



2011 Mango Attitude & Usage Survey



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Background & Objectives

Background

- In 2007 The National Mango Board conducted a Mango Attitude and Usage survey by telephone. This year a similar study was conducted online with MarketTools proprietary ZoomPanel.

Objectives

- The objectives of this study were to determine what changes, if any, have occurred in the Mango marketplace since 2007, as well as to obtain information on current behavior and attitudes.
- Specifically how has the market changed in terms of :
 - the proportion purchasing and eating mangos
 - reasons for no longer purchasing or purchasing less
 - knowledge and understanding about mangos

Methodology

- The study was conducted online from July 1 through July 6, 2011
- A national representative sample of 500 Primary Grocery Shoppers were surveyed
- In order to qualify the respondent had to be:
 - 21-69 years old
 - Primary grocery shopper (30% males/70% females)
 - US residents

- The following user groups are included in this report:
 - Current purchasers:
 - 2011: Purchased mango in the past 6 months
 - 2007: Purchased mangos in past 6 months and plan to in the future
 - Past purchasers:
 - 2011: Ever purchased but not in the past 6 months
 - 2007: Not purchased in the past 6 months or have purchased in the past 6 months but don't plan to buy or purchase in the future
 - Non purchasers:
 - 2011: Never purchased mangos
 - 2007: Same

Demographics & Social Profile



Current Purchasers Demographic & Social Profile (%)

Demographic Profile

- Female(75%)
- Average age(44)
- Hispanic(20%)
- White/Caucasian(69%)
- Employed(60%)
- College level and higher(82%)
- Average income(\$58.3)
- With kids(49%)
- Average household size(2.7)
- Midwest residents(23%)
- South region residents(31%)
- Northeast residents(20%)
- Pacific residents(25%)

Social Profile

Activities engaged in:

- Computer at home/internet(71%)
- Physical fitness(49%)
- Barbecuing(44%)
- Gardening(42%)
- Facebook(70%)
- Search recipes(44%)
- Eat out(3.8 x per month)
- Cooking(12.3 x per month)
- Buys produce at grocery/local stores(64%)
- Buys from Superstores(15%)

Past Purchasers Demographics & Social Profile (%)

Demographic Profile

- Female(77%)
- Average age(45.5)
- Hispanic(16%)
- White (77%)
- Employed(63%)
- College level and higher(77%)
- Average income (\$55.9)
- No kids in the household(67%)
- Average household size(2.5)
- Midwest region residents(31%)
- South region residents(30%)
- Northeast region residents(20%)
- Pacific region residents(19%)

Social Profile

- Activities engaged in:**
- Computers at home/internet(83%)
 - Physical fitness(45%)
 - Barbecue/grilling(36%)
 - Gardening(31%)
 - Watch sports on TV(30%)
 - Facebook(63%)
 - Search recipes(53%)
 - Twitter(13%)
 - None(19%)
 - Eat out(3.2 per month)
 - Cook at home(12.6 per month)
 - Buys produce in grocery stores/local markets(69%)
 - Buys from Superstores(19%)

Non Purchasers Demographic & Social Profile (%)

Demographic Profile

- Female(67%)
- Average age (47)
- Non Hispanic(93%)
- White/Caucasian(86%)
- Employed(52%)
- College level and higher(74%)
- Average income(\$54.8)
- With kids at home(46%)
- Average household size(2.4)
- Northeast region residents(18%)
- Midwest region residents(31%)
- South region residents(30%)
- Pacific region residents(19%)

Social Profile

Activities engaged in:

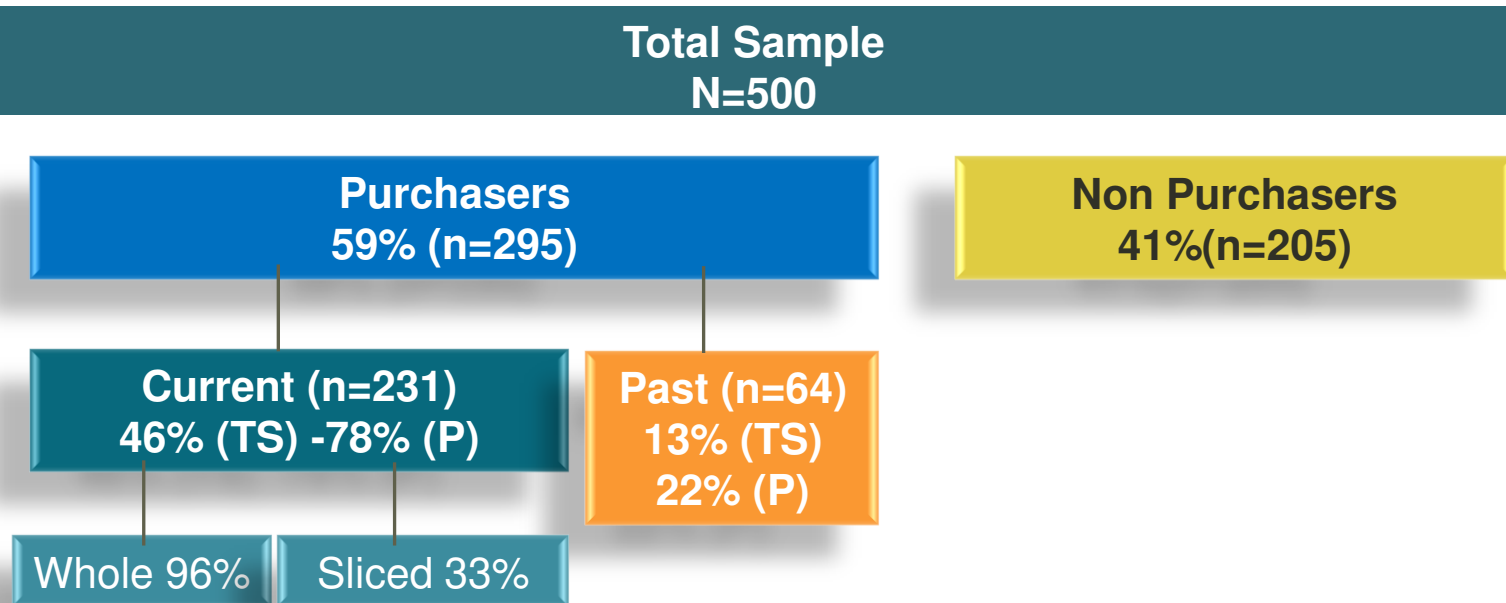
- Computer at home/internet(72%)
- Watching sports/TV(38%)
- Physical fitness(34%)
- Barbecuing/grilling(34%)
- Gardening(33%)
- Facebook(64%)
- No online activities(29%)
- Search recipes(24%)
- Buys produce at groceries(76%)
- Eat out(4.4 per month)
- Cook at home(12.1 per month)

Category Incidence



Purchase Incidence - 2011

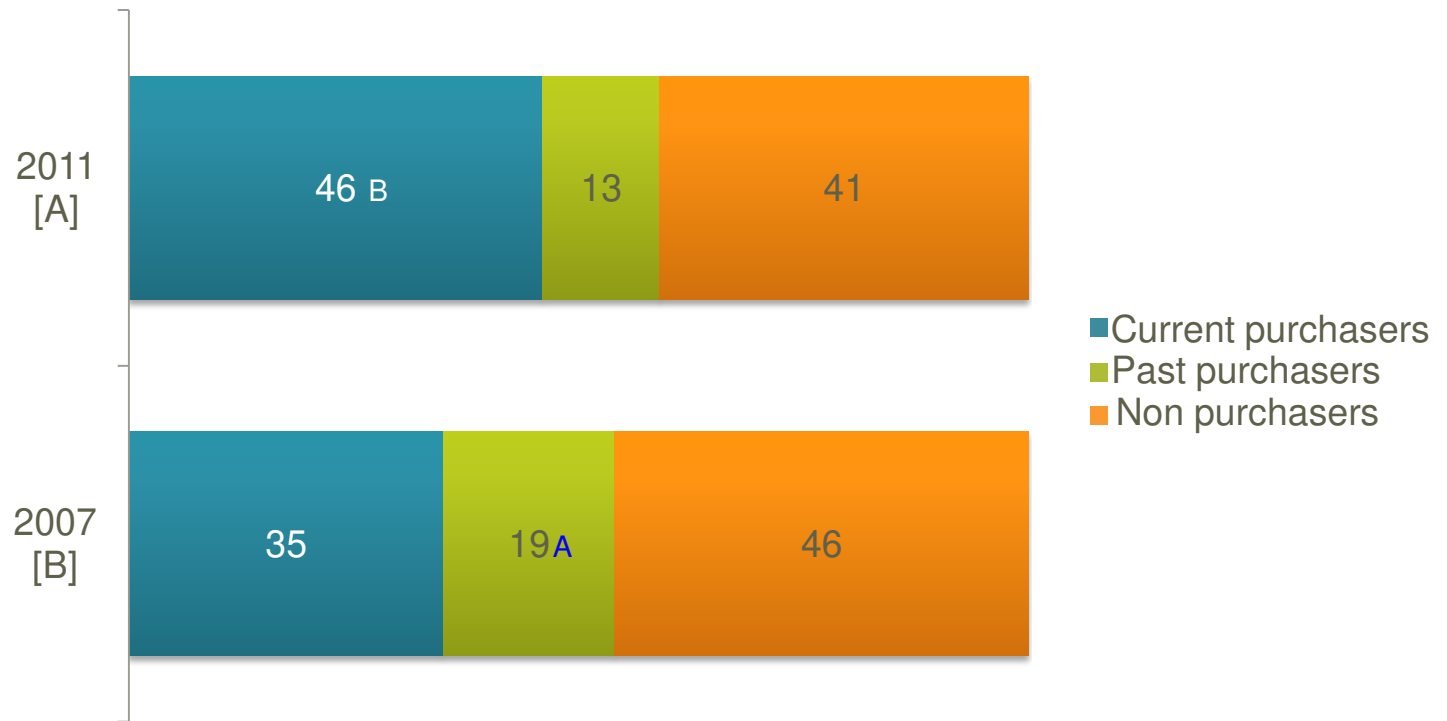
- 3 in 5 surveyed in 2011 have purchased mangos at some time
- A large majority of Purchasers (78%) have purchased either whole or pre-sliced mangos in the past 6 months (Current Purchasers)



- Current purchasers are those who bought fresh mango in the past 6 months
- Past purchasers are those who ever bought fresh mango but not in the past 6 month
- Non purchasers are those who never bought fresh mango

Purchase Incidence (%) - 2007 vs. 2011

- Purchasing mangos increased somewhat in 2011, from 54% who ever purchased in 2007 to 59% in 2011
- Current Purchasers increased from 35% to 46%



2007 Total Random: n=372, 2011 Total Sample: n=500

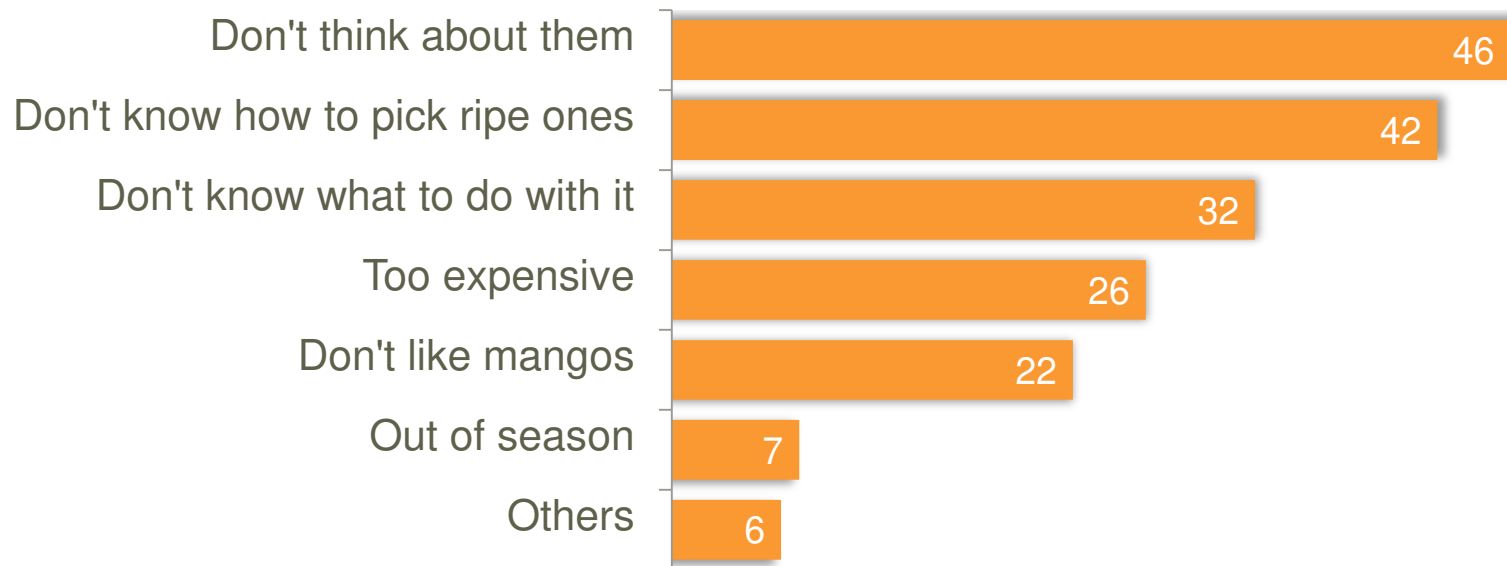
Q3. Have you ever purchased fresh mango for yourself or your family?

Q4. Have you purchased fresh mango for yourself or your family during the past 6 months?

Q5. Have you purchased fresh mango during the past 6 months that were sold pre-sliced and packaged?

Reasons Why Never Purchased (%)

- About half of Non Purchasers claimed they never thought about purchasing mangos
- Lack of knowledge on how to pick mangos and not knowing what to do with them are cited next most often

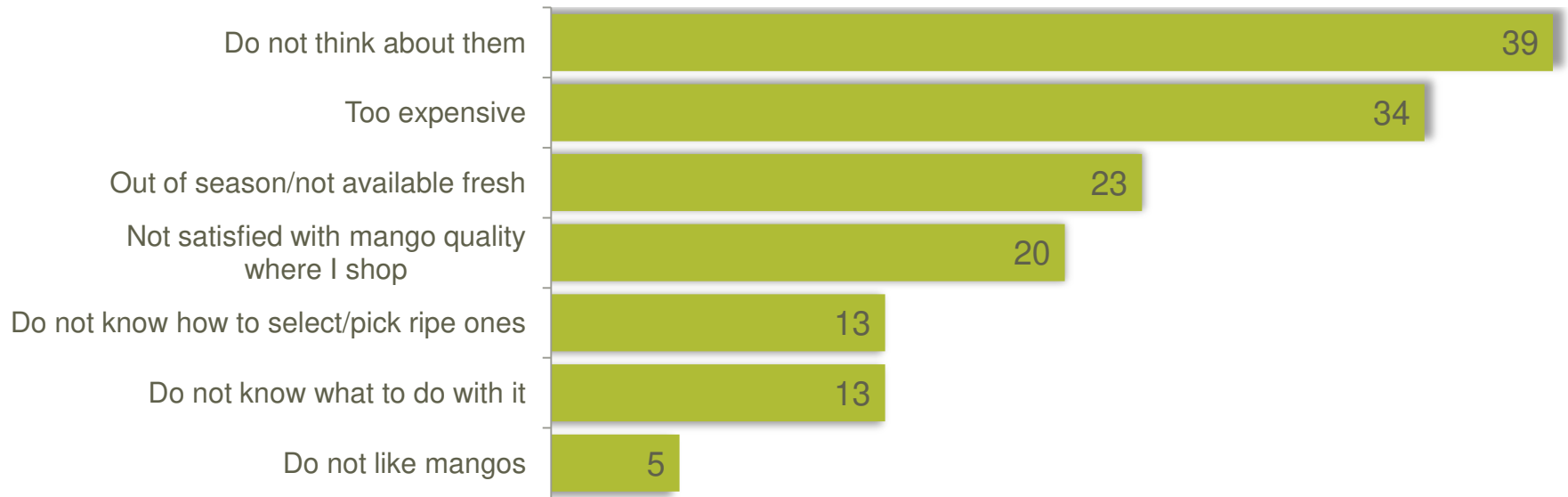


Non Purchasers: N=205

Q21. You indicated that you have never purchased a fresh mango. What are the reasons why you have never purchased a fresh mango?

Reasons Why Not Purchased in Past 6 Months (%)

- Too expensive and Don't think about them are the main reasons cited by Past Purchasers for not buying in the past 6 months

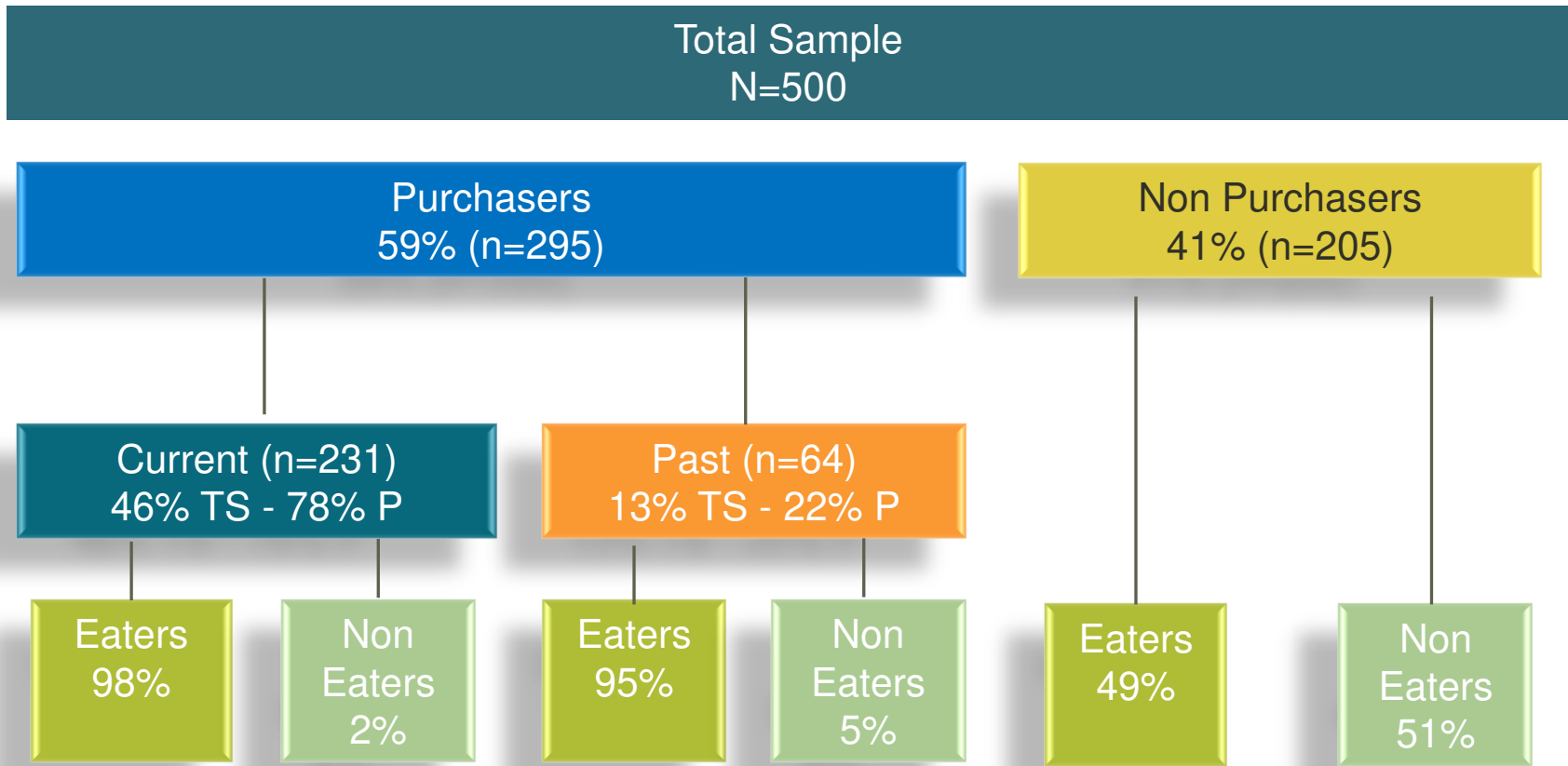


Non Purchasers: N=64

Q25. You indicated that you have not purchased a fresh mango in the past 6 months. What are the reasons why you have not purchased a fresh mango in the past 6 months?

Consumption Incidence by Purchase (%)

- Almost all (98%) Purchasers have eaten mangos
- Half (49%) of Non Purchasers claim to have eaten mangos

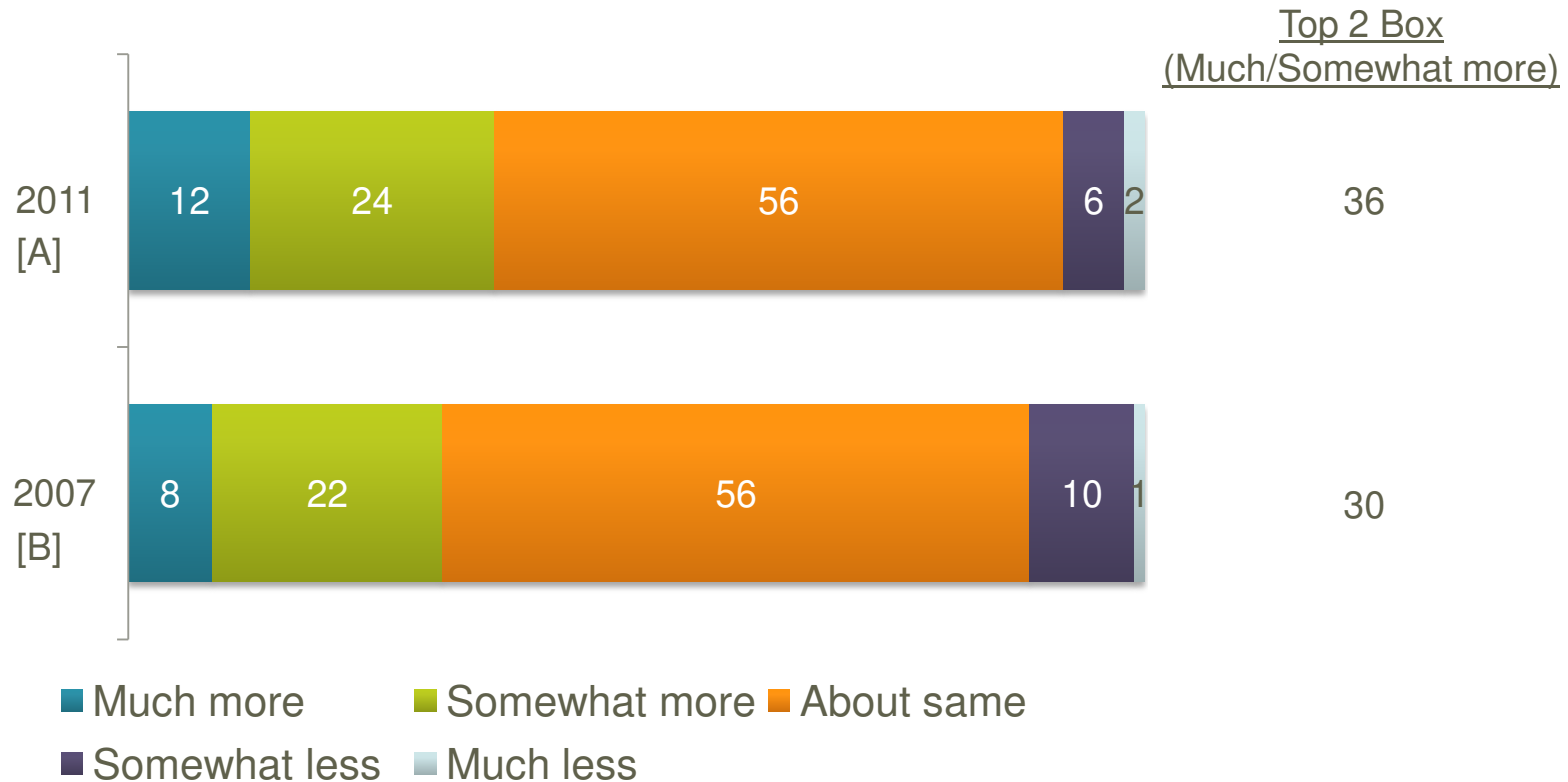


Purchase Behavior



Current Purchase Frequency vs. Year Ago (%) - 2011 vs. 2007

- In 2011, more than one-third of Current Purchasers claim they are purchasing more mangos than last year compared to 8% who are purchasing less
- This is somewhat higher than in 2007
- In both 2011 and 2007, the majority of Current Purchasers are buying about the same as a year ago

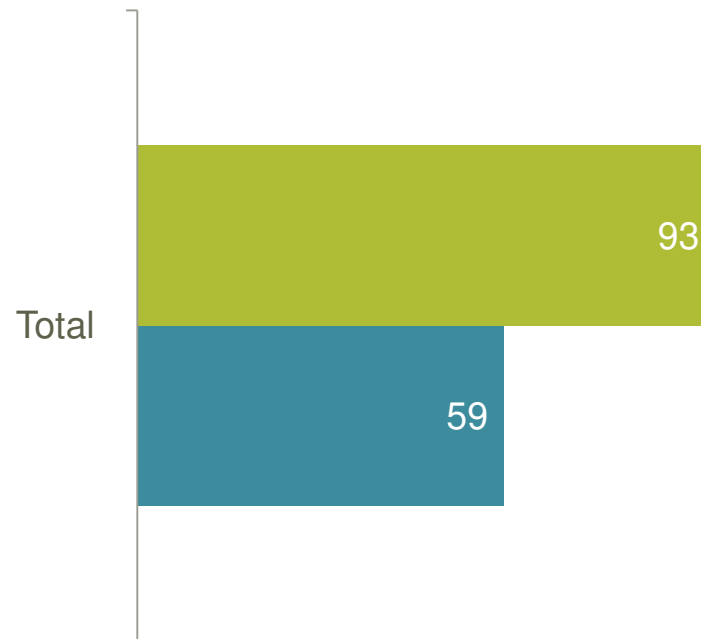


2007 current purchasers: n=180, 2011 current purchasers: n=231

Q27. Are you purchasing more or less mangos than you were last year?

Incidence of Purchase (%) (Summer & Spring vs. Winter & Fall)

- Mangos are more likely to be purchased in the spring and summer than in fall and winter



■ Spring & Summer [A] ■ Winter & Fall [B]

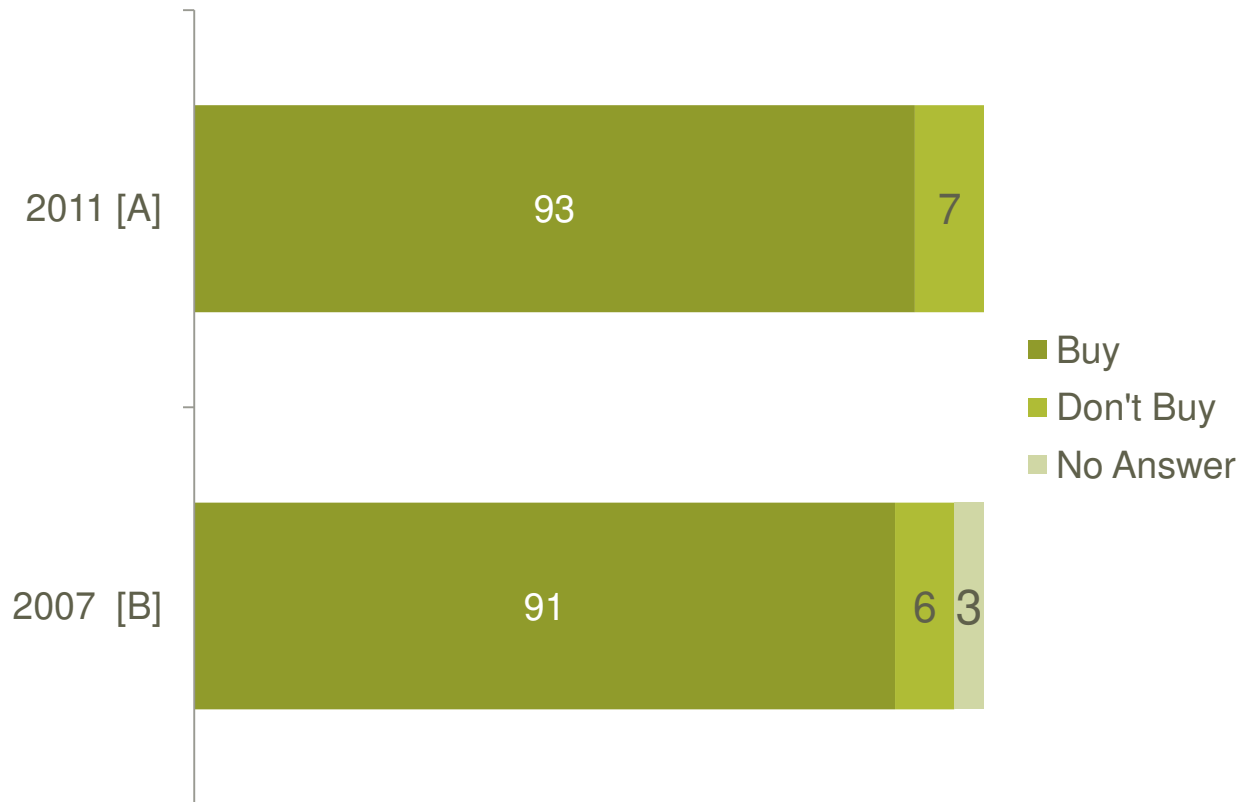
Current Purchasers who are:

Q29. Do you purchase mangos during the spring and summer months, from March through August?

Q31. Do you purchase mangos during the fall and winter months, from September through February?

Whether or Not Purchase in Spring and Summer (%) - 2007 vs. 2011

- Proportion of Spring and Summer buyers of mangos is similar to 2007

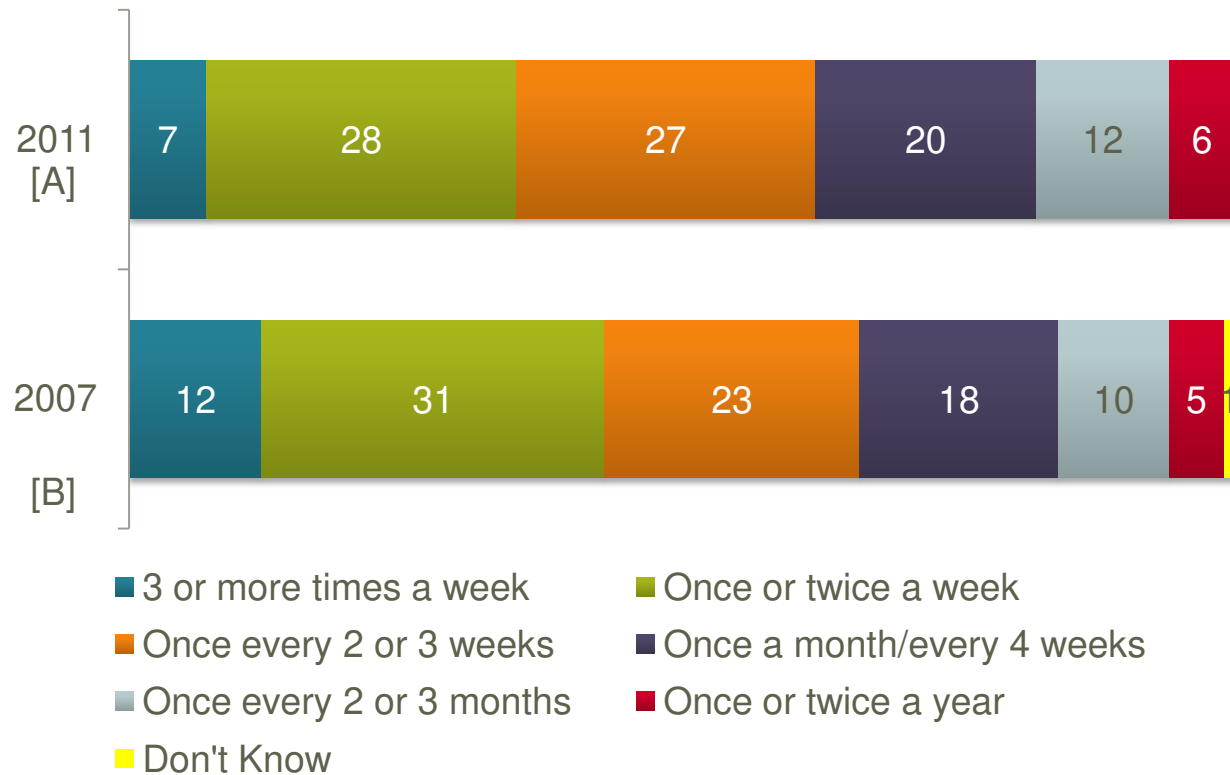


2007 Current Purchasers: n=180, 2011 Current Purchasers: n=231

Q29. Do you purchase mangos during the spring and summer months, from March through August?

How Often Serve in Spring and Summer (%) - 2007 vs. 2011

- Although purchasing mangos in the spring and summer has not declined, the frequency of serving mangos in spring and summer has declined since 2007
- 35% of those who serve mangos at home in spring and summer do so at least once per week

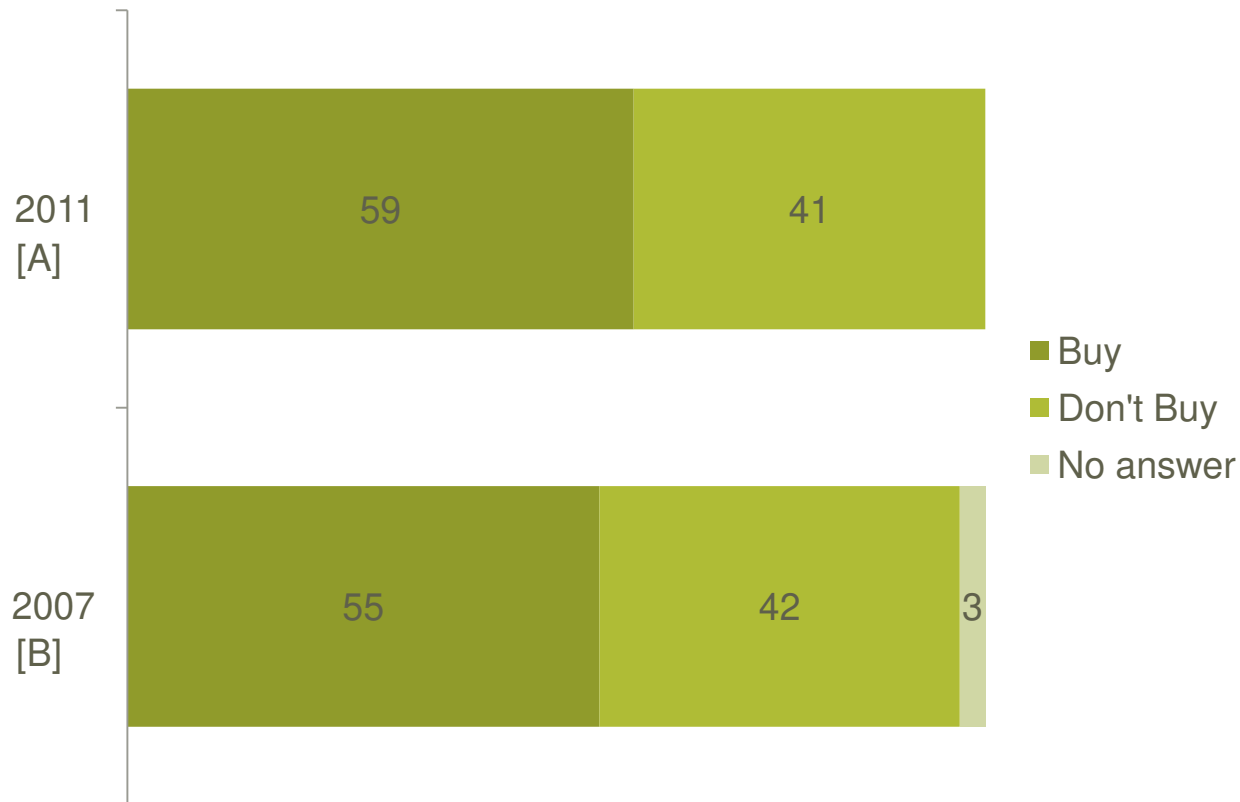


2007 Spring and Summer Purchasers: n=163, 2011 Spring and Summer Purchasers: n=217

Q30. About how often are mangos served at your home during the spring and summer months?

Whether or Not Purchase in Fall and Winter (%) - 2007 vs. 2011

- Current Purchasers are less likely to purchase in the fall and winter than in the spring and summer
- Incidence of fall and winter purchasing is comparable to 2007

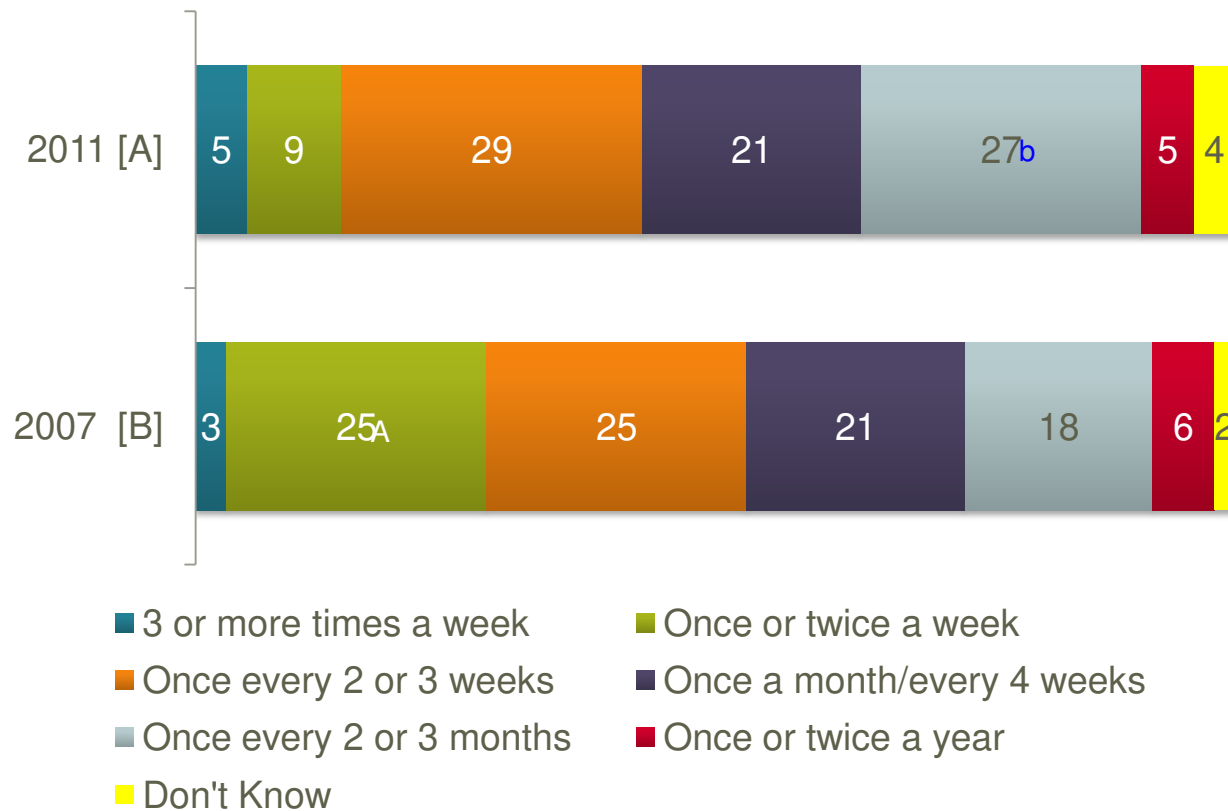


2007 Current Purchasers: n=180, 2011 Current Purchasers: n=231

Q31. Do you purchase mangos during the fall and winter months, from September through February?

How Often Serve in Fall and Winter (%) – 2007 vs. 2011

- The frequency of serving mangos in fall and winter has declined since 2007

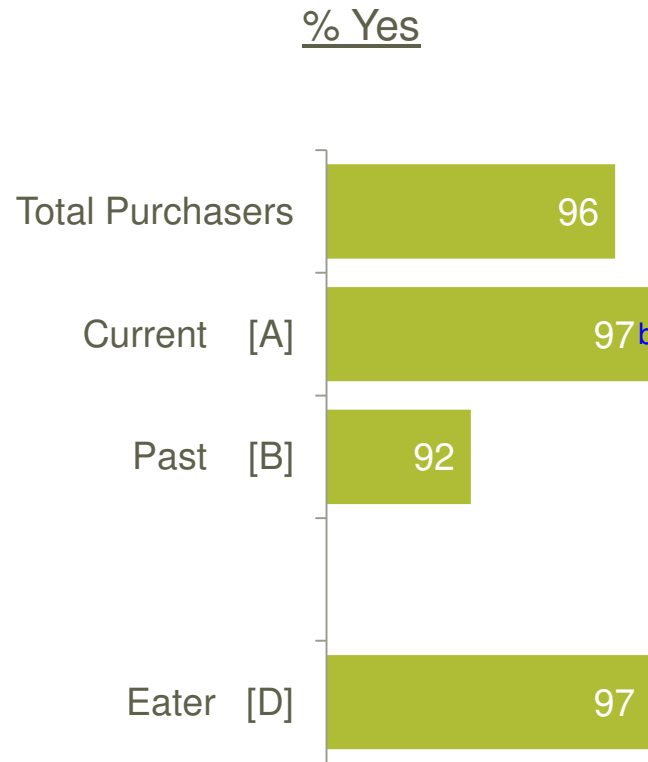


2007 Spring and Summer Purchasers: n=163, 2011 Spring and Summer Purchasers: n=217

Q30. About how often are mangos served at your home during the fall and winter months?

Intent to Purchase Fresh Mangos in the Future (%)

- Virtually all (97%) of Current Purchasers and a large majority of Past purchasers (92%) intend to purchase mangos in the future

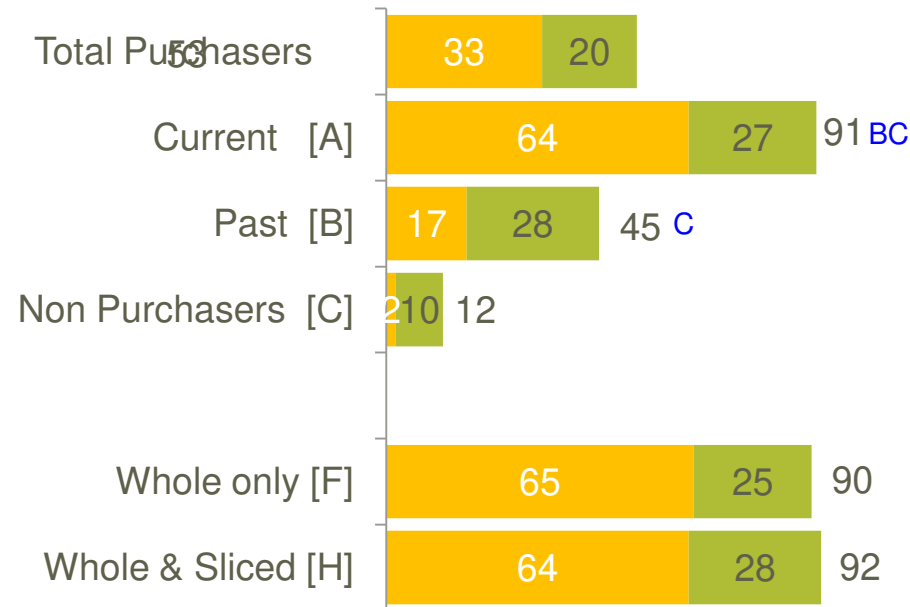


Total=295, Current Purchasers: n=231, Past Purchasers: n=64, Whole mango only purchasers: n=155, Whole & sliced mango purchasers: n=67, Males: n=140, Females: n=360, 21-29: n=85, 30-44:n=162, 45-54: n=100, 55-69: n=153

Q7. You indicated that you have previously purchased mangos, do you plan to purchase mangos in the future?

Likelihood of Purchasing Whole Mangos in the Next 6 months (%)

- Probability of purchasing whole mangos in the next 6 months is significantly higher among Current Purchasers



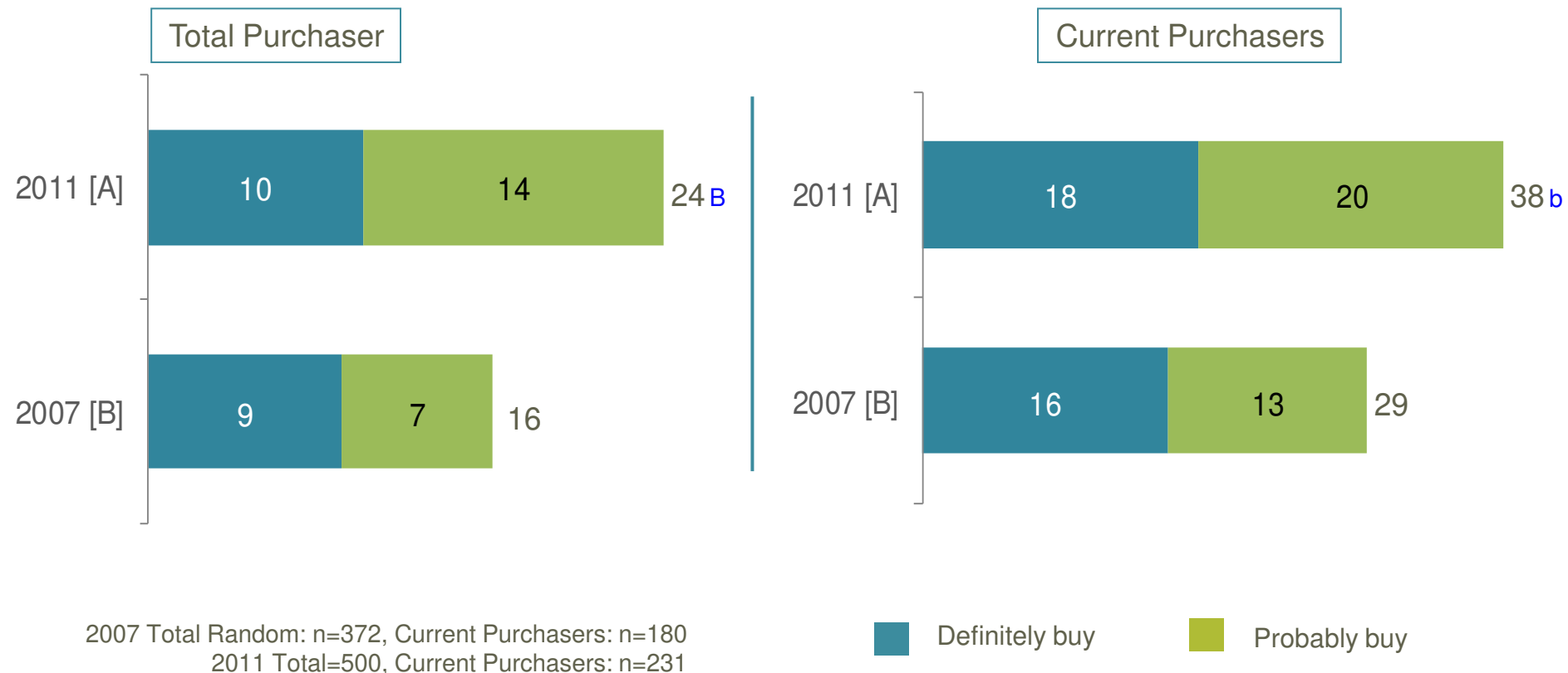
■ Top Box/(Definitely buy)
 ■ 2nd Box (Probably buy)

Total: n=500, Current Purchasers: n=231, Past Purchasers: n=64, Non Purchasers: n=205, Whole Mango Purchasers: n=155, Whole & sliced Mango purchasers: n=67,

Q17. How likely are you to purchase a whole fresh mango during the next 6 months?

Interesting in Purchasing Organic Mangos (%) – 2007 vs. 2011

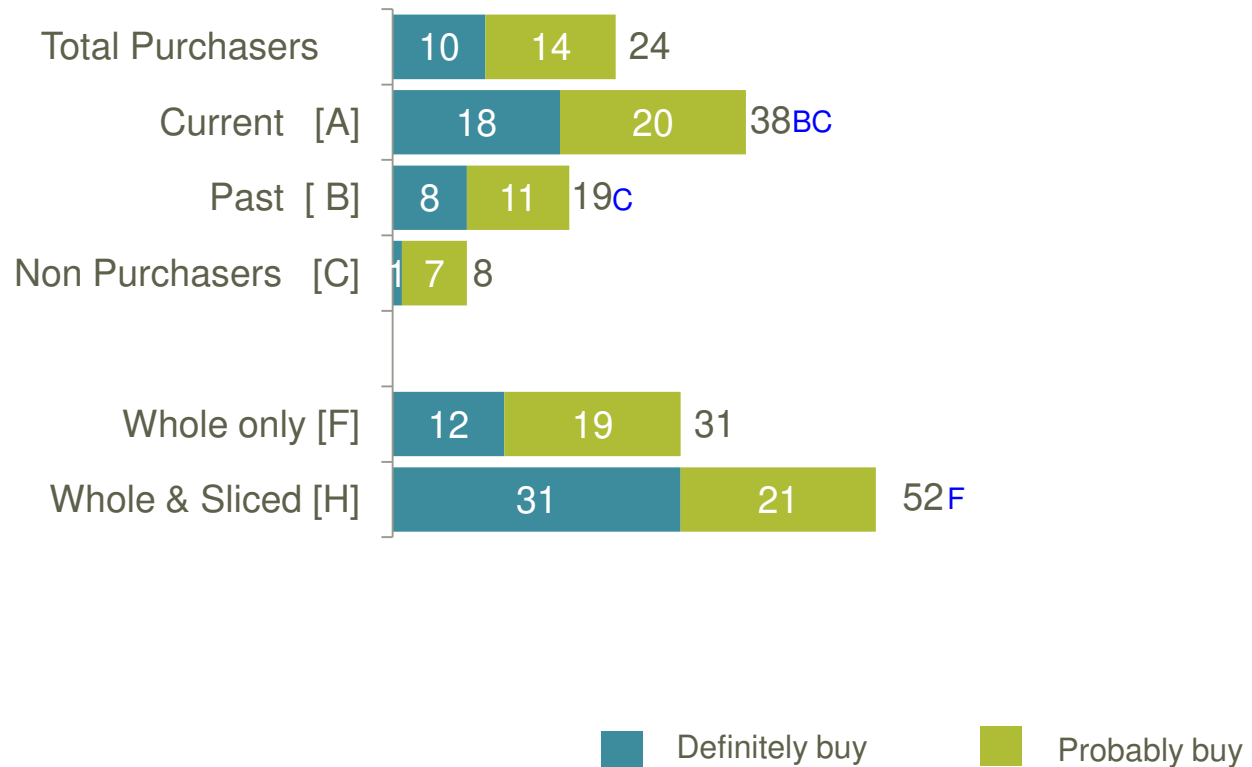
- Interest in purchasing organic mangos is significantly higher in 2011 than 2007 among both the total surveyed and Current Purchasers



Q37. How interested are you in purchasing organic mangos?

Interest in Purchasing Organic Mangos (%)

- Interest in purchasing organic mangos is highest among Current Purchasers, Whole & sliced mango buyers

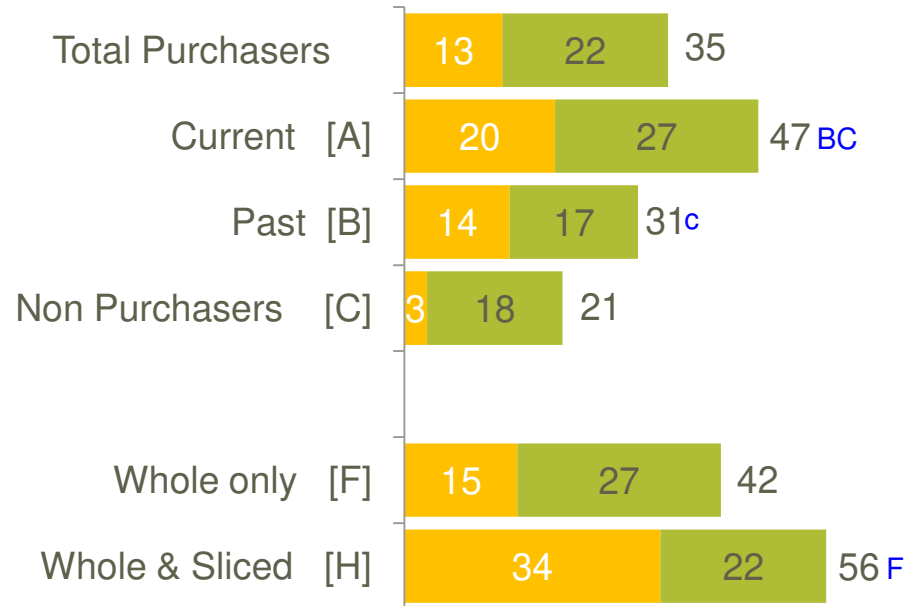


Total: n=500, Current Purchasers: n=231, Past Purchasers: n=64, Non Purchasers: n=205, Whole mango only buyers: n=155, Whole & sliced buyer: n=67,

Q37. How interested are you in purchasing organic mangos?

Likelihood to Purchase Irradiated Mangos (%)

- Current Purchasers are most likely to purchase irradiated mangos



■ Top Box/(Definitely buy)
 ■ 2nd Box(Probably buy)

Total: n=500, Current Purchasers: n=231, Past Purchasers: n=64, Non Purchasers: n=205, Whole mango only purchasers: n=159, Whole & sliced mango purchasers: n=67,

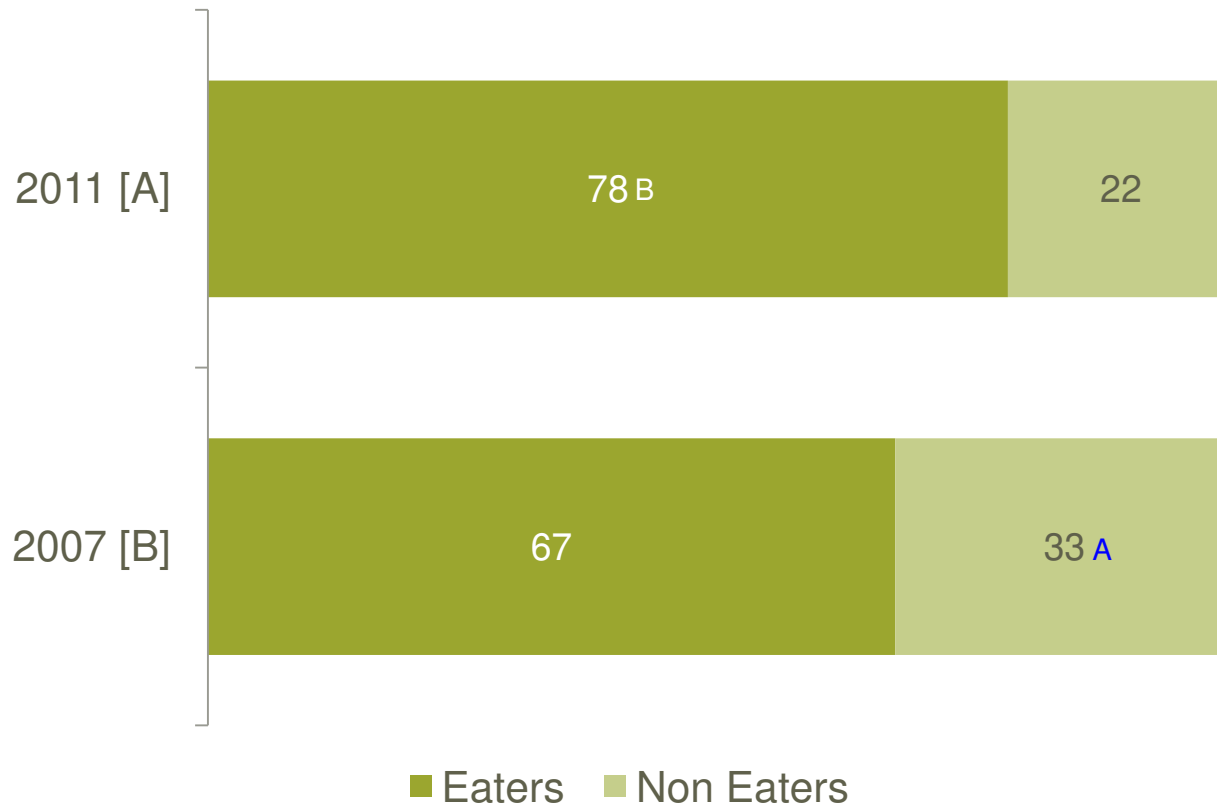
Q38. As you may know, irradiation is a treatment used on food to destroy deadly organisms such as E. coli and Salmonella, and endorsed by the World Health Organization. How likely would you be to buy mangos that have been treated by food irradiation?

Consumption Behavior



Eater/Non Eater Incidence (%) - 2007 vs. 2011

- The incidence of eating mangos has increased since 2007



2007 Total Random =372, 2011 Total=500

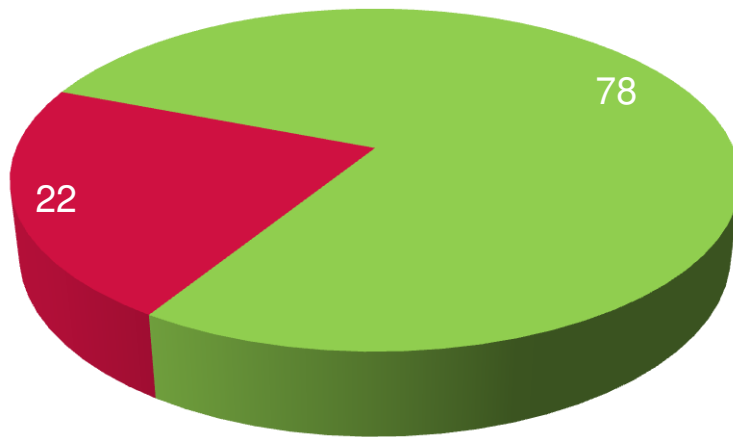
Q2. Have you ever eaten fresh mango as an ingredient such as in a smoothie, in a salsa, in or on a dessert, or on a piece of chicken or meat either at home or away from home?

Q3. Have you ever eaten fresh mango by itself or mixed with other fruit either at home or away from home?

Eater/Non Eater Incidence in 2011 (%)

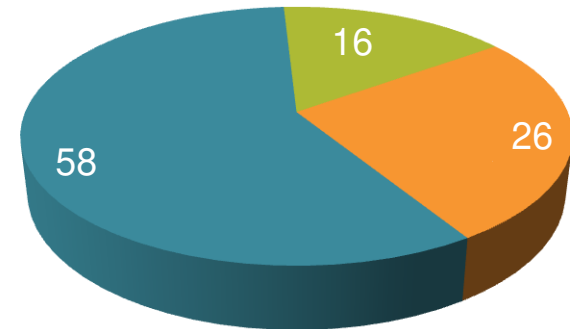
- Three-quarters of those surveyed have eaten mangos in 2011
- The majority of those who have eaten mangos have purchased it in the past 6 months
- Interestingly, a quarter who have tried mangos either at home or elsewhere have never purchased them

Total Sample



■ Non Eater ■ Eater

Incidence among Eaters



■ Current Purchasers ■ Past Purchasers
■ Non Purchase

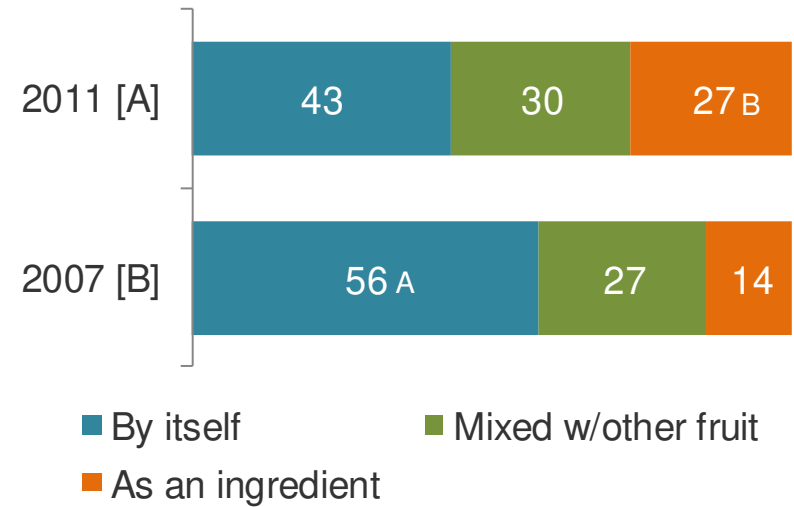
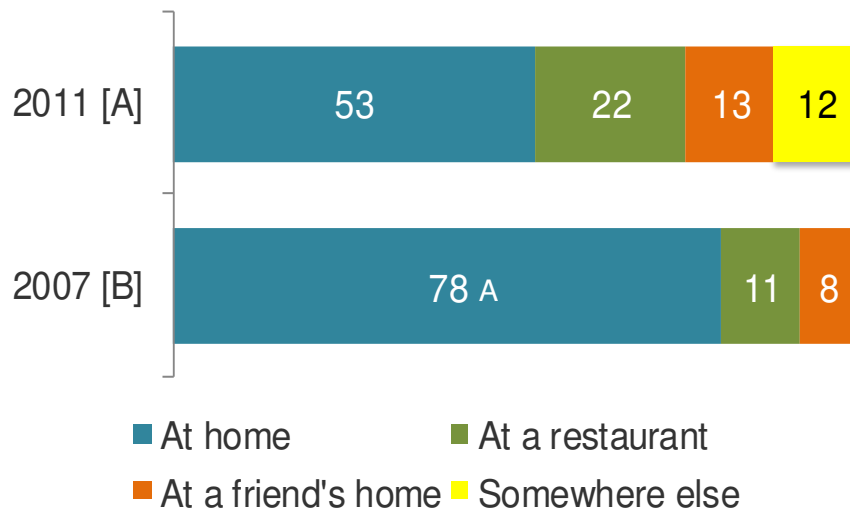
Total: n=500 Eaters: n=389

Q2. Have you ever eaten fresh mango as an ingredient such as in a smoothie, in a salsa, in or on a dessert, or on a piece of chicken or meat either at home or away from home?

Q3. Have you ever eaten fresh mango by itself or mixed with other fruit either at home or away from home?

Where/Ways Have Eaten Last 10 Mangos (%) – 2007 vs. 2011

- In 2011, mangos are more likely to be eaten in restaurants and as an ingredient than in 2007



2007 current purchasers: n=180, 2011 mango eaters who are current purchasers: n=227

Q22 Thinking about the last 10 times you ate mango, whether as a food or drink ingredient, by itself, or mixed with other fruit, how many times were mangos served at each of the following?

Q23 Still thinking about the last 10 times you ate mango, whether as a food or drink ingredient, by itself, mixed with other fruit, how many times were mangos eaten the following ways?

Where/Ways Have Eaten last 10 Mangos (Averages)

- Out of the last 10 mangos eaten by Current Purchasers, 8 were eaten at home and 6 of them were eaten plain (not mixed with other fruit or as an ingredient)

	TYPE OF PURCHASER			TYPE OF MANGO PURCHASED		GENDER		AGE				
	TOTAL	CURRENT	PAST	NON PURCHASER	WHOLE ONLY	WHOLE & SLICED	MALE	FEMALE	21-29	30-44	45-54	55-69
	A	B	C	F	H	M	N	P	Q	R	S	
<i>Base: Mango Eaters</i>	389	227	61	101	151	67	104	285	69	130	78	112
How												
By itself	4.6	5.9 ^{BC}	4.7 ^C	1.6	6.1	2.0	4.4	4.7	4.9	5.1 ^S	4.4	4.1
Mixed with other fruit	2.9	2.4	2.4	4.5 ^{AB}	2.2	4.8	3.3	2.8	2.8	2.6	3.2	3.2 ^{QR}
As an ingredient	2.5	1.7	2.9 ^A	3.8 ^A	1.7	3.2	2.3	2.5	2.3	2.9	2.4	2.8
Where												
At home	5.9	7.9 ^{BC}	6.4 ^C	1.3	8.1	4.9	6.0	5.9	6.9	5.9	5.8	5.5
At a restaurant	2.3	1.0	2.2 ^A	5.2 ^{AB}	0.8	3.4	2.7	2.1	1.7	2.4	2.4	2.4
At a friend's house	0.7	0.5	0.6	1.2 ^{AB}	0.5	0.4	0.5	0.7	0.4	0.6	0.6	1.1 ^{PQR}
Somewhere else	1.1	0.6	0.9	2.3 ^{AB}	0.6	1.2	0.8	1.2	1.0	1.1	1.3	1.0

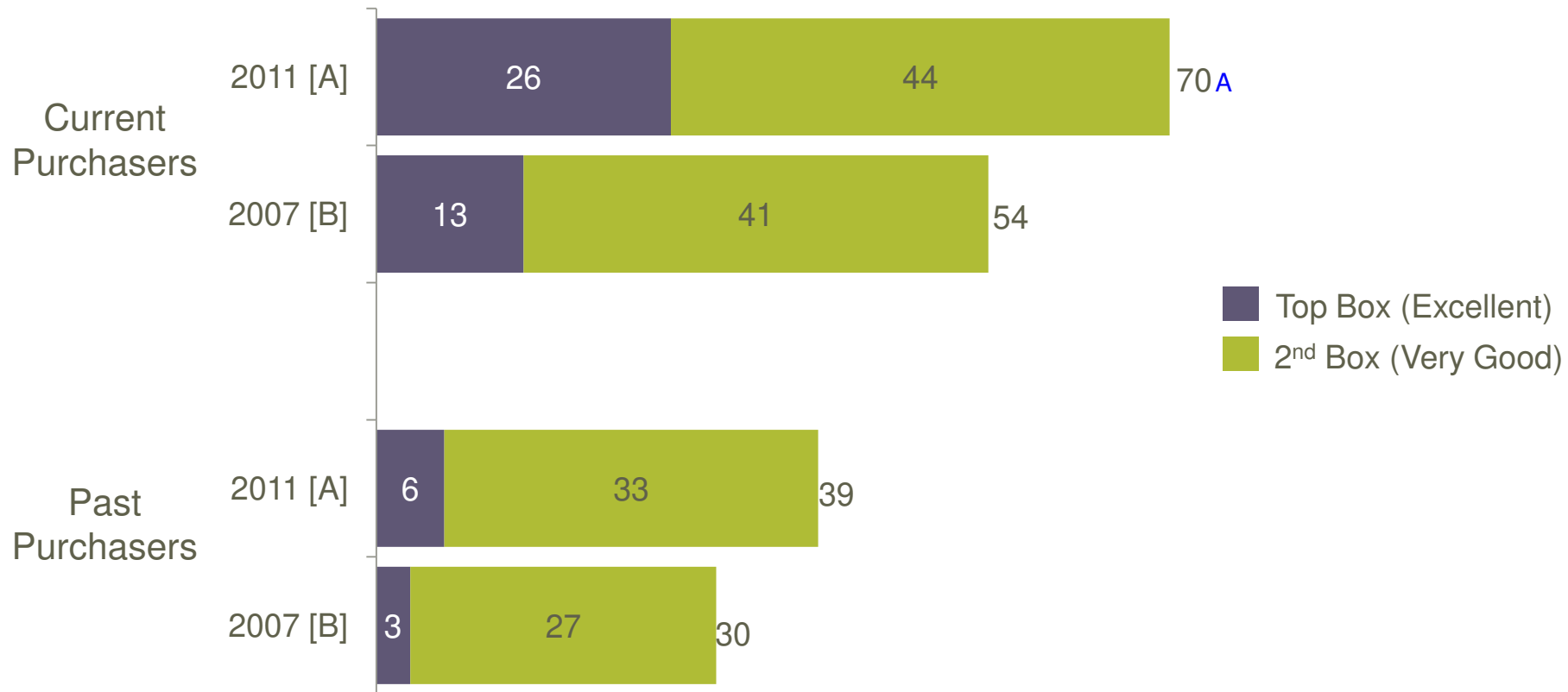
Q23 Still thinking about the last 10 times you ate mango, whether as a food or drink ingredient, by itself, mixed with other fruit, how many times were mangos eaten the following ways?
 Q22 Thinking about the last 10 times you ate mango, whether as a food or drink ingredient, by itself, or mixed with other fruit, how many times were mangos served at each of the following?

Satisfaction with Mango Quality



Satisfaction with Mango Quality (%) – 2007 vs. 2011

- Among both Current and Past Purchasers, satisfaction with the quality of mangos sold where usually shop is higher in 2011 than in 2007

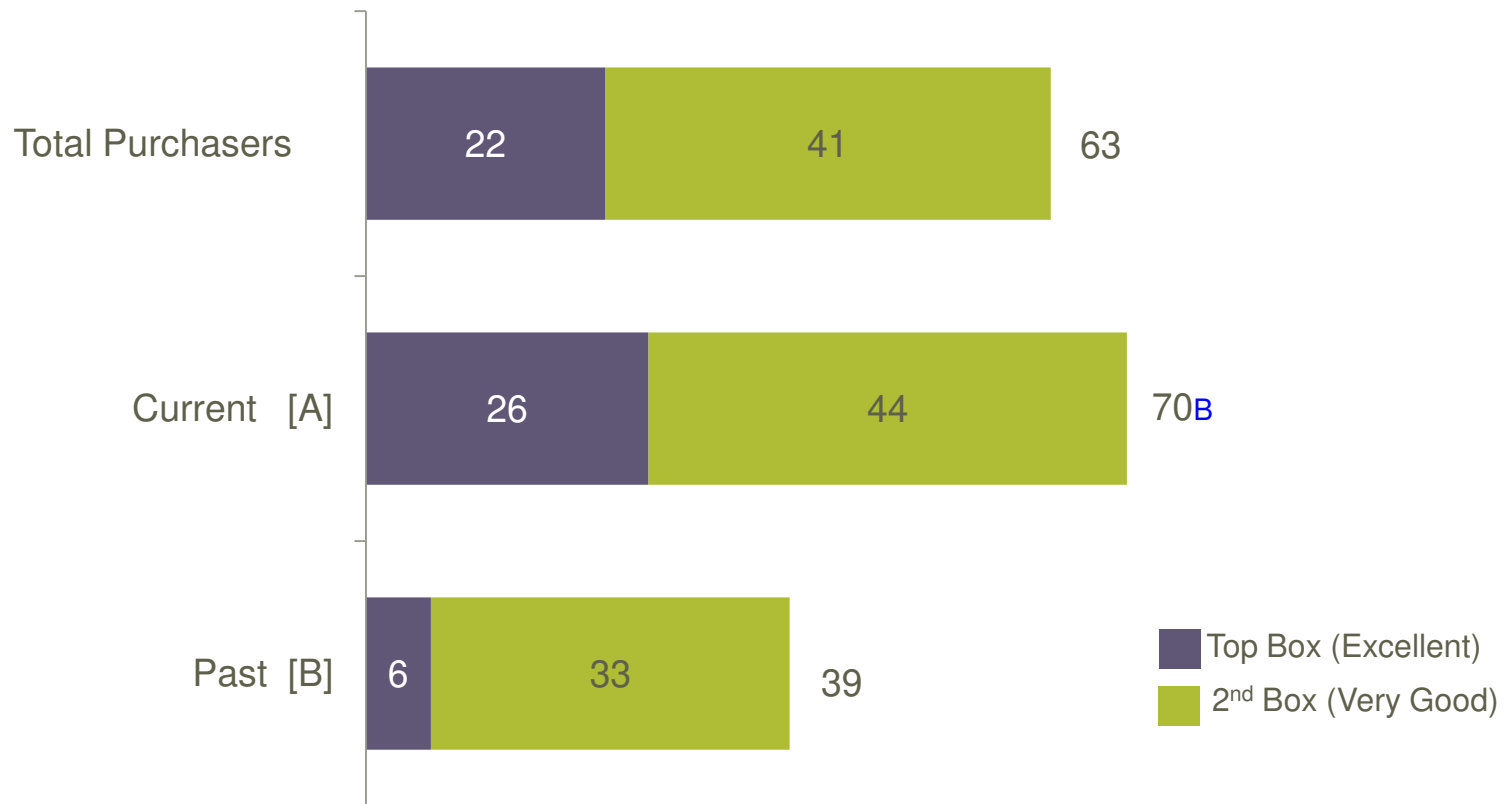


2007 Current Purchasers: n=180, Past Purchasers: n=71, 2011 Current Purchasers: n=231, Past Purchasers: n=64

Q8. How satisfied have you been with the overall quality of mangos sold where you usually buy your fruit? Would you say the quality is typically...

Satisfaction with Mango Quality (%)

- The majority of Purchasers are satisfied with the quality of the mangos sold where they usually shop
- On a Top 2 Box basis (excellent/very good), Current Purchasers are significantly more likely to be satisfied than Past Purchasers

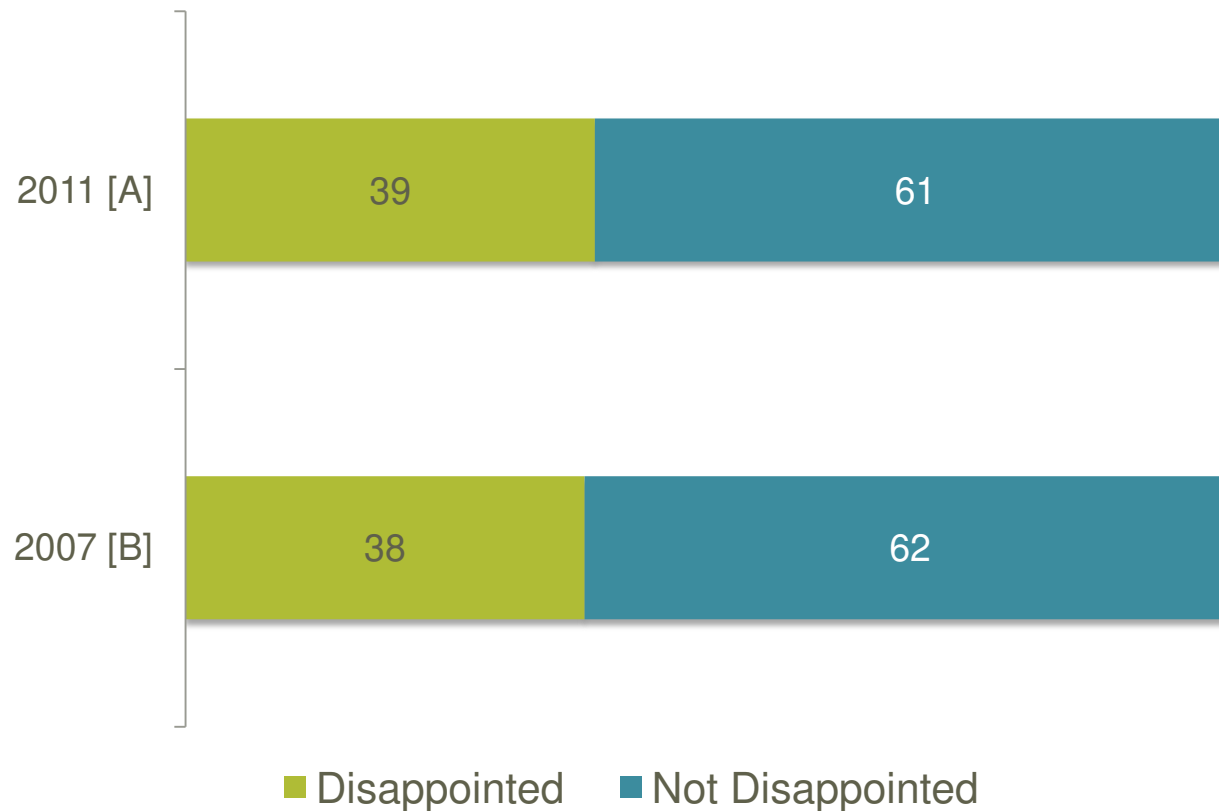


Total Purchasers: n=295, Current: n=231, Past : n=64, Whole Mango only Purchasers: n=155, Whole & sliced purchasers: n=67

Q8. How satisfied have you been with the overall quality of mangos sold where you usually buy your fruit? Would you say the quality is typically...

Disappointed with Mango Quality – 2007 vs. 2011

- The proportion who have experienced disappointment with mango quality in 2011 is similar to 2007

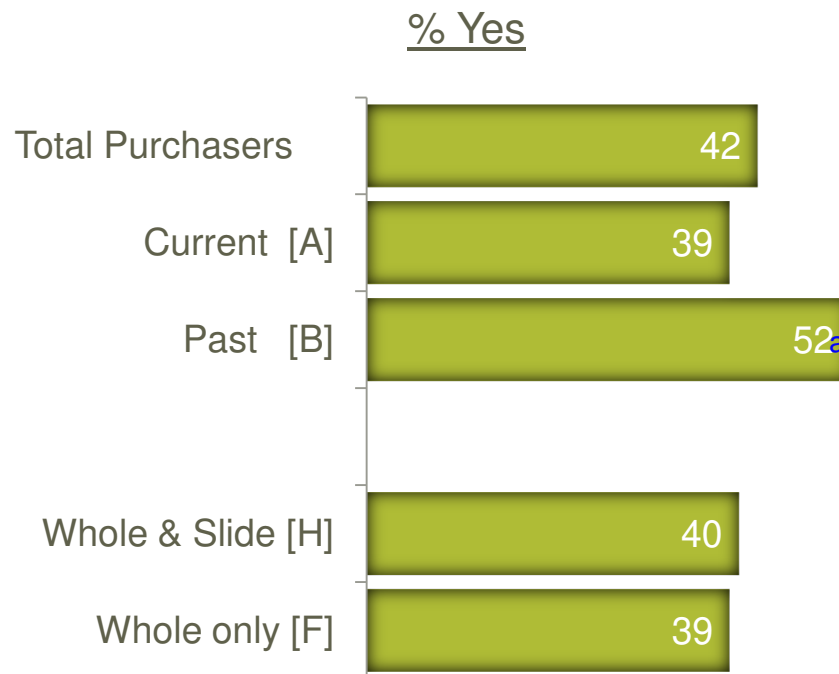


2007 Current Purchasers: n=180, 2011 Current Purchasers: n=231

Q9. Have you ever been disappointed with the overall quality of mangos sold where you usually buy your fruit?

Disappointed with Mango Quality (%)

- However, 2 in 5 Purchasers have been disappointed at some point with the quality of mangos sold where they shop



Total Purchasers: n=295, Current: n=231, Past : n=64, Whole Mango only Purchasers: n=155, Both: n=67,

Q9. Have you ever been disappointed with the overall quality of mangos sold where you usually buy your fruit?

Disappointment with Mango Quality (%)

- Not being ripe enough, the lack of sweetness and taste mainly triggered the disappointment

TOTAL	TYPE OF PURCHASER		TYPE OF MANGO PURCHASED		GENDER		AGE			
	CURRENT	PAST	WHOLE ONLY	WHOLE & SLICED	MALE	FEMALE	21-29	30-44	45-54	55-69
	A	B	F	H	M	N	P	Q	R	S

Base: Purchasers
Who Experienced
Disappointment Over Mango
Quality

	124	91	33*	61	27**	27**	97	21**	39	22**	42*
RIPE/NOT RIPE (NET)	68	67	70	70	56	74	66	67	64	68	71
Not ripe enough	52	49	58	51	41	56	51	38	59	50	52
Too ripe	26	27	21	31	22	37	23	43	26	23	19
TASTE/JUICY (NET)	65	66	64	59	78	63	66	67	56	77	67
Not sweet	41	45	30	43	52	37	42	43	44	55	31
Lacks taste/flavor	40	38	42	38	33	41	39	33	33	50	43
Not juicy	20	20	21	18	26	15	22	29	15	36	12
Poor Texture	28	26	33	26	26	33	27	29	33	18	29

*/**=small/very small base

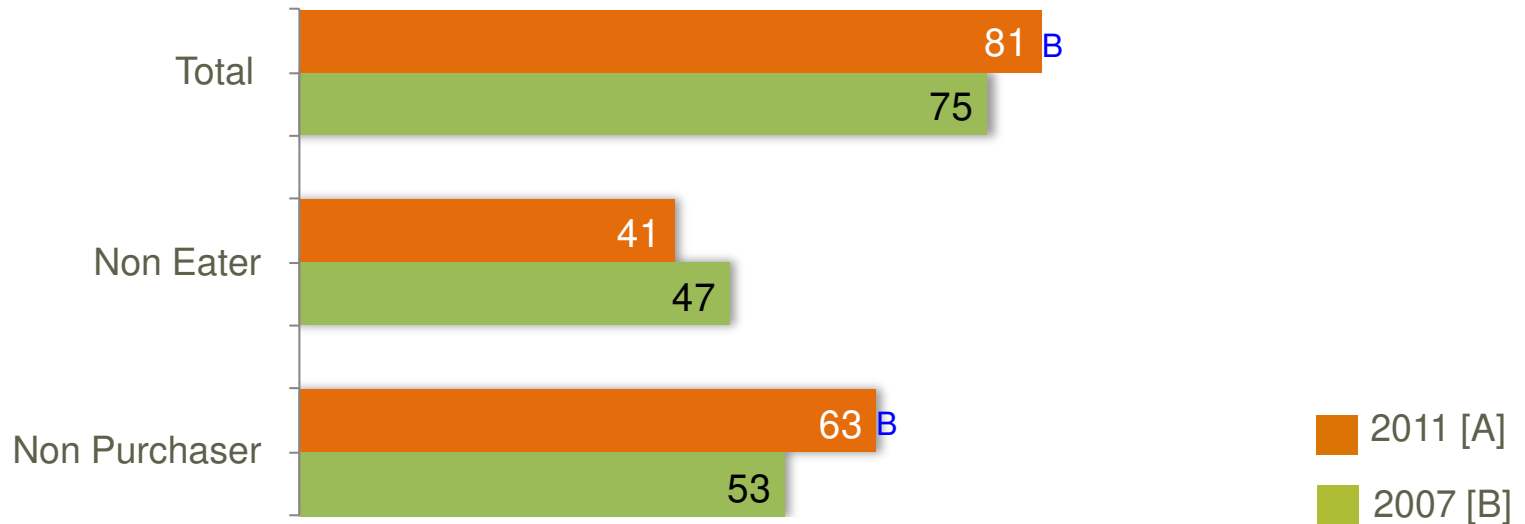
Q10. What specifically has disappointed you about the overall quality of mangos sold where you usually buy your fruit?

Attitudes Towards Mangos



Like Mango Flavor (%) – 2007 vs. 2011

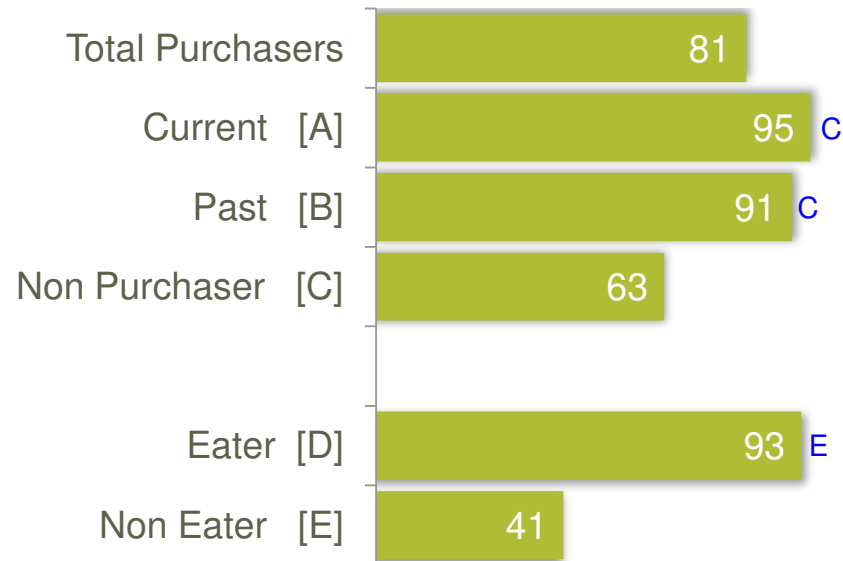
- Among the total surveyed, significantly more liked the flavor of mangos in 2011 than in 2007
- Interestingly, a substantial size of non eaters of fresh mangos in both surveys claimed liking the mango flavor
- Non Purchasers are more likely to claim they like the mango flavor in 2011 than in 2007



2007 Total Random =372, non-eaters: n=139, non-purchasers=174
2011 Total=500, non-eaters: n=111, non-purchasers=205

Like Mango Flavor (%)

- 4 in 5 (81%) Purchasers like the flavor of mangos
- Almost all (93%) who have eaten mangos, like the flavor



Total Purchasers: n=295, Current: n=231, Past : n=64, Eaters: n=389 Non eater: n=111,
Males: n=73, Females: n=222, 21-29:n=57, 30-44: n=101. 45-43: n=53, 55-69: n=84

Attitude Towards Fresh Mangos (%) – 2007 vs. 2011

- Top 2 Box ratings (strongly agree 5/4) are significantly higher in 2011 than in 2007 for most attributes
- A noteworthy exception is the perception on difficulty in slicing which is lower than in 2007

	2011 Total Sample	2007 Total Random
	A	B
<i>Base: Total Respondents</i>	500	372
Healthy and nutritious		
Top 2 Box (Strongly Agree -5/4)	81 ^B	53
Top Box (Strongly Agree-5)	49 ^B	33
Exotic fruit		
Top 2 Box (Strongly Agree -5/4)	71 ^B	57
Top Box (Strongly Agree-5)	35	37
Tastes great		
Top 2 Box (Strongly Agree -5/4)	66 ^B	56
Top Box (Strongly Agree-5)	40	39
Special treat		
Top 2 Box (Strongly Agree -5/4)	57 ^B	50
Top Box (Strongly Agree-5)	26	32 ^a
Have a special mystique		
Top 2 Box (Strongly Agree -5/4)	48	-
Top Box (Strongly Agree-5)	18	-
Difficult to slice		
Top 2 Box (Strongly Agree -5/4)	26	52 ^A
Top Box (Strongly Agree-5)	10	33 ^A

Q16. Below are several phrases that might be used to describe your attitudes toward fresh mangos please indicate how much you agree with each statement when thinking about fresh mangos.

Shopping Experience (%)

- Half those surveyed buy mangos on impulse
- About one-third say they frequently cannot find ripe and ready to eat mangos
- Significantly more Current Purchasers than Past Purchasers claim to include mangos on their shopping list

PURCHASERS		
TOTAL	CURRENT	PAST
	A	B

<i>Base: Past And Current Purchasers</i>	295	231	64
I usually buy mangos on impulse and don't plan on buying them			
Top 2 Box (Strongly Agree -5/4)	52	50	58
Top Box (Strongly Agree-5)	22	22	22
Frequently I can't find mangos that are ripe and ready to eat			
Top 2 Box (Strongly Agree -5/4)	37	38	34
Top Box (Strongly Agree-5)	12	13	11
Mangos are available all year round where I usually buy fruit			
Top 2 Box (Strongly Agree -5/4)	30	31	27
Top Box (Strongly Agree-5)	12	12	11
When I buy mangos, they are usually on my shopping list			
Top 2 Box (Strongly Agree -5/4)	28	31 ^B	17
Top Box (Strongly Agree-5)	13	15 ^b	6

Q15. Please indicate how much you agree with each statement when shopping for fresh mangos.

Shopping Experience (%) – cont'

- Past Purchasers are significantly more apt to say they frequently cannot find mangos that are good quality than Current Purchasers

PURCHASERS		
TOTAL	CURRENT	PAST
	A	B
295	231	64

Base: Past And Current Purchasers

Frequently the mangos that are available are not of good quality

Top 2 Box (Strongly Agree -5/4)

26

23

38^A

Top Box (Strongly Agree-5)

7

7

9

Frequently I can't find the variety of mangos I am looking for

Top 2 Box (Strongly Agree -5/4)

21

22

19

Top Box (Strongly Agree-5)

9

10

8

Frequently I can't find mangos when I'm looking for them

Top 2 Box (Strongly Agree -5/4)

19

18

20

Top Box (Strongly Agree-5)

7

6

9

Frequently the mangos that are available are too ripe

Top 2 Box (Strongly Agree -5/4)

17

19

11

Top Box (Strongly Agree-5)

7

7

6

Situations that Would Motivate More Purchase(%)

- Less expensive mangos appears to be most effective at driving purchase interest, followed by sampling or tasting sliced mangos where usually shop, learning how to select a good mango and better quality mangos

Situations that Would Motivate More Purchase	Type of Purchaser			
	Total	Current	Past	Non Purchaser
Less expensive mangos	55%	72%	58%	35%
Sampling or tasting sliced mangos where you usually shop	54%	68%	45%	40%
Learning how to select a good mango	54%	66%	50%	41%
Better quality of mangos	53%	74%	64%	26%
Greater availability of mangos	45%	63%	52%	22%
Better understanding of the different varieties	44%	58%	36%	32%
Learning how to cut and slide a mango	41%	49%	34%	34%
Having a mango splitter	38%	53%	36%	21%
Having easy to follow recipes	38%	51%	30%	26%
Larger display of mangos	37%	51%	42%	21%
More mango information	36%	45%	34%	26%
Instruction and inspiration on cooking shows	32%	43%	28%	20%
A cooking demonstration where you shop for groceries	29%	38%	22%	21%
Availability of organic mangos	27%	42%	22%	12%
Preparing a mango at a cooking class	22%	34%	17%	10%

Q36. How likely is it that each of the situations listed below would make you want to purchase more mangos in the near future?

Miscellaneous Measures (Ripening, Storing, Awareness)



How Tell If Mango is Ripe (%) – 2007 vs. 2011

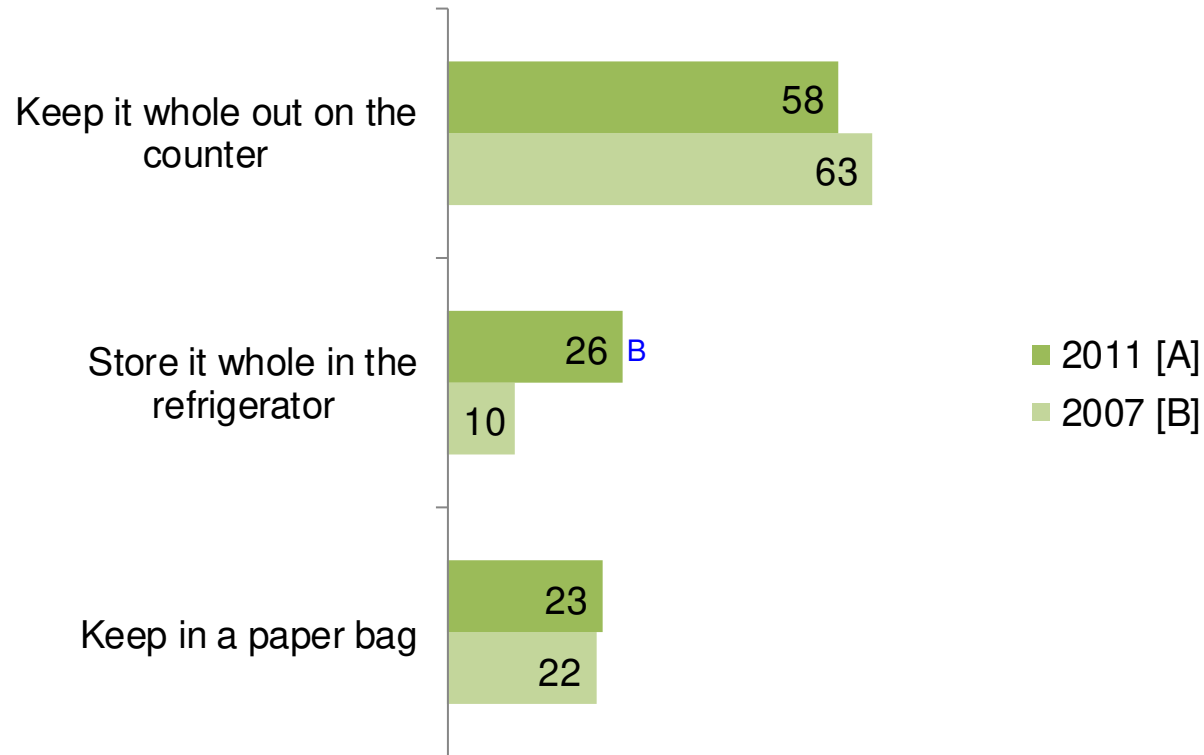
- Softness/firmness to the touch is the main consideration in determining ripeness in 2011, while in 2007 firmness to the touch was highest
- Half of Current Purchasers surveyed in 2011 judge ripeness by smell

	2011 [A]	2007 [B]
<i>Base: Current Purchasers</i>	231	180
TEXTURE/FEEL (NET)	77	90 ^A
If it is soft/firm to the touch	70	90 ^A
By the texture of the skin	23	-
COLOR (NET)	57 ^b	48
If it is red in color	34	32
If it is orange in color	21	20
If it is yellow in color	16	16
If its green in color	6	11 ^a
If it smells ripe	46	-

Q12. Please describe how you personally determine if a mango is ripe.

Mango Ripening (%) – 2011 vs. 2007

- Keeping it whole out on the counter is the prevailing ripening method in both surveys
- Storing it whole in the refrigerator to ripen is used significantly more often in 2011 than 2007

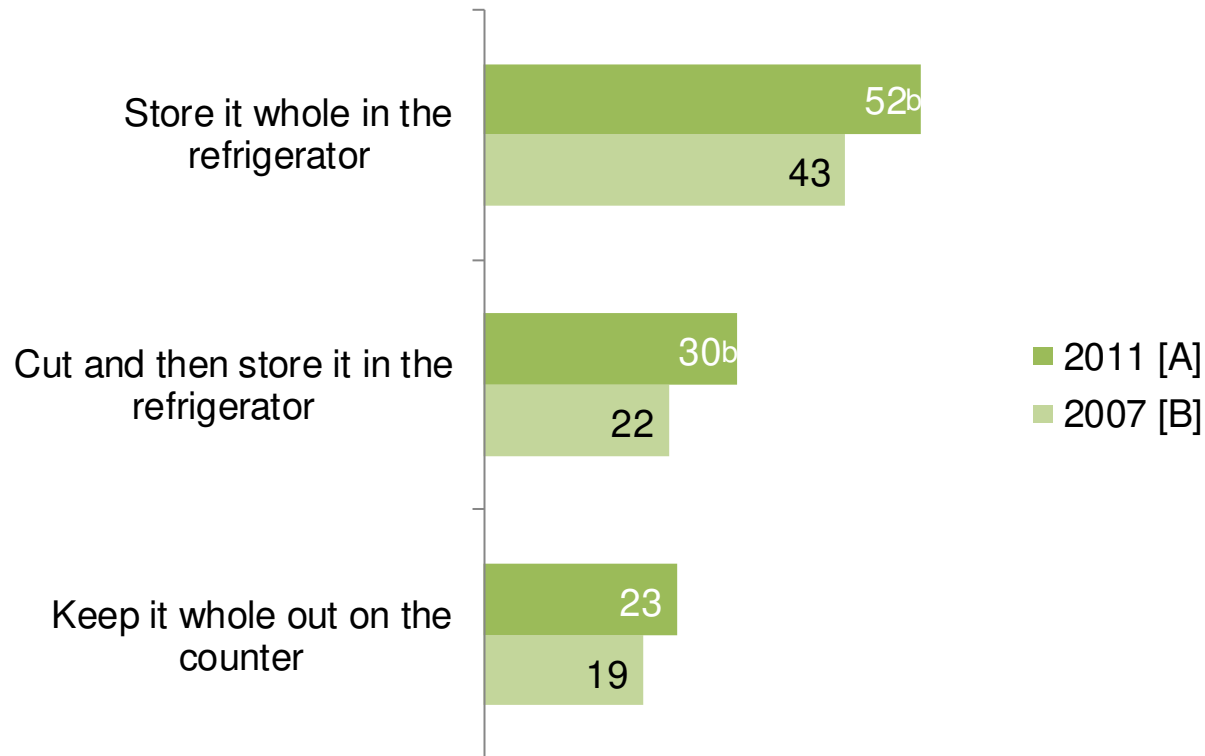


2011 Current Purchasers of Fresh Mangos: n=222, 2007 Current Purchasers: n=180

Q13. Which of the following describes how you typically would store a mango to ripen it?

Storage of Ripe Mango (%) – 2007 vs. 2011

- Storing it whole in the refrigerator is the prevailing storage method currently and in 2007
- Both storing it whole in the refrigerator and cutting before storing it in the refrigerator are used more often in 2011 than 2007

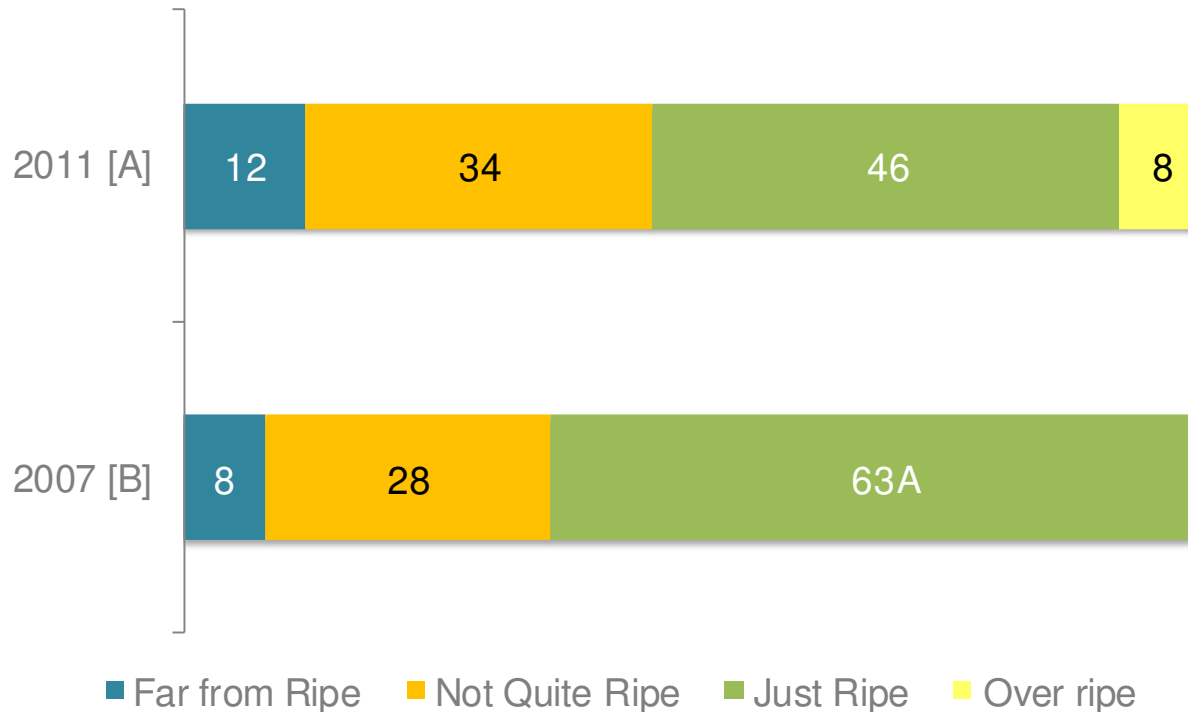


2007 Current Purchasers: n=180, 2011 Current Purchasers of Fresh Mangos: n=222

Q14. Which of the following describes how you typically would store a fully ripe mango?

Type of Next 10 Mangos (%) – 2011 vs. 2007

- In both 2011 and 2007, Current Purchasers are most likely to select a “just ripe” mango
- However, in 2011 buying a “just ripe” mango is significantly lower than in 2007 and more are buying “not quite ripe and “over ripe” mangos

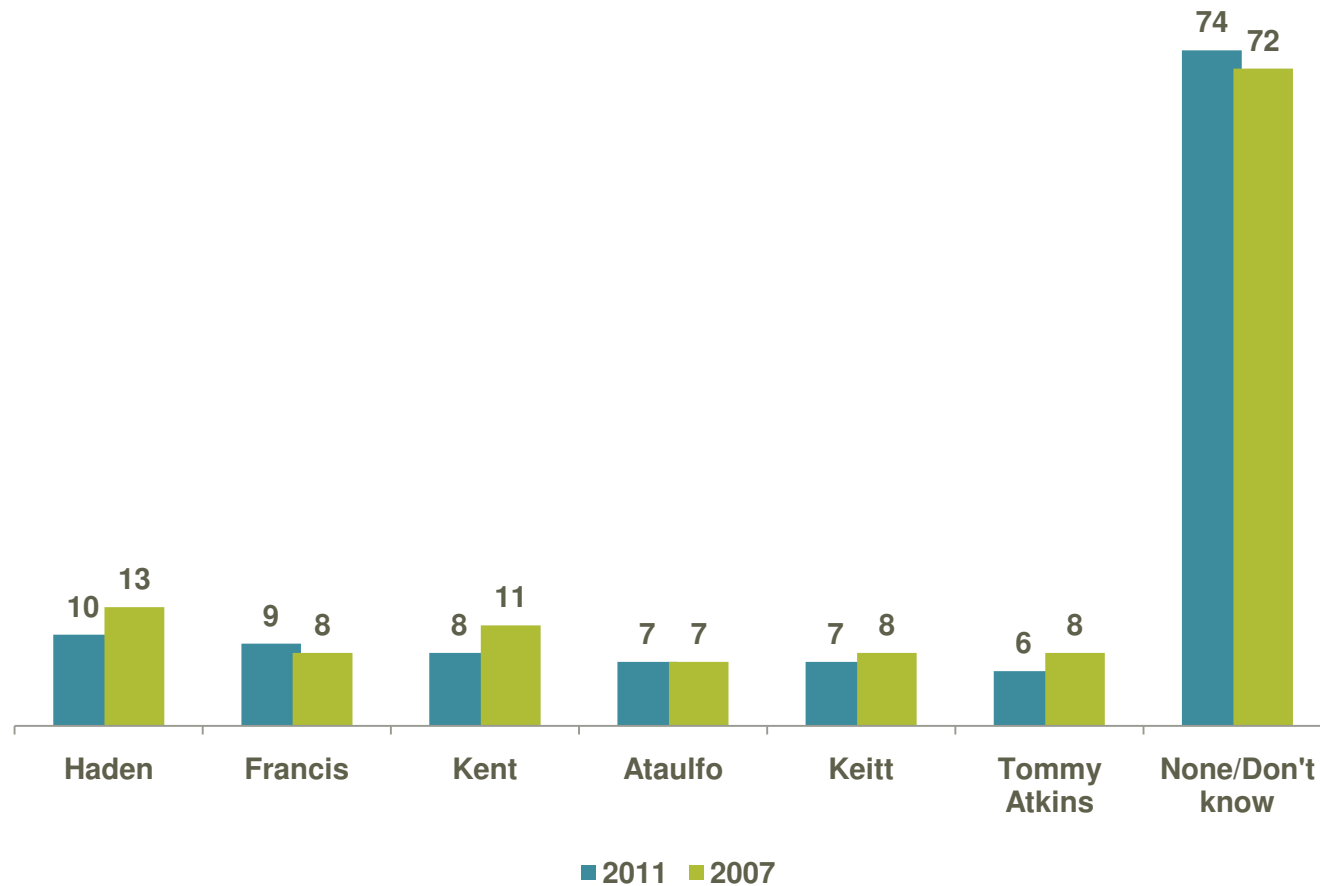


2007 Current Purchasers: n=180 2011 Current Purchasers: n=231

Q11. In an ideal world where you could buy mangos to your liking, thinking about the next 10 mangos that you might select for purchase, how many mangos would you select for each of the following types?

Awareness of Mango Varieties (%) – 2007 vs. 2011

- Awareness on mango varieties is very low in both surveys



2007 current purchasers: n=180
2011 current purchasers: 231

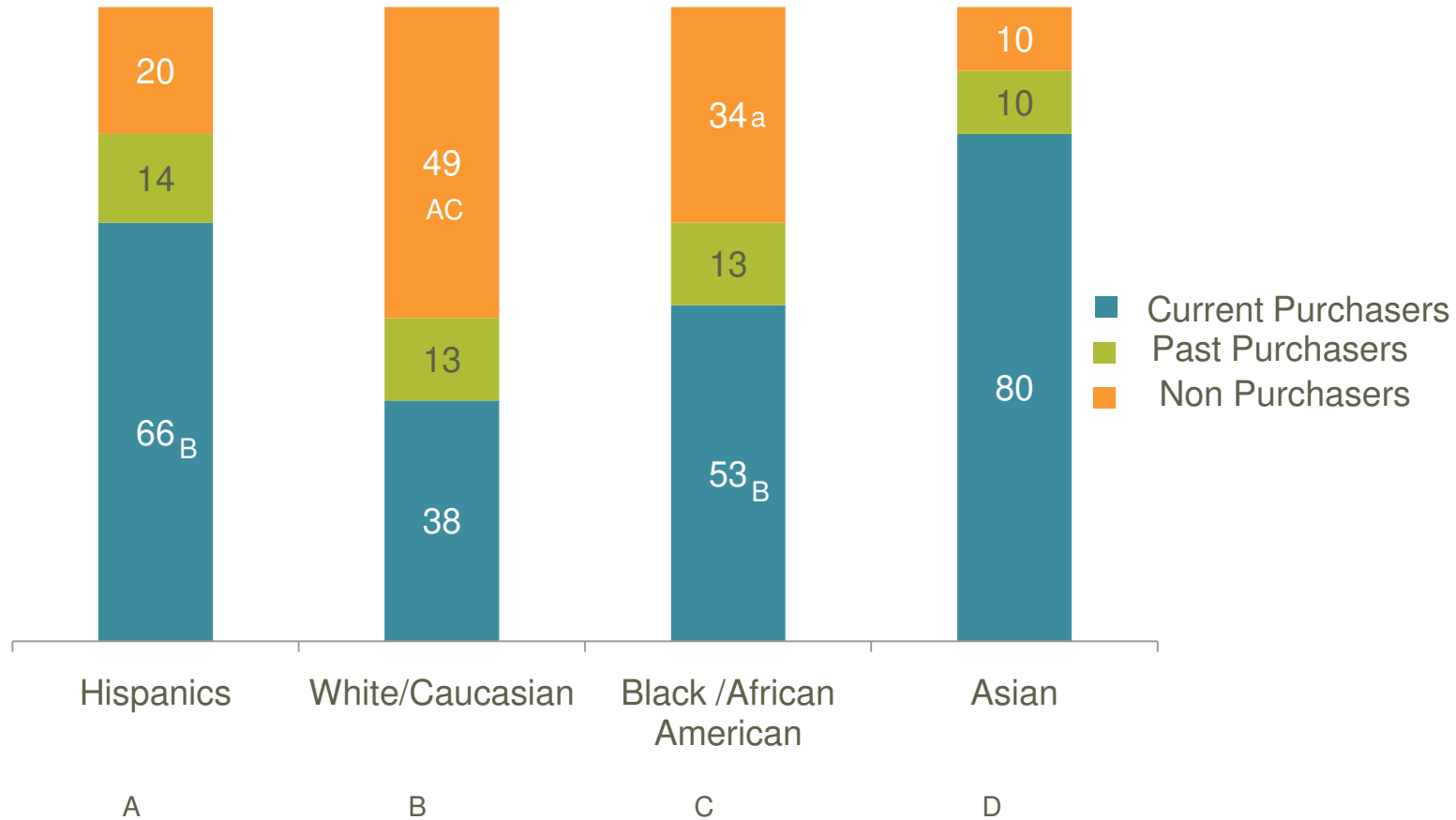
Q20. Which of the following varieties of mangos have you seen or heard of?

Behavior, Consumption by Ethnicity



Purchase Incidence (%)

- Hispanics are almost twice as likely as Non Hispanics White/Caucasians to be Current Purchasers of mangos



Total Respondents: Hispanic (n=71), Non Hispanic White/Caucasian (n=330), Non Hispanic African American (n=64), Non Hispanic Asian (n=20**)
 **=small/very small base

Summary and Recommendations



Summary of Findings

- There have been some differences since 2007 in mango usage, behavior and attitudes towards mangos, but some things remained the same.
 - Current Purchasers increased significantly from 35% to 46%.
 - The proportion purchasing mangos in the spring and summer has not changed much since 2007, but the frequency of serving mangos in spring and summer has declined since 2007.
 - As in 2007, mangos are more likely to be purchased in the spring and summer than in the fall and winter.
 - The incidence of eating mangos has also increased since 2007 from 67% to 78%.
 - In 2011, mangos are more likely to be eaten in restaurants than in 2007 (22% vs. 11%)
 - Awareness of specific varieties of mangos continues to be very low.
- Almost all those who currently purchase mangos plan to continue purchasing (97%) and most who have purchased in the past (92%) intend to purchase mangos in the future.
- Interest in purchasing organic mangos increased significantly in 2011 among both the total surveyed (16% to 24%) and Current Purchasers (from 29% to 38%).

Summary of Findings (Cont.)

- Half of Current purchasers claim they would be likely to purchase.
- Mangos are eaten in a variety of ways, but generally as an ingredient or by itself as a snack, breakfast, or dessert.
- Current Purchasers' satisfaction with the quality of mangos sold is higher in 2011 than in 2007 (70% vs. 54%).
 - However, 2 in 5 Current Purchasers have been dissatisfied with the quality at some point.
 - Not being ripe enough, the lack of sweetness and taste mainly triggered the disappointment.
- Among the total surveyed, significantly more liked the flavor of mangos in 2011 than in 2007
- Significantly more consumers surveyed in 2011 than in 2007 feel mangos are healthy and nutritious, exotic fruit, taste great and are a special treat. In addition, in 2011, less feel they are difficult to slice.
- Half those surveyed buy mangos on impulse, while about one-third say they frequently cannot find ripe and ready to eat mangos.

Summary of Findings (Cont.)

- It appears that less expensive mangos would be most effective at driving purchase interest, followed by being able to sample or taste sliced mangos where usually shop, learning how to select a good mango and better quality mangos.
- Softness or firmness to the touch is the main consideration in determining ripeness in both years.
- In both 2011 and 2007, Current Purchasers are most likely to select a “just ripe” mango. However, in 2011 buying a “just ripe” mango is significantly lower than in 2007 and more are buying “not quite ripe and “over ripe” mangos.

There is growth opportunity for mangos.

- ❖ Non purchasers (41%) is a sizeable market to penetrate.
- ❖ Incidence of out of home consumption and liking mango flavor are at high levels and indicative of potential buyers.
- ❖ Strategies that could likely encourage purchase are: in store product sampling, demonstrations on how to peel and slice, providing education on how to select, store, and use mangos in food recipes, as well as lower prices, if possible.
- ❖ Current Purchasers are also a potential source of additional growth. Wider availability, better quality, and affordability are key to encouraging more purchases.

Recommendations

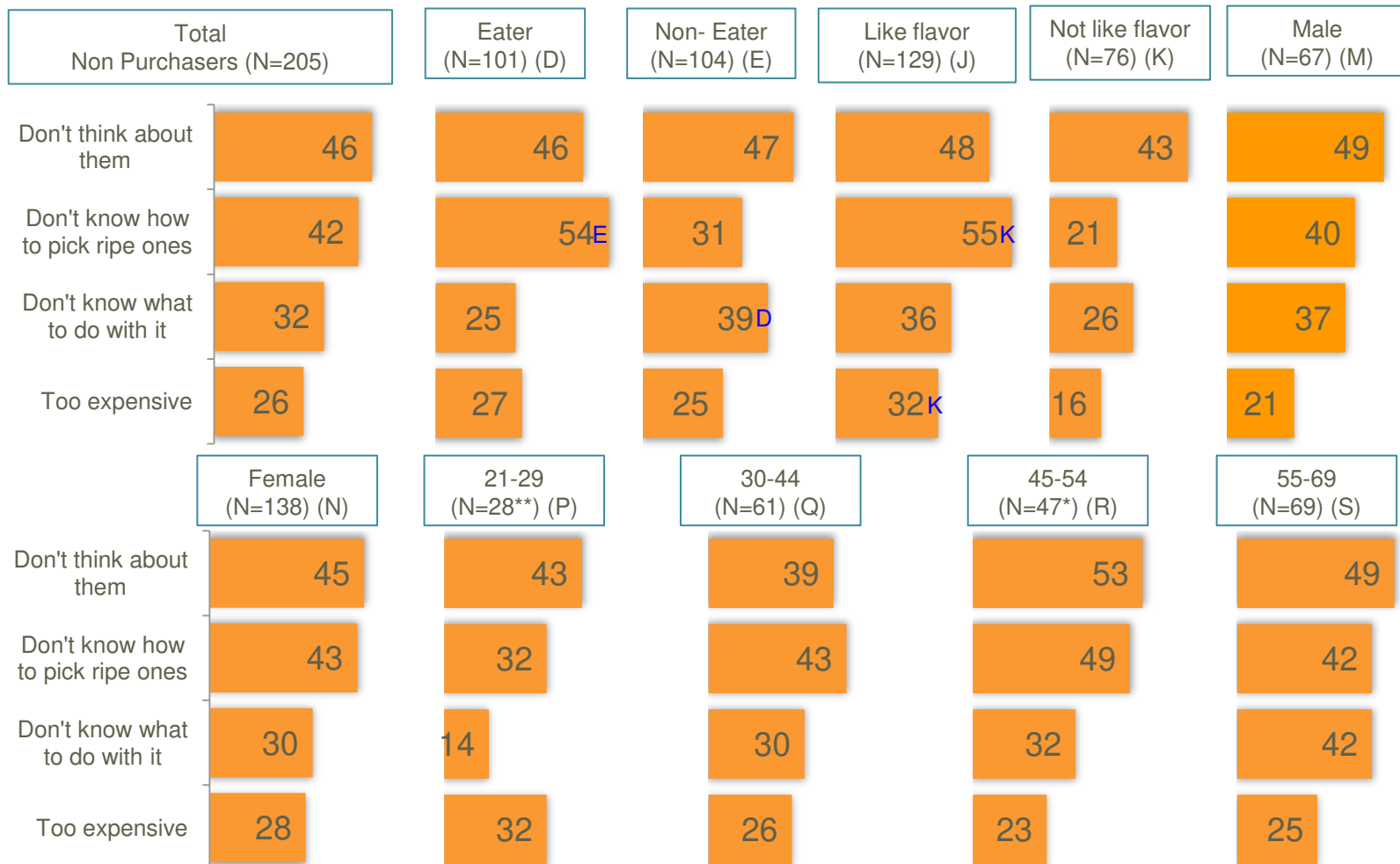
- ❖ Recapture past purchasers by addressing dissatisfaction with quality by providing education on how to select and use mangos. Pricing is also key for this group.
- ❖ Mangos are much more likely to be purchased in the summer and spring. If more mangos were available in the winter and fall, and this was promoted, sales may increase during these months.

There is high level of perception of mangos as being nutritious and healthy, exotic fruits that taste good and can be a special treat. These characteristics should be used in promotions.

Appendix



Reasons Why Never Purchased (%)



Q21. You indicated that you have never purchased a fresh mango. What are the reasons why you have never purchased a fresh mango?

Demographic Profile (%)

	TYPE OF PURCHASER			TYPE OF EATER		
	Total	Current Purchasers	Past Purchasers	Non Purchasers	Eater	Non Eater
		A	B	C	D	E
<i>Base: Total Respondents</i>	500	231	64	205	389	111
Gender						
Male	28	25	23	33 a	27	32
Female	72	75 c	77	67	73	68
Age						
21-29 (Net)	17	20 c	17	14	18	14
30-44 (Net)	32	35	33	30	33	29
45-69 (Net)	51	45	50	57 A	49	57
<i>Mean</i>	45.3	43.5	45.5	47.2 A	44.6	47.4 d
Hispanic Origin						
Yes	14	20 C	16 C	7	17 E	5
Ethnicity						
White/Caucasian	77	69	77	86 Ab	75	82
Non-white (Net)	21	29 C	22 c	13	22	18
Education						
High School Level (Net)	19	16	19	22	17	23
College and Higher Level (Net)	78	82 c	77	74	79	73
Employment						
Employed (Net)	57	60 c	63	52	60 E	47
Not Employed (Net)	41	39	34	44	38	50 D
Income						
Under \$50,000 (Net)	47	47	45	48	46	51
\$50,000-\$99,999 (Net)	33	32	36	34	33	33
\$100,000 and Over	11	13	9	10	12	7
Prefer not to answer	8	9	9	8	8	8
<i>Mean (000's)</i>	56.6	58.3	55.9	54.8	58.2 e	51.0

Demographic Profile (%)

	TYPE OF PURCHASER			TYPE OF EATER		
	Current Purchasers	Past Purchasers	Non Purchasers	Eater	Non Eater	
	A	B	C	D	E	
<i>Base: Total Respondents</i>	500	231	64	205	389	111
Household Size						
1	22	20	19	26	21	26
2	34	29	48 Ac	36 a	35	32
3	20	23 b	13	19	20	21
4	14	16	11	12	15 E	8
5	7	10 c	5	5	7	10
(6) 6 or more	2	2	5	1	2	3
<i>MEAN</i>	2.6	2.7 C	2.5	2.4	2.6	2.5
Presence of Kids in Household						
Base: Household With More Than One Member	388	185	52	151	306	82
Yes	46	49 B	33	46 b	45	49
No	54	51	67 Ac	54	55	51
Age of Children						
Base: Household With Children	178	91	17**	70	138	40*
Under 1yr Old	8	10	6	7	9	8
1 - 5 Years Old	39	38	59	34	38	43
6 - 11 Years Old	43	47	47	37	46	35
12 - 17 Years Old	47	49	41	46	46	50
<i>Mean (Overall HH Member)</i>	1.9	2.0 C	2.5	1.6	1.8	1.9
State of Current Residence						
<i>Base: Total Respondents</i>	500	231	64	205	389	111
Northeast Region (Net)	19	20	20	18	19	21
Midwest Region (Net)	28	23	31	32 A	26	35 d
South Region (Net)	32	31	30	35	31	36
Pacific Region (Net)	20	25 C	19	15	24 E	8

*/**=Small/Very small

A/a = Significantly higher than corresponding column at 95%/90% confidence level

Shopping Behavior/Social Activities(%)

	TYPE OF PURCHASER			TYPE OF EATER		
	Total	Current Purchasers	Past Purchasers	Non Purchasers	Eater	Non Eater
		A	B	C	D	E
<i>Base: Total Respondents</i>	500	231	64	205	389	111
Where Shop						
Grocery stores or local markets	89	86	91	91 a	89	87
Superstores, such as Walmart or Target	61	56	70 A	65 a	61	62
Warehouse stores, such as Costco or Sam's Club	30	32	30	28	32 e	23
Most Shopped At						
Grocery stores or local markets	69	66	66	75 A	68	73
Superstores, such as Walmart or Target	23	23	27	22	23	23
Warehouse stores, such as Costco or Sam's Club	3	4	5	2	4	3
Where Buy Produce						
Grocery stores or local markets	69	64	69	76 A	67	77 D
Superstores, such as Walmart or Target	17	15	19	18	16	17
Produce or farmer's market	8	12 C	8	3	9 E	3
Frequency of Eating Out						
Mean (Times Per Month)	4.0	3.8	3.2	4.4 B	4.1 e	3.4
Frequency of Cooking at Home						
Mean (Times Per Month)	12.3	12.3	12.6	12.1	12.3	12.3
Regular Activities						
Indoor (Net)	92	90	100 AC	91	93	89
Computers at home/internet	73	71	83 ac	72	73	73
Physical fitness/exercise	43	49 C	45	34	48 E	24
Watching sports on TV	33	29	30	38 A	32	35
Outdoor (Net)	71	76 C	67	67	74 E	61
Barbecuing/grilling	39	44 C	36	34	41 E	30
Gardening	37	42 C	31	33	38	34
Travel	26	29	23	22	29 E	15
Online Activities						
Facebook	67	70	63	64	68	60
Search recipes	37	44 C	53 C	24	43 E	16

A/a = Significantly higher than corresponding column at 95%/90% confidence level