

Consumer Preferences for Potatoes in North Dakota¹

by

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THE potato producers of North Dakota are becoming increasingly aware that they must improve their merchandising methods for their table-stock potatoes if they are to successfully compete with other potato producing areas. In the merchandising of potatoes full recognition must be given to the preferences of consumers, particularly to the preferences of the housewife who buys and prepares the potatoes for consumption.

The commercial potato producer of North Dakota is primarily interested in the preferences of the consumers of those states in which the bulk of North Dakota potatoes are consumed. Is it not reasonable to assume, however, that the preferences of North Dakota consumers are the same or at least similar to those of consumers in other states? With this idea in mind and also in order to give the North Dakota producer a picture of the preferences for potatoes of his city and village neighbors, a study has been made of the preferences of North Dakota consumers for potatoes.

Even in North Dakota, it would be a large undertaking to attempt to contact individual consumers or even the housewives who buy and prepare the potatoes. It is possible, however, to get a composite picture of their preference by interviewing individual retail food store managers as their ideas can be expected to reflect those of their customers. The managers or owners of 60 retail food stores located in various parts of North Dakota were interviewed. Twenty of these stores were in eastern North Dakota, 18 in central North Dakota, and 22 in western North Dakota. This article will discuss appearance factors and size preferences, which is only a part of the information obtained during these interviews.

The first impression a potential buyer receives when first looking at an article often has considerable influence in determining what is ultimately bought. This is true with potatoes as well as with other articles or commodities. One retailer said that he could sell ten times as many washed potatoes. A number of the retailers interviewed stated that they could sell three times as many washed potatoes as the unwashed. This probably would not be true if the store had washed potatoes all the time, but it does il-

lustrate the fact that the consumer is influenced by and appreciates clean, well-appearing potatoes. On the other hand, there is no question but that poor appearing potatoes will cause the buyers to curtail the amount purchased over a period of time. However, it is more than 'eye appeal' that the consumer is interested in when looking at a given lot of potatoes. The case of preparation, the utility of the potato, and possibly other considerations also enter into appearance as it influences the potential consumer buyer.

¹Progress Report on Purnell Project No. 110, "The Marketing of North Dakota Table-Stock Potatoes."

The 60 food retailers were asked to give the tangible appearance factors for potatoes and to rank them in the order of their relative importance. A tabulation of their replies is given in Table 1.

It is sometimes difficult to clearly differentiate between some of the appearance factors. For instance, "bright" may be associated with "clean." Likewise, "shallow-eyed" may be associated with "uniform."

Also, some of the retailers considered more than one factor of such major importance that it was difficult for them to make a choice between them when they were asked

to rank the factors in the order of their importance. Three of the retailers ranked two factors as of equal importance, that is, they gave two first choices. Two men ranked three factors as first choice. This explains why in the last column of Table 1 the sum of the first choices adds up to 12% more than 100% and why second choice and third choice add up to 9% and 3% respectively less than 100%. In many instances, the retailers did not think that there were as many as five factors of enough importance to be mentioned. This explains why 43% expressed no preference for fifth choice.

Table 1.—Appearance Factors for Potatoes¹

Rank	Percentage of Retailers Reporting							Total
	Clean	Uniform	Smooth	Shallow-eyed	Bright	Other Factors ²	No preference expressed	
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
First choice.....	42	38	22	2	3	5	0	112
Second choice.....	25	29	24	6	5	2	0	91
Third choice.....	27	20	37	6	3	2	2	97
Fourth choice.....	6	10	12	42	15	2	13	100
Fifth choice.....	0	3	3	22	27	2	43	100
Not a factor.....	0	0	2	22	47	87
Total.....	100	100	100	100	100	100

¹Based upon their experience in serving their customers.

²Factors included are firm, good quality, general appearance.

The majority of the 60 retail food store managers or owners rated clean as the most important factor, 42% giving it a first choice, 25% second choice and 27% third choice. In the opinion of these retailers, the consumer prefers to buy potatoes of a uniform size. The factor of uniform was rated almost as high as clean as 38% of the retailers gave it first choice compared with 42% for clean. Smooth was indicated as the third most important factor. In no case was clean or uniform considered as not a factor, and only 2% of the retailers omitted smooth as a factor.

The results of the interviews as shown in Table 1 clearly indicate that clean, uniform and smooth are the major appearance factors for potatoes. The factor of clean was ranked either first, second or third choice by 94% of the retailers. Uni-

form and smooth were ranked first, second or third by 87% and 83% respectively. On the other hand, shallow-eyed as a factor was ranked first, second or third by only 14% of the retailers. The corresponding percentages for bright and other miscellaneous factors were 11 and 9 respectively. Table 1 also reveals that 22% of the retailers did not consider shallow-eyed as a factor and that 47% did not consider bright a factor.

The reader will notice that the question of the size of the potatoes that the consumer buyer prefers has been omitted from the discussion so far except as it was related to uniformity of size as an appearance factor. The following discussion deals with size as preferred by the consumer buyer irrespective of the appearance of the potato. Actually it may be a combination of the two

in conjunction with price that may determine what lot of potatoes are purchased. In the opinion of most of the retailers, however, price is not as important as the appearance and size of the potatoes. That is, the consumer buyer does not seem to be adverse to paying a little more for the potatoes when good appearing potatoes of the desired size are available.

During the interviews with the selected group of retailers, a 2-inch sized potato was called small, a 2½ inch potato was called medium, and a 3-inch potato was called large. A potato gauge was used so that there

would be no question as to size. Each retailer was asked what size the majority of his customers preferred. The question was then asked as to what size the average customer would prefer if the first choice size was not available. He was, in the same manner, asked to determine what would be the third choice. In determining the size, five possible sizes were suggested, uniformly small, uniformly medium, uniformly large, mixed sizes from small to medium and mixed sizes from medium to large. The results of these inquiries are given in Table 2.

Table 2.—Size Preferences for Potatoes¹

Rank	Percentage of Retailers Reporting ²					
	Medium (2½")	Large (3")	Medium to Large (2½-3")	Small (2")	Small to Medium (2-2½")	No preference expressed
	Percent	Percent	Percent	Percent	Percent	Percent
First choice.....	80	12	8	0	0	0
Second choice.....	8	61	14	8	2	7
Third choice.....	7	8	59	5	10	11
Not a choice.....	5	19	19	87	88	..
Total.....	100	100	100	100	100	..

¹Based upon the retailers' experiences in serving their customers.

²Reports on size preferences were secured from 59 retailers.

A uniform lot of potatoes of approximately 2½ inches in diameter was given as first choice by 80% of the retail food store managers or owners. Sixty-one percent selected large as second choice and 59% selected a mixed lot of medium to large as third choice. In no case were the small potatoes, even though of uniform size, selected as first choice. Neither were a mixed lot of small to medium potatoes given first place. It is interesting to note here that 2-inch potatoes are permitted in the U.S. No. 1 potato grade. The average

North Dakota consumer buyer would not, in the opinion of these retailers, select a small or a small to medium-sized lot of potatoes as first, second or third choice. This is indicated by the fact that 87% of the retailers did not list small as among the three choices and 88% did not so list small to medium. It is recognized that the consumer will buy small, new potatoes but the survey upon which this article is based was concerned with the average, year-around potatoes handled by the stores and not with a seasonal specialty product.

SUMMARY

The appearance of potatoes and the size of potatoes are factors that influence consumer buyers in their selection and purchase of potatoes. Therefore, good merchandising of potatoes requires that attention be given to the preferences of consumers with respect to appearance and size. What do they prefer? The consensus of opinion of 60 retail food store managers gives the following answers.

Appearance. The factors of clean, uniform and smooth are the most important appearance factors. Out of five possible choices, 94% of the retailers rated clean either first, second or third choice. Uniform was rated first, second or third choice by 87% of these men. Smooth ranked next with 83% of the retailers placing it either first, second or third.

Size. The majority of consumers prefer a medium-sized potato of approximately 2½ inches in diameter. Eighty percent of the retailers indicated that the medium-sized potato is the first choice of their customers. In case a uniform lot of medium-sized potatoes was not available, 61% of the retailers were of the opinion that a uniform lot of large potatoes, 3 inches in diameter, would be the second choice of their customers. If neither of these sizes are available, the third choice, in the opinion of 59% of the retailers, would be a mixed lot of potatoes ranging in size from medium to large.

Perennial peppergrass, also known as whitetop and hoary cress, is one of our newer weeds, which spreads by roots and is highly resistant to control methods. The plant blooms in late May, producing large, flat-topped clusters of small white flowers. It differs in appearance from Frenchweed in that the flower clusters remain flat and dense; the pods are about one-fourth inch wide, without wing margins and the leaves are covered with fine hairs.

Perennial peppergrass has little in common with the ordinary peppergrass except that the flowers and seeds are similar in structure. The ordinary peppergrass is a very common annual or winter annual weed. Its flowers lack the white petals and the fruiting branches become elongated as in Frenchweed. It is a smaller plant than either Frenchweed or the perennial species.—O. A. Stevens.

Flixweed is one of the newer mustards in our area but has become very abundant, especially in vacant lots in towns, along roadsides and in small pastures. It is a fine leaved, gray, strong smelling plant, which produces an enormous number of very tiny seeds. It should be mowed before June 1 wherever possible, to prevent it from ripening seeds.

Most pasture weeds do not kill out grass. They merely grow in the bare places where grass was killed by too close grazing. A thrifty stand of grass is one of the best weed control crops.—O. A. Stevens.