



STATE *of the* PLATE

2015 Study on America's
Consumption of Fruit & Vegetables



Produce for Better Health Foundation

Produce for Better Health Foundation (PBH) is a non-profit 501 (c) (3) consumer education foundation whose mission is to motivate Americans to eat more fruit and vegetables to improve public health. PBH partners with government agencies like CDC, non-profit organizations, health professionals, educators, and members of the fruit and vegetable industry to promote increased consumption of fruit and vegetables. We leverage private industry and public sector resources, influence policy makers, motivate key consumer influencers, and promote fruit and vegetables directly to consumers.



Fruit & Veggies—More Matters®

Managed by PBH, Fruit & Veggies—More Matters is the nation's largest public-private fruit and vegetable nutrition education initiative. The foundation of Fruit & Veggies—More Matters is a brand logo and messaging designed to motivate Americans to eat more fruit and vegetables. Fruit & Veggies—More Matters materials and messages are widely featured in print, on websites, and on social media platforms like Facebook, Twitter, Pinterest, Instagram, YouTube, and blogs. Since its inception in 2007, it is estimated that the Fruit & Veggies—More Matters logo has been seen an average of 108 times by every American.



Table of Contents

I. Executive Summary	5.
A. Fruit and Vegetable Consumption Trends	5.
Consumption Levels Mixed	5.
Losses Tied to Key Behaviors	5.
Fruit Benefits from Breakfast and Snacking	6.
B. Shifting Demographics of Fruit and Vegetable Consumers	6.
Younger Consumers Eating More	6.
While Still Highest, Older Consumers Trending Down	6.
C. The Future of Fruit and Vegetable Consumption	7.
4% Growth Expected, Could be Higher	7.
Expected Growth for Fruit Excluding Juice and Fresh Vegetables	7.
D. Recommendations	8.
Become Relevant Again to Older Consumers	8.
Extend Partnerships	8.
Remember Pricing Strengths	8.
Advance Away-From-Home Dining Opportunities	8.
II. Current Fruit and Vegetable Consumption Trend	9.
A. Consumption Levels	9.
B. Various Forms	10.
C. In-Home vs. Away-From-Home	12.
D. Top Consumed Fruit and Vegetables	14.
E. How and When Consumed	15.
1. Vegetables	16.
2. Fruit	18.
3. Fruit Juice	18.
III. Demographics of Fruit and Vegetable Consumers	21.
A. Age	21.
1. All Ages, 2014	21.
2. Children Over Time	22.
3. Ages 18-44 Over Time	24.
4. Ages 45+ Over Time	24.
B. Region	26.
C. Gender	27.
1. Males	27.
2. Females	27.
D. Other Demographics	28.

IV. Consumption by Lifecycle and Eater Segments	30.
A. Life Cycle	30.
B. Eater Segments	33.
V. The Future of Fruit and Vegetable Consumption	36.
A. Generational Effect	36.
B. Current and Forecasted Consumption: Total Fruit and Total Vegetable	39.
1. Current	39.
2. Forecasted	40.
C. Current and Forecasted Consumption: Fresh Vegetables and Fruit Excluding Juice	40.
1. Fresh Vegetables	40.
2. Fruit Excluding Fruit Juice	42.
VI. What to Focus on Next	44.
A. Become Relevant Again to Older Consumers	44.
B. Extend Partnerships	46.
1. Core Partners when Fruit and Vegetables are Consumed “As Is”	46.
2. Core Partners when Fruit and Vegetables are Consumed as an Ingredient	46.
3. Expand Efforts with New Partners	46.
C. Remember Pricing Strengths	48.
D. Advance Away-From-Home Opportunities	49.
Appendix A: Methodology and Definitions	50.
Appendix B: Fruit and Vegetable Annual Eatings Per Capita for Various Age Groups	53.
A. Total Vegetables	53.
B. Total Fruit	54.
C. Fruit Juice	55.
D. Fresh Vegetables (In-Home Only)	56.
Appendix C: Chart Index	57.
References	59.

I. Executive Summary

PBH commissioned consumer research through The NPD Group to use its National Eating Trends database for the year ending May 2014 to examine current consumption of fruit and vegetables in the United States, including consumption levels by age, gender, life cycle, health segmentation, meal occasion, and form. The research also estimates trends in future consumption and identifies items that should be considered moving forward to help increase consumption. Key findings include:

Fruit and Vegetable Consumption Trends

CONSUMPTION LEVELS MIXED

After a brief rise thru 2009, per capita fruit and vegetable consumption has declined 7% over the past 5 years, this has been driven primarily by decreased consumption of vegetables (-7%) and fruit juice (-14%). If fruit juice is excluded from the overall fruit total, however, there is only a 2% decrease in fruit consumption over the past 5 years. Fruit has seen growth among certain subsets of the population, specifically children of all ages and adults ages 18-44.

In addition, store fresh fruit has grown 4% over the past 5 years. Also, store fresh vegetables, while flat, have grown among PBH's core target of children (10%) and young adults over the past 5 years. Canned has lost favor during this same time period for both fruit and vegetables (-13%). Homegrown is down as well, particularly for vegetables, as is dried fruit.

LOSSES TIED TO KEY BEHAVIORS

Overall the fruit and vegetable consumption losses are tied to two big behaviors: a decline in the dinner side dish for vegetables, and reduced consumption of fruit juice at breakfast. Staples such as orange juice, lettuce/salad, corn, and green beans have led the declines. Fewer side dish salads also reduces the use of other salad related vegetables such as tomatoes and cucumbers.

Vegetables have long been affected by shifts occurring at the dinner table. Americans have been looking for convenience at the dinner occasion and one way to make things more convenient is to include fewer side dishes in their dinner meal and to include them less often. They are also using fewer ingredients to prepare meals. This, along with steady growth for convenient options like ready-to-eat or frozen main dishes, has hurt vegetable consumption.



The decrease in 100% fruit juice consumption could be attributed to any variety of factors, including ongoing interest in consuming low-carbohydrate foods, which peaked a decade ago, and the ever-increasing competitive set of beverages available to consumers that now include flavored water. As one of its key MyPlate messages, USDA also encourages decreased consumption of ‘sugar-sweetened’ beverages, and consumers often unwittingly include 100% juice in this mix.

Despite losses, however, fruit and vegetables are still a cornerstone of the American diet. In fact, vegetables are 4 of the top 5 side dishes at the in-home dinner meal and fruit is second only to candy as a snack.

FRUIT BENEFITS FROM BREAKFAST AND SNACKING

Fruit has enjoyed gains in consumption at breakfast. This is likely because breakfast is a more health related meal and fruit is versatile. For example, berries and bananas have gained favor throughout the day, probably due to their versatility for consumption “as is” and as a topping for cereal or yogurt, or as an ingredient to a smoothie or hot cereal. Fruit also is one of the top two snacks consumed and is growing, especially at the morning snack occasion due in part to American’s greater acceptance of snacking.

Children of all ages are consuming more fruit “as is” and with increases at all meal occasions.



Shifting Demographics of Fruit and Vegetable Consumers

YOUNGER CONSUMERS EATING MORE

While almost all age and life stage groups are consuming fewer vegetables (teens and adult males ages 18-34 are an exception) and less *fruit juice*, some segments are consuming more *fruit* compared to 2009. Specifically:

- Children of all ages are consuming more fruit “as is” and with increases at all meal occasions. Berries, bananas, apples and oranges are driving this increase.
- Adults ages 18-44 are eating more fruit at breakfast, particularly berries and bananas.
- Working Women households and Traditional Families with stay at home moms have shown sizeable increases in fruit consumption over the past 5 years.
- African Americans, Hispanics, and those in the West North Central, Mountain, and Pacific are eating more fruit ([see Appendix A for US regions](#)), as well as households with annual incomes of either \$20,000-\$40,000 or of \$60,000 or more.

WHILE STILL HIGHEST, OLDER CONSUMERS TRENDING DOWN

The overall losses seen in fruit and vegetable consumption have been driven by double digit declines among adults ages 45 and older, and particularly those ages 65 and older, who are the highest fruit and vegetable consumers. In particular:

- Losses for fruit among this population have been driven by: decreases in all main meals, particularly dinner and lunch; fewer consuming them “as is”; and fewer including fruit as a dessert. Losses are driven by bananas and a variety of other fruit.
- Sizable declines for vegetables (1 fewer eating a week per capita versus just 5 years ago) have been driven by lower side dish “as is” use at in-home dinner meals. Lettuce and salad related vegetables, like tomatoes, have been hit the hardest, as have onions, potatoes, and mixed vegetables. Consumption at lunch has declined as well, though vegetables at breakfast have increased slightly.

One possible reason contributing to the losses among older core consumers (ages 50+) is that their dinner meal has changed. American’s are preparing ‘center of plate’ protein meals *less* often. Instead, consumers are opting for more one dish meals like pizza or sandwiches. This then impacts the use of side dishes, of which vegetables are the largest. This shift, combined with the overall long term trend toward simplifying the dinner meal (fewer sides and desserts), has driven declines for older core consumers.

The Future of Fruit and Vegetable Consumption

4% GROWTH EXPECTED, COULD BE HIGHER

Consumption of total fruit and total vegetables are expected to grow roughly **4% respectively** in the next 5 years, or roughly the same rate as population growth, resulting in relatively flat per capita consumption.

Fruit and vegetables, as a category is expected to show a much stronger benefit from the aging of the population given the higher consumption rates among older consumers and their higher levels of concern about health and greater incidence of medical conditions. Fruit and vegetables should be poised to flourish rather than just keep pace with population growth. If current food preparation and consumption behaviors among consumers ages 50+, are not modified or changed, the full growth potential of fruit and vegetables will likely not be realized during the coming years. This is due to the negative *generational* (cohort) effect for both fruit and vegetables among older consumers, which means that 50+ year olds today are consuming fruit and vegetables less often than their counterparts ten years ago.

Fruit consumption, excluding juice, is expected to grow by 9% over the next 5 years, and fresh vegetables are expected to grow by 8% overall.

Still, there is a positive generational effect for both fruit and vegetables for those under the age of 40, which bodes well for the long term future of fruit and vegetables. This group is consuming *more* fruit and vegetables than their counterparts a decade ago. Overall, the slight positive *aging* effect (changing life-stages), is expected to offset the slightly negative *trend* effect (changing environment), leaving population growth as the main factor influencing the 4% anticipated growth in the next 5 years for fruit and vegetables.

9% GROWTH FOR FRUIT EXCLUDING JUICE AND 8% GROWTH FOR FRESH VEGETABLES EXPECTED

Fruit consumption, excluding juice, is expected to grow by 9% over the next 5 years, and *fresh* vegetables are expected to grow by 8% overall. When subtracting the 4% anticipated growth due to the expansion of the total population, a 5% *per capita* growth in fruit (excluding juice) and a 4% *per capita* growth in fresh vegetables is expected.

Consumption of total fruit and total vegetables are expected to grow roughly 4% respectively in the next 5 years, or roughly the same rate as population growth, resulting in relatively flat per capita consumption.



Recommendations

BECOME RELEVANT AGAIN TO OLDER CONSUMERS

While the focus on moms and children has shown positive results in consumption, fruit and vegetable eatings among older consumers (ages 50+) has declined significantly over the past 5 years. It's concerning that the highest decline in fruit and vegetable consumption has occurred among older consumers who are focused the most on their health. The health benefits of fruit and vegetables should be a sweet spot with this group, but there appear to be some needs that fruit and vegetables are not meeting in terms of their health and daily lives. The older consumers may have also found ways other than consuming fruit and vegetables to address health. Additional qualitative or ethnographic research is needed to truly understand the disconnect and what's driving the severe losses for this older group, recognizing that fruit and vegetables are fighting bigger over-arching needs and competing priorities for health, such as convenience, taste, and price. The drive to simplify meals over the past 30 years has resulted in a significant and negative impact on the inclusion of vegetables at the dinner meal.

EXTEND PARTNERSHIPS

The consumption of fruit and vegetables associated with core foods is declining. However, this decline affords fruit and vegetable marketers an opportunity to partner with companies who prepare and sell the core food groups most often associated with fruit and vegetables such as beef and poultry protein entrées, salads, and Italian dishes. The creation of partnerships between fruit and vegetable organizations and companies representing complementary foods, that have shown solid growth over the last decade, is another strategy to increase the consumption of fruit and vegetables. Yogurt, for example, is a natural pairing for fruit. Vegetables and some fruit work well on pizza. A variety of vegetables can be included on poultry sandwiches and in Mexican food. All of these complementary food groups are also among the fastest growing food items. In retail, there has been a lot of focus on the perimeter of the store, but the center of the store is important and fruit and vegetables can help the center of the store partners provide better meals for consumers.

REMEMBER PRICING STRENGTHS

Consumers often focus on the price of the fruit or vegetable, but forget that relative to other alternatives, fruit and vegetables are a great alternative for those watching their food budget. Since most fruit and vegetables are consumed in the home, it

is important to remember that the price of a home prepared meal is one-third the cost of the average meal away from home. Food marketers and educators can encourage price sensitive consumers to eat more meals at home by showing how the purchase of ready-made meals, and other convenience items from the supermarket, are less expensive than eating out.



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ADVANCE AWAY-FROM-HOME DINING OPPORTUNITIES

While food purchased from grocery stores is the bulk of all fruit and vegetables consumed, convenience continues to drive away-from-home eating. Restaurants are an ideal and significant opportunity to help with the growth of fruit and vegetable sales, especially at fast food outlets where a large number of the current population regularly frequent. Also, older adults are eating more away from home, offering an opportunity to reach this population through restaurant venues.

II. Current Fruit and Vegetable Consumption Trends

Consumers need to increase their intake of fruit and vegetables, and additional efforts need to be focused on achieving this change in behavior. Understanding current and past consumption trends will help in estimating future consumption. This section identifies consumption levels by form, in-home versus away-from-home dining, meal occasion, and usage.

Consumption Levels

After a brief rise in per capita consumption of fruit and vegetables between 2004 and 2009, overall consumption has declined 7% over the past 5 years, including both in-home and away-from-home foods. Fruit consumption has decreased by 6% and vegetables by 7% (**Chart 1**). However, fruit's losses have been driven primarily by juice. Fruit juice consumption is down 14% over the past 5 years and 21% over the last 10 years. The per capita consumption of whole fruit — whether fresh, canned, frozen, or dried — has remained fairly stable during this time: down 2% over the past 5 years, but still up 7% over the past 10 years (**Chart 2**).

DEFINITIONS

Eatings

Represents frequency of consumption (does *not* measure volume consumed).

Annual Eatings Per Capita (AEPCC)

The number of times the “average” person consumes a product annually (across users and non-users).

Total Fruit

Includes all fruit including fresh, frozen, canned/jarred, homegrown, dried, and 100% juice.

Total Vegetables

Includes all vegetables, potatoes, vegetable juice, but excludes French Fries, Hash Browns, Tots, and Fried potatoes.

Store Fresh

Any fresh fruit or vegetable that is not home grown, which includes those purchased from the grocery store, farmer's market, or other retail outlet.

Index

An Index > 120 represents above average tendencies; Index < 80 represents below average tendencies.

Expanded definitions are found in Appendix A, page 51.

Chart 1.
Consumption
of Fruit &
Vegetables,
2004-2014

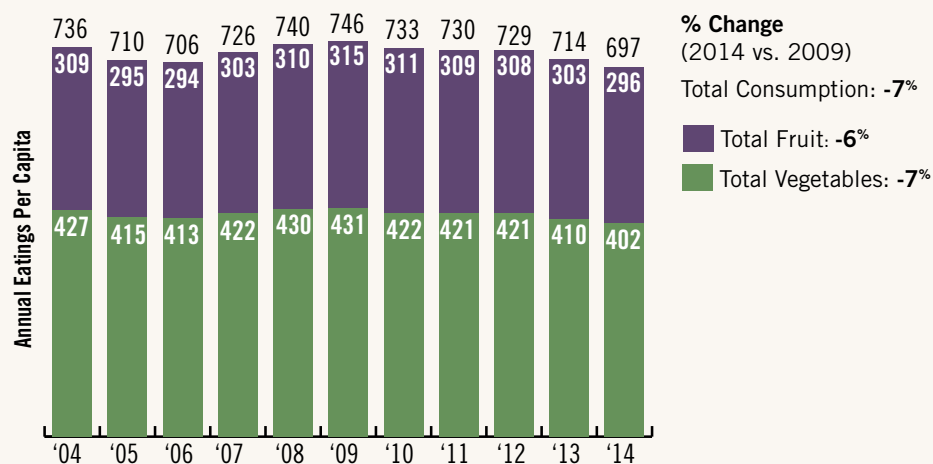
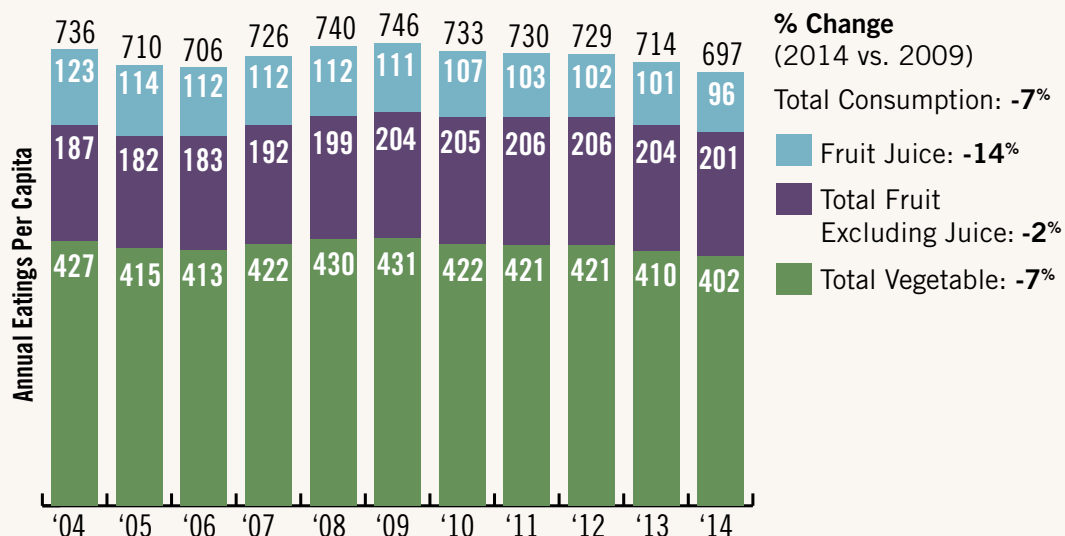


Chart 2.
Consumption
of Fruit Juice,
Whole Fruit,
& Vegetables,
2004-2014

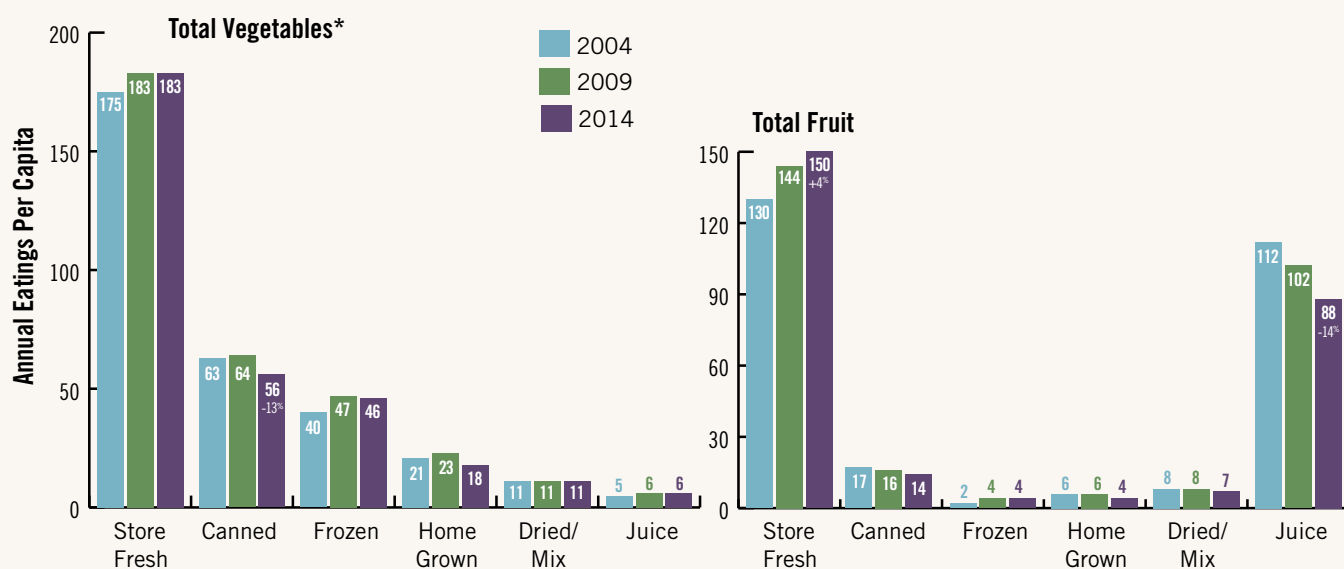


Various Forms

When comparing consumption of various forms of fruit and vegetables over time, store fresh is the only form to show growth over the last 10 years for both fruit and vegetables (**Charts 3 and 4**). Canned and homegrown are down for both fruit and vegetables since 2009. Fruit juice has experienced the

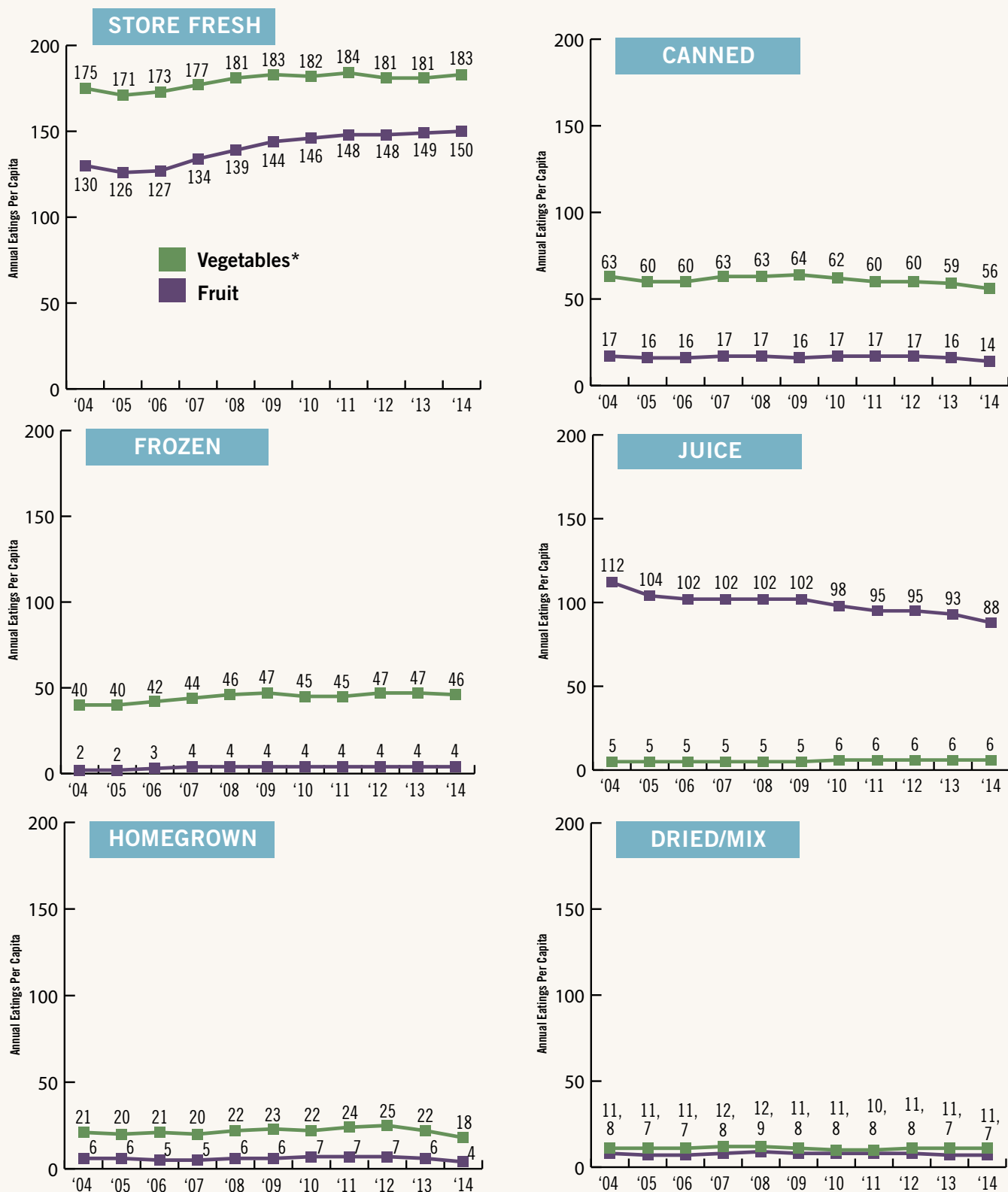
greatest decline. Note in Charts 3 and 4, however, only in-home consumption records can be referenced. Survey respondents can record whether fresh, frozen, canned, dried, pureed, or juiced fruit or vegetables were used for in-home meal preparation. Consumption by form is more difficult to discern when food is consumed away-from-home. Fruit and vegetables consumed away-from-home are therefore not included in Charts 3 and 4.

Chart 3. In-Home Consumption of Various Forms of Fruit & Vegetables, 2004-2014, Summary



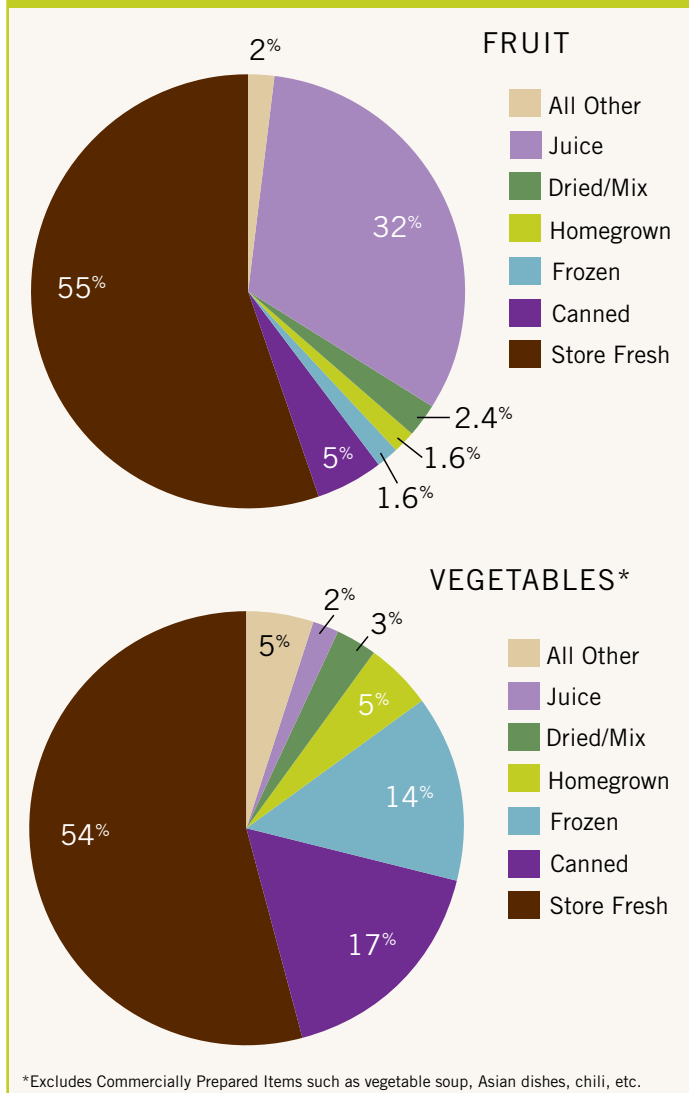
*Excludes Commercially Prepared Items such as vegetable soup, Asian dishes, chili, etc.

Chart 4. In-Home Consumption of Various Forms of Fruit & Vegetables, 2004-2014, Detailed



*Excludes Commercially Prepared Items such as vegetable soup, Asian dishes, chili, etc.

Chart 5. Percentage of In-home Consumption of Various Forms of Fruit & Vegetables, 2014



Restaurants only account for 10% of all vegetables consumed, and only 2% of fruit and 3% of fruit juice.

Store fresh accounts for over half of all vegetables and fruit consumed (**Chart 5**). Canned and frozen vegetables account for the largest share of the remaining vegetable eatings. Juice represents one-third (32%) of all fruit eatings in 2014, down from 35% in 2009, and 40% in 2004.

In-Home vs. Away-From-Home

Most foods are prepared at home (**Chart 6**): 80% from home, 12% from restaurants, and 8% from all other away-from-home locations, including worksites and schools. Even more than other foods prepared at home, 82% of vegetables and 90% of fruit are sourced from or prepared at home. Sourced from home includes foods that are purchased from a store and then consumed elsewhere, like fruit or bottled juices packed in lunches or taken as a snack.

Restaurants only account for 10% of all vegetables consumed, and only 2% of fruit and 3% of fruit juice. One reason for this gap is the relatively low consumption of fruit and vegetables at fast food (e.g. McDonald's, Subway) and coffee shop (e.g. Starbucks, Panera Bread) establishments. While nearly two-thirds of individuals visit these establishments within a 2-week window, only 22% of individuals report eating fruit or vegetables (excluding French fries) from fast food and only 27% from coffee shops (**Chart 7**). Comparatively, 66-75% of the eating occasions at higher priced restaurants (e.g. Ruby Tuesday, Red Lobster) and schools include fruit or vegetables. Because so many people eat at fast food establishments and coffee shops, these operators have an opportunity to make a very large impact on fruit and vegetable consumption by including more fruit and vegetables in meals and a la carte offerings. Indeed, in the past 10 years, fast food establishments have been offering more salads, fruit with oatmeal, and fruit as a default in children's meals.

Regardless of where it was sourced, fruit and vegetable consumption has been on the decline since 2009, especially for home prepared vegetables (**Chart 8**). While not shown in Chart 8, in-home fruit juice is consumed 88 times a year, down 14 annual eatings per capita since 2009 (14%). The average person also 'carries' fruit from home 21 times per year, down 2 times since 2009, and 11 times per year for vegetables, down 1 time since 2009.

Even more than other foods prepared at home, 82% of vegetables and 90% of fruit are sourced from or prepared at home.

Chart 6. Where Fruit & Vegetables are Sourced, 2014

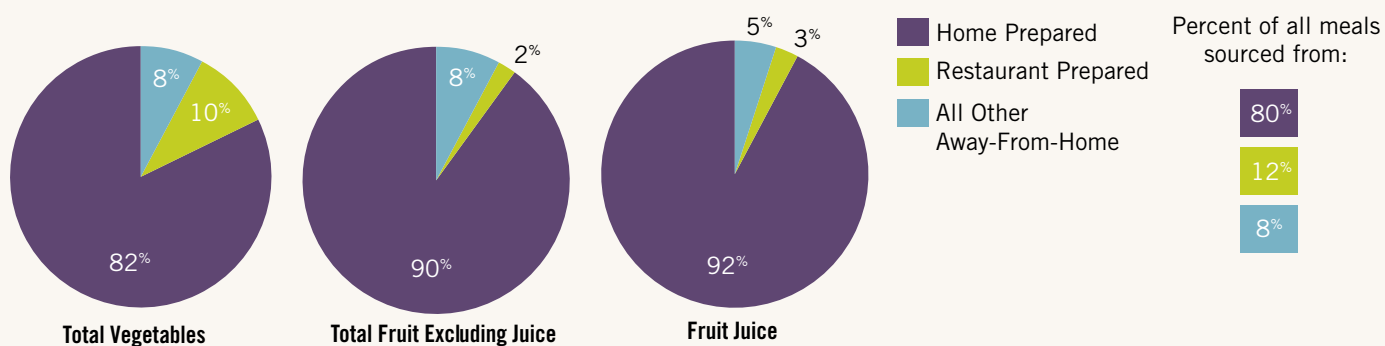


Chart 7.
Away-From-Home
Sources of Fruit
& Vegetables,
2014

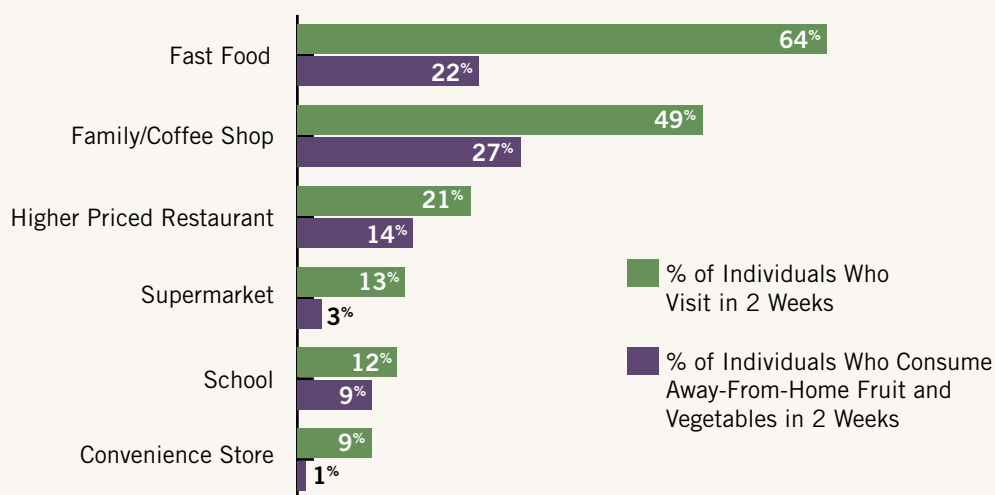
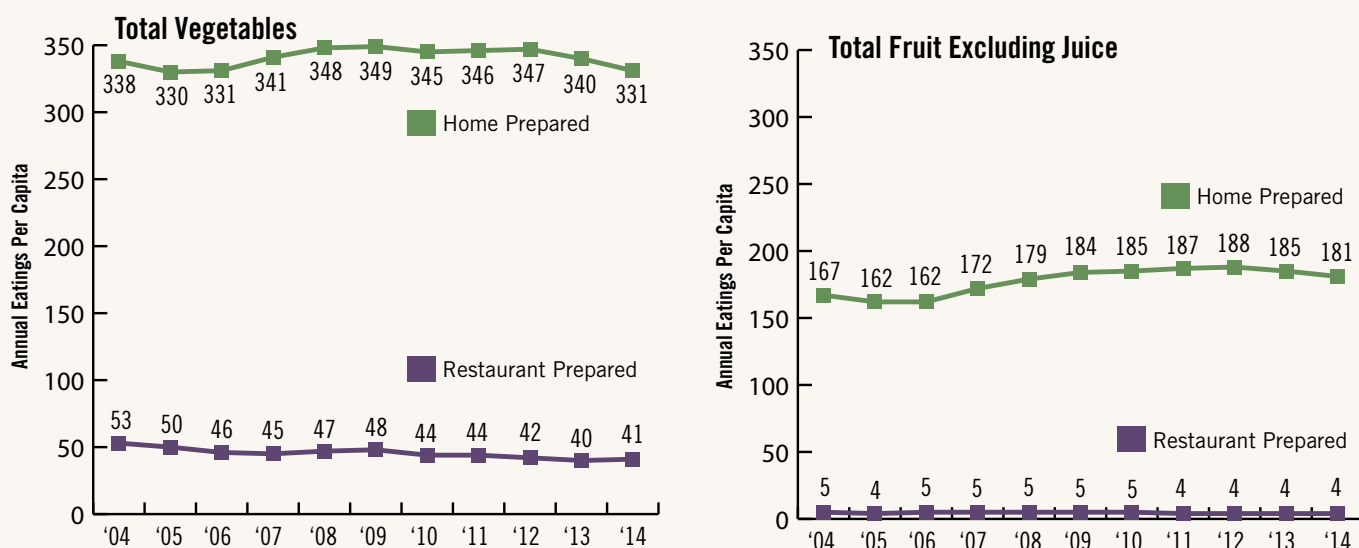


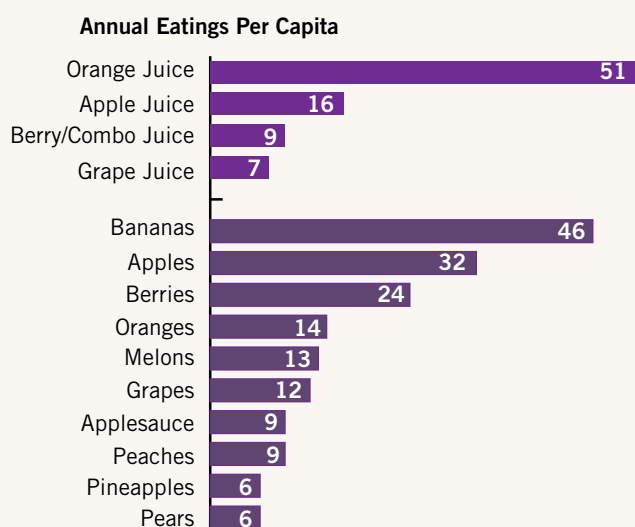
Chart 8. Trend of In-Home vs. Away-From-Home Sourced Fruit & Vegetables



Top Consumed Fruit and Vegetables

Orange juice is by far the top juice consumed, followed by apple juice (Chart 9). Bananas, apples, and berries top the list of the most consumed fruit. Potatoes and lettuce are by far the top consumed vegetables (Chart 10). Staple side dishes like vegetable salads, green beans, and corn are just a few of the items that are causing the vegetable category to soften; however, carrots, spinach, avocado, and kale have posted small gains.

Chart 9. Top Fruit & Fruit Products Consumed, 2014



Includes fruit eaten "as is" and used as an additive/ingredient in other dishes.

Changes in Fruit & Vegetable Consumption, 2014 vs. 2009

FRUIT — Annual eatings per capita

▲ Growing

+4 Berries
+2 Bananas

▼ Declining

-6 Orange Juice
-2 Apple Juice
-2 Berry Juice

Most other fruit is fairly stable

VEGETABLES — Annual eatings per capita

▲ Growing

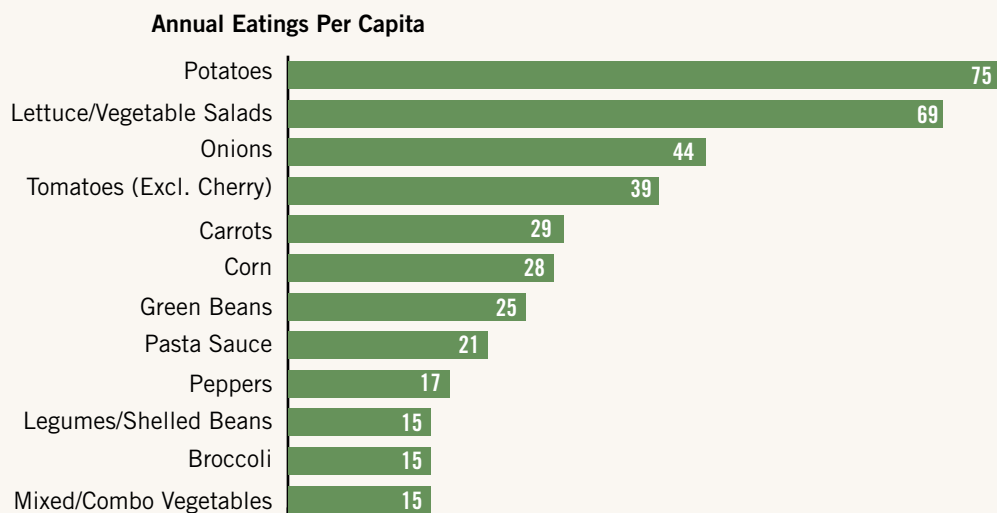
+1 Carrots
+1 Spinach
+1 Avocado
+1 Kale

▼ Declining

-9 Lettuce/Salad
-4 Green Beans
-4 Corn
-3 Onions
-3 Mixed vegetables

Most other vegetables are fairly stable

Chart 10. Top Vegetable & Vegetable Products Consumed, 2014



Includes vegetables eaten "as is" and used as an additive/ingredient in other dishes.

How and When Consumed

In 2014, 83% of fruit, excluding juice, was eaten “as is,” and virtually all fruit juice (98%) was consumed “as is” (in a glass). Vegetables were slightly more versatile in how they were used: One-third were used as an additive (added at the table) or ingredient (added when prepared by the meal preparer) to another dish, and 65% consumed “as is” (**Chart 11**). Over the past 10 years, fruit eaten “as is” has remained fairly stable, as has fruit use as an additive or ingredient (**Chart 12**). Vegetables, however, have declined in use “as is” with some softening as an ingredient as well.

DEFINITIONS

Additive

Added to a dish post-preparation (i.e., berries added to ready-to-eat cereal or parmesan added to a pasta dish).

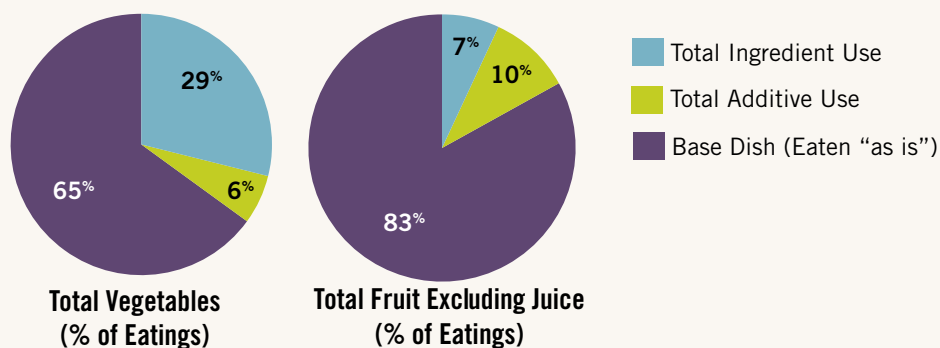
Ingredient

Added during preparation (i.e., the various vegetables, meat, pasta, and seasonings used to make a casserole).

Base Dish

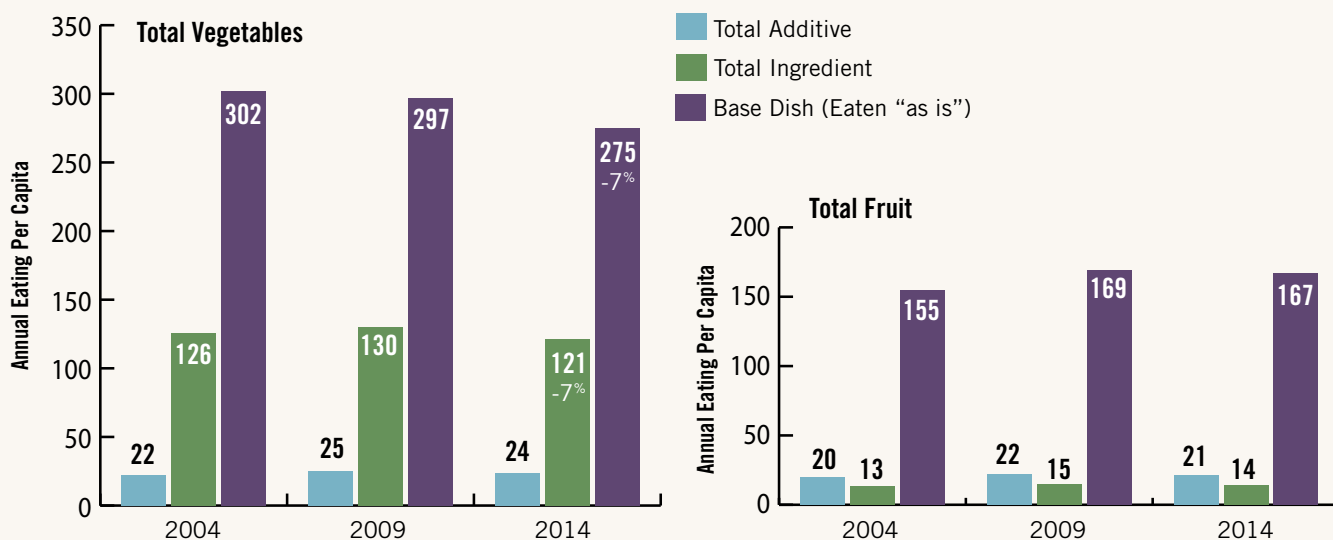
Final dish consumed “as is” which includes all additive and ingredient records (i.e., the casserole dish mentioned above, a vegetable eaten “as is” as a side dish at a meal, an apple, or a glass of juice).

Chart 11.
Base Dish
vs. Additive/
Ingredient Use,
2014



98% of Fruit Juice is consumed “as is” (in a glass).

Chart 12. Base Dish vs. Additive/Ingredient Use, 2004-2014



Fruit Juice in a glass is consumed about 94 times a year, down 16 AEPCs since 2009.

Chart 13. Most Popular Side Dishes at In-home Dinners, 2014

% of Dinners Including Item as a Side Dish (all forms)

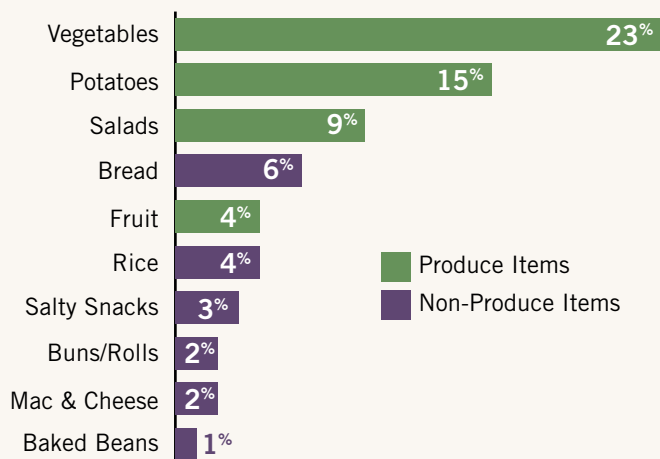


Chart 14. Percent of In-home Dinners Including At Least One Side Dish

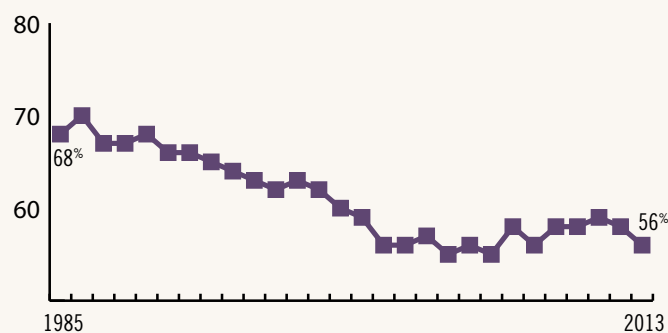
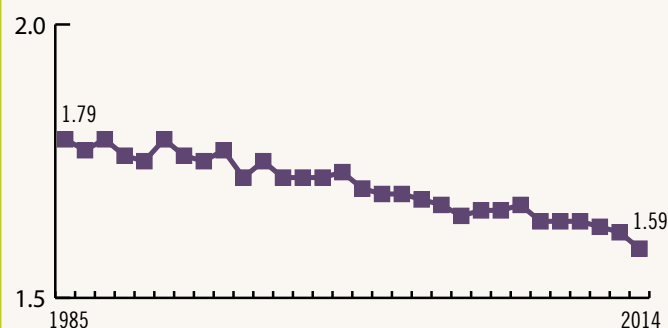


Chart 15. Number of Side Dishes Served When a Side Dish is Present at Dinner



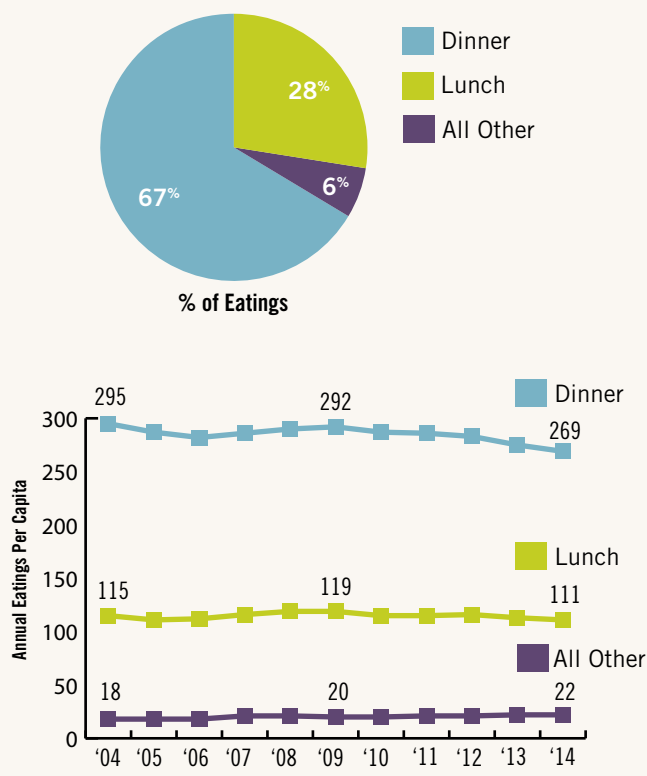
VEGETABLES

Vegetable side dishes are a frequent part of the dinner meal, representing the top side dishes (**Chart 13**), yet consumption has declined over the past 5 years. The percent of dinners including a side dish has softened over time (**Chart 14**), and the number of side dishes served at the in-home dinner meal is at an all-time low (**Chart 15**). Dinner is the most important meal occasion for vegetables, but has suffered the greatest losses in the past 5 years (**Chart 16**). Specifically, the top vegetable side dishes of leaf salads, corn and green beans have decreased since 2009 by 5%, 2%, and 2% respectively (**Chart 17**). Small gains have been noted for French fries (3%), baked potatoes (1%), broccoli (2%), and carrots (2%). Slight declines in vegetable consumption have also been noted for the lunch meal (**Chart 16**).

Half of all vegetables are eaten as a side dish, but have declined (**Chart 18**) 5% in the past 5 years with 10 fewer annual eatings per capita. Consumption and use of vegetables as an ingredient in a casserole or mixed dish has increased slightly, by 3 more annual eatings per capita. Vegetables eaten “as is” as the main dish (e.g. salad, roasted vegetables) has also softened. The decline is driven in part by consumers’ need to prepare and serve the complete dinner meal as quickly and conveniently as possible. These needs have contributed to the increased use of slow cookers, and the decrease of preparing a separate side dish. Another contributing factor is consumers’ tendency to be less focused on health in the evening compared to the morning.

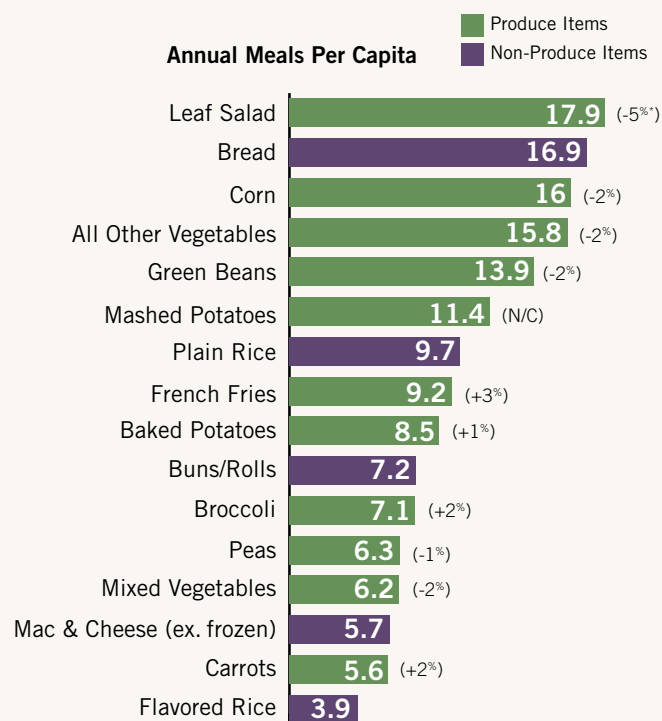


Chart 16. Total Vegetables: Daypart Consumption



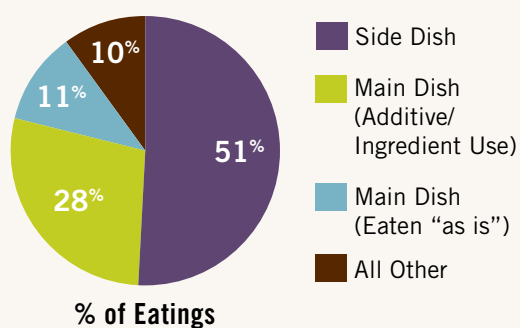
All Other = Breakfast and Snack Occasions

Chart 17. Top Specific In-home Dinner Side Dishes

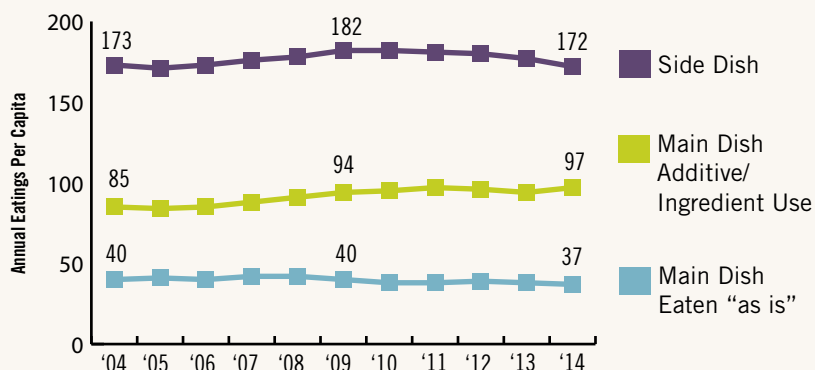


*Based on Compounded Annual Growth, 2014 vs. 2009.

Chart 18. In-home Vegetables: How Used at Meal



All Other = Appetizer, Dessert, Beverage, Carried/Snacks



FRUIT

The data for fruit is much more positive over the past 5 years. Fruit, excluding juice, is consumed throughout the day at all eating occasions (**Chart 19**). Fruit consumption during breakfast and snack, in particular the morning snack, are up over 2009, but these gains are offset by losses at both lunch and dinner. Additionally, fruit consumed either as a side or main dish has grown (**Chart 20**), while fruit eaten as a dessert has lost favor (the latter driven by older adults).

Consumers' health motivations are most prevalent in the morning (**Chart 21**), fueling fruit's growth at breakfast and morning snack. According to The NPD Group, 72% of respondents in 1990 said they try to avoid snacking entirely, compared to only 39% in 2014. Fruit is the preferred snack food, second only to candy (**Chart 22**), and possesses a strong health halo in the minds of consumers. In recent years, these "better-for-you" types of snack foods have gained popularity with the average consumer (**Chart 23**). Combined, these factors place the fruit category in a potentially favorable growth position over the next few years.

FRUIT JUICE

While fruit juice is primarily consumed at breakfast (**Chart 24**), consumption during this eating occasion has also seen the biggest decrease over time. The overall decrease in 100% fruit juice consumption could be attributed to any variety of factors, including ongoing interest in consuming low-carbohydrate foods, which peaked a decade ago, and the ever-increasing competitive set of beverages available to consumers, that now includes flavored water. Additionally, USDA, as one of its key MyPlate messages, encourages the decreased consumption of sugar-sweetened beverages, yet consumers may be unwittingly including 100% juice. A final factor may be the 2010 Dietary Guidelines which emphasize that, due to the provided fiber, most fruit should be consumed as whole fruit (fresh, canned, frozen, dried) rather than as juice.¹

Interestingly, several studies show 100% fruit juice drinkers have higher intakes of whole fruit compared to non-fruit juice drinkers, suggesting that fruit juice is complementary and not competitive with fruit.²⁻⁸ Research also shows fruit juice drinkers

Chart 19. Total Fruit Excluding Juice: Daypart Consumption

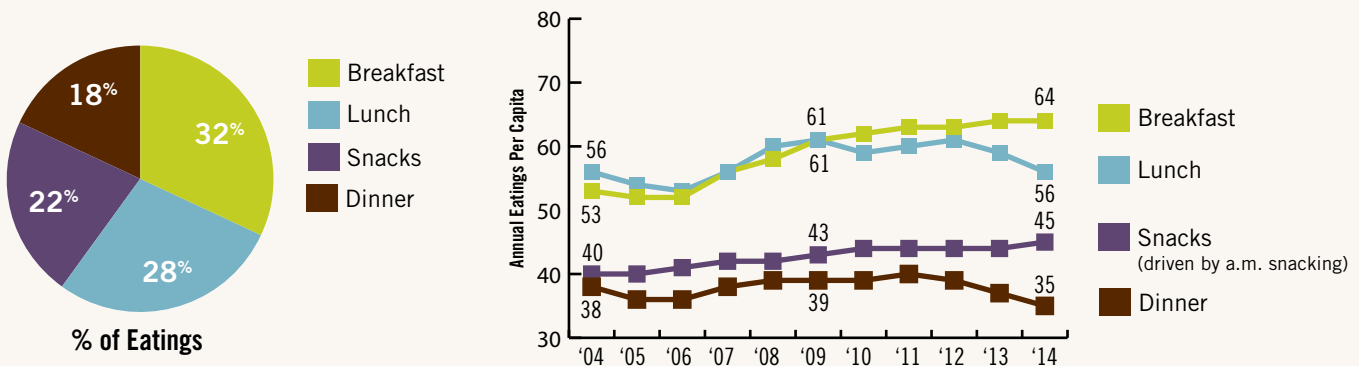
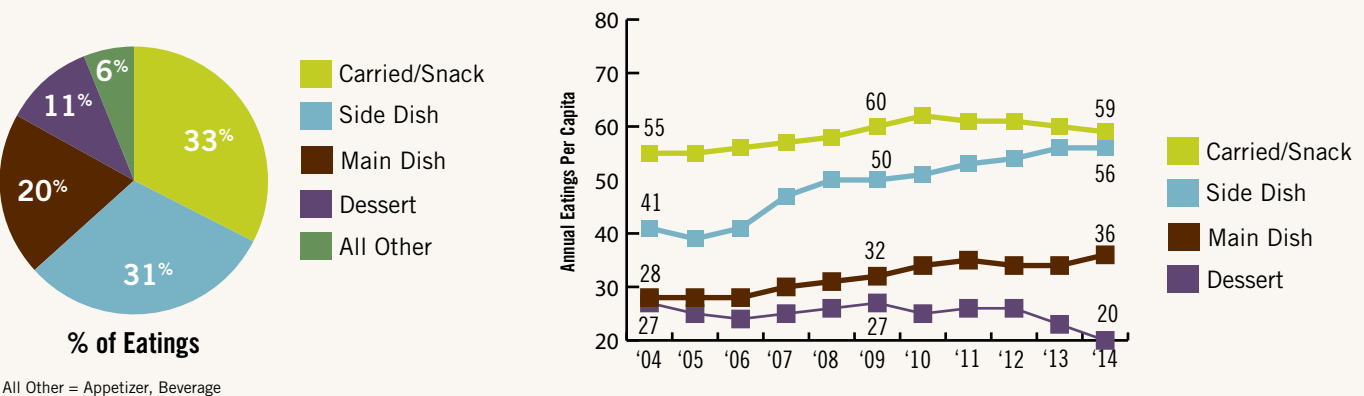


Chart 20. Total Fruit Excluding Juice: Dish Position



have higher intakes of total dietary fiber and better quality diets overall compared to people who don't drink fruit juice.^{2-4,8} And finally, those Americans that do consume fruit generally follow a pattern of two parts whole fruit to one part juice.^{9,10}

Marketers and educators should continue to emphasize to consumers that up to 12 ounces of 100% juice each day can help meet daily nutritional needs and that "100% juice" means that there are no added sugars.

While fruit juice is primarily consumed at breakfast, consumption during this eating occasion has also seen the biggest decrease over time.

Chart 21.
Percent of Eating Occasions Motivated Primarily by Health

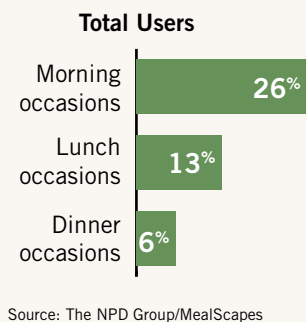
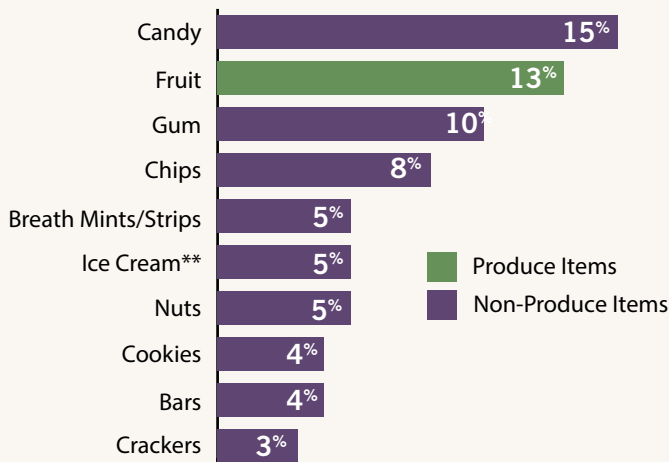


Chart 22. Top 10 Snack Foods

Share of Snack Food* Eatings When Consumed at Snack Occasions

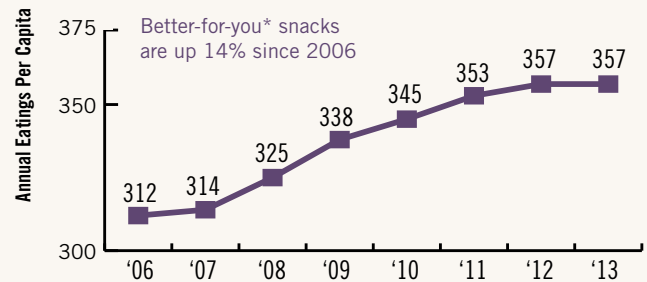


*Snack foods are a set group of foods generally perceived to be snack foods, regardless of when consumed. Excludes cough drops and throat lozenges.

**Ice Cream includes bulk and novelties.

Source: The NPD Group's SnackTrack®, 2014

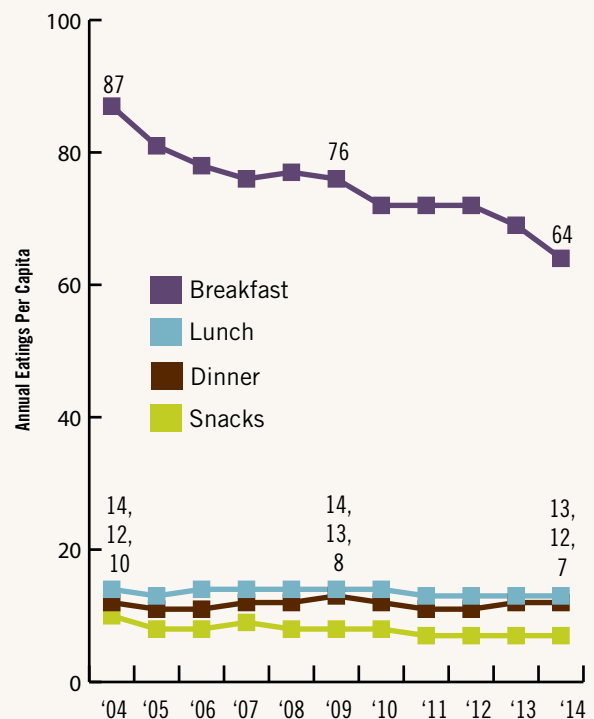
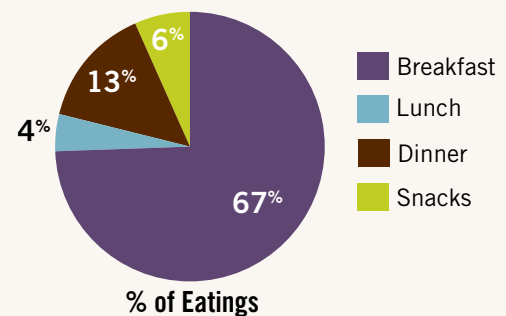
Chart 23. Better-For-You Snack Food Consumption Trend



*Better-for-you snack foods include: Fresh fruit, fruit cups, dried fruit, yogurt, granola bars, cereal fruit bars, cereal breakfast bars, energy/sports/protein bars, diet bars, nuts, seeds, trail mix, rice/popcorn cakes, gelatin cups, cottage cheese cups.

Source: The NPD Group's SnackTrack®

Chart 24. Juice: Daypart Consumption



Changes in Fruit & Vegetable Consumption SUMMARY

Total Fruit Excluding Juice

-4 Annual eatings per capita 2014 vs. 2009 (-2%)

GAINS FOR:

- Berries (+4^), Bananas (+2)
- Store Fresh Fruit (+6)
- Breakfast (+3), Snack (+2), (am in particular)
- Side Dish Fruit (+5), Main Dish Fruit (+4)

LOSSES FOR:

- In-home (-3)
- Processed Fruit (-2), Homegrown (-2)
- Lunch (-5), Dinner (-4), Dessert Use (-7)

Fruit Juice = -15 AEPC vs. 2009 (-14%); declines driven by breakfast.

^Actual change in AEPC 2014 vs. 2009

**"As is" and ingredient use into a side dish as well as eaten "as is" as a main dish have all declined.

Total Vegetables

-30 Annual eatings per capita 2014 vs. 2009 (-7%)

GAINS FOR:

- Store Fresh Vegetables (+1)
- Additive/Ingredient Vegetable Used in Main Dish (+3)*

LOSSES FOR:

- In-home (-18) and Away-from-home (-7)
- Lettuce/Salad (-9), Green Beans (-4), Corn (-4), Onions (-3), Mixed Veg (-3)
- Processed (-8), Homegrown (-5)
- Dinner (-24), Lunch (-8)
- Side Dish Use (-10)
- Eaten "As Is" (-23)



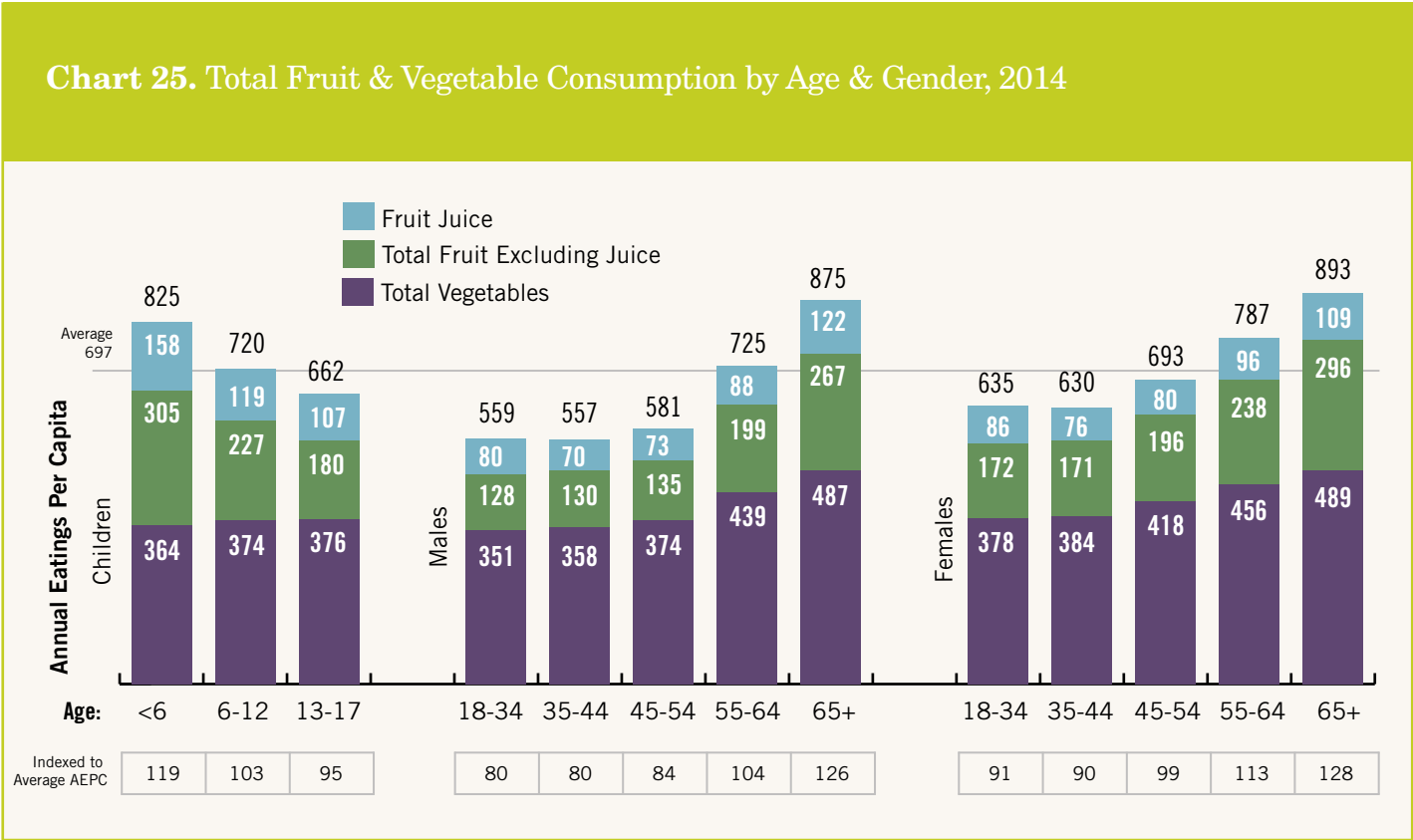
III. Demographics of Fruit and Vegetable Consumers

This section identifies fruit and vegetable consumption levels by age, region of the country, gender, income, and ethnicity. Additional details are in [Appendix B, pages 53-56](#).

Age

ALL AGES, 2014

Children under the age of 6 and older adults 55+ are consuming the most fruit and vegetables. Males under the age of 45 consume at below average rates ([Chart 25](#)). Adults ages 65 and older consume the most fruit and vegetables; 81 more fruit, 24 more fruit juice, and 87 more vegetable eatings annually than the average person. Other factors that help drive higher consumption for those ages 65 and older are outlined on the top of the next page.



Adults Ages 65+

Total Fruit Excluding Juice

65+ year olds consume 81 more fruit eatings annually vs. the average person

INCREMENTAL EATINGS DRIVEN BY:

- In-home (98[^]), not carried or Away-from-home
- Breakfast (52), Dinner (18)
- Eaten "as is" (50), Additive (26)
- Main dish (36), Dessert (22), Side dish (19)
- Store Fresh (57), Can/Jar/Cup (7)
- Bananas (25), Berries (15), Melon (8), Grapes (6), Grapefruit (5), Peach (4), Mixed (4), Raisins (4), Pineapple (4), Oranges (3), Apples (3)

Total Vegetables

65+ year olds consume 87 more vegetable eatings annually vs. the average person

INCREMENTAL EATINGS DRIVEN BY:

- In-home (79), Away-from-home (13), not carried
- Dinner (41), Lunch (36)
- Eaten "as is" (66), Ingredient (23)
- Side dish (35), Main dish (31)
- Store Fresh (55), Homegrown (16)
- Tomatoes (27), Onions (20), Lettuce (17), Potatoes (13), Celery (7), Mixed (6), Cabbage (5), Legumes (4), Peppers (4), Squash (3), Beets (3)

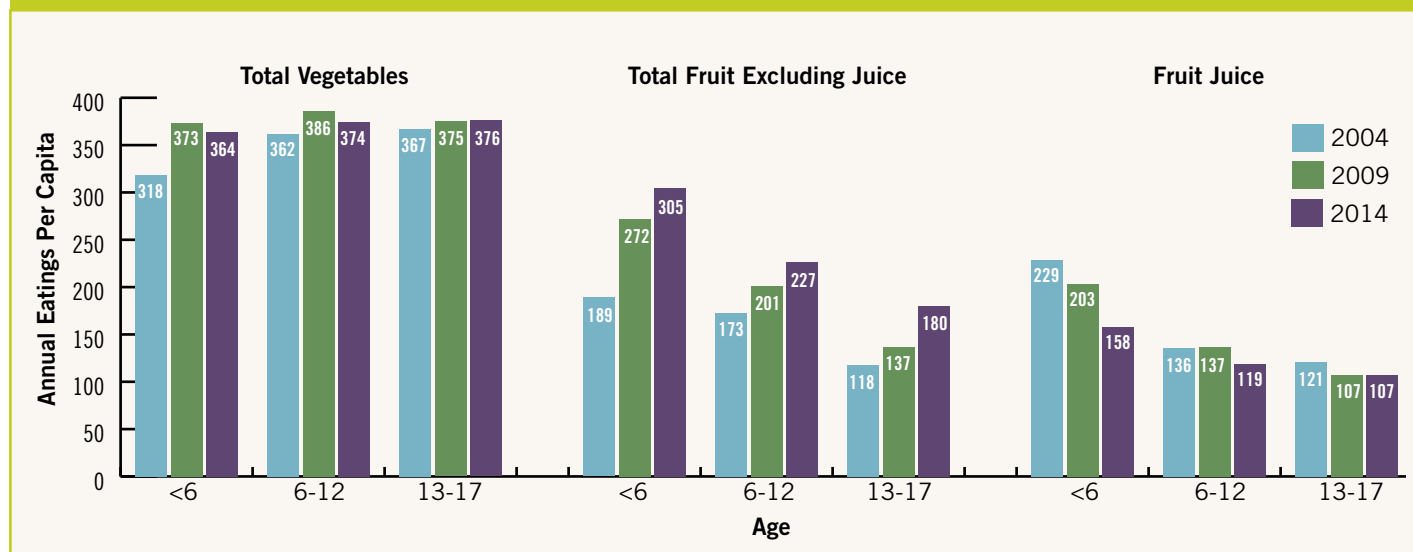
[^]Actual difference in AEPC vs. Total Sample | Fruit Juice = 24 more AEPC (especially at breakfast).

CHILDREN OVER TIME

Children under the age of 12 are not eating vegetables as frequently as they were just 5 years ago, but children of all ages are eating more fruit (excluding juice, [Chart 26](#)). Fruit juice is consumed 119 times a year by children ages 6-12, and 107 times by teens. Children under the age of 6 consume the most fruit juice, yet consumption for this group is down 22% since 2009 and 31% since 2004. Children of all ages are consuming more

fresh fruit, with gains at all main meal occasions. Vegetable intake is mixed, though down overall. A decrease in canned vegetables was offset by an increase in fresh vegetables among children. In fact, fresh vegetables are up 10% among all children over the past 5 years ([Appendix B, page 56](#)). These and other factors that impact consumption for children include those outlined on the next page and in [Chart 27](#).

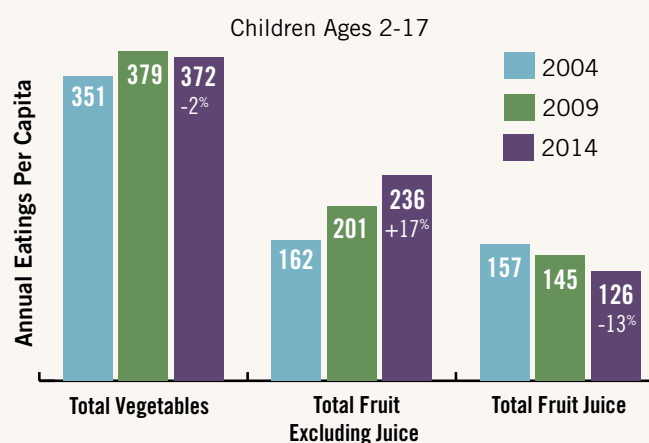
Chart 26. Fruit & Vegetable Consumption by Child Subsets, 2004-2014





Children under the age of 6 consume the most juice, yet consumption for this group is down 22% since 2009 and 31% since 2004.

Chart 27. Fruit & Vegetable Consumption, All Children, 2004-2014



Children Ages 2-17

Total Fruit Excluding Juice

+35 Annual Eatings Per Capita 2014 vs. 2009 (+17%)

GAINS FOR:

- In-home (+24[^]), Away-from-home (+7), Carried (+4)
- Breakfast (+12), Lunch (+12), Dinner (+9)
- Eaten "as is" (+30), Additive (+3)
- Side dish (+18), Main dish (+7)
- Store Fresh (+28)
- Berries (+7), Bananas (+8), Apples (+6), Oranges (+6), Applesauce (+3)

LOSSES FOR:

- Nectarines (-1), Pears (-1), Dessert (-1)

[^]Actual change in AEPC 2014 vs. 2009
Fruit Juice = -19 AEPC (-13%)

Total Vegetables

-8 Annual Eatings Per Capita 2014 vs. 2009 (-2%)

GAINS FOR:

- Lunch (+3), Breakfast (+1), Snack (+1)
- Additive (+2), Main Dish (+2)
- Store Fresh (+14)
- Carrots (+5), Salad (+5), Vegetable juice (+3), Legume, pepper, broccoli, spinach (each +2)

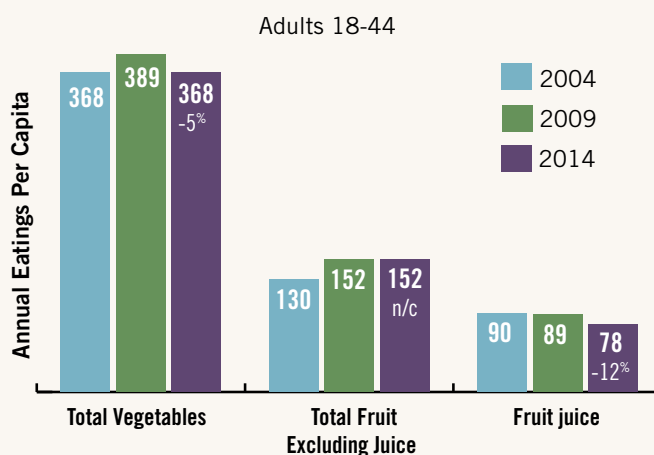
LOSSES FOR:

- In-home (-6), Away-from-home (-2)
- Dinner (-12)
- Eaten "as is" (-6), Ingredient (-4)
- Appetizer (-3), Side dish (-2)
- Canned (-12)
- Corn (-8), Green Beans (-7)

AGES 18-44 OVER TIME

Consumers ages 18-44 are consuming the same amount of fruit in 2014 as in 2009, though more is consumed as fresh fruit, particularly at breakfast. Vegetable consumption is down by 5%, driven by fewer dinner and eatings “as is” (Chart 28). Store fresh vegetables increased while canned and homegrown decreased. These and other factors that impact consumption for 18-44 year olds are summarized in the box at the bottom of this page.

Chart 28. Fruit & Vegetable Consumption by Adults Ages 18-44, 2004-2014



AGES 45+ OVER TIME

All individuals over the age of 45 are consuming less fruit (-11%) and vegetables (-12%) since 2009 (Chart 29). Fruit losses are primarily a result of fewer eatings “as is” and in-home consumption. Lower vegetable consumption is primarily driven by less consumption ‘as is,’ at dinner, and in-home.

One possible reason contributing to the losses among these older core consumers is that their dinner meal has been changing. They are preparing ‘center of plate’ protein meals less often (Chart 30) (which typically have a vegetable side), and opting



Adults Ages 18-44

Total Fruit Excluding Juice

+0.4 Annual Eatings Per Capita 2014 vs. 2009 (n/c)

GAINS FOR:

- In-home (+6[^])
- Breakfast (+8)
- Additive (+2)
- Side dish (+6), Main dish (+5)
- Store Fresh (+6)
- Berries (+5), Banana (+2), Melon (+1)

LOSSES FOR:

- Eaten “as is” (-2), Dessert (-5)
- Lunch (-6), Dinner (-2); Carried (-5)
- Can/Jar/Cup (-2), Homegrown (-2)
- Grapes (-2), Orange(-1), Pears (-1)

Total Vegetables

-20 Annual Eatings Per Capita 2014 vs. 2009 (-5%)

GAINS FOR:

- Breakfast (+2), Main dish (+2)
- Store Fresh (+9), Frozen = n/c
- Carrots (+2), Kale (+2), Broccoli (+2)

LOSSES FOR:

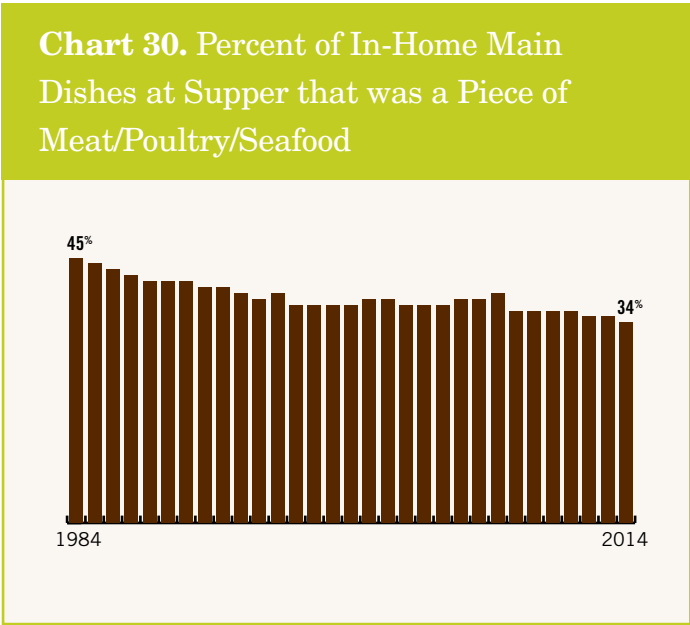
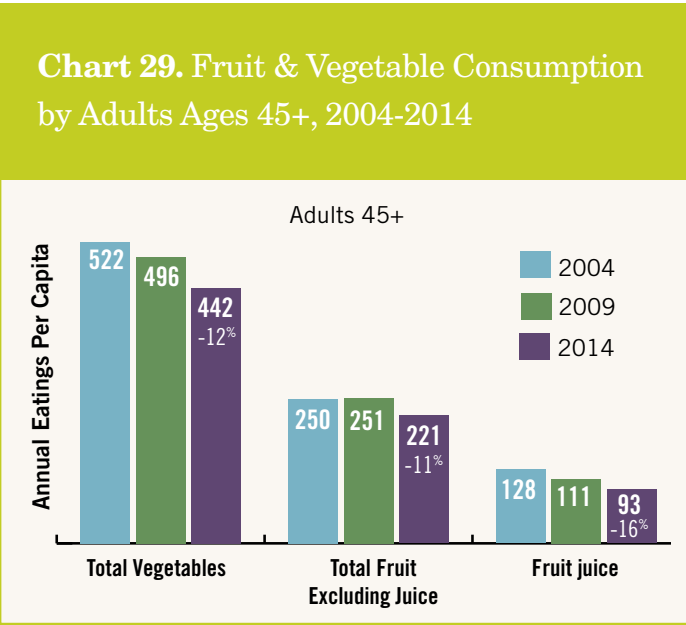
- Away-from-home (-11), In-home (-8)
- Dinner (-17), Lunch (-5)
- Eaten “as is” (-17), Ingredient (-5)
- Side dish (-5)
- Canned (-9), Homegrown (-7)
- Salad/Lettuce (-9), Tomato (-4), Corn (-3), Green Beans (-3), Mixed Vegetables (-3)

[^]Actual change in AEPC 2014 vs. 2009 | Fruit Juice = -11 AEPC (-12%)

more often for sandwich, soup, and pizza main dishes, which don't typically have a side dish. This, combined with the overall long term trend toward simplifying the dinner meal (fewer sides and desserts), has driven declines for these older consumers. A summary of factors that impact consumption for this group include those outlined at the bottom of this page.

In summary, children are eating more fruit, excluding juice. Younger adult fruit and vegetable consumption is stable to down slightly, and older adults have shown double digit losses for fruit and vegetables.

In summary, children are eating more fruit, excluding juice. Younger adult fruit and vegetable consumption is stable to down slightly, and older adults have shown double digit losses for fruit and vegetables.



Adults Ages 45+

Total Fruit Excluding Juice	Total Vegetables
-30 Annual Eatings Per Capita 2014 vs. 2009 (-12%)	-54 Annual Eatings Per Capita 2014 vs. 2009 (-11%)
GAINS FOR: <ul style="list-style-type: none">Snack (+2^)Mixed Fruit (+1) LOSSES FOR: <ul style="list-style-type: none">In-home (-21), Away-from-home (-5), Carried (-4)Dinner (-14), Lunch (-12), Breakfast (-6)Eaten "as is" (-20), Additive (-8)Dessert (-13), Side dish (-3)Fresh (-10), Can/Jar/Cup (-4), Dried (-4)Banana (-3), Raisin (-2), Apple (-2), Peaches (-2), Applesauce (-2), Pears (-2), Oranges (-2), Grapes (-2)	GAINS FOR: <ul style="list-style-type: none">Breakfast (+2) LOSSES FOR: <ul style="list-style-type: none">In-home (-34), Away-from-home (-18)Dinner (-38), Lunch (-17)Eaten "as is" (-39), Ingredient (-15)Side dish (-19), Main dish (-4)Store Fresh (-16), Homegrown (-6), Canned (-4)Salad/Lettuce (-18), Onion (-7), Tomato (-7), Potato (-4), Mixed (-4), Carrots (-3)

^Actual change in AEPC 2014 vs. 2009 | Fruit Juice = -18 AEPC (-16%)

Region

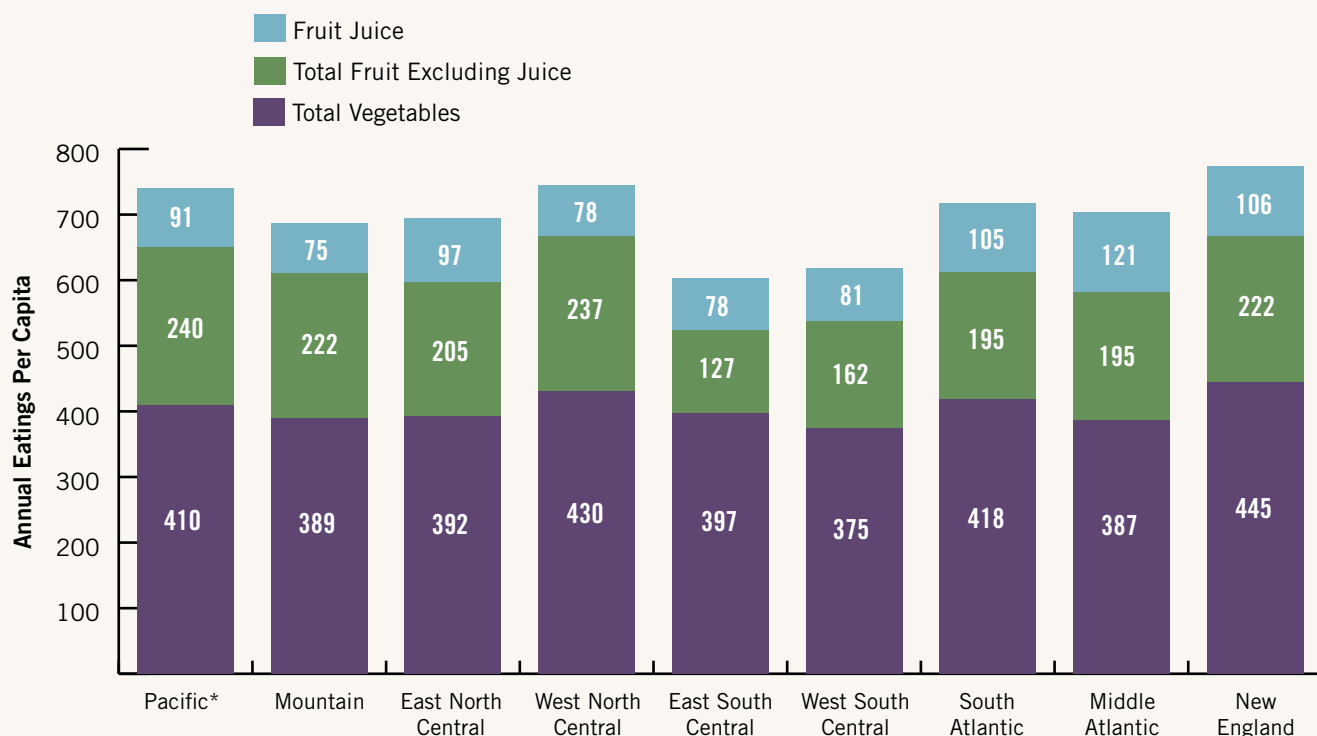
New England, the West North Central, and Pacific regions consume the most fruit and vegetables (**Chart 31**), with the latter 2 regions consuming the most total fruit, excluding juice. The East South Central and the West South Central regions consume the lowest amount of total fruit, excluding juice.

The East, particularly the Middle Atlantic region, consumes the most fruit juice, and the Mountain region consumes the least. There weren't many notable differences in vegetable consumption by region.

The biggest shift in fruit or vegetable consumption between 2009 and 2014 was seen in the West North Central region where fruit juice consumption decreased by 38% and all other fruit increased by 10%. Also notable is that vegetable consumption decreased by 17% and 11% in the East South Central and West South Central regions, respectively.



Chart 31. Total Fruit & Vegetable Consumption: By Region, 2014



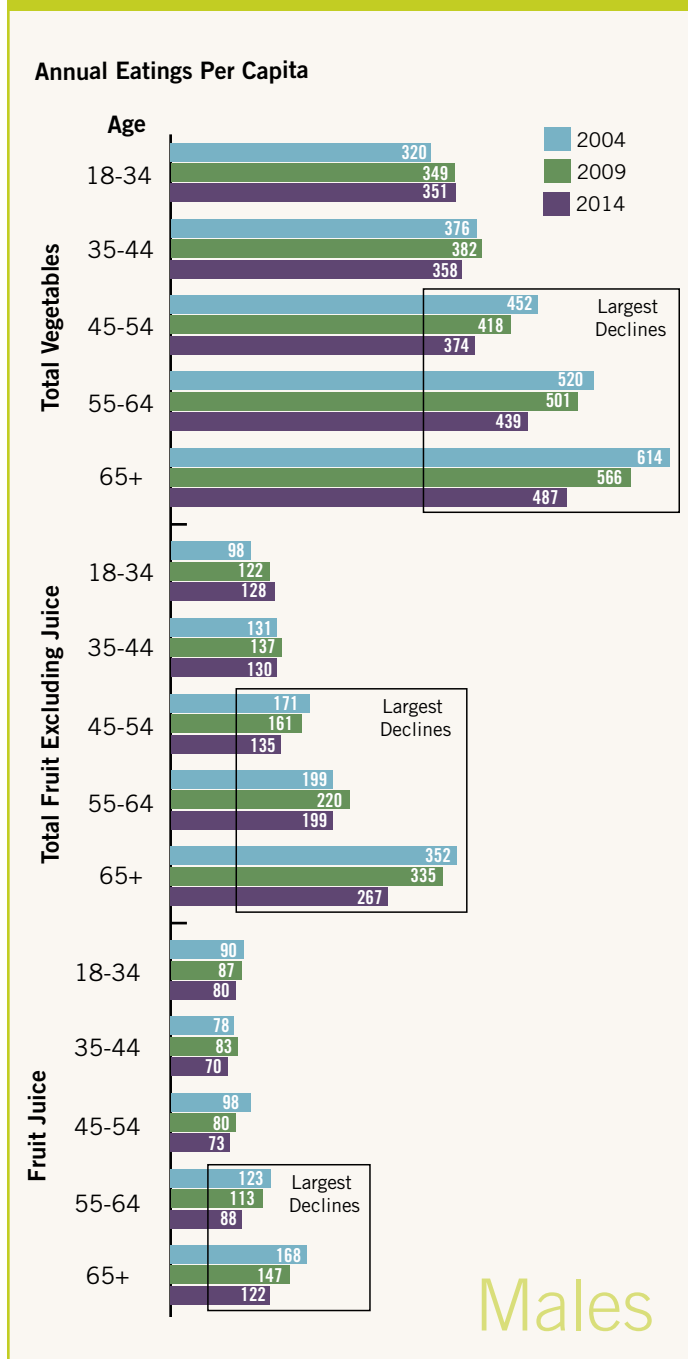
*See U.S. Census Regions, Appendix A, page 50.

Gender

MALES

Adult males ages 45+ are consuming significantly less fruit and vegetables per capita over the past 5 years (**Chart 32**). However, young adult males ages 18-34 are eating more of both. The largest declines for fruit juice consumption are occurring among males age 55 and older who are the heaviest users (-19%).

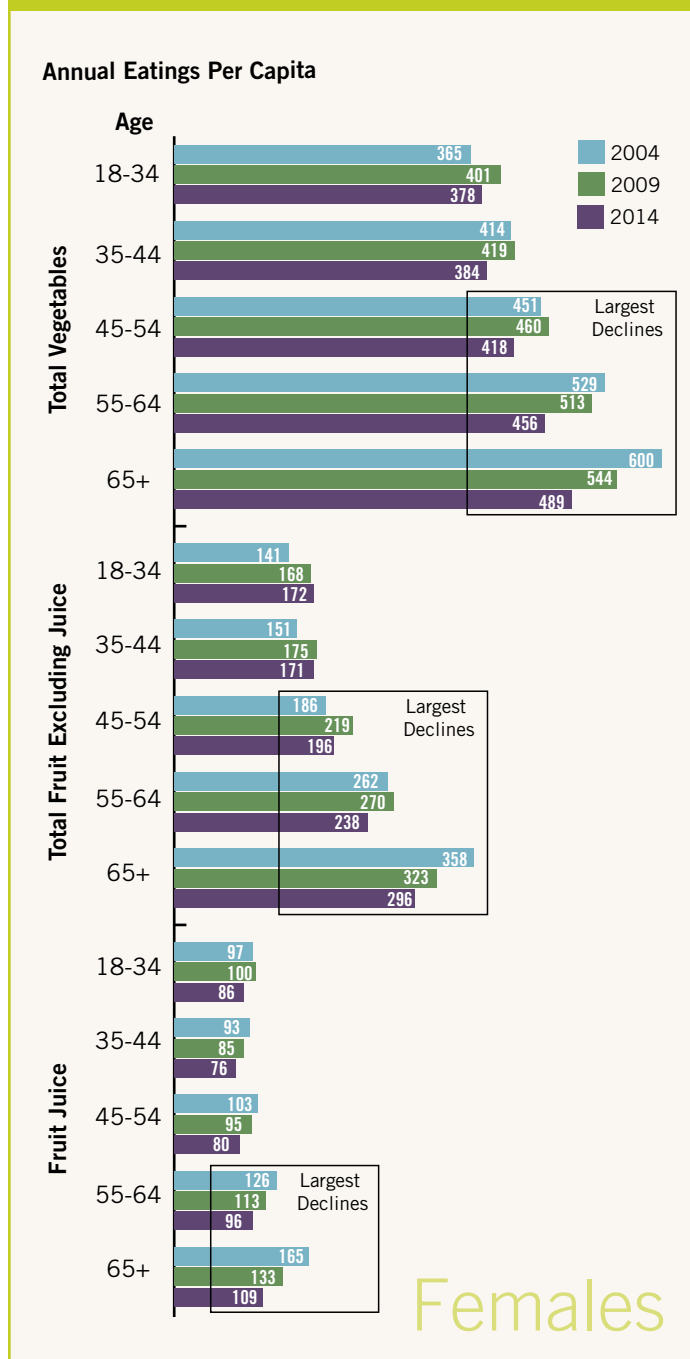
Chart 32. Fruit & Vegetable Consumption: Males, 2004-2014



FEMALES

Adult females age 45 and older are also consuming significantly less fruit, fruit juice, and vegetables over the past 5 years, reaching an all-time low in 2014 (**Chart 33**). Younger females, ages 18-34, are eating more fruit, excluding juice, (+2%), but not more vegetables (-6%). Similar to males, the largest declines for fruit juice consumption is occurring among females age 55 and older who are the heaviest users (-17%).

Chart 33. Fruit & Vegetable Consumption: Females, 2004-2014



Other Demographics

Overall, fruit skews to upper income households (\$60,000+) with a female head of household who tends to be a college graduate and age 65 or older. Vegetables have broad appeal to all demographic groups. Fruit juice skews toward African American and Hispanic ethnicities.

Over time, fruit has gained favor in upper income households (\$20,000-\$40,000 and \$60,000+), and families with children. A decline in fruit juice consumption among children under the age of 6 has occurred since 2009. Losses for vegetables have been driven by smaller (1-2 member), lower income (<\$20,000), older (ages 65+) households.

More specifically in terms of income (**Chart 34**), households with increasingly higher incomes have higher consumption of fruit (including juice) and total vegetables. Households with incomes less than \$20,000 per year have seen the most decreases in both fruit and vegetable consumption over the past 5 years. Fruit juice consumption declined in all income groups, especially among the lowest income group (see details in **Appendix B, page 55**).

More specifically in terms of ethnicity (**Chart 35**), Asian households have seen the greatest declines in fruit (including juice) and vegetable consumption over the past 5 years.

Demographics, 2014

Total Fruit Excluding Juice

Annual Eatings, 2014

ABOVE AVERAGE SKEWS TO HOUSEHOLDS WITH:

- Incomes over \$60K
- Female Head Age 65+
- Female Head a College Graduate
- West North Central, Pacific*

FRUIT JUICE

- Female Head Age 65+
- African American, Hispanic
- Mid-Atlantic

Total Vegetables

Annual Eatings, 2014

ABOVE AVERAGE SKEWS TO HOUSEHOLDS WITH:

- Female Head Age 65+

Based on Index to total Sample >118; many other demographic groups are average.

*See U.S. Census Regions, Appendix A, page 50.

Demographics, Over Time

Total Fruit Excluding Juice

Annual Eatings, 2014 vs. 2009

GAINS FOR:

- Incomes \$20-\$40K, also \$60K+
- 3-4 member households, with children present
- Female Head Age <45 (esp. <35)
- African Americans, Hispanics
- Working Women, Traditional Family Households
- West North Central, Mountain, Pacific

Based on Index to total Sample > 118.

Total Vegetables

Annual Eatings, 2014 vs. 2009

LOSSES FOR:

- Incomes <\$20K
- 1-2 member households without children present
- Female Head Age 65+
- Asian, African Americans
- Retired Female or Household Head
- East and West South Central, Mid-Atlantic

Chart 34. Trend of Total Fruit & Vegetable Consumption by Household Income

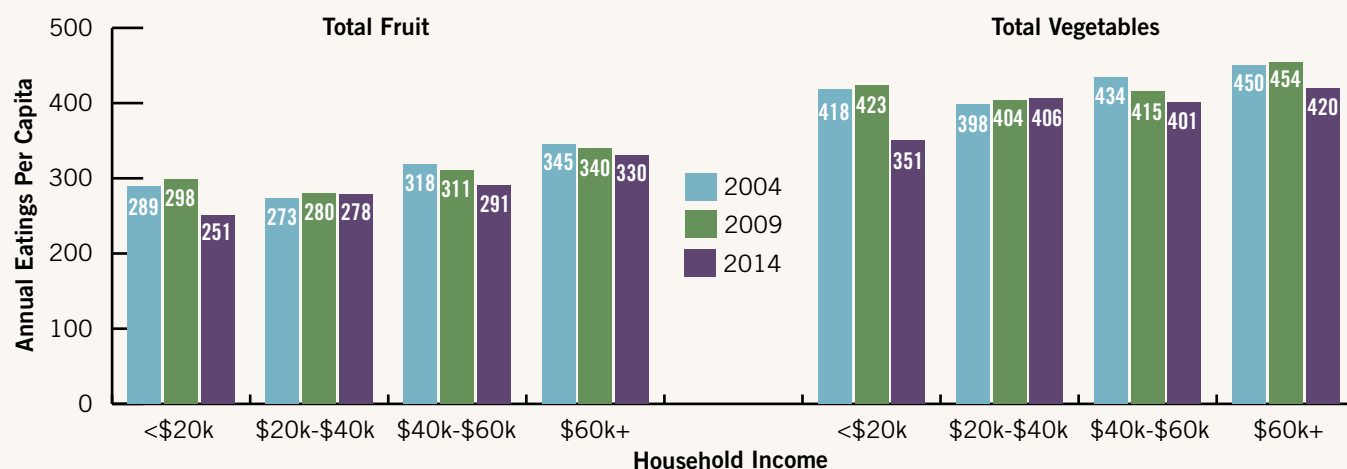
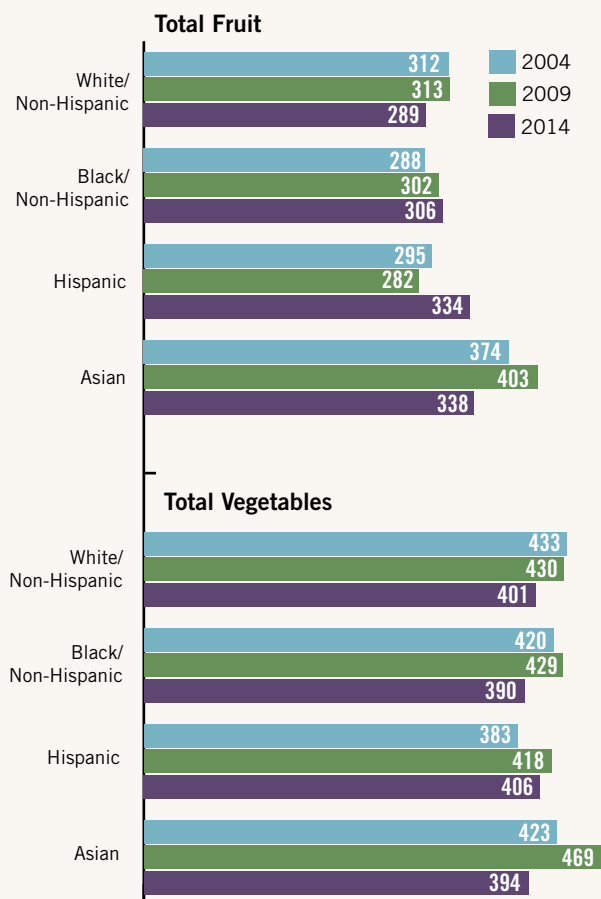


Chart 35. Trend of Total Fruit & Vegetable Consumption by Race/Ethnicity

Annual Eatings Per Capita



Households with incomes less than \$20,000 per year have seen the most decreases in both fruit and vegetable consumption over the past 5 years.

IV. Consumption by Lifecycle and Eater Segments

Lifecycle

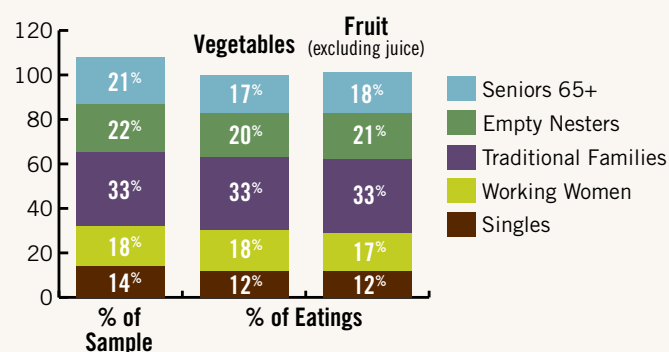
Families with children (Traditional Families or Working Women) account for half of all fruit and vegetable eatings, proportionate to their share of the total population. Empty Nesters and Seniors account for just under 40% of eatings (**Chart 36**). Only 13% of the population are Seniors, yet they represent 17% of all vegetables consumed and 18% of all fruit consumed (excluding juice). Singles represent more of the population than seniors, but account for the smallest share of consumption of vegetables or fruit.

Working Women and Traditional Family households are consuming more fruit, but less fruit juice, per capita over time.

Seniors ages 65+ by far consume the most fruit and vegetable annual eatings per capita, indexing at 136 above an average of 100, yet have shown the greatest decline of fruit and vegetables *per capita* over the last 10 years. All other lifecycles index slightly below the average (**Chart 37**). Working Women and Traditional Family households are consuming more fruit, but less fruit juice, per capita over time (**Chart 38**). Working Women households are consuming more fresh fruit, especially “as is,” in-home, and at breakfast and lunch. Vegetable losses among Working Women households are mostly driven by decreases at in-home dinner consumption, “as is” and as a main dish.

Traditional Families are consuming more fresh fruit, especially “as is” at in-home breakfast and snack. Vegetables losses are primarily driven by decreases at dinner and a reduced number of side dishes.

Chart 36. Total Fruit & Vegetable Consumption by Lifecycle, Percent Share





SUMMARY OF LIFECYCLE DESCRIPTIONS

SINGLES

Under 65 years old

WORKING WOMEN

Working parents, single (female) parent, and dual income with no children (DINKS)

TRADITIONAL FAMILIES

Married with children <18 years old present; only 1 spouse employed full-time

EMPTY NESTERS

Middle age households ages 45-64 with no children <18 years of age present

SENIORS

Single or married, male or female head of household, age 65+

Chart 37.
Total Fruit
& Vegetable
Consumption
by Lifecycle,
2014

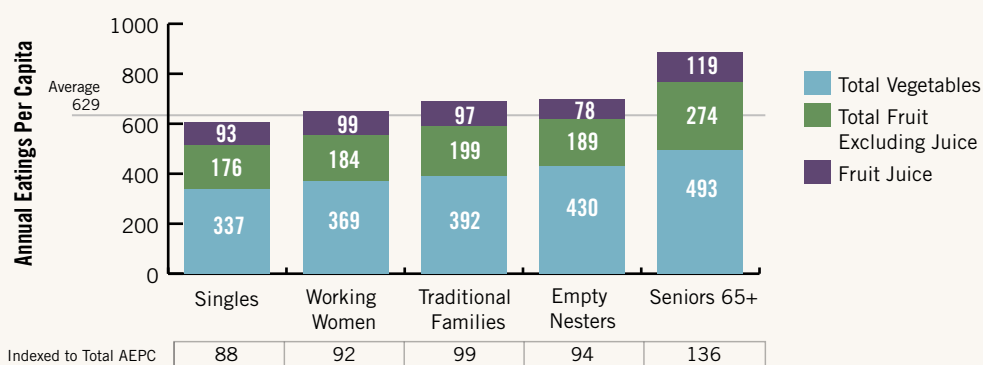
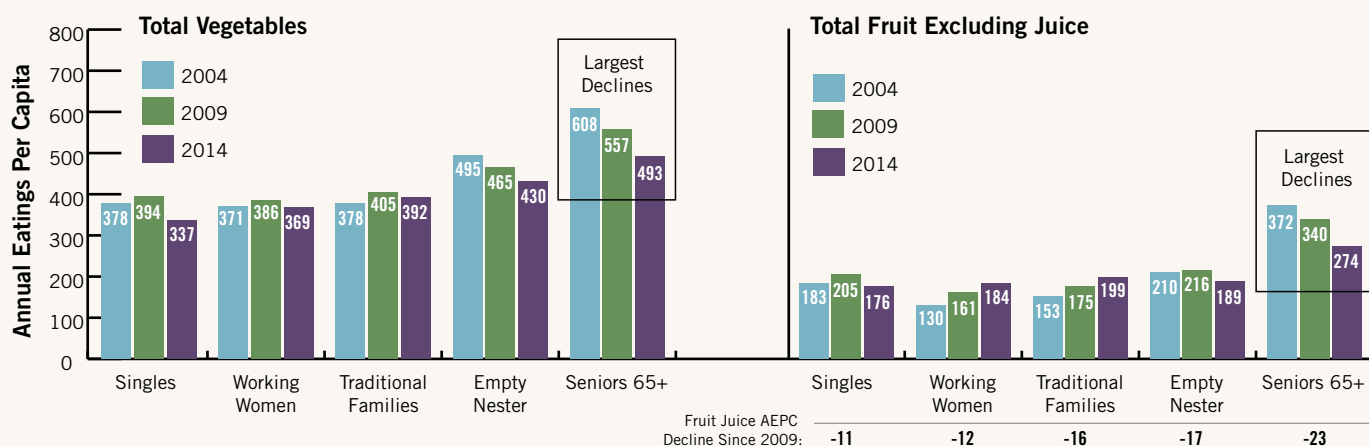


Chart 38. Total Fruit & Vegetable Consumption by Lifecycle, 2004-2014



Working Women Households

Total Fruit Excluding Juice

+23 Annual Eatings Per Capita 2014 vs. 2009 (+14%)

GAINS FOR:

- In-home (+25[^]), Away-from-home (+3)
- Breakfast (+14), Lunch (+7)
- Eaten "as is" (+21)
- Side dish (+18), Main dish (+7)
- Store Fresh (+23)
- Banana (+10), Berries (+9), Melon (+4), Grapes (+3), Tangerine (+1), Apple (+1)

LOSSES FOR:

- Carried (-5)
- Cranberries(-1), Fruit Cocktail (-1)

Fruit Juice = -11 AEPC (-10%)

[^]Actual change in AEPC 2014 vs. 2009

Total Vegetables

-17 Annual Eatings Per Capita 2014 vs. 2009 (-4%)

GAINS FOR:

- Snack (+2), Breakfast (+1)
- Additive (+1), Side Dish (+3)
- Store Fresh (+10)
- Carrot (+6), Legume (+2), Celery (+2), Potato (+2), Broccoli (+2)

LOSSES FOR:

- In-home (-12), Away-from-home (-5)
- Dinner (-18), Lunch (-1)
- Eaten "as is" (-12), As an ingredient (-9)
- Main dish (-12)
- Canned (-11), Frozen (-4)
- Corn (-7), Veg. Salad (-3), Asian (-3), Pasta Sauce (-3), Onions (-3), Green Beans (-3)

Traditional Families

Total Fruit Excluding Juice

+19 Annual Eatings Per Capita 2014 vs. 2009 (+14%)

GAINS FOR:

- In-home (+19[^]), Away-from-home (+4)
- Breakfast (+10), Snack (+7)
- Eaten "as is" (+18), Additive (+4)
- Side dish (+11), Main dish (+6)
- Store Fresh (+22)
- Berries (+7), Banana (+7), Apple (+5), Orange (+3), Applesauce (+2), Pineapple (+1)

LOSSES FOR:

- Dessert (-2)
- Grapes (-2), Pears (-2)

Fruit Juice = -16 AEPC (-14%)

[^]Actual change in AEPC 2014 vs. 2009

Total Vegetables

-14 Annual Eatings Per Capita 2014 vs. 2009 (-3%)

GAINS FOR:

- Breakfast (+2), Snack (+1)
- Additive (+2), Main Dish (+9)
- Store Fresh (+12), Frozen (+3)
- Peppers (+4), Carrot (+4), Broccoli (+3), Spinach (+2)

LOSSES FOR:

- In-home (-10), Away-from-home (-4)
- Dinner (-17)
- Eaten "as is" (-10), Ingredients (-7)
- Side dish (-11)
- Canned (-12), Homegrown (-7)
- Green Beans (-6), Lettuce (-5), Corn (-4)

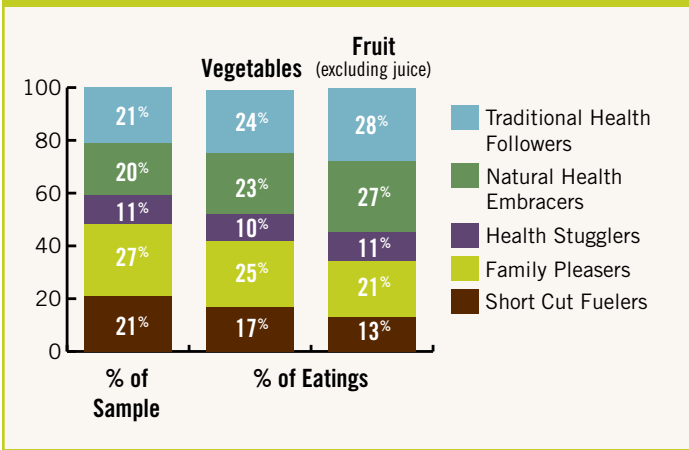
Eater Segments

NPD grouped the population into 5 segments based on varying attitudes: Traditional Health Followers, Natural Health Embracers, Health Strugglers, Family Pleasers, and Short Cut Fuelers. A summary of each segment is noted to the right, and a detailed description can be found in [Appendix A](#).

The three consumer segments focused on health account for 60-70% of fruit and vegetable eatings, yet only represent half of the total population. Family Pleasers and Short Cut Fuelers are an under-developed market ([Chart 39](#)).

While all segments are fairly average consumers of fruit and vegetables, Natural Health Embracers and Traditional Health Followers consume the most, while Short Cut Fuelers consume the least ([Chart 40](#)).

Chart 39. Total Fruit & Vegetable Consumption by Segment, Percent Share



SUMMARY OF SEGMENT DESCRIPTIONS

TRADITIONAL HEALTH FOLLOWERS

- Driven by health and nutrition
- Like to try new foods
- Older, upper income/ education
- Tend to have health condition

NATURAL HEALTH EMBRACERS

- Not driven by convenience
- Preferences for organic food, natural/herbal remedies
- Younger, female, lower income

HEALTH STRUGGLERS

- Driven by convenience
- Tend to eat same things
- 45+, lower income, no children
- Tend to have health condition

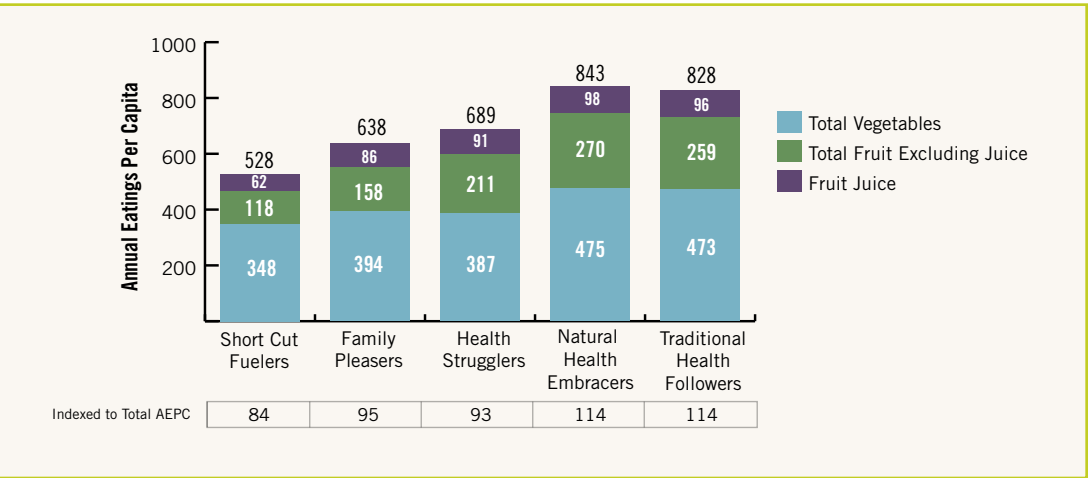
FAMILY PLEASERS

- Influenced by children, focused on pleasing the family
- Lives are hectic and rushed
- 18-34 females

SHORT CUT FUELERS

- Lives are hectic and rushed
- Driven by convenience
- Males
- Less concern with price, health

Chart 40. Total Fruit & Vegetable Consumption by Segment, 2014

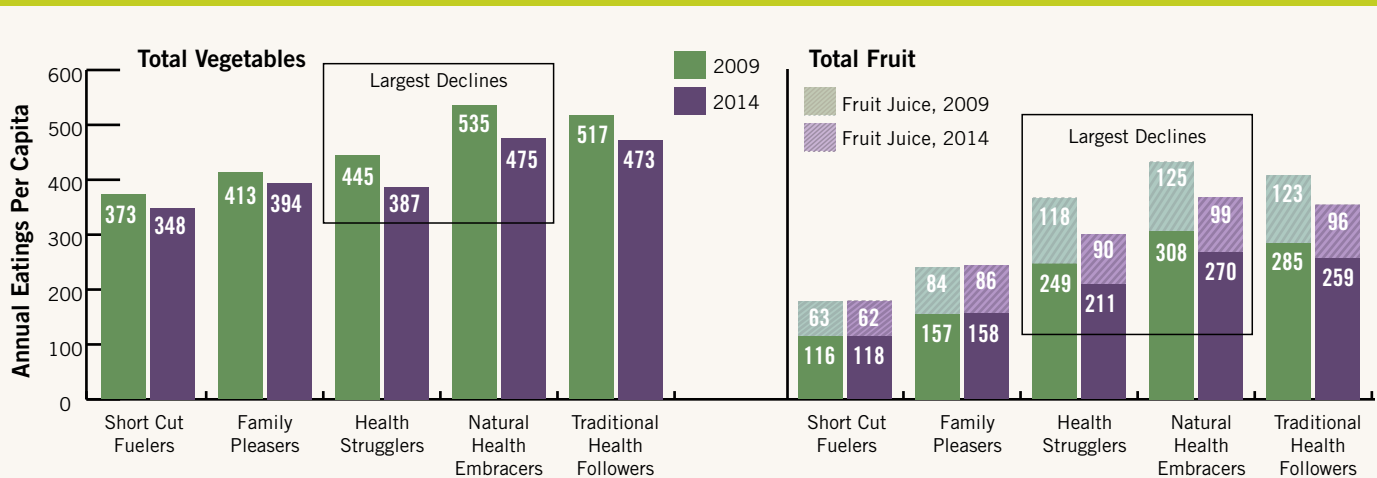


Natural Health Embracers and Health Strugglers have shown the greatest declines in fruit and vegetables over the last 5 years (**Chart 41**). This is especially disturbing given that people presumably focused either on leading a healthy lifestyle or a health condition appear to be thinking less about fruit or vegetable consumption when it comes to their overall health. Health Strugglers are consuming fewer fruit and vegetables “as is,” in-home, and at lunch, dinner, and as a side dish, though they have in-

creased their consumption of berries and vegetable juice. Natural Health Embracers are also consuming less fruit and vegetables, especially “as is” and in-home, though they have increased their consumption of spinach, kale, avocado, berries, and tangerines.

All segments experienced declines to some degree; however, Family Pleasers did consume more fruit juice vs. 2009 and Short Cut Fuelers consumed slightly more fruit (**Chart 41**).

Chart 41. Total Fruit & Vegetable Consumption by Segment, 2009-2014



Health Embracers

Total Fruit Excluding Juice

-38 Annual Eatings Per Capita 2014 vs. 2009 (-12%)

LOSSES FOR:

- In-home (-30^), Carried (-4)
- Breakfast (-12), Lunch (+9), Snack (-9), Dinner (-8)
- Eaten “as is” (-26), Additive (-9)
- Dessert (-10), Main dish (-5)
- Banana (-11), Apples (-9), Raisins (-4), Applesauce (-4), Grapes (-2), Grapefruit (-2)

GAINS FOR:

- Berries (+2), Tangerine (+2)

Fruit Juice = -28 AEPC (-23%)

^Actual change in AEPC 2014 vs. 2009

Total Vegetables

-60 Annual Eatings Per Capita 2014 vs. 2009 (-11%)

LOSSES FOR:

- In-home (-34), Away-from-home (-20)
- Dinner (-34), Lunch (-22)
- Eaten “as is” (-41), As an ingredient (-16)
- Side dish (-16), Appetizer (-4)
- Lettuce/Salad (-15), Tomato (-9), Onion (-8), Carrot (-6), Vegetable Juice (-5), Peppers (-5), Green Beans (-5), Mixed Vegetables (-5), Cabbage (-5), Mushroom (-4), Asian Dishes (-4)

GAINS FOR:

- Spinach (+3), Kale (+2), Avocado (+2)

Health Strugglers

Total Fruit Excluding Juice

-38 Annual Eatings Per Capita 2014 vs. 2009 (-15%)

LOSSES FOR:

- In-home (-27[^]), Away-from-home (-6)
- Lunch (-13), Dinner (-11)
- Eaten "as is" (-35), Additive (-5)
- Side dish (-15), Dessert (-10)
- Raisin (-6), Peach (-5), Apple (-5), Pear (-4), Orange (-4), Tangerine (-2), Grapefruit (-2), Banana (-2)

GAINS FOR:

- Main Dish (+8), As an ingredient (+2)
- Berries (+4), Grapes (+2)

Fruit Juice = -28 AEPC (-23%)

[^]Actual change in AEPC 2014 vs. 2009

Total Vegetables

-58 Annual Eatings Per Capita 2014 vs. 2009 (-13%)

LOSSES FOR:

- In-home (-33), Away-from-home (-20)
- Dinner (-49), Lunch (-11)
- Eaten "as is" (-44), As an ingredient (-18)
- Side dish (-20), Main Dish (-8)
- Lettuce/Salad (-18), Tomato (-12), Onion (-8), Mixed Vegetables (-7), Carrots (-6), Cucumber (-6)

GAINS FOR:

- Breakfast and Snack both stable
- Vegetable Juice (+2)



V. The Future of Fruit and Vegetable Consumption

Now that current and past consumption of fruit and vegetables has been outlined, this section will estimate future consumption based on statistical modeling using population growth, trends, changing life-stages, and generational characteristics.

Generational Effect

As we've seen, per capita consumption of fruit and vegetables increases with age (**Chart 25, page 21**). The aging of the population means that there will be more adults entering a stage in their life of potentially higher per capita fruit and vegetable consumption (**Chart 42**).

However, there has been a negative generational (cohort) effect for both fruit and vegetables among older adults, who historically have consumed the most fruit and vegetables. This means that 50 and 60+ year olds today are consuming less fruit and vegetables than their counterparts 10 years ago (**Chart 43**). The good news is that those under the age of 40 have shown a positive generational effect during the past decade, meaning that those under the age of 40 today are consuming more fruit and vegetables than their counterparts 10 years ago.

DEFINITIONS

Population Effect

Changes that occur due to the growth (or decline) in total population of the country. Current U.S. population averages 4% growth each year.

Age Effect

Changes that occur due to life-stage and the percent of population within each life-stage. For example, eating behaviors differ based on the presence of children in the home.

Trend Effect

Changes that occur as a result of surrounding marketing, communications, and attitudinal shifts. For example, expanded consumer product launches, competitive marketing landscape, and dietary guidance are all part of a trend effect.

Generational Effect

Differences that are seen between cohorts. For example, Baby Boomers, Generation X, Generation Y (Millennials), are all cohorts that have differing attitudinal and behavioral characteristics between them.

Index

An Index >120 represents above average tendencies; Index <80 represents below average tendencies.





Chart 42. Percent Change in Population by Age, 2013 vs. 2018

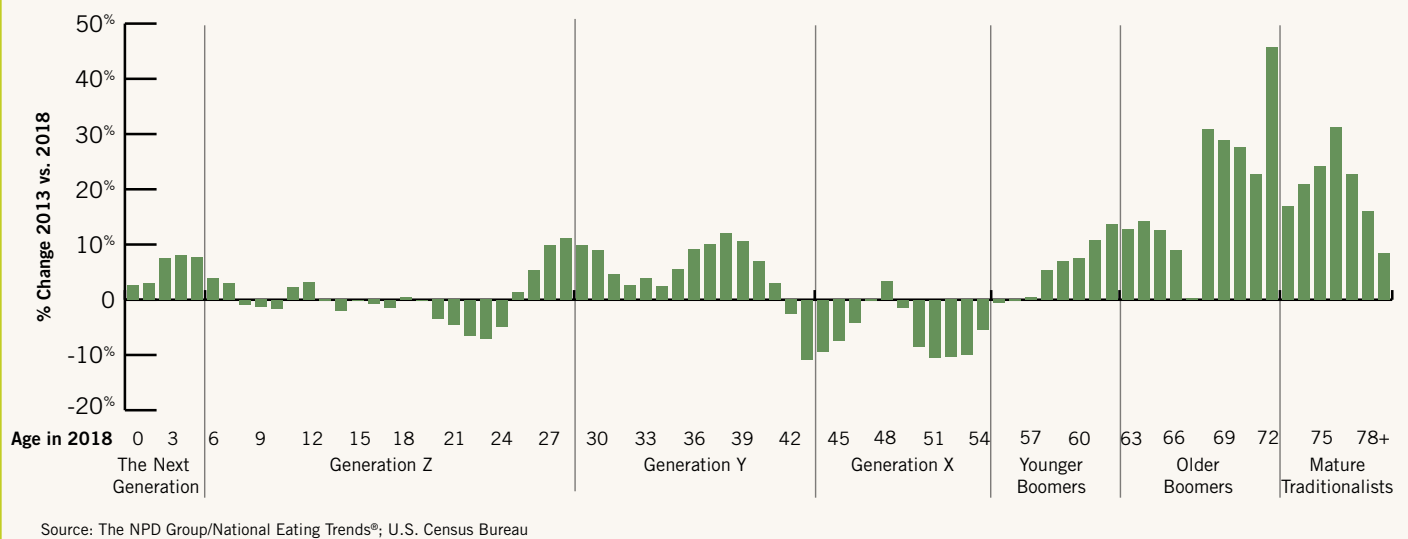
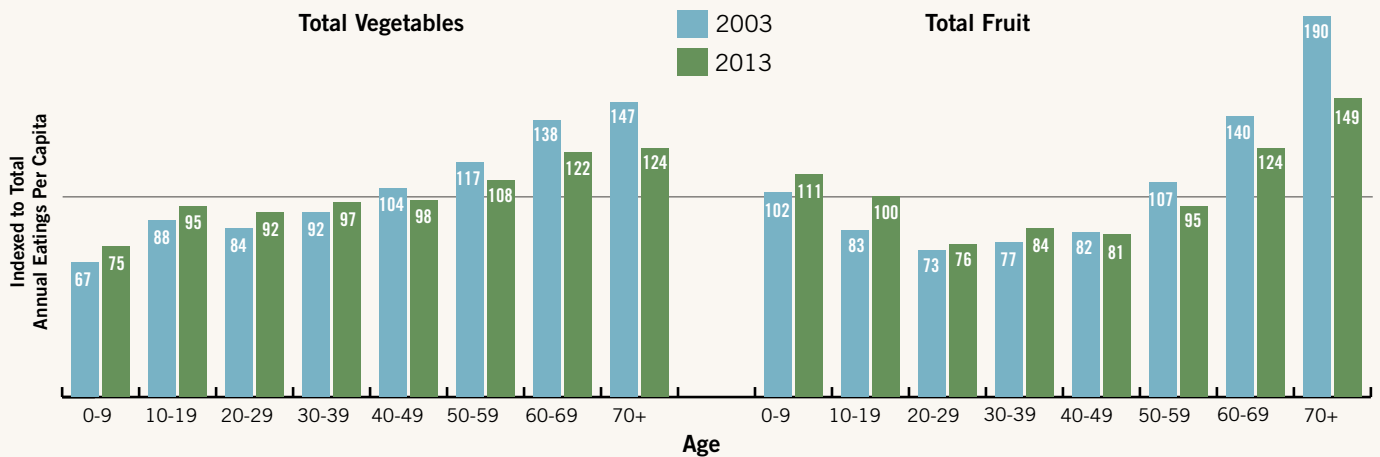


Chart 43. Generational Effect for Total Fruit & Total Vegetables, 2003-2013



Older Boomers and Mature Traditionalists will still index high for fruit and vegetables, but will be less important in 2018 vs. 2013 (**Chart 44**). Gen Z, who account for almost one third of fruit and vegetable consumption, will be even more important in the future.



GENERATIONS DEFINED

The Next Generation

Those born after 2013

Gen Z

Those born between 1990-2013

Gen Y (Millennials)

Those born between 1976-1990

Gen X

Those born between 1965-1975

Young Boomers

Those born between 1956-1964

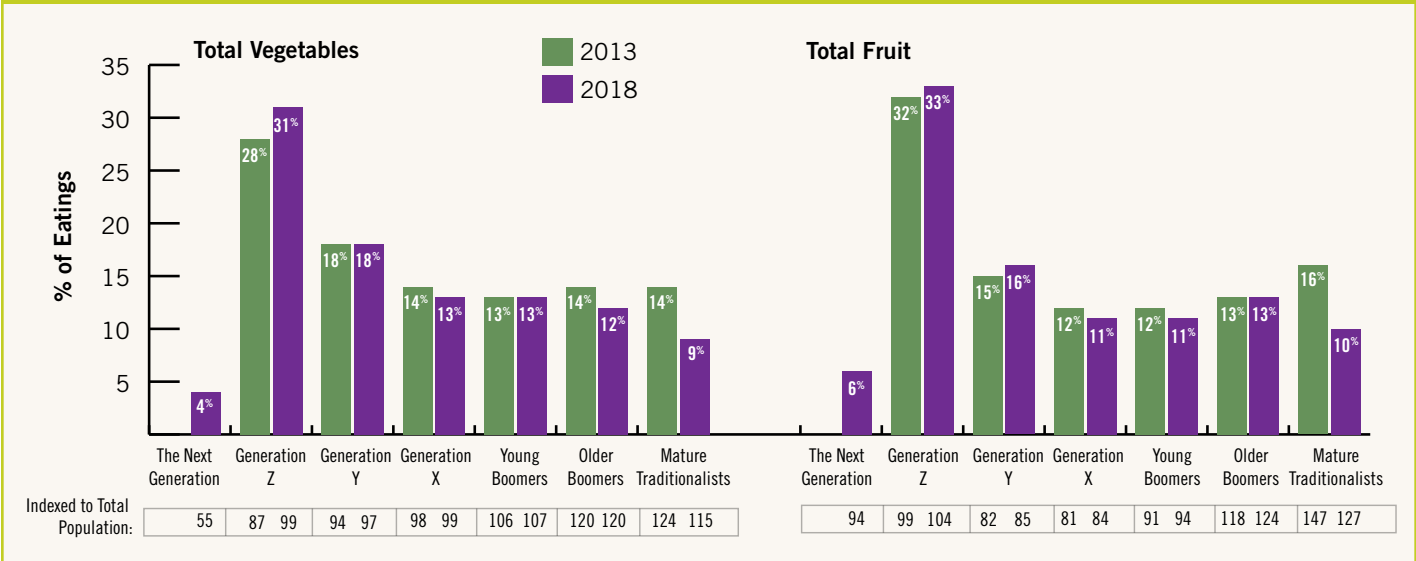
Older Boomers

Those born between 1946-1955

Mature Traditionalists (Silent or GI Generation)

Those born 1945 and earlier

Chart 44. Generational Effect for Total Fruit & Total Vegetables, 2013-2018



Current and Forecasted Consumption: Total Fruit and Total Vegetable

CURRENT

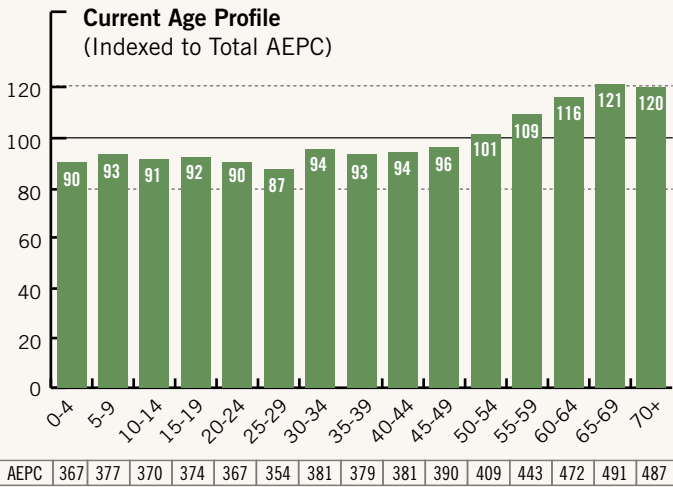
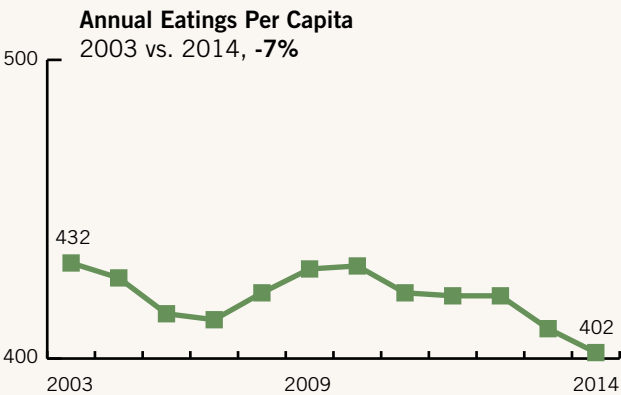
As previously noted, the consumption for total vegetables has been steadily declining over the last 10 years, representing a 7% decline, with adults 55 and older consuming the most (Chart 45).

Similarly, though a softer decline than vegetables, the consumption for total fruit has also been declining over the past 10 years, a 5% decrease, with children under the age of 10 and adults over the age of 60 consuming the most (Chart 45).

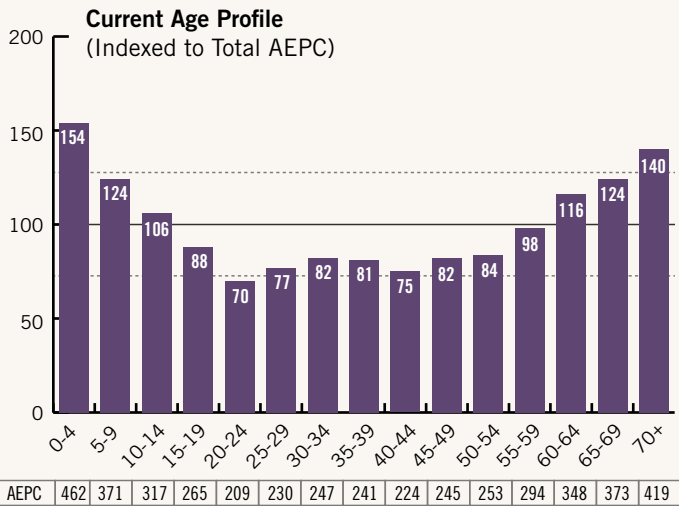
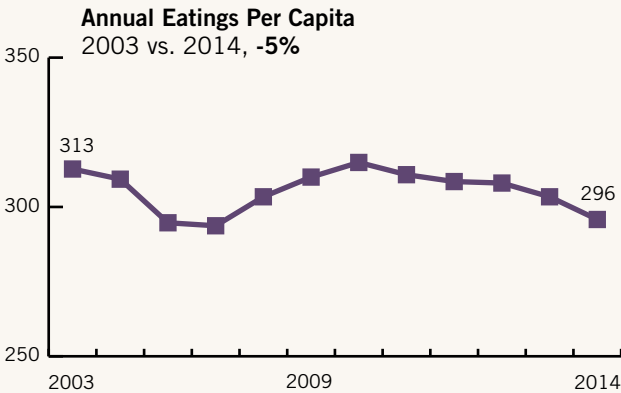


Chart 45. Current Total Fruit & Total Vegetable Consumption, 2014

TOTAL VEGETABLES, CURRENT SITUATION



TOTAL FRUIT, CURRENT SITUATION



FORECASTED

Based on statistical modeling using population growth, trends, changing life-stages, and generational characteristics, total overall vegetable eatings (not *per capita*) are expected to grow by 4% in the next five years (**Chart 46**). Total vegetables should benefit from both the aging of the population, as well as the increasing population. This rate of growth is similar to what had occurred the entire 10 years prior, representing the same growth in half the time. However, a negative trend effect including the drive for convenience, fewer side dishes, fewer ingredients in meals, a competitive food landscape with more options, and competing marketing will need to be overcome to achieve this projected benefit. Additionally, the 4% growth over the next five years is an estimate of all vegetable eatings consumed by the nation. Actual *per capita* consumption is only expected to grow by 2 eatings per year (**Chart 46**), representing less than a 1% increase, but better than the 7% decline seen over the last 10 years.

Similarly, total overall fruit eatings (not *per capita*) are expected to grow by 4% over the next five years. Like vegetables, in spite of a negative trend effect, total fruit consumption is expected to sustain some growth supported by both the increasing population and the aging of the population (**Chart 46**). This rate of growth is an estimate of all fruit eatings consumed by US consumers and is less than what occurred the 10 years prior. Actual per capita consumption is not expected to grow at all.

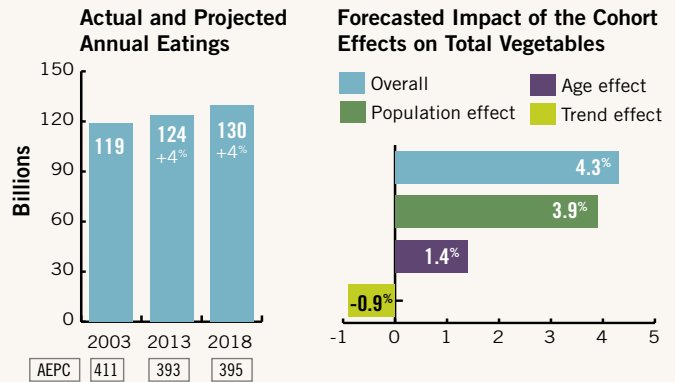
Various age groups, as shown in **Chart 47**, are projected to increase their fruit and vegetable eatings, potentially providing additional and new opportunities for fruit and vegetable marketers to reach consumers. For example, by 2018 a larger portion of total nationwide vegetable and fruit eatings are expected to be among early grade-school age children and young adults in their mid to late 20's. Children ages 3-4 are also expected to have a high number of fruit eatings.

Over the next few years, vegetables and fruit as a category should show a strong benefit from the aging of the population, given the higher consumption rates among older consumers and their higher levels of concern about health, greater incidence of medical conditions, and the general 'health halo' surrounding fruit and vegetables. Vegetables and fruit should be poised to flourish rather than just keep pace with population growth. If current behaviors among older consumers, such as opting to not prepare and consume as many fruit and vegetable side dishes, are not modified or completely changed, vegetables and fruit will likely not realize their full growth potential over the coming years.

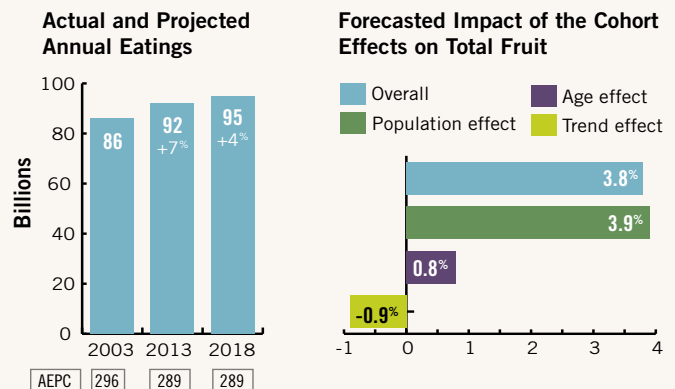
Overall, the slight positive aging effect is expected to offset the slightly negative trend effect, leaving population growth as the main factor influencing the 4% anticipated growth in the next 5 years for fruit and vegetables.

Chart 46. Forecasted Total Fruit & Total Vegetable Consumption, 2018

TOTAL VEGETABLES, FORECAST



TOTAL FRUIT, FORECAST



Current and Forecasted Consumption: Fresh Vegetables and Fruit Excluding Juice

Upon a deeper dive into the data, a slightly different picture emerges when, once again, 100% fruit juice is separated from total fruit. Fresh vegetables when separated from total vegetables also show a positive trend.

FRESH VEGETABLES

As previously noted, total vegetables reported a steady decline in consumption of 7% over the past 10 years. However, fresh vegetables trended upward with 4 additional eatings per capita during that time, a 2.5% increase (**Chart 48**). Total vegetable consumption among consumers ages 55+ seems to be driven by fresh vegetables (**Chart 48**).

Chart 47. Projected Eatings by Year of Age, 2013 vs. 2018

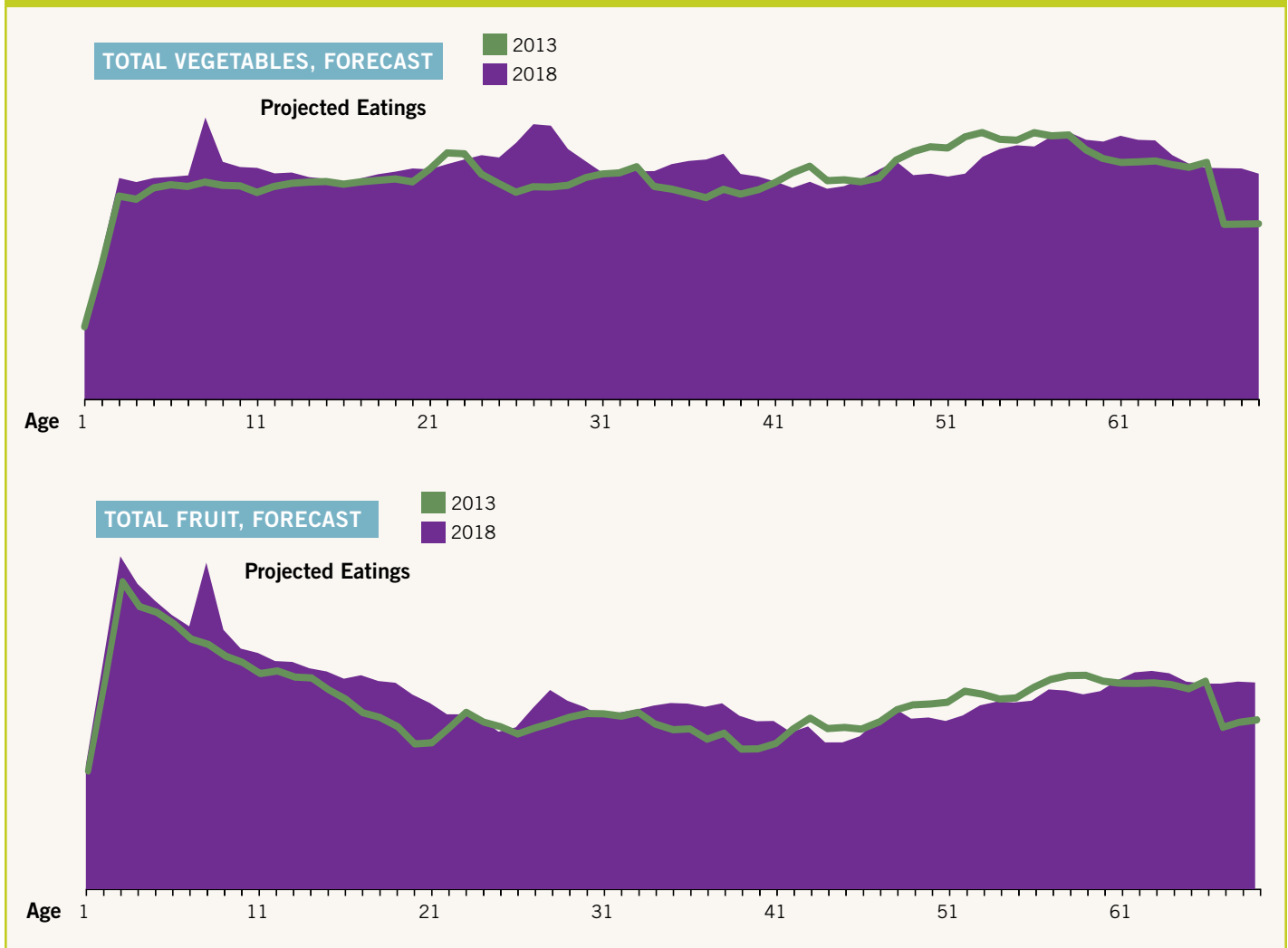
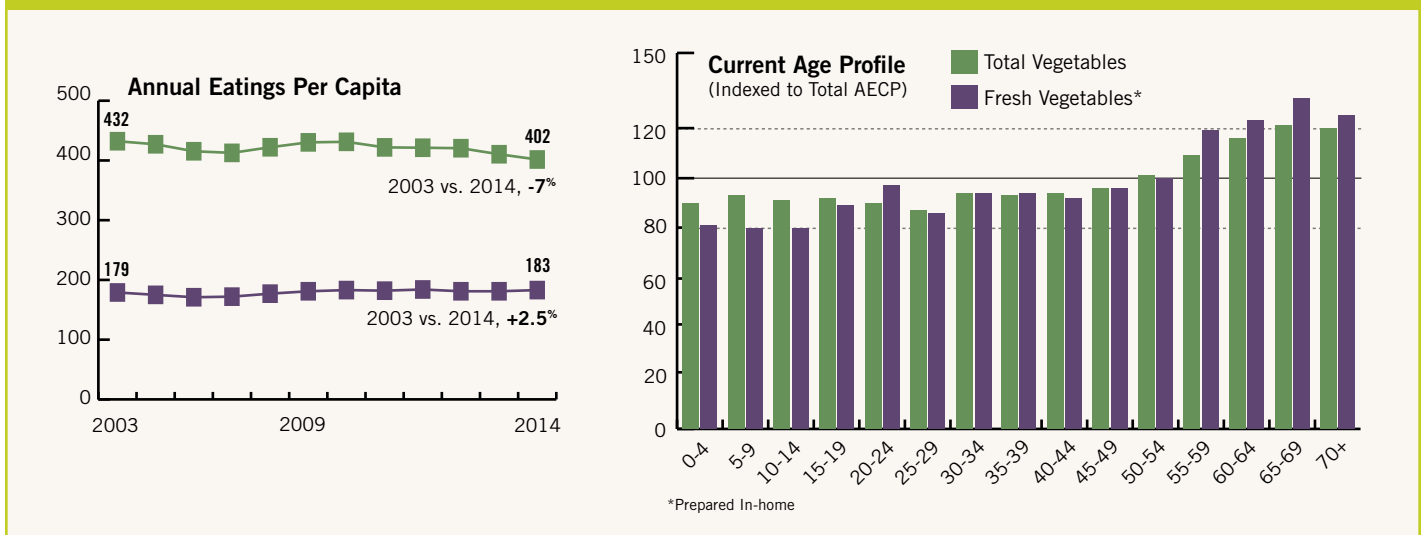


Chart 48. Total vs. Fresh Vegetables, Current Situation



Ultimately these differences support projected growth of 8% in overall *fresh* vegetable eatings over the next 5 years, compared to a 4% growth among *total* vegetables during that time (Chart 49). For fresh vegetables, this rate of growth is similar to that seen over the past 10 years. In terms of *per capita* consumption, fresh vegetable consumption is expected to increase 3% by 2018, but no growth among total vegetables.

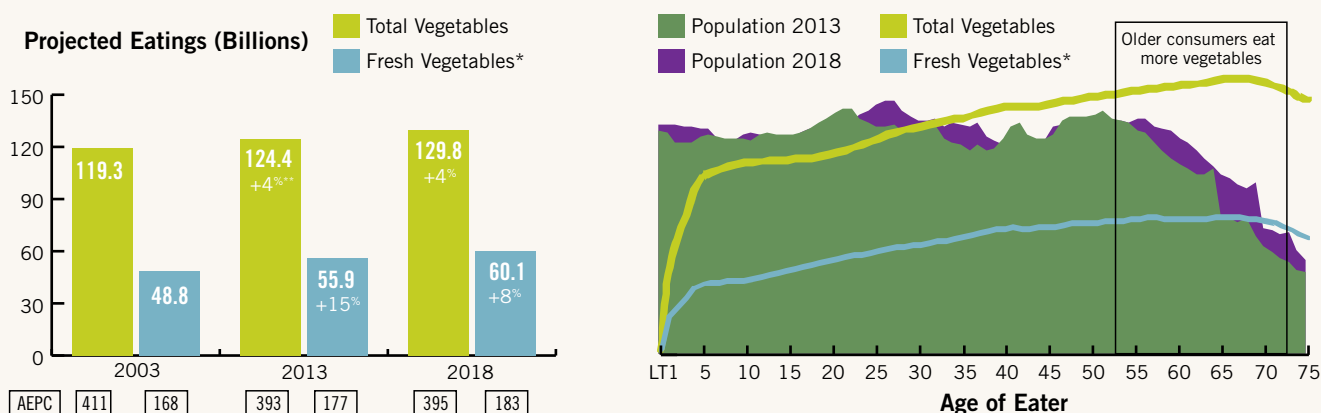
FRUIT EXCLUDING FRUIT JUICE

A 5% downward trend in total fruit consumption is mainly driven by a decreased intake of fruit juice (Chart 50). However, excluding fruit juice, fruit consumption has been trending upward

over the past 10 years by 7%, or 14 more annual eatings per capita. Children and young adults skew more towards including fruit juice, whereas consumers ages 50+ skew more towards whole fruit, indicating a clear difference in eating habits (Chart 50).

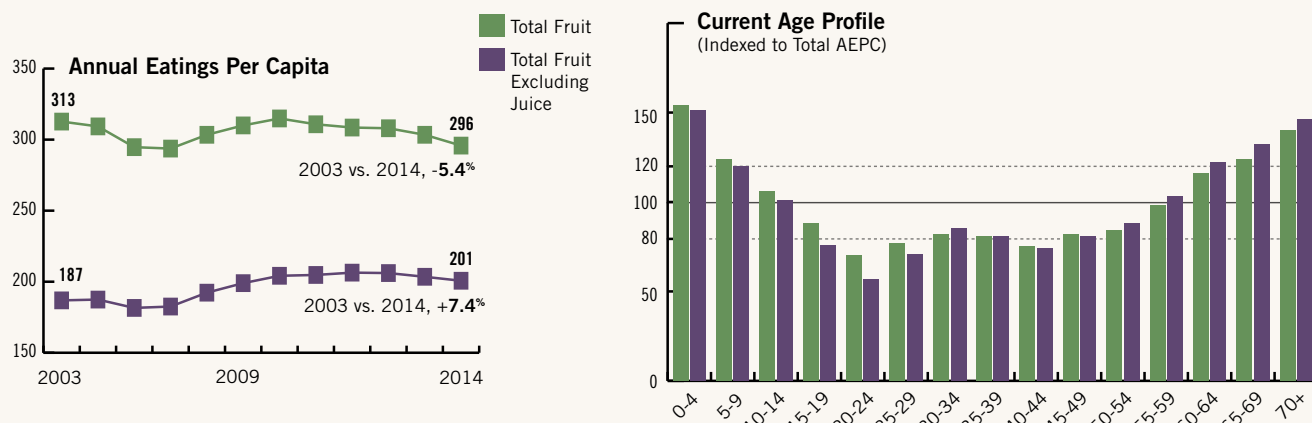
These differences are projected to result in a 9% growth for ‘whole fruit’ (fresh, canned, dried, frozen) eatings (not *per capita*) over the next 5 years, compared to 4% growth if fruit juice is included in the fruit total (Chart 51). Excluding juice, fruit consumption has seen a 19% growth rate in overall eatings (not *per capita*) over the past 10 years, therefore, a 9% projected growth

Chart 49. Total vs. Fresh Vegetables, Forecast



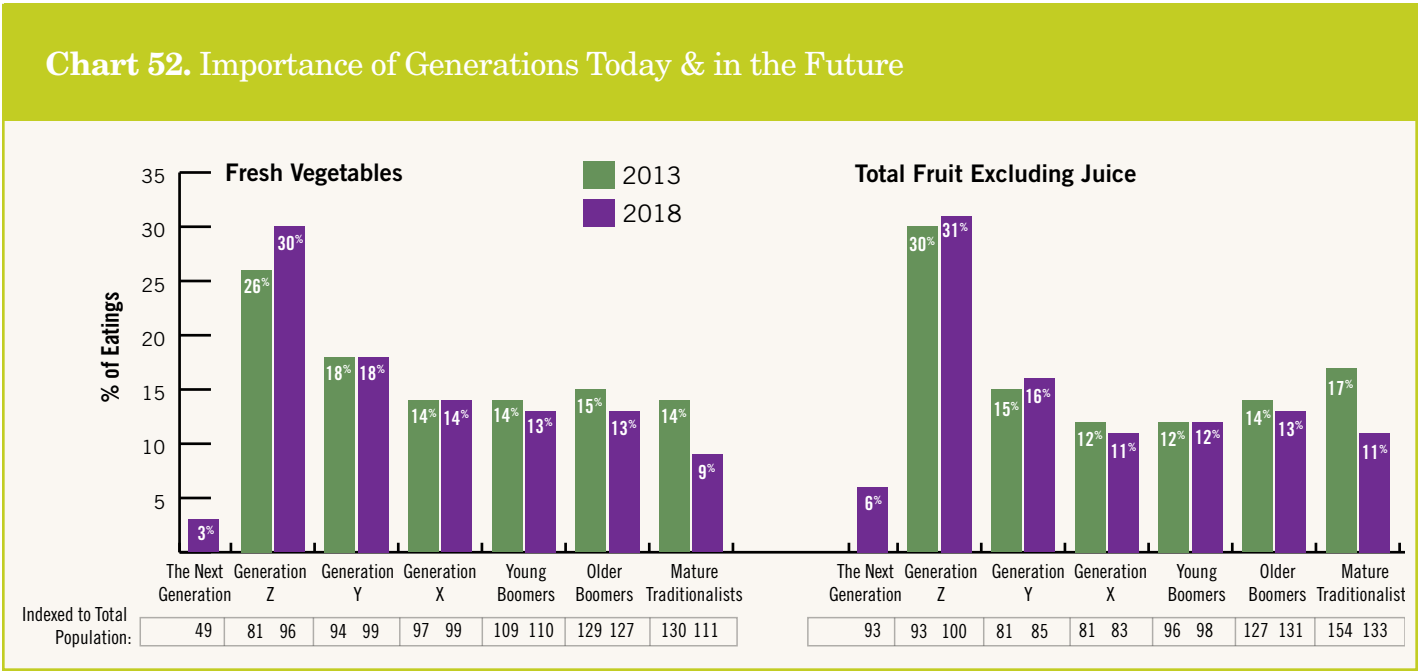
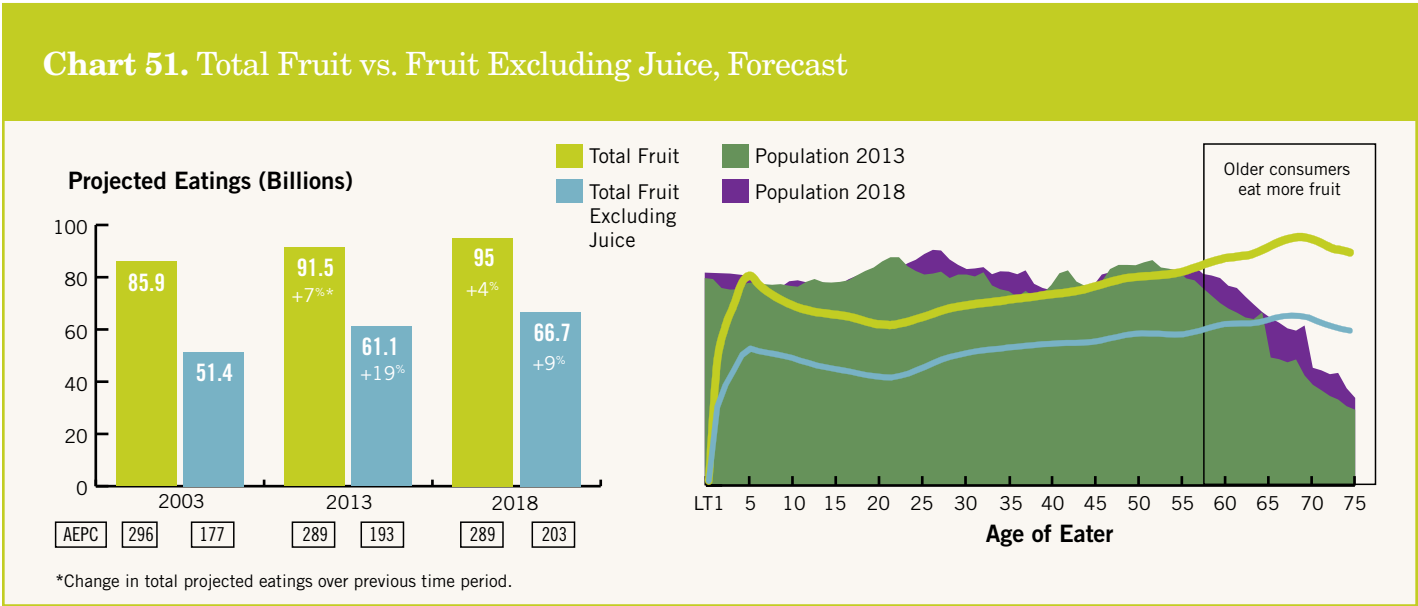
*Prepared in-home
** Change in total projected eatings over previous time period.

Chart 50. Total Fruit vs. Fruit Excluding Fruit Juice, Current Situation



rate over the next 5 years would be a continued steady increase. In terms of *per capita* consumption, fruit excluding fruit juice increased by 7% between 2003 and 2014, and will increase by another 5% by 2018.

When looking at fresh vegetables and fruit, excluding fruit juice, Gen Z (current age 0-23) accounts for more than one fourth of fruit and vegetable consumption (**Chart 52**). Older Boomers and Mature Traditionalists still index very high, meaning that they eat more than the average consumer; however, because there are fewer of them, they will be less important in the future than they are today.



VI. What to Focus on Next

Become Relevant Again to Older Consumers

The decline in fruit and vegetable consumption is being driven by 'health' oriented consumers (Chart 53) who tend to be older. As noted earlier in this report, older adults are driving the decline in fruit and vegetable consumption despite their likely propensity to diet, manage a health condition (Chart 54), and therefore listen to health messages.

Part of the challenge for consumers to prepare and eat more fruit and vegetables is the many competing priorities of daily life (sleeping, working, eating, grooming, and engaging in leisure activities), with the biggest challenge being the continued drive for convenience (Chart 55). In 2014, there were 21% fewer dishes on the dinner table (Chart 56), and 39% fewer ingredients being used to prepare them compared to 30 years ago (Chart 57), illustrating the shift to and desire for convenience (Chart 58). The core fruit and vegetable markets — older consumers and vegetables as a dinner side dish — are declining.

The Core Essence of Fruit and Vegetables Regarding Health Has Lost Meaning in the World of Health

Fruit and vegetable positioning must differentiate itself on health and meet the broader needs of the eating occasion. The top motivations driving food and beverage selections at-home and away-from-home include ease of preparation, taste, is filling, is something everyone likes, doesn't cost a lot, and requires little planning. In the end, the core 'health consumer' is declining in the consumption of fruit and vegetables indicating fruit and vegetable relevance is being lost among this core group.



Top motivations driving food & beverage selections at-home & away-from-home combined

MORNING

- Easy to prepare
- Routine
- Taste
- Fills me up
- Requires little planning
- Make quickly

LUNCH

- Easy to prepare
- Quick to clean up
- Make quickly
- Didn't cost a lot
- Could eat quickly
- My favorite

DINNER

- Taste
- Easy to prepare
- Fills me up
- Something everyone likes
- Requires little planning
- Quick to clean up

Chart 53. Total Fruit & Vegetable Consumption by Eater Segment, 2009-2014

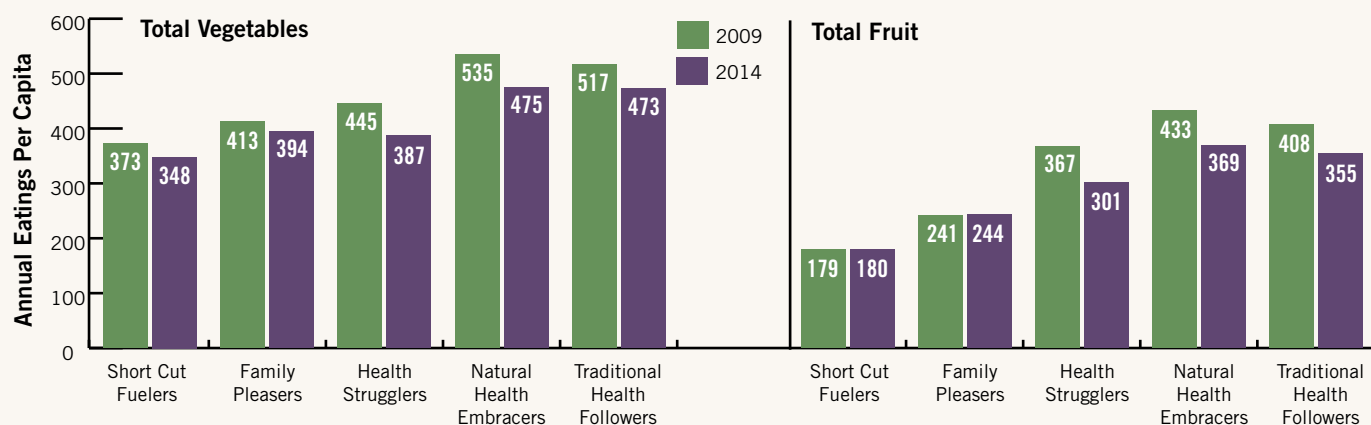
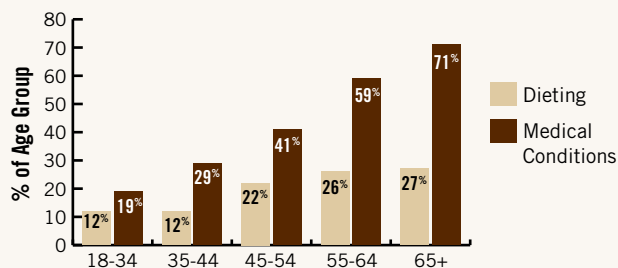


Chart 54. Percent of Age Group on Any Kind of Diet or Having Any Medical Condition



Source: The NPD Group's Health Track Service, 2014

Chart 56. Average Number of End Dishes Served In-home at Supper, Including Food & Beverages

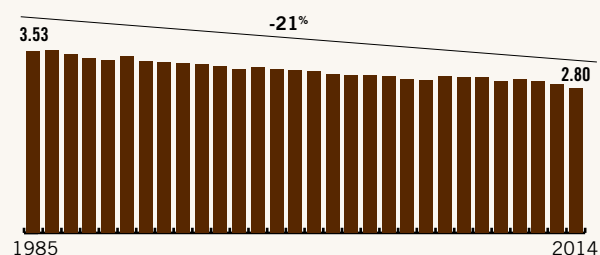


Chart 57. Number of Additives, Ingredients, & Cooking Agents Used Per Supper Meal

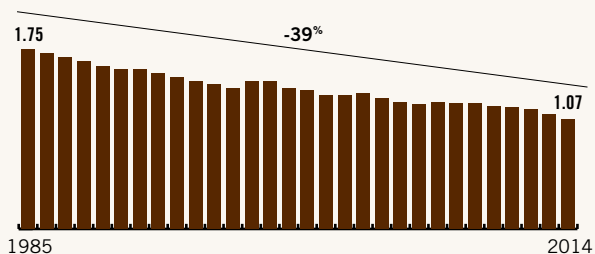
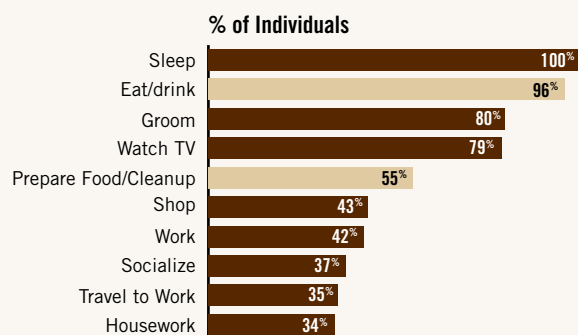
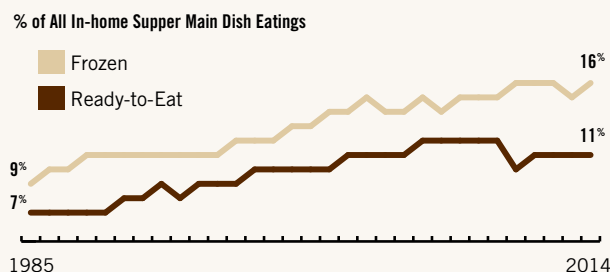


Chart 55. Percent of Individuals Doing Activity on Any Given Day*



*Primary Activity done ... does not include doing additional activities at the same time as primary activity. Average for any day during week; Only those 15 years and older.
Source: American Time Usage Study, 2013; The Bureau of Labor Statistics

Chart 58. Frozen & Ready-to-Eat Main Dishes



Extend Partnerships

CORE PARTNERS WHEN FRUIT AND VEGETABLES ARE CONSUMED “AS IS”

One opportunity to help grow the fruit and vegetable category is to partner with complementary foods. Main dish foods such as sandwiches and poultry or beef entrées index the highest for use with vegetables “as is” (**Chart 59**). Side dish items most often accompanying “as is” vegetables include fruit, bread, or rice.

Most fruit is consumed ‘as is,’ 98% of juice in a glass and 83% of all other fruit. The top main dish accompaniments to fruit (excluding juice) include breakfast foods such as cereal and eggs, as well as poultry entrées (**Chart 59**). Side dish items often present with “as is” fruit include vegetables and legumes, potatoes, and salads.

Chart 59. Top Accompaniments to Total Vegetable & Total Fruit Eaten “As Is,” 2014

VEGETABLES

MAIN DISHES

- Poultry Entrées
- Sandwiches
- Beef Entrées

SIDE DISHES

- Fruit Eaten “As Is”
- Bread
- Rice

FRUIT (excluding juice)

MAIN DISHES

- Ready-to-eat Cereal
- Poultry Entrées
- Eggs/Omelettes

SIDE DISHES

- Vegetables and Legumes
- Potatoes
- Salads

Continue To Work With Core Partners Who Can Use Help...But Also Look To New Partners

CORE PARTNERS WHEN FRUIT AND VEGETABLES ARE CONSUMED AS AN INGREDIENT

Slightly more than a third (35%) of total vegetables are used as an additive or ingredient in a dish (**Chart 60**). The top dishes with added vegetables include salads, sandwiches, homemade variety dishes (e.g. casseroles, meals prepared in a slow cooker, ready-to-eat frozen foods) and Italian dishes, yet all except homemade variety dishes have declined in use over the past 5 years.

While most fruit is consumed ‘as is,’ 17% of whole fruit is most often used as an additive or ingredient to hot or cold cereals and salads (**Chart 60**), but neither cereal or salad use has increased since 2009.

EXPAND EFFORTS WITH NEW PARTNERS

Most of the key ‘host foods’ or ‘accompanying foods’ for fruit and vegetables are declining, but these core partner foods can use the help of fruit and vegetable marketers to the benefit of both. In addition, fruit and vegetable marketers may want to look at products demonstrating solid growth during the past decade as potential new partners (**Chart 61**). These include yogurt, pizza, sandwiches, Mexican food, and bars (snack, breakfast, diet, energy, cereal, and granola).

Chart 60. Top Host Foods When Vegetables & Fruit Are Used as an Additive or Ingredient

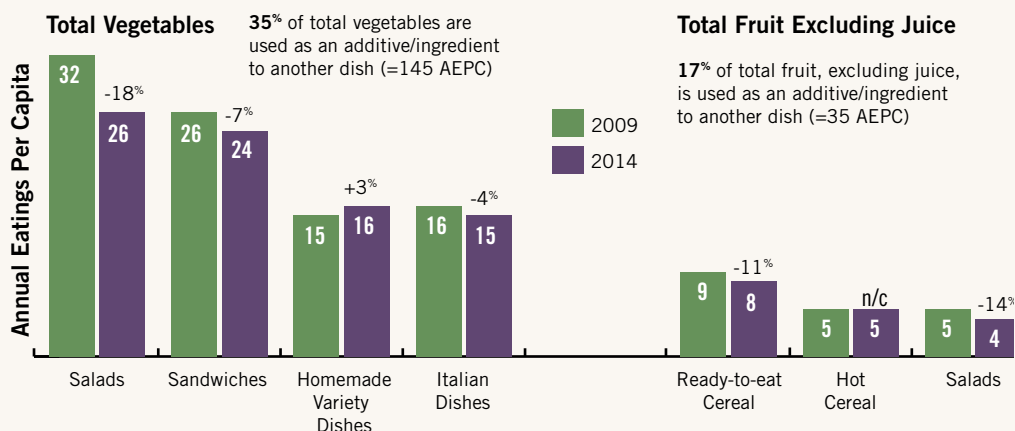
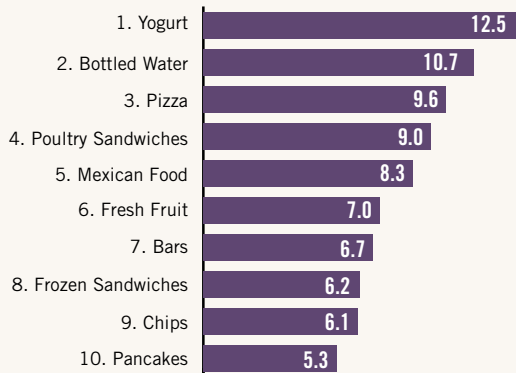


Chart 61: Top Ten Foods/Beverages that are Part of More American Diets

Point Change in Percent of Americans Consuming at Least Once in Two Weeks Year Ending February 2014 vs. 2004



In-Home and away-from-home consumption; Excludes tap water/additive/ingredient consumption.

The top dishes with added vegetables, include salads, sandwiches, homemade variety dishes (e.g. casseroles, meals prepared in a slow cooker, ready-to-eat frozen foods) and Italian dishes.



Remember Pricing Strengths

In a recent PBH survey of primary shoppers' attitudes related to fruit and vegetable consumption, cost is cited as the most important factor when shopping for fruit and vegetables by 71% of those with incomes less than \$50,000.¹¹ Considering the average cost of a meal (Chart 62) purchased at a restaurant (\$6.96) is three times higher than one made in-home (\$2.24), it is important to encourage price sensitive consumers to eat more meals at home.

While the price of the in-home meal has increased slightly more than the restaurant meal over the past 20 years, it is still only one-third the cost (Chart 63). Fruit and vegetable marketers, as well as CPG companies, should emphasize that eating prepared meals (e.g. frozen entrées and fruit/vegetable side dishes) purchased from the grocery store is less expensive than eating out. In fact, Nestlé's *Balance Your Plate On a Budget* meal plan can be done for less than \$2 per meal, per person.¹²

One thing to keep in mind, however, is that historically food costs have not risen faster than incomes (Chart 64), at least not in an appreciable way since the Great Depression and World War II. Recent years are showing a slight increase in food spending as a percent of disposable income, providing additional support for companies to emphasize eating at home as a way to save on food costs.

Chart 62.
Cost of Average
Meal Per Eater

*Source: The NPD Group's CREST® service
** Source: Calculation based on information from The NPD Group's National Eating Trends® for 2012 (latest year), Census Bureau and USDA Economic Research Service

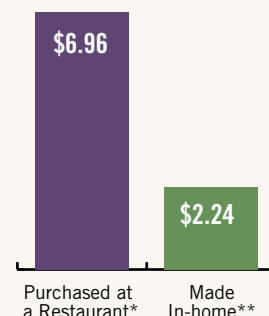
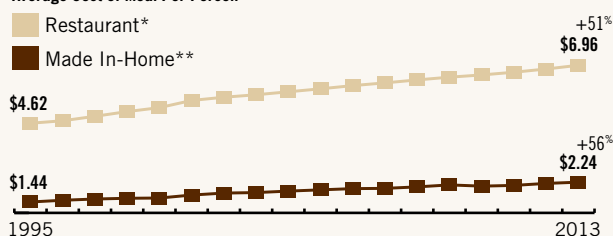


Chart 63. Cost of Average Meal Per Eater Over Time

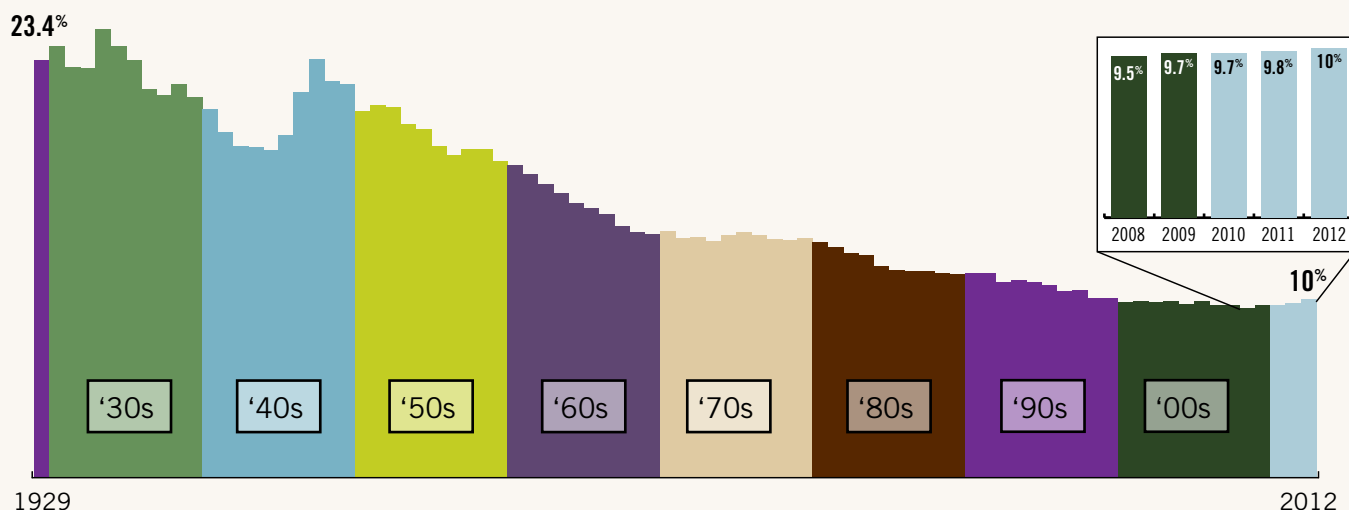
Average Cost of Meal Per Person

Restaurant*
Made In-Home**



*Source: The NPD Group's CREST® service
** Source: Calculation based on information from The NPD Group's National Eating Trends® service, Census Bureau, and revised information from USDA Economic Research Service

Chart 64. Food Spending as Percent of U.S. Disposable Personal Income



Source: USDA, Economic Research Service

Advance Away-From-Home Opportunities

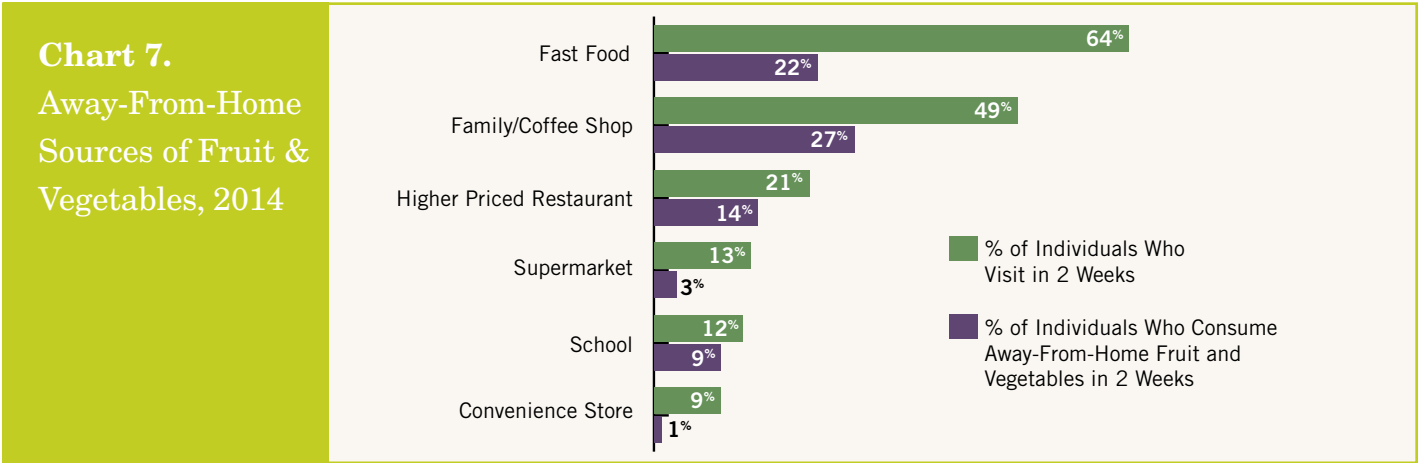
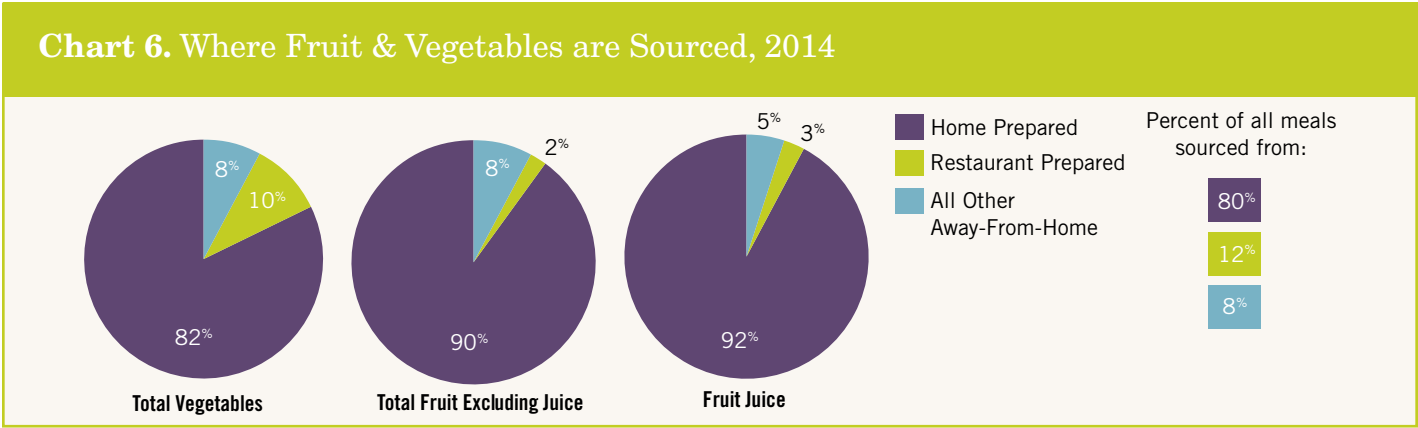
As previously illustrated, only 10% of vegetables and 2% of fruit are sourced from restaurants (**Chart 6, shown again below**). This means that, while grocery stores and in-home dining are the largest source of fruit and vegetables in the American diet, there is also an opportunity for growth in the consumption of fruit and vegetables from away-from-home sources. Since trends in away-from-home dining have been declining since 1999, growth needs to come from securing a larger share of the away-from-home eating occasion.

Among away-from-home sources of food, fast food restaurants are frequented by 64% of individuals in a 2-week period, more than any other away-from-home source, including family dining (Applebee's, Golden Corral, Bob Evans, etc.), high-end restaurants (Olive Garden, Red Lobster, Outback Steakhouse, etc.), and convenience stores (7-Eleven, Sheetz, WaWa, Casey's, etc.).

Restaurants account for nearly half (47%) of the food dollar,¹³ but only 12% of total food consumed (**Chart 6, below**). Of the

Focus On Home Primarily, But Don't Forget Foodservice. Efforts To Increase Presence Are Still Needed

food dollars spent at restaurants, fast food accounts for 79% of all restaurant occasions.¹⁴ The biggest factor that could improve fruit and vegetable consumption away-from-home is assuring that more fruit and vegetables are sold in fast food restaurants. While convenience stores have attracted a good deal of attention and are making headway in offering more fruit and vegetables and fresh-cut produce, the percent of consumers who visit a convenience store in a 2 week period is small compared to those who visit a fast food chain (**Chart 7, shown again below**).



Appendix A: Methodology and Definitions

Methodology

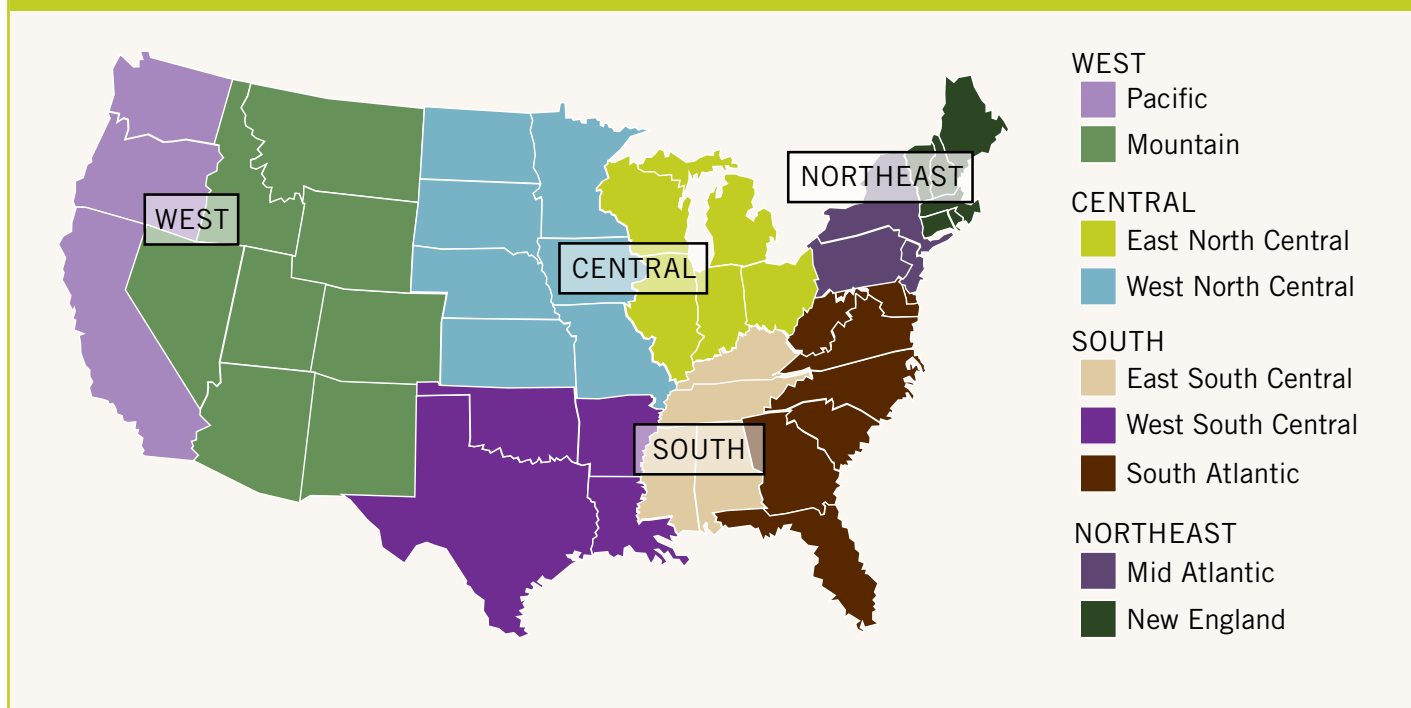
The NPD Group analyzed consumer consumption patterns of fruit and vegetables to compare data collected for Produce for Better Health Foundation in 2004 and 2009 in order to evaluate the state of American's diets in relation to fruit and vegetables. This report is based on National Eating Trends (NET) data collected from a panel of participants for the year ending May 2014 by The NPD Group. NET data has been collected continuously, with no change in methodology, since 1980. Unless otherwise noted, all data in this document is from this data source.

Participants report all foods and beverages consumed in the home or away-from-home by all family members for a two-week period of time. There were 2,000 households who reported, with data collected for approximately 5,000 individuals. On an annual basis, these households were comprised of 500 single and 1,500

family households. Two-week reporting periods of respondents were staggered throughout the year to account for seasonal variation. Approximately 40 households begin their two-week reporting period each Monday. Data measurement is an eating occasion, and actual volume consumed is not measured. Participant selection is balanced within the 4-way census region and on key U.S. census demographic variables including household income, household size, and age/education/employment of female head.

Fruit and vegetables consumed "as is" were analyzed, as well as those used as an additive or ingredient to other dishes. This study excludes French fries/fried potatoes, potato chips, sauerkraut, ketchup, green olives, and pickles/relish. It includes dry beans. All consumption represents total in-home (eaten at home and carried-from-home) and away-from-home (eaten on/off premise) unless otherwise noted.

Appendix: National Eating Trends® U.S. Census Regions



Definitions

Total Fruit

Includes all fruit, fruit juice, as well as commercially prepared fruit salad or pie.

- Fruit: All uses (base dish and additive/ingredient), including all forms such as fresh, frozen, canned/jarred, homegrown, dried
- Fruit Juice: Excludes lemon/lime juice and homemade
- Ready-to-serve/Pre-made Fruit Salads
- Ready-to-serve/Pre-made and Frozen Fruit Pies

Total Vegetables

Includes all vegetables, potatoes, vegetable juice, as well as the commercially prepared items mentioned below.

- Vegetables and Legumes: All Uses (base dish and additive/ingredient), including all forms such as fresh, frozen, canned/jarred, homegrown, dried
- Potatoes: all uses and forms except French Fries/Hash Browns/Tots/Fried Potatoes
- Vegetable Juice: excludes homemade
- Commercially Prepared: Excluding homemade, but including:
 - Ready-to-serve /Pre-made Vegetable Salads
 - Ready-to-serve /Jarred/Canned Pasta Sauce- Red pasta sauce and Ready-to-serve tomato sauce only
 - Ready-to-serve /Canned Vegetable Soup
 - Ready-to-serve /Frozen Asian Dishes, Ready-to-serve / Canned Chili
 - Salsa/Picante Sauce

Fresh Vegetables

Includes all uses of store fresh vegetables, fresh potatoes/sweet potatoes, ready-to-eat/fresh vegetable salads, refrigerated potatoes.

Additive

Added to a dish post-preparation (i.e., berries added to ready-to-eat cereal or parmesan added to a pasta dish).

Ingredient

Added during preparation (i.e., the various vegetables, meat, pasta, and seasonings used to make a casserole).

Base Dish

Final dish consumed “as is” which includes all additive and ingredient records (i.e., the casserole dish mentioned above, a vegetable eaten “as is” as a side dish at a meal, an apple, or a glass of juice).

Eatings

Represents frequency of consumption (does not measure volume consumed).

Annual Eatings Per Capita (AEPC)

The number of times the “average” person consumes a product annually (across users and non-users).

Index

Relative measure indicating if a group is well developed or under developed compared to the rest of the population:

- Index < 80 is below average
- Index > 120 is above average

National Eating Trends® Lifecycle Descriptions

Singles

Under 65 Years Old

Affluent: Household Income >\$32K per Year

Low/Mid Income: Household Income ≤\$32K per Year

Working Women

DINKS: Couples <45 Years, No Children <18, Both Employed Full Time

Working Parents: Age of Homemaker <65 Years, Married with Children, Both Spouses Employed Full Time

Single Parents: Household Head (Typically Female) <65, No Spouse, Children Present

Traditional Families

Married with Children <18 Years Present, Female Head <65, Only 1 Spouse Employed Full Time

Affluent: Per Capita Income >\$13K per Year

Low/Mid Income: Per Capita Income ≤\$13K per Year

Empty Nesters

Middle Age Households 45-64, No Children <18 Years Present

Affluent: Per Capita Income >\$28K per Year

Low/Mid Income: Per Capita Income ≤\$28K per Year

Seniors

Female Head (or Male Head if No Female Present) Age 65+

Single Active: Single and Between 65 and 74 Years Old

Married Active: Married and Between 65 and 74 Years Old

75+: 75+ Years Old

National Eating Trends®

Segmentation Descriptions

Traditional Health Followers

One of three segments where adult food choices are strongly influenced by health and nutrition, this segment tends to be older, have higher incomes and more education. Traditional Health Followers tend to be females 55+ or males 65+. Nearly half report that they have a health condition (at least one of heart disease, high blood pressure, high cholesterol, diabetes or osteoporosis). This segment is much less sensitive about food prices compared to the other two health oriented segments and are the least likely to say they buy organic foods when available, or choose natural or herbal medications over prescription drugs. This segment is also more food adventurous in that they say they are usually the first to try new restaurants and the least likely to eat their usual foods while on vacation. Of all five segments, they are the least likely to say their lives are hectic and rushed.

Natural Health Embracers

This is the second of the three segments where the food choices of adults are strongly driven by health and nutrition. Unlike Health Strugglers, this group is not driven by convenience. Of the three health oriented segments, Natural Health Embracers tend to be younger. This group also has a female skew – females 35-44 years old and 55-64 years old – and, like Health Strugglers, have a lower income skew. This group is unique with their preference for organic foods and for natural or herbal remedies. Of the three health oriented segments, they are the least likely to report having a medical condition.

Health Strugglers

The final health-oriented segments are the Health Strugglers. They tend to be adults 45+ in lower income households without children. Nearly half of the adults in this segment report a health condition (at least one of heart disease, high blood pressure, high cholesterol, diabetes or osteoporosis). Compared to the other two health oriented segments, these adults say their food choices are also strongly driven by convenience. Food is “fuel” to this group and they say they tend to eat the same things over and over again even while on vacation. Of all five segments they are the least likely to try new foods.

Family Pleasers

These adults tend to be females 18-34 who say they are strongly influenced by the presence of children in their house. These individuals feel that their lives are hectic and rushed. Their food choices are not driven by health and nutrition or convenience, but are about pleasing the family.



Short Cut Fuelers

These adults, who skew male, say their lives are hectic and rushed and that their food choices are driven primarily by convenience. Food prices are not a major concern – however they tend to view food as “fuel”, or simply as a means to keep them going, and say they eat the same things over and over. While these individuals tend to have children in the household, they, themselves, do not express interest in providing child-pleasing choices. This segment is also characterized by their lack of interest with nutrition and healthy living.

National Eating Trends® Segmentation Descriptions

Appendix B: Fruit and Vegetable Annual Eatings Per Capita for Various Age Groups

TOTAL VEGETABLES (AEPG)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	5 Yr. Pt. Δ ('09-'14)	10 Yr. Pt. Δ ('04-'14)
TOTAL INDIVIDUALS	427	415	413	422	430	431	422	421	421	410	402	-30	-26
Total Children	351	344	352	360	372	379	377	377	376	374	372	-8	21
< 6 Yrs Old	318	313	326	338	349	373	386	378	370	373	364	-9	46
6-12 Yrs Old	362	357	364	374	386	386	377	376	379	375	374	-12	13
13-17 Yrs Old	367	356	360	360	372	375	366	376	376	373	376	0	8
Total Adults	452	438	432	442	448	446	435	434	433	421	410	-36	-42
18-34 Yrs Old	344	332	334	351	373	378	376	374	375	375	365	-13	21
35-44 Yrs Old	397	380	379	395	405	402	389	383	395	388	372	-29	-25
45-54 Yrs Old	451	442	434	438	442	440	429	425	420	403	397	-43	-55
55-64 Yrs Old	525	507	491	496	507	507	476	468	472	464	448	-59	-77
65+ Yrs Old	606	597	582	579	566	554	541	525	503	490	488	-66	-118
Adult Males	441	430	424	432	437	432	421	423	424	410	398	-35	-43
Males 18-34 Yrs Old	320	315	324	339	353	349	349	353	359	362	351	1	31
Males 35-44 Yrs Old	376	359	356	369	382	382	372	368	383	376	358	-24	-18
Males 45-54 Yrs Old	452	441	429	426	428	418	403	410	413	388	374	-44	-78
Males 55-64 Yrs Old	520	496	476	488	499	501	472	462	463	447	439	-62	-81
Males 65+ Yrs Old	614	609	592	589	579	566	543	519	499	487	487	-79	-126
Adult Females	461	446	438	450	458	459	448	443	440	431	421	-38	-40
Females 18-34 Yrs Old	365	347	343	361	390	401	398	391	388	387	378	-23	13
Females 35-44 Yrs Old	414	397	397	417	424	419	404	396	405	398	384	-35	-30
Females 45-54 Yrs Old	451	443	439	448	454	460	453	439	427	415	418	-42	-33
Females 55-64 Yrs Old	529	515	504	502	514	513	480	473	480	479	456	-57	-73
Females 65+ Yrs Old	600	586	573	570	554	544	539	530	507	493	489	-55	-111
HOUSEHOLD INCOME	427	415	413	422	430	431	422	421	421	410	402	-30	-26
Under \$10,000	408	386	377	400	447	427	384	393	349	321	333	-94	-75
\$10,000 - \$19,999	425	409	405	413	416	420	404	389	391	382	364	-57	-61
\$20,000 - \$29,999	391	377	387	405	398	400	419	424	420	416	387	-13	-4
\$30,000 - \$39,999	404	379	391	420	423	408	398	392	401	423	424	16	20
\$40,000 - \$49,999	438	432	412	415	423	422	402	399	407	397	397	-25	-41
\$50,000 - \$59,999	428	428	417	420	412	405	410	411	422	415	407	2	-21
\$60,000 - \$69,999	428	428	423	396	429	456	424	419	411	399	408	-49	-20
\$70,000 And Over	459	448	445	447	450	453	450	459	464	441	422	-31	-36
RACE/ETHNICITY	427	415	413	422	430	431	422	421	421	410	402	-30	-26
White/Non-Hispanic	433	417	413	421	426	430	421	421	421	411	401	-29	-32
Black/Non-Hispanic	420	410	404	417	434	429	428	446	435	417	390	-39	-30
Hispanic	383	390	413	431	439	418	405	395	409	399	406	-12	23
Asian	423	456	420	447	490	469	445	414	393	394	394	-74	-29
Other	414	390	410	433	465	476	443	437	422	421	486	10	72

TOTAL FRUIT (AEPC)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	5 Yr. Pt. Δ (‘09-‘14)	10 Yr. Pt. Δ (‘04-‘14)
TOTAL INDIVIDUALS	309	295	294	303	310	315	311	309	308	303	296	-19	-14
Total Children	319	296	305	324	331	346	353	349	349	356	362	15	43
< 6 Yrs Old	418	365	392	425	437	474	470	440	423	435	461	-13	44
6-12 Yrs Old	308	288	293	319	330	338	343	346	344	346	346	8	38
13-17 Yrs Old	238	239	237	228	235	244	242	261	285	292	287	43	48
Total Adults	306	294	290	297	304	306	298	297	297	289	277	-28	-29
18-34 Yrs Old	214	199	200	212	235	241	239	237	231	236	234	-7	20
35-44 Yrs Old	228	211	212	230	239	240	230	230	242	239	225	-15	-2
45-54 Yrs Old	278	272	272	267	264	278	277	273	274	256	243	-35	-35
55-64 Yrs Old	358	344	330	342	361	358	338	333	334	327	310	-48	-48
65+ Yrs Old	521	523	508	490	477	467	449	423	406	404	397	-70	-124
Adult Males	285	278	277	279	283	283	271	276	278	264	253	-30	-32
Males 18-34 Yrs Old	188	182	183	186	203	208	207	204	195	208	208	0	20
Males 35-44 Yrs Old	208	190	190	209	224	219	195	193	211	212	199	-20	-9
Males 45-54 Yrs Old	268	260	259	245	234	240	237	246	259	228	208	-33	-60
Males 55-64 Yrs Old	322	308	301	319	334	332	313	316	312	293	286	-46	-36
Males 65+ Yrs Old	519	532	515	487	485	481	445	418	404	390	388	-93	-131
Adult Females	324	308	302	313	321	325	321	316	314	311	298	-27	-26
Females 18-34 Yrs Old	237	213	215	235	261	268	265	263	260	259	257	-11	20
Females 35-44 Yrs Old	244	228	231	248	250	258	259	259	269	263	247	-12	3
Females 45-54 Yrs Old	288	284	284	287	291	313	314	296	287	280	275	-38	-13
Females 55-64 Yrs Old	388	372	354	362	384	382	360	347	353	358	332	-50	-56
Females 65+ Yrs Old	522	516	502	492	471	455	452	428	408	417	404	-51	-118
HOUSEHOLD INCOME	309	295	294	303	310	315	311	309	308	303	296	-19	-14
Under \$10,000	285	251	256	263	266	282	290	285	243	246	263	-19	-22
\$10,000 - \$19,999	291	270	262	271	296	310	280	254	240	238	241	-69	-50
\$20,000 - \$29,999	276	262	258	269	258	264	275	275	274	268	262	-2	-14
\$30,000 - \$39,999	269	247	266	301	310	297	281	280	298	309	293	-4	24
\$40,000 - \$49,999	313	299	283	282	301	313	294	281	293	301	306	-7	-6
\$50,000 - \$59,999	323	318	289	287	301	307	326	328	332	301	269	-38	-54
\$60,000 - \$69,999	309	301	321	319	316	331	321	339	347	337	335	3	26
\$70,000 And Over	358	348	349	348	343	341	343	351	356	345	328	-13	-30
RACE/ETHNICITY	309	295	294	303	310	315	311	309	308	303	296	-19	-14
White/Non-Hispanic	312	294	292	302	309	313	308	307	308	302	289	-24	-23
Black/Non-Hispanic	288	297	273	272	281	302	312	306	302	293	306	4	19
Hispanic	295	269	267	307	315	282	283	293	292	305	334	53	39
Asian	374	411	380	360	381	403	411	386	340	333	338	-65	-35
Other	298	283	356	389	368	400	381	321	329	352	347	-53	49

FRUIT JUICE (AEPC)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	5 Yr. Pt. Δ ('09-'14)	10 Yr. Pt. Δ ('04-'14)
TOTAL INDIVIDUALS	123	114	112	112	112	111	107	103	102	101	96	-16	-27
Total Children	158	141	141	143	142	146	142	133	133	131	127	-19	-31
< 6 Yrs Old	229	192	199	199	196	203	188	170	161	152	158	-46	-71
6-12 Yrs Old	136	124	125	133	135	137	132	122	122	125	119	-17	-17
13-17 Yrs Old	121	117	109	101	101	107	107	113	126	119	107	1	-13
Total Adults	111	105	102	102	103	101	96	94	94	92	87	-14	-24
18-34 Yrs Old	94	88	88	85	90	94	94	92	87	87	83	-11	-11
35-44 Yrs Old	86	78	78	83	85	84	77	75	79	79	73	-11	-13
45-54 Yrs Old	101	95	91	87	88	88	81	80	82	80	76	-11	-24
55-64 Yrs Old	125	119	116	112	111	113	104	101	100	96	92	-21	-33
65+ Yrs Old	166	163	156	154	152	139	132	125	121	121	115	-25	-52
Adult Males	108	104	103	99	100	99	92	92	92	89	86	-13	-22
Males 18-34 Yrs Old	90	90	89	80	84	87	85	84	78	80	80	-7	-10
Males 35-44 Yrs Old	78	71	74	79	83	83	73	68	75	76	70	-13	-8
Males 45-54 Yrs Old	98	89	86	79	79	80	72	74	80	80	73	-7	-26
Males 55-64 Yrs Old	123	120	120	112	109	113	103	105	100	89	88	-25	-36
Males 65+ Yrs Old	168	171	164	160	161	147	139	130	125	123	122	-25	-47
Adult Females	114	106	102	104	105	104	100	96	96	95	89	-15	-26
Females 18-34 Yrs Old	97	87	88	90	95	100	101	97	95	93	86	-15	-12
Females 35-44 Yrs Old	93	84	81	87	87	85	81	80	82	82	76	-8	-17
Females 45-54 Yrs Old	103	100	95	94	95	95	90	86	84	80	80	-15	-23
Females 55-64 Yrs Old	126	118	113	112	113	113	105	98	101	102	96	-17	-31
Females 65+ Yrs Old	165	157	149	148	145	133	127	120	117	118	109	-24	-56
HOUSEHOLD INCOME	123	114	112	112	112	111	107	103	102	101	96	-16	-27
Under \$10,000	130	120	125	120	113	117	122	132	112	100	105	-12	-25
\$10,000 - \$19,999	120	108	103	102	115	128	113	100	94	91	94	-33	-25
\$20,000 - \$29,999	113	107	106	109	105	108	99	87	92	94	96	-12	-17
\$30,000 - \$39,999	107	99	102	115	119	105	99	96	100	103	93	-12	-14
\$40,000 - \$49,999	126	111	106	102	103	100	94	92	99	104	98	-2	-29
\$50,000 - \$59,999	136	128	108	97	107	127	120	102	104	101	93	-35	-43
\$60,000 - \$69,999	119	108	103	101	107	101	92	104	109	103	94	-7	-26
\$70,000 And Over	129	123	126	123	115	112	111	109	108	104	96	-16	-32
RACE/ETHNICITY	123	114	112	112	112	111	107	103	102	101	96	-16	-27
White/Non-Hispanic	120	110	108	108	108	106	101	99	99	97	89	-16	-30
Black/Non-Hispanic	144	143	128	128	139	154	151	140	139	125	132	-22	-12
Hispanic	130	118	111	114	118	114	113	114	105	115	129	15	-1
Asian	131	145	128	115	109	108	123	120	124	125	111	4	-19
Other	107	106	152	154	121	139	130	92	71	85	94	-46	-13

FRESH VEGETABLES (In-Home Only) (AEPC)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	5 Yr. Pt. Δ (‘09-‘14)	10 Yr. Pt. Δ (‘04-‘14)
TOTAL INDIVIDUALS	175	171	173	177	181	183	182	184	181	181	183	1	8
Total Children	121	120	127	128	131	138	141	141	140	145	151	14	30
< 6 Yrs Old	107	106	119	128	130	145	151	139	136	143	155	10	48
6-12 Yrs Old	122	121	124	126	131	133	134	135	135	139	145	11	23
13-17 Yrs Old	134	131	138	132	132	137	142	153	150	156	160	23	26
Total Adults	192	188	187	192	196	196	194	196	193	191	192	-4	0
18-34 Yrs Old	131	127	128	137	153	160	160	160	157	164	172	11	41
35-44 Yrs Old	154	151	156	163	167	163	160	166	171	171	168	6	15
45-54 Yrs Old	189	188	191	194	191	188	193	194	187	179	179	-9	-10
55-64 Yrs Old	238	227	220	226	238	235	218	218	221	222	218	-17	-21
65+ Yrs Old	289	287	276	268	264	263	258	245	229	230	236	-27	-53
Adult Males	185	184	183	186	189	186	185	189	189	186	185	-2	0
Males 18-34 Yrs Old	121	120	125	131	142	146	148	151	152	158	161	15	41
Males 35-44 Yrs Old	144	143	144	151	158	153	149	159	166	167	163	10	18
Males 45-54 Yrs Old	184	184	185	184	180	174	176	184	184	172	165	-9	-19
Males 55-64 Yrs Old	230	221	210	221	230	226	214	211	215	215	213	-13	-17
Males 65+ Yrs Old	291	295	281	273	271	264	255	241	227	226	235	-29	-56
Adult Females	199	192	191	196	202	204	201	201	196	195	199	-5	0
Females 18-34 Yrs Old	140	132	132	143	162	171	169	166	160	168	181	10	40
Females 35-44 Yrs Old	161	158	165	173	174	171	169	172	176	174	173	2	12
Females 45-54 Yrs Old	193	193	196	203	201	200	208	203	190	185	191	-9	-2
Females 55-64 Yrs Old	246	232	228	230	245	242	222	224	227	228	222	-21	-24
Females 65+ Yrs Old	287	280	271	264	258	262	260	247	232	233	237	-25	-49
HOUSEHOLD INCOME	175	171	173	177	181	183	182	184	181	181	183	1	8
Under \$10,000	146	138	132	140	166	167	149	158	142	129	136	-32	-10
\$10,000 - \$19,999	158	152	155	158	164	170	171	162	155	159	152	-18	-6
\$20,000 - \$29,999	153	139	147	155	145	147	165	166	162	172	161	14	8
\$30,000 - \$39,999	166	157	166	174	164	156	156	159	172	189	194	38	28
\$40,000 - \$49,999	184	189	174	165	167	177	172	171	170	159	167	-9	-16
\$50,000 - \$59,999	176	185	183	180	175	175	180	182	191	189	185	11	9
\$60,000 - \$69,999	179	182	184	169	192	210	188	191	189	183	195	-15	15
\$70,000 And Over	201	196	199	206	208	204	206	216	214	206	210	6	9
RACE/ETHNICITY	175	171	173	177	181	183	182	184	181	181	183	1	8
White/Non-Hispanic	178	171	170	175	179	181	180	182	180	179	181	0	3
Black/Non-Hispanic	166	162	157	149	160	168	174	193	181	174	169	2	4
Hispanic	155	175	205	206	200	190	190	184	194	200	208	18	53
Asian	203	222	214	246	259	245	233	220	203	194	209	-36	6
Other	157	145	168	173	196	211	200	197	197	212	234	24	77

Appendix C: Chart Index

Fruit and Vegetable Consumption Trends

Consumption Levels

- Chart 1. Consumption of Fruit & Vegetables, 2004-2014
- Chart 2. Consumption of Fruit Juice, Whole Fruit, & Vegetables, 2004-2014

Various Forms

- Chart 3. In-Home Consumption of Various Forms of Fruit & Vegetables, 2004-2014, Summary
- Chart 4. In-Home Consumption of Various Forms of Fruit & Vegetables, 2004-2014, Detailed
- Chart 5. Percentage In-Home Consumption of Various Forms of Fruit & Vegetables, 2014

Home vs. Away-From-Home

- Chart 6. Where Fruit & Vegetables are Sourced, 2014
- Chart 7. Away-From-Home Sources of Fruit & Vegetables, 2014
- Chart 8. Trend of In-Home vs. Away-From-Home Sourced Fruit & Vegetables

Top Consumed Fruit and Vegetables

- Chart 9. Top Fruit & Fruit Products Consumed, 2014
- Chart 10. Top Vegetable & Vegetable Products Consumed, 2014

How Consumed

- Chart 11. Base Dish vs. Additive/Ingredient Use, 2014
- Chart 12. Base Dish vs. Additive/Ingredient Use, 2004-2014
- Chart 13. Most Popular Side Dishes at In-Home Dinners, 2014
- Chart 14. Percent of In-Home Dinners Including At Least One Side Dish
- Chart 15. Number of Side Dishes Served When a Side Dish is Present at Dinner
- Chart 16. Total Vegetables: Daypart Consumption
- Chart 17. Top Specific In-Home Dinner Side Dishes
- Chart 18. In-Home Vegetables: How Used at Meal
- Chart 19. Total Fruit Excluding Juice: Daypart Consumption
- Chart 20. Total Fruit Excluding Juice: Dish Position
- Chart 21. Percent of Eating Occasions Motivated Primarily By Health
- Chart 22. Top 10 Snack Foods
- Chart 23. Better-For-You Snack Food Consumption Trend
- Chart 24. Juice: Daypart Consumption

Demographics of Fruit and Vegetable Consumers

Age

- Chart 25. Total Fruit & Vegetable Consumption by Age & Gender, 2014
- Chart 26. Fruit & Vegetable Consumption by Child Subsets, 2004-2014
- Chart 27. Fruit & Vegetable Consumption, All Children, 2004-2014
- Chart 28. Fruit & Vegetable Consumption by Adults Ages 18-44, 2004-2014
- Chart 29. Fruit & Vegetable Consumption by Adults Ages 45+, 2004-2014
- Chart 30. Percent of In-Home Main Dishes at Supper that was a Piece of Meat/Poultry/Seafood

Region

- Chart 31. Total Fruit & Vegetable Consumption: By Region, 2014

Gender

- Chart 32. Total Fruit & Vegetable Consumption: Males, 2004-2014
- Chart 33. Total Fruit & Vegetable Consumption: Females, 2004-2014

Other Demographics

- Chart 34. Trend of Total Fruit & Vegetable Consumption by Household Income
- Chart 35. Trend of Total Fruit & Vegetable Consumption by Race/Ethnicity

Consumption by Lifecycle and Eater Segments

Lifecycle

- Chart 36. Total Fruit & Vegetable Consumption by Lifecycle, Percent Share
- Chart 37. Total Fruit & Vegetable Consumption by Lifecycle, 2014
- Chart 38. Total Fruit & Vegetable Consumption by Lifecycle, 2004-2014

Eater Segments

- Chart 39. Total Fruit & Vegetable Consumption by Segment, Percent Share
- Chart 40. Total Fruit & Vegetable Consumption by Segment, 2014
- Chart 41. Total Fruit & Vegetable Consumption by Segment, 2009-2014

The Future of Fruit and Vegetable Consumption

Generational Effect

- Chart 42. Percent Change in Population by Age, 2013 vs. 2018
- Chart 43. Generational Effect for Total Fruit & Total Vegetables, 2003-2013
- Chart 44. Generational Effect for Total Fruit & Total Vegetables, 2013-2018

Current and Forecasted Consumption

- Chart 45. Current Total Fruit & Total Vegetable Consumption, 2014
- Chart 46. Forecasted Total Fruit & Total Vegetable Consumption, 2018
- Chart 47. Projected Eatings by Year of Age, 2013 vs. 2018
- Chart 48. Total vs. Fresh Vegetables, Current Situation
- Chart 49. Total Vegetables vs. Fresh Vegetables, Forecast
- Chart 50. Total Fruit vs. Fruit Excluding Juice, Current Situation
- Chart 51. Total Fruit vs. Fruit Excluding Juice, Forecast
- Chart 52. Importance of Generations Today & in the Future

What to Focus on Next

Reposition Fruit and Vegetables

- Chart 53. Total Fruit & Vegetable Consumption by Eater Segment, 2009-2014
- Chart 54. Percent of Age Group on Any Kind of Diet or Having Any Medical Condition
- Chart 55. Percent of Individuals Doing Activity on Any Given Day
- Chart 56. Average Number of End Dishes Served In-Home at Supper, Including Food & Beverages
- Chart 57. Number of Additives, Ingredients, & Cooking Agents Used Per Supper Meal
- Chart 58. Frozen & Ready-to-Eat Main Dishes

Extend Partnerships

- Chart 59. Top Accompaniments to Total Vegetable & Total Fruit Eaten "As Is", 2014
- Chart 60. Top Host Foods When Vegetables & Fruit Are Used As An Additive or Ingredient
- Chart 61. Top Ten Foods/Beverages that are Part of More American Diets

Remember Pricing Strengths

- Chart 62. Cost of Average Meal per Eater
- Chart 63. Cost of Average Meal per Eater Over Time
- Chart 64. Food Spending as Percent of U.S. Disposable Personal Income

Advance Away From Home Opportunities

- Chart 6. Where Fruit & Vegetables are Sourced, 2014
- Chart 7. Away-From-Home Sources of Fruit & Vegetables, 2014

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