

# 28 Article for The Bristol Herald Courier Agriculture Page  
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### **“Taking the Oil Out of Our Food”**

Everyone knows that recent surges in gas prices have made travel and home heating much more expensive. But many folks don't realize another area where our petroleum dependency is coming home to roost: Our food.

Modern American agriculture is among the most efficient in the world, when evaluated in terms of output per farmer. But if we consider our productivity in terms of energy efficiency, it's a very different story. Studies by Pimental and Gianpietro show that the energy used to produce our food grew steadily from 1950 to the present, to the point where 10 units of fossil fuel energy are now required for every 1 unit of food energy produced.<sup>1</sup> On the farm, this is attributable to several factors: Pesticide use increased tenfold from 1950 to the 1990's, reaching an average of 800 million pounds per year; 77 million tons of chemical fertilizers, mostly derived from petroleum, are applied to American farms annually.<sup>2</sup>

The energy equation is even worse when we look at modern feedlot meat production. Nearly three fourths of grain produced in the U.S. is fed to livestock, concentrating energy inputs into every pound of meat we eat, especially beef.<sup>3</sup> As Joel Salatin has pointed out, modern meat and dairy production has largely substituted oil for grass, by replacing pasture and hay with energy intensive grains.

Yet as much as we farmers have increased our oil use, the real action happens once our crops leave the farm. Cobb & Daly point out that three times as much energy is used to process, package, ship and distribute food as is used on-farm.<sup>4</sup>

Reducing this oil dependency in our food requires two basic, but challenging steps: Eating more locally, and choosing foods with less “embedded” fossil fuel energy.

Eating locally is getting easier, every year. With seven farmers markets in Tri-Cities and southwest Virginia, there are many fresh-from-the-farm items available from late April through October. As the produce season winds down, there are still local farm products to be had, from honey and sorghum syrup to a range of meats and eggs. Health food stores in Abingdon, Johnson City and Kingsport make local pasture-fresh eggs, beef and other meats readily available. Finding these farmers is also getting easier, thanks to local foods directories and websites compiled by ASD and other groups. When we buy these local farm products, we help reduce the 1200 or more miles that most of our food travels, before it reaches us.

In addition to buying locally, we can also take the oil out of our foods by purchasing fewer packaged and processed items, and by supporting farmers who use conservation practices. In our own region, this includes nearly a dozen farmers harnessing the “power of pasture” to raise top quality eggs, beef, pork, poultry and dairy products. A much larger group has joined with Food City to provide pasture-fresh lamb. These delicious meats and eggs require far less oil to produce, because minimal fertilizers

and pesticides are needed to maintain a healthy pasture, as compared to raising corn and other grains. In taking these steps, we cut down on the hidden or “embedded” energy in our food.

To learn more about how to take the oil out of your food, contact Appalachian Sustainable Development at 276-623-1121.

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### References

- <sup>1</sup> Pimental and Gianpietro, cited in Dale Allen Pfeiffer, “Eating Fossil Fuels”, 2004.
- <sup>2</sup> Angus Wright, “The Death of Ramon Gonzalez: The Modern Agricultural Dilemma”, 1990.
- <sup>3</sup> Herman Daly and John Cobb, “For the Common Good: Redirecting the Economy toward Community, the Environment and a Sustainable Future.” 1989.
- <sup>4</sup> *ibid*