

*"Come, give us a taste of your quality."
-- William Shakespeare, Hamlet, II, ii, 460*

Frozen Creamy Juice Bars – A Consumer Taste Test Survey

OBJECTIVE, METHOD AND DEMOGRAPHICS

To determine the relative consumer acceptance of these national brands of creamy strawberry frozen juice bars, attendees at the Institute of Food Technologist's convention were served paired samples on a blind basis. After completing their evaluation of the first bar, they repeated the evaluation with the second sample (sequential monadic design). The average age of the 152 respondents was 37.6 years; they were 44% male and 56% female.

RESULTS AND DISCUSSION

How well do you like the bar overall?

	<u>Score</u>	<u>Dole</u>	<u>Chiquita</u>	<u>Jello</u>
<i>like extremely</i>	9	5%	7%	5%
<i>like very much</i>	8	27	12	17
<i>like quite well</i>	7	31	30	29
<i>like fairly well</i>	6	13	24	14
<i>like moderately</i>	5	8	9	12
<i>like slightly</i>	4	5	12	15
<i>dislike slightly</i>	3	7	4	4
<i>dislike very much</i>	2	1	2	2
<i>dislike extremely</i>	1	2	0	0
AVERAGE SCORES:		6.5	6.2	6.2

The degree of liking of the three bars is quite similar. However, there is a slight trend favoring the Dole bar (62% confidence).

Now rate this juice bar for . . . the amount of fruit.

	Score	Dole	Chiquita	Jello
<i>much too much fruit</i>	+2	3%	0%	1%
<i>slightly too much fruit</i>	+1	6	6	6
<i>just the right amount</i>	0	55	49	33
<i>not quite enough fruit</i>	-1	31	37	37
<i>not nearly enough fruit</i>	-2	6	7	24
AVERAGE SCORES:		-0.3	-0.5	-0.8

None of the products are considered to have an adequate amount of fruit. However, the Dole bar is nearer the ideal than the Chiquita bar; which in turn is nearer the ideal than the Jello bar (95% confidence).

Now rate this juice bar for . . . sweetness.

	Score	Dole	Chiquita	Jello
<i>much too sweet</i>	+2	1%	4%	7%
<i>slightly too sweet</i>	+1	29	24	15
<i>just right</i>	0	57	61	62
<i>not quite sweet enough</i>	-1	13	9	15
<i>not nearly sweet enough</i>	-2	0	2	1
AVERAGE SCORES:		+0.2	+0.2	+0.1

Consumers usually prefer products with average sweetness scores of +0.2 to +0.3. Given this consideration, all of the products are near the ideal.

Now rate this juice bar for . . . tartness/tanginess.

	Score	Dole	Chiquita	Jello
<i>much too tart</i>	+2	1%	1%	1%
<i>slightly too tart</i>	+1	20	8	4
<i>just right</i>	0	56	39	50
<i>not quite tart enough</i>	-1	23	47	37
<i>not nearly tart enough</i>	-2	1	5	8
AVERAGE SCORES:		+0.0	-0.5	-0.5

Both the Chiquita and Jello products are seriously lacking in tartness.

Now rate this juice bar for . . . creaminess.

	Score	Dole	Chiquita	Jello
<i>much too creamy</i>	+2	3%	1%	5%
<i>slightly too creamy</i>	+1	18	15	32
<i>just right</i>	0	60	43	48
<i>not quite creamy enough</i>	-1	17	32	11
<i>not nearly creamy enough</i>	-2	3	9	4
AVERAGE SCORES:		+0.0	-0.5	-0.5

The Jello bar is about as much too creamy as the Chiquita bar is lacking in cream. All the differences are statistically significant (95% confidence).

Now rate this juice bar for . . . the presence of ice crystals.

	<u>Score</u>	<u>Dole</u>	<u>Chiquita</u>	<u>Jello</u>
<i>extremely icy</i>	5	3%	8%	5%
<i>very icy</i>	4	8	10	7
<i>moderately icy</i>	3	25	30	29
<i>slightly icy</i>	2	40	31	38
<i>not icy at all</i>	1	23	21	22
AVERAGE SCORES:		2.3	2.5	2.4

All of the products are considered to be slightly to moderately icy.

Now rate this juice bar for . . . how likely you would be to buy it.

	<u>Score</u>	<u>Dole</u>	<u>Chiquita</u>	<u>Jello</u>
<i>definitely would buy it</i>	5	16%	5%	11%
<i>probably would buy it</i>	4	37	35	27
<i>might or might not buy it</i>	3	25	31	31
<i>probably would not buy it</i>	2	14	19	19
<i>definitely would not buy it</i>	1	7	10	12
AVERAGE SCORES:		3.4	3.1	3.1

Both the Chiquita and Jello products are less likely to be purchased than the Dole bar (95% confidence).

Now that you have tasted both bars, which did you prefer?

	<u>Dole</u>	<u>Chiquita</u>	<u>Jello</u>
<i>Dole vs. Chiquita</i>	60%	40%	
<i>Dole vs. Jello</i>	63	35	37%
<i>Chiquita vs. Jello</i>		45	55

The Dole bar is preferred over either the Chiquita or Jello bar. **Combining** data from each comparison gives the following first place choices:

	<u>Dole</u>	<u>Chiquita</u>	<u>Jello</u>
<i>All respondents</i>	61%	43%	45%
<i>Younger <40 years old</i>	58	51	40%
<i>Older >40 years old</i>	68	29	51
<i>Male</i>	63	33	53
<i>Female</i>	59	51	39
<i>Easterners (east of Mississippi)</i>	63	47	36
<i>Westerners (west of Mississippi)</i>	57	37	52

Although there is a clear preference for the Dole juice bar, the Chiquita bar does especially well with younger eastern females and the Jello bar seems more attractive to older western males.

Why did you prefer that sample?

	Dole	Chiquita	Jello
<i>more flavor, better flavor</i>	62%	29%	40%
<i>creamier</i>	15	15	29%
<i>more fruit</i>	2	27	0
<i>more natural</i>	2	5	0

The Dole product is cited for better flavor; Chiquita for fruit content, sweetness and naturalness; and the Jello bar for creaminess and appearance.

CONCLUSIONS AND RECOMMENDATIONS

Although the Dole bar is clearly preferred by a majority of respondents, the Jello and Chiquita bars are favored by significant portions of the test population. All of the bars could benefit from a higher fruit content. The Chiquita bar needs more cream and greater tartness while the Jello bar needs more fruit, tartness and less cream.