

# Chinese diet improves

A couple of days ago I was engaged in a discussion with some analysts about the future of exports and they raised the argument that export demand will turn around and start an upward climb. Part of their reasoning was the increasing income levels in China and the movement of the urban middle class from a diet based upon grain to one in which meat plays a more significant role (one might call this the hope for the Westernization of the Chinese diet).

As you must have figured out by now, I eat, breathe and drink data. It is my daily sustenance. So, as I usually do, I decided to look up the numbers. I wanted to see what the data might say about the potential for changes in the Chinese diet and who might supply the food. For my data source, I used the United Nations Food and Agricultural Organization food balance sheets.

Before I start I must say that the data surprised even me. I could hardly believe what I saw. In 1976 China had a population of 948.6 million people and the per capita daily calorie consumption was 2,051. By 2000, China's population had grown to 1.282 billion people and the per capita calorie consumption had risen to 3,029.

In those 25 years, China's gross food calorie consumption grew from 1.945 billion kilocalories a day to 3.884 billion kilocalories a day. That's a 100 percent increase in total calories consumed. And for the most part they did it with internal production. Wheat production increased from 50 to 113 million metric tons (mmt) a year while coarse grains went from 69 to 138 mmt a year and soybean production went from 6.6 to 14.3 mmt a year. For the years between 1980 and 1995 China did import modest amounts of wheat, otherwise Chinese grain and seed imports were minimal.

Looking more closely at the Chinese diet, the average person consumed 1646 calories a day in grains in 2002 which provided 36 grams of protein. For the average American the grains numbers are 848 calories and 25 grams of protein.

When it comes to meat, conventional wisdom is correct in noting that the average Chinese eats 110 pounds of meat a year while the average American eats 269 pounds. Residents of both countries consume about the same amount of pork. The big difference comes in poultry and beef. It seems most likely that if the average Chinese diet shifts to include more meat the most likely products would be pork and poultry.

Improved genetics could bring about a significant increase in pork production with a minimal increase in grain consumption.

Poultry production has a significantly lower conversion ratio than either beef or pork. If the Chinese were to eat less grain than that grain could be shifted to poultry production and the additional grain needed to bring meat consumption up to U.S. levels would be quite modest in comparison to the dietary and production changes the Chinese have made over the last 25 years.

In terms of daily calorie consumption, the big difference between China and the U.S. comes in two categories: sweeteners and vegetable oils. The average American consumes 677 calories a day in sweeteners while the number for the average Chinese is a mere 64. With vegetable oils, the average American comes in at 597 calories a day while in China the number is 187 calories a day.

If I were selling Hershey's chocolate or Life Savers, I might see some real opportunity in the Chinese market. However, when it comes to grains and seeds I would be less optimistic. Based on their past performance, I would guess that, except for short-term fill-in needs, the Chinese will provide their own grain, thank you very much.

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