

dippin' dots. Ice Cream of the Future.

CURT JONES



PELLETIZED PROFIT

How a microbiologist turned his professional knowledge into an astronomical future

By Melinda Kaitcer

Most inventors will tell you there are two kinds of ideas: the completely new thoughts, precious few and far between, and new twists on something you already know. With the creation of Dippin' Dots, that pelletized ice cream that is all the rage at theme parks, shopping malls and movie theatres nation- and world-wide, microbiologist Curt Jones has managed to harness both kinds of ideas to create an entrepreneur's dream product — a popular success that has created a totally new niche in its market and reaped financial rewards that have led to an award-winning franchise system with hundreds of locations that span the globe, along with thousands of other locations in theme parks, water parks, stadiums, arenas, shopping malls and movie theatres.

Curt Jones grew up on a farm in southern Illinois, just outside the small town of Grand Chain where his family raised corn, soybeans, grains and pigs. After high school, Jones attended Shawnee Community College then went on to the University of Southern Illinois in Carbondale, where his agricultural roots were pulling him in the direction of mi-

crobiology and the creation of probiotics, the “good bacteria” that provide natural alternatives to putting antibiotics in feed for farm and ranch animals. Jones got his bachelor's degree, and then a master's degree in microbiology, and then he landed a job with Alltech Biotechnology in Nicholasville, Kentucky. There he helped start a feed division for growing these special bacteria.

One step in this process of creating probiotics was to quick freeze the bacteria cultures into a powder. The object was to form the smallest ice crystals possible in order to more completely preserve the bacteria in its freshest state. That's when that elusive and completely new idea came to him: He devised a new method of pelletizing bacterial cultures at extremely cold temperatures by using liquid nitrogen. This process, he found, kept more of the structure of the bacteria intact and preserved its freshness much better than other methods.

A month later, making homemade ice cream, Jones says that the light bulb of the second kind of idea came on. What if he put homemade ice cream through the same freezing process he had devised for the bacteria? Would the result be a fresher tasting, more perfectly preserved ice cream product

Photos provided by Curt Jones.

than had ever before been achieved? Jones laughs now at his excitement as he tells of his first taste. "It was about 300 degrees below zero when I popped it in my mouth," he says, "so I burned myself pretty good. But then I found that once you let it warm up a little it was pretty good." Pretty good was an understatement. Over the next six to eight months, Jones and his family began making this new concoction in his home garage and letting people try it — and buy it. And as they began to see the possibilities, they slowly decided to make that leap of faith that is required of all great ventures — a leap that has landed them among the leaders of the global marketplace for ice cream products. A still-amazed Jones was glad to share his story — and the details of his challenges in bringing this new idea in ice cream to the marketplace.

So you have this new ice cream product and you have tested it with friends and family and other local people. What made you want to take it to the level of selling it to the public?

The response was so positive. We test marketed it in a little mall in Lexington — we just made some up and went there and gave out samples. While we were doing that, we met a man who said he had 17 restaurants in Indianapolis. We were still deciding what we wanted to do. Did we want to sell the ice cream or the machines to make it?

We stayed in contact with this guy and he said he'd help us put in a storefront in Lexington. He told us the location had traffic of 20,000 cars a day and he would hire a general contractor to finish out the store for us for \$21,500. All he needed was a \$10,000 down payment. So we scraped together \$10,000 from our collective savings. We were supposed to open before Christmas. By March, when we still weren't open, I realized he had scammed us.

What did you do then?

Hired an attorney. I had contacted a patent and trademark attorney and after a few months of searching, he told me

I could qualify for a patent of my own. So when this happened I went to him and told him what was going on. Somehow, they were able to catch the guy before he left town completely. He was arrested for scams on all those original 17 stores — turns out he would go in and get people interested in opening a store. He would ask for \$30,000 and let them own half of the store. He would do just enough to make them think the project was under way and then he'd disappear. For him it was floating money. We got our money back and took over as general contractors of our half-finished space and paid all subcontractors ourselves — and the attorney. We got the store open three months late with no money left for advertising. We opened on a shoestring and had no idea how long we'd be able to stay in business. But we were in that far so we had to see it through.

Where did you get the money to weather this storm — the original \$10,000 and the additional money it took to finally get the store open?

I had savings of about \$8,000-\$10,000, we sold one of our cars, and we had six credit cards. My sister, Charlotte, who had an MBA, got involved. She became vice president of corporate development. Before we started the business, she and I had thought about doing another business together. When I had the idea for the ice cream, she was available and interested in helping out. She took care of all the accounting — and she had \$10,000. My dad was involved as well, and he mortgaged part of the farm. We just scraped the barrel and came up with the \$80,000 or so of our own money that it took to get started.

So how did it do?

We had very small numbers from March to December, then we closed to remodel. At that point we had \$52,000 in sales — and expenses were also about \$52,000. That's what we did with credit cards — paid ourselves our living expenses by cash advances from credit cards. That first year we also worked on developing our flavors. In the very beginning, we had a homemade mix for making samples, the same mix I used for making homemade ice cream. When we opened up the store, we looked at some local suppliers first to see what they had. Yogurt was popular then, and we did yogurt dots. Some of those came pre-flavored, and others we got an ice cream base mix and we would add flavorings from other companies. The first couple of years, we experimented with a lot of different companies for flavors and mixes, and we got to see a lot of consumer reaction to our product. It was really fun to talk to people who came in the store. That first year we practically lived there — open to close every day. Our daughter was 6 years old — and she was there with us after school until closing time.

What publicity did you get — and how did you capitalize on it without an advertising budget?

A couple of TV stations did stories that really helped a lot. They found us. Some guy brought one of the local TV guys in and he liked the concept. He did a little piece on us. Then another station came out to do a story on us. In the very beginning, we didn't really know what channels we wanted to sell through. We did have a store open in Lexington, Kentucky.

*There are two kinds of ideas:
completely*

New Thoughts & New Twists

on something you already know.



By converting this old garage into a small ice cream plant, Jones was able to add a packaging line and bigger machines.

The pitch was just telling people that we had a new kind of ice cream, and typically they would be very surprised when they saw it. They didn't think it was ice cream. We told them how it was formed through quick freezing with no aerosol product. The main thing was that it was fun. The product spoke for itself. My sister, Connie, called the food service supervisor at Opryland in Nashville and got an appointment with him in late 1988. Opryland put it in their park in 1989. At that point we decided to move back home to make sure we could make enough product for Opryland.

What did you do to gear up your production for Opryland? Did you have any idea what your volume might be?

We converted an old garage back in southern Illinois into a small ice cream plant. Even before we moved back, my dad and my sister had started working on converting that garage into an ice cream plant. In Lexington, we made the ice cream in the store with a small ice cream machine. By converting the garage, we were able to have a packaging line and bigger machines.

To open a food establishment, you first have to go to your local health department, so I went to Fayette County Health Department in Lexington to open. I also had to go to the Milk Control Division at the state level to get the equipment approved.

What equipment did that require — and where did you get it?

I made my own equipment in a machine shop. I used stainless steel. The production equipment was made by us and in local machine shops. In our first store, our equipment was fairly basic with few moving parts. When we moved into the garage, we had to have more moving parts for automation. For those we had to have pieces made to fit

the design. There was no vendor. We made everything from parts, basically. We had no idea how the product would do at Opryland, but we had to be ready for anything.

So how did it do?

It was a dismal failure that first couple of years — nobody knew what the product was. And it was in a bad location near the roller coaster — that shortened the flow of traffic. The second year we tried it out of a kiosk. After two years of complete failure, they asked us to come get our equipment. Then we were introduced to one of their new food service supervisors who suggested we rent a place within Opryland.

We had to spend about \$5,000 to overhaul a building they had. We paid them about 25 percent of our sales. It went up over the years to about 32 percent. We had to buy menu boards and freezers. We were able to get a \$25,000 bank loan because it was going to be in a major theme park. Prior to that, we had problems getting anything financed. The key to making it work, we found, was sampling the product — to get people to try it. Sales went up within a short time — and what we found out that was even

more important in the long run was that most of our sales were incremental sales. Our value to the park was that we went in and gave them a new product that made people spend more money in their park.

What else did you do to market your product?

We went to the trade show for the International Association of Amusement Parks and Attractions (IAAPA) in 1989. First we contacted them (www.iaapa.org) and leased a 10'x10' booth for about \$1,000. We had a friend in Lexington who was a real fan. I told her about the trade show and that I didn't know if we could afford it — from what I understood you have to have a lot of stuff to do a trade show. Her husband worked for a company called Staging Techniques in Atlanta (www.stagingtechniques.com) that does nothing but make trade show booths and kiosks. I was worried about cost, but she said, "Don't worry — we'll do it. You just worry about Dippin' Dots."

How did that work out?

Sure enough, they made a nice kiosk and we did the trade show and gave out samples, cards and brochures that introduced the product. We made a homemade tri-fold brochure with background of the product and photos. It told the history of the product and why it was different, and gave our contact informa-



Jones handed out homemade tri-fold brochures at an IAAPA trade show in 1989.

tion. Then, at the end of the show, the guy who made our kiosk came to get the booth and gave me a bill for \$2,665. Remember, the friend had told me it was taken care of. They ended up mad about it, and I said I'd find a way to pay for it. In March we had the opportunity to go to the Dade County Fair in Miami. I stopped off in Atlanta to try to get the booth and told them if they'd let me use it again, I might be able to make a payment. They finally agreed. I was able to pay them \$500 and kept paying them \$500 at a time until I paid it off.

How did you do at the Dade County Fair?

It was 1990, and we made \$14,000 at the fair. It encompassed three weekends. My oldest sister, Charlotte, went with me and helped work the fair. We stayed in the trailer — it was quite an adventure. Now we do about \$100,000 at that fair, and we ended up getting two locations by getting that kiosk. We took a dipping cabinet and a kiosk, so they gave us a second location. To speak to someone regarding rental of facilities, call Sira Camilo at **786.315.5266** or e-mail scamilo@fairexpo.com. And if you'd like to learn more about becoming a sponsor of the 2005 Miami-Dade County Fair, call Esteban de la Ossa at **786.315.5162** or e-mail delaoossa@fairexpo.com.

After you saw success at the fair — and you now owned the kiosk — what did you do from there?

From the IAAPA show we got into the Whitewater Water Park in Marietta, Georgia. (Now it is a Six Flags Park.) A fair is shorter, usually 10 days or two weeks. A water park is all summer long, so you can leave your equipment in place for several months.

What do you need to have in order to be a concessions vendor at a park like this?

In our case, we have kiosks to sell from. You need a unique product in order to get in and a way or place to sell it. You have to have signage and health department approvals once you

set up, and depending on whether you are selling it or the park is selling it, you need labor.

How much does it cost/what is the percentage or deal? What do you need to watch out for in these arrangements?

The percentage split varies. Typically, somewhere around 40 or 50 percent goes to the park. If they put you in a good location, you can sell a lot of product. They figure they could always just buy it and sell it themselves, so they ask for a large percentage. To set up at one location, it cost around \$10,000 because we had to provide the park with storage freezers.

When did you know that Dippin' Dots was really taking off? How did it happen?

I'd say the real turnaround came in 1992 when we got into the Kennedy Space Center. At the 1991 IAAPA show, just as we were closing the booth, we noticed a guy hanging around. This guy was from the Kennedy Space Center — but he was not the food service guy. So at his urging, we went down and met the food service people at NASA. We took samples, and they liked it. They wanted us to present it to people at NASA for approval. We worked out a deal: We would provide them with a kiosk in their colors, blue and white. We had picked up the tagline, "Ice Cream of the Future" at the Dade County Fair, but we had to call our product Space Dots.

What was the setup at the Kennedy Space Center — and how did it go?

We had a location right in the center courtyard with the exhibits. My wife, Kay, daughter, Tracey, and I set up a kiosk on the property. We also had to provide them with storage freezers. We had just gotten eight new freezers from Denmark designed to hold the product at 40 degrees below zero. The freezers cost about \$1,000

each. People started buying it just a few minutes after we opened. We had never experienced that before.

How did this success change your production operation and shipping?

At first, we were passing ourselves on the road. Dad and I were taking each load down there ourselves. We were still making the ice cream in our garage for a year or two. It was a 24'x24' foot garage. It had a concrete floor that we had to seal. My sister and dad did most of the renovation. They used a particle board mix with a sealer. Once we got that done, we had to build a partition to separate the raw materials from the receiving area. We had three sinks for wash, rinse and sanitize. We put a liquid nitrogen tank outside and a cooler to hold the mix. That was in a separate area of the garage.

There wasn't a lot of storage space, so my wife and sister got to work with a local realtor and found a 2000-square foot abandoned liquor store in nearby Paducah. So we moved our production to Paducah. It was still just us, though — we all worked in the business — four or five people. And we did all of our own trucking and distribution.

How did you handle distribution — and keep the product frozen while on the road?

We had an old pickup we started with — Dad built an insulated box that



In 1992, after he was approached at an IAAPA trade show, Jones set up a kiosk at the Kennedy Space Center in Cape Canaveral, Florida.

held 200 gallons. We bought some old freezers from the neighbors and used dry ice or liquid nitrogen to haul the ice cream in a truck. Then we got to building bigger boxes so that we could put them on trailers. In 1992, we bought our first one-ton truck.

How did all this change as Dippin' Dots get more popular?

Once we got into the Kennedy Space Center, the exposure and interest in our product grew exponentially. The key element to keeping up with this growth came a couple of years later when we were able to buy a pallet reefer. A pallet reefer is the size of a pallet; it's like a big box with a door on it. It's insulated and you can load product in it with a fork lift or pallet jack. On the top, there's a place to fill it with CO₂. What that allows you to do is keep your product in there for about four days for shipping purposes. You can buy CO₂ and liquid nitrogen from gas companies. It's readily available. That allowed us to ship on regular shipping routes and keep our product at least 40 degrees below zero. It also allowed us to take on customers in much easier ways without worrying so much about the routes so that we could expand when the product took off at malls and other fairs.

Is that when you started the dealership network? Tell me the process for setting that up.

The dealership network was just a license to buy the equipment to keep and sell our product. The dealership license was a contract that we license them with the right to use our logo; they would buy their equipment and set up a place to do business. We would also then sell them the product. At the time, we had no royalties. We didn't start royalties until we became a franchise in 2000. It was a fairly loose contract. They would apply for where they wanted to sell — a dealer might have 10 locations where he wanted to sell. And we still made the ice cream. To set this up, we went back to the same at-

torney who had helped us before and he created a dealership network and franchise system. He realized what we needed, and he understood the problems and challenges we faced.

I understand that next you entered the international market — how did that come about?

In 1995, we were approached at a trade show by a Japanese company, Itochu Trading Company, the second or third largest trading company in Japan at that time, that wanted to sell our product. We got to thinking, "If we used enough dry ice, could it make the trip?" We tested this theory in our back lot. We made 1,500 gallons and measured how long we could keep it frozen. When we made it the 15 days it would take to ship and distribute, we made our first international shipment to Tokyo.

How did you set all this up? What are the arrangements you need to make to ship something like that internationally?

They found a large freezer over there that went to a very cold temperature. They used liquid gas for cooling power. We were able to ship container loads, about 6,000 gallons at a time. They put it into amusement parks, shopping centers and other locations, very similar to the way we did it. We worked with a company out of Portland, Oregon, for awhile. At the time we were shipping on dry ice and CO₂ snow and it cost about \$2 a gallon to ship. Nowadays there is a container that electrically cools to about 50 degrees below zero and it costs around \$9,000 with 7,000 gallons in it. The shipping cost per gallon actually came down. They went crazy over our product over there, and they opened up several additional locations that first year. We have a video of Japanese people tasting the product on their version of the "Today Show."

So describe your production operation now.

We opened a new plant in 1995, bought land and built a 26,000-square-foot plant; it doubled in size in 1997, and doubled again in 1999. Our volume right now is about two million gallons a year in Paducah, and a plant in South Korea now also makes 250,000 gallons a year.

What permits and inspections did you need in the beginning?

First, of course, there were tax permits, and then a permit from the health department. I went to our local health department when I wanted to do my original test, and they told me that to open up a long-term business I needed to go to the state capital and meet with the Milk Board. The health department granted me a temporary permit so I could do my test, but told me if I decided to go forward, I needed to have all the production equipment inspected at the state level. She gave me all the information to do that, including the number to call, so I called their office to ask for guidelines from the Milk Control Department so I could prepare for this inspection. I had to learn all the codes — certain materials have to stay polished to certain levels and all kinds of other things.

Eventually we had to apply for USDA approval (www.USDA.gov)



Jones, in 1995, with his family at the ribbon-cutting ceremony for the new 26,000-square-foot Dippin' Dots plant.



—we got that when we opened the new plant. They inspect and regulate everything from floors to ceilings and everything in between. We go to extremes in our plant to have the cleanest and best production facility — again, I'm a microbiologist so I understand the reasons for the rules and know a lot about what needs to be done and why, so we have always been careful to meet and exceed the guidelines.

Tell us about your marketing budget and strategies.

Well, there was really no money for marketing, so everything we did was internally generated. We had to explain the product because it was so different, so we did brochures that we generated on our word processor. In fact, for most of the presentations I made, I generated simple materials on my word processor that just gave basic information about what it is, how it came about and prices.

Most of our advertising and marketing was location and demonstration. We had a product that had to be kept very cold in specialized freezers we bought from Denmark. So wherever we put our freezers, we had to sell a lot of ice cream, so we had to make sure we were in high-traffic, high-profile locations. We also got a lot of press because we were so different and people were talking about our product so much.

What about the franchising — how did that come about?

We franchised Dippin' Dots in the year 2000. Even after we began marketing our franchises, most franchise sales are from someone contacting us — they would see it somewhere and want to sell it. With the franchises we actually have an advertising budget for the first time — we're now placing ads in teen magazines and other places — and we're also now doing promotions at places like Universal Studios.

How did your franchises do?

For the fourth consecutive year, Dippin' Dots Franchising is a member of the elite "Franchise 500" as ranked by *Entrepreneur* magazine. *Entrepreneur's* January 2005 issue ranks Dippin' Dots #93 among the top 500 franchise companies in the USA. Dippin' Dots also moved up to #2 in *Entrepreneur's* listing of the "Top 50 New Franchise Companies." DDF debuted on the list at #1 in 2002 and remains the highest-ranking food franchise.

So what's next for Dippin' Dots?

We have to keep growing. We're coming up with new products — a Dotwich ice cream sandwich, Dippin' Stix, a cookie that you dip first in chocolate, and then in Dippin' Dots, and Dots in a Block — a more conventional product that has Dots blended into regular ice cream for some unique combinations of flavors and texture.

What is Jones' advice for others who have a unique idea for the concessions industry?

First, he says, let it kick around in your own mind for a while before you do anything else. Ideas need to percolate. Then, once you have convinced yourself that it is a good and unique product, start exposing it to friends and family — and ask for honest feedback. Next, go to the library or get on the Internet and do research to see what is out there like it. Get with a university that does field tests and figure out what field tests you need to do. Talk to other people in the field to get impressions of the market you are going to try to reach, but make the decisions yourself. Above all, Jones advises aspiring novelty concession inventors to follow their gut instinct — this will always be your best guide. "Does your gut tell you that you have something unique or different?" He smiles.

"Then stay with it." MB

RESOURCES

FOR ENTREPRENEURS WITH A UNIQUE FOOD PRODUCT

OK! You have a unique food product.
The entrepreneurial juices are flowing.

Now, where are your customers?

\$1,000,000aire Blueprints found Festival Network Online, www.festivalnet.com, which publishes a list of over 15,000 music festivals, craft shows, art festivals and fairs throughout the U.S. and Canada. This list gives the name of each event with address, phone numbers, e-mail and Web site information, availability and cost of vendor booths, plus a complete event narrative. The Festival Network also publishes a newsletter with information such as "160 things to take to art shows, festivals and craft shows". Festival Network memberships start at \$49 per year.

The United States is home to more theme parks and family entertainment centers than any other country in the world. And all those little Mouseketeers love to eat. We found an online resource for gathering information about nearly every entertainment park in America. Theme Parks Online (www.themeparksonline.org) lists parks by state in alphabetical order. Beneath each state you will find the parks. Clicking on the name directs you to the Web site.

Shopping mall carts and kiosks are a far less expensive alternative to the huge start-up costs of leasing or buying permanent retail space. Don't know where to begin? Blueprints discovered a wealth of information on www.125aday.com, including three books for planning, operating and developing a successful kiosk business. *Start Your Own Kiosk Business*, *The Business Plan for Your Kiosk Operation* and *How to Start Your Own Business* are sold as e-books or in hard copy. See www.amazon.com and www.125aday.com to order these books.

We also searched kiosk books on www.amazon.com, and found *Ultimate Guide to Specialty Retail: How to Start A Cart, Kiosk or Store* by Patricia Norins, priced at \$41.65 in paperback only.

Can't find the right shopping mall for your product? We found the ultimate resource, a book considered to

be the Bible of the shopping center industry, *Directory of Major Malls® — 2005, 26th Ed.* The book details 4,350+ U.S. and Canadian shopping centers and malls which are approximately 225,000 square feet or bigger in size or are lifestyle/specialty centers of any size. Includes site/leasing plans for 2,850+ listings. Details, tenant lists contact names and general demographics for both existing and future/planned centers. Additional sections: Top 50 owner/developers and management companies, 45 major metro area maps, real estate contacts for 350+ leading retail chains. Of particular interest is a listing of shopping malls that cater to temporary tenants and have food courts. Order a copy on www.shoppingcenters.com for \$499. [1,700 pages, published in January]

What about sports stadiums? Go to beta.collectingchannel.com/?page=welcome/stadiums for a listing of sports stadiums nationwide and their food vendor contact information.

Obviously, you need money to start your business. We found www.mycapital.com, which has a free directory of venture capital firms, searchable by state. Selecting firms interested in your particular industry will narrow the search. The database of private equity investors covers more than 3,000 private equity, venture capital and buyout firms throughout the U.S., Europe and Asia. Also, check the Small Business Administration at www.sba.gov.

As in any business endeavor, a large portion of your investment will be spent on equipment and supplies. We found www.chefsbazaar.com — a good site to find just about any equipment you might need for your new food business, ranging from garbage disposal units to cabinets to freezers. One impressive feature on this Web site is the provision of equipment links directly to each manufacturer.

So, now you have your product, a business plan, funding, facility, equipment and customers. But do you know where you're going from here?

To increase market share, you need the ability to forecast the industry's future and to analyze the competition. We found an affordable online resource with food industry profiles. First Research, (www.firstresearch.com) offers industry-specific reports and market analysis for individual use. Reports provide competitor intelligence and current trends, giving a point of reference for forecasting your food distributor business. For \$99, you will have access to food industry profiles for 90 days.

