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# Soy-based Food and Drink

Despite lagging sales and lack of FDA approval for health claims, the soy industry is far from giving up. Recent innovations promise to revitalize and reinvigorate consumers' interest in soy-based products.

Marcia Mogelonsky, Contributing Editor

ales of soy-based energy bars, dairy alternatives (soy milk, cheese and yogurt), frozen and refrigerated meat alternatives and other soy-based foods (cold cereal, frozen entrées and pizza) increased 41% between 2001 and 2006 to \$1.7 billion. Adjusted for inflation, this represents an increase of 24%.

The sales increase is impressive, and many consumers have begun to view soy as an alternative to animal-sourced products that they would rather not eat. However, the soy market is maturing: soy food and drink had a "growth spurt" between 2001 and 2003 as better technology and product innovation led to increased

as better technology and product innovation led to increased availability of a range of soy-based foods. However, growth slowed significantly between 2004 and 2006. In fact, sales of soy products declined 1.8% between 2004 and 2005; it is estimated that sales will increase less than 1% between 2005 and 2006.

#### **Potential Health Benefits Lured Many Shoppers**

Considering the attention given to soy as a "functional" or "health" food in the late 1990s and early 2000s, the decline in sales over the past two years is notable. A number of issues have contributed to the situation. Consumers were originally drawn to the products for health and wellness benefits. One of the main claims put forward by the soy industry—that soy could serve as a natural estrogen replacement—has not yet

Dean Foods' Silk, which controls more than half of the soy milk market, was the first soy milk to find a permanent place in the refrigerated dairy case beside dairy milk products.



received FDA approval, as current clinical trials have been inconclusive.

The soy-as-natural-estrogen concept resonated among an aging female Baby Boomer population that was seeking a non-pharmacological answer for

its menopausal symptoms. Without FDA backing and solid scientific proof, soy products began to lose favor with this major portion of the population. This explains (at least in some part) the slowing of soy sales in the second half of the review period.

#### Heart Health is a Major Driver

While soy health claims have not always been supported by enough data to gain FDA support, there is good health news about soy and health: the FDA does allow claims relating the product to heart health. Manufacturers are allowed to label foods containing soy with the following claim: "25g of soy protein a day, as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease." Considering that heart disease is the leading killer of adults in the U.S., soy products should have an important position in consumers' health and wellness plans.

Category	2001	2002	2003	2004	2005	Change 2001- 2005 %
Bakery	19	4	15	37	32	68.4
Beverages	38	18	35	39	20	-47.4
Breakfast cereals	14	5	10	9	14	0.0
Dairy	68	34	34	34	17	-75.0
Desserts & ice cream	2	12	20	21	3	50.0
Meals & meal centers	22	35	31	30	12	-45.5
Processed fish, meat & egg products	52	32	16	56	19	-63.5
Side dishes	13	21	10	18	7	-46.2
Soup	10	0	1	8	1	-90.0
Total	238	161	172	252	125	-47.5

Heart disease is especially a concern for consumers aged 65 and older. As the population ages, heart health concerns will become more of an issue for a greater number of people as they enter an age group that is more likely to suffer from some type of heart disease or stroke. Between 2000 and 2005, the number of people over the age of 65 increased by 4.6%. From 2005 to 2010, the number of those over 65 will increase by 9.7%. Those who are not 65, but approaching it, will want to decrease their risk of heart disease, heart attacks and stroke as much as possible. By 2010, over

38% of the population will be over 45, a large group that will be cognizant of heart health issues.

Scientists are looking at a number of foods that could help control heart disease. According to the Journal of the American Heart Association, both tea and dark chocolate can be beneficial to a person's heart. In May 2005, the journal published a report explaining how the flavonoids in tea can be extremely helpful to those who have recently suffered from a heart attack. A study showed patients who drank the greater amount of tea were least likely to die during

the four-year period after a heart attack.

In July 2005, the same publication recommended the daily consumption of a bar-sized serving of flavonol-rich dark chocolate to those with high blood pressure. The positive results these foods contribute, according to this credible source, suggest the possibility that tea and dark chocolate will, one day, be as recognized as oatmeal and olive oil for their heart health properties.

Soy already has the endorsement of the FDA as a "hearthealthy" food, and soy manufacturers will probably begin to leverage this claim—perhaps teaming with chocolate or tea

> manufacturers to produce "superfoods" that combine flavonoids with the heart-healthy ingredients in soy (e.g., soy milk chocolate or soy chai products).

# Food Intolerances and Allergies Spur Growth of Dairy Alternatives

Soy products have held their own—and even seen sales

increase— in the dairy alternative segment in the past two years. Soy milk sales increased 4.4% between 2003 and 2006, led by Dean Foods' Silk, which controls more than half of the soy milk market. Innovation has always been the hallmark of Silk: it was the first soy milk to find a permanent place in the



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refrigerated dairy case right beside dairy milk products. Line extensions including flavored and light alternatives also have helped boost sales.

Soy milk gained popularity in part because of its suitability for lactose intolerant consumers. According to the National Center for Health Statistics, more than 50 million people suffer to some degree from lactose intolerance.

Though researchers do not currently understand why, it appears that some individuals develop lactose intolerance as they age.

Current research (published in June 2006) suggests that food allergies and intolerances, including sensitivity to milk, may be exaggerated: according to a study published in the Journal of Allergy and Clinical *Immunology*, parents are more likely to think their infant is allergic to certain foods than is actually the case. Findings from the study showed that 54% of a group of oneyear-olds were avoiding some foods because their parents perceived them to have had reactions to ingredients such as cow's milk, wheat, eggs or additives. Overall, however, only 2% to 6% of the infants had clinically confirmed food hypersensitivity, the researchers reported.

It is not clear if this research will contribute to further declines in the soy market. Consumers who find that drinking milk results in some sort of gastric distress, whether medically supported or self diagnosed, will undoubtedly continue to turn away from dairy foods. The growth in availability of lactose-free milk (such as Lactaid) and other dairy products, and of pills that can be taken before consuming dairy to obviate the discomfort, mean that consumers do not have to give up dairy for soy. This is a detriment to the soy market.

Nonetheless, the 4.4% growth in sales of dairy alternatives points to the fact that soy milk does have a following, and new varieties of dairy alternatives (soy creamers, smoothies and yogurt) suggest there is still a place for soy in the dairy case.

#### **Vegetarians and Vegans Look to Soy**

Vegetarians generally avoid consuming any meat products, while vegans, whose eating habits are stricter, avoid any animal-sourced food including milk, cheese, eggs, meat, fish, poultry and honey. Only 10% of the population considers itself to be either strictly or usually vegan or vegetarian, according to an

exclusive survey conducted by Mintel. In that study, 7% of respondents said their diet is "usually vegetarian or vegan," and 3% said they "strictly practice some kind of vegetarian or vegan diet."

Thus, the overwhelming majority of American consumers regularly eat a diet that is animal-based. However, even omnivorous consumers may occasionally eat a meat-



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## Sales of Soy Food and Beverages Market, Segmented by Product Type, 2004 and 2006\*

	2004 \$ Million	%	2006 (est.) \$ Million	%	Change 2002-2004 %
Soy milk	551	31.2	575	33.1	4.4
Soy-based energy bars	638	36.2	565	32.5	-11.4
Soy-based meat substitutes	260	14.7	250	14.4	-3.8
Other soy-based dairy substitutes	68	3.9	71	4.1	4.4
Other soy products	247	14.0	276	15.9	11.7
Total	1,764	100.0	1,737	100.0	-1.5

\*Note that 2006 estimates based on 52 weeks ending April 16, 2006

Source: Mintel/Based on Information Resources Inc. InfoScan® Reviews Information/SPINS

free meal because they feel like something lighter and/or something they perceive to be healthier. These "occasional vegetarians" or "flexiterians" (meat-eating consumers who occasionally eat meals that are not meat-based or vegetarians who occasionally eat meat) are likely to be the major driving force behind the entire vegetarian food market, including the market for soy-based alternatives to meat and dairy, because the true vegetarian segment is not large enough to have a major impact on sales. As such, the meat-eating soy product users provide the most important target for manufacturers and retailers.

Occasional vegetarians may seek vegetarian fare because of health issues—they may be cutting back on cholesterol and substituting some of their meat intake for other proteins. They may have some dairy discomfort and therefore trade ice cream for frozen tofu or dairy creamer for soy creamer. They may also just be looking for something different in their diets.

#### Soy's Image Makeover

The quest for something different provides the impetus for food manufacturers to develop new soy-based products, from vegetarian ready meals to flavored soy milk. However, manufacturers should remember that the con-



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sumer who is searching for something different is also likely to require a constantly changing choice of products. Innovation, therefore, must be one of the major watchwords of the industry.

Soy-based bars, long flagbearers of soy products, have fallen on hard times in recent years, as sales have experienced doubledigit percentage drops. New product launches of soybased products are declining as the soy industry itself matures. According to Mintel's GNPD, new product launches of foods containing soy declined 47.5% between 2001 and 2005, with the biggest declines in such categories as dairy, beverages and meals.

For soy products to regain some traction among consumers, the category has had to escape its "health food" image to appeal to a broader group. Some products have made this leap: soy milk can be found right beside dairy milk in the refrigerated section of most supermarkets, and soy yogurt is finding its way to a similar spot beside dairy yogurt. Other products have not been as successful: while soy-based meat alternatives have had a longstanding track record among vegetarians and the "vegetarian aware," many consumers trying to cut back on their meat intake are more likely to eschew meat altogether than to substitute "real meat" for "soy meat."

This article contains information from the Mintel Reports "Vegetarian Food—U.S., July 2005" and "Soy Food and Drink—U.S., June 2006." Please visit http://reports.mintel.com for more information or call Mintel at 312-932-0400.

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