



A farmer-led organization comprised of 68 farmer-directors, the United Soybean Board oversees the investments of the soybean checkoff of all U.S. soybean farmers.

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[www.soyconnection.com](http://www.soyconnection.com)

I'm trying to maintain a healthy weight.

I heard it's good for your heart.

Soy milk is the soy product I like.

What is Trans Fat anyway?

Omega-3s are good for me.

I cook with vegetable oil - that's soybean oil, right?

I don't know if I can afford to eat healthy.

I'd prefer products with zero trans fat.

Is there such a thing as good fat?

I care about calories.

How do I know which one is healthier?

I hear about the benefits of soy all over the place.

16th Annual  
**CONSUMER ATTITUDES  
ABOUT NUTRITION**  
Insights into Nutrition, Health & Soyfoods

**UNITED SOYBEAN BOARD**

16th Annual Survey

# CONSUMER ATTITUDES ABOUT NUTRITION

2009

## INTRODUCTION

This 16<sup>th</sup> annual nationwide survey provides vital information on consumer attitudes and perceptions about health and nutrition issues. Sponsored by the United Soybean Board (USB), this report takes an in-depth look at:

- Nutrition attitudes and their effect on purchasing decisions
- Nutritional habits and obesity concerns
- Consumer awareness of health benefits regarding soy products
- Attitudes about different types of fat and oils
- Restaurant and home consumption of soy

## METHODOLOGY

The United Soybean Board conducted the first Consumer Attitudes about Nutrition study in 1994. Over the years, this annual survey has become more detailed to address current topics of interest to the food industry. As such, we have provided multiple years of trending data, where available.

This year represents the fourth year we have adopted an online self-administered survey as our methodology, a significant change from telephone interviews conducted in previous years. The survey, conducted by an independent research firm in January 2009, includes 1,009 random surveys, providing a sample that is consistent with the total U.S. population. The study's margin of error remains +/- 1.9-3.1 percent, with a confidence interval of 95 percent.

Results are generally quite comparable between methodologies. However, when presented with comparisons between 2006 to 2009 data and previous years, we recommend that the reader view the data for general trending purposes rather than for specific market shifts.

## ABOUT USB

The United Soybean Board serves as a resource for soybean-related educational materials. Healthcare and food professionals can utilize this study and other USB resources when making decisions on consumer nutrition. Please visit [SoyConnection.com](http://SoyConnection.com) to view soybean oil innovation news, up-to-date health research, recipes and the *Soy Connection* newsletter.

You can also visit [SoyBoom.com](http://SoyBoom.com) for information and resources specific to the 76.4 million American Baby Boomers (aged 43-61) dealing with concerns of healthy aging.

**UNITED SOYBEAN BOARD**

A young woman with short brown hair, wearing a dark green long-sleeved top, is smiling warmly. She is holding a white shopping list and a black pen, appearing to be in a grocery store's produce section. The background is filled with various fresh vegetables like cabbages and leafy greens.

Most consumers  
(88 percent) find  
nutrition important  
when purchasing food  
at the grocery store.



Despite the ailing economy, 54% of U.S. consumers report they are willing to pay more for healthy or healthier versions of food. Among those who aren't willing to pay more, over half confirm the reason is financial, not lack of interest.

## GENERAL NUTRITIONAL ATTITUDES & BEHAVIORS

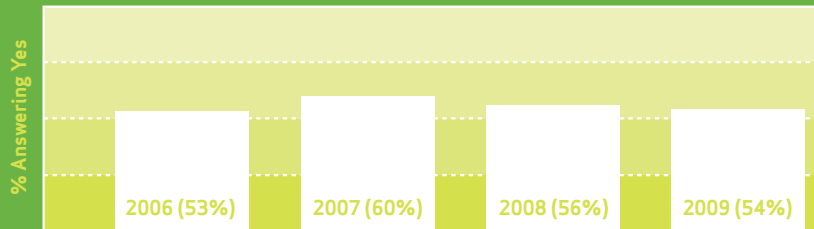
Americans overwhelmingly say they are trying to choose foods that maximize nutrition and health. In 2009, 87 percent express concern about the nutritional content of the food they eat, a number that has remained consistent over the last 11 years. Three out of four have changed their eating habits in the past three to five years due to health concerns.

Most consumers (88 percent) find nutrition important when purchasing food at the grocery store. Although 48 percent of U.S. consumers feel information about health and nutrition is too confusing, 88 percent review the Nutrition Facts panel when deciding what foods to purchase. This number is down from 91 percent in 2008.

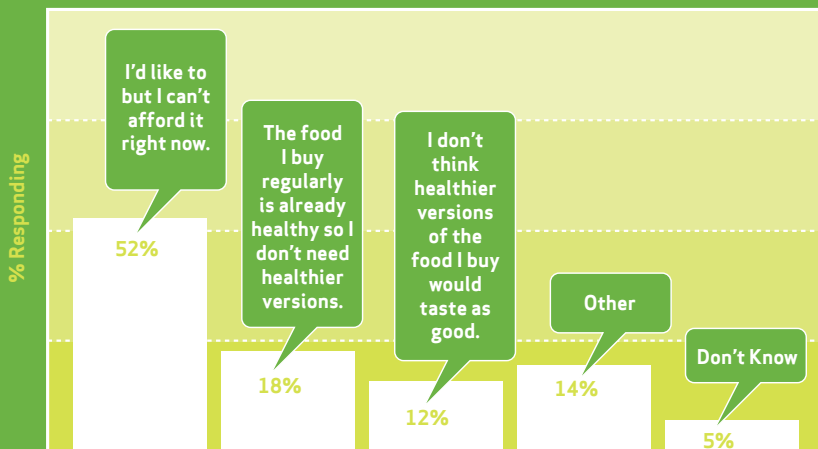
Consumers reviewing the panel seek out total calorie content most frequently (16 percent), followed by total fat (11 percent). Of those consumers who pay attention to trans fat on the Nutritional Facts panel (8 percent), significantly fewer cited trans fat as "bad for you" as their reason for doing so (48 percent in 2009 compared to 69 percent in 2008) while more cited their interest in "watching fat intake" (10 percent in 2009 compared to zero percent in 2006 to 2008).

Sodium, carbohydrate, saturated fat and calories from fat also came in at 8 percent, with sugar and preservatives at 7 percent. With a notable exception of diabetics watching carbohydrate and sugars, most consumers focused on overall health maintenance (including weight management) rather than responding to a specific health condition.

### WILLINGNESS TO PAY MORE FOR HEALTHIER FOODS



### REASONS FOR NOT WILLING TO PAY MORE FOR HEALTHIER FOODS 2009





Over half of Americans believe soy-based foods can play a role in reducing obesity.

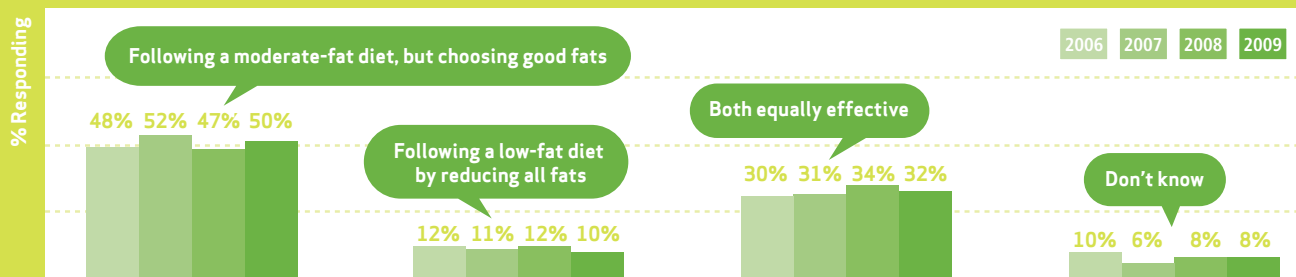
## OBESITY CONCERNS

In 2009, Americans say the top two causes of obesity in America are the fast-food industry and individuals themselves, each mentioned by about one-quarter of consumers (26 and 24 percent, respectively). This year, an increasing number of consumers also mentioned bad habits/poor nutrition (12 percent) and advertising (5 percent) as causes.

## STRATEGIES FOR IMPROVING OVERALL HEALTH

This year, significantly more consumers realize there is a distinction between the health effects of different types of fat. Fifty percent believe the most effective strategy for improving overall health is to follow a moderate fat diet but choose “good” fats over “bad” fats, rather than adopt an overall low-fat diet by reducing all fat intake (10 percent).

### EFFECTIVE STRATEGIES FOLLOWED FOR IMPROVING OVERALL HEALTH



Soy's health benefits are numerous, starting with soy protein's ability to directly lower LDL ("bad") cholesterol. Research suggests soy protein may help prevent certain cancers, promote bone health, alleviate symptoms of menopause and play a role in weight management. Many soyfoods are relatively low in saturated fat, contain zero grams of trans fat and no cholesterol, while rich in vitamins and minerals including folate, potassium and, in some cases, fiber.

Approximately one-third of U.S. consumers seek out products containing soy.



## SOYFOODS AND HEALTH PERCEPTIONS

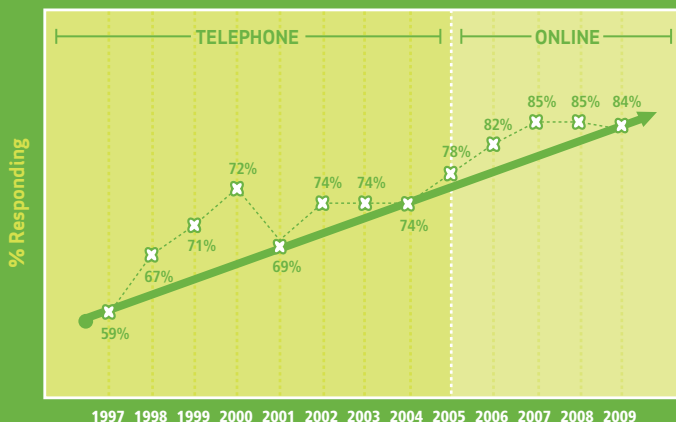
In 2009, 84 percent of consumers rate soy products as healthy. While down a point from 2008 – a statistically negligible difference, this nevertheless reflects a dramatic increase of 25 percentage points over the last 12 years.

Thirty percent of consumers seek out products specifically because they contain soy, and approximately 31 percent are aware of specific health benefits of soy in their diet. On an unaided basis, consumers mention the following specific health benefits of soy most: low in fat (19 percent), source of protein (18 percent), reduces risk of heart disease (18 percent), lowers cholesterol (13 percent) and good for you (12 percent).

On an aided basis, consumers are most aware of the health benefits of soy in relation to weight management (31 percent), reduced risk of heart disease (27 percent) and reducing the risk of some cancers (20 percent).

Only one in ten Americans has any negative association with soy's health profile, consistent with past years' results.

### AWARENESS OF SOY AS HEALTHY



**Consumers depend on soybean oil – commonly marketed as vegetable oil – as one of their two most frequent cooking oils and three most “very healthy” oils.**



## COOKING AND SALAD OIL IMPRESSIONS

Consumers recognize olive oil (89 percent), flaxseed oil (72 percent), canola oil (70 percent) and soybean oil (69 percent) as the healthiest oils. Sunflower ranks fifth (65 percent), followed by safflower (62 percent). Each of these experienced a slight increase or is on par with 2008 levels, and soybean oil went up a percentage point. Consumers rate soybean oil as the third most “very healthy” oil, behind olive and flaxseed oils.

As in past years, soybean oil – commonly marketed as vegetable oil – is second only to olive oil in terms of cooking oil used most frequently.

Consumers continue to perceive soybean oil as a healthy cooking oil. Sixty-one percent of Americans are aware of soybean oil as cooking oil (up four percent from 2008) and 84 percent think soybean oil is very or somewhat healthy. This suggests product development opportunities, as consumers are doing more at-home eating and entertaining in 2009.

**In the coming years, enhanced soybean oil varieties, such as increased oleic, low-saturate and increased omega-3 traits, will be available to food companies for better-for-you product formulation, potentially influencing this trend of increased consumer awareness.**

## SOY IN THE MEDIA

Among consumers aware of the health benefits of soy, respondents state that they usually gather their information from the Internet (42 percent), television (41 percent), magazines (40 percent) or word-of-mouth (34 percent).

### Sources Of Health And Nutrition Information\*

## THEN & NOW

	1994	2008	2009
Magazines	25%	38%	40%
Television	25%	48%	41%
Newspapers	12%	30%	28%
Doctor/Other Health Professional	12%	20%	16%
Family & Friends	6%	33%	34%
Internet	--	41%	42%
Radio	10%	9%	7%

\* All others mentioned 6% or less.

**Consumers’ primary sources for health information have changed dramatically since the first year of research and also even from just 2008.**

## FDA- APPROVED HEALTH CLAIM

One-third of consumers (33 percent) say they are aware of the FDA-approved health claim that consuming 25 grams of soy protein per day reduces the risk of coronary heart disease. Ninety-four percent either agree with the health claim or would like more information, a number that has remained consistent over the last four years.

Fifty-nine percent of Americans would be more likely to purchase products reformatted to eliminate trans fats.



## CONSUMER ATTITUDES ABOUT FATS

Despite an interest in choosing “good” fats over “bad” fats, most U.S. consumers have a hard time pinpointing the healthier choices. Only 29 percent of Americans recognize polyunsaturated fats as healthy, and 32 percent recognize monounsaturated fats accordingly.

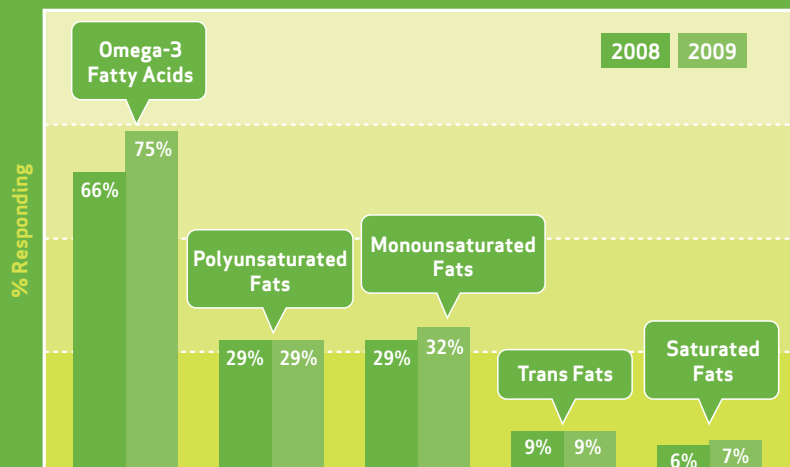
Heart-healthy omega-3 fatty acids remain the only type of fat that consumers rate more healthy than unhealthy. In 2009, significantly more Americans consider omega-3 fatty acids very or somewhat healthy (75 percent, up 9 percent from 2008 and up 13 percent from 2006). While fish oil is the preferred source of omega-3s due to bioavailability, soybean oil is the principal source of omega-3s in the American diet.

In a direct comparison between harmful types of fats, more consumers say that saturated fats are healthier than trans fats; however, the gulf in perception has narrowed each of the last three years, suggesting a need for food companies to develop products low in both of these fats. Choosing saturated fats as healthier has dwindled from 42 percent in 2007 to 35 percent in 2009.

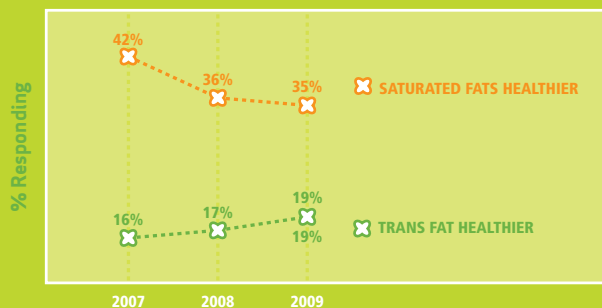


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### FATS CONSUMERS VIEW AS VERY/SOMEWHAT HEALTHY



## PERCEIVED HEALTHINESS OF SATURATED FAT VS. TRANS FAT



## TRANS FAT AWARENESS AND OPINION

Sixty-nine percent of Americans view trans fat as very unhealthy, a significant decrease from 75 percent in 2007 but on par with 2008 data. Looking at the long term trend, this represents a dramatic increase from 2000, when only 38 percent viewed trans fat as very unhealthy.

Over half of all consumers (54 percent) are aware of media coverage about trans fats, on par with 2008 and a significant decrease from 2007 (65 percent).

When asked what specific stories consumers recalled about trans fats in the media, 45 percent cited obesity and weight concerns (up from 41 percent in 2008 and 33 percent in 2007) despite the fact that scientific research into trans fats' effects has focused on heart disease.

A declining percentage of Americans say they are very unlikely to purchase foods with trans fat listed on the Nutrition Facts panel (41 percent in 2009 compared to 45 percent in 2007). However, 59 percent of consumers continue to say they would be more likely to buy a product that they currently enjoy if the food company reformulated the product in order to list zero grams of trans fat on the product label.

### Awareness Of News Media Coverage Of Trans Fats

#### SPECIFIC STORY

	2006	2007	2008	2009
<b>Sample</b>	<b>(426)</b>	<b>(650)</b>	<b>(540)</b>	<b>(542)</b>
May cause obesity/weight problems	45%	33%	41%	45%
Increases risk of coronary heart disease	11%	12%	10%	11%
Cities (such as NYC) banning trans fats in restaurants	–	20%	11%	10%
Restaurants removing trans fats	–	17%	12%	9%
Advice to avoid/limit them in diet	4%	4%	5%	6%
Companies trying to eliminate from foods	3%	7%	5%	5%
Don't know/Refused	18%	10%	16%	11%

All others mentioned by less than 3%

## Top 20 Soy Products By Awareness

# SOY PRODUCTS

Soy milk	89%
Soybean oil	61%
Tofu (unspecified variety)	56%
Soy veggie burger	53%
Soy nuts	43%
Soy protein bars	41%
Soy latte/soymilk in espresso drinks	37%
Cereal bar/energy bar	34%
Dried or canned soybeans	31%
Soy yogurt	30%
Soy ice cream/cheese	30%
Edamame	30%
Miso	27%
Soy hot dogs	26%
Flavored/marinated tofu	26%
Soy supplements	22%
Soy flour	21%
Soy breakfast cereal	20%
Textured soy protein	14%

All others mentioned by 14% or less.



A wide range of soy products have entered the marketplace, allowing consumers more options and occasions for consuming soy.

## AWARENESS & USAGE OF SOY PRODUCTS

Thirty-two percent of Americans consume soyfoods or soy beverages once a month or more, on par with 2006 through 2008. For the sixth year in a row, consumers reported the most familiarity with soymilk, soybean oil, tofu and soy veggie burgers.

Soymilk continues to be the most regularly consumed soy product, with nearly one-quarter of Americans reporting they drink it regularly. For comparison, in 1999, 18 percent of consumers reported that they had tried soymilk. By 2009, the number of consumers who have tried soymilk has more than doubled to 42 percent of all consumers.

Emerging soyfoods are capturing consumer interest as well, as they become widely available to U.S. consumers. For example, edamame trial increased from 3 percent in 2000 to 17 percent in 2009.

## RESTAURANTS AND SOY PRODUCTS

More Americans are ordering soy veggie burgers, edamame and tofu in restaurants, compared to 2008 levels. Of consumers who order soy products in restaurants, most choose soy veggie burgers (20 percent, up 8 percent), tofu (19 percent, up 5 percent), edamame (18 percent, up 4 percent) or soymilk (16 percent).

One-quarter of consumers eat soyfoods at home but rarely order soy in restaurants because they say soyfoods are not available. This represents a menu development opportunity for restaurants.

## OCCASION PREFERENCES FOR CONSUMING SOY

Dinner remains the most popular meal time for consuming soy products (38 percent). Other respondents cite their favorite occasion for eating soy as breakfast (32 percent), lunch (20 percent), mid-afternoon snacking (16 percent), late evening snacking (10 percent), mid-morning snacking (9 percent) and desserts (6 percent).

Over one-half of consumers are interested in a ground meat and soy combination product, with beef as the meat of preference (65%).

## CONSUMER INTEREST IN GROUND MEAT/SOY PRODUCT

