Food Safety: Economists Take a Bite

Economics of Food Safety. *Edited by Julie A Caswell New York Elsevier Science Publishing Co 1991, 356 pages, $135*

Reviewed by Phil R Kaufman

This collection of articles provides economists and policymakers with many of the tools necessary for understanding the potentially volatile issue of food safety Although falling short as a textbook source, as the title may imply, the collection of articles nevertheless is an ambitious beginning toward understanding the conceptual and empirical complexities of the economics of food safety The work also reveals weaknesses that subsequent researchers must address Policymakers should also value the contributions made here but should recognize the limitations of current research Greater demand for food safety policy will result in an equally large research supply response

The editor, an economist, chose to organize individual chapters into sections that address either the demand for or the supply of food safety and quality Lay readers and policymakers may not appreciate that scheme, however In addition, a number of authors address research methodologies as opposed to the purely applied empirical aspects of food safety analysis

Smallwood and Blaylock assess the suitability of economic concepts and methods for analyzing food safety issues in the lead chapter They review models and applications of demand analysis to food safety issues, including household production models, product characteristics, and attribute models Sufficient theoretical foundations of consumer behavior exist to adequately address many food safety issues, but empirical application is data intensive, and therefore demanding of the researcher Smallwood and Blaylock conclude that, as a result, most studies provide only a weak link between analytical results and theoretical constructs However, the chapter falls short by not addressing the obvious need for better data sources

Two chapters address the element of risk in consumer food demand models Choi and Jensen find that perfectly competitive markets would provide complete information about food substance hazards, allowing for a socially optimal level of food safety The role of the Government is to ensure that food safety and risk-related information are accurate Falconi and Roe, on the other hand, assert that such information would exist as a public good, rather than a private good As such, the private provision of food hazard and health risk information would be reduced to the lowest common denominator across competing firms Because there are no incentives for individual suppliers to alter their allocation of a food substance (ingredient or additive), neither total industry allocation nor product price is affected The reader is left to reconcile the seemingly conflicting conclusions

Extending consumer demand methodologies to incorporate risk first requires that it be properly measured Carriquiry and others review methodologies for determining exposure to health risks, distinguishing between short-term (acute) and long-term (chronic) risk exposure This characteristic may be useful to help explain why the public's perceived health risks often differ from science-based risk measures, given the significance of chronic conditions Relative risk assessment extends to evaluating food hazard control strategies Curtin and Krystynak apply this approach to the Canadian poultry processing industry in which the costs of intervention at various stages of production and distribution are estimated and compared with potential benefits Although cost-effective, their proposal would likely conflict with existing food safety standards and regulations, making implementation impractical

A number of articles are devoted to understanding consumer demand for greater food safety and risk-reduction behavior Van Ravenswaay and Hoehn analyzed apple consumption during the Alar controversy in 1984-89 The authors found that demand for apples declined in 1984 after the Environmental Protection Agency issued a new risk assessment of Alar (a growth regulator), and not after heightened media activity in 1989, which contrasts popular perception

Awareness about the use of pesticides, especially in fresh fruit and vegetable production, has nevertheless triggered a growing interest in consumers' willingness to pay for food safety assurance, and of the apparent credibility gap among government agencies charged with monitoring and regulating chemical use Ott and others found that consumers prefer independent laboratories to government agencies for pesticide residue tests The

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credibility issue is central to the consumer acceptance of the production-enhancing BSt hormone in milk, according to Preston and others Neither of the chapters develops the economic implications of identified risk behavior, however Attention should also have been given to the new bio-engineered food products and their potential for success in view of apparent consumer skepticism Many studies of the consumer demand response to food safety and health information, such as "willingness to pay" surveys, have relied on hypothetical situations The degree to which these controlled experiments approximate actual consumer tastes and preferences in the marketplace is debatable

A final set of articles is devoted to private and public food safety strategies Caswell and Johnson distinguish between individual firm strategies according to their purpose differentiation strategies attempt to improve a competitive position, risk management strategies attempt to minimize liability resulting from a hazardous product or violation of government regulation, and proactive strategies attempt to guide the regulatory process in the best interests of the firm The authors present a number of case studies involving agricultural producers, food processors, and retailers The Caswell and Johnson article lacks for empirical support that would quantify the returns to food safety strategies Clearly, the decision to implement a given strategy should take into account tangible and intangible costs and benefits Because differentiation strategies constitute firm or product differentiation, how does one disaggregate the costs and returns of the multiple strategies involved? Finally, to what extend do private initiatives substitute for greater government oversight and regulation From a social welfare perspective, which approach—public or private—best addresses food safety and health risks?

French and Neighbors offer essentially an accounting model for determining the firm costs of food labeling compliance, an important policy consideration Mauskopf and Chapman attempt to improve the efficiency of the imported foods enforcement program They develop a model of firm compliance behavior given a dynamic enforcement program Product sampling rates are thus adjusted to minimize program costs and maximize firm compliance While superior to the existing dynamic sampling approach, successful implementation may hinge on fairness and equity issues raised by the firms subject to enforcement

The *Economics of Food Safety* contains a collection of literature addressing the conceptual and empirical issues that will likely give considerable value to the uninitiated researcher, so I would recommend the book to all who wish to better inform themselves in this emergency area

On the Jobs

Multiple Job-holding among Farm Families. *Edited by M C Hallberg, Jill L Findeis, and Daniel A Lass Ames Iowa State University Press, 1991, 350 pages, $41 95*

Reviewed by Leslie A. Whitener

This anthology evolved from a May 1988 symposium on multiple job-holding among farm families, sponsored jointly by the four Regional Rural Development Centers and the Farm Foundation The book is designed as a guide to research and policy responses to the phenomenon of part-time farming and multiple job-holding among U S and Canadian farm families Twenty-one papers by agricultural economists, rural sociologists, anthropologists, extension specialists, and rural development experts are organized into six major sections historical perspective and future prospects, current theoretical issues, results of farm household surveys, rural labor market factors, public programs for multiple job-holding farm families, and policy issues and research needs

This collection offers a comprehensive review of multiple job-holding of farm families And while it is a "must read" for anyone about to embark on research studies in this area because it succinctly reviews the progress to date, it is far more useful for illustrating where we have been than for suggesting where we should go In fact the book debates, but never really answers, the question of why we should go anywhere

The various articles differ in quality, research approach, and analytical technique, but the anthology draws strength from this multidisciplinary perspective Anthropologist Peggy Barlett bases her findings about the motivations of part-time farmers on participant observation and open-ended, in-depth interviews with a small number of farm families in Dodge County, Georgia Although geographically limited, her excellent case study

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