Food and Health Challenges

Thank you for including in your Journal scientific articles that so clearly illustrate the inherent linkage between food and health challenges. National leaders need to see that public policy must be informed by scholarship in order to effectively serve their constituents. The Ebola epidemic is another critical problem that deserves similar scholarly attention, and the University of Missouri is poised to contribute to that problem in new ways.

The Ebola epidemic now centered in three West African countries, Guinea, Liberia, and Sierra Leone, is not only a life threatening disease, but it also significantly threatens the food security of the region. The U.S. Agency for International Development is leading our government's response, aligned with the CDC and the Department of Defense and many UN Agencies such as the World Health Organization, and Non-Governmental Organizations that have large presence on the ground in those countries. These workers deserve our praise for the risks they face daily as they undertake essential service to the global society. The current strategy is to eliminate Ebola in humans and enable economy recovery as quickly as possible. The latter cannot be achieved, however, unless the former is successful. Ebola must be contained in order for public policy to effectively support production and marketing systems.

This is where the University comes in, because so much new knowledge is required on all fronts. The Deaton Institute became deeply involved in the discussion last October at the World Food Conference where dire predictions of 30-40 percent losses of food availability raised concern across the food and health communities. Reports of land abandonment, loss of trust and disruptions of labor in key processing and transportation facilities, in the financial and economic support systems of those already fragile societies, and genuine human empathy for the many victims of the epidemic, all contributed to an unease among observors here and abroad. Members of the university community felt a deep need to contribute.

It was recognized that emergency food aid will address short term food availability, but guiding the transition to a sustainable system of food security and strength in the agricultural economy is quite another challenge. The Institute was asked to take leadership in formulating a recovery strategy in coordination with the Global Health Response and Resilience Alliance, and a multidisciplinary team of faculty, students and staff stepped forward to contribute. The team incorporates faculty from medicine, public health, plant and animal science, biology, nutrition,

agricultural economics, anthropology, sociology, and behavioral sciences from across the diverse programs of the University of Missouri. We recognize the vast strengths of our University community that is exceptional among America's higher education landscape. Even more exceptional is the creativity and dedication they bring.

In many ways, responding to Ebola takes us into new territory, but being a "frontier university", the first public university west of the Mississippi, inspires both dedication and creativity. The efforts of such esteemed colleagues, with no guarantees of success, also deserve commendation. I am honored to be involved with my colleagues in this process and look forward to providing you with a progress report in the future.

Brady Deaton, PhD Chancellor Emeritus, University of Missouri

Genetically Modified Organisms Crops In Agriculture? Food For Thought

I would like to comment on the article, "Why We Need GMO Crops in Agriculture," by Melvin J. Oliver, PhD (November/December 2014). My contention is that not only do we not need GMOs in agriculture, but we should eliminate GMOs from our food supply (including indirectly in our animals) because of the abundance of evidence that they are likely dangerous. In a 1998 lawsuit by public interest attorney Steven M. Drucker, 44,000 pages of the FDA's internal documents proved that the consensus of their own scientists was that GMOs could not be presumed safe; that they were different and dangerous; could lead to diseases and needed long-term safety studies. ("How the U.S. Food and Drug Administration Approved Genetically Engineered Foods Despite the Deaths They Had Caused and the Warnings of its Own Scientists About Their Unique Risks" executive summary, by Steven M. Drucker). Their warnings were ignored and GMOs got "fast-tracked." It may help to know that our current "Food Czar," Michael Taylor, was previously a Monsanto attorney. In the first nine years since introduction of GM crops in 1996, the incidence of people with three or more chronic diseases nearly doubled from 7% to 13%. (Kathryn Anne Paez, et al, "Rising Out-Of-Pocket Spending For Chronic Conditions: A Ten Year Trend," Health Affairs 2009;28(1):15-25). Causation? Maybe, we don't know because the GMOs haven't been tested sufficiently. Over 93 scientists have signed a statement that there is no consensus on the safety of GMOs. ("No scientific consensus on GMO safety" ENSSER October 21, 2013) For a good summary of the concerns get "Genetic Roulette: The Gamble of Our Lives" by Jeffery M. Smith (DVD, 2012 available on Amizon.com).

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GMO Author Reponds to Food For Thought

Thank you for taking the time to read and comment on my article. As I discussed in the article, from all of the studies conducted to look at the safety of GM crops, there is no evidence that they are any different, in terms of public or animal health, from crops developed by conventional breeding practices. I refer you to Nicolia et al. (reference 24) and the reports of the NRC and European Commission that address these claims directly for both livestock and humans. As a scientist, and as I am sure you are aware, one has to be very careful in how you interpret or act upon simple correlations and until one applies scientific rigor and methods to obtain reliable data to gain objective insight they remain hypothetical. There has been an equally strong increase in organic food sales since 1996 that tracks the increase in the production of GM crops. The independent variables that lay between any of these comparisons are numerous and would require specific studies to address any cause and effect relationships. Many such studies have been conducted by numerous agencies and researchers, as I document in my article, and there is no substantiated link between adverse health issues and GM crops. As for scientific consensus, I think I have documented that extensively in the article (for more information, see reports on GMOs by the American Medical Association, the National Academy of Science, The Royal Society of London, European Plant Science Organization, and the American Society of Plant Biologists among others). From a scientific perspective, it is difficult to comment on the 1998 lawsuit without having scientific data and information that might have factored into any deliberations that led to its dismissal.

> Melvin J. Oliver, PhD Supervisory Research Geneticist, USDA Agricultural Research Service University of Missouri

The Courts Should Not Apply the Seriously Flawed Learned Intermediary Doctrine

In the article titled "Product Liability Suits Involving Drug or Device Manufacturers and Physicians: The Learned Intermediary Doctrine and the Physician's Duty to Warn" (Missouri Medicine November/December 2014) attorney Jason Husgen cites a case of toxic epidermal necrolysis (TEN) in a patient who received Zithromax, an antibiotic and Daypro, a non steroidal anti-inflammatory drug. According to the Learned Intermediary Doctrine the drug company is not responsible for this untoward reaction. It is the physician whose failure to warn who is liable under this doctrine. This doctrine, especially as described in the example given in the article, is completely impractical.

I have been in practice fifty years and have treated tens of thousands of patients and have never seen one case of TEN or its related condition Stevens Johnson Syndrome. I think most doctors in clinical practice have had similar experiences. Am I supposed to tell every patient about every risk, no matter how rare, that is present in the warning section of the package insert? NSAIDS can be obtained over the counter. Who is liable and who pays when a serious drug reaction occurs in that situation?

A far better solution to this problem can be found in the National Vaccine Injury Compensation Program. When a vaccine related injury or occurs death occurs compensation is paid out of a fund which is government funded by a small excise tax. The trial lawyers, of course, do not like this arrangement because they are out of the loop. They are constantly challenging the program in every ingenious way that they can think of.

For rare serious reactions that occur with drugs either a set aside should be made by the drug companies to compensate injured patients or an excise tax as in the vaccine injury program should be applied. Physicians can and do tell patients about the serious side effects and possible allergic reactions of drugs used to treat patients with life threatening diseases but cannot warn patients about every rare untoward reaction.

The Learned Intermediary Doctrine shifts liability from the drug and device manufacturers where it rightfully belongs to the physician. The other beneficiaries of the doctrine are the trial lawyers both plaintiff and defense. Doctors are much more vulnerable to law suits than are wealthy drug companies and device manufacturers. The author describes the reasoning the courts used to arrive at the Learned Intermediary Doctrine, which I find unconvincing and a violation of common sense. The Courts should not apply this seriously flawed doctrine.

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