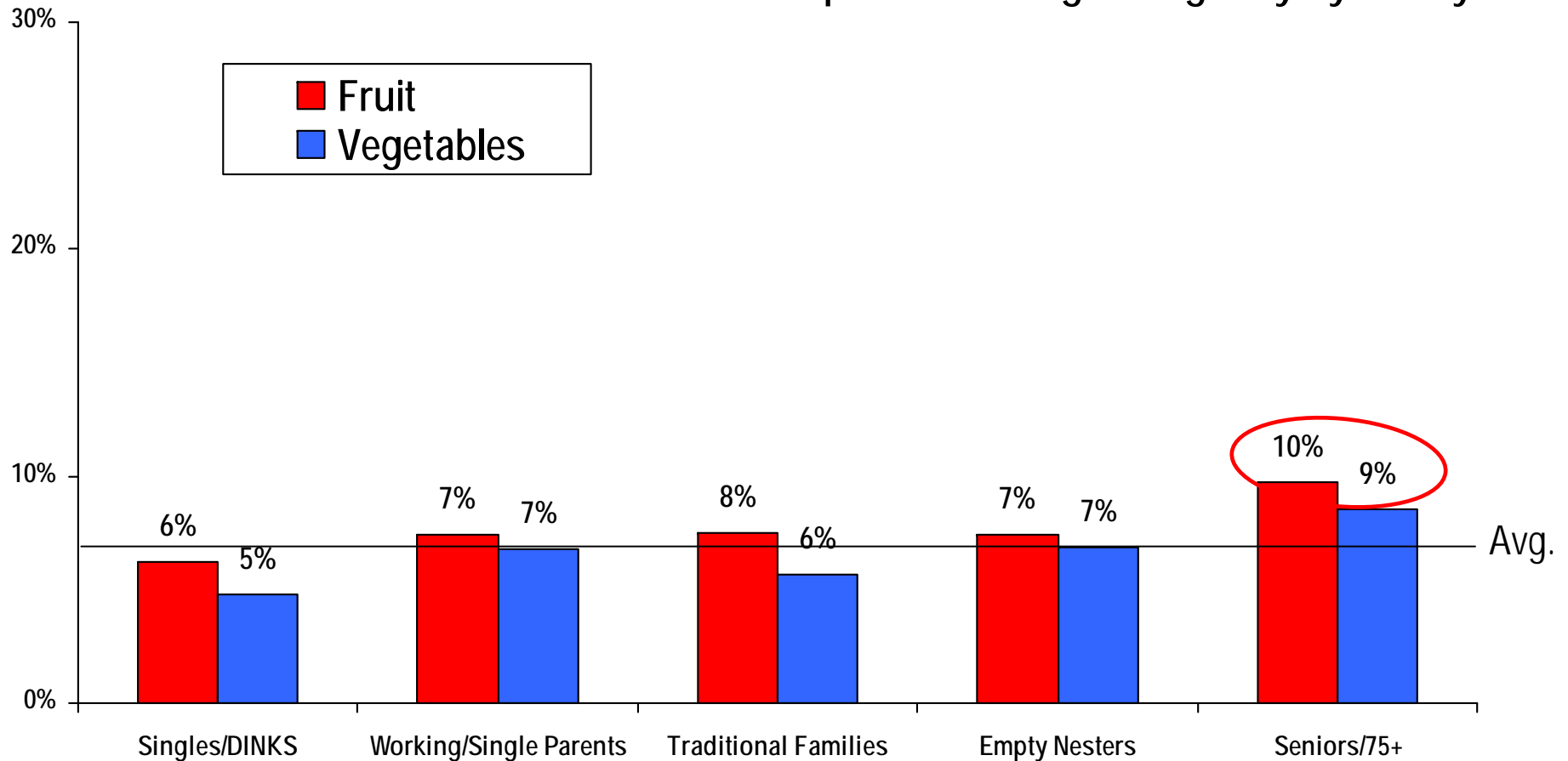
Only 6-8% of individuals achieve the recommended number of vegetables and fruits (respectively) in an average day. 20% of young kids (2-5) achieve their fruit target, but their targets are lower.

Just 1% of adults (and 2% of kids) meet both their fruit & vegetable targets!



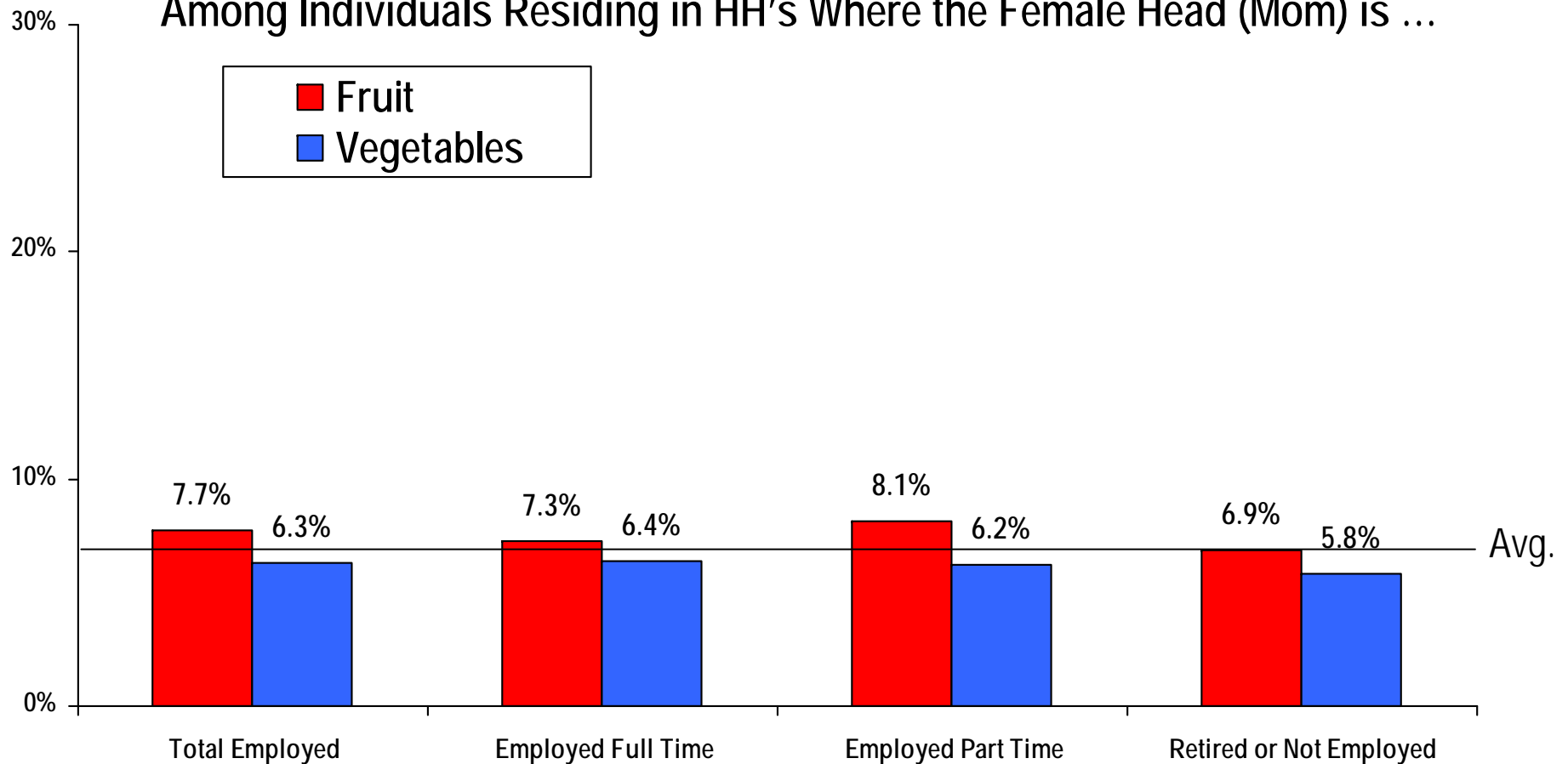
Seniors and 75+ HH's are slightly more likely to achieve their fruit and vegetable targets ... roughly 1 out of 10 individuals do so. Singles/DINKS are least likely to achieve.

% Who Achieve the Recommended # of Cups of Fruit/Veg In Avg. Day by LifeCycle



Employment of the female head does not appear to have a significant impact on the achievement of fruit and vegetable targets among the individuals in the household.

% Who Achieve the Recommended # of Cups of Fruit/Veg In Avg. Day Among Individuals Residing in HH's Where the Female Head (Mom) is ...



Heavy fruit users tend to be either young kids or females 55+ ... heavy vegetable users skew to adult males aged 55+, also young kids and teens.

Age and Demographic Skews*

Achieve Vegetable Target

Achieve Fruit Target

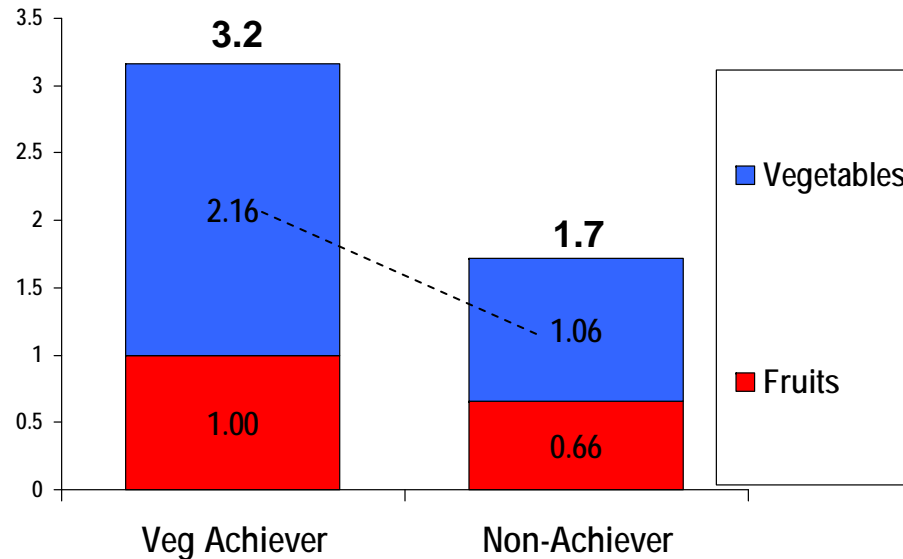
(avg.= 6.4% of individuals)	(avg.= 7.6% of individuals)
<ul style="list-style-type: none"> ■ Males 55+ ■ Kids <6 and Teens ■ <u>Not</u> F18-44, M35-44 	<ul style="list-style-type: none"> ■ Females 55+ ■ Kids <12 ■ <u>Not</u> teens, M18-64, F18-34
<ul style="list-style-type: none"> ■ Incomes <\$10K, ~\$60-70K ■ 5+ members ■ Older homemaker (55+) ■ Retired head ■ African Americans ■ New England, E.S. Central ■ Married Seniors, 75+ 	<ul style="list-style-type: none"> ■ Incomes \$50-59 ■ 5+ members ■ Homemaker 65+ ■ Retired head ■ Asian ■ New England, W.N. Central ■ Married Seniors, 75+



Behind Every Business Decision

Individuals who achieve their vegetable target consume 1.1 more cups of vegetables per day (and 0.3 more cups of fruit) vs. non-achievers.

Fruit/Vegetable Cups per Capita in Avg. Day



Vegetable Achievement is driven by:

- use at dinner, also lunch
- eaten 'as is'
- weekday use
- sourced from the home

What drives Achievers to Achieve?

- Individuals who achieve the recommended # of cups for vegetables consume ...
 - **0.6** more cups of vegetables at dinner & **0.4** more cups at lunch
 - **0.7** more cups of vegetables eaten 'as is' & **0.4** more cups as an ingredient*
 - **0.8** more cups of vegetables eaten during a weekday & **0.3** cups on a weekend*
 - **0.85** more cups of vegetables sourced from the home & **0.25** cups from AFH*



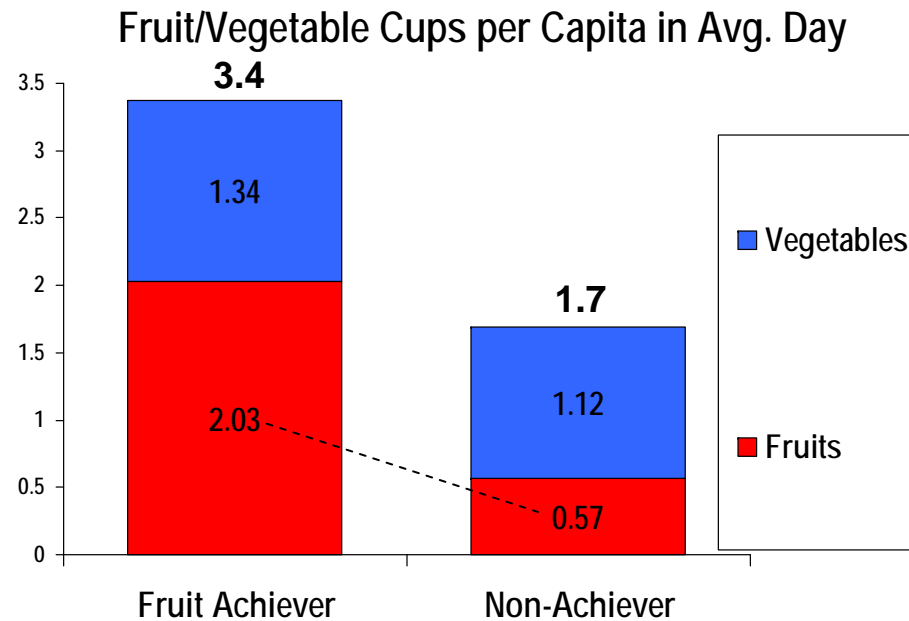
Behind Every Business Decision

*these are each in line with the proportions expected for these behaviors

NPD/Nutrient Intake Database; 2 YE Feb '09 vs. '04; 6.4% of individuals achieve their recommended vegetable target in a typical day)

Proprietary and Confidential

Individuals who achieve their fruit target consume 1.5 more cups of fruit per day (and 0.2 more cups of veg) vs. non-achievers.



Fruit Achievement is driven by:

- use at breakfast & lunch[^]
- eaten 'as is'
- weekday use
- sourced almost exclusively from the home

What drives Achievers to Achieve?

- Individuals who achieve the recommended # of cups for fruit consume ...
 - **0.5** more cups of fruit at breakfast & **0.4** more cups at lunch[^]
 - **1.3** more cups of fruit eaten 'as is' & **0.2** more cups as an ingredient or additive*
 - **1.1** more cups of fruit eaten during a weekday & **0.4** cups on a weekend*
 - **1.4** more cups of fruit sourced from the home & **0.1** cups from AFH

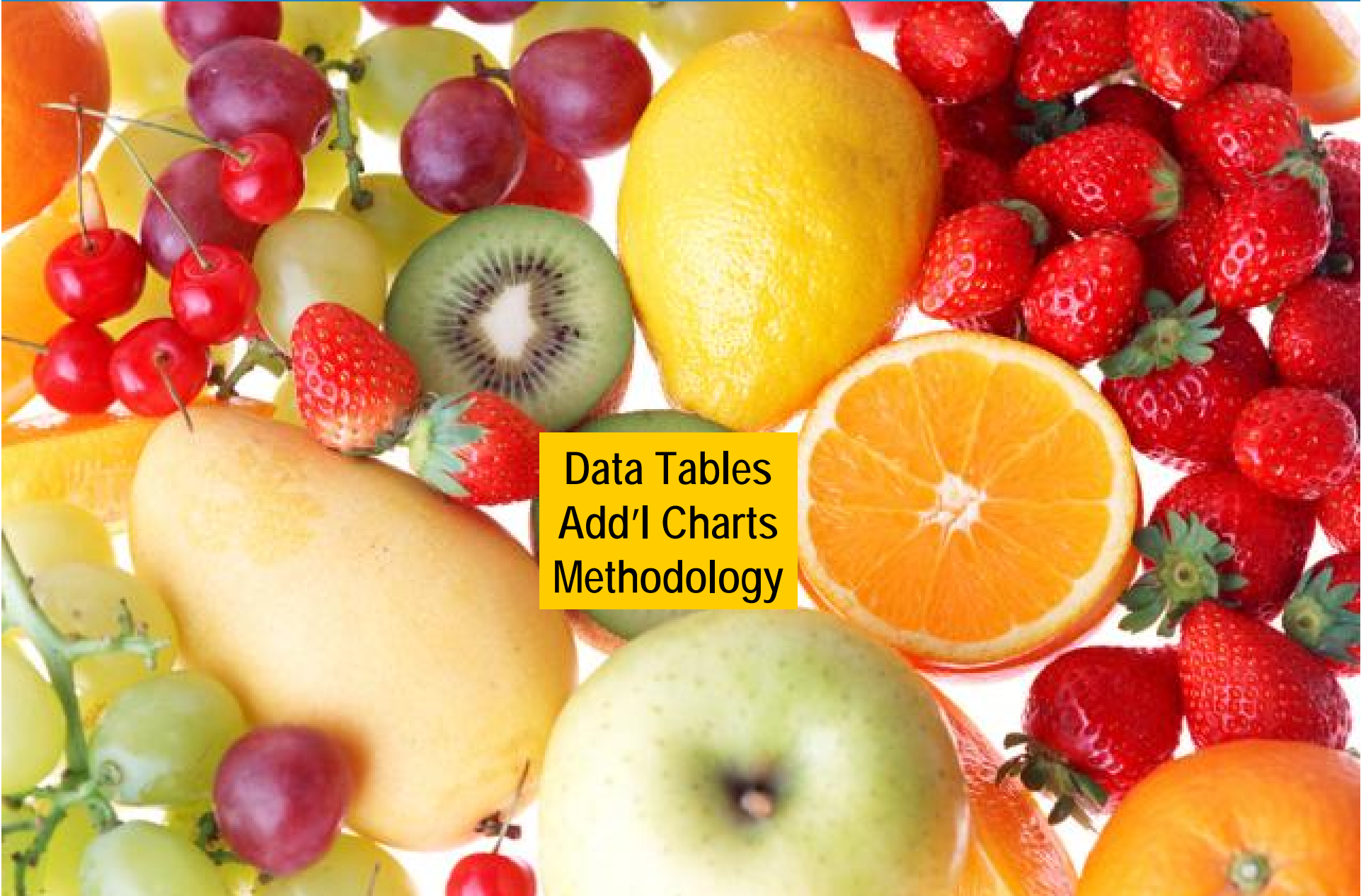


Behind Every Business Decision

[^]0.3 more cups at each dinner and snack occasion

*these are in line with the proportions expected for these behaviors

NPD/Nutrient Intake Database; 2 YE Feb '09 vs. '04; 7.6% of individuals achieve their recommended vegetable target in a typical day)



**Data Tables
Add'l Charts
Methodology**

Fruit/Vegetable Consumption Among Kids – Average Cups per Person per Day

Servings (Cups) per Avg. Day	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	% Chg '09 vs '04
TOTAL INDIVIDUALS												
Cups of Vegetables per Day	1.16	1.17	1.16	1.15	1.16	1.15	1.12	1.11	1.12	1.13	1.13	-2%
Cups of Fruit per Day	0.66	0.67	0.66	0.65	0.66	0.66	0.64	0.64	0.65	0.66	0.68	2%
Total Fruit/Veg Cups per Day	1.82	1.83	1.82	1.80	1.82	1.81	1.77	1.75	1.77	1.80	1.81	0%
TOTAL CHILDREN												
Cups of Vegetables per Day	0.81	0.81	0.80	0.80	0.82	0.80	0.78	0.79	0.79	0.80	0.80	0%
Cups of Fruit per Day	0.63	0.64	0.64	0.62	0.65	0.65	0.63	0.64	0.66	0.67	0.69	6%
Total Fruit/Veg Cups per Day	1.44	1.45	1.44	1.42	1.47	1.45	1.41	1.42	1.45	1.47	1.49	3%
< 6 YRS OLD												
Cups of Vegetables per Day	0.53	0.54	0.53	0.53	0.53	0.53	0.53	0.52	0.53	0.54	0.54	3%
Cups of Fruit per Day	0.58	0.61	0.62	0.62	0.68	0.67	0.62	0.64	0.68	0.69	0.75	11%
Total Fruit/Veg Cups per Day	1.12	1.15	1.15	1.15	1.21	1.20	1.15	1.16	1.20	1.23	1.29	7%
6-12 YRS OLD												
Cups of Vegetables per Day	0.77	0.76	0.74	0.76	0.77	0.75	0.74	0.75	0.75	0.76	0.76	2%
Cups of Fruit per Day	0.63	0.61	0.59	0.58	0.62	0.62	0.59	0.60	0.64	0.67	0.67	7%
Total Fruit/Veg Cups per Day	1.40	1.37	1.33	1.33	1.39	1.37	1.34	1.35	1.39	1.43	1.43	5%
13-17 YRS OLD												
Cups of Vegetables per Day	1.13	1.15	1.15	1.13	1.15	1.16	1.12	1.12	1.11	1.11	1.09	-6%
Cups of Fruit per Day	0.68	0.73	0.73	0.69	0.69	0.68	0.69	0.68	0.67	0.66	0.67	-2%
Total Fruit/Veg Cups per Day	1.81	1.88	1.89	1.82	1.84	1.84	1.80	1.80	1.78	1.77	1.76	-4%

Fruit/Vegetable Consumption Among Adult Males – Average Cups per Person per Day

Servings (Cups) per Avg. Day	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	% Chg '09 vs '04
ADULT MALES												
Cups of Vegetables per Day	1.43	1.44	1.43	1.41	1.41	1.41	1.38	1.35	1.36	1.38	1.37	-3%
Cups of Fruit per Day	0.71	0.72	0.71	0.70	0.70	0.71	0.69	0.69	0.68	0.69	0.71	0%
Total Fruit/Veg Cups per Day	2.14	2.15	2.15	2.10	2.11	2.12	2.07	2.04	2.04	2.07	2.08	-2%
MALES 18-34 YRS OLD												
Cups of Vegetables per Day	1.34	1.35	1.34	1.29	1.30	1.28	1.23	1.22	1.26	1.30	1.30	1%
Cups of Fruit per Day	0.60	0.59	0.63	0.61	0.63	0.65	0.63	0.61	0.60	0.66	0.70	9%
Total Fruit/Veg Cups per Day	1.94	1.94	1.97	1.89	1.93	1.93	1.86	1.83	1.86	1.96	2.00	4%
MALES 35-44 YRS OLD												
Cups of Vegetables per Day	1.41	1.39	1.39	1.40	1.40	1.36	1.34	1.31	1.32	1.39	1.39	2%
Cups of Fruit per Day	0.57	0.59	0.58	0.56	0.60	0.60	0.56	0.56	0.59	0.62	0.61	1%
Total Fruit/Veg Cups per Day	1.98	1.98	1.97	1.97	2.00	1.97	1.90	1.88	1.91	2.00	2.00	2%
MALES 45-54 YRS OLD												
Cups of Vegetables per Day	1.44	1.47	1.46	1.42	1.43	1.43	1.40	1.36	1.36	1.38	1.37	-4%
Cups of Fruit per Day	0.67	0.66	0.64	0.65	0.69	0.69	0.64	0.63	0.62	0.60	0.61	-12%
Total Fruit/Veg Cups per Day	2.11	2.14	2.09	2.07	2.12	2.12	2.04	1.99	1.98	1.98	1.98	-7%
MALES 55-64 YRS OLD												
Cups of Vegetables per Day	1.53	1.52	1.49	1.44	1.46	1.49	1.49	1.43	1.42	1.43	1.43	-4%
Cups of Fruit per Day	0.81	0.80	0.79	0.76	0.73	0.72	0.71	0.70	0.71	0.72	0.75	5%
Total Fruit/Veg Cups per Day	2.34	2.32	2.28	2.20	2.19	2.21	2.19	2.13	2.13	2.15	2.19	-1%
MALES 65+ YRS OLD												
Cups of Vegetables per Day	1.51	1.49	1.52	1.51	1.49	1.53	1.51	1.46	1.47	1.44	1.39	-9%
Cups of Fruit per Day	1.03	1.01	1.00	1.00	0.93	0.94	0.97	0.97	0.94	0.92	0.90	-4%
Total Fruit/Veg Cups per Day	2.54	2.51	2.53	2.51	2.42	2.47	2.49	2.44	2.41	2.36	2.29	-7%

Fruit/Vegetable Consumption Among Adult Females – Average Cups per Person per Day

Servings (Cups) per Avg. Day	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	% Chg '09 vs '04
ADULT FEMALES												
Cups of Vegetables per Day	1.16	1.15	1.14	1.14	1.15	1.14	1.12	1.10	1.11	1.12	1.11	-3%
Cups of Fruit per Day	0.64	0.64	0.64	0.63	0.63	0.63	0.61	0.61	0.62	0.64	0.65	2%
Total Fruit/Veg Cups per Day	1.80	1.79	1.78	1.77	1.78	1.78	1.73	1.71	1.74	1.75	1.76	-1%
FEMALES 18-34 YRS OLD												
Cups of Vegetables per Day	1.05	1.05	1.06	1.06	1.08	1.05	1.00	1.01	1.04	1.05	1.06	1%
Cups of Fruit per Day	0.53	0.52	0.54	0.56	0.58	0.57	0.53	0.52	0.55	0.61	0.62	9%
Total Fruit/Veg Cups per Day	1.58	1.57	1.60	1.62	1.66	1.62	1.54	1.53	1.59	1.66	1.68	4%
FEMALES 35-44 YRS OLD												
Cups of Vegetables per Day	1.14	1.13	1.12	1.12	1.13	1.10	1.07	1.07	1.10	1.13	1.12	2%
Cups of Fruit per Day	0.53	0.52	0.51	0.51	0.53	0.52	0.49	0.51	0.55	0.55	0.56	7%
Total Fruit/Veg Cups per Day	1.67	1.65	1.63	1.63	1.67	1.62	1.56	1.58	1.65	1.68	1.68	4%
FEMALES 45-54 YRS OLD												
Cups of Vegetables per Day	1.18	1.16	1.15	1.13	1.14	1.15	1.13	1.11	1.09	1.13	1.12	-2%
Cups of Fruit per Day	0.63	0.60	0.58	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.62	8%
Total Fruit/Veg Cups per Day	1.80	1.76	1.73	1.70	1.71	1.72	1.71	1.69	1.67	1.70	1.75	1%
FEMALES 55-64 YRS OLD												
Cups of Vegetables per Day	1.23	1.23	1.21	1.20	1.20	1.21	1.19	1.17	1.15	1.14	1.14	-6%
Cups of Fruit per Day	0.72	0.74	0.75	0.72	0.70	0.70	0.68	0.68	0.68	0.70	0.71	2%
Total Fruit/Veg Cups per Day	1.95	1.97	1.95	1.92	1.90	1.91	1.88	1.84	1.83	1.83	1.85	-3%
FEMALES 65+ YRS OLD												
Cups of Vegetables per Day	1.26	1.25	1.22	1.21	1.24	1.25	1.24	1.22	1.21	1.18	1.15	-8%
Cups of Fruit per Day	0.93	0.92	0.88	0.87	0.84	0.84	0.83	0.81	0.83	0.79	0.75	-11%
Total Fruit/Veg Cups per Day	2.19	2.17	2.11	2.08	2.07	2.10	2.07	2.03	2.04	1.97	1.90	-9%

Fruit/Vegetable Consumption Among Kids – Annual Cups per Capita

Annual Servings (Cups) per Capita	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	% Chg '09 vs '04
TOTAL INDIVIDUALS												
Cups of Vegetables Annually	423	426	424	420	423	420	410	405	409	414	413	-2%
Cups of Fruit Annually	242	244	242	237	242	242	234	234	238	243	247	2%
Total Fruit/Veg Cups Annually	665	669	666	657	665	662	645	639	647	657	660	0%
TOTAL CHILDREN												
Cups of Vegetables Annually	295	296	292	293	298	291	285	288	289	292	292	0%
Cups of Fruit Annually	231	234	232	226	239	238	229	232	240	246	252	6%
Total Fruit/Veg Cups Annually	525	530	524	519	537	529	514	520	529	538	544	3%
< 6 YRS OLD												
Cups of Vegetables Annually	195	197	195	194	192	192	192	190	192	196	198	3%
Cups of Fruit Annually	213	222	225	225	249	246	228	235	247	254	272	11%
Total Fruit/Veg Cups Annually	408	419	420	419	441	438	419	425	440	450	471	7%
6-12 YRS OLD												
Cups of Vegetables Annually	281	278	271	277	283	273	271	275	275	277	279	2%
Cups of Fruit Annually	230	221	214	210	225	226	216	218	233	244	243	7%
Total Fruit/Veg Cups Annually	511	499	486	487	508	499	487	493	508	521	522	5%
13-17 YRS OLD												
Cups of Vegetables Annually	413	420	421	412	420	422	408	408	406	406	397	-6%
Cups of Fruit Annually	249	265	268	251	250	250	250	249	244	241	245	-2%
Total Fruit/Veg Cups Annually	662	685	688	664	670	672	658	658	650	647	643	-4%

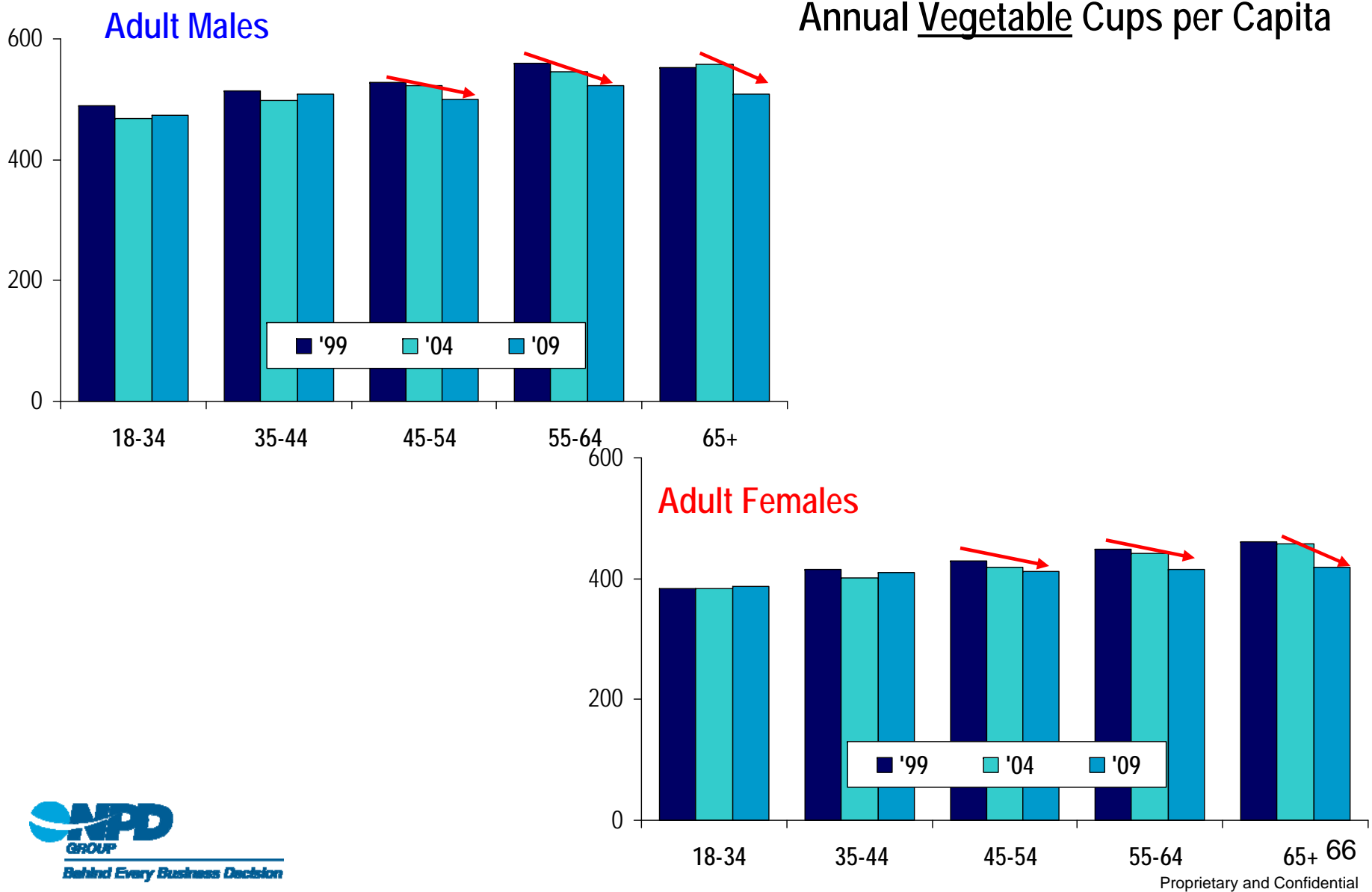
Fruit/Vegetable Consumption Among Adult Males – Annual Cups per Capita

Annual Servings (Cups) per Capita	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	% Chg '09 vs. '04
ADULT MALES												
Cups of Vegetables Annually	524	525	524	514	514	514	504	492	495	504	501	-3%
Cups of Fruit Annually	259	261	261	254	257	259	251	251	250	253	258	0%
Total Fruit/Veg Cups Annually	783	786	785	768	771	773	755	743	745	757	758	-2%
MALES 18-34 YRS OLD												
Cups of Vegetables Annually	489	491	490	470	475	468	449	446	461	474	473	1%
Cups of Fruit Annually	220	217	230	221	229	237	229	223	218	242	257	9%
Total Fruit/Veg Cups Annually	709	708	720	690	704	704	678	668	678	717	731	4%
MALES 35-44 YRS OLD												
Cups of Vegetables Annually	514	507	506	513	512	498	488	479	482	506	509	2%
Cups of Fruit Annually	209	216	212	205	219	220	206	206	215	225	222	1%
Total Fruit/Veg Cups Annually	723	723	718	718	731	718	694	685	697	731	731	2%
MALES 45-54 YRS OLD												
Cups of Vegetables Annually	527	538	531	518	520	522	511	497	496	505	500	-4%
Cups of Fruit Annually	245	241	233	236	253	250	233	231	227	218	221	-12%
Total Fruit/Veg Cups Annually	771	779	764	755	773	773	744	728	723	723	721	-7%
MALES 55-64 YRS OLD												
Cups of Vegetables Annually	560	557	543	527	534	546	543	522	517	522	523	-4%
Cups of Fruit Annually	295	292	288	277	265	263	258	257	261	264	274	5%
Total Fruit/Veg Cups Annually	855	848	832	804	799	808	801	779	777	786	798	-1%
MALES 65+ YRS OLD												
Cups of Vegetables Annually	553	545	555	551	543	558	552	535	536	526	509	-9%
Cups of Fruit Annually	376	370	367	366	340	342	356	355	345	334	327	-4%
Total Fruit/Veg Cups Annually	929	915	922	916	884	900	908	889	880	860	836	-7%

Fruit/Vegetable Consumption Among Adult Females – Annual Cups per Capita

Annual Servings (Cups) per Capita	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	% Chg '09 vs. '04
ADULT FEMALES												
Cups of Vegetables Annually	422	421	418	415	419	417	408	403	406	408	406	-3%
Cups of Fruit Annually	233	234	233	230	231	231	223	221	228	232	236	2%
Total Fruit/Veg Cups Annually	656	655	651	645	650	648	631	624	634	640	642	-1%
FEMALES 18-34 YRS OLD												
Cups of Vegetables Annually	384	382	387	388	393	384	366	368	379	383	387	1%
Cups of Fruit Annually	192	191	198	204	213	208	194	190	201	221	227	9%
Total Fruit/Veg Cups Annually	576	573	585	593	606	591	561	558	579	604	614	4%
FEMALES 35-44 YRS OLD												
Cups of Vegetables Annually	416	412	408	410	413	402	391	391	402	411	410	2%
Cups of Fruit Annually	192	191	188	185	195	192	180	184	201	202	205	7%
Total Fruit/Veg Cups Annually	609	603	596	596	608	593	571	575	603	613	614	4%
FEMALES 45-54 YRS OLD												
Cups of Vegetables Annually	430	423	418	413	416	418	411	404	400	411	410	-2%
Cups of Fruit Annually	228	220	212	209	209	211	213	213	211	212	227	8%
Total Fruit/Veg Cups Annually	658	643	630	622	625	629	624	617	611	622	638	1%
FEMALES 55-64 YRS OLD												
Cups of Vegetables Annually	448	448	441	438	438	441	436	426	421	415	415	-6%
Cups of Fruit Annually	262	270	273	262	257	256	249	247	247	254	260	2%
Total Fruit/Veg Cups Annually	710	718	714	700	695	698	685	673	669	669	675	-3%
FEMALES 65+ YRS OLD												
Cups of Vegetables Annually	461	457	447	443	451	457	453	443	443	432	419	-8%
Cups of Fruit Annually	339	336	322	318	306	308	303	297	302	288	274	-11%
Total Fruit/Veg Cups Annually	800	794	769	760	757	765	755	740	745	720	693	-9%

Both males and females aged 45+ are consuming fewer vegetables over the past decade.

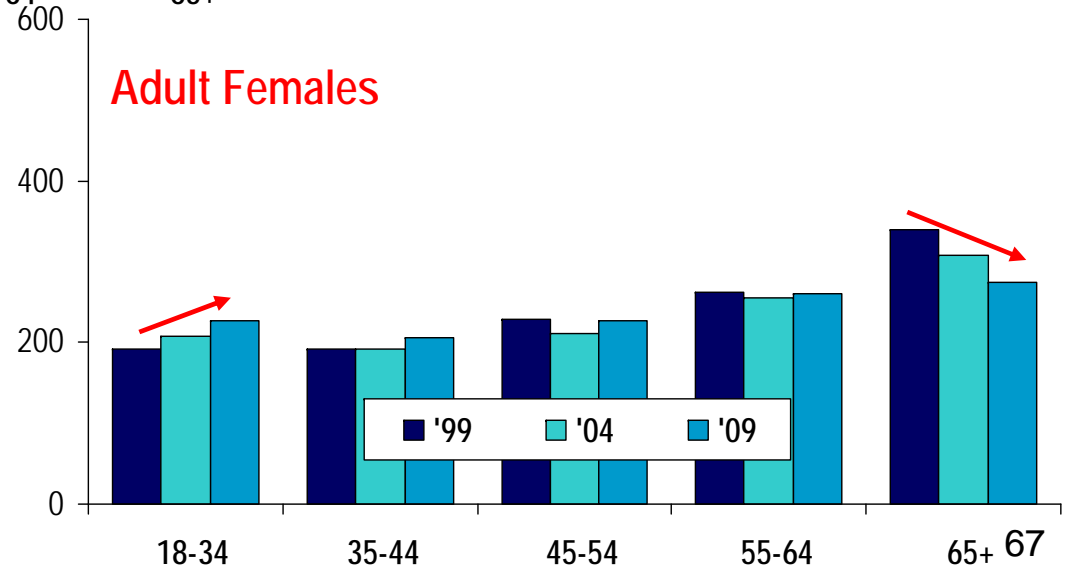
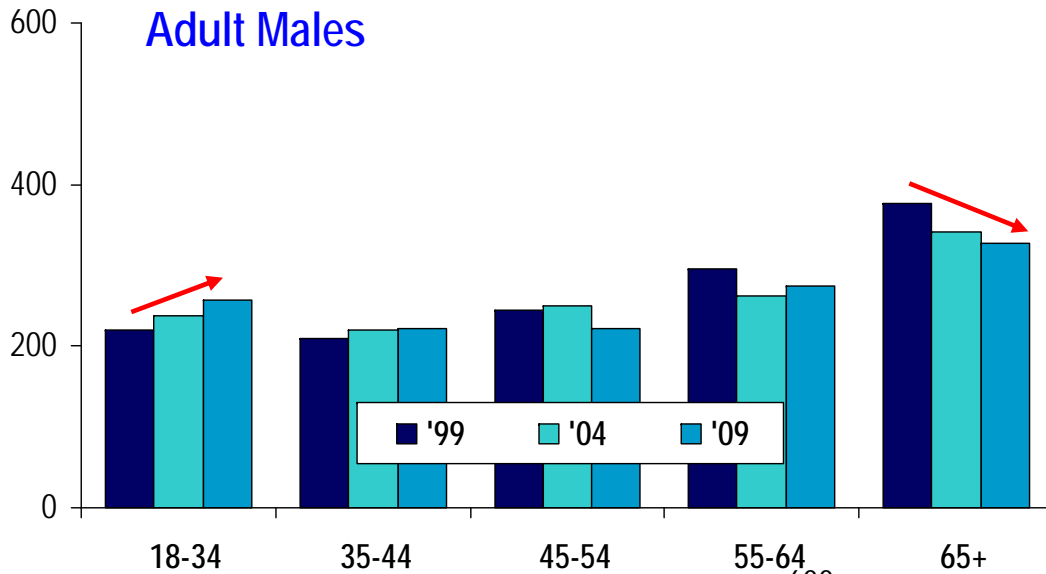


NPD/Nutrient Intake Database; 2 YE Feb; % change '09 vs. '04 (avg % change all ages = -2%)

Proprietary and Confidential

Males and females aged 18-34 are consuming more fruit in the past decade ... however, those aged 65+ are consuming less fruit over time.

Annual Fruit Cups per Capita

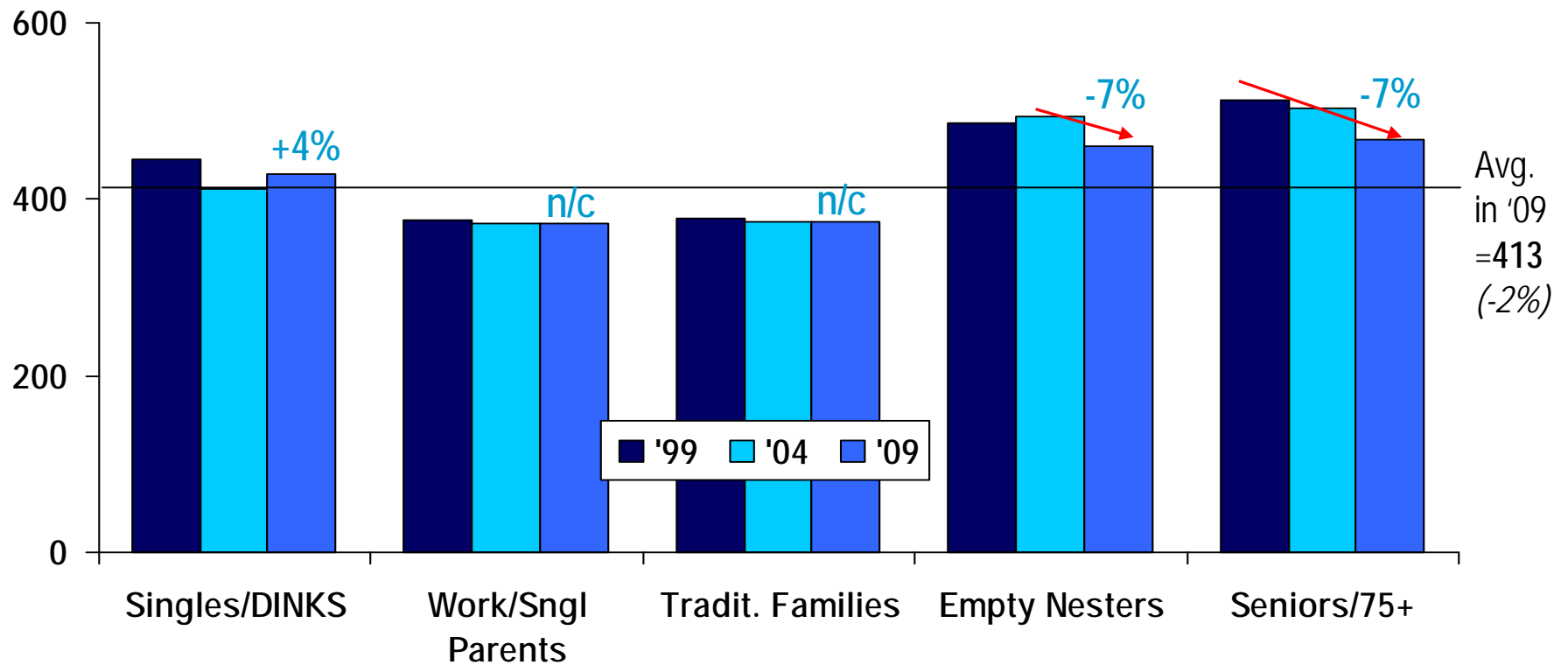


NPD/Nutrient Intake Database; 2 YE Feb; % change '09 vs. '04 (avg % change all ages = -2%)

Proprietary and Confidential

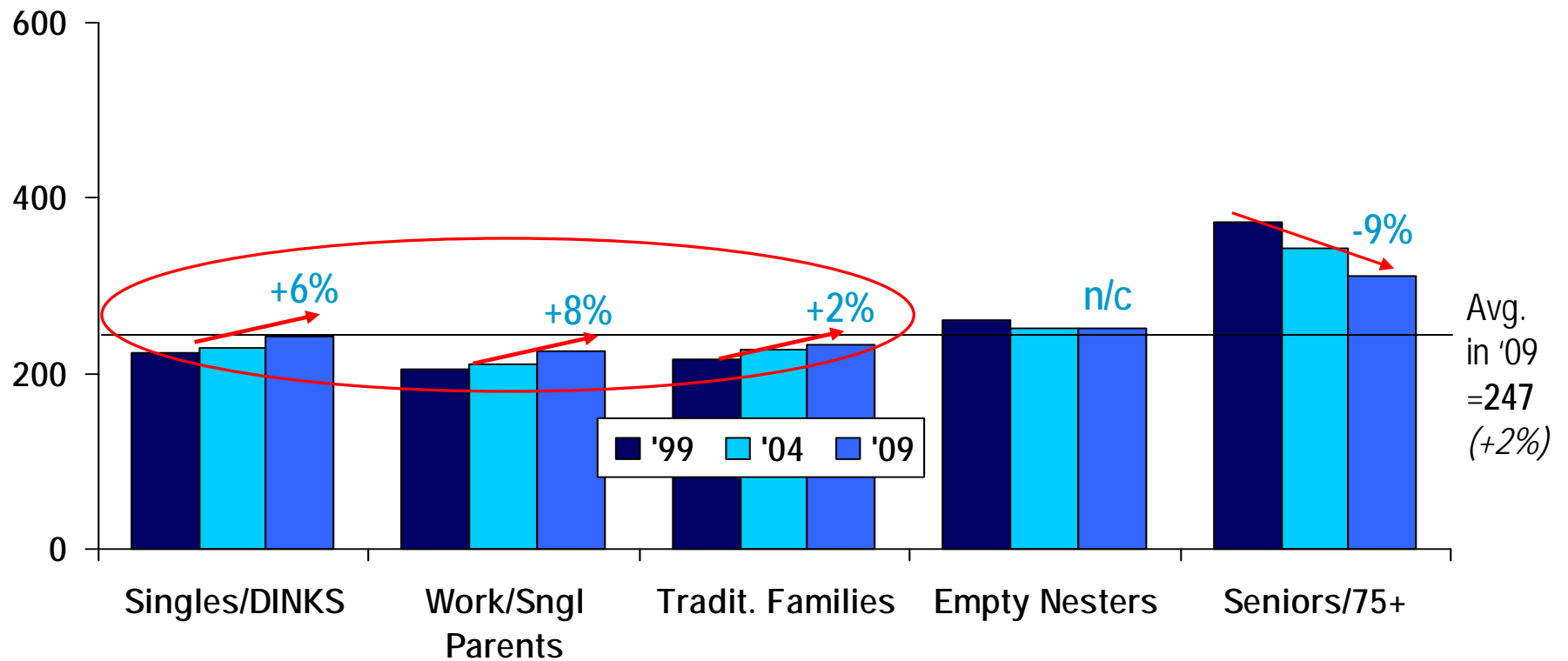
LifeCycle: Empty Nesters and Seniors/75+ are consuming fewer cups of vegetables vs. '04. Consumption has increased modestly among Singles/DINKS, however.

Annual Vegetable Cups per Capita by LifeCycle



LifeCycle: Singles/DINKS and families with kids have shown improvement in fruit consumption vs. '04. Fruit intake is down among Seniors/75+, however.

Annual Fruit Cups per Capita by LifeCycle



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- **Offices and affiliates in 36 countries**
- **Corporate Headquarters in Port Washington, NY**
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- **800+ employees**



Fashion



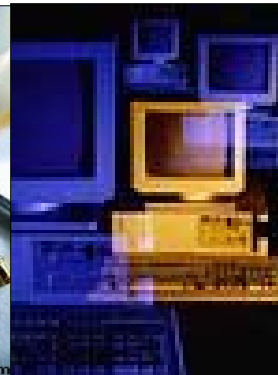
Food



Fun



Home



Tech

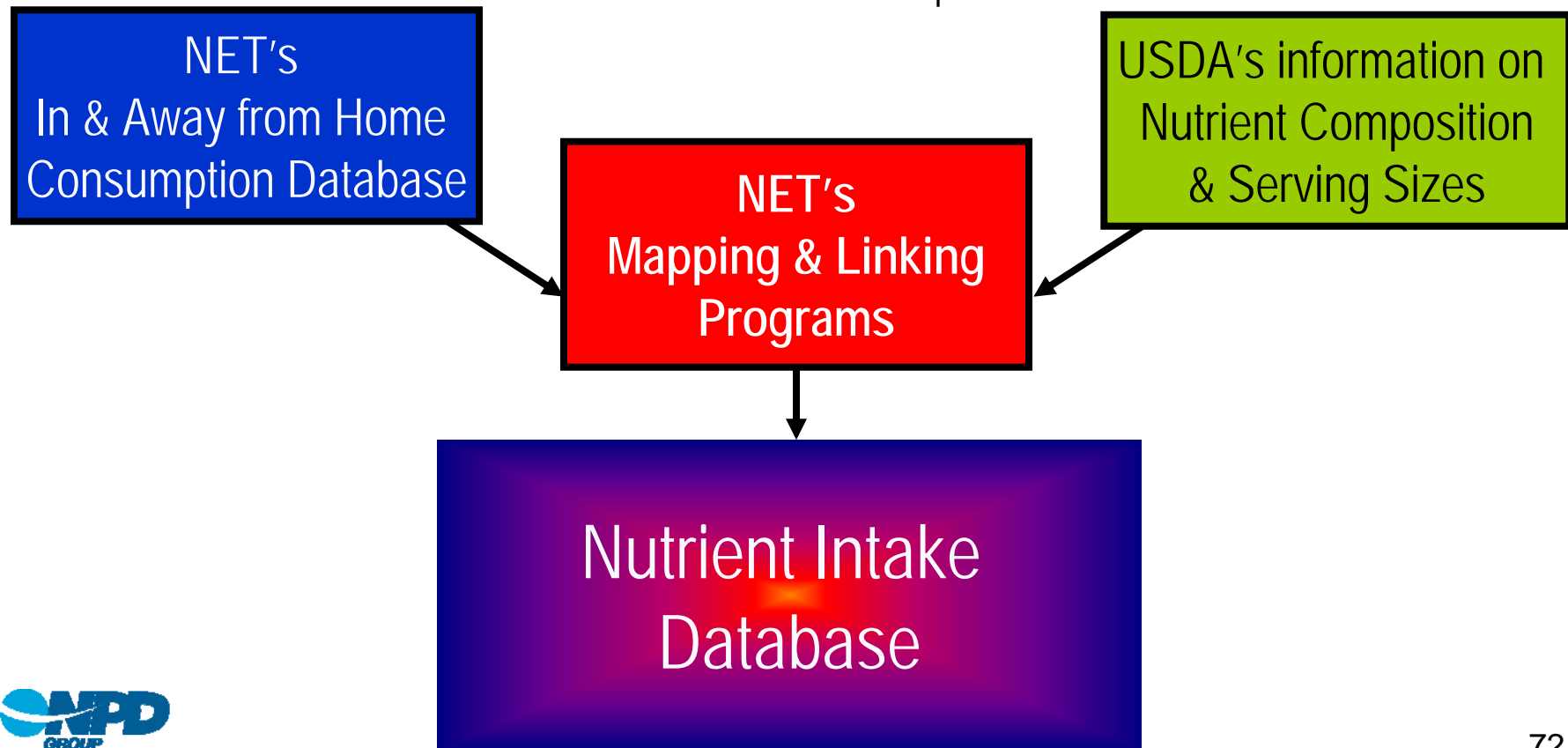


Automotive

- Panel reports all foods + beverages consumed in-home or away-from-home by all family members via a paper diary (excluding water, salt, and pepper).
- 2,000 households (~5000 individuals) report for a two-week period each year.
 - 500 single and 1500 family households.
- Balanced to the U.S. Census on key demographic variables:
 - HH Income, HH Size, Age/Education/Employment of Female Head
 - Also balanced within 4-way Census Region
 - Over-sample for hard to reach groups (i.e., young, single males)
- HH's are staggered throughout the year in order to represent all seasons.
- Approximately 40 HH's begin their two-week reporting period each Monday.
- Data measurement is an eating occasion ... does not attempt to measure actual volume.
- Data has been continuously collected since 1980 with no change in methodology.
- Also collect info on: diet status, height, weight, exercise, attitudes toward health/nutrition.

How was the Nutrient Intake database created?

Eating frequencies from NET's consumption database are merged with the USDA's nutrient composition and serving sizes via a mapping and linking program developed by The NPD Group.



- **NET's Nutrient Intake Database is an analytical tool that allows NET to translate what panelists tell us they ate into estimates of nutrient intake.**

1. A New Food Dictionary

NET created a dictionary of 2,400+ foods & beverages that are common to both NET and the USDA -- an extremely detailed, and labor intensive endeavor.

2. Nutrient Composition

The common dictionary allows NET to link eating frequencies from the NET database with the USDA's nutrient composition (nutrient values from the USDA Nutrient Database for Food Intake) for each of the 2,400+ foods & beverages.

3. Serving Sizes - Volumetrics

The common dictionary also allows NET to associate USDA's average serving sizes (from the Continuing Survey of Food Intake by Individuals - CSFII) with each of the 2,400+ foods & beverages. This allows us to volumetrically estimate actual food intake for the individuals in the NET database.

Nutrient Intake Database Methodology: Serving Sizes

Serving Sizes - Volumetrics - from Continuing Survey of Food Intake by Individuals - CSFII

NET's linking program assigns USDA average serving sizes based in grams to 2,400+ foods and beverages for 20 separate age and gender groups. The serving size takes into consideration how the food was used (e.g. base dish vs. ingredient use). The groups are as follows:

Children under 1	Males 13-17	Females 13-17
Children 1 year old	Males 18-24	Females 18-24
Children 2-5 years	Males 25-34	Females 25-34
Children 6-12 years	Males 35-44	Females 35-44
	Males 45-54	Females 45-54
	Males 55-64	Females 55-64
	Males 65-74	Females 65-74
	Males 75+	Females 75+

In other words, the avg. serving size for a particular food for kids 2-5 is different from the serving size for males 25-34. The avg. serving size for *base dish* milk is different from the serving size for *ingredient* milk.

*PBH wishes to thank Bayer Crop Science
for their support of this research*

