

A Better Milkshake

(Continued from Page A29)

search completed for the project, the two were natural partners.

The combination of grains, vegetables, and dairy in a naturally fat-free product, gives a "completely different nutritional profile than traditional milkshakes," she said.

"The business started because of my personal passion for children's nutrition," said Devine.

"I wanted to create products to address the nutritional needs of children by creating a good-tasting, convenient product marketed with pizzazz.

"One of my missions was to create a product to let people follow the guidelines of the USDA food pyramid more easily."

As Natural As Possible

A challenge, said Konstance, is making the product tempting to students accustomed to heavily-sweetened drinks. At a career day hosted by the ARS one year ago, 500-600 students, ages 9-17, taste-tested the product.



Richard Konstance and Denise Devine, in this picture supplied by the Agriculture Research Service, are working together to produce the milkshake and soft serve ice cream.

"Generally speaking, they neither liked nor disliked the product," he said. "Some of them said they didn't think it was sweet enough."

Seniors at an assisted living center, on the other hand, have given the product high marks. "Great texture and great flavor were basically the comments we got," he said.

Konstance is looking at adding a low level of sweetener.

"We want to keep the product as natural as possible because of the negative perception of additives," he said.

The product checks in at six percent added sugar. In contrast most milkshakes, according to Konstance, contain 12-15 percent sugar.

"In my opinion, it is as good as any soft-serve out there. It behaves the same. The melt tests are as good or better as other soft-serve products," he said.

"The grain-replacing technology offers us the texture we're looking for," said Konstance. "It has absolutely magnificent texture. It feels just like a soft serve."

The ice cream was tested by placing a scoop on a plate with concentric circles and observing the flow of the melting ice cream.

"A lot of tests were run on the product to measure the quality," he said.

Production

The universal pilot plant pasteurizes and homogenizes the milk. The milkshake mixture can be prepared and heated in one tank before it is processed and then collected and chilled in the other.

Lactose-intolerance is an issue

with milk products, so the lactase enzyme, which reduces the amount of lactose in the product, is added to reduce or eliminate the problem and make the product a little sweeter.

The additional sweetness is a must-have element to "sell" schoolchildren on the product.

The product also contains inulin, a natural product derived from a chicory root. Addition of inulin contributes to the fiber content of approximately 2½ grams per serving. The good fiber content may provide a market for senior citizens, said Konstance.

Marketing

The ARS' job, he explained, is to develop the process and prototype product, then hand it over for industry for final product development.

Additionally flavoring companies will need to lend their expertise to the product, said Konstance.

The next step in getting the product into the schools and

(Turn to Page A32)

June Dairy Month Specials



To pay tribute to our dairy and beef farmers, during June 2001 we will give 5% to 15% off barn equipment.

Lapp's has provided quality barn equipment and professional service to the dairy industry for 29 years.

We are a service oriented company carrying these quality brands:



by J - STAR
Feed Mixers



Feeding Equipment



VAN DALE



by J - STAR
Feed Mixers



LAPP'S BARN EQUIPMENT

5935 Old Philadelphia Pike, Gap, PA 17527

Radio Dispatched Trucks -

PHONE: 717-442-8134

Call or write for free catalog.

