

**STATEMENTS FROM SCIENTISTS CONCERNING THE SAFETY AND QUALITY OF LOW OXYGEN MODIFIED ATMOSPHERE PACKAGING WITH CARBON MONOXIDE**

<p>Dr. Alden Booren, Professor, Michigan State University (Retired)</p>	<p>May 4th, 2006, in a letter to the Honorable Carl Levin, U.S. Senate</p>	<p>“The risk of a significant food safety hazard occurring in meat packaged using this low-oxygen carbon monoxide modified atmosphere packaging (MAP) technology does not change when this technology is compared to conventional retail meat wrap technologies. For this reason I would not hesitate to utilize the technology in the Meat Laboratory Pilot Plant, a facility I help manage at Michigan State University.”</p>
<p>Dr. Joseph Sebranek, Iowa State University; Dr. Melvin Hunt, Kansas State University; Dr. Darren Cornforth, Utah State University; and Dr. Susan Brewer, University of Illinois</p>	<p>May, 2006, Perspectives Article in Food Technology, a scientific publication of the Institute of Food Technologists</p>	<p>“The claim that CO packaging will result in unsafe products is not scientifically sound.”</p> <p>“Because scientific studies have validated the safety of low-CO packaging technology for fresh meat, it seems appropriate to let the marketplace decide the success or failure of the process.”</p>
<p>Dr. Melvin Hunt, Professor, Kansas State University (Retired)</p>	<p>March 14, 2006, Letter to the Editor, submitted to the Kansas City Star</p>	<p>“Over the last few weeks, media have persuaded some consumers that they are being misled because meat that would have otherwise turned brown is still red. Some retailers are now fearful of selling products packaged in this impressive, safe and cutting edge technology. The effort to discredit the science that went into it – and efforts to discredit the federal agency that reviewed it three times – is scientifically inaccurate and unfortunate.</p> <p>A close look at this media scare shows motives that are as transparent as carbon monoxide itself. But carbon monoxide packaging technology has a real benefit to consumers. The only benefits generated by these unfounded safety allegations are to the company that stirred the controversy – and to the media outlets that benefit from the attention grabbing story.”</p>
<p>Texas Tech University researchers, Dr. Chance Brooks and Dr. Mindy Brashears</p>	<p>June 26, 2006, Texas Tech University Press Release</p>	<p>“In a related microbiological study, a research team headed by Dr. Mindy Brashears found that beef inoculated with pathogenic bacteria, <i>Salmonella</i> and <i>E. coli</i> O157, and then packaged with carbon monoxide had less pathogenic bacteria after 14 days than similarly inoculated beef wrapped in traditional packaging without carbon monoxide.”</p>
<p>EU Scientific Opinion</p>	<p>2001, EU Scientific Committee on Food</p>	<p>“The EU Scientific Committee on Food (SCF) in 2001 determined that the use of CO under intended conditions of use in meat packaging is safe. The committee concluded “there is no health concern associated with the use of 0.3% to 0.5% CO in a gas mixture of carbon dioxide and nitrogen as a modified atmosphere packaging gas for fresh meat provided temperature during the storage and transport does not exceed 4 C.”</p>

**NAMI FACT SHEET: STATEMENTS FROM SCIENTISTS CONCERNING THE SAFETY AND QUALITY OF LOW OXYGEN MODIFIED ATMOSPHERE PACKAGING WITH CARBON MONOXIDE - CONTINUED**

Dr. Gary Acuff, Professor Texas A&M University	May 26, 2006, Letter to Editor of Meatingplace Magazine	“Low-oxygen modified atmosphere packaging is a safe technology that provides significant consumer benefits, not the least is a longer shelf-life than aerobic packaging. Adding very low levels of carbon monoxide to the atmosphere provides an acceptable color that helps meet consumer expectations. The use-by date on every package tells consumers the point at which the product will no longer be acceptable. This is not a misleading technology; however, facts seem to be getting lost in the publicity generated by critics.”
Dr. Darren Cornforth, Professor, Utah State University	March 16, 2006, Letter to the Deseret News	“The FDA has looked at, and approved the use of CO in meatpacking on three separate occasions, most recently noting that the use of CO “will not mislead consumers into believing that they are purchasing a product that is fresher or of greater value than it actually is or increase the potential for masking spoilage.”
Dr. Mike Doyle, Professor and Director of the Center for Food Safety, University of Georgia	July 27, 2006, Interview with Food Production Daily USA	“I don’t think that carbon monoxide packaging is a deceptive process at all, certainly not from a safety standpoint.  I think that carbon monoxide packaging technology deserves an award, from a scientific perspective this is a profound idea,” said Doyle. “If manufacturers have a reasonable date on the product and it looks good, smells good and tastes good... well what’s wrong with that?”
Dr. Oddvin Sorheim, Norwegian Food Research Institute	September 6, 2006, Letter to Center for Food Safety and Applied Nutrition, FDA	“I started studying CO in 1996, and at that time I must admit that I was skeptical of CO. However, by acquiring knowledge through later research and experience, I am convinced that CO packaging is safe and the best available packaging method for fresh meat...There is now a solid base of scientific literature describing and supporting the use of CO for meat, and I am aware of no meaningful scientific controversy as to the safety of its intended use...My sincere recommendation to the US food control authorities is to maintain the GRAS status for meat packaging.”