With special thanks to Siemens for sponsoring the research and interviews required to present this innovation special section.

SIEMENS
To some naysayers today, “CPG innovation” is an oxymoron, but in fact nothing could be further from the truth.

The breadth, depth and variety of innovation in product, formulation, packaging, manufacturing, marketing, distribution, business process, collaboration and co-invention that has characterized CPG for more than a century — and that is occurring inside hundreds of companies as you’re reading this — is nothing short of mind-boggling.

Why is it that this remarkable record — this staggering difference between our choices and those available to our grandparents or great-grandparents when they were our age — doesn’t take our breath away?

Only, perhaps, because we are, as psychologists might say, “habituated” — we have lost our sense of wonder because we live with all these options every day.

In the kitchen, flip a light switch — a new CFL, say. Open the refrigerator, the cupboard, the spice cabinet, the bread box, the storage drawers, the pantry. Look in the laundry room, the medicine cabinet, the shower stall. Peer under the kitchen and bathroom sinks. Check the desk, the toilet tank, the trash compactor. Think about the garbage bin, the broom closet, the baby’s bassinet, the bird feeder. Consider the car, the cat box, the canine cookie jar. Glance in the mirror at your smoothly shaved face, artfully enhanced eyes, youthful colored coif.

What do you see?

Everywhere you look, you — we — see CPG products that make our lives easier, cleaner, lighter, brighter, safer, better nourished, more satisfying and, in so many ways, sweeter.

What did our grandparents see? Well?

What is the difference?

The difference is a century of explosively creative response to consumer needs. In a word, innovation.

So, this year, 2008, the 100th Anniversary of the Grocery Manufacturers Association, we celebrate this astonishing CPG century with a decade-by-decade overview of a barely representative few of the thousands upon thousands of remarkable CPG accomplishments over the past 100 years — innovations that cover the CPG spectrum from products and advertising we recall from childhood to packaging and merchandising innovations remaking today’s store to business systems and processes that will serve as the springboard to CPGs future.

As this survey shows, if CPG has a creativity challenge, it is that, over the past 100 years, it has set itself such a high standard — an uphill climb for any sector.

Indeedit, after reading these pages, you, too, might well conclude that a synonym for CPG is — innovation.

In 2108, may we all look back on 100 years more.

— Carol Fensholt, Editor & Publisher
### 1910s

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1909</td>
<td>A decision in 1909 to contract with farmers for growing crops, rather than renting or leasing the land from them, assures Lakeside Foods of higher quality raw products since farmers who grow vegetables for them are now paid extra for producing higher quality, more saleable product.</td>
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<tr>
<td>1910</td>
<td>Albacore tuna is discovered in seasonal abundance off the coast of Oregon in 1910, and the Bumble Bee brand is born.</td>
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<td>1911</td>
<td>In 1911, McCormick &amp; Company becomes one of the first producers of tea in gauze pouches, introducing tea bags to the marketplace.</td>
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<td>1912</td>
<td>Crisco, the first shortening made entirely of vegetable oil, is produced by Procter &amp; Gamble in 1911. Since it doesn’t contain animal products, the shortening is suitable for vegan and kosher diets.</td>
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<tr>
<td>1913</td>
<td>Del Monte replaces hand-soldered containers with “sanitary” three-piece cans in 1911, ushering in the era of modern, mechanized canning.</td>
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<td>1914</td>
<td>In 1913, the National Biscuit Company introduces the Oreo cookie. The innovative combination of two chocolate cookie disks with a crème filling goes on to become the best-selling cookie in the U.S.</td>
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### 1910s Companies

- **Del Monte Foods**
- **3M**
- **McCormick**
- **Smuckers**
- **Del Monte Foods**
- **Kraft**
- **Clorox**
- **Morgan Foods**
- **Wholly**

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### Additional Information

- **Richard G. Wolford**, Chairman, President and CEO, Del Monte Foods, stated in 2007: "In fiscal 2007, we improved our innovation process. We have enhanced our ability to take creative concepts and turn them into successful products that capitalize on our branded portfolio and reflect the marketplace trends we have identified.”
In the early 1920s, a cooperative is formed that makes butter from fresh, sweet cream instead of sour cream, and sells it in one-pound packages with individually wrapped sticks instead of in tubs. In 1924 a contest is held to name the product, and the brand Land O’Lakes – a tribute to Minnesota’s sparkling lakes – debuts.

Lever Brothers launches its Clean Hands Campaign. Part of a child health policy, it educates children about dirt and germs and encourages them to wash their hands “before breakfast, before dinner and after school.”

In 1924, Mars introduces Milky Way, the first of three candy bars that become part of America’s confectionary culture. Three Musketeers and Snickers follow in the next decade.

Clement Pappas initiates cranberry processing in 1925 and pioneers the commercial production of cranberry sauce.

After studying Eskimos in the Arctic and observing that food which is rapidly frozen at extremely low temperatures retains its freshness and flavor, Clarence Birdseye forms the General Seafood Corporation (a predecessor to Birds Eye Foods) and unveils his “Quick Freeze Machine” in 1926. He then focuses on marketing, entering into a joint venture to make refrigerated grocery display cases for his products.
The modern system of brand management is developed by Procter & Gamble in the early 1930s and remains the standard for consumer product companies today. The system calls for one person to be in charge of a brand and head up a team to market it.

In the 1930s, the Tasty Baking Company, looking to capitalize on the country’s penchant for economy, launches individually-packaged, lunchbox-sized pies. At a nickel a piece, Tastykakes are immediate hits.

Three cranberry growers who want to expand the market for their crop come up with a new and innovative product made from cranberries, introducing Ocean Spray Cranberry Juice Cocktail in 1930. A schoolteacher decides to supplement his $65 monthly salary in 1933 during the Great Depression by selling pepper seeds. Now America’s largest producer of pimentos and bell peppers, Moody Dunbar vegetables are fresh processed from proprietary seed stock and employ proprietary roasting methods to carmelize the natural sugars and give them a smoky, sweet flavor.

In 1934, Campbell Soup introduces Chicken Noodle and Cream of Mushroom soups, varieties that continue to be two of the company’s three top-selling soups sold to this day. The third is Tomato soup, which debuted in 1897.

“Virtually every consumer product company talks about innovation. The hard part is turning the talk into meaningful results. Our product innovation process has been completely reinvented. It results in rapid identification and development of fewer, bigger and better ideas. Our innovation parameters are quite clear: Ideas that are sticky... ideas that expand our margins... ideas that play our inherent strength in health and wellness... ideas we can own, arising from unique technologies we protect.”

Gary M. Rodkin, President, CEO and Director, ConAgra Foods
In 1936, Oscar Mayer & Co. rolls out the Wienermobile, an early mobile marketing vehicle that promotes the company's hot dogs.

The world's first instant coffee is developed by Nestlé in 1937 and branded Nescafé (a combination of Nestlé and café). It becomes a staple beverage of the U.S. armed forces during World War II.

McCormick & Company develops new metal containers for its spice line in 1937. The innovation wins seven national packaging awards for the company over the next two years.

E & J Gallo Winery's commitment to protecting the land and enhancing wildlife habitat through sustainable agricultural practices originates with the Winery's co-founders in the late 1930s. In 2005 the company is recognized as the first U.S. winery to receive the International Standards Organization's ISO 14001 certification, a status created to assist companies in reducing impacts on the environment.

The J.M. Smucker Company's apple butter jar receives The Wolf Award in 1939 at the National Packaging Show for best packaging.

Niche marketing makes its first appearance when Pepsi-Cola Co. President Walter S. Mack makes an historic marketing decision: to hire Pepsi's first black salesmen to target black consumers. Blacks were then a consumer market totalling $8 billion, yet most corporations never considered the demographic in their selling efforts. Mack's hiring of Herman T. Smith as its first black salesman was so unusual it was noted in the March 18, 1940 edition of The New York Times.

“The twin pillars of success over the 116-year existence of Hormel Foods have been “Innovation” and “Quality.” Innovation includes the creation of flavorful and convenient products by teams of employees, and it also includes technological innovation aimed at enhancing food safety, improving work processes and streamlining customer service, among other things.”

Jeffrey M. Ettinger, Chairman, President and CEO, Hormel Foods
In 1941, Mars introduces M&M’s, which become a convenient snack for the U.S. armed forces during World War II because the candy wouldn’t melt in changing climates.

1941

Rich Products opens its doors in 1945 when Robert E. Rich revolutionizes food processing by discovering that the soybean can be frozen, thawed and whipped. This leads to the introduction of the world’s first non-dairy whipped topping, Rich’s Whip Topping.

1945

Grupo Bimbo begins operations in Mexico City in 1945 and goes on to become one of the most important bakeries in the world due to its production, volume, sales and brand positioning of over 5,000 products. A major innovation is adding vitamins and minerals to its products.

1946

The first heavy-duty synthetic laundry detergent quickly becomes the dominant brand in the category. Procter & Gamble introduces Tide in test markets in 1946 and begins national distribution three years later.

1948

Dial is the first deodorant soap developed in the U.S. introduced in the Chicago market in 1948, the name Dial is chosen because the soap advertises “around the clock” protection against the odor caused by perspiration.

1949

A St. Louis inventor develops a special aerosol valve and creates Reddi-wip real whipped cream in 1948. ConAgra Foods expands to national distribution in 1954.

1954

In 1954, C.A. Swanson & Sons develops the first TV dinner consisting of turkey, cornbread dressing and gravy, buttered peas and sweet potatoes. The initial production order — considered a gamble — is for 5,000 frozen dinners that come in a box resemble a TV and retail for 98 cents. Swanson sells 10 million the first year.

1955

There were no fluoride toothpastes before Procter & Gamble introduced Crest in 1955. The American Dental Association soon recognizes Crest as effective in preventing tooth decay, and it becomes the leading brand in the category.

1956

Bush Brothers expands beyond its core baked bean products by developing canned, southern peas in 1955.

1957

In 1954, Daniel Servitje, CEO, Grupo Bimbo
“We take a global approach to innovation, expanding and adjusting our portfolio to meet consumer needs around the world. More than 270 new products or adaptations of other successful products were introduced in 2007 alone.”

David Mackay, President, CEO and Director, Kellogg Company

“Innovation is an essential component of our long-term growth strategy. We know Sara Lee’s future success will depend on our ability to keep the product innovation pipeline full of exciting new ideas that cater to real consumer needs.”

Brenda C. Barnes, Chairman and CEO, Sara Lee Corporation
### THE CPG CENTURY

#### Innovation

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1970</td>
<td>Rich Products signs a 25-year deal in 1972 which gives it naming rights to the Buffalo Bills brand new football stadium. It is one of the earliest examples of the sale of naming rights in North American sports.</td>
</tr>
<tr>
<td>1972</td>
<td>S.C. Johnson makes the bold move in 1975 to voluntarily and unilaterally eliminate chlorofluorocarbons (CFCs) from its aerosol products, such as Raid insect spray, three years before the U.S. mandate.</td>
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<tr>
<td>1975</td>
<td>In 1978, Red Gold revolutionizes the tomato industry by adopting the use of coreless tomatoes, which were first developed four years earlier.</td>
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<td>1976</td>
<td>Dr. Anthony J.F. O'Reilly becomes President and CEO of Heinz in 1979, launching an era in which the company becomes a leader in the nutrition and wellness revolution, and penetrates such challenging markets as South Africa, Russia, the Czech Republic, Hungary, South Korea, China, India, Egypt, Botswana and Zimbabwe.</td>
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<tr>
<td>1979</td>
<td>Backed by a $100 million advertising campaign, the Coca-Cola Company in 1982 introduces Diet Coke which eventually becomes the top-selling soft drink in the U.S.</td>
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<td>1981</td>
<td>Kimberly-Clark Corporation introduces Depend incontinence products. The first television ads air in 1981 with actress June Allyson encouraging people to “get back into life.”</td>
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<tr>
<td>1982</td>
<td>Consolidated Foods Corporation changes its name to Sara Lee Corporation in 1985 to reflect its consumer marketing orientation. In 1988, the corporation reaches the $10 billion sales mark.</td>
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<tr>
<td>1985</td>
<td>Oscar Mayer Lunchables debuts in 1988 and kicks off the lunch combinations category in the U.S. Kraft goes on to develop innovative varieties of these convenient meals, including pizza, taco, breakfast selections and better-for-you chicken dunks.</td>
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<tr>
<td>1988</td>
<td>Red Gold installs the first state-of-the-art evaporator in its plant in 1988, allowing it to concentrate tomato puree at a lower temperature than traditional atmospheric cooking, resulting in tomato products with consistent color, texture and flavor.</td>
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</tbody>
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**Heinz** is well-positioned for consistent growth in sales and profits as we continue to develop innovative healthy, great-tasting and convenient foods across our core categories and geographies where we have leading brands and strong infrastructure.”

William R. Johnson, Chairman, President and CEO, H. J. Heinz Company

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**“The greatest challenge for any business leader is we cannot see the future. Our greatest responsibility is that, nevertheless, we must make wise decisions not just for our companies, but for future generations.”**

H. Fisk Johnson, Chairman and CEO, SC Johnson

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**Church & Dwight is the sole corporate sponsor of the first Earth Day in April 1970, and later that year introduces Arm & Hammer Powder Laundry Detergent, the first non-phosphate detergent.**

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**Rich Products signs a 25-year deal in 1972 with actress June Allyson encouraging people to “get back into life.”**
Fairbault Foods celebrates its 100th anniversary with the construction of a new warehouse at Fairbault Industrial Park in 1995.

In 1996, Dean Foods pioneers the refrigerated soymilk category with the introduction of Silk.

Knouse Foods receives the DuPont Award for “Excellence in Packaging” as well as DuPont’s top Diamond Award in 1998 in recognition of its 46-ounce, plastic easy-grip apple sauce container.

Unilever starts the 21st century by launching two initiatives: Path to Growth, a concentration on innovation and brand development on a focused portfolio of 400 brands (down from 1,600), and followed in 2004 by Vitality, a mission “to meet everyday needs for nutrition, hygiene, and personal care with brands that help people feel good, look good, and get more out of life.”

Procter & Gamble launches a “connect and develop” model for new products as an alternative to innovation from within. The company collaborates with suppliers, entrepreneurs and others, looks throughout the world for technologies, ideas and products with potential, then develops, improves and markets them.

Kimberly-Clark Corporation opens an Innovation Design Studio equipped with advanced virtual reality technology that enables the company to test merchandising layouts and chart a shopper’s product choices without building physical mockups or conducting in-store surveys.

Ralston Foods is the industry leader in private label ready-to-eat and hot cereals, supplying over 50 varieties that compete with national brands in terms of taste, appearance and nutrition.

Georgia Pacific begins using its Packaging Systems Optimization (PSO) calculator in 2002 to help its customers reduce total packaging costs while achieving greater sustainability with a short lead time. Over $180 million in annual savings are identified by computing potential savings in terms of raw material cost, energy consumption and greenhouse gas emissions (GHG).
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<tr>
<td>2003</td>
<td>Kraft works with Safeway Stores using a new collaboration process developed by IDEO, a global design and innovation firm. They create a cross-functional team that improves Safeway's stock position through a redesigned supply chain and alignment between the trading partners. In one category, Kraft experienced a 162% sales increase.</td>
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<tr>
<td>2003</td>
<td>Campbell Soup deploys breakthrough gravity-feed shelving in supermarkets in 2003. The unique system groups soups in a highly-visible and efficient way and makes it easier for shoppers to find and select their favorite varieties.</td>
</tr>
<tr>
<td>2004</td>
<td>In 2004, Kraft introduces a line of South Beach Diet (now called South Beach Living) products developed by Arthur Agatston, author of the best-selling book, &quot;The South Beach Diet.&quot; The products meet consumer interest in eating the right combination of carbs and fats from a variety of foods.</td>
</tr>
<tr>
<td>2004</td>
<td>PepsiCo introduces the Smart Spot on packaging in 2004 to help consumers identify food and beverage choices that contribute to a healthier lifestyle. The spot is placed on some 250 products, including Tropicana Pure Premium, Gatorade Thirst Quencher, Baked! Lays, Potato Crisps, Quaker Oatmeal, Diet Pepsi, and Life Cereal.</td>
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<tr>
<td>2005</td>
<td>Kraft wins the first GMA CPG Award for collaborative supply chain redesign with Safeway, then the nation’s fifth-largest retailer and recipient of some 300 million pounds of Kraft product annually. Facilitated by Palo Alto, CA-based design firm Ideo, the effort sought to improve customer collaboration and alignment. Results: a 162-percent year-to-year increase in total sales of one featured category, a seven-percent improvement in full pallet shipments, new-product speed to retail cut 50 percent, new innovation tools and a “true partnership.”</td>
</tr>
<tr>
<td>2005</td>
<td>Campbell Soup Co. wins the GMA CPG Award for its center-store category turnaround of soup, a multipart effort to redefine soup as a much-larger “simple meals” category starting in 2002. The new approach, “Integrated Category Planning,” shifted the entire company’s thinking from a brand focus to a mega-category focus, reversing a 30-year decline in condensed soups and incremental sales from new convenience- and health-oriented packaging, products and merchandising.</td>
</tr>
<tr>
<td>2006</td>
<td>Sara Lee Foods establishes an ongoing R&amp;D relationship with Purdue University in 2006 by launching the Sara Lee Innovation Award, an opportunity for college students to win $10,000 by providing the company with an innovative idea or product with the potential to enter the marketplace.</td>
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</tbody>
</table>
Clorox wins a 2008 GMA CPG Award for Green Works, the first line of natural cleaners developed by a major CPG company. Products in the line, made from plant-based ingredients, are as effective as conventional cleaners. Clorox also announces another first – an alliance with the Sierra Club. The oldest, largest and most influential grassroots environmental group in the US will counsel and guide Clorox on its journey to becoming a more sustainable company.

Kettle Foods wins a 2008 GMA CPG Award for the marketing creativity of its “People’s Choice” campaign consumer Internet voting for their favorite Kettle Foods chip, which gets fans to connect with the brand in a new way.

Masterfoods USA, Wm. Wrigley Company and Time/Warner Retail win the 2006 GMA CPG’s Award for collaboration on research identifying a $2 billion industry opportunity from better checkout merchandising; and that failure to adequately merchandise front end results in losses averaging $100,000 per store per year.

In 2007, Furmano Foods bases its product and packaging innovations on collaboration and sees a sales lift of its tomato sauce when it moves from a red to a yellow label. How? By placing prototypes in the retail aisle to determine which label stands out on the shelf.

Unilever wins GMA's 2007 CPG Award for its groundbreaking collaboration with Ahold. Unilever and Ahold worked together to unite multiple marketing and merchandising personnel inside Ahold, spanning over 20 categories. This broad team ensured that out-of-store and in-store programming met shopper needs — and were well-executed across more than 1,000 stores. Result: Shopper trips to the store rose 90 percent, multiple category buying rose 80 percent, sales per trip rose 25 percent, and total store sales rose by 138 percent.

Unilever becomes the first major fast-moving consumer products company to target a new standard in carbon reduction by launching Carbon 20 in 2007, a revolutionary program aimed at reducing its total carbon footprint by 30% per unit by the year 2020. This “cradle to grave” approach across the entire product life cycle measures not only the carbon impact of raw and packaging materials, manufacturing, logistics and distribution, but also consumer use of products, where the greatest carbon impact can occur.

In 2007, Sunny Delight Beverages responds to consumer expectations for fresher tasting, more wholesome products by launching Fruit Simple, a 100% juice smoothie designed to provide two full servings of fruit in every 8-ounce glass, and Sunny D 100% Juices – an all-natural, no-sugar-added line of chilled juices with no added preservatives.

We use high levels of brand investment and innovation to nurture our Power Brands to above industry and company average growth rates. Our innovation rate at almost 40% of net revenue from products that launched in the prior three years strengthens the positions of our Power Brands within their categories, continually enhancing their consumer appeal. These innovations are then supported with a marketing investment that is amongst the highest in our industry – with our media investment alone running at 12.4% of net revenues.

Bart Becht, CEO and Director, Reckitt Benckiser
Congratulations to members of the Consumer Packaged Goods industry on 100 years of innovation. Siemens PLM Software is proud to be a part of this milestone and we look forward to being a part of this industry’s successful innovation for the next 100 years.

About Siemens PLM Software
Siemens PLM Software, a business unit of the Siemens Industry Automation Division, is a leading global provider of product lifecycle management (PLM) software and services with 5.5 million licensed seats and 51,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software’s open enterprise solutions enable a world where organizations and their partners collaborate through Global Innovation Networks to deliver world-class products and services. For more information on Siemens PLM Software products and services, visit: www.siemens.com/plm/consumerproducts