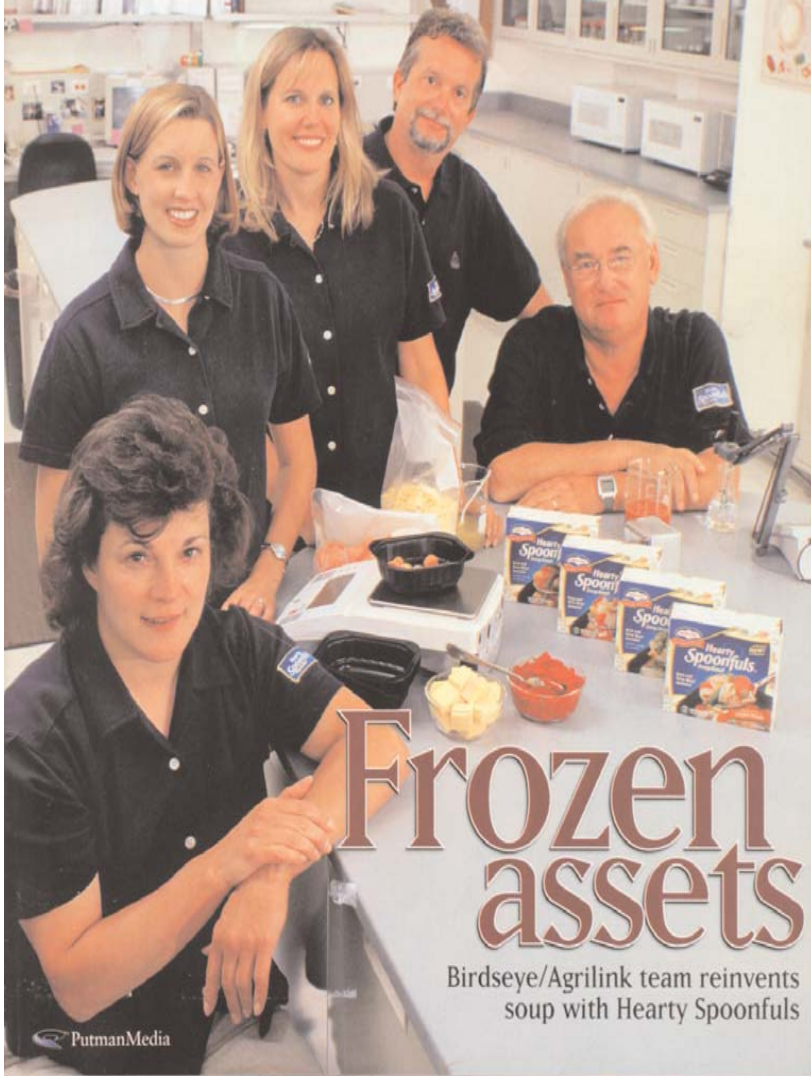


Nestlé looks hungry • Gauge viscosity needs • Create cool coffee formulations

FOOD PROCESSING

October 2002

foodprocessing.com



Frozen assets

Birdseye/Agrilink team reinvents soup with Hearty Spoonfuls

PutmanMedia

Frozen assets

Teamwork builds first-ever frozen soup

One of food processing's tastier ironies is that some great hot meals start in a frozen state.

For nearly a century, the folks at Birdseye Corp., Green Bay, Wis., have been leaders in crafting this thermal transition – in fact, the company pioneered packaged frozen foods in the U.S. in 1922. Now Birdseye, park of Agrilink Foods, Rochester, N.Y., is pioneering a special brand of teamwork to introduce the country's first line of frozen soups, Hearty Spoonfuls. Built through independent elements working together, Hearty Spoonfuls proves a prime example of team product development.

"This is a very quality-conscious type of value-added product," says Jeff Rindfleisch, operations manager for Agrilink and Birdseye. Rindfleisch functions as a liaison between operations and the product development team. "It took a lot of teamwork from R&D, from the engineering standpoint, and on the plant level. As we got into different phases, we try to bring issues out on the table and pool our resources."

"We are very proud of the teamwork," says Donna Rippin, business director/business development for Agrilink Foods, Rippin was the business director of the Hearty Spoonfuls from concept to commercialization. "It's what made this product possible. Getting the right people on the team is the key to success."

The product rolled out nationally in July – a fast pace for a product introduction.

"All of our new products are noteworthy because of a key innovation," says Agrilink R&D vice president Chuck Fuhrmann. "Each of our new products has a special twist to it. We think this one is a significant innovation."

Naturally there were challenges in developing such a novel product. But by leveraging the strengths of the entire company and listening intently to consumers, Birdseye feels it has come up with a winner.

"This project has its share of hurdles," says Rippin. "What made it all click was strong team leadership." She heralds the work of project team leader Suzanne Warborg, associate business manager for Birdseye, as a key



component of this success.

“From a strategic direction, we were able to fill a void in the market place,” says Warboug. She notes that the flood of canned and dry soup products don’t offer the homemade qualities that frozen soup can deliver.

“There really wasn’t a soup available that could deliver the texture and flavors of homemade quality,” she says. “Homemade is the gold standard. Though a large number of consumers don’t home-make soups anymore, they do have that reference point.”

Finding the formula

That consumer reference point demands the careful balance of texture, tastes and independent components coming together successfully, much like the development team itself.

“What we have focused on is the ‘vegetable-ness’ of the soups,” says Kathy Siegrist, principle research leader for the Hearty Spoonfuls project. Siegrist was also technical leader for Birdseye’s Voila!, the 20 oz. all-in-one-meal. The Voila! product was another example of Birdseye expanding product development horizons, and Siegrist says the experience was helpful in developing the Hearty Spoonfuls line.

“Because we are in the meal business with Voila!, we were able to use what we learned during the development of that product,” she says. “We worked on translating that into this product. Our biggest challenge from the R&D standpoint was that we had to complement the vegetables – develop the perfect blend and then add the flavors that complement that blend.”

“One of the key things we learned as we consumer-tested Voila! is like that [consumers] like the fact that the vegetables and meat taste like vegetables and meat,” Siegrist continues. “It’s not just a homogenous blend. They like the distinct flavor that comes from Voila!, and that’s what we heard on this product. The flavors are distinct – that’s what sets us apart from the can.”

“With the canning process, you end up with a lot of heat and cooking everything very long,” says Warboug. “In our process, we don’t need to cook everything together. The broth hasn’t gone through that extreme heat and has less of that cooked-through flavor. The individual components taste like themselves.”

To ensure delivery of all components,

Birdseye packaged the four varieties of soup in 11.5-oz. microwaveable, polypropylene trays. The moisture content, says Siegrist, helps with evenness of cooking. Though the team was able to leapfrog many canned soup cooking issues by leveraging its existing expertise in frozen technology, the component delivery posed an interesting challenge.

Team mechanics

The best way to build soup at Birdseye is to bring everything into the proverbial kitchen early in the process.

Birdseye built its Hearty Spoonfuls team under a proprietary program called “I-Opt” that Fuhrmann developed and then implemented with Rippin. In this process, team members are selected on the basis of characteristics as well as titles.

“We put this team together using individual profiles to maximize the strength of the team,” says Rippin. “Using I-Opt, we know about the profiles of the teams and how they might go about problem-solving.”

“It has great impact on the success of the team,” says Fuhrmann. “Everyone that has anything to do with a product is profiled. We do a team profile as well.”

Once the team is built, there is constant interaction from the onset.

“The [product development] process is fully integrated from the beginning, and we were working hand-in-hand with manufacturing right from the beginning,” says Warboug. “This early cooperation has led us to many successes.

Team members explain that the company used a stage-gate process divided into four segments with about 50 product development checkpoints along the way.

Fuhrmann’s I-Opt help leverage the strengths of the team members through each stage. “We use it to say ‘here is what you are strong in and here is where we need you,’” he explains.

“At each step we identify a member of our cross-functional team and what they will do,” says Siegrist. “That helps us check along the way that we are involving the right person and prevents conflicts from arising down the road. I mentioned 50 steps, but because we work as a team as we implement them, we might be able to expedite or even skip some.”

The key, of course, is in guiding those great kitchen concepts as they translate through the production process.

“We start by providing information



The Hearty Spoonfuls team left to right: Donna Rippin, Suzanne Warboug, Kathy Siegrist, Jeff Rindfleisch and Chuck Fuhrmann.

about the types of [production] hurdles we will have to overcome,” says Rindfleisch. “We work closely with R&D to look at roadblocks from our functional expertise and how we can handle them.”

“We go through intensive steps in development where we are concurrently conducting manufacturing trials while talking with consumers,” says Siegrist. “In this case, we didn’t experience conflicts with manufacturing capabilities and consumer needs.”

“There was a lot of hustle and creative thinking on behalf of the team,” says Rippin. “Every time we hit a roadblock the team huddled and came up with a solution. That helped us get this out in record time.”

The cross-functional roles are clearly defined, but a key to success is the mutual respect of the team members and their input on all facets of the product development process.

“We might see a certain opportunity and recommend a certain style of vegetable,” says Rindfleisch. “and we will provide insights about what we have available in production.”

“Operations is a key member of our cross-functional team,” adds Siegrist. “We bring preliminary specifications to them early in the project and get feedback from all manufacturing functions: management, production staff, maintenance staff and quality systems. We have been very successful in extending the Birdseye value-added portfolio by bringing in operations support into a project in its early stages. As we developed this product, we built enhanced manufacturing process to ensure proper delivery of all components.”

Despite the fact that development centers and team members are scattered across the country, the team ensures a fluid development process through constant communications.

“We all travel,” says Rindfleisch, “and we are all involved in various projects, but the team meets regularly. Those who can’t attend in person call in, and we also use e-mail.”

Production pieces

The teamwork extends well beyond determination whether a carrot will fit through a tube. Creation of a unique product such as Hearty Spoonfuls – or any new product – begins with an assessment of total team resources.

“We looked for opportunities to maximize the synergies between our current manufacturing capacities and the consumer needs,” says Siegrist.

As operations manager, Rindfleisch works with several of the Birdseye manufacturing facili-



ties, using his intimate knowledge of their capabilities as a constant tool for product development.

“R&D came to our group with a prototype of the soup and said ‘this is what we would like to produce,’” explains Rindfleisch. “Where would it make the most sense to produce it?”

After developing a pros and cons list, the team decided on Fulton, N.Y., the birthplace of packaged frozen food in America.

“Fulton has the most to offer because of its experience in sauce manufacturing, freezing and complicated product manufacturing,” says Rindfleisch. “It was a natural fit.”

“From a strategic perspective we were able to develop something that fit what the consumer wants and matched what we could deliver from an operations perspective,” says Mike Curtin, director of the Birdseye business team, which handles the commercialization stage.

The benefits of an established company are obvious. And by working with production from the onset, R&D was able to spread its wings a bit.

“Whenever we enter into the development of a new product, we try to use as many of the ingredients in the system as possible,” says Siegrist. “We look to ensure these ingredients are compatible with the system and try to do a good job of understanding the capabilities of our system. We try to get the product in [operations’] hands as early as possible to match our resources. Then, if needed, we can modify the product to accommodate that.”

“We were able to have a lot of flexibility in the product,” continues Warborg. “This is evident in the variety: the Cheesy Cream of Broccoli offers a much different texture than the Chicken Rice and Vegetables.”

Challenges on the production line included the demand for a high degree of accuracy and portion control teamed with adequate line speed.

“We had a lot of people – from plant management to line personnel – working together in a team environment to pull this off,” says Rindfleisch, who adds that the Fulton floor personnel played a particularly key role. “We listen to the

[plant] employees and value their input. Many of them have been with Birdseye for quite a while and have overcome a lot of challenges. It works because we pool the expertise of the people in R&D right down to the plant floor. I think the process we went through as a team – identifying

roadblocks before we ran into them – helped us go in there and solve problems together.”

Suppliers too

Of course, on a product as groundbreaking as Hearty Spoonfuls, there are production challenges novel even to the experienced Birdseye team. “There were some unknowns in terms of packaging,” says Rindfleisch, “and some freezing profiles that we had to do some homework on.”

So Birdseye expanded its product development team by bringing in suppliers from the packaging and manufacturing side for added solutions.

“We needed to bring in our equipment resources too,” says Rindfleisch, adding that the Hearty Spoonfuls product runs on a combination of existing, customized and new equipment at the Fulton New York plant. “We brought our suppliers in and said ‘Here are some of our issues.’ It was a combination of our internal resources capacities and our external resource capacities.”

Rindfleisch says suppliers play an important part in today’s product development. “The speed of product development is very important today,” he says. “And to that extent, it’s important to get suppliers involved early when you have specific hurdles to overcome. We will bring them in early, as needed, depending on the challenges we face. In this business climate, [suppliers] have to be willing to offer that kind of help. We expect that.”

Rindfleisch says that in the early stages of product development, suppliers may trade product samples back and forth to expedite the process and ensure all parties are on the same page. He adds that while suppliers were not brought in for face-to-face interaction for Hearty Spoonfuls, there may be situations when that interaction fits. “I can easily see a situation call for one-on-one interface,” he says.

“This was a very fast timetable,” says Siegrist. “Development started late last summer and we were into commercialization by February to March of this year. She adds that conceptually, the stock of the idea came from earlier brainstorming among Birdseye’s product services staff, who look for concepts for “further on down the road.”

Hearty Spoonfuls is in the frozen entree section and supported by a full advertising and consumer promotion campaign.