

Project Chocolate Dessert Snacks

Research Guidance Test
Summary

Date

- † Background
- † Demographics
- † Results
- † Summary of Key Findings

Background

This research was designed to identify

Demographics & Test Design

xx consumers participating in this Research Guidance Test were:

† **Demographics:**.....

† **Qualifications:**

The Research Guidance Test Design:

- † Type of design
- † # of geographically dispersed markets.

Products Evaluated

Random Code	Product Description
224	Prototype Snack - Dark Chocolate
573	Prototype Snack - Milk Chocolate
327	Chocolate & Nut Bar
169	Chocolate Peanut Butter Bar
867	Caramel Chocolate Crunch

Executive Summary

- ✦ Product 224, Prototype Snack - Dark Chocolate, is the winner. It scores the highest 'Purchase Intent' (4.0) and 'Overall Acceptance' (5.9). Penalty analysis reveals that this product has only two 'weak' attributes, 'Not enough caramel'. Key drivers show that Prototype Snack - Dark Chocolate's multigrain flavor, appearance, and nutty flavor are what is driving Overall Acceptance.
- ✦ Product 573, Prototype Snack - Milk Chocolate, scores well in 'Purchase Intent' (3.9) and 'Overall Acceptance' (5.8). Penalty analysis show that this product is not nutty enough. Regression shows that Prototype Snack - Milk Chocolate's key driver is 'Appearance' and 'Overall Flavor'.
- ✦ Product 327, Chocolate & Nut Bar, has significantly lower 'Purchase Intent' (3.0) than the three first place finishes. Penalty analysis shows that this product's weakness are rooted mainly that lacks a strong chocolate flavor, while its multigrain flavor is too strong.

Executive Summary (con't)

- ✦ Product 169, Chocolate Peanut Butter Bar, is the third highest scoring concept ('Purchase Intent' (3.2), 'Overall Acceptance' (4.9)). Penalty analysis shows that this product is weak on chocolate and caramel flavor. Key drivers to Chocolate Peanut Butter Bar's 'Overall Acceptance' are its overall flavor, texture, and its nutty taste.
- ✦ Product 867, Caramel Chocolate Crunch, scores low in 'Purchase Intent' (2.9) and 'Overall Acceptance' (4.4). Examining the Penalty Analysis map, there are too many attributes, indicating that this product did not hit the 'Just About Right' button often.

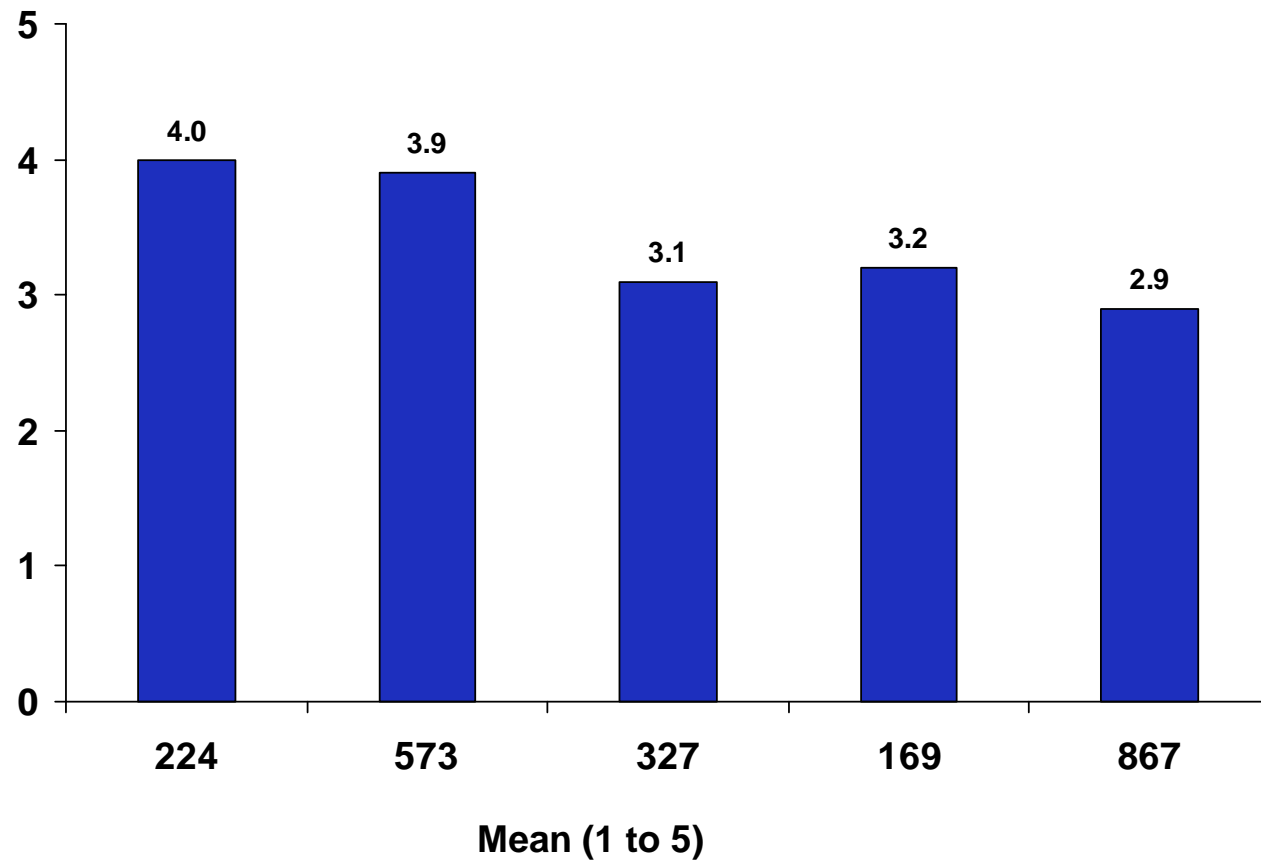
Consumer Attitudinal Measures

Consumer Attitudes	Dark Choco #224	Milk Choco #573	Choco Nut #327	Choco PeanutB #169	Caramel ChocBlast #867
Purchase Intent (5 pt. scale)	4.00a	3.94a	3.08b	3.20b	2.86b
Top Box	39	38	17	19	10
Top 2 Box	75	75	41	50	38
Expectations (5 pt. scale)	3.71a	3.67a	2.99b	3.05b	2.76b
Top Box	29	26	9	9	11
Top 2 Box	63	62	36	45	31
Product fits description (5 pt. scale)	4.06a	3.87a	3.50b	3.39b	3.37b
Top Box	36	27	17	14	11
Top 2 Box	78	74	54	56	56
How often would you expect to eat this product(9 pt. scale)	6.95a	6.62a	5.11b	5.16b	4.64b
Top Box	18	18	10	9	8
Top 2 Box	55	48	26	28	25

NOTE: Values sharing a common letter do not differ significantly at $p < 0.10$.

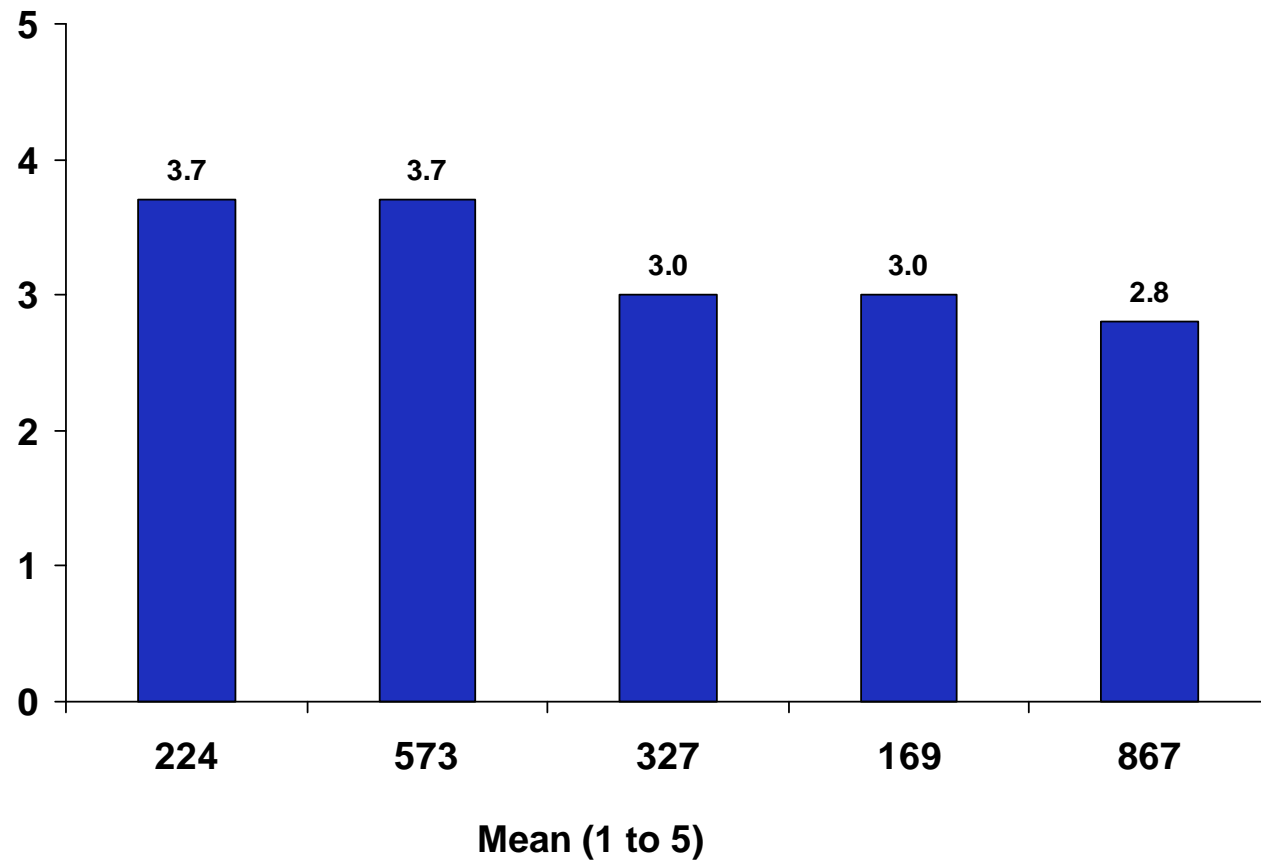
Consumer Attitudes

Purchase Intent



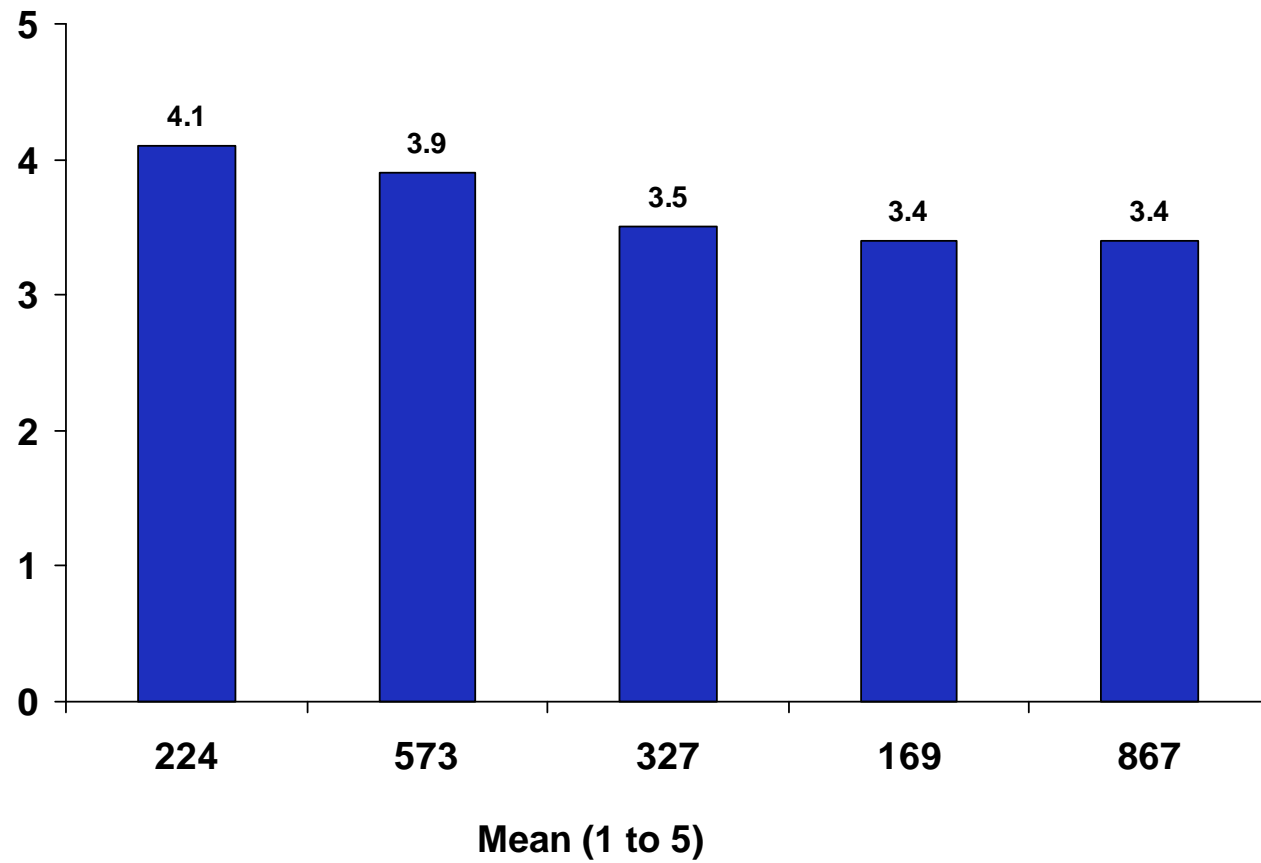
Consumer Attitudes

Met Expectations



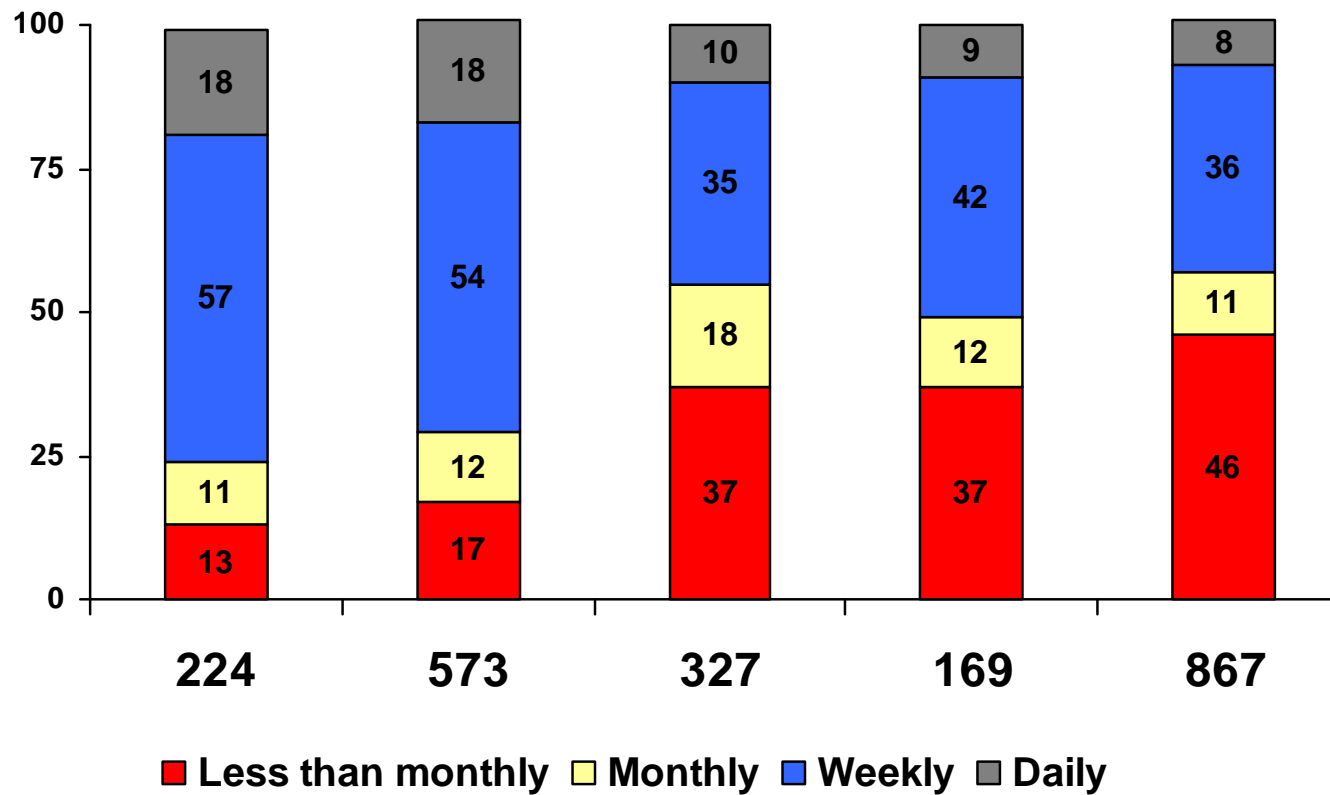
Consumer Attitudes

Product Fits Description



Consumer Attitudes

EXPECT TO EAT



Consumer Acceptability - Mean Hedonic Scores

Product Attributes (7 pt. Hedonic scale)	Dark Choco	Milk Choco	Choco Nut	Choco Peanut	Caramel ChocBlast
	#224	#573	#327	#169	#867
Overall Acceptance	5.85a	5.78a	4.64cb	4.90b	4.38c
Appearance	5.78a	5.55ba	4.96c	5.52ba	5.15cb
Overall Flavor	5.80a	5.76a	4.53cb	4.66b	4.17c
Sweetness	5.56a	5.52a	4.60cb	4.85b	4.24c
Chocolate Flavor	5.53a	5.44a	4.54b	4.87b	4.46b
Nuts/Peanuts Flavor	5.56a	5.43a	4.62b	4.81b	4.43b
Caramel Flavor	5.52a	5.44a		4.77b	4.19c
Center Flavor					4.03
Texture	5.48a	5.36a	4.58cb	4.67b	4.16c
Multigrain Flavor	5.43a	5.32a	4.29c	4.75b	

NOTE: Values sharing a common letter do not differ significantly at $p < 0.10$.

Appropriateness Ratings - Percent "Just About Right"

Appropriateness Rating Percentages (5pt JAR Scale)	#224	#573	#3278	#169	#867
Too Big	13	17	18	8	13
Size (JAR)	85	77	79	72	74
Too Small	2	6	3	20	14
Too Strong	18	16	35	34	34
Flavor (JAR)	75	71	51	58	41
Too Weak	7	14	14	8	25
Too Sweet	16	15	15	20	15
Sweetness (JAR)	71	67	50	59	36
Not Sweet Enough	13	18	36	21	50
Too Strong	23	17	16	17	14
Chocolate Flavor (JAR)	68	73	50	57	42
Too Weak	9	11	34	26	45

Appropriateness Ratings - Percent "Just About Right"

Appropriateness Rating Percentages (5pt JAR Scale)	#224	#573	#327	#169	#867
Too Strong	9	9	20	17	18
Nuts/Peanuts Flavor (JAR)	77	75	58	59	50
Too Weak	14	16	22	24	32
Too Strong	7	6		9	15
Caramel Flavor (JAR)	71	64		59	36
Too Weak	22	29		31	50
Too Strong					31
Center Flavor (JAR)					41
Too Weak					28
Too Much Chocolate	22	17	18	21	17
Balance Chocolate (JAR)	69	72	53	55	43
Not Enough Chocolate	9	12	29	25	40

Appropriateness Ratings - Percent "Just About Right"

Appropriateness Rating Percentages (5pt JAR Scale)	#224	#573	#327	#169	#867
Too Much Nut/Peanut	7	11	14	13	19
Balance Nut/Peanut (JAR)	75	65	57	59	45
Not Enough Nut/Peanut	18	24	29	27	36
Too Much Caramel	6	9		12	14
Balance Caramel (JAR)	72	65		58	39
Not Enough Caramel	22	25		29	48
Too Much Center Flavor					28
Balance Center Flavor (JAR)					40
Not Enough Center Flavor					32
Too Chewy	16	13	15	15	30
Chewiness (JAR)	79	73	68	66	44
Not Chewy Enough	5	15	17	19	26

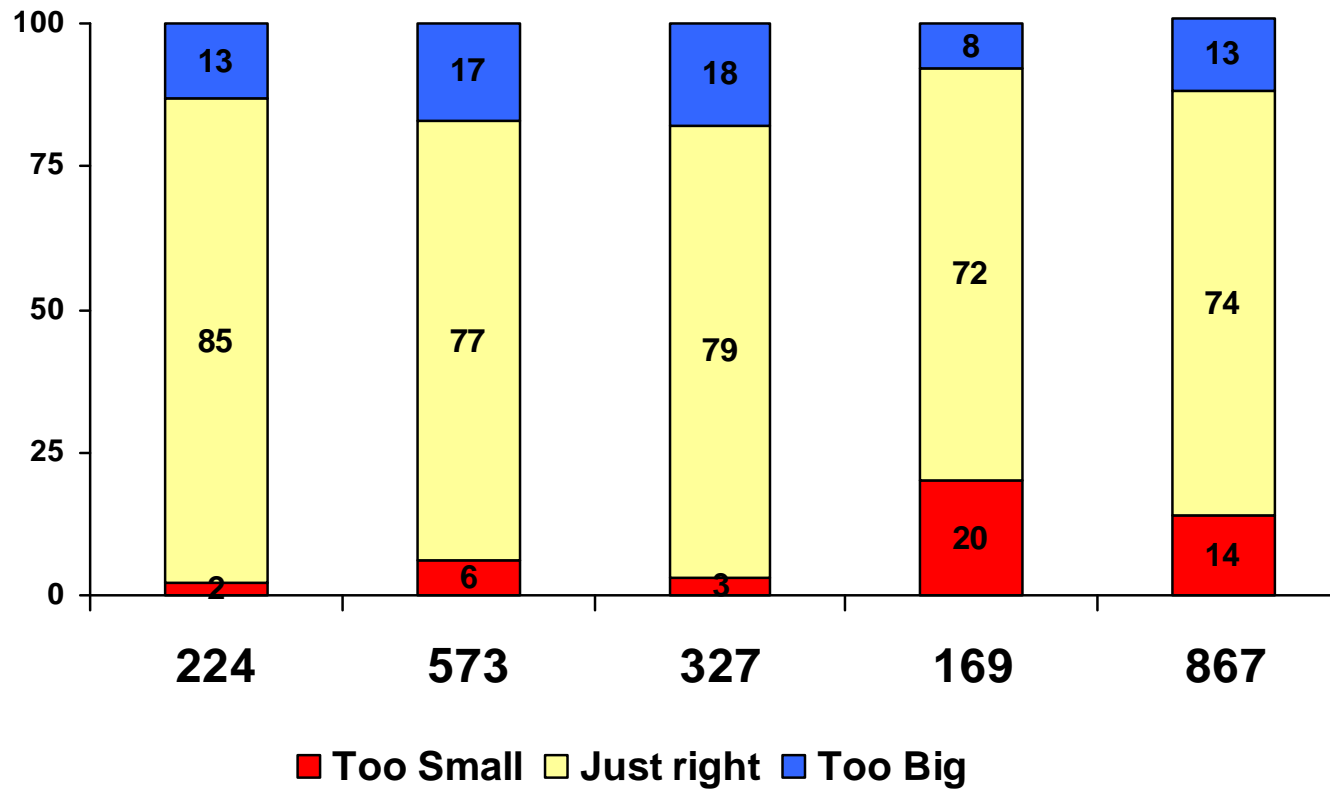
Appropriateness Ratings - Percent "Just About Right"

Appropriateness Rating Percentages (5pt JAR Scale)	#224	#573	#327	#169	#867
Too Crunchy	15	18	16	27	9
Crunchiness (JAR)	78	71	73	65	44
Not Crunchy Enough	7	12	11	8	48
Too Hard	13	13	16	26	42
Texture (JAR)	85	82	75	69	45
Not Hard Enough	2	5	9	5	14
Too Big	15	16	17	16	
Size of Multigrain Pieces (JAR)	82	81	76	75	
Too Small	3	3	7	8	
Too Strong	21	21	33	25	
Mutigrain flavor (JAR)	72	66	50	62	
Too Weak	7	13	17	12	

Appropriateness Ratings - Percent "Just About Right"

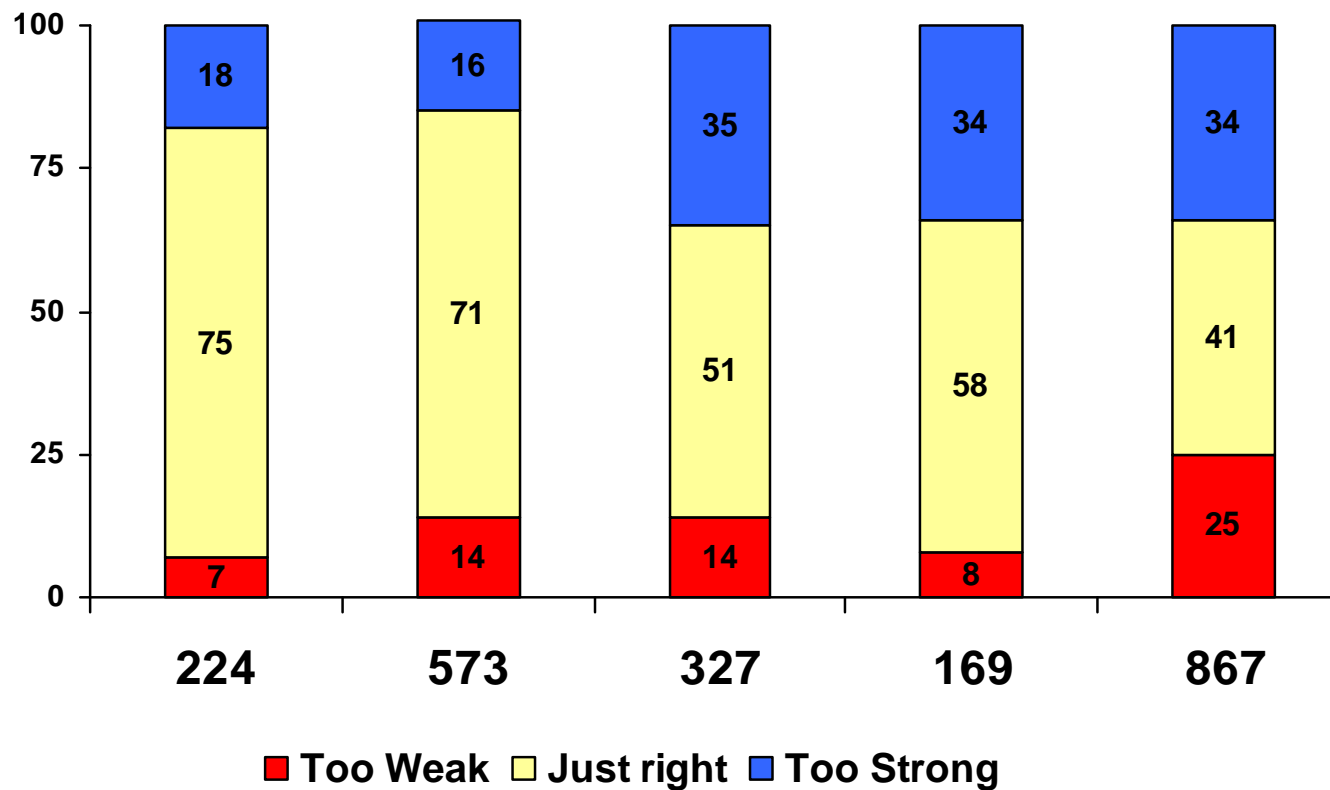
Appropriateness Rating Percentages (5pt JAR Scale)	#224	#573	#327	#169	#867
Too Much Multigrain	17	21	27	25	
Balance Multigrain (JAR)	77	65	55	60	
Not Enough Multigrain	6	14	18	15	
Too Many Peanuts	10	9			
Amonut of Peanuts (JAR)	71	67			
Not Enough Peanuts	18	23			
Too Big	8	7			
Size of Peanuts (JAR)	80	75			
Too Small	11	18			

Appropriateness Ratings—Size Percentage “Just About Right”



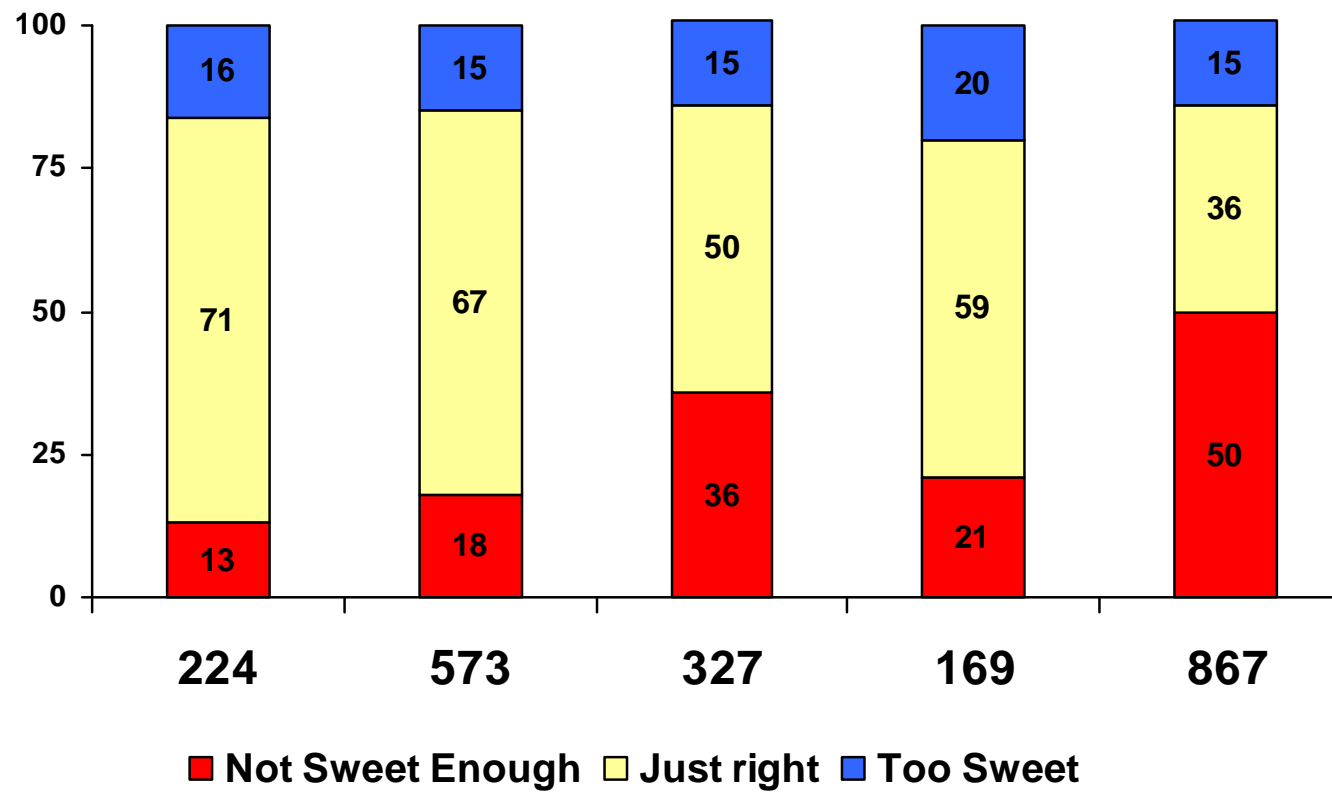
5pt. scale

Appropriateness Ratings—Flavor Percentage “Just About Right”



5pt. scale

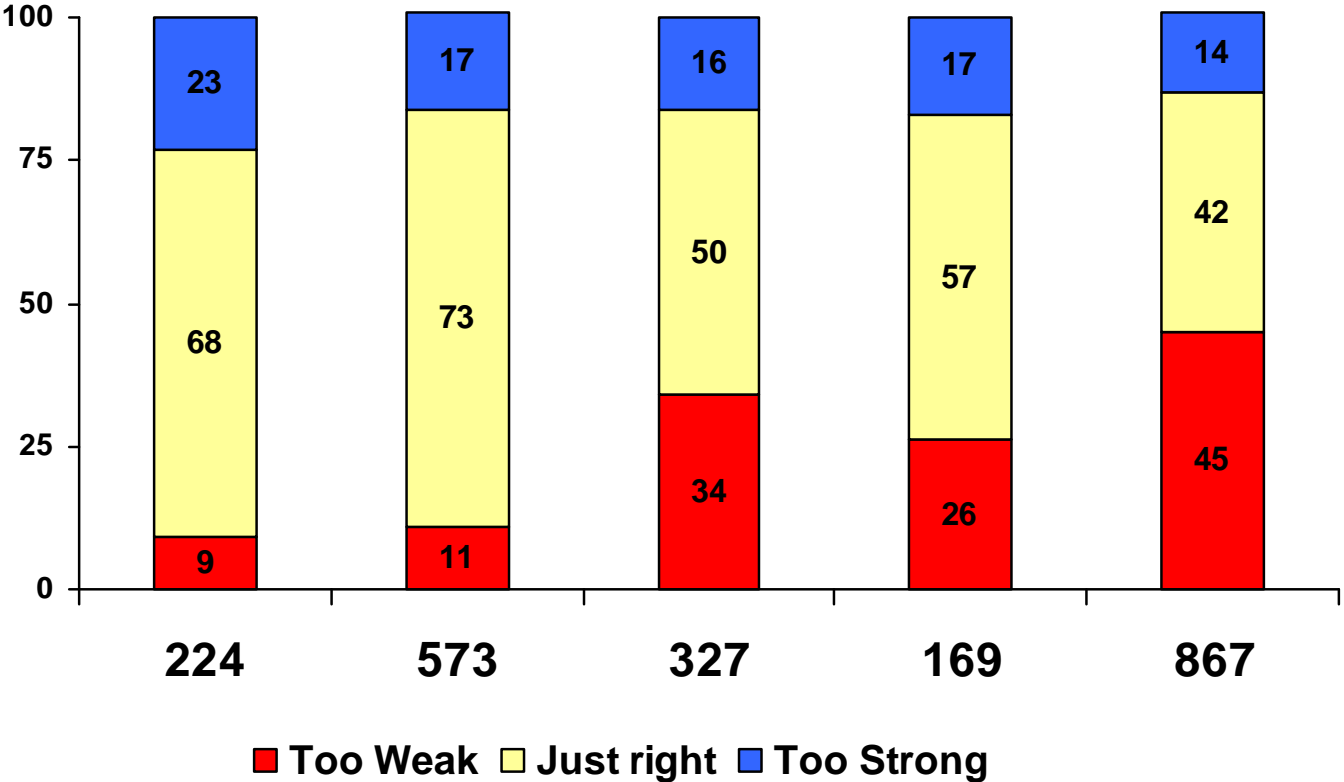
Appropriateness Ratings—Sweetness Percentage “Just About Right”



5pt. scale

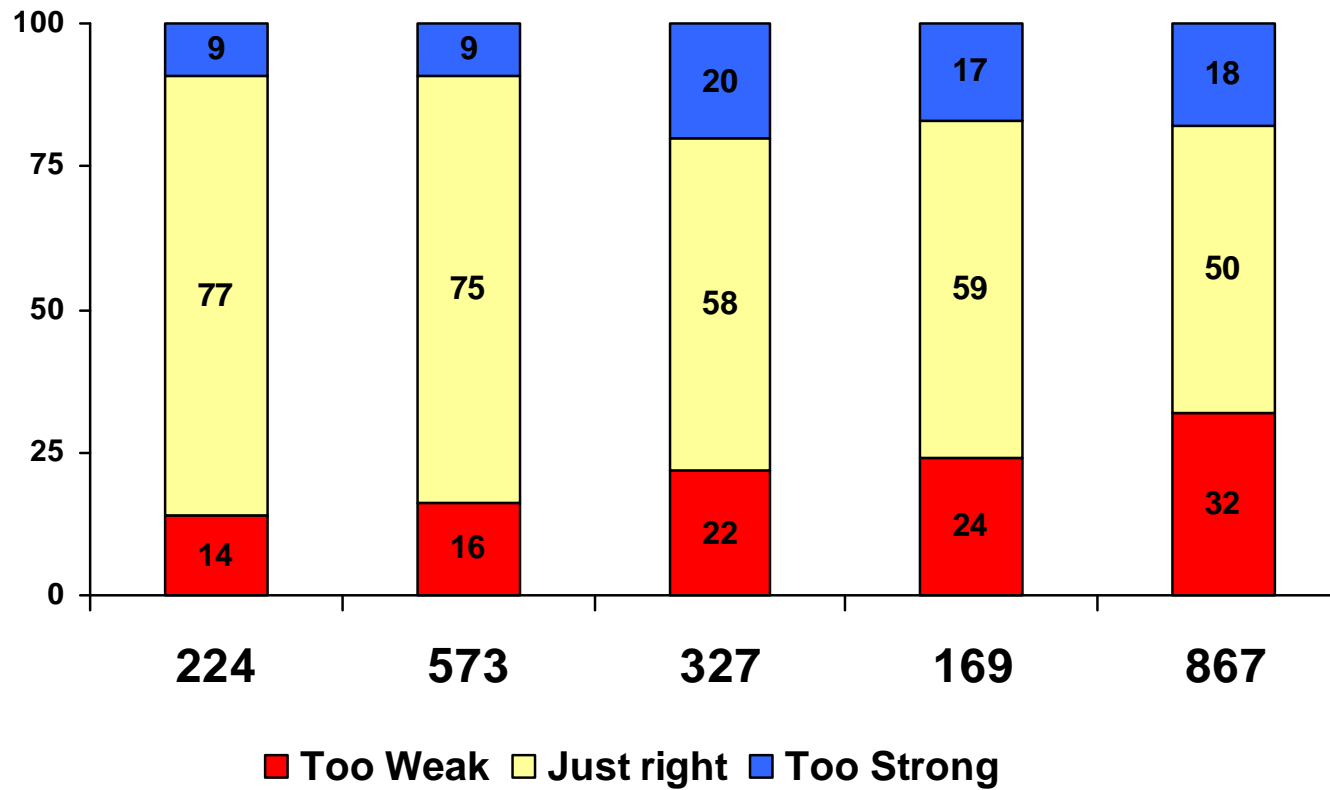
Appropriateness Ratings—Chocolate Flavor

Percentage "Just About Right"



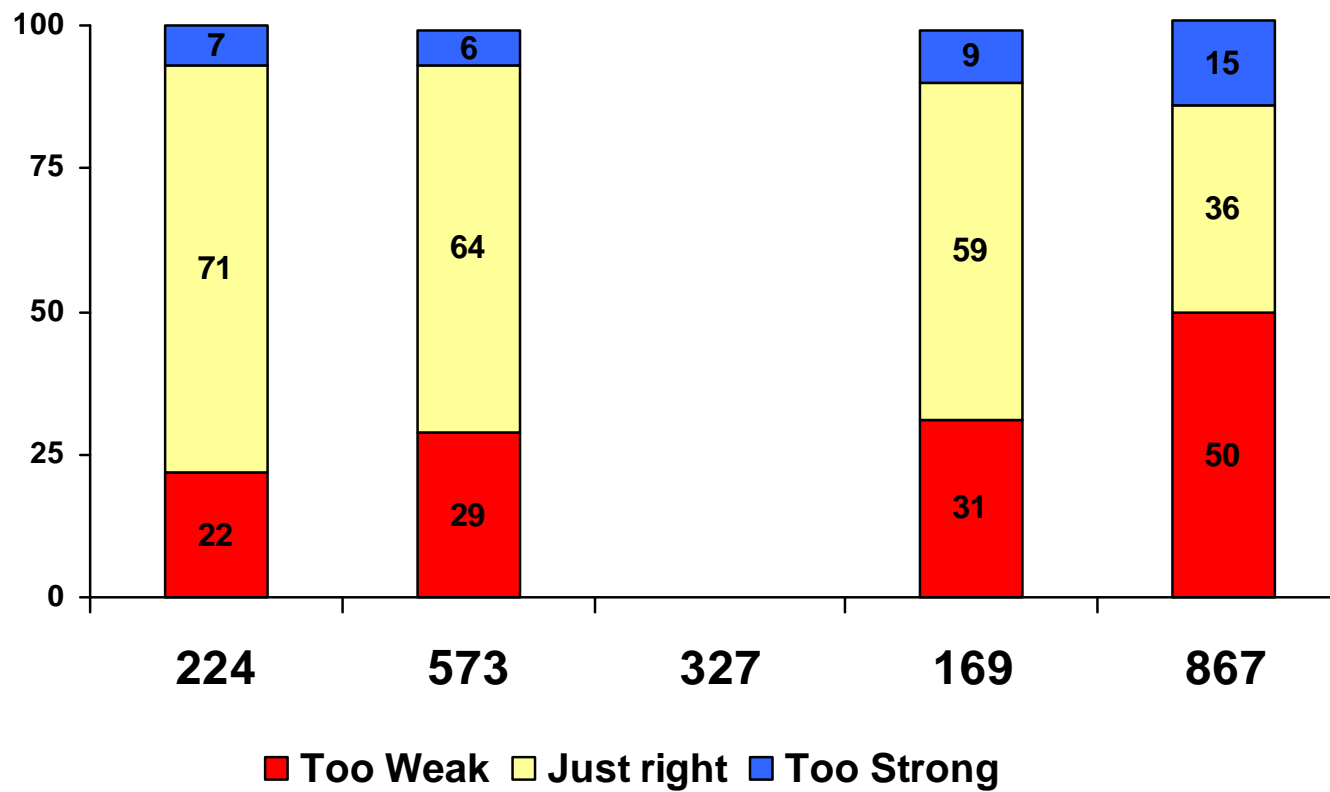
5pt. scale

Appropriateness Ratings—Nuts/Peanut Flavor Percentage “Just About Right”



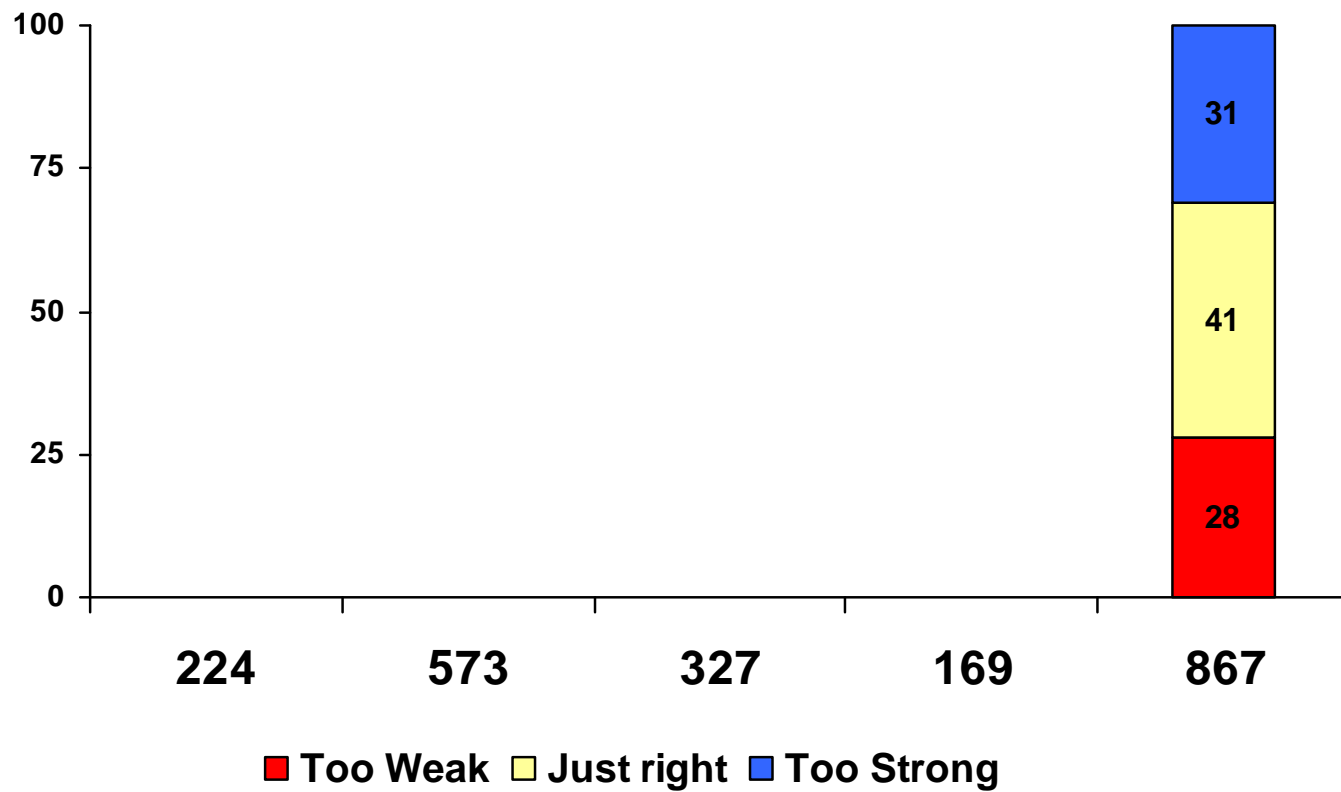
5pt. scale

Appropriateness Ratings—Caramel Flavor Percentage “Just About Right”



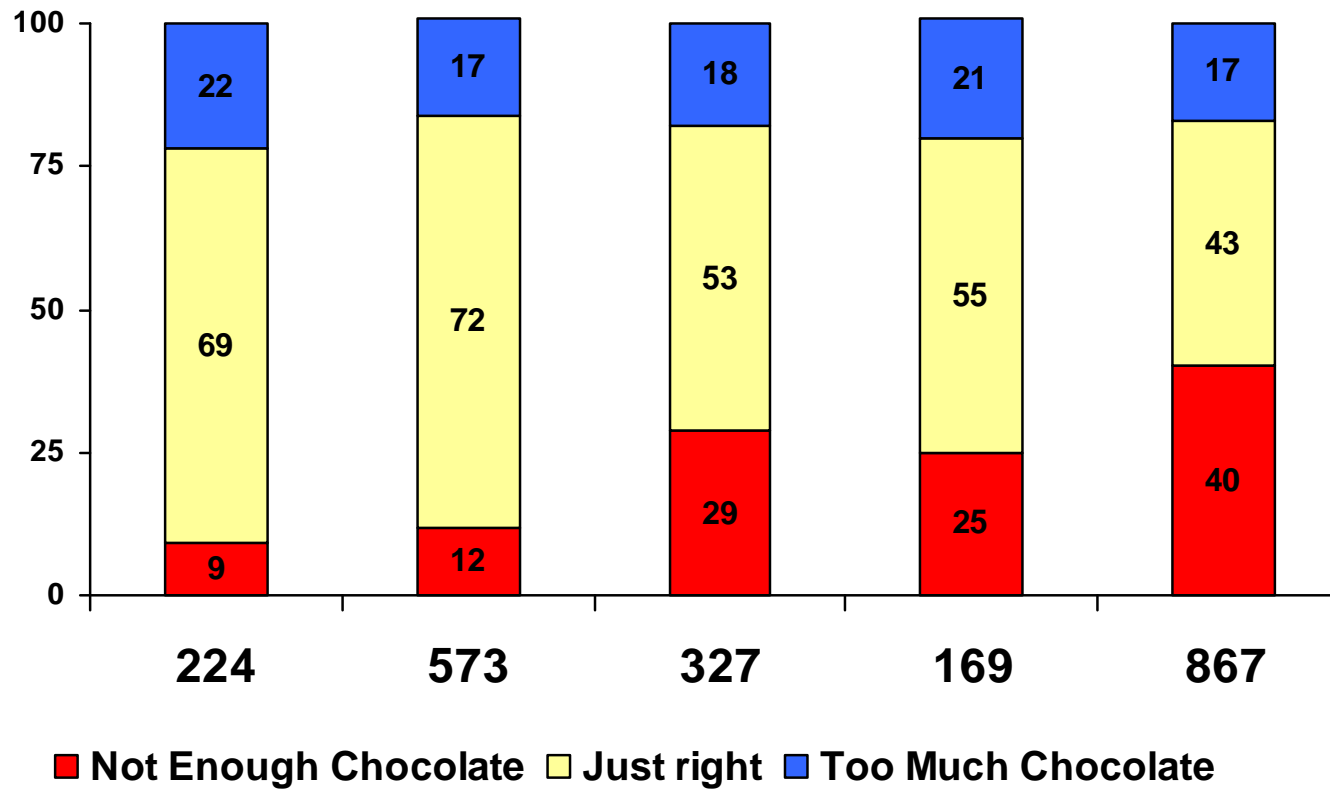
5pt. scale

Appropriateness Ratings—Center Flavor Percentage “Just About Right”



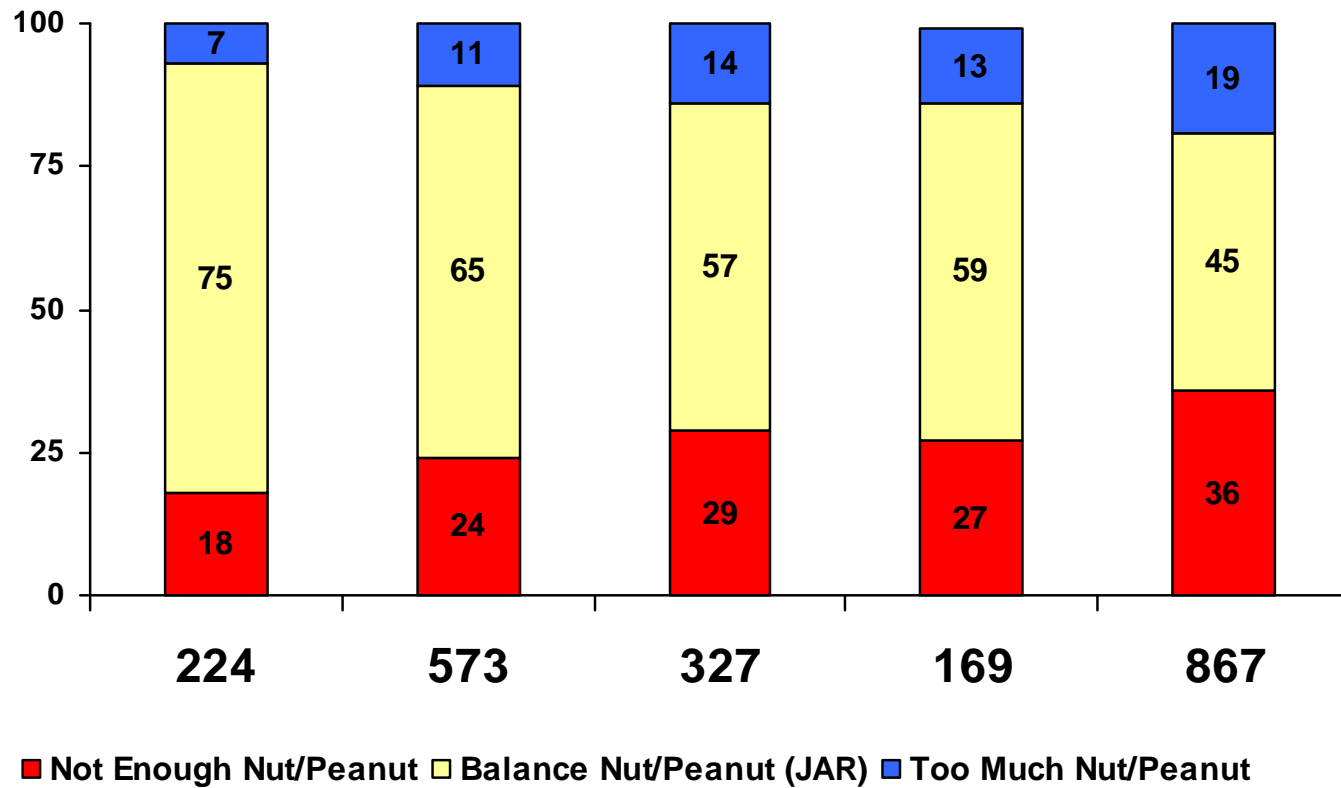
5pt. scale

Appropriateness Ratings—Balance Chocolate Percentage “Just About Right”



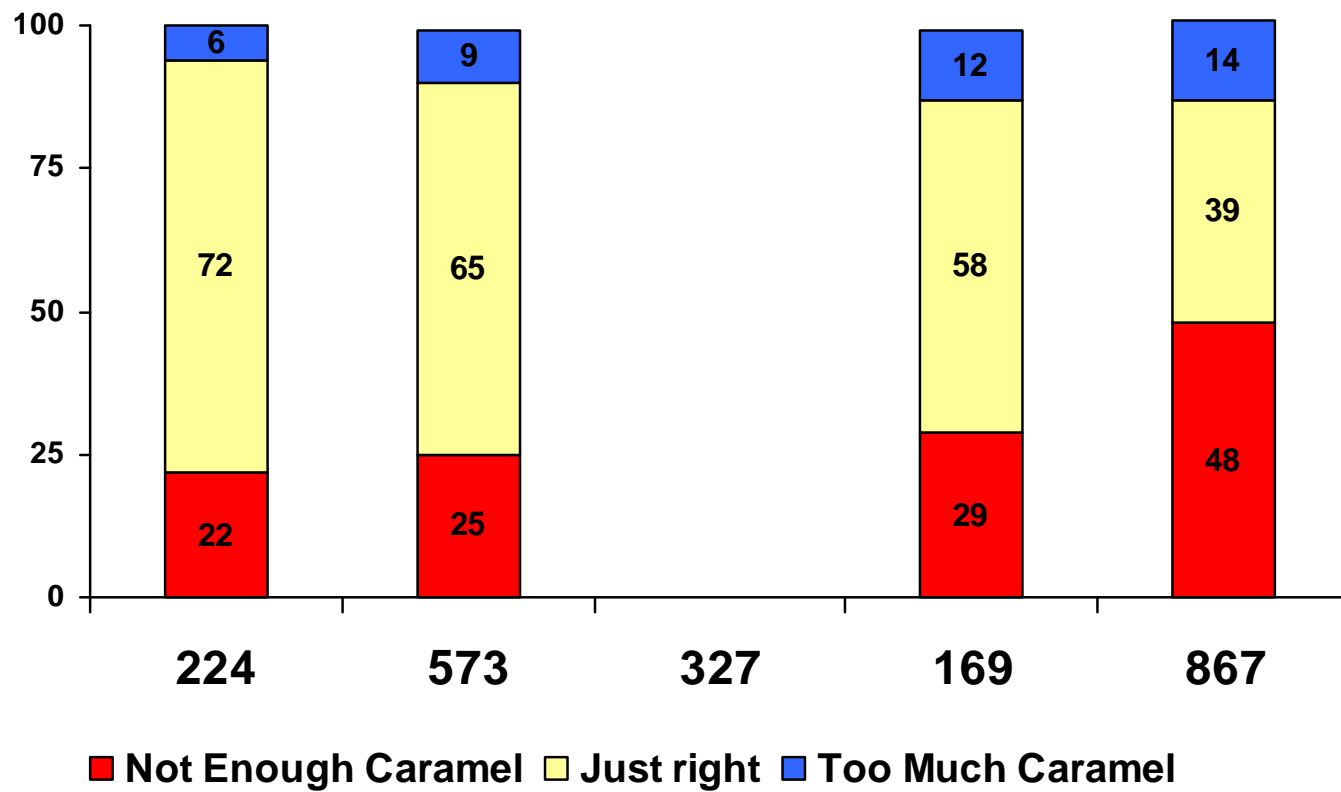
5pt. scale

Appropriateness Ratings—Balance Nut/Peanut Percentage “Just About Right”



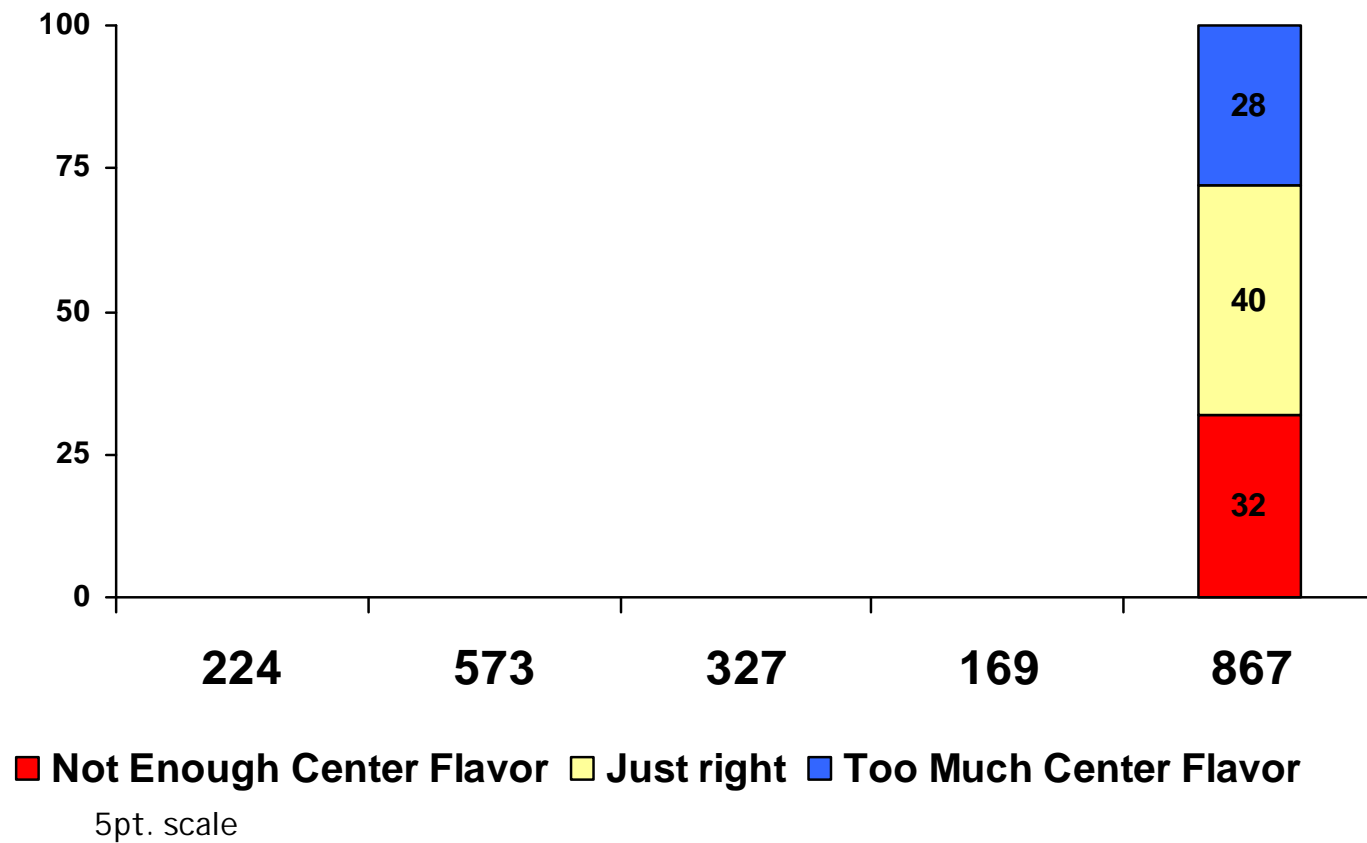
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Appropriateness Ratings—Balance Caramel Percentage “Just About Right”



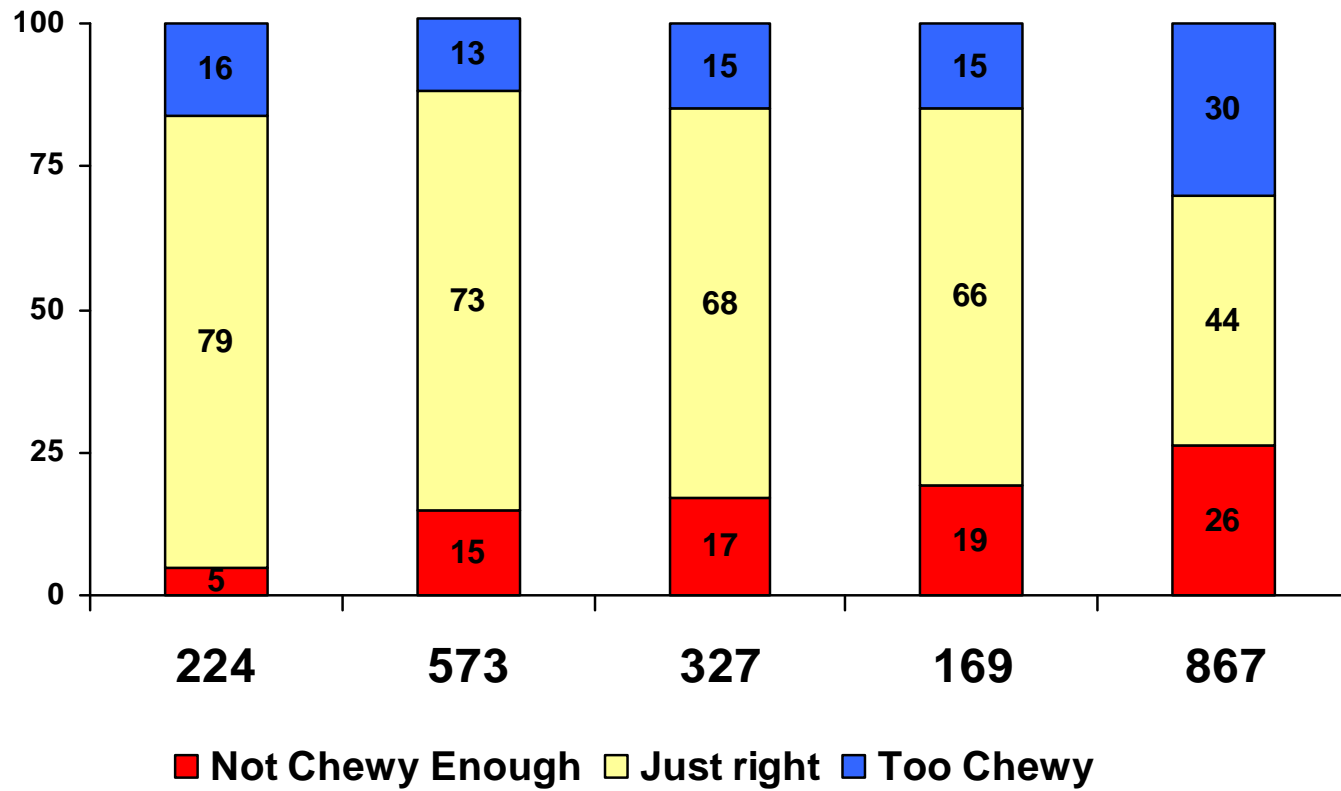
5pt. scale

Appropriateness Ratings—Balance Center Percentage “Just About Right”



Appropriateness Ratings—Chewiness

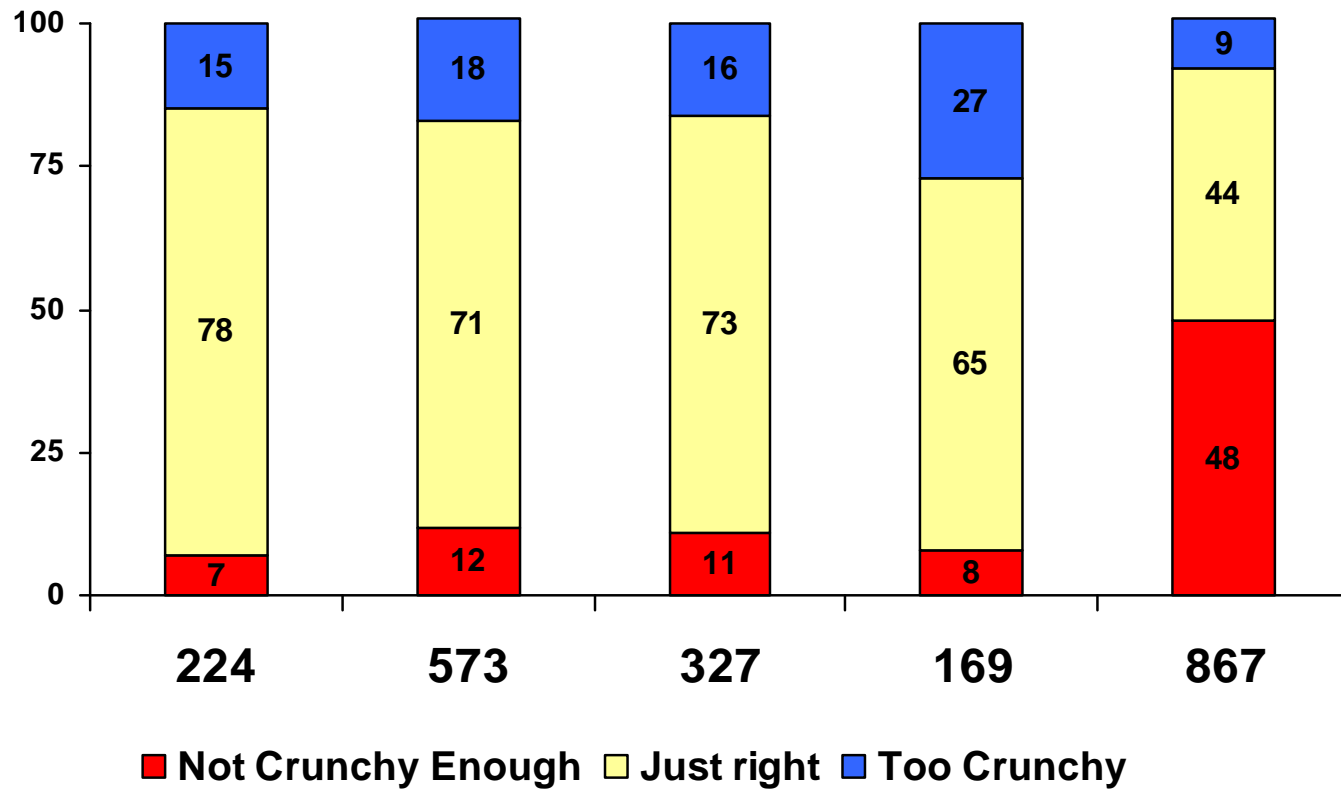
Percentage “Just About Right”



5pt. scale

Appropriateness Ratings—Crunchiness

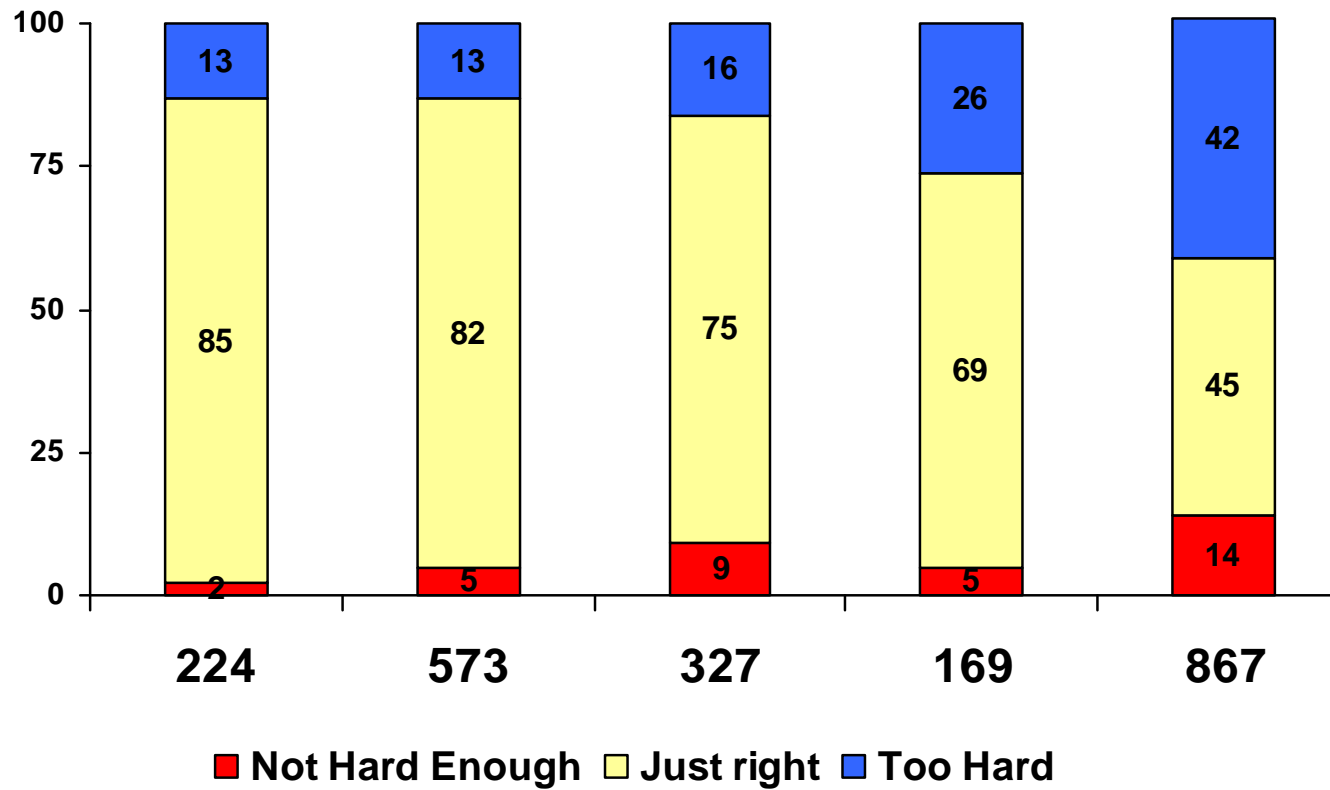
Percentage “Just About Right”



5pt. scale

Appropriateness Ratings—Texture

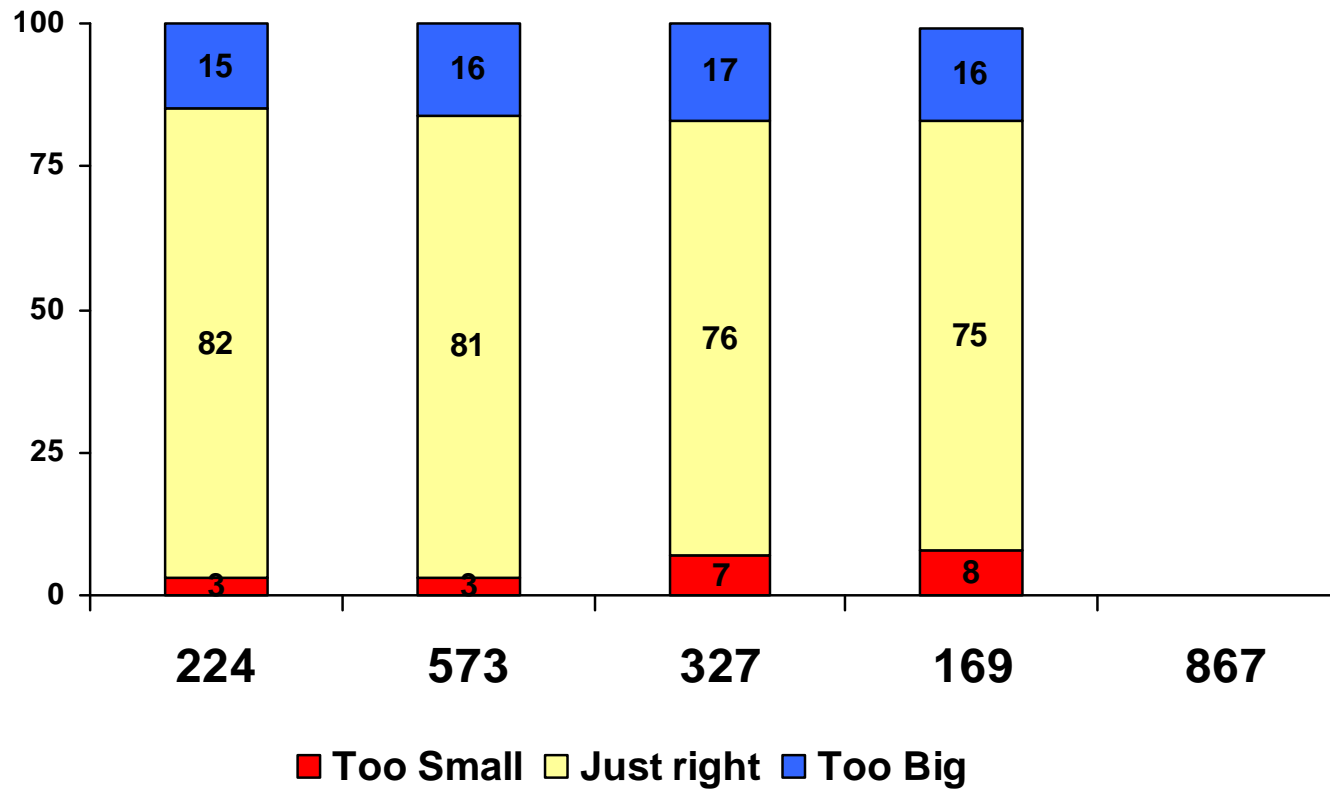
Percentage "Just About Right"



5pt. scale

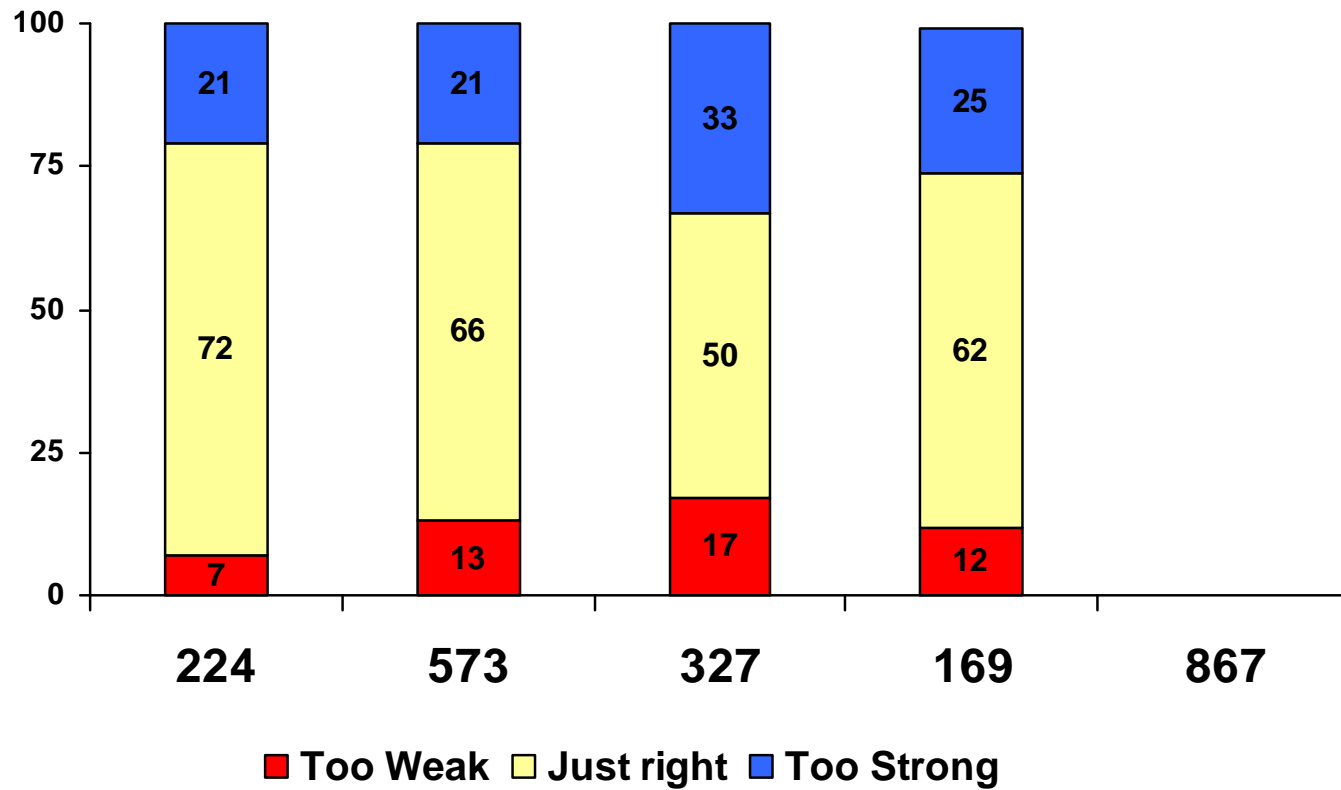
Appropriateness Ratings—Size of Multigrain Pieces

Percentage "Just About Right"



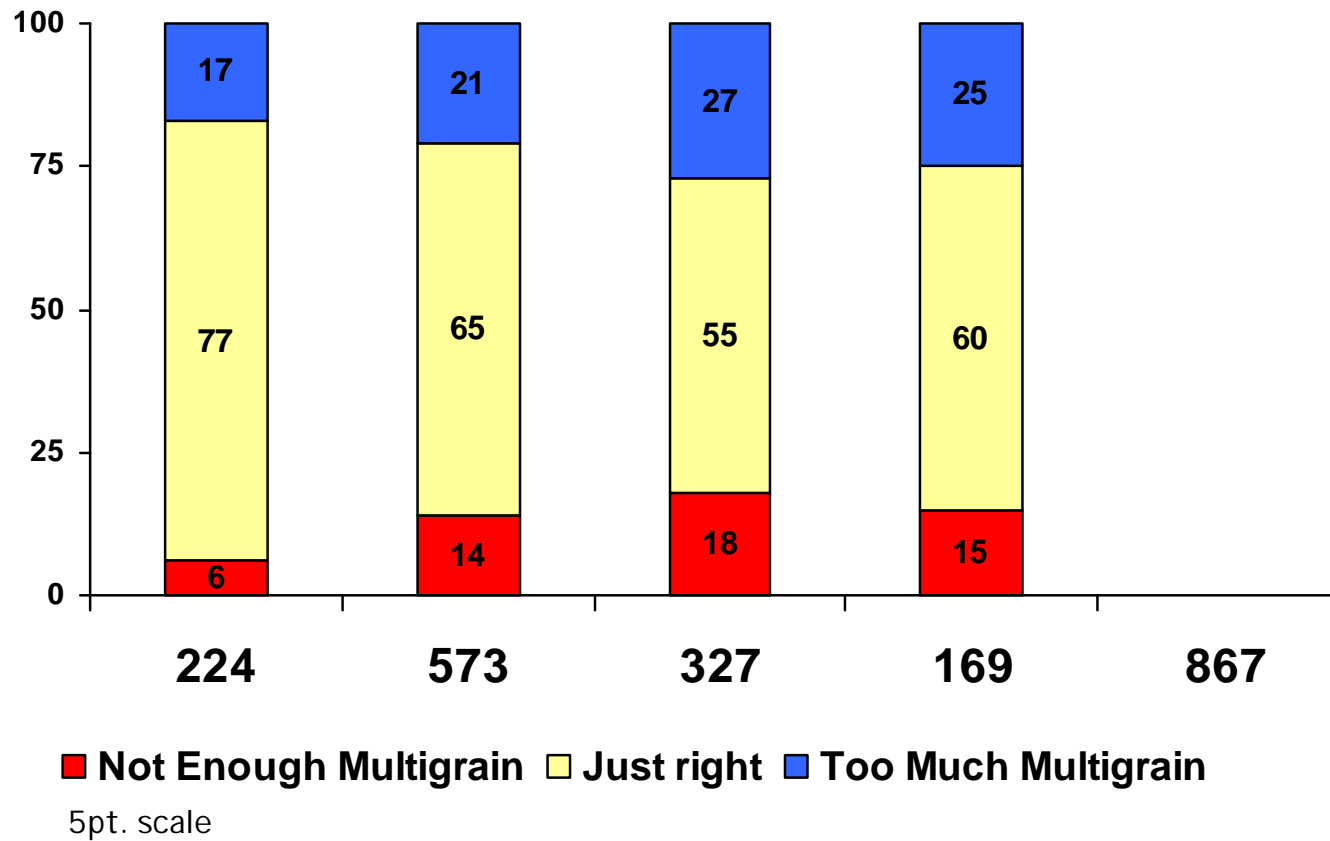
5pt. scale

Appropriateness Ratings—Multigrain Flavor Percentage “Just About Right”

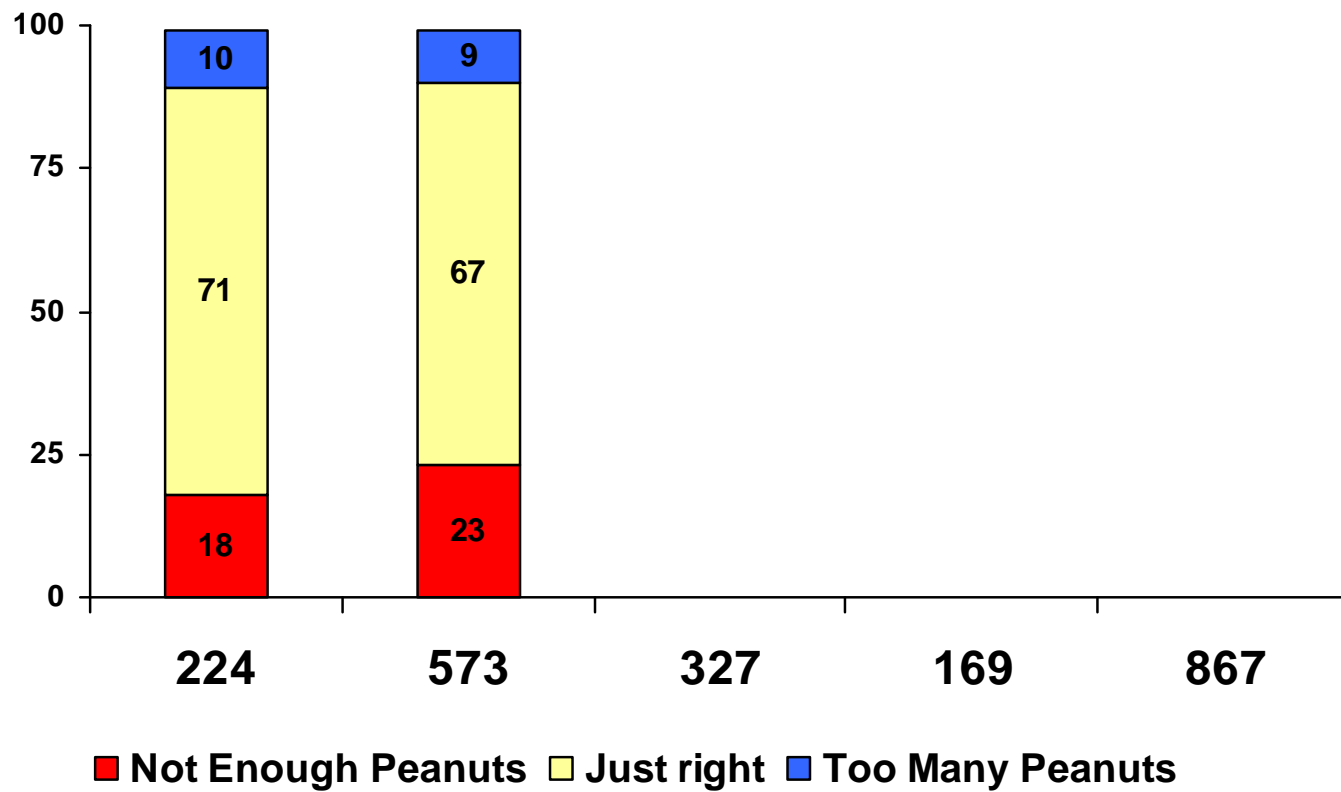


5pt. scale

Appropriateness Ratings—Balance Multigrain Flavor Percentage “Just About Right”



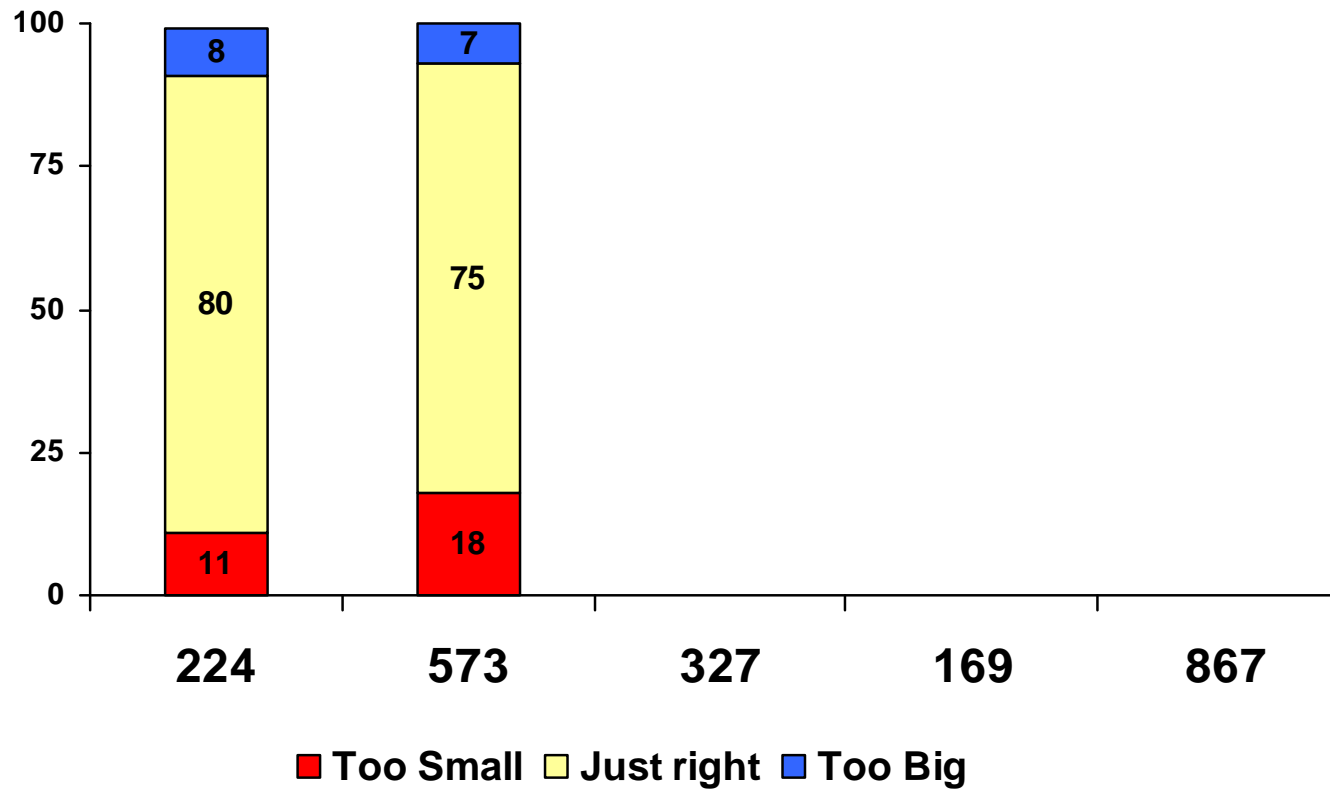
Appropriateness Ratings—Amount of Peanuts Percentage “Just About Right”



5pt. scale

Appropriateness Ratings—Size of Peanuts

Percentage "Just About Right"



5pt. scale

Consumer Descriptive Ratings

Intensity Ratings (5 pt. scale)	Dark Choco #224	Milk Choco #573	Choco Nut #327	Choco Peanut #169	Caramel ChocBlast #867
Flavor	4.41a	4.20a	4.42a	4.38a	4.13a
Sweetness	4.07a	3.99ba	3.61b	3.ba	3.19c
Chocolate Flavor	4.31a	4.05ba	3.60dc	3.78cb	3.33d
Nuts/Peanuts Flavor	3.84a	3.54a	3.67a	3.56a	3.69a
Caramel Flavor	3.79a	3.64ba		3.28cb	3.04c
Center Flavor					3.56
Multigrain Flavor	3.98ba	3.72b	4.20a	3.94ba	

NOTE: Values sharing a common letter do not differ significantly at $p < 0.10$.

Texture and Taste - Mean Hedonic Scores

Product Attributes (7 pt. Hedonic scale)	Dark Choco	Milk Choco	Choco Nut	Choco Peanut	Caramel ChocBlast
	#224	#573	#327	#169	#867
Chalky Texture	2.86b	3.03b	3.01b	3.23ba	3.69a
Dry Texture	3.13b	3.29ba	3.64a	3.48ba	3.66a
Gritty Texture	3.07a	3.28a	3.42a	3.33a	3.18a
Sticky Texture	3.02a	3.01a	2.82a	2.93a	2.91a
Vitamin Taste	2.67b	2.71b	3.24a	3.29a	3.17ba
Artificial Taste	2.78b	3.12ba	3.36a	3.39a	3.46a

NOTE: Values sharing a common letter do not differ significantly at $p < 0.10$.

Texture and Taste Impact Ratings - Percent "No Impact"

Impact Rating Percentages (5pt JAR Scale)	#224	#573	#3278	#169	#867
Acceptable	49	49	41	39	33
Chalky Texture (No Impact)	41	38	38	42	31
Not Acceptable	9	13	21	20	36
Acceptable	52	41	38	39	34
Dry Texture (No Impact)	39	43	41	41	32
Not Acceptable	9	16	21	21	34
Acceptable	51	47	41	34	32
Gritty Texture (No Impact)	34	38	41	42	42
Not Acceptable	15	15	18	25	26

Texture and Taste Impact Ratings - Percent "No Impact"

Impact Rating Percentages (5pt JAR Scale)	#224	#573	#327	#169	#867
Acceptable	55	51	45	38	38
Sticky Texture (No Impact)	41	41	44	51	40
Not Acceptable	3	8	11	11	22
Acceptable	47	48	41	40	34
Vitamin Taste (No Impact)	41	41	38	41	39
Not Acceptable	11	11	21	20	27
Acceptable	52	44	39	36	38
Artificial Taste (No Impact)	39	40	34	40	30
Not Acceptable	9	16	27	25	32

Consumer Attitudinal Measures

Where Would You Eat This Product

Product Attributes (7 pt. Hedonic scale)	Dark Choco	Milk Choco	Choco Nut	Choco Peanut	Caramel ChocBlast
	#224	#573	#327	#169	#867
At work	72	64	53	55	57
Around the house	56	56	45	50	42
At the gym	39	32	34	24	25
When bike riding	24	15	14	8	9
When roller blading/skating	18	9	12	5	6
Other	23	23	28	28	37

Aftertaste

Aftertaste	Dark Choco #224	Milk Choco #573	Choco Nut #327	Choco Peanut #169	Caramel ChocBlast #867
Yes (Percentage)	41	42	45	55	59
Length of Aftertaste (Filter) (5pt. scale)					
Too long	36	48	60	60	64
Just about right	64	48	40	33	31
Not long enough		4		7	5
Like Aftertaste (Filter) (7pt. scale)					
Top Box	8	5	8	5	5
Top 2 Box	50	38	13	22	18

NOTE: Values sharing a common letter do not differ significantly at $p < 0.10$.

Consumer Attitudinal Measures

Consumer Attitudes	Dark Choco #224	Milk Choco #573	Choco Nut #327	Choco Peanut #169	Caramel ChocBlast #867
Agreement - Is an Excellent Product from the Makers of Snickers (7pt. scale)					
Top Box	5.67a	5.40a			
Top 2 Box	39	31			
	64	62			
Product Fits With Snickers Name and Brand (7pt. scale)					
Top Box	5.49a	5.19a			
Top 2 Box	33	24			
	64	57			

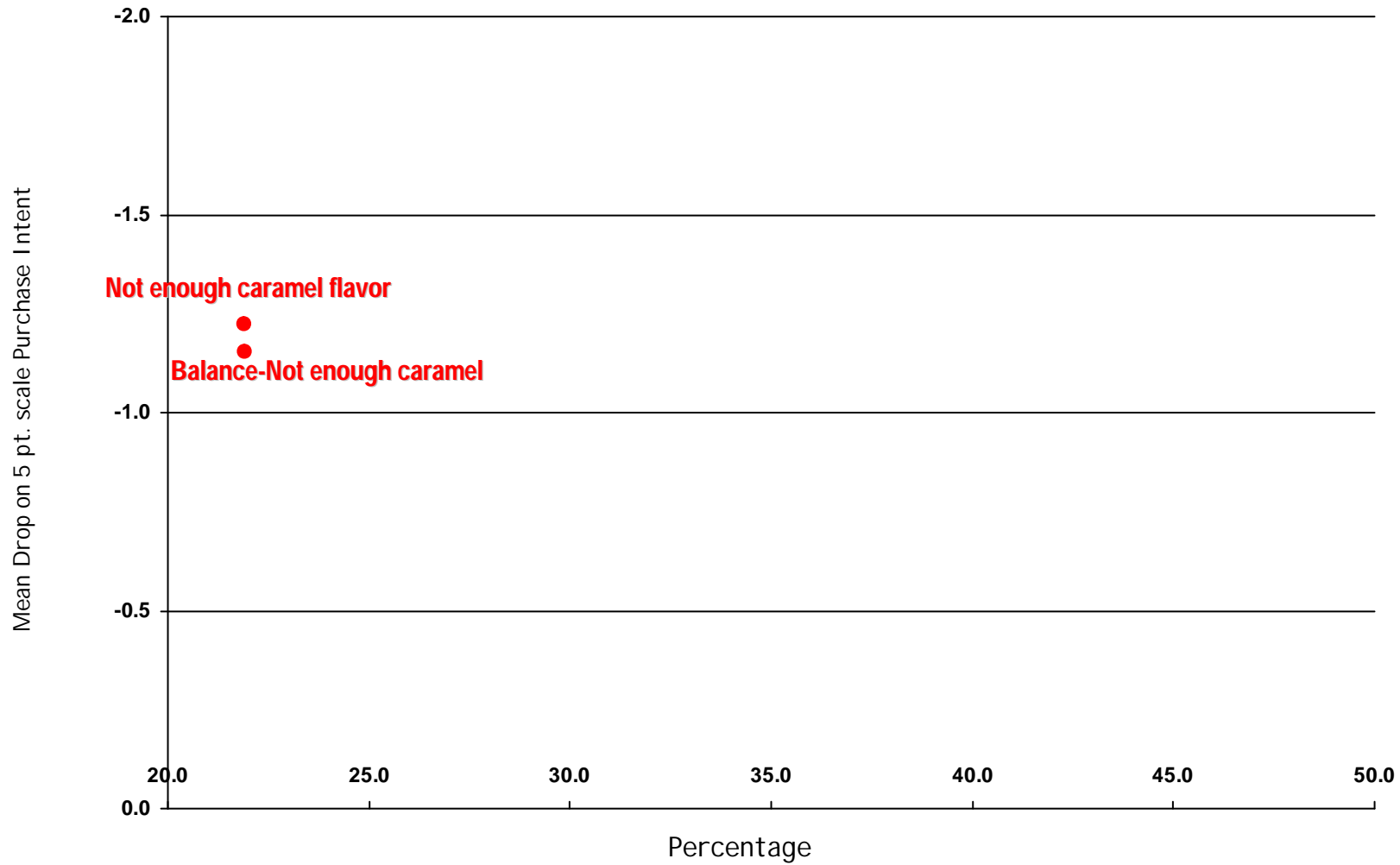
NOTE: Values sharing a common letter do not differ significantly at $p < 0.10$.

MeanDrop/Penalty Analysis

- ✚ MeanDrop/Penalty analysis takes two measures. First, the difference in mean purchase intent between those who feel a flavor has too much (blue labels) or too little (red labels) of an attribute and those who feel that attribute is just right. The value is calculated JAR minus too much/too little. These are placed on the y (vertical) axis.
- ✚ Next the percentages of those too much/too little respondents are mapped on the x (horizontal) axis.
- ✚ Interpret the map like this:
 - High vertical, big difference in purchase intent mean between this attribute too much/too little and 'just right'.
 - High x-value, a lot of people thought this flavor was too much/too little.
 - It is worthwhile to see which attributes have either a high y or x mapping.
 - Trouble spots. Upper right hand corner. This indicates that a flavor has both a lot of people who think it is too much/too little, and their purchase intent drops accordingly.

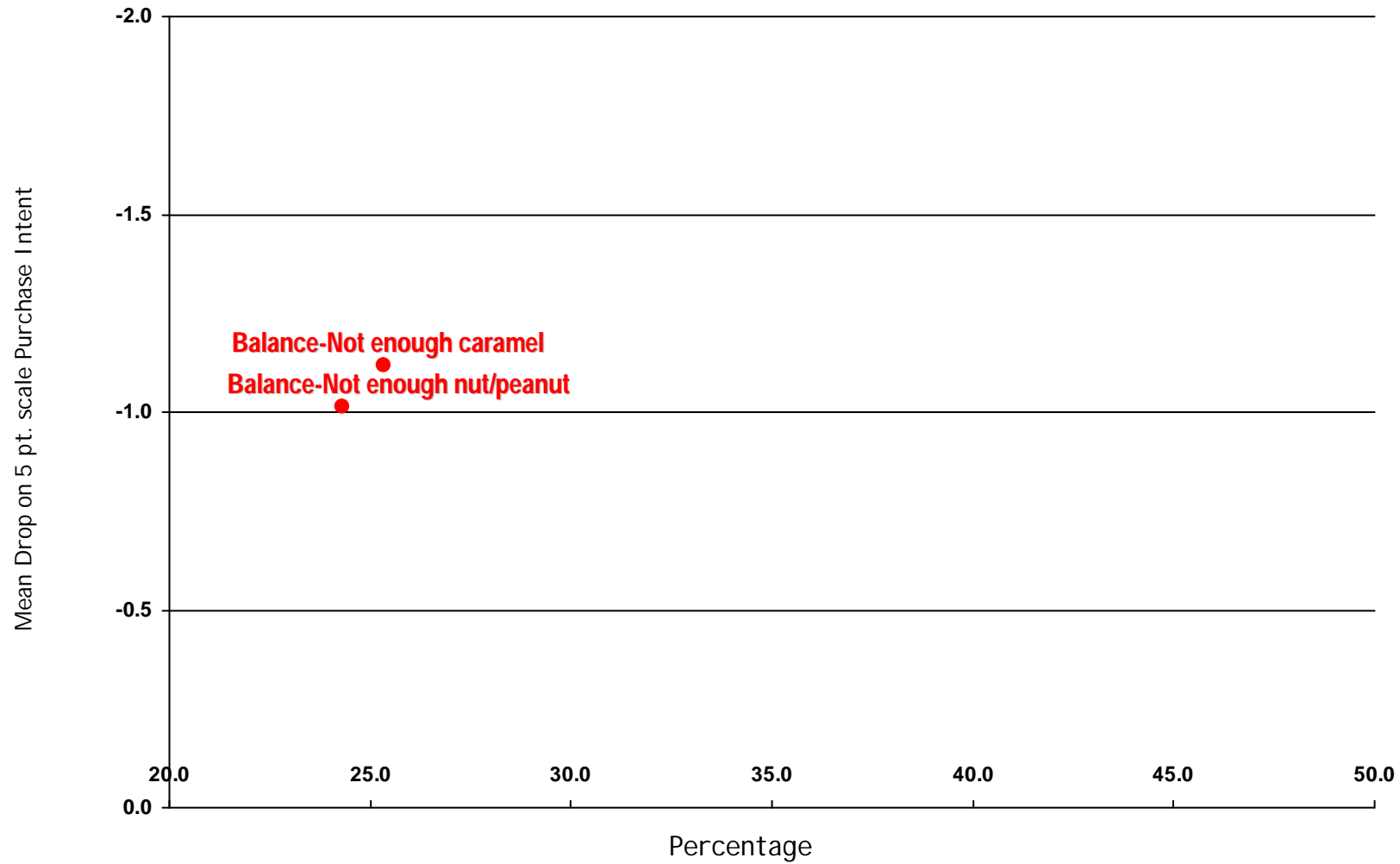
Penalty Analysis

Product 224 - Prototype - Dark Chocolate



Penalty Analysis

Product 573 - Prototype - Milk Chocolate



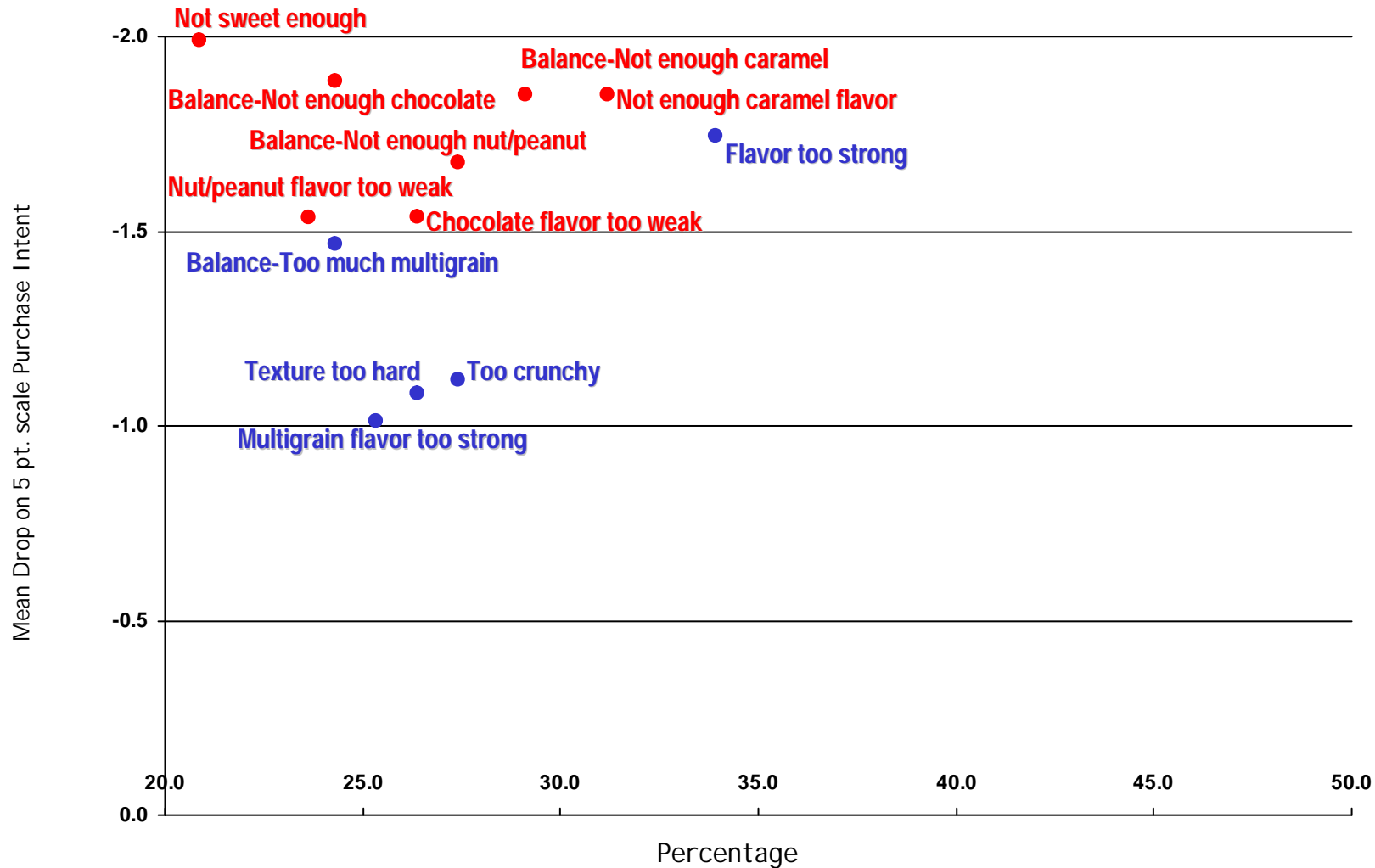
Penalty Analysis

Product 327 - Chocolate & Nut Bar



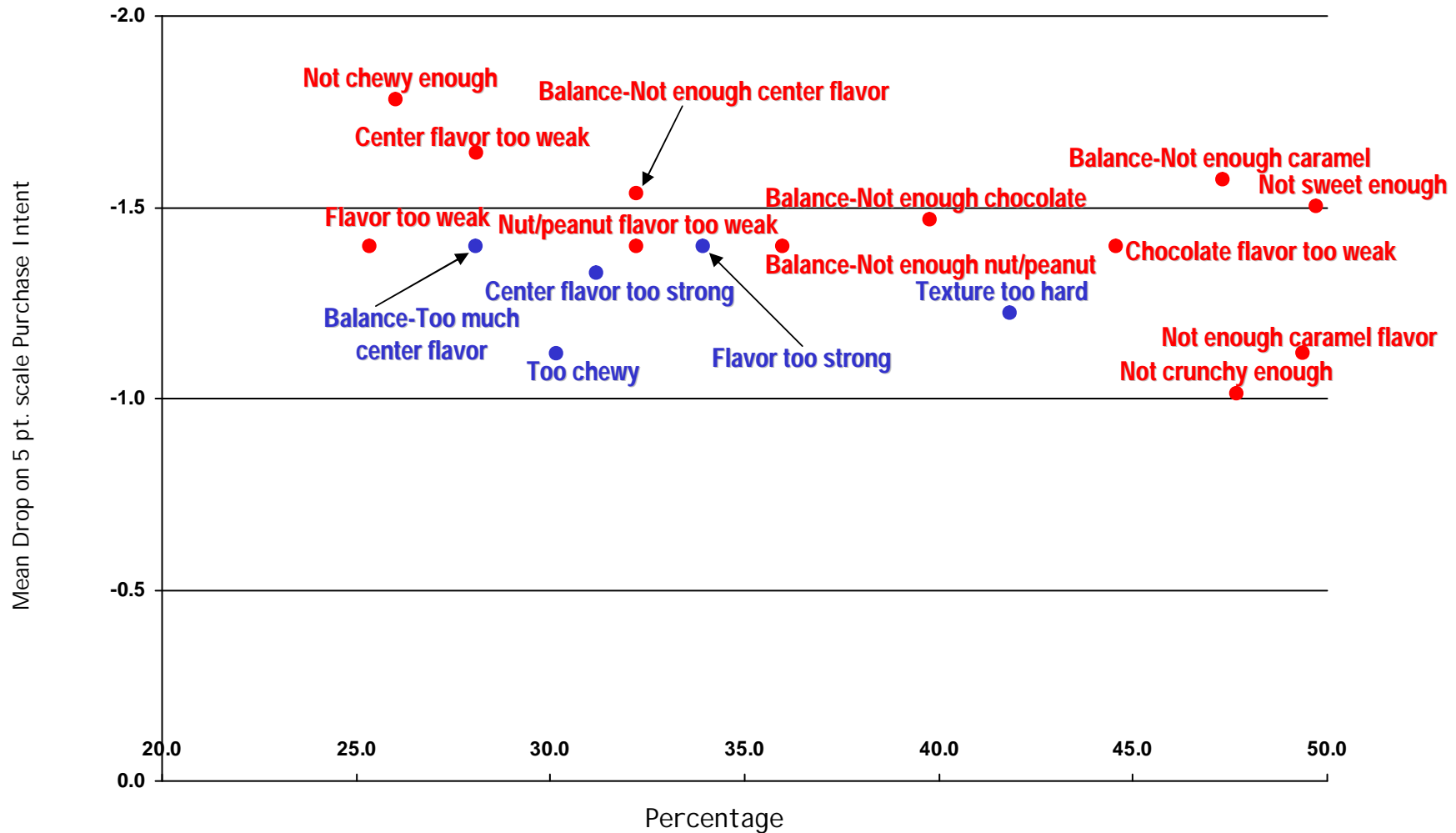
Penalty Analysis

Product 169 - Chocolate Peanut Butter Bar



Penalty Analysis

Product 867 - Carmel Chocolate Blast

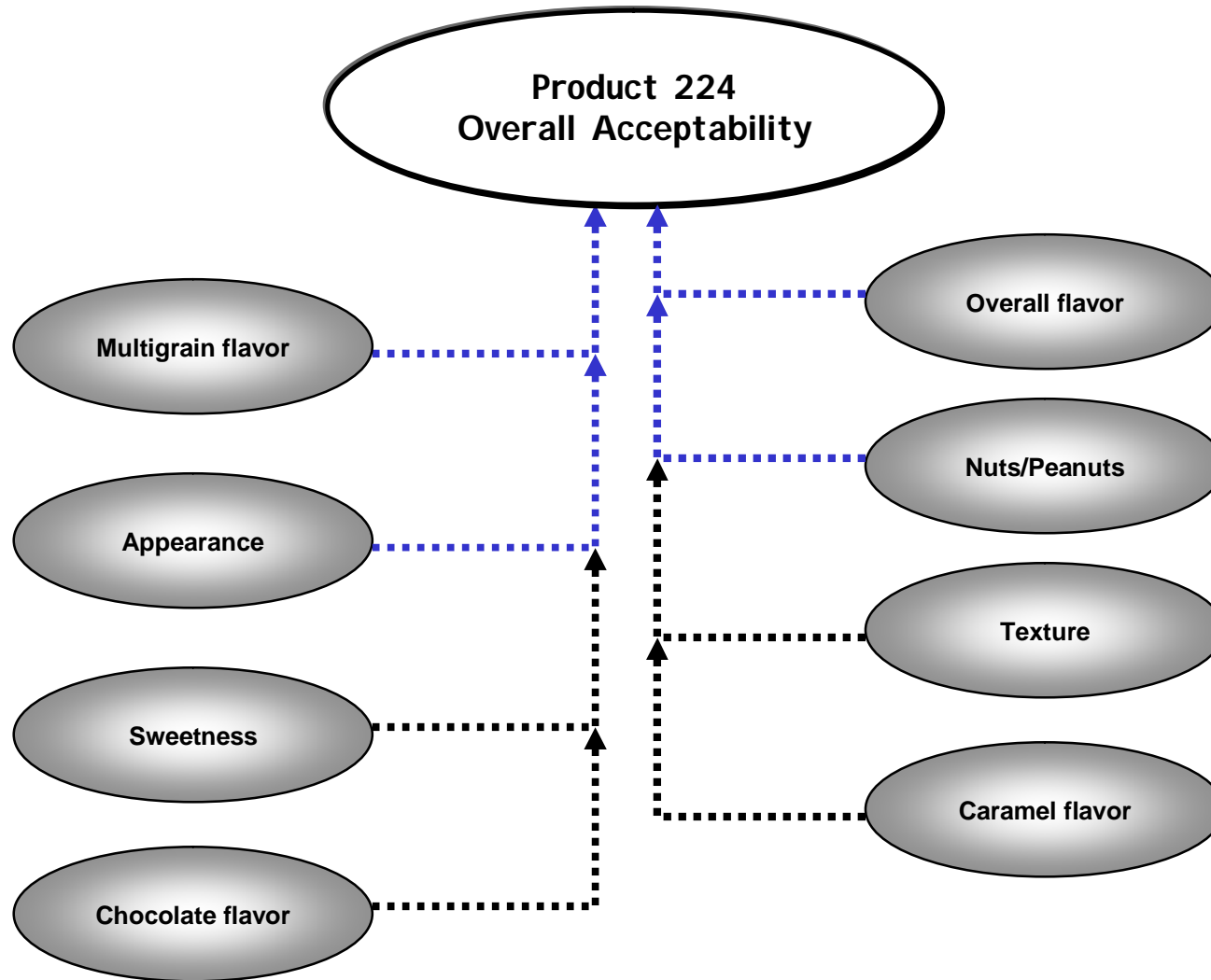


Regression Analysis

- ✦ Linear regression analysis uses ratings of independent variables to form a linear equation that predicts the dependent variable.
- ✦ It ranks the importance of each attribute to the dependent. These attributes are displayed on the following graphs in descending order.
- ✦ For the Chocolate Dessert Snack concepts we are looking for the relationship between 'Overall Acceptability' and the other 'Acceptability' ratings. That is, why do respondents like a particular concept.
- ✦ If a rating is positively significant (dotted blue line), that shows that if this product has a high rating, 'Overall Acceptability' will also be high. If it is low, so is 'Overall Acceptability'.
- ✦ If a rating is negatively significant (dotted red line), that shows a negative relationship between that variable and 'Overall Acceptability'.

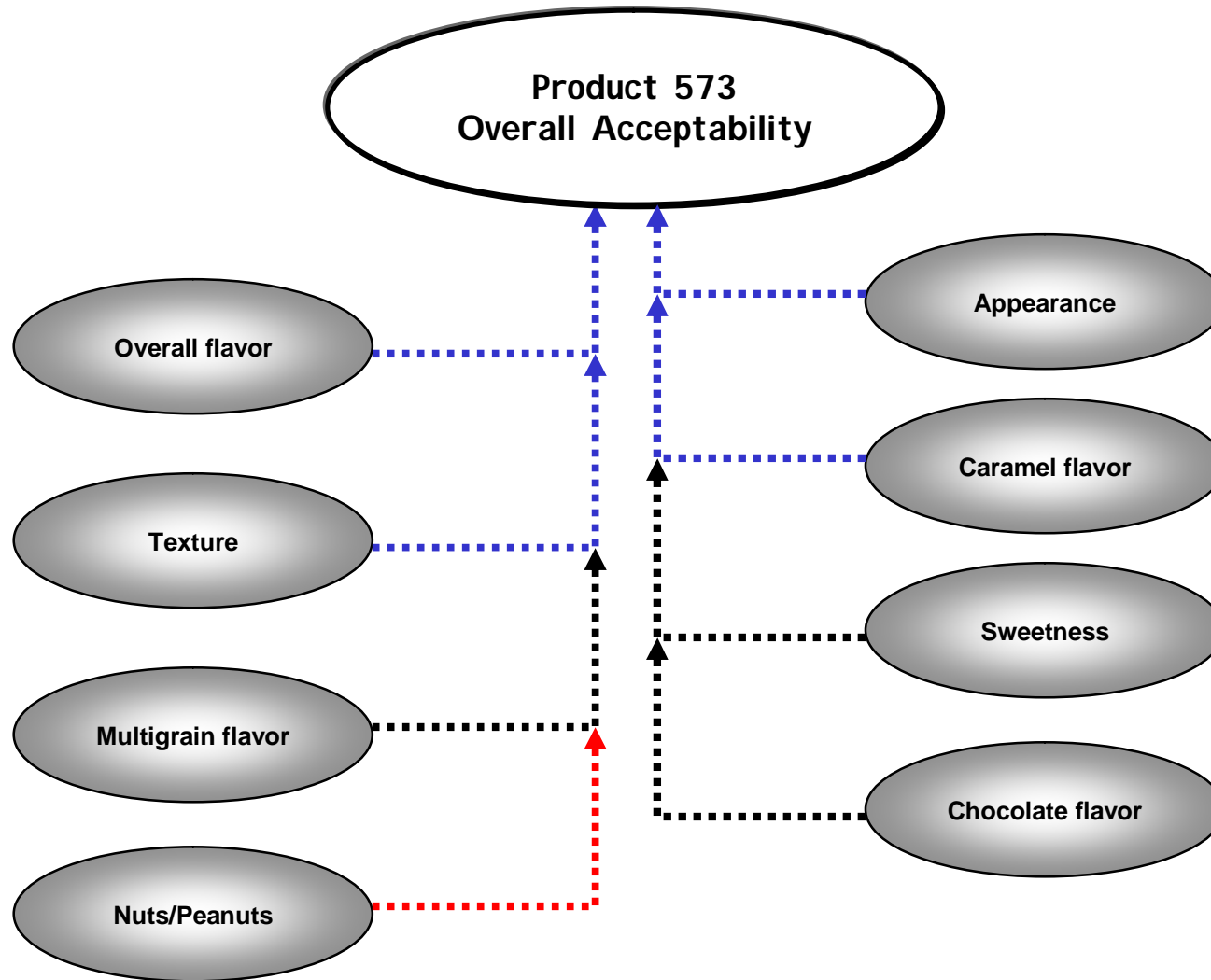
Regression Analysis

Product 224 - Prototype - Dark Chocolate



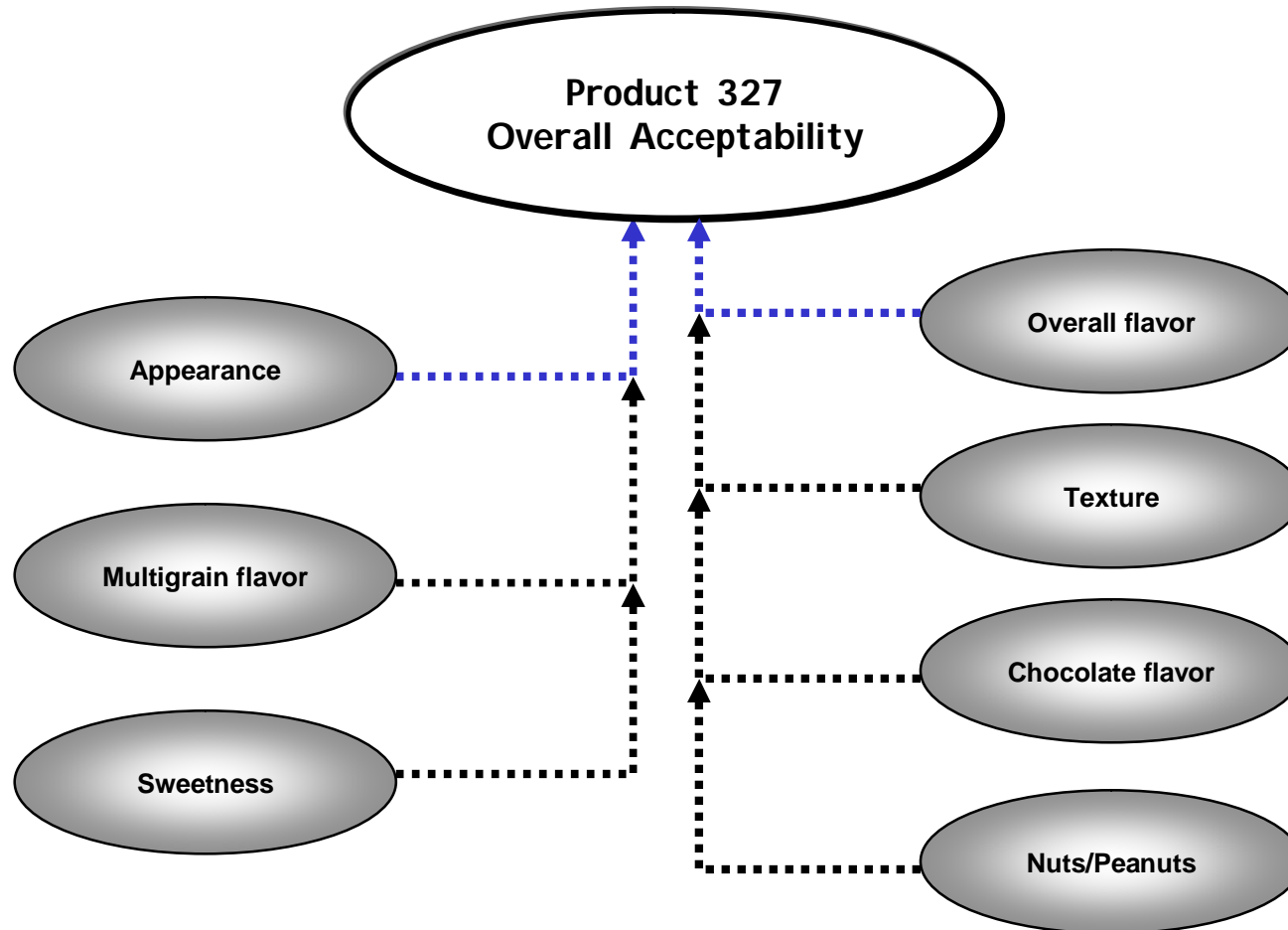
Regression Analysis

Product 573 - Prototype - Milk Chocolate



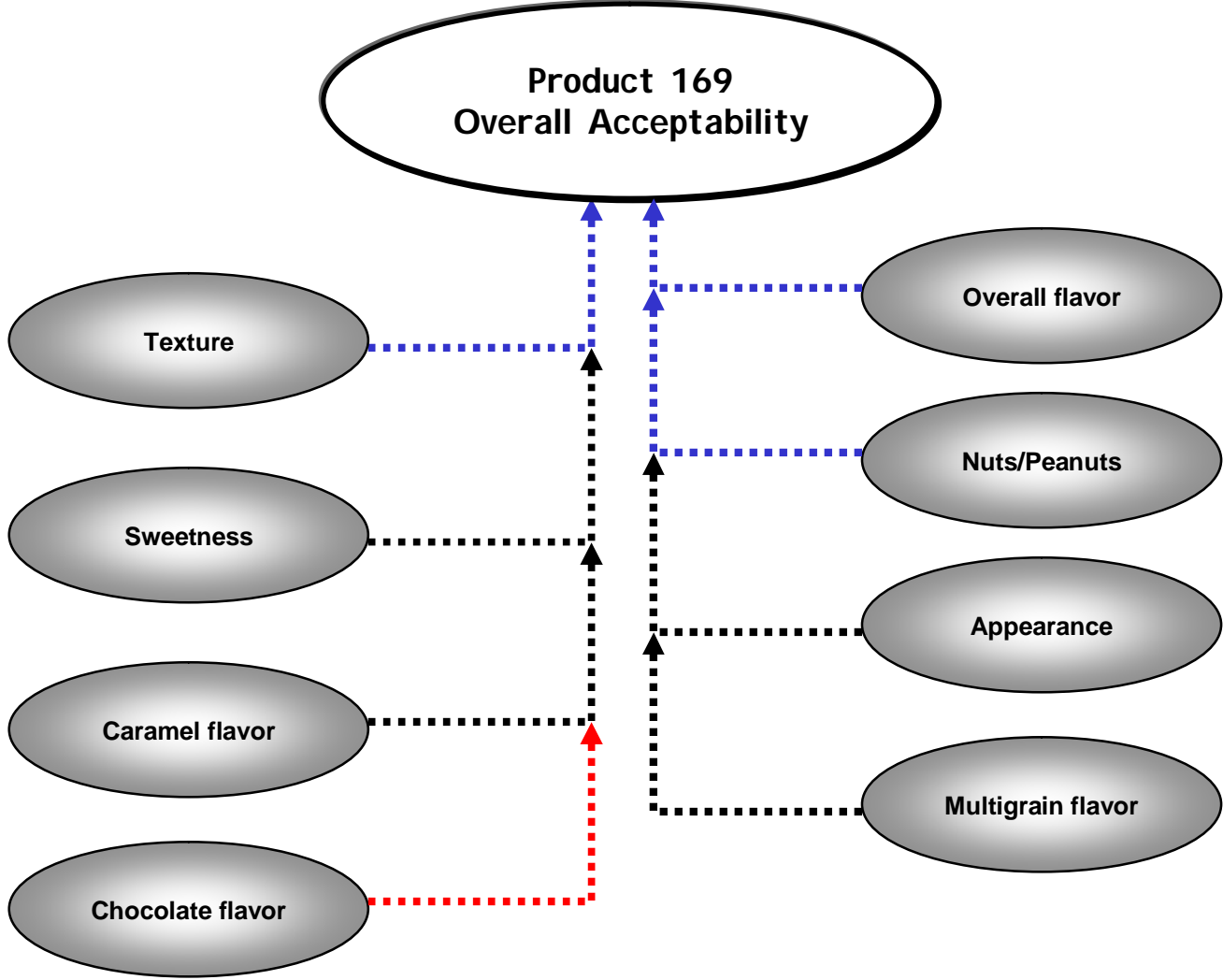
Regression Analysis

Product 327 - Chocolate & Nut Bar



Regression Analysis

Product 169 - Chocolate Peanut Butter Bar



Regression Analysis

Product 867 - Caramel Chocolate Blast

