THE FINE ART OF STOCKING A SUPERMARKET'S SHELVES

By Richard Gibson Staff Reports Why don't grocers alphabetize soup sections, putting cans of asparagus before bean with bacon and chicken noodle?

Wouldn't it be easier to shop for breakfast cereals if all the raisin brans were together? And might not consumers buy more toothbrushes if they were nestled among the toothpastes?

Marketing researchers at the University of Chicago Graduate School of Business are asking such questions and rearranging shelves in real grocery stores to find answers - as part of a two-year study of consumer buying behavior. The project is being bankrolled by such companies as General Mills Inc., Procter & Gamble Co. and Kraft General Foods Inc., a unit of Philip Morris Cos. And it may change how supermarkets display, price and promote their merchandise.

"For example, we think one can increase sales by . . . going from a mass-marketing mentality toward the morn-and-pop approach," says Stephen Hoch, professor of marketing and behavioral science in the university's business school and the project direc-

Customer's Needs

The study examines "micromerchandising," techniques that target the needs of diverse customers. While the researchers aren't finished, they already have indications that micromerchandising may be powerful enough to boost sales as much as 10% and profits even more.

Using Dominick's Finer Foods Inc. supermarkets in the greater Chicago area as their laboratory, the research team is studying whether many items' sales justify their shelf space, whether rearranging product categories might increase turnover and whether crossmerchandising certain products - for example, toothbrushes and paste pays off.

Sixty stores were divided into four clusters - ethnic, urban, established suburb and growing suburb. Then checkout-scanner data for each cluster were analyzed and the inventory in those stores adjusted accordingly. In clusters where scanner data showed products to be duds, the products were removed; in others, where sales justifled it, they might gain more shelf space.

"Typically, you carry all items in every store," says Daniel Nelson, a senior vice president at Dominick's.

What have the researchers found so

When they alphabetized soups, sales fell. A Campbell Soup Co. spokesman suggests that most stores' seemingly random arrays stimulate sales because "as people try to find the soup they



want, they may run across four or five others they hadn't thought of."

Similarly, when cereals were sorted by content instead of brand, overall category sales declined. Mr. Hoch theorizes that consumers bring a "spatial map in their minds" to the store, which they use to locate items. Mixing up the layout apparently causes such confusion that some shoppers stop looking, he says.

"A consumer becomes used to a shopping pattern in a store," says Dominick's' Mr. Nelson. "Consumers don't like to shop. It's a nuisance and when you disrupt their flow they get upset and leave. In soup, I think we made it confusing.

Other rearrangements yielded surprising results. To stimulate toothbrush sales — most people replace theirs twice a year - the researchers suggested moving brushes from the top shelf into the middle of a newly designed toothpaste section. It worked. Brush sales increased more than 8%, and because of their higher profit margin lifted category profits.

Colgate Is Delighted

Colgate-Palmolive Co., the oral-care sponsor-participant in the experiment, was delighted. "We always thought that

toothbrushes were missing some profit opportunities," says Tom Bennett, Chicago-area district business manager for the personal-products company. This was an excellent way of [proving that I our hunch was accurate." He says Colgate is passing on the findings to other retailers.

Not everyone is discovering ways to boost sales, though. Cookie-and-cracker makers thought that by combining those categories, overall sales would rise. "They did not. It was flat," says

Mary Purk, project manager.

In the soft drinks section. researchers sorted items by package size — all the 2-liter bottles were lined up together - then by brand. "We found that the most effective way to arrange them was by manufacturer.' Mr. Hoch says, reporting an 8% sales increase. Brand clustering also made restocking easier for delivery people, shrinking their time in a store and saving bottlers money.

While sorting soups logically hurt sales, researchers found they could boost a store's soup sales significantly by better matching the amount of each flavor displayed to its actual sales volume. Thus, if cream of mushroom soup outsold minestrone 10 to 1, that store cluster would carry 10 times as much mushroom. Ratios were figured for each of the four store clusters, rather than the entire chain.

Mutual Trust

Frozen dinner and entree offerings also were modified according to sales data. In some Dominick's stores that meant changing 15% of the usual lineup, sometimes eliminating products. The result: a 4% increase in sales.

While that's good for the retailer, manufacturers might be expected to resist the loss of freezer space, preferring to discount a slow-moving item rather than having it removed. But, says Mr. Hoch, "It all evened out," adding that "there has to be more trust and partnership" between manufacturer and retailer.

Mr. Nelson, the retailer representative, agrees. "As old as our industry is, there's a real lack of knowledge and sophistication about some fundamental elements," he says. Manufacturers were eager to sign up for the study, he

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adds, "because what they learn in Chicago should be transferrable to other parts of the country."

Some participants apparently were attracted to the project because of growing pressures from retailers to reduce the number and sizes of products they try to shoehorn into supermarkets.

"Manufacturers recognize it's costing them a lot of money maintaining extra sizes," says Mr. Hoch. Results of the Chicago study, he says, "should help stores streamline operations and reduce costs." For the consumer, that should translate into lower prices, he says.