



FOCUS: FOODS

Fascinating Food...and Food for Thought



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There is a great deal of talk these days of 'natural food' and 'slow food' movements. Oftentimes, it seems like these are presented in juxtaposition to large-scale agriculture (and the GMOs in it) as the evil alternative. I find it frustrating that these two production systems are presented as Either/Or options for our future. Why can't *both* be a part of feeding our families in the decades to come?

Personally, I like the idea of food grown closer to home. My family grows a garden specifically to teach my children (city kids, to my dismay) that food isn't magically concocted in the back rooms of the grocery store. And my family benefits by eating some fresh vegetables full of yummy flavor. I think our American society benefits from consumers feeling a closer connection to the land—whether that is through a farmers' market, direct sales, or Community Supported Agriculture. I buy into the nostalgia evoked by food grown by Farmer Joe down the road. I do read labels and prefer my peanut butter be made from peanuts only. And yes, I admit it--I spend some cash on organic/natural/niche foods from time to time. I am

fortunate to have the disposable income to do so. Yet my family eats its fair share of fast food, frozen dinners, and "regular" ingredients, too.

Regardless of emotion, the statistics make it quite clear: *we will not feed the world growing low intensity crops on the land currently available*. Having traveled parts of the world and met families struggling for each meal, I feel a moral imperative to study this issue closely and contribute however I can.

Unless we're ready to have a serious discussion about population control and/or compulsory vegetarianism (which I doubt we are), or advocate for clearing vast amounts of land for agricultural production, we should be pursuing *all* options for growing higher-yielding crops in a safe manner. Today those options include biotechnologies proven to have significant yield and environmental benefits. Tomorrow the options may include something we haven't even thought of yet. Certainly biotech, as any new technology, should be rigorously tested and applied with care. I welcome regulatory oversight and a robust discussion.

Food for Thought...

- World population is trending up rapidly...moving from 2.6B in 1950 to 6.8B in 2009 to a projected 8.35B in 2030 and 9B+ by 2050.
- Arable land is limited...and demand for protein is increasing globally.

Production and efficiency have increased dramatically and must continue to do so to adequately feed the world's population.

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I hope, though, that the discussion can move beyond fear-mongering toward mutual respect. There are markets for all types of food. If a farmer is successful growing for a local or niche market, I applaud his or her success. Likewise, we should appreciate the large-scale farmers achieving impressive yields and constantly improving their efficiency. The American farmers I know work quite hard to provide for their families while being proud that their product helps feed and clothe the world. We will have to work *together* to do so in the coming decades.

...Food Facts

In the U.S., significant gains in food production and efficiency include:

- In 2009, 85% of the nation's corn acreage was planted with biotechnology varieties. Yields have increased 36% since 1995, the last year before biotech varieties were commercially planted.
- With about 91% of the U.S. soybean acreage now planted with biotech varieties, soybean yields have increased 12% since 1995.
- Eighty-eight percent of the U.S. cotton crop is now enhanced by biotechnology. Since 1995, cotton yields have increased 31% in the years that biotech cotton has been grown in this country.
- Since 1944, when there were roughly 25.6 million dairy cows in the country, the average dairy cow produced 5,000 lbs. milk per cow in her lifetime. In 2007, lifetime milk production per the country's 9.2 million dairy cows had increased to 20,000 lbs. per cow.
- During the past 65 years, the carbon footprint per cow nearly doubled, but the carbon footprint per gallon of milk produced declined by more than two-thirds.
- Modern U.S. agriculture uses less energy and water, fewer pesticides and less energy per unit of crop production than it did 30 years ago.

(Sources: The Context Network, The Council for Biotech Information, Washington State University, USDA ERS, NASS)

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The Context Network provides business management and strategy consulting services to the world's leading agriculture, biotechnology and food companies and government agencies and institutions. Major areas of expertise include strategy, merger and acquisition support, valuation of new technologies, formation of alliances, and market research. The West Des Moines-based firm is composed of a core of professional consultants that is complemented by a network of more than 200 industry and subject-area experts.