1. In terms of their effects on people's health, which of the soy food products on the market would you say are the worst?

The worst by far is soy formula because it's usually the only food nourishing the developing baby. Soy formula contains phytoestrogens that can disrupt the baby's thyroid, reproductive development and toxic levels of manganese that can cause neurological and brain damage associated with ADD/ADHD and violent tendencies. Babies on soy formula are also at higher risk for gastrointestinal damage, allergies, asthma, poor mineral absorption and lower intelligence. Although most patrons of health food stores know that it is important to breast feed, those who cannot often pick soy formula thinking it is the healthy choice. This choice is a formula for disaster. Contrary to popular belief, soy formula was never used traditionally in Asia.

For children and adults, the two worst product categories are soy protein products and soy oil. Unlike in Asia where people eat small amounts of whole soybean products, western food processors separate the soybean into two golden commodities – protein and oil. There's nothing safe or natural about this. Today's high-tech processing methods not only fail to remove the antinutrients and toxins that are naturally present in soybeans but leave toxic and carcinogenic residues created by the high temperatures, high pressure, alkali and acid baths and petroleum solvents.

The worst of today's soy protein products are soy protein isolate, soy protein concentrate, texturized vegetable protein and hydrolyzed vegetable protein. We find these ingredients in everything from shake powders, energy bars and veggie burgers to canned tuna. The worst soy oil products are margarines and shortenings made from partially hydrogenated soybean oil containing dangerous trans fatty acids. Most of the liquid vegetable oils sold in supermarkets also come from the soybean. To make these bland enough for public acceptance, the oils are subjected to heavy refining, deodorizing and light hydrogenation.

The fact that soy protein enjoys an excellent reputation but soy oil has been disgraced has led to an interesting marketing split among class lines. Upscale "health conscious" consumers pay dearly for the supposedly beneficial soy protein products in health food and gourmet stores.

The masses, meanwhile, get the soy oil in the form of the deadly hydrogenated oils lurking in nearly every fast food or packaged product – from crackers, cookies and other baked goods to canned foods, frozen French fries and TV dinners. However, upscale soy products are trickling down as the word "soy" becomes associated in the popular mind with "healthy." Although average Americans still think of a "Fake Steak" as a "Misteak," they don't seem to mind the fact that the industry has slipped "invisible" soys into every supermarket food imaginable.

Provided that the prices are low and flavor and texture remain familiar, soy is now perceived as a "healthful" additive, a "plus value." Meanwhile, over in the upper crust neighborhoods, soy oil has begun feeding off soy protein's healthy reputation and is starting to pop up in goods sold to the health food crowd, and not all of it is in the unrefined, cold-pressed "healthy" form.

The product I'm most concerned about, however, is soy milk. Not because it's the worst product out there, but because some people are drinking so much of it.

2. How did soy, once a fringe product, end up being thought of as a "disease-preventive panacea"?

For years, the market for soy foods was limited. Americans not only loathed the beany taste and gas-producing effects of soy but thought of soy foods as "hippie foods," "poverty foods" or specialty foods
for vegetarians. That presented a problem to the industry, which had lots of soy protein left over from soy oil production and nowhere to sell it. After all, they could only feed so much to animals before they rolled over with serious health problems. In order to make a good profit selling soy protein as a "people feed," the industry needed to make people want to eat it and to pay well for the privilege.

As a top gun marketer hired by the soy industry explained in 1975, "The quickest way to gain product acceptability in the less affluent society is to have the product consumed on its own merit by a more affluent society." Heightening consumer awareness of "health benefits" has done the trick. Millions of soy industry dollars have gone into funding "checkbook" medical research, sponsoring symposia, establishing FDA health claims and influencing of key dietitians and journalists. The campaign has led to a lot of soy hype, high hopes and higher profits.

3. With soy being added to so many U.S. food products (soy protein isolate, soybean oil, etc.) what advice do you have for consumers who are looking to avoid soy, but don't know where to start?

It's a real challenge, especially for those with soy allergies. But it's also an opportunity for us to make optimum food choices. The best – and maybe the only – way to completely avoid soy in the food supply is to buy whole foods and prepare them ourselves. For those who prefer to buy readymade and packaged products, I offer a free Special Report, "Where the Soys Are," on my Web site. It lists the many "aliases" that soy might be hiding under in ingredient lists – words like "boullion," "natural flavor" and "textured plant protein."

In addition, I'd like to share some good news. Help for the American consumer comes in January 2006 when the Food Allergen and Labeling and Consumer Protection Act goes into effect. The law requires food manufacturers to clearly state whether a product contains any of the top eight allergens – milk, eggs, peanuts, tree nuts, fish, shellfish, wheat or soy, and it requires the FDA to conduct inspections to ensure that manufacturers comply with practices to reduce or eliminate cross contamination with any major food allergens that are not intentional ingredients of a food. We have this new law thanks to the Food Allergy Initiative, a New York-based non-profit organization.

4. Many Americans are convinced that soy is the "cure-all" for heart disease, menopause symptoms, high cholesterol and more. What would you say to this large group of the population who still believe soy is a health food?

In general, we should be cautious about thinking of any food as a "miracle food" – especially ones being heavily promoted by the very food manufacturers who stand to benefit. We hear so many wonderful things about soy, but people need to remember that the possible benefits are outweighed by proven risks. Thousands of epidemiological, laboratory and clinical studies link soy to malnutrition, digestive problems, thyroid dysfunction, cognitive decline, reproductive disorders, immune system breakdown, even heart disease and cancer.

While it is certainly possible that several components of the soybean might be successfully developed into useful pharmaceutical drugs, it is inappropriate for the soy industry to recommend that the entire population of men, women and children self-medicate by eating massive amounts of soy foods. The public has not been properly warned that soy can have many side effects, that it is a substance that could be helpful in one stage of the life cycle but harmful in another and that dietary estrogens can interact cumulatively or exponentially with environmental estrogens.

5. What was your motivation for writing The Whole Soy Story?

Years ago I was excited about the claims being made for soy. The possibility that a simple,
inexpensive food could prevent heart disease, fight cancer, fan away hot flashes, and build strong bodies in far more than 12 ways was seductive. The hype, however, did not match the reality of the many sick, soy-eaters that I saw in my life. At ashrams, I talked to vegetarians who waxed enthusiastic about their enlightened diets but who complained about loss of energy, "brain fog," thinning hair, gray skin, weight gain and gas.

When I taught classes, I met health-conscious professionals who came to me confused and frustrated because they had been advised to eat soy but felt worse than they had ever felt in their lives. As a nutritionist, I worked with many clients whose health improved dramatically after removing soy foods from their diets. These observations led me to question everything I'd ever heard or read about soy and to research the subject for myself.

6. Which types of soy are acceptable? Aren't some types of fermented soy (natto, tempeh, miso) healthy?

I personally eat old-fashioned fermented soy products such as miso, tempeh, natto, shoyu and tamari and believe they can be healthy in the context of a varied diet. Tofu is a precipitated product and less healthy, but I still enjoy it occasionally at vegetarian potlucks. Edamame – the green immature soybeans – contains fewer of the toxins found in the mature beans and so can be eaten occasionally. People who are not allergic or sensitized to soy can consume these whole soy products safely at the levels eaten traditionally in Asia, which is to say in small amounts as condiments, not staples.

Soy sprouts, by the way, are not healthy. Short-term germination increases the strength of soy's antinutrient fractions. In contrast, long-term sprouting plus fermentation will decrease and nearly eliminate them. Soy sprouts are mentioned in historical accounts as useful, sometime pharmaceuticals, not as a daily food.

7. You say in The Whole Soy Story that soy has never been proven safe and can cause irreversible harm to people’s health. What are some of the most serious side effects that can result from this food?

I hesitate to use words like "irreversible" or "incurable." Adults who have been harmed by soy foods have a good chance of restoring their health if they remove all soy and other estrogenic foods from their diets, switch to a varied, organic omnivorous diet and use appropriate supplements as recommended by a wise doctor, nutritionist or other health professional. I most often see thyroid damage, infertility, menstrual problems, loss of sex drive, hair loss and digestive problems.

It's the damage from soy formula that may be irreversible. A crucial time for the programming of the human reproductive system is right after birth – the very time when many non-breastfed babies get bottle after bottle of soy formula. Normally during this period, the baby's body surges with natural estrogens, testosterone and other hormones needed to program the newborn's reproductive system to mature from infancy through puberty and into adulthood.

For infants on soy formula, the programming may be disturbed or interrupted. The phytoestrogens in soy formula – the isoflavones – bear a strong resemblance to the natural estrogens produced by the human body as well as to the synthetic estrogens found in contraceptive pills. Strictly speaking, soy estrogens are not hormones but "estrogen mimickers," but the bottom line is that human body mistakes them for hormones. Little boys who are estrogenized in this way may experience delayed or arrested puberty. Little girls who are overly estrogenized may go through premature puberty. We have many tragic stories.

8. What was the most shocking piece of information you learned while writing or researching The Whole Soy Story?
I began my research thinking there would be pros and cons to soy. Instead, I found overwhelming evidence of harm. I was startled by the sheer number of buried studies that needed to come to light, by the flagrant misrepresentation of data and the soy industry's talent for "spinning" unfavorable results. Right now, the FDA is seriously considering a soy-protein-prevents-cancer health claim as proposed by the Solae Company. The idea that the FDA could even consider soy for a cancer health claim is ludicrous on the face of it.

Soy isoflavones – the plant estrogens in soy most often credited with cancer prevention – are listed as "carcinogens" in many toxicology textbooks. They have also been proven to be mutagenic, clastogenic and teratogenic. Recent studies have even shown that soy accelerates the growth of breast cancer. Yet Solae stated that there is a "consensus among experts qualified by scientific training and experience" that "soy protein products reduce the risk of certain cancers." This is so shockingly untrue that I joined Sally Fallon and Bill Sanda of the Weston A. Price Foundation to file two protest documents with the FDA. The FDA has delayed its decision and we will meet with them this spring.

9. For those who currently include soy as a major protein in their diet, what foods would you suggest they use to replace the soy?

I strongly recommend a varied, omnivorous diet such as found in Nourishing Traditions and Eat Fat/Lose Fat by Sally Fallon and Mary Enig, and in Dr. Mercola's books and Web site. If people wish to remain vegetarians, I would recommend clean, raw, whole dairy products and eggs from free-range hens. Those who rely on nuts and beans for protein should be sure to soak them to deactivate phytates and other antinutrients and to make them more digestible and assimilable.

10. Do you have plans to write another book?

I am working on Whole Soy Stories, a sequel that will include true soy stories and the steps taken by men, women and children who have successfully recovered from the health problems caused by soy. I want to hear from the public and also from doctors and other health practitioners who are developing – or have developed – protocols for clients suffering from soy-induced thyroid disease, infertility, cognitive decline, cancer or other health problems. Please share your stories at www.wholesoystory.com.