

Which Milk Tastes Best?

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Two University of Arizona departments, in cooperation with the American Dairy Association, are taking a look at peoples' likes and dislikes in the milk they drink.

Working on the assumptions that standards for milk products can always be improved and that so-called "sacred cows" should not exist in the American dairy industry, research is testing consumers' preference for milk beverages with varying levels of fat and nonfat solids. Main objective of the experiment is to improve the palatability, flavor and food value of milk beverages as well as to help farmers utilize their milk supply in the most economic manner.

Started On the Home Folks

The first phase of the work consisted of selecting a small panel from the faculty and staff of the University of Arizona to taste selected combinations of milk which varied in fat and nonfat solids content. This determined the taste differences that people could detect in milk beverages. At this time, many milk beverage combinations were eliminated as not practical for further study.

On the basis of the results obtained with the taste panel, beverages of three classes — whole, low-fat, and nonfat milk — are now being subjected to preference observations in larger groups of people in retail food markets, in schools and in public gatherings in Arizona. Participants are asked to drink two samples of milk and then indicate their preference.

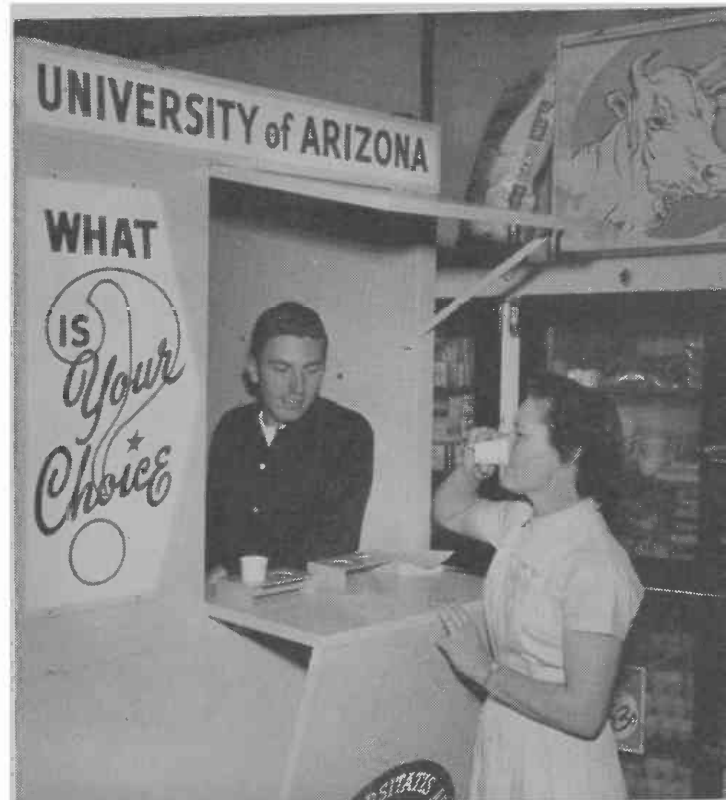
Currently six different pairs of samples are being tested and the response and cooperation received have been excellent. Plans call for sampling preferences of consumers at all levels of income. Over five thousand people have already participated, and indications are that between 15,000 and 20,000 respondents will be obtained during the study.

Like Extra Nonfat Solids

The table indicates that people like a milk which is fortified with additional amounts of nonfat solids. In all except one of the six pairs of samples used, consumers preferred the milk with higher nonfat solids content.

COMPOSITION OF MILK BEVERAGES USED AND CONSUMER PREFERENCES IN EXPERIMENT

Pair Number		Fat (%)	SNF (%)	Total Solids (%)	Number Preferring	Per Cent of Total
I.	A	3.5	8.5	12.0	512	38
	B	3.5	9.5	13.0	846	62
II.	A	2.0	9.0	11.0	577	46
	B	2.0	10.0	12.0	664	54
III.	A	0.1	9.0	9.0	298	42
	B	0.1	10.0	10.0	412	58
IV.	A	3.5	8.5	12.0	385	47
	B	2.0	10.0	12.0	432	53
V.	A	1.5	8.5	10.0	370	53
	B	0.1	10.0	10.1	327	47
VI.	A	4.0	8.5	12.5	201	48
	B	3.5	9.0	12.5	219	52



SHOPPERS in Tucson supermarkets sampled the milk, gave their opinions.



This is true for beverages having the same total solids content but with varying amounts of fat. In one instance (Sample Pair V.) where the lower nonfat solids content was preferred, the milk in the other sample was a skim or nonfat type.

Will Make Market Tests

These results are preliminary and before the research is completed, actual market tests will be conducted either in retail stores or in homes. These tests will offer a limited range of milk beverages of varying contents of fat and nonfat solids for sale on a retail basis. With the cooperation of local milk distributors, milk will be sold under controlled conditions to get the desired experimental data.

ENTHUSIASTIC school children were part of the mass sampling of milk with various fat and nonfat solids content.