

PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

Science and making decisions about the foods we eat

Science plays an increasingly important role in modern society. Without scientific research, we would not have the conveniences that we have come to depend on to carry out our daily tasks. There would be no cell phones or computers and our activities would be geographically constrained to an area dependent upon how far we could walk or ride a horse in a reasonable length of time. Health care as we know it would not exist and people would die of diseases we treat with a pill or prevent with a vaccine. It is fair to say that few of us would be willing to give up many of the ways in which scientific study has improved our lives.

While we depend upon the fruits of scientific inquiry to make our lives easier and healthier, we don't use scientific analysis to make many of the decisions in our lives from those that are of utmost importance to those that are quite mundane. That is not to say that many people don't depend on the rigorous testing and repair data analysis conducted Consumers Reports in the purchase of an automobile; they do. But when it comes to color and accessories, our personal biases come into play. If it were just about science, it's a pretty good bet that there would be fewer fully-loaded pickup trucks and huge SUVs in suburban garages and driveways.

While scientific studies are critical to establishing the safety of everything from the drugs we take to some of the crops we plant to the pesticides we use on crops, those studies are not the only factors consumers take into account when they make their decisions on what foods to purchase. Religious beliefs, for instance, often play a role not only in the meats that various peoples eat, but also the manner in which the animals they do use for food are slaughtered. Both Islam and Judaism proscribe the eating of pork and prescribe the manner in which cattle, sheep and goats are slaughtered for food.

Any science about the nutritious qualities of pork is beside the point. Livestock producers who want to sell meat to members these communities would be well advised to focus instead on raising goats, sheep, and cattle. They will also have to make contact within those communities to establish systems that will assure that the animals are ritually slaughtered.

Tradition also plays a role in the food selection process. If you eat lutefisk, it is more likely than not you are of Norwegian heritage; haggis that you are of Scottish extraction; kimchi that you have Korean ancestry; budena that you trace your family to Oromia. Scientific studies may show how traditional diets are often quite nutritious, containing the recommended balance of various nutrients, but for most of us, what we eat is heavily influenced by the family in which we were raised.

There are a host of factors that influence the foods that various consumers choose to purchase: individual taste, risk tolerance, economics, allergies, the desire for novelty, marketing, and others that we have not even thought of. And there is nothing wrong with that.

If there is a question, we do expect scientific studies to determine the safety of a given product, realizing that the published level of safety is a statistical determination based on the factors considered in the studies. Thalidomide was determined to be safe for human consumption until it was given to pregnant women. DDT was thought to be a safe and effective insecticide until researchers looked at its effect on birds. The determination that a compound or product is safe will probably not override the concerns of a risk-averse person.

Too often agricultural producers have allowed themselves to be drawn into unwinnable arguments about the science behind the safety or danger of GMOs when other factors are at play; it is not necessary for agricultural producers to know what those other factors are. What they need to know is what consumers want to purchase. Consumer preference, not producer preference or convenience, is at the heart of our economic system. It did not matter that Betamax was a superior product when the market shifted in favor of VHS. If you wanted to sell videotape recorders, you had to use the VHS format.

If consumers want organic and are willing to pay what it takes to keep organic production economically viable there is no problem. If consumers want cage free eggs, then producers need to find a way to make that profitable. In the end the customer is king. The challenge of agriculture is to keep up with the ever-evolving preferences of the consumer. Producers, who insist upon raising/growing what they want in the manner they want, run the risk of facing increasingly less profitable and more limited markets.

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