Summer 2005

Food Business Incubator Plan

Extending the Life of Fresh-Cut Produce

Client Innovations

Rutgers Food Innovation Center Mission

To stimulate and support sustainable economic growth and prosperity of the food and agricultural industries in the New Jersey region by providing businesses with innovative research, customized practical solutions, resources for business incubation and a trusted source for information and guidance.
Welcome to the inaugural issue of Rutgers Food Innovation Center’s periodic newsletter, The Innovator, featuring news and valuable information about the center, our clients and the people we serve - New Jersey’s food and agricultural industries.

The Food Innovation Center is based in Bridgeton, Cumberland County, the heart of southern New Jersey. The region has a rich heritage and strong roots in the food and agricultural industries, and the farmers, entrepreneurs, and communities those industries serve and support.

We pride ourselves on the close working relationships, indeed partnerships, we foster and maintain with our clients. In the same way, The Innovator was designed to build a communications bridge with readers. The content covers a wide range of timely issues. We welcome your comments about this edition and your suggestions for future newsletters.

The Innovator complements the center’s redesigned website, www.foodinnovation.rutgers.edu. It is our hope that the newsletter and the website reflect the energy and enthusiasm we have for our work at the center.

Visit our new website and sign up for future editions of the e-newsletter. If you prefer to receive a mailed copy, please complete the address information on the website or call the Food Innovation Center at 856-459-1125. We’ll add your name to our mailing list.

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**INNOVATIONS**

News about Food Innovation Center clients and the innovative products they bring to market.

**Blu-Jay Farms** – In the heart of New Jersey’s blueberry country, Blu-Jay Farms produces Farmers’ Own Blueberry Preserves as a value-added product and hopes to share its recipe for success with other New Jersey blueberry growers. Blu-Jay received a Food Innovation Center Value-Added grant in 2005. The grant is funding a feasibility study to structure a value-added preserves business for the benefit of NJ blueberry growers.

**Cedar Run Farms** – Espárrago salsa and guacamole are unique value-added products from Cedar Run Farms that have great national distribution potential. A value-added grant is funding the development and implementation of a marketing and sales strategy.

**Redi-for-Roni** - Three Generations of Food and the Food Innovation Center believe that consumers who love good Italian food and quick, nutritious meals are REDI for RONI, the first frozen Italian sauces available in grocery stores. In a remarkably short period of time, the Center helped the nascent Three Generations move their business from concept to reality. Consumers can find REDI for RONI’s full product line at Kings - New Jersey & New York Metro; King Kullen - NY Metro; Foodtown - NJ & New York Metro; Gristedes - New York Metro; and Thriftway/Shop N Bag.
TECH TALK: Fresh News from the Fresh-Cut Industry

Shelf-Life Extension Technologies

Lettuce was the catalyst. Precut, bagged and distributed to grocery stores nationwide, lettuce prompted the tremendous growth of the entire refrigerated foods category. This segment, made possible by breakthrough advances in packaging technology, was launched only about 15 years ago. Prior to 1990, one would have thought it inconceivable that consumers would purchase bagged, branded lettuce. However, current sales dominate the value-added produce category, estimated to be well over $2 billion in the U.S. today.

Convenience and variety offered by prepackaged items have changed consumer purchasing behavior and created “halo” effects for a wide array of other packaged pre-cut fruits and vegetables. Fruits, in particular, considered too fragile for the fresh-cut market, may now have the opportunity to be successfully marketed in both retail and foodservice applications. In the past several years, new fresh-cut fruit offerings have become available, such as pre-cut melons with a 10-14 day shelf life and pre-sliced apples with a 3-6 week shelf life. These products integrate a variety of shelf life extension technologies. In the years ahead, this fresh-cut fruit category in particular is projected to evolve considerably because of further advances in processing and packaging.

Thus new technologies will make a shelf life of at least 10-14 days a reality for a wider and wider array of products. Improvements in product shelf life and safety and the integration of improved refrigeration units in supermarket produce sections will enable the birth of new product categories and new market opportunities.

WHAT AFFECTS THE QUALITY AND SHELF LIFE OF FRESH-CUT PRODUCE?

• Variety and source
• Initial maturity and processing maturity
• Pretreatment of exterior prior to cutting - Including steam treatment, disinfectant wash aids, or irradiation of the exterior surfaces.
• Slicing and cutting equipment - Sanitation procedures.
• Disinfectant chemical wash aids and dips - May include a chlorine solution, peroxyacetic acid, ozone and/or other antimicrobial additives.
• Packaging environment - Use of rigorous sanitation procedures, employee hygiene practices, avoidance of cross contamination and, potentially, the use of “clean room” packaging conditions.
• Packaging processes - Use of modified atmosphere packaging and other “active” packaging techniques.
• Pre- or post-packaging pasteurization treatments - Including heat pasteurization or ultra high pressure processing.
• Packaging materials - Such as enhanced barriers to oxygen, moisture, and/or light, antifog capabilities to reduce condensation or materials that enable product respiration.
• Packaging solutions that minimize or contain moisture migration - New patented food package technologies that absorb/retain moisture, keeping excess moisture and spoilage organisms away from the product.
• Maintenance of refrigerated conditions throughout the process and the entire cold chain - This is critical!
$5.4 Million and Counting…
Center Set to Cross Funding Finish Line

The Rutgers Food Innovation Center hopes to break ground in spring 2006 for a 23,000 sq. ft. food business incubator facility at a new industrial park in Bridgeton, New Jersey.

A broad range of companies will benefit from this new facility, from fledgling startups in need of basic small scale processing capacity to sophisticated businesses in need of pilot or test market processing for new product development. The small operator will gain access to otherwise unaffordable equipment and services. Larger processors will minimize the capital risks associated with new products and processes in test market, scale up or commercialization phases.

The incubator will house a Shared-Use Processing Area for preparation, packaging and storage of fresh-cut vegetables and fruits for retail and foodservice markets in addition to an area where cooked products like soups, jams, jellies, baked products, etc. can be produced. A Client Services Area will include a product development research kitchen, sensory analysis, microbiology and analytical laboratories, a consumer research/focus group center, conference and education facilities, and office/administrative support.

Funding Update

As of July 2005 the Center has raised $5.4 million toward the $8.8 million construction cost of the incubator facility. Funding has come from federal, state and local sources including: NJ Casino Reinvestment Development Authority, State of New Jersey, New Jersey Agricultural Experiment Station at Rutgers University, Cumberland Empowerment Zone, and the City of Bridgeton.

The Center is building private sector partnerships to secure most of the remainder of the construction funding. Major contributors will have the opportunity to create a lasting legacy for their organization at the Food Innovation Center with naming rights for parts of the building or the entire facility. If groundbreaking can occur during the spring of 2006, then full operations will begin by the summer of 2007.
R.U. Entrepreneurial?

“Entrepreneurs should be innovators, not risk-takers.”

As the second largest consumer goods industry in New Jersey, the food and agriculture sector serves as a major area of focus for many of the state’s entrepreneurs. While the $64 billion a year industry is lucrative, aspiring entrepreneurs should take a few things into consideration before venturing out on their own.

There are no mandatory characteristics or requirements of an entrepreneur. However, becoming a successful entrepreneur requires many skills and talents – with the adage of “99% perspiration and 1% inspiration” being most relevant.

Although entrepreneurship is often academically defined as, “risk-taking to establish a business venture,” it is better defined as, “innovation in, and management of, new business development.” Entrepreneurs should be innovators – not risk-takers. An entrepreneur should innovate and create new business opportunities and then implement a strategic plan, prudently avoiding business risks, to achieve business goals.

In addition to being innovators, successful entrepreneurs should know their own capabilities and limitations, ask questions, seek solutions to challenges and thrive on success. Successful entrepreneurs should also be independent thinkers and go-getters.

The most important element in successful entrepreneurship is economy – economy of money and time. Therefore, entrepreneurs must also know how to both spend and save money and time in business.

Before deciding to become an entrepreneur, ask yourself and honestly answer the following questions:

1. Can I accept failure? Many entrepreneurs have experienced failure several times before achieving success. Remember the adage, “Fear of failure is more harmful than failure itself.”

2. Can I live without a paycheck? Many entrepreneurs have spent their entire savings or more without considering their own financial situation and their emotional attachment to a regular paycheck. Remember the adage, “Live within your means,” and know what it means to you.

3. Am I a hard worker? Many entrepreneurs have asked themselves, “Can I work hard (in the future)?” Remember the adage, “We first make our habits and then our habits make us.”

Christopher Shyers
Business Development Specialist
Rutgers Food Innovation Center

Ask the Expert

The Rutgers Food Innovation Center invites you to send inquiries about business and technical related topics. In future issues, we will address the most frequently asked questions in our Ask the Expert column. To post a question, visit the comments section on the Food Innovations Center’s website at www.foodinnovation.rutgers.edu/ContactUs.html or you may write us at:

Food Innovation Center
Rutgers, The State University of New Jersey
87 E. Commerce Street
Bridgeton, NJ 08302

Center Launches New Website

Because our goal is to constantly provide you with valuable information to establish and grow your own food business, we’ve launched a new website: www.foodinnovation.rutgers.edu.

Visit the new site to learn about our capabilities, staff and extensive list of partners. The site includes the latest news, events and links to sites with a wealth of information and resources.

Come join the Food Entrepreneurs’ Network (FEN), an online association of start-up and small, established food businesses. FEN is a resource for establishing and expanding your business. Through the site, we will sponsor online training to help entrepreneurs establish new businesses, create business plans and assist with financial planning.

Read about FOOD BIN, a developing network of food business incubators and innovation centers that will serve as a global networking system for food innovation centers.

Whether you are thinking about starting a food business, in the process of growing your established food business or are a government or private resource, you’ll find www.foodinnovation.rutgers.edu packed with valuable information you can use today!
NJ Producers Benefit From Value-Added Producer Grants

Start-up and existing food and agricultural businesses are often challenged by a lack of funding for business planning and business operations, both of which are critical for success in a competitive economy.

The United States Department of Agriculture (USDA) provides funds for business planning and operations through the Value-Added Producer Grants (VAPG) program. The program helps farmers; agricultural producer groups; farmer and rancher cooperatives; and majority-owned, producer-based business ventures develop business plans for viable opportunities and strategies in emerging markets. The grants provide matching funds of up to 50% of eligible costs associated with business planning and operations.

In the past four years, the Food Innovation Center, USDA and New Jersey Department of Agriculture, have hosted seminars and assisted NJ-based enterprises in obtaining an impressive total of $679,200 in USDA value-added funds. In addition, the Center awarded 11 grants totaling $47,500 with funds that originated from USDA as well. Recipients came from throughout the state in businesses ranging from blueberries to wineries.

If you have a “value-added” idea for a new or existing food or agricultural business and would like to learn more about the 2006 USDA VAPG program, please call the Food Innovation Center at 856-459-1125.

A Crisis of Creativity is Causing Rumblings in the Food Industry

“Whether a food company is a start-up or established business entity, has $50,000 or $50 million in gross sales, and supports 5 or 5000 employees, innovation is a key component to success. Today small companies tend to be the innovators, while large companies are only investing 1.6% of sales in R&D.”

Diane Holtaway, Associate Director, Business Development, Rutgers Food Innovation Center

Judging by the thousands of new products at the Food Marketing Institute’s show in Chicago, held in May 2005, the makers of packaged food are an inventive lot. Hundreds of firms, ranging from family-run outfits to giant multinationals, laid out their wares at one of world’s biggest supermarket trade events, hoping to attract the attention of retail executives seeking hot new products and emerging trends.

Yet despite the buzz, the food industry is falling behind in its ability to innovate. This will cost the companies heavily as supermarkets’ own – label goods grab an increasing share of the market, especially for products aimed at the growing number of health-conscious consumers.

Innovation is crucial in driving sales of consumer goods, especially when competing against a retailer’s own – label

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Center Leading Light…

Circle M Farms – Perfection in Peaches

Each July when third generation farmer Santo John Maccherone harvested peaches, some of his juiciest and best tasting fruits, more than 10 percent, went to waste because they were too ripe to pack and ship. Shipping is hard on ripe fruit leaving it bruised, battered and unable to be sold in markets.

So Santo had a spectacular idea: Use the peaches that weren’t suitable for fresh markets to make peach cider.

Helped by experts at the Food Innovation Center, Santo sold 7,000 gallons of his Circle M Peach Cider in its first year of production. Patrons of fruit stands and Wegmans and Foodtown grocery stores enjoyed the truly “fresh picked” flavor of the cider. And to Santo’s delight, the success of the peach cider, led to an increase in new customers for peaches, nectarines, apples and asparagus produced on his 200-acre Mullica Hill farm.

“The beauty of this product is that I don’t have to produce anything new. I’m taking something that was going to be discarded and making money with it,” Santo said.

According to Santo, the only missing ingredient for perfect peach cider is a local production facility to manufacture and bottle his cider. The Food Innovation Center will offer those facilities when the business incubator opens in Bridgeton.

In the meantime, Santo will ship his cider peaches to a bottling plant in Georgia for processing. When the incubator is up and running, and Santo’s fresh peach cider is produced right in Bridgeton without the added transportation and manufacturing costs, Circle M Farms will realize considerably more profit from this ideal “value-added” product.

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products, says John Blasberg, head of Bains North America consumer products practice.

Most new food products now tend to be extensions of an existing line, for example, a vanilla-flavored cola. Food firms must become faster at launching new products and quicker to exit when demand wanes, adds Balsberg.

The packaged-food industry’s reaction to low-carbohydrate diets typifies the problems. Many leading brands have been launching new low-carb products until recently, just as the market has peaked. Two years ago, the soaring popularity of low-carb diets saw sales of eggs and steak soar as those of carbohydrate-rich products such as bread and pasta slowed. Was it a fad or a long-term trend? Either way, it presented food firms with a big opportunity – if they could move fast. Some did. In 2004, the number of new low-carb products jumped from around 500 to 5,000. Sales exceeded $2 billion in the US last year. But by autumn, the market was turning down. Now the talk in the industry is of products being axed and truckloads of unsold low-carb snacks and meals being donated to charities for the homeless.

Whether the low-carb phenomenon has passed or still presents an opportunity, future innovation is likely to come increasingly from small food manufacturers. Large firms will often look to small ones to provide the innovation they lack and then buy up the successful ones, says Roy Bingham of Health Business Partners, an investment banking firm specializing in nutrition and consumer healthcare.

Excerpted from “Making a Meal of It”, The Economist Newspaper and The Economist Group; May 5, 2005
Food Trends 2005: Fancy to Farm-Friendly

The top food trends listed in the April 2005 edition of Food Technology, a magazine published by the Institute of Food Technologists include:

**Quick Fix** – The time for consumers to prepare food remains at a minimum, so they are preparing limited side dishes with entrees and giving priority to easy-to-prepare items.

**Grazing** – Seven million vending machines in the U.S. are attracting 100 million customers daily. The machines are increasing their healthy fare options.

**Low-, No- and Reduced** – With low-carb interest waning, consumers are beginning to watch their fat and calorie intake again.

**Inherently Healthy** – Consumers are eating more fruits, vegetables, grains, nuts and yogurts.

**Fancy** – The premium foods market is projected to reach nearly $100 billion before 2010.

**Farm-Friendly** – Foods produced closer to home are becoming more appealing to consumers.

**Layered Flavors** – Consumer fondness for layered flavors is causing the sale of items like cheeses, condiments and ethnic foods to increase.

**Do-It-Yourself Doctoring** – Shoppers are trying to manage or treat conditions through diet.

**Global Gangbusters** – Convenience and ready-made meals are accelerating worldwide. Fresh, chilled, ready-to-eat products are emerging.

*Excerpted from Food Technology, April 2005.*