

## MARKET NICHES FOR MANGO PRODUCTS

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As you have heard, the marketing techniques explained by my colleagues in this Marketing Panel focused on fresh Hawaii mango, which is the form that is currently the most sought after. This is probably because consumers, living outside mango-producing areas, are unfamiliar with the fruit.

However, as we also know, there are importation problems associated with fresh mango. Dr. Kefford, at the beginning of this conference, challenged us to determine whether or not this problem is perceived or real. But in either case, the problem of what to do with mangos which are found unsuitable for the fresh fruit market, sometimes also called *cull* mangos, needs to be resolved.

### Value-Added Products

To utilize *cull* mangos, many retailers still sell the fruits fresh in the local market. Others are processed to increase consumer applications and also to add value to the resulting products.

**Fruit Leather.** Fruit leather (also called *Fruit Roll*, *Roll-ups*, etc.) is a way of utilizing fruit puree and concentrates. A mango product would be similar to the apricot fruit roll made by Sunkist, which is 0.75 oz in weight and costs \$0.50 a piece. The product was packed for a company in New Jersey and was made from apricot concentrate.

Fruit leather satisfies market demand for "natural" sweet snacks perceived by the homemaker as "good" and "healthy." This product is popular with children and some adults.

**Mango Pudding.** This product, whose brand name is Yeo's, is a formulated food using mango puree and is prepared by a company in Singapore. This is an aseptically packaged food (i.e., it is shelf-stable under normal non-refrigerated conditions of storage and distribution) and is very reasonably priced at \$0.89 for 8.8 oz.

Mango Pudding is likely to be considered a dessert-type product in the United States, that may find its use as a snack for children's lunch boxes. It has the consistency of tofu.

**Mango Beverages.** *Mango Nectar.* This is a shelf-stable formulated product using imported

mango puree. It is made by Kern's of California. The beverage costs \$1.09 for 12 fluid oz. It is popular with ethnic populations familiar with the characteristics of mango. Adults and children alike drink this beverage. In most other countries, aseptically packaged juices, from single to multiple servings, are a very common item.

*Orange and Mango Sparkling Water and Fruit Juice Beverage.* This Koala Beverage, made in Canada, uses mango concentrate. A 25.4 fluid oz bottle costs \$1.65. Most of the flavored water beverages in the market use fruit flavors. However, this product addresses consumer demand for beverages with some fruit juices. This is popular with the adult population.

*Carbonated Mango Juice Drink.* Again prepared by a company in Singapore, this Yeo's beverage uses mango puree as the fruit ingredient and is competitively priced at \$0.60 for an 11 fluid oz aluminum soft drink can. Carbonated drinks are always enjoyed by a broad age group. However, for a mango juice drink to dent the soft drink market even just slightly, it strongly needs to be supported by heavy advertisements.

*Frozen Mango Orange Blend.* Distributed by a company in Hawaii, this is a frozen product that uses mango puree. Hawaii's Own costs \$1.59 for 12 fluid oz of Blend or 48 fluid oz of finished drink after dilution with three cans of water.

Because mango is an expensive ingredient, the name "mango" is almost always found on the product label when used as an ingredient. For example, this Juice Blend would not have used mango as an ingredient if mango would not be part of the product name.

**Mango Slices.** This is a can of mango slices packed in light syrup. It is manufactured by a company in Thailand and costs \$0.89 for 15 oz.

Dole Packaged Foods also has a similar product, also manufactured in Thailand, but packaged in a No. 1-1/2 can. Although I was unable to secure a labeled can, I was able to sample some product. Dole mango slices are about 3 inches long by 1-1/2 to 2 inches wide. The texture is slightly chewier than that of canned peaches. The perceived flavor is mainly sweet with

very little acidity, if any. Color was yellow-orange. It is mainly sold in the European market. It is also found in Asia, but Asians prefer to consume the fresh fruit instead (which might also be less expensive at a certain time of the year). Some homemakers serve the slices as a dessert, as is, *a la mode* or in a salad. It is also used as a topping for cakes or as fruit particulates in other bakery products. This is mostly popular with adults.

**Dried Mango Slices.** I found five brands of dehydrated mango slices in local markets, each packaged differently. All of these products use mango slices prepared in Asia. Their prices range from about \$0.33/oz for the Thailand product to \$0.84/oz for the Philippine product. All of these products have been sulfited to preserve the color, which then varied from yellow-orange to orange-brown. They have been coated with a protective layer of fine sugar to prevent individual slices from sticking to each other. Texture is slightly chewy due to the moisture retained in the slices. Flavor is sweet. This product has a wide range of applications, from trail mixes to cookies to cereals, or as is. I personally think that this product can compete with other dried fruits if it is strongly promoted.

*Northwest Delights.* An 8 oz package costs \$4.69 and is distributed by a company in Washington.

*Yick Lung.* A 2 oz package costs \$1.49 and is repacked in Hawaii.

*AFT.* Repackaged in Hawaii into a 4.5 oz covered plastic tray, this product of Thailand costs \$1.50.

*Bells & Flower.* Also a product of Thailand, a 3.5 oz package costs \$1.35.

*R & M.* Showing the most expensive packaging of the group, this Philippine product costs \$2.95 for 3.53 oz (bought at a Honolulu International Airport shop).

**Cracked Seeds.** Local delicacies, shredded mango and mango seed, may be imported from Asia and repacked in Hawaii, prepared in Hawaii, or both. These products are flavored with licorice and also sometimes colored according to tradition.

*Yick Lung Shredded Mango.* Packed in Hawaii, this product costs \$1.49 for 2 oz.

*Jade Food Products Mango Seed.* Declared as made in Hawaii, this product costs \$1.35 for a 2-1/4 oz package.

**Mango Jam.** There are several packers of Mango Jam in Hawaii. *Maui Jelly Factory*, *Kukui*, and *Hawaiian Sun* are some Hawaii manufacturers. Mango is considered a tropical

fruit. Thus, many local residents purchase this product as a gift for friends and relatives abroad.

*Old Hawaii Recipes.* Distributed by a company in Hawaii, this product uses mangos and costs \$2.59 for a 10 oz jar.

*Maui Jelly Factory.* One 8 oz jar costs \$3.00 for this product made in Maui.

**Mango Chutney.** The same manufacturers of Mango Jam also produce Mango Chutney. Some other mango chutneys found in Hawaii are imported from England and India. Chutney uses green mangos, and one local company employed 4-H program young adults to purchase green mangos from backyard producers for chutney production. The company used about 3 tons of green mangos last year to make this product.

*Kukui.* This product uses mangos and is produced by a company in Hawaii. It costs \$3.65 for a 9 1/2 oz jar.

*Maui Jelly Factory.* An 8 oz jar of this mango chutney made in Maui costs \$3.00.

#### **Other mango products**

**Mango Puree.** This form was discussed in detail by Dr. Chan of USDA-ARS. There are many product applications for the puree, ranging from baby foods to fruit leathers.

**Mango Juice.** Juice is usually prepared from puree and may either be pulpy or clear. Tropical fruit juices, still or carbonated, are used by beverage manufacturers to introduce an exotic item and to satisfy the demand of certain ethnic populations.

**Mango Particulates.** This product may be in a syrup or juice medium or be in a dried form. Its size would be smaller than mango slices. It would be used as fruit particles in bakery and dairy products.

**Pickled Mango.** In the local dialect, "pickled mango" means preserved mango. Thus, *cracked seeds* are also considered pickled. However, the pickled mangos that most consumers are familiar with are sold in a brine, brine-vinegar, brine-sugar, or brine-vinegar-sugar medium, with or without additional spices for flavoring.

These are only some of the mango products available in Hawaii. There may be other forms prepared according to ethnic traditions.

#### **Defining Marketing Niches**

If you would like to market mango products, you can introduce either an existing product or a new one.

An existing product can be marketed several

ways:

As an exact copy with no additional features,

As a cost-reduced copy (costs less),

As an improved copy (with better quality; costs more),

By *buying out* the manufacturer.

A new product will be entirely new. In either case, for a product to be successful in the marketplace, it has to have a defined market niche, and you have to advertise. Consumers should have a need for the product so that there is a reason for sales volume. Develop product applications so that manufacturers and consumers would know how to use mango products as ingredients.

Many food entrepreneurs have approached me, both here and abroad, about a sensational product that their parents and friends all swear should be marketed. However, when asked which population will be buying this product, what are the characteristics of the population, their likes

and dislikes, their purchasing power, and for other types of information, the entrepreneur usually does not have the answer, because no market research has been done. Product introduction in this case can be very frustrating and expensive for the unprepared entrepreneur.

On the other hand, knowing what your consumers want and staying in touch with what they want is a powerful key to product success. This information is very important in defining the viability of the product during introduction and at succeeding points in time. A certain population might really need the product but might also ask for changes in some of its product characteristics or packaging. Full product potential is realized with careful market research.

Therefore, value-added products have to address a certain consumer need. To reduce the risks of product failure, the market needs to be defined first before developing the product.