

Food Technology, Innovation & Safety Forum 2010

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(PPT Slide #1) Good morning. Thank you for giving me this opportunity to share some thoughts with you from the perspective of the frozen food industry.

Shortly after I took the helm of the American Frozen Food Institute, my daughter Nadika – then 11 years old and seeking a way to connect with her Dad's new job – did a book report, complete with poster, on Clarence Birdseye. **(PPT slide # 2)**

She's a smart kid, if I do say so myself, since Clarence Birdseye is the logical place to start when talking about frozen foods.

My daughter learned and I share with you today as a preface to my comments that many of the principles governing Birdseye's founding foray into frozen foods left an indelible mark upon the character of the frozen food industry. Principles such as wedding natural observation with scientific innovation, matching technological development with human need, and meeting consumer demand with business-savvy solutions – these principles remain today as the foundation of the frozen food industry.

Clarence Birdseye once described himself as "just a guy with a very large bump of curiosity." But it was more than curiosity that he infused into the industry he fathered. **(PPT slide # 3)** He hardwired the frozen food industry to:

1. Explore and understand human need. In Birdseye's case, it was the need for a better way to safely preserve food.
2. Determine how best to address the need. Many had seen that freezing was nature's way of preserving food, but it was Birdseye who recognized its potential on a much broader scale.
3. Develop the technological means to the solution. It took two years for Birdseye to find a successful way of quick freezing food, learning along the way that packaging was part of the solution.
4. Get the solution safely into the hands of the people. His quick freezing process resulted in 168 patents, covering not just the freezing technique, but

also the packaging, the type of paper used, freezer display cases, insulated railroad cars and the first commercially practical freezer.

In Birdseye's day, what was needed was a safe, efficient means of preserving food. Consumer needs today are far more complex and constantly evolving: (PPT slide # 4)

- Today's economic situation has heightened the consumer hunt for bargains.
- Increased demands on time have raised the yearning for foods that are easy to prepare, simple to serve and quick to clean-up.
- Growing health consciousness has increased the demand for foods that are lower in sodium, trans-fat, saturated fat and sugar while higher in nutrients, whole grains and fiber.
- And, increased exposure to food contamination stories has led consumers to seek reassurance about the safety of their food.

Let's look at some of the ways the frozen food industry is applying the Birdseye principles of need awareness, technological innovation and safety and quality assurance to these contemporary consumer needs. (PPT slide # 5)

Consumer need to economize.

The state of the economy has Americans feeling the need to tighten their belts and seek out increased value. The frozen food industry has tried to make economizing less painful and even rewarding.

The number of new product launches in the food and drink industry was down this last year, while the number of products boasting an economical claim increased 72 percent from 2008 to 2009. Responding to the consumer need to watch the food spending budget, clearly the industry energy was invested less in producing new products and channeled more into producing affordable foods. (PPT slide # 6)

In fact, Insight Track research found that nearly half of the consumers surveyed believed that frozen food would help them through the current credit crunch. A whopping 70 percent said frozen foods helped them minimize waste and cut down on the number of trips to the grocery store, thereby delivering greater value.

(PPT slide # 7) As part of the food economizing, coupon use increased in 2009. There was a marked increase in the purchase of private label or supermarket store brands. And families continued to eat even more meals at home, while restaurant visits were down 3 percent in 2009 according to NPD Group. Eating at home more

frequently is a trend many consumers have indicated they will continue even after the economy improves.

However, while the economy has provided incentive to eat at home more often, it has not provided additional time to prepare the food at home. So, the frozen food industry has responded with packaging innovations that save time while increasing consumer options. Some of these improvements have to do with portions – individual packets all the way to full-blown frozen dinners for entire families. Other packaging innovations are technological in nature – such as steam bags that can go straight from freezer to microwave. These new bags serve as storage pack, cooking pot and serving dish, all-in-one. These time-saving packages expand the menu options – especially vegetables – that are available to meal makers. Healthy and quick last minute supplements to any meal are only as far away as your freezer.

While consumers have enjoyed the economy of dining at home, they have also reported missing elements of “the restaurant experience.” So, the frozen food industry has responded with an expanding number of frozen restaurant meals that allow the consumer to enjoy their favorite restaurant fare, but with at-home prices and convenience. Stay-at-home diners also reported missing the ethnic foods that were not in their cooking repertoire. We have seen the frozen food industry respond by offering international dishes and all kinds of ethnic options.

In response to the economic demands of today’s consumer, the frozen food industry has followed the Clarence Birdseye formula of identifying the need, developing the technology to address the need and getting the solution swiftly and economically into the hands of the consumer.

While I suspect many of us have felt the need to economize, I’d venture to say that all of us have also shared in the next consumer need. (PPT slide # 8)

Consumer need for convenience.

During my lifetime – and that of many of you here – the average amount of time spent preparing the evening meal has dropped from between 2-3 hours in the 60’s to just a tad over 30 minutes today. This trend has been brought about by a variety of factors, not the least of which is the changing demographics of America’s workforce and enhanced technology.

Even with the advent of numerous “labor-saving devices,” such as I-phones, Americans do not appear to have additional time. These devices may be saving

exertion, but we seem to be using whatever time they save us by trying to squeeze even more activities into our daily lives. Just as economic constraints are squeezing the wallet, heightened time demands are putting the squeeze on our schedules. As the father of a 12 year-old competitive cheerleader and soccer player, I can certainly attest to this fact.

Thus, the need for the frozen food industry to provide convenience continues to grow.

We are certainly doing our part to provide consumers with any number of healthy-options that can be ready in that 30-minute window allowed for meal preparation. But we have to take care that in consumers' haste to put food on the table, they do not inadvertently sacrifice safety. (PPT slide # 9)

That is why we are working with frozen food producers, microwave manufacturers and retailers to ensure that consumers know the wattage of their ovens and can match that information with easy to follow cooking instructions. We have developed a symbol that aids in consumer education, created an informational web site and secured the support of mega-retailers Target and Wal-Mart, who will only stock microwave ovens that carry the symbol and wattage on the front of the ovens.

While safety should never be sacrificed for convenience sake, in the interest of time I'm going to "conveniently" move along to explore other consumer needs that the frozen food industry is addressing.

Consumer need for nutrition and health.

The consumer need for nutrition and health has been in the news recently on several fronts. (PPT slide # 10)

First Lady Michelle Obama's "Let's Move" campaign, announced in February 2010, has brought renewed interest, attention and energy to solving the problem of obesity – especially among children. Food labeling, food advertising and school nutrition are all being influenced by this initiative.

(PPT slide # 11) Once upon a time the circle of those telling you to eat healthy was inhabited primarily by your mother and perhaps your doctor. Now, the circle of those offering commentary on your diet encompasses . . . well, almost everyone including politicians at every level, newscasters, teachers, authors, everyone

hosting anything on the Food Network, reality television hosts and actors. Did I mention *politicians* at every level?

Nutrition and health reminders abound and the number and means of those reminders are on the rise. Consequently, Americans have become much more aware of their food choices. (PPT slide # 12)

A recent survey on women's healthy buying patterns reveals increased health awareness among those who still do the majority of the grocery shopping. Of the almost 5,000 women surveyed, 85 percent said they make a conscious effort to buy healthier foods; 73 percent reported reading labels carefully given their concerns about specific additives such as high fructose corn syrup, and approximately 50 percent look for specific health benefits such as high fiber, reduced fat and low sodium in the products they buy.

(PPT slide # 13) A big part of the push for Americans to "eat healthier" involves an emphasis on consuming more fruits and vegetables. Experts, such as my friend and fellow presenter, Dr. Elizabeth Pivonka of the Produce for Better Health Foundation, are striving to educate the American public about the health benefits and nutritional rewards of getting more fruits and vegetables in their diet – in whatever form: frozen, canned, juice and fresh.

Consumers must be listening because the segment of the frozen food market that includes vegetables and side dishes grew 8.1 percent in 2008, a higher growth rate than the 3.2 percent gain experienced by frozen foods overall. In fact, four out of five American households (79 percent) use frozen produce.

However, our industry still has its marketing work cut out for it. Most everyone knows the convenience of frozen fruits and vegetables – which are easy to store, easy to cook. And most have discovered frozen produce's economic value – knowing what gets purchased will get used because of limited spoilage and low discard rate. By contrast, consider how much of your raw vegetable purchases end up in the garbage because they go bad or must to be trimmed off before cooking.

But where the frozen food industry faces its largest communication challenge is in the area of health awareness and nutritional education. Unfortunately for us, the myth that fresh fruits and vegetables have a higher nutritional value is persistent.

In truth, raw vegetables begin losing their nutritional value the moment they are picked. So, which is more nutritional? A vegetable flash frozen within six hours of being harvested, which cryogenically locks in its nutritional value or a raw

vegetable that sheds its nutrients the whole time it gets sorted, packaged, transported, stored and stocked, where it sits with the nutritional clock ticking, until it is purchased, transported home and stored until served, cooked or spoiled and discarded?

In the interest of proving the rather obvious answer to this question, the Frozen Food Foundation is assembling existing data and commissioning further analysis that compares the nutritional value of frozen vegetables with their raw counterparts at the point of purchase. As previous studies have demonstrated, frozen vegetables are nutritionally equivalent and, in many cases, superior to their raw counterparts. As my friends at AFFI's sister association in Great Britain are fond of saying, "If you want it fresh, buy it frozen."

As we work to set the nutritional record straight, we believe frozen fruits and vegetables are well positioned to be a major player in the call for a healthier America. With innovative packaging they are convenient, with maximum return on investment they are economical and with advanced freezing techniques they are nutritious. We just have to do a better job at getting that word out.

In addition to the call for increased consumption of fruits and vegetables, there are other health considerations being thrust upon the American consumer. (PPT slide # 14)

Recent reports from the Institute of Medicine (IOM) regarding the amount of sodium consumed by Americans and calls for the government to take swift action on this perceived health hazard have grabbed much media attention . . . leading to what one writer called an "assault on salt."

So, what is the frozen food industry doing about salt content in their products? (PPT slide # 15) Several of the American Frozen Food Institute's largest members have made public announcements regarding their efforts to reduce salt in their food products.

- ConAgra stated last October that it would cut sodium by 20 percent over five years.
- Kraft said in March that it would cut salt in the products it sells in North America by an average of 10 percent over the next two years.
- And General Mills recently announced it will reduce the amount of sodium by 20 percent in its cereals, soups, snacks and other products by 2015.

Based on the U.S. Food and Drug Administration's definition, 31 percent of General Mill's current portfolio is already low in sodium, because like many other food producers they have been trimming sodium for the past several years.

(PPT slide # 16) And while we are on the topic of low-sodium products, according to Mintel's Global New Products Database, food product introductions containing low, no, or reduced sodium claims increased almost 115 percent from 2005 to 2008.

Clearly, the food industry is addressing this issue. These newly announced reductions by major food companies will dramatically increase the number of low-sodium offerings.

While the food industry is doing its part by actively producing more sodium free and low sodium products, there is another angle to this issue that must be addressed. **(PPT slide # 17)** The market research group, NPD, which has tracked American eating behaviors for the last 30 years, points out that there is a gap between consumer concerns about the amount of sodium in their diet and their actual consumption of low-sodium and sodium free foods.

In other words, there is a disparity between what consumers say and what they do.

NPD data show that during the 90s, sodium concern and the consumption of sodium sensitive products were in sync with both declining somewhat and at roughly the same rate. As we entered the new millennium, sodium concern flattened out. In the meantime, consumption of low-sodium and sodium free products continues to decline creating a notable discrepancy between concern and behavior.

Reducing sodium further in a manner that meets with consumer acceptance is not going to be an easy task. **(PPT slide # 18)** I'm not just talking about the behavior modification of weaning Americans off their salty taste preferences. As difficult as that will be – as indicated by the NPD data and articulated in this headline from USA TODAY – the task facing the food industry is even more complicated.

As most of you know, salt adds more to food than just taste. **(PPT slide # 19)** It interacts and affects other flavors. It affects food texture, moisture, microbiological safety, preservation and color. So, it is not just a matter of starting to leave it out of the recipe and saying "get use to the taste." Many other factors – not the least

of which is food safety – have to be considered in this complicated equation of reducing sodium content in frozen foods.

Our society didn't get into this sodium dilemma overnight, hence we should not expect to solve it overnight. It is likely to be a graduated process. It will take time and some scientific ingenuity to formulate and produce products with decreased sodium that consumers find equally attractive. It will also take time to find reasonable sodium substitutes that cover – not just taste – but all the bases that salt covers.

Our industry has been hard at work with ingredient suppliers on developing a variety of ingredients, such as yeast extracts and mineral blends, to help food manufacturers reformulate their products so they have less sodium content without compromising taste and texture. While the food industry has taken some very significant steps, we believe a safe, satisfactory and sustainable solution will be achieved by taking several more incremental and calculated steps over time.

With that, let us turn our attention to the consumer need for food safety. (PPT slide # 20)

Consumer need for food safety.

In addition to nutrition and health issues, American consumers are much more aware of food safety issues. Media coverage of food recalls and pending food safety legislation has contributed to making the words Salmonella, Listeria and E. coli part of our cultural vocabulary.

A recent poll by Harris Interactive found that 42 percent of the Americans surveyed reported becoming sick or ill over the past two years from something they ate. Please note that the "something they ate" was not specific to **frozen food!**

People are simply more aware of food safety. They want to know where their food is coming from so contaminations can be quickly traced and contained, and they expect the government and food companies to do a better job of keeping the American food supply network the safest in the world.

The Centers for Disease Control and Prevention developed the Foodborne Diseases Active Surveillance Network (Food Net) back in 1996 and began tracking confirmed infections caused by selected pathogens transmitted commonly through food. Just last month the CDC released the preliminary results for 2009 and compared them with the findings of previous years.

Compared to 1996-98, rates of infection in 2009 were lower for a host of pathogens including E. coli (down 41 percent), Listeria (down 26 percent) and Salmonella (down 10 percent).

These numbers, which show a significant drop in instances of food-related infections, are very encouraging. But the frozen food industry wants even better results. Technological developments and innovations in the area of cryogenic freezers – such as the use of materials more resistant to food adherence (therefore cleaner), the use of modular units that are easier to clean and sanitize, and data logging units providing constant freezer performance feedback information – have shown great promise in improving the already high standards of hygiene in frozen food production plants. We continue to expand our technological horizons to address the need for safe reliable food. (PPT slide # 21)

Freezing food has long been recognized for its quality of convenience, but it is also time to acknowledge – and expand upon – its contribution to the area of food safety. Given the frozen food industry's positive food safety track record – further research into utilizing freezing and cryogenic technology to further enhance food safety could make significant contributions to public health. (PPT slide # 22)

Doctor Doug Archer, the past deputy director of the Center for Food Safety and Applied Nutrition at the Food and Drug Administration and currently professor in the Food Science and Human Nutrition Department of the University of Florida, Gainesville, has been a leading advocate in this arena.

In his study entitled, *Freezing: an Underutilized Food Safety Technology?*, Archer points out, "It is clear that under certain conditions, freezing can be lethal for certain food-borne pathogens. It also seems clear that there are researchable areas that might lead to increased use of freezing as a barrier to food-borne pathogens. It seems that freezing may be an underutilized food safety technology that can be enhanced to become a major hurdle for pathogen survival."

And the microorganisms he was addressing included the major players on the CDC's hit list. (PPT slide # 23)

Conclusion

In line with our roots, the frozen food industry continues to listen to consumer need, determine how best to meet that need, develop technology-based solutions and deliver the solution into the hands of the consumer. Safe, convenient, economical, nutritious and, of course, tasty – these are the attributes that best define today’s and, increasingly, tomorrow’s frozen food offerings. (PPT slide # 24)

Thank you for your time. And remember, the best way to recoup your investment of time in this week’s forum may be found in your grocery store’s frozen food section.