

Increasing Food Production Megatrend

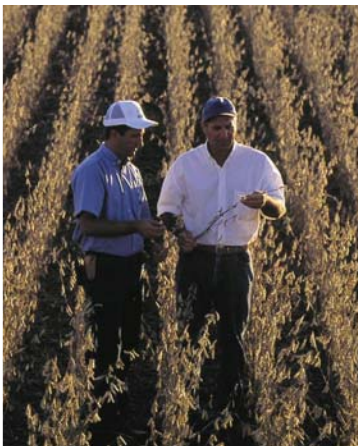
Providing abundant, safe and nutritious food for a growing global population



Pioneer® Brand Seeds

Improving crop yield to help feed a world facing food shortages.

» [Learn More](#)



Crop Protection

Helping to improve agriculture's sustainability and productivity through efficient use of technology.

» [Learn More](#)



Packaging

DuPont products help protect food from spoilage and contamination.

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The Challenge

According to the United Nations, agricultural output will need to double and food production will need to increase by 70 percent by 2050 to adequately feed the expected global population of 9 billion people. Sustainable, increased productivity will need to occur as available arable land and resources shift, remain unchanged, or in some areas, decrease.

The demand for food is expected to grow as a result of both population growth and rising incomes. In the last 10 years alone, global population has increased 13 percent and global incomes have grown by 29 percent, leading to higher protein consumption and healthier diets. During this same period, global crop area harvested has grown only 8 percent.

Worldwide, more than one in six people are malnourished. Even for those people who are consuming sufficient calories, as many as half of them are considered to be lacking suitable amounts of essential nutrients, vitamins and minerals to ensure good health.

The DuPont Value Proposition

DuPont is uniquely positioned to increase global food production across the value chain by boosting crop yield through advanced seed genetics, agronomic practices and product innovations that help farmers maximize productivity and quality; advancing the nutritional content derived from crops such as soybeans, while increasing accessibility to these products; supplying innovative packaging to preserve food quality; and developing efficient quality-testing systems to ensure a safe food supply.

The Market Opportunity

The global seed market is valued at approximately \$22 billion. Of that, approximately \$8-9 billion can be attributed to biotechnology products. The global agrochemicals markets are valued at approximately \$45 billion.

In 2008, seeds sales accounted for about 50 percent of DuPont's \$8 billion sales distribution across the Agriculture & Nutrition businesses. Of the remaining 50 percent, 33 percent (\$2.56 billion) came from crop protection sales and 17 percent (\$1.44 billion) through the sale of food ingredients.

Soy accounts for 2 percent of the protein consumed by the world's population. Trends indicate increasing awareness in soy as a healthy source of protein, as well as growth in demand for processed food due to population growth. Between 1999 and 2009, world soybean consumption increased by 45 percent. The nutrition and health food market space, including specialty food ingredients and food safety, is approximately \$50 billion.

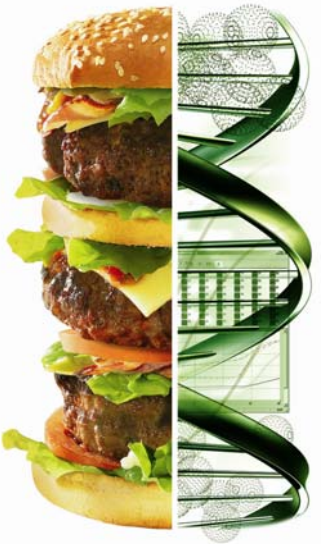
DuPont sales of packaging products are approximately \$2.5 billion in a market valued at \$558 billion worldwide.



Nutrition

Meeting the world's protein and health needs through high-quality Solae ingredients.

» [Learn More](#)



Food Safety

Reducing the impact of pathogens to maintain a safe food supply.

» [Learn More](#)

The DuPont Opportunity

DuPont offers numerous solutions to the world's food needs.

Pioneer® brand seeds are sold to farmers in nearly 70 countries worldwide. Pioneer is the leading developer and supplier of advanced seed genetics and seeks to increase customer productivity, profitability and develop sustainable agricultural systems for people everywhere.

DuPont Crop Protection provides growers with a wide range of technologies to improve sustainable agriculture for a growing world. Cutting-edge crop protection products with increasingly lower use rates and better efficacy are available for a multitude of crops worldwide including corn, soybeans, fruit and vegetables, wheat, sugarcane, rice and more.

Solae, LLC, an alliance between DuPont and Bunge, is the world leader in developing innovative soy-based technologies and ingredients for food, meat and nutritional products, and provides solutions that deliver a unique combination of functional, nutritional, economical and sustainable benefits to our customers. Solae's soy ingredients are enjoyed by consumers around the world in products such as baked goods, beverages, nutrition bars, meats, vegetarian meals and much more.

DuPont Qualicon provides safety diagnostic technology that can reduce the impact of pathogens and other unwanted organisms in food, detecting problems before they become large scale recalls that waste resources. Products like the BAX® System provide rapid and easy-to-use tests for *E. coli*, *Salmonella*, *Listeria* and other harmful pathogens.

DuPont applies science and innovation to packaging structures to help protect food from spoilage and contamination, while offering structures that help make food great-tasting and convenient. DuPont offers a broad range of packaging solutions with reduced energy and greenhouse gas impact that are renewably resourced, enable less packaging to be used and support more responsible end-of-life solutions.



The miracles of science™