

Executive Summary



Behind the Bean

The Heroes and Charlatans of
the Natural and Organic Soy
Foods Industry

The Social, Environmental, and Health Impacts of Soy



CORNUCOPIA
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WITH THE CONTINUED MARKETPLACE SHIFT toward eating organic, local, and sustainably produced food, more consumers are interested in knowing the story behind their food. This cultural shift represents consumers' desire to eat healthily, and to invest in environmental health, family farms, animal welfare, and, often, their own local economies.

Adding to the social, health and environmental impacts of food-buying decisions, people purchasing organic soy foods, such as tofu and soymilk, want to know whether the soybeans were grown by American family farmers, whom they trust, or imported from China, Brazil, and other countries. Consumers, especially those investing their hard-earned dollars in organic brands, are edgy about imports after multiple contamination problems with imported food, including the recent China melamine scandal.

Many educated consumers also want to avoid genetically engineered ingredients, and many assume organic companies test for fraud or accidental contamination.

Some soy consumers, many of them vegetarians or vegans for religious or philosophical reasons, feel it is important to support family-owned businesses that share their values, as opposed to buying brands owned by multi-billion-dollar corporations that are also heavily involved in conventional animal agriculture.

To shed some light on these questions and more, the Cornucopia Institute developed this research paper and the accompanying Organic Soy Scorecard. The scorecard rates organic soy food brands based on ten criteria, including soybean sourcing and production practices. The scorecard serves as an objective resource for consumers and wholesale buyers, and showcases the heroes in the organic soy foods business. Part I of the report examines some of the criteria of the scorecard in greater depth and showcases some of the companies that scored highly, as well as some of the companies that did not.



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The report highlights the brands in the 5-Bean category that appear highly committed to organic integrity and source exclusively domestic organic soybeans, most often directly from family farmers (rather than five stars, the companion scorecard ranks brands on a 1-to-5 *Bean* rating). If we wish to see more North American farmers switching to organic agriculture, as opposed to relying heavily on genetically engineered crops, petroleum-based fertilizers, and toxic pesticides, consumers must support the companies that buy from North American organic farmers—and the Organic Soy Scorecard shows which companies do so.

At the bottom of the scorecard (in the 0-Bean and 1-Bean categories) are the companies that were unwilling to share their sourcing and production information with The Cornucopia Institute and, more importantly, their customers. Our research indicates that many of these companies are sourcing Chinese soybeans, and this may be why so many are unwilling to share their sourcing decisions.

Given the weak U.S. Department of Agriculture (USDA) oversight of organic certifiers working in China, their hesitation makes sense. When the USDA audited certifiers in all of China, for the first time in August 2007, they scrutinized four certifying agents but visited only two farms in China. They found multiple noncompliances of the federal organic standards. Noteworthy and worrisome violations include the failure of one certify-

ing agent to hire Chinese inspectors that are adequately familiar with the USDA organic standards, and the failure by another organic certifying agent to provide a written and translated copy of the USDA organic standards to all clients applying for certification. This raises serious concerns about whether foods grown organically in China follow the same USDA organic standards with which we require American farmers to comply. How can you sign an affidavit that you are following the letter of the law—when you have not had the opportunity to read the law in your native language?

Part II of the report exposes a “dirty little secret” in the natural foods business—the widespread use of a toxic and environmentally damaging chemical, hexane, in the manufacturing of “natural” soyfoods such as vegetarian burgers, nutrition bars, and protein shakes. The use of chemical solvents such as hexane is strictly prohibited in organic food processing, yet its use is widespread in the “natural” soy industry, including in some products labeled as “made with organic soybeans,” such as Clif® Bars. Hexane, a neurotoxin, is listed as a “hazardous air pollutant” by the U.S. Environmental Protection Agency (EPA), and grain processors, including soy processors, are responsible for more than two-thirds of all hexane emissions in the United States.

The effects on consumers of hexane residues in soy foods have not yet been thoroughly studied and are not regulated by the U.S. Food and Drug Administration (FDA). Test results obtained by The Cornucopia Institute indicate that residues—ten times higher than what is considered normal by the FDA—do appear in common soy ingredients.

At least two hexane-extracted ingredients are found in certain processed organic foods, including organic infant formula. Both ingredients can be sourced organically. The National Organic Standards Board (NOSB) recommended that one of the ingredients, soy lecithin, be removed from the USDA’s National List of approved substances for use in organically labeled products (current regulations allow manufacturers to use conventional versions of certain minor ingredients if the organic version is commercially unavailable and it is deemed safe). Unfortunately, the NOSB also voted to keep a de-oiled form of conventional soy lecithin—produced with hexane and acetone—on the National List as a matter of convenience for food manufacturers.

Other hexane-extracted ingredients that many industry experts believe should not be present in organic foods, especially organic infant formula, are algal DHA and fungal ARA oils. These oils—nutritional supplements containing omega-3 and omega-6 fatty acids—are produced by Martek Biosciences Corporation by way of a process that immerses fermented algae and soil fungus in a hexane bath. The Cornucopia Institute is especially concerned with evidence obtained through a Freedom of Information Act request with the FDA that these DHA and ARA oils, when added to infant formula, are linked to serious health complications experienced by some infants. Organic foods should be a refuge from chemically processed additives in foods: consumers expect nothing less.



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The full report is available for free download from The Cornucopia Institute’s web site, www.cornucopia.org.

Also published by the Cornucopia Institute:



Replacing Mother — Imitating Human Breast Milk in the Laboratory. Novel oils in infant formula and organic foods: Safe and valuable functional food or risky marketing gimmick?



Maintaining the Integrity of Organic Milk: Showcasing ethical family farm producers, Exposing the corporate takeover — factory farm production.



Wal-Mart: The nation's largest grocer rolls-out organic products. Market expansion or market delusion?

THE CORNUCOPIA INSTITUTE is dedicated to the fight for economic justice for the family-scale farming community. Through research, advocacy, and economic development, our goal is to empower farmers both politically and through marketplace initiatives.

The Organic Integrity Project acts as a corporate and governmental watchdog assuring that no compromises to the credibility of organic farming methods and the food it produces are made in the pursuit of profit. We will actively resist regulatory rollbacks and the weakening of organic standards, to protect and maintain consumer confidence in the organic food label.



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