"WHAT'S *HOT* IN COLD?" A Look at Refrigerated and Frozen Food Trends

Industrial Refrigeration Consortium

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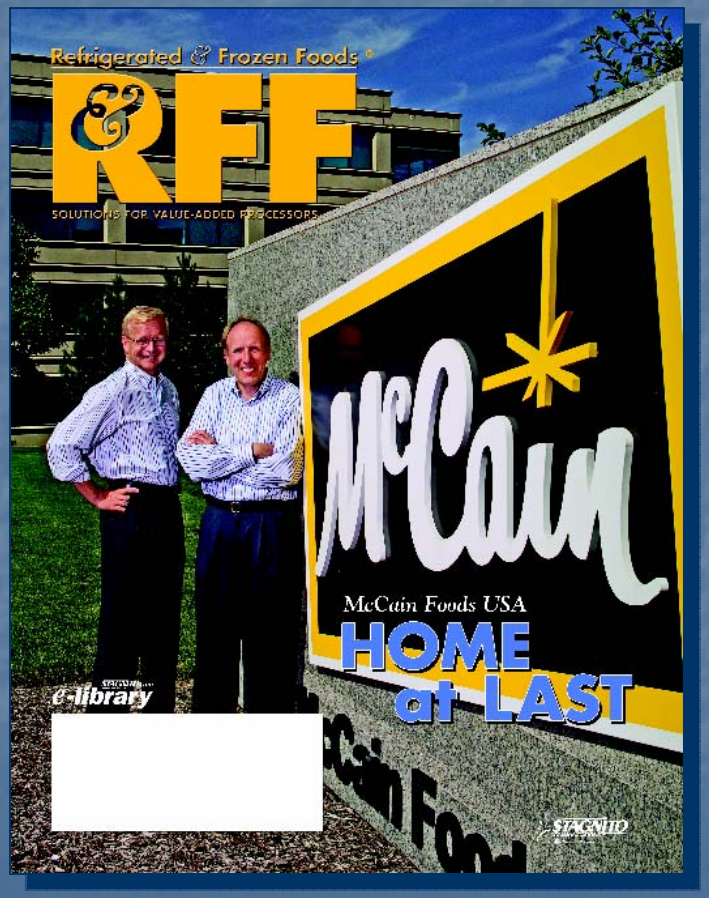
MY BACKGROUND

BOB GARRISON

- Newspaper Reporter, Kokomo Ind., 1985-1987
- Bakery Production & Marketing Magazine, 1987-1990
- Founding Member of Stagnito Communications in 1990
- Refrigerated & Frozen Foods, 1990-Present
- R&FF Editor Since 1995

R&FF BACKGROUND



- R&FF created in 1990
- Covering *retail* and *foodservice* processors in:
  - Prepared meals & entrees
  - Snacks, appetizers & side dishes
  - Prepared meat, poultry, & seafood
  - Prepared fruit & vegetables
  - Bakery
  - Dairy

R&FF POSITIONING

- Today, R&FF is one of more than 15 food, beverage, and packaging industry titles at Stagnito Communications (www.stagnito.com)
- R&FF is designed to serve food processing executives at all decision-making levels (senior management, functional departments)
- Monthly coverage of a major food company (ies) and in-plant visit. Monthly department coverage of latest trends in packaging, logistics, food product development and operations

Frozen Food History

1920s – Taxidermist-inventor Clarence Birdseye creates, perfect quick-freezing process.

1930s – Goldman-Sachs Trading Corp. & Postum (later General Food Corp.) buys Birdseye patents, offers vegetables, fruits, seafood and meat in Springfield, Mass., under Birds Eye Frosted Foods® brand. Mechanical refrigeration grows in food distribution.

1940s – Snow Crop produces first full-color magazine ad for frozen foods. While more frozens debut, 19 fruit and vegetable packers form the National Association of Frozen Food Packers, NAFFP. NAFFP ends the '40s with 126 members.

1950s – C.A. Swanson debuts the first retail frozen dinner. Sixty-four percent of groceries have frozen food cabinets. Frozen food sales exceed $1 billion. Boil-in-bag packaging emerges.

Source: American Frozen Food Institute

Frozen Food History

1960s — Microwave oven introduced. Frozen vegetable mixes popular, as are frozen prepared meals and entrees. McDonald's accepts frozen fish and meat patties.

1970s — Bar codes begin appearing. Paper tray packaging appears for oven and microwave cooking. Supermarkets include heated frozen foods at deli counters.

1980s — Microwave items gain popularity. Tremendous competition in frozen low-cal, low-price entrée markets. Ethnic cuisines growing in popularity. Advances in cryogenic rail car.

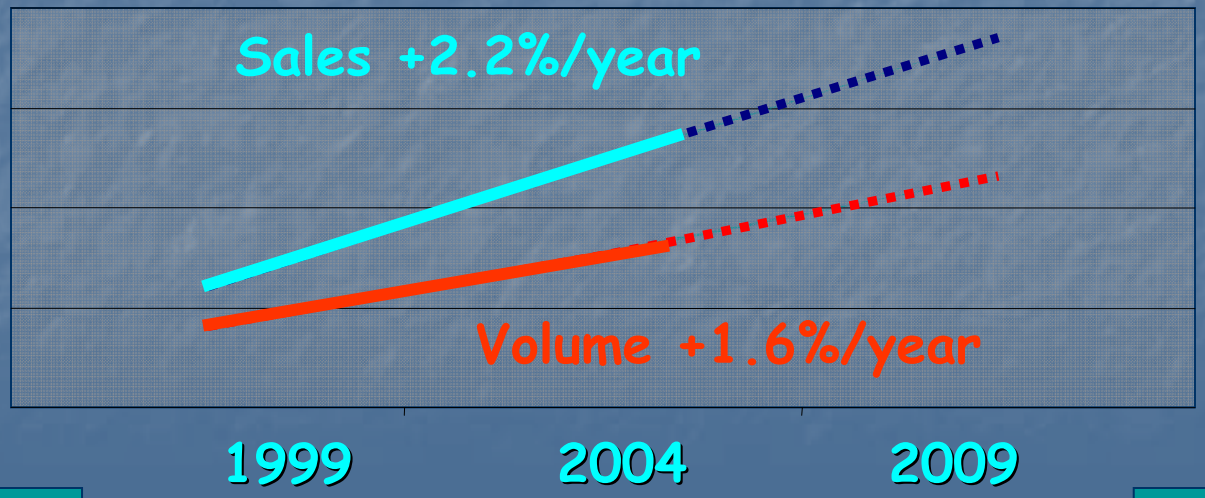
1990s — Home meal replacement trend emerges. Club stores compete with traditional groceries. Gaining popularity: frozen meal starters, family-size portions, kids products. FDA deems frozen fruit, vegetables have equivalent or superior nutrient profiles to fresh.

Source: American Frozen Food Institute

Growth Markets - Refrigerated

U.S. *Refrigerated* Food

	Sales, in dollars* (US$ millions)	Sales, by volume* (kg millions)	
1999 —	$44,837.9	6,563.7	
2004 —	$49,982.5	7,057.4	
2009 —	$54,793.0	7,618.2	(forecast)



** All retail channels*

Source: Datamonitor

Datamonitor Figures Reflect These *Refrigerated* Categories:

- Bakery
- Fish/Seafood
- Meat Products
- Pizza
- Ready Meals
- Soup
- Deli Foods
- Fresh Pasta
- Salads/Sandwiches

Growth Markets - Frozen

U.S. *Frozen* Food

	Sales, in dollars* (US$ millions)	Sales, by volume* (kg millions)
1999 —	$28,563.5	12,434.8
2004 —	$30,965.1	12,877.5 (est.)
2009 —	$34,021.8	13,251.3 (forecast)

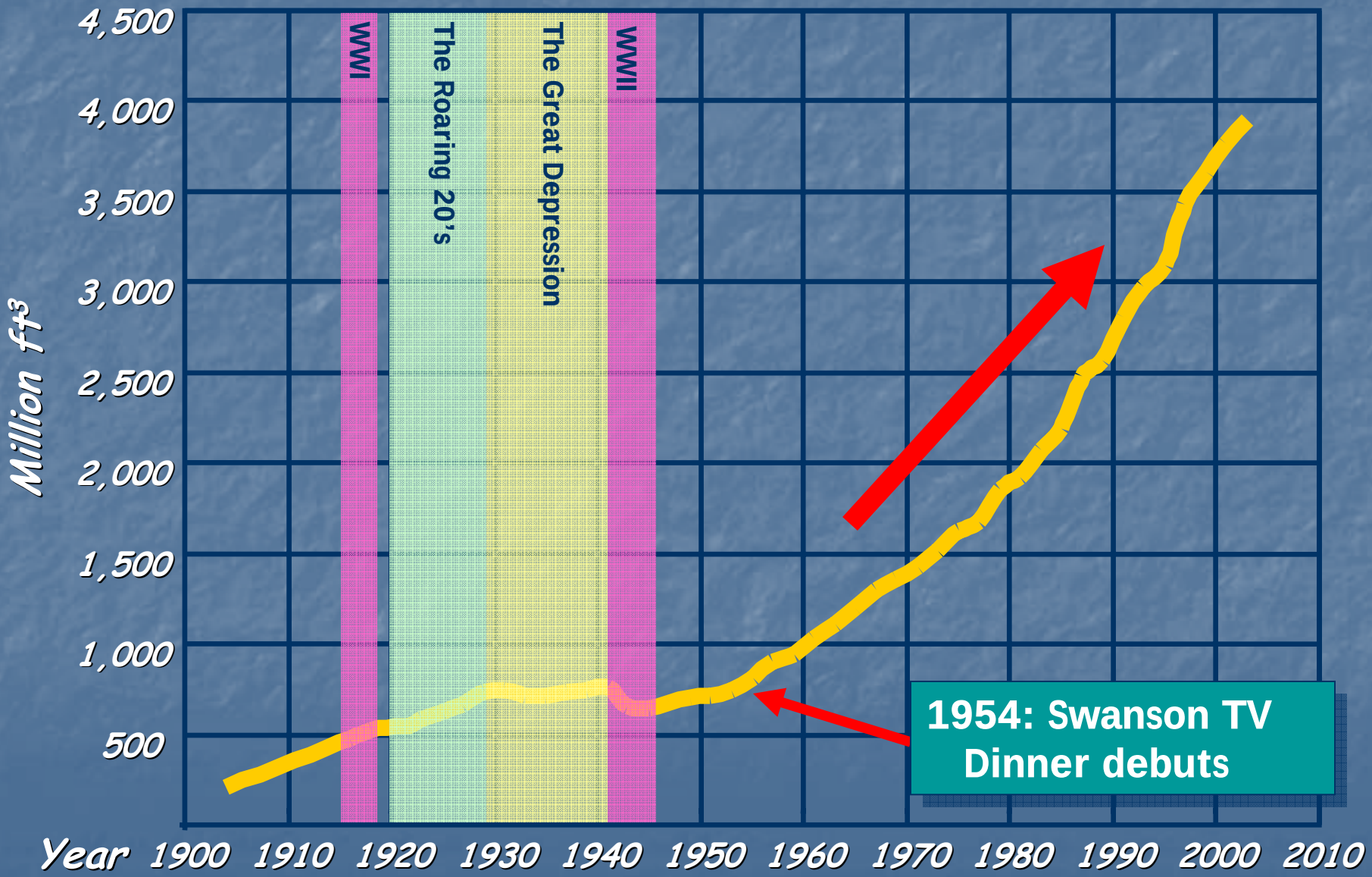
** All retail channels*

Source: Datamonitor

Datamonitor Figures Reflect These *Frozen C*ategories:

- Bakery Foods
- Desserts
- Fish/Seafood
- Pizza
- Meat Products
- Potato Products
- Ready Meals
- Vegetables

U.S. Refrigerated Warehouse Capacity



Growth Markets - Foodservice

Sales of frozen products sold to *foodservice* and *alternate* channels is estimated, by R&FF, to rival or exceed retail percentages.

Foodservice operators — ranging from restaurants to convenience-store roller grills — need more convenient, value-added products that save labor, provide consistency and help ensure food safety.

Not much industry-specific data available on frozen food sales.

Growth Markets

- In 1999, the foodservice market accounted for about 60 percent of U.S. frozen food sales, according to Technomic Inc. That would amount to an estimated $40.6 billion

Categories of frozen products used in foodservice include meat, fish, poultry, fruits, vegetables, dairy and bakery products, prepared foods, soups, sauces and juices

Growth Markets

- In 2002, the National Restaurant Association surveyed independent foodservice operators about frozen food usage. The survey found:
  - Top 3 reasons for using: year-round availability, product consistency, labor savings
  - Looking ahead to the next five years, 95% of respondents said they would be using the same volume – or more – of frozen foods
  - Seven out of 10 operators agreed: “In the next decade, frozen food technology will advance to such a degree that it will be difficult to distinguish between frozen and non-frozen, after preparation.”

Source: American Frozen Food Institute

Last 5 Years/Retail Trends

Overall Market —

- Fractured
  - increasing competition from super centers, dollar stores, convenience stores, specialty formats
- Expanding refrigerated and frozen space because these products move and bring higher returns

Supermarket Trends, Part I —

- Past
  - dinnertime entrée choices confined to freezer case and shelf-stable aisle
- Today
  - entrée options in the deli, refrigerated meat case, refrigerated dairy case and even frozen seafood

Last 5 Years/Retail Trends

Supermarket Trends, Part II —

- Supermarket layout and traffic patterns changing to bolster sales.

Supermarket Trends, Part III —

- Home meal replacement sees increased competition from new further-prepared offerings in refrigerated meat case.
  - meat and dairy cases are the most hotly contested ground in the supermarket today
  - still in transition as retailers, processor-suppliers learn best mix of private label & branded offerings, price points, merchandising

Last 5 Years/Frozen Food Product Trends

- Banquet's Crock Pot ready meals.
- New generation of hand-held entrees including sub sandwiches and even panini (Stouffer's).
- Jennie-O Turkey creates freezer-to-oven packaging that simplifies the process. Product cooks in the bag. Similar new packaging appearing in the deli.
- Frozen organics growing
- Frozen *private label* growing, particularly in value-added categories.
- New generation of steam-and-serve tray technology (from Europe) coming to frozen vegetable category.

Last 5 Years/Refrigerated Food Product Trends

- *Drinkable yogurts/meals* growing quick thanks to consumer interest in healthy/convenient meals on the go.
- Explosion in *refrigerated side dishes*, particularly home-style items like mashed potatoes.
- *Prepared, packaged meats* more sophisticated in packaging, portion control and pre-seasoned flavors.
- *Deli* regaining momentum with more pre-packaged offerings and better packaging for grab-and-go. IDDBA, in Madison, Wis., sponsors a trade show growing each year!
- With shelf space at a premium — and increased competition — processors cannot afford to fail (or at least very often) with new products.

More Growth Ahead?

Yes. Consumer interest in time-saving, convenience foods (entrees, snacks, everything) has *ONLY ACCELERATED* since 1990.

Yes. Perishable items are among the highest performing (volume, profit) categories in the grocery store. Continued emphasis through category studies.

Yes. Foodservice operators interest in further-prepared items will only grow while

- quality & consistency improves (i.e. harder to distinguish between fresh and frozen)
- products continue to provide easy, labor-saving

Be Ready For the Future

Flexibility: Industry consolidation means change.

Example: Heinz acquires Nancy's hors d'oeuvres. Massillon, Ohio, entrée plant gearing up for entirely new products.

Be Ready For the Future

Flexibility: Supply chain needs, growth markets mean change

Example: Increasingly, manufacturing and logistics are reporting up through same department head to tighten inventory control, service customers quicker. Rich Products from dedicated plant–product focus to “shared assets” view where line decisions are based on distribution/growth needs.

Nestlé Prepared Foods doing the same with Hot Pockets, putting that line into Jonesboro, Ark., plant that had been originally built for tray entrees.

Be Ready For the Future

Flexibility: Packaging increasingly important point of difference.

Example: Jennie-O Freezer-to-Oven turkey a breakthrough product, thanks to packaging innovation, plant's ability to gear up and produce (and, produce more).

Meanwhile, new retail channels want their own packaging, the grab-and-go market is critical.

Overall, packaging becoming more important point of new product distinction and success. Flexible equipment and line changeovers are critical.

Be Ready For the Future

Food safety: Avoiding microbiological product contamination now means greater controls regarding condensation, moisture throughout the entire production room . . . not just in the immediate processing zone.

Example: Worldwide Food Expo dedicated a session to this increasingly important topic. What began with processing equipment redesigns — eliminating moisture collection points — is extending to refrigeration units, piping and other equipment /surfaces in the processing room.

Be Ready For the Future

Food plant and supply chain *security*

- moving toward demonstrated abilities to track, trace and document *product/facility safety*

Continued opportunity for *productivity & efficiency* gains

- new generation of automation controls allows better employee involvement programs, analysis and problem-solving skills

Lean Manufacturing works

- I've seen Gorton's come out with a factory that's consolidated on one floor (instead of two) and producing twice as much product with no loss in flexibility

Continued importance of link between manufacturing & supply chain strategies

- manufacturing plays key role in new product development plans
- all processors trying to improve odds of success and processing's input is critical.

- Questions/Comments?

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