



## Conservation in the food chain

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Topic: [Demand/Consumption](#)

Tags: [green revolution](#), [locally grown food](#), [oil](#), [organic](#) [[list all tags](#)]

Many of you may have read the article called "[The Oil We Eat](#)" from the February 2004 issues of Harper's Magazine. In that piece, Richard Manning examined the evolution of the human food chain, ending with the [Green Revolution](#) which ultimately freed vast amounts of the population (especially in first world countries) from having to grow their own food. The upshot of the Green Revolution, along with advances in storing and transporting food, is that we now expend approximately 7-10 calories of fossil fuels for each food calories that is generated.

Today, the San Francisco Chronicle has a human interest piece called "[The oil in your oatmeal: A lot of fossil fuel goes into producing, packaging and shipping our breakfast](#)" that essentially distills the end of the Harper's article into a concise recounting of the amount of fossil fuel energy that goes into making "a bowl of imported McCann's Irish oatmeal topped with Cascadian Farms organic frozen raspberries, and a cup of Peet's Fair Trade Blend coffee."

My breakfast fuels me up with about 400 calories, and it satisfies me. So for just over a buck and half and an hour spent reading the morning paper in my own kitchen, I'm energized for the next few hours. But before I put spoon to cereal, what if I consider this bowl of oatmeal porridge (to which I've just added a little butter, milk and a shake of salt) from a different perspective. Say, a Saudi Arabian one.

Then what you'd be likely to see -- what's really there, just hidden from our view (not to say our taste buds) -- is about 4 ounces of crude oil. Throw in those luscious red raspberries and that cup of java (an additional 3 ounces of crude), and don't forget those modest additions of butter, milk and salt (1 more ounce), and you've got a tiny bit of the Middle East right here in my kitchen.

Maybe the author Chad Heeter is sensationalizing the case a little bit, but the issue is an important one, I think. Now, I know that [many of our readers](#) are skeptical about sustainable agriculture and whether eating local and/or organic will be able to feed the world. In all likelihood, it will not. There are way too many people in the world for that, and too many of us live in places where we cannot have access even to the staples. Besides, there was certainly transportation of food before the advent of trucks and cars, so it's not the case that increasing our reliance on local agriculture should mean the end of all oranges from Florida or lettuce from California. It simply means that we should strive to increase the production of local food so that less energy is needed to package, store, cool, and transport our food over thousands of miles. A step toward flattening the peak, if you will.

The way I see it, the call for favoring locally grown foods does not by definition have to mean relying on them exclusively. I'm not talking about what happens long after the peak—I mean right now, while we still have [6.6 billion](#) people in the world and no immediate plans for the decimation of the population. If we can advocate for conservation of heating oil or gasoline for our cars, why can't we have a similar sort of "conservation" of long distance foods? It seems reasonable that if people opt for locally grown items whenever possible, they'll be cutting down on some unnecessary expenditure of fossil fuels.

Obviously, I'm not the modeler on TOD, but I leave it as an exercise for the reader to determine how many barrels of oil we would save if, say, we decreased the distance that food travels on average by 15% or 20%. (And just to head off the inevitable discussion, yes, [Jevons Paradox](#) undoubtedly applies here. We all already know that.)



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