

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IOWA
WESTERN DIVISION**

DAVID STULTS and BARBARA
STULTS,

Plaintiffs,

vs.

SYMRISE, INC., BUSH BOAKE
ALLEN, INC., INTERNATIONAL
FLAVORS & FRAGRANCES, and
SENSIENT, L.L.C.,

Defendants.

No. C 11-4077-MWB

**MEMORANDUM OPINION AND
ORDER REGARDING DEFENDANTS'
MOTIONS FOR SUMMARY
JUDGMENT**

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In this products liability case, plaintiffs allege that David Stults developed “popcorn lung” by eating microwave popcorn daily over many years. Presently, I am asked to determine whether the plaintiffs are entitled to present to a jury their strict liability, failure to warn, and design defects claims about microwave popcorn. However, before I address the merits of plaintiffs’ claims, I must resolve paradoxical choice of law questions. Defendants assert application of the law of Michigan, where plaintiffs reside and where they purchased the popcorn at the center of this case, while plaintiffs assert application of the law of Iowa, where some of the microwave popcorn was produced. These questions, and others, are presented by the defendants’ motions for summary judgment.

I. INTRODUCTION AND BACKGROUND

A. Factual Background

As is my usual practice, I set out only those facts, disputed and undisputed, sufficient to put in context the parties’ arguments concerning the defendants’ motions for summary judgment. Unless otherwise indicated, the facts recited here are undisputed, at least for the purposes of summary judgment. I will discuss additional factual allegations, and the extent to which they are or are not disputed or material, if necessary, in my legal analysis.

1. The parties and principal actors

Plaintiffs David Stults and Barbara Stults are residents of Grand Rapids, Michigan. David grew up in Muskegon, Michigan, and attended college in Michigan. Except for brief stints in California and Maryland, David has always lived and worked in Michigan.

Defendant Bush Boake Allen, Inc. (“Bush Boake”) is a Virginia corporation with its principal place of business in New York, New York. Defendant International

Flavors & Fragrances, Inc. (“International Flavors”) is a New York corporation with its principal place of business in New York, New York. In 2000, Bush Boake became a wholly-owned subsidiary of International Flavors (collectively, “the Flavoring Defendants”). None of the Flavoring Defendants have any employees or agents in Iowa. None of the Flavoring Defendants manufactures or designs butter flavorings in Iowa.

The Flavor and Extracts Manufacturers’ Association (“FEMA”) is a trade association. It is comprised of flavor manufacturers, flavor users, flavor ingredient suppliers, and others with an interest in the United States flavor industry. International Flavors and Bush Boake are members of FEMA and have been since approximately 1984. A senior vice-president of International Flavors served on FEMA’s Board of Governors in 1984.

Diacetyl is a basic food chemical present in all cheeses and butters. Diacetyl is an ingredient used to manufacture butter flavorings. Diacetyl is one of a number of potentially volatile organic compounds present in butter flavorings. Diacetyl was used in butter flavorings in order to give the flavorings a buttery taste and smell. Upon opening a cooked bag of microwave popcorn with butter flavorings containing diacetyl, diacetyl vapors are released into the air.

The Flavoring Defendants sold their butter flavorings to microwave popcorn manufacturers, including ConAgra. ConAgra Foods, Inc. (“ConAgra”) is one of the largest manufacturers of microwave popcorn in the United States and one of the largest food manufacturers in the world. ConAgra has been in the microwave popcorn business since the 1980’s. ConAgra operated microwave popcorn factories in Edina, Minnesota, Hamburg, Iowa, Winslow, Indiana, Valparaiso, Indiana, and Marion, Ohio. In 1991, ConAgra purchased Golden Valley Microwave Foods (“GVMF”). GVMF was formed around 1978 by James Watkins. Before forming GVMF, Watkins

invented microwave popcorn when he worked for Pillsbury. In 1982 or 1983, GVMF became one of the first developers of a thin metal susceptor in microwave popcorn bags that allowed the bags to cook in any oven. GVMF was a customer of Bush Boake. GVMF became a customer of International Flavors after International Flavors acquired Bush Boake. GVMF became one of the leaders in the United States in the manufacture and sale of microwave popcorn.

ConAgra has been aware since the early 1990's that butter flavorings contained diacetyl and other volatile organic compounds. Beginning as early as the 1990's, ConAgra conducted studies of the volatile organic and chemical compounds released when its microwave popcorn was popped. ConAgra had an Environment, Occupation, Health, and Safety Department ("EOHS") that was responsible for the health and safety of both ConAgra's workers and its customers.

In developing a product, ConAgra solicits flavorings suppliers to submit flavors which, if accepted, are subject to ConAgra's testing and approval. In particular, ConAgra had a specification and approval system which butter flavorings manufacturers had to go through before their butter flavorings would be considered for commercial use. ConAgra's Snack Food Division had four to six butter flavorings suppliers. ConAgra's research and development department received Material Safety Data Sheets ("MSDS") when it received flavoring samples from flavorings suppliers.

Prior to 1994, ConAgra owned the Hunt-Wesson and Orville Redenbacher brands of microwave popcorn. Hunt-Wesson was, eventually, consolidated into ConAgra's Snack Foods Division. In 1994, Hunt-Wesson identified diacetyl as a "target" flavor compound in Bush Boake's butter flavorings for microwave popcorn. As early as 1995, Hunt-Wesson had discussions with Bush Boake about the viability of Bush Boake's butter flavorings. Hunt-Wesson specifically analyzed Orville Redenbacher flavor 39536, using its own laboratories and personnel, to learn the

amount of diacetyl, acetoin, and butyric acid it contained. Bush Boake had to submit flavorings to Hunt-Wesson for Hunt-Wesson's approval.

No one at Bush Boake or International Flavors informed ConAgra that its butter flavorings could cause serious lung injury or bronchiolitis obliterans. Bush Boake's MSDS to ConAgra did not indicate that exposure to Bush Boake's butter flavorings could cause serious lung injury or bronchiolitis obliterans. The Flavoring Defendants stopped selling butter flavorings containing diacetyl, including the Orville Redenbacher flavorings, by January 2005.

ConAgra, General Mills, and American Pop Corn are all members of the Popcorn Board. The Popcorn Board is an industry association created to promote research related to popcorn. Its members are popcorn manufacturers who process at least four million pounds of popcorn per year. The Flavoring Defendants are not members of the Popcorn Board and have never attended the Popcorn Board's meetings.

2. *David's consumption of microwave popcorn*

The parties dispute when David first began eating butter flavored microwave popcorn. David contends that it was as early as 1985.¹ By 1988 or 1989, David was preparing and eating butter flavored microwave popcorn daily 95 percent of the time. By 1991, David's daily routine was to prepare and eat butter flavored microwave popcorn every evening. For at least 19 years, David prepared, inhaled, and ate microwave popcorn daily 95 percent of the time. The time period David ate microwave popcorn is also disputed. David contends that it was from 1985 to 2009. David estimates that he prepared and ate between 6,241 and 12,483 bags of microwave popcorn over the course of 19 years.

¹The Flavoring Defendants contend that David previously reported eating butter flavored microwave popcorn from 1991 to 2004, or 1987 to 2010.

David always prepared the microwave popcorn and always enjoyed breathing in the buttery aroma when he removed the popcorn from the microwave. Once he opened a bag, David would get his nose as close to the bag as he could without getting burned. With his nose close to the bag, David would suck in the smell by taking deep breaths.

The only brand of microwave popcorn David ate that contained any of the Flavoring Defendants' butter flavorings containing diacetyl was ConAgra's Orville Redenbacher Butter. The butter flavorings that the Flavoring Defendants' manufactured for use in Orville Redenbacher Butter were flavors Bush Boake no. 39536 a/k/a International Flavors no. 10806906, and Bush Boake no. 85352 a/k/a International Flavors no. 10807852.²

David remembers reading the microwave popcorn bags' directions for how long to cook the microwave popcorn. David does not recall looking for any warnings on microwave popcorn bags. He does not recall any warnings provided on any bags of microwave popcorn he ate between 1988 and 2007. He testified that he does not remember seeing microwave popcorn packaging that mentioned "no added diacetyl" or "no diacetyl added," because "if I had, it would not have resonated with me, because it was not relevant to anything I needed to know." David's Dep. at 78; Defendants' App. at 483. Asked whether he typically read the labels of products before using them,

² In addition to ConAgra's Orville Redenbacher Butter, David ate the following microwave popcorn brands: General Mills's Pop Secret Butter, which allegedly contained Symrise and Givaudan flavorings; General Mills's Pop Secret Movie Theater, allegedly containing Firmenich flavorings; ConAgra's Act II Butter Lover's, allegedly containing Symrise and Givaudan flavorings; ConAgra's Act II Butter, allegedly containing CHR Hansen flavorings; American Pop Corn's Jolly Time Blast O' Butter, allegedly containing Sensient flavorings. Each of these brands of microwave popcorn comprised between ten percent and twenty percent of David's total microwave popcorn consumption.

David responded: “In general yes, but I can tell you at the time I was consuming microwave butter-flavored popcorn, I didn’t have a sense of what diacetyl was, nor did I care. For all I knew, it was something that would make you fatter or thinner. I had no idea of the correlation to lung disease.” David’s Dep. at 563; Defendants’ App. at 488.

Asked whether a warning might have prevented him from inhaling microwave popcorn fumes, David stated: “I would like to think that had there been a warning or if there had been some public notice that butter-flavored microwave popcorn could create these kinds of disastrous effects in the consumer market as it did in the workers’ market, I would have liked to have known that.” David’s Dep. at 525; Defendants’ App. at 487. David added, “So in my opinion, had there been some kind of warning on the bag that the fumes of this has been known to cause a non-recoverable disease, I think I would have been much more sensitive to not breathing in the fumes which is where this all came from to begin with.” David’s Dep. at 525; Defendants’ App. at 487. David might have seen a microwave popcorn warning telling consumers to allow the popcorn to “cool before opening,” but he “thought perhaps this was just another defensive thing the manufacturer is putting on there for whatever reason,” similar to how McDonald’s warns that its coffee is hot. David’s Dep. at 565; Defendants’ App. at 488.

The Stults purchased microwave popcorn almost entirely at grocery stores in the Grand Rapids, Michigan area. During the time period that David ate microwave popcorn, he lived outside of Michigan for less than a year. David has never lived in Iowa.

3. *David’s medical background and diagnosis*

In 2008, David began to suffer symptoms associated with bronchiolitis obliterans in Michigan. Bronchiolitis obliterans is a progressive respiratory disease that becomes

worse with additional exposure. In 2009, David was diagnosed with bronchiolitis obliterans at the Mayo Clinic. All of David's current treating physicians are located in the Grand Rapids area. David is currently being treated for his lung disease by Dr. Shelley Schmidt, who practices in Grand Rapids.

4. *Popcorn and flavorings industries' activities*

a. *1986 International Bakers plant study*

In 1986, the National Institute for Occupational Safety and Health ("NIOSH") published a study regarding a Health Hazard Evaluation involving bronchiolitis obliterans at an International Bakers plant in Indiana. The NIOSH's report concluded that two workers at the plant had been diagnosed with lung injuries clinically consistent with bronchiolitis obliterans or emphysema. The NIOSH's 1986 International Bakers report stated: "In the absence of specific identified etiology for the two cases of severe obstructive lung disease, every attempt should be made to control airborne dust exposure in the mixing room." 1986 NIOSH Report at 2; Plaintiffs' App. at 965. The NIOSH report makes no reference or recommendation regarding exposure to "vapors, mists or fumes" which could arise from evaporating liquid.

b. *Bronchiolitis obliterans at Givaudan plant*

By 1992, FEMA member Givaudan discovered that some of its employees had been diagnosed with bronchiolitis obliterans and that one of its employees may have died as a result. This discovery led to the creation of an internal task force to investigate the potential for lung injury at the Givaudan plant. In 1992, Givaudan established safety procedures including the use of respirators for workers exposed to diacetyl or products containing diacetyl. In 1993, the Givaudan task force reported that diacetyl could be a cause of bronchiolitis obliterans and further studies should be

conducted.³ In 1994, Dr. Stuart Brooks, M.D., a specialist retained by Givaudan as part of its investigation, confirmed the bronchiolitis obliterans diagnosis in two of Givaudan's employees. Dr. Brooks recommended steps to continue the investigation to determine the cause and prevent further bronchiolitis obliterans cases. In 1994, Givaudan retained specialists from the University of Cincinnati to investigate the level of lung disease among Givaudan employees. The specialists included Roy McKay, a pulmonary toxicologist, Dr. James Lockey, M.D., an occupational physician, and Dr. Susan Pinney, Ph.D., an epidemiologist. On July 22, 1996, Mike Davis, Givaudan's President, and Nancy Davis, Givaudan's toxicologist, met with John Halligan, a FEMA attorney and science advisor, to inform FEMA that Givaudan employees had been diagnosed with bronchiolitis obliterans. On September 27, 1996, Karen Duros, Givaudan's General Counsel, and Dr. Lockey met with Halligan again to educate FEMA on bronchiolitis obliterans and what was happening at the Givaudan plant. During this time period, Mike Davis served on FEMA's Board of Governors with Symrise's President and International Flavor's Vice President.

c. FEMA and its 1997 conference

Among the health hazard information FEMA publishes for its members are Flavor and Fragrance Ingredient Data Sheets ("FFIDS") for flavoring chemicals. In 1985, FEMA issued a FFIDS for diacetyl which stated that, upon inhalation, diacetyl was "harmful" and high concentrations were "capable of producing systemic toxicity."

³By 1993, BASF AG, a German Company that manufactured diacetyl, had conducted diacetyl inhalation studies on rats that showed respiratory damage. It is unclear from the summary judgment record when the BASF study was released to the public.

FFIDS at 2; Plaintiffs' App. at 62. FEMA has a standing Safety Evaluation Coordination Committee. That committee's responsibilities are:

To direct and oversee all safety evaluation activities of the Association, and to monitor safety evaluation activity, wherever it occurs, related to flavors. To initiate or cooperate in initiating activities related to, and supporting, competent and effective safety evaluation of flavors. To coordinate the safety evaluation activities of the Board of Governors, the Expert Panel, other committees of the Association, and outside organizations including governmental agencies, scientific and academic institutions and other industry groups,

FEMA Directory at 26; Plaintiffs' App. at 464. FEMA also has a standing Flavor Ingredients Committee. The responsibilities of this committee are:

To plan and conduct periodic surveys of the industry, to obtain current usage data on flavoring ingredients, and to review and interpret the results of such surveys. To locate and obtain samples of materials required for use in scientific studies sponsored by the Association. To locate and compile other available data on flavor ingredients which may be required to evaluate the safety of those ingredients or to assign priorities for their review.

FEMA Directory at 24; Plaintiffs' App. at 463. FEMA's Flavor Ingredients Committee did not conduct any original animal studies. By 1997, no FEMA committee existed which was responsible for determining whether chemicals could be hazardous when inhaled.

Additionally, FEMA developed a Generally Recognized As Safe ("GRAS") list of ingredients. FEMA's membership directory explained:

The *GRAS* list—FEMA formulated an innovative program utilizing the generally-recognized-as-safe (*GRAS*) concept to evaluate the safety of flavor ingredients. Through the creation of an Expert Panel to determine the *GRAS* status of flavoring ingredients; A *GRAS* list of nearly 1800

ingredients has been developed for use by the industry. The Expert Panel periodically reviews the status of existing ingredients and provides the opportunity for the introduction of new ingredients. The *GRAS* list is a unique example of an established, successful, industry self-regulation program.

FEMA Directory at 3; Plaintiffs' App. at 452.

As a result of the findings of bronchiolitis obliterans at Givaudan's plant, John Hallagan, a science advisor and attorney for FEMA, advised FEMA's Board of Governors that an employee of a member flavor company had been diagnosed with bronchiolitis obliterans and that FEMA should provide a seminar for its members on occupational lung disease and respiratory protection.⁴ In March 1997, FEMA sponsored a seminar entitled "Respiratory Safety in the Flavor and Fragrance Workplace" ("the 1997 FEMA Seminar"). Dr. Cecille Rose, an occupational medicine physician from the National Jewish Health Center, and John Martyny, a certified industrial hygienist, spoke at the 1997 FEMA Seminar. Rose and Martyny addressed respiratory safety in the flavor industry.

The seminar materials provided in relevant part:

There is no list of flavor and fragrance ingredients that may present respiratory hazards in the workplace. Some flavor and fragrance ingredients such as acetaldehyde may pose respiratory hazards, and are so identified on Material Safety Data Sheets (MSDS). There is no list of specific respiratory, or other, diseases associated with flavor and fragrance workplaces.

FEMA and FMA staff and members regularly monitor the literature and other sources of information to keep abreast of developments in workplace safety relevant to

⁴ Givaudan's identity was kept secret and it was referred to as "Company X" in FEMA documents.

the flavor and fragrance industries. As we have seen, reports of specific problems are rare which supports our conclusion that flavor and fragrance workplaces are very safe.

One of the few relevant reports is the 1986 NIOSH Health Hazard Evaluation Report of International Baker's Services, a company based in South Bend, Indiana which provided flavors and other materials to the baking industry. In this instance, NIOSH evaluated a cluster of respiratory illness in the workplace. NIOSH was unable to identify any specific chemical that may have caused the respiratory effects noted in several workers, nor were they able to specifically identify the disease although they concluded that the disease may have been bronchiolitis obliterans.

Seminar Materials at 10; Plaintiffs' App. at 150. Bronchiolitis obliterans was also discussed at the seminar. By the end of the seminar, attendees were aware of a possible case of bronchiolitis obliterans at a FEMA member plant. Attendees were informed about steps that could be taken to try to prevent individuals from being exposed to things that could cause bronchiolitis obliterans.

d. General Mills's skin irritation problems

Some General Mills's employees at its microwave popcorn plant in Iowa City, Iowa began experiencing skin irritation problems in the mid to late 1990's. In investigating this skin irritation problem, General Mills contacted Givaudan for advice on butter flavorings and industrial hygiene. At the request of General Mills, Givaudan representatives came to its plant in Iowa City. Givaudan advised General Mills on how to protect workers from skin irritation but never told General Mills that Givaudan always required its workers to wear respirators when working with diacetyl. General Mills asked Givaudan if inhaling butter flavorings was hazardous and was told it was not hazardous. In 1999, General Mills hired ventilation consultants to install exhaust hoods at its Iowa City plant.

In approximately 1999, Dr. Gary Olmstead, Dr. Thomas Trautman, and Dr. Tim Crimmins began investigating complaints of skin rashes among workers in General Mills's Iowa City popcorn plant. Dr. Crimmins was General Mills's Vice-President of Health, Safety and Environment. He received board certification in emergency medicine and was a past Chairman of the Board of the Minnesota Medical Association. Dr. Olmstead, Ph. D., was General Mills's Director of Safety from 1997 through 2000. He received his doctorate in environmental health from the University of Cincinnati in 1982 and became a Certified Industrial Hygienist in 1984. Dr. Trautman was an industrial hygienist at General Mills for 30 years, beginning in 1978. Dr. Trautman obtained his doctorate in toxicology from the University of California at Davis. He focused on product and consumer safety at General Mills. As part of their investigation, they looked into diacetyl. They had access to the scientific and medical literature available at the time and reviewed publications regarding diacetyl in the course of their investigation.

On October 6, 2001, Dr. Trautman wrote an e-mail memorandum outlining General Mills's position that "[d]iacetyl, in our setting, is safe. Nothing has changed for us." Trautman Memorandum at 1; Defendants' App. at 140. Dr. Trautman added: "From the very beginning we knew we needed to take care to minimize exposure [to diacetyl]." Trautman Memorandum at 1; Defendants' App. at 140.

e. NIOSH's investigation of Jasper plant

In August 2000, NIOSH performed a Health Hazard Evaluation ("HHE") of the Gilster-Mary Lee microwave popcorn packaging facility in Jasper, Missouri, where there were reported incidents of workplace-related lung disease. NIOSH performed industrial hygiene sampling to measure contaminants. NIOSH also conducted a medical survey of Gilster-Mary Lee plant workers.

On August 22, 2001, NIOSH published an interim report regarding its investigation of the Gilster-Mary Lee microwave popcorn packaging facility. Diacetyl was found to be the “predominant” ketone in the Jasper plant. NIOSH also found that:

Plant employees had 2.6 times the rates of chronic cough and shortness of breath compared to national data, adjusted for smoking and age group; younger employees who had never smoked had rates about five times higher than expected from national rates. Overall, plant employees had 3.3 times the rate of obstructive spirometry abnormalities compared to national adjusted rates; never smokers had 10.8 times the national rate. Worker reports of physician-diagnosed asthma and chronic bronchitis were about twice as frequent as expected from national data, with a 3.3-fold excess of chronic bronchitis in never smokers. Microwave popcorn production workers had statistically higher rates of regular trouble with breathing and unusual fatigue, compared with workers in two lower exposure groups.

NIOSH Gilster-Mary Lee Report at 2; Defendants’ App. at 255.⁵ NIOSH concluded that “[s]trong exposure-response relationships existed between quartile of estimated cumulative exposures to diacetyl and respirable dust and frequency and degree of airway obstruction.” NIOSH Gilster-Mary Lee Report at 2; Defendants’ App. at 255.

In March and April of 2002, NIOSH conducted follow-up medical and environmental testing at the Gilster-Mary Lee plant. On July 26, 2002, NIOSH issued an interim letter report. NIOSH found that: “In more complex analyses performed since our interim report in August of 2001, we reported an additional high risk work area in the plant-quality control (QC), in which 5 of the 6 workers had airways

⁵The Stults also included a copy of the NIOSH’s Gilster-Mary Lee Report in their appendix at 499.

obstruction.” NIOSH Gilster-Mary Lee Letter Report at 2; Plaintiffs’ App. at 546. NIOSH further noted:

From our observations and measurements, we conclude that QC workers are repeatedly exposed for intervals of several seconds up to several minutes to elevated organic vapor concentrations by work processes throughout the shift. The sources of these vapors are the following:

1. Microwave oven fan exhaust air during cooking of the corn.
2. Bursts of steam and flavoring vapors ejected as bags are opened
3. Vapors rising from corn while being loaded into graduated cylinder

NIOSH Gilster-Mary Lee Letter Report at 2; Plaintiffs’ App. at 546. NIOSH made numerous safety recommendations specific to the quality control room and quality control workers to improve the air quality and reduce worker exposures. The recommendations included installation of vented enclosures with a vertical sash in front to allow workers to perform testing with their arms under the sash, placement of ventilation slots in back of the enclosure, and performing all testing within the enclosure.

On August 2, 2002, NIOSH provided Gilster-Mary Lee with a “Worker Update about NIOSH Testing at Jasper Popcorn.” The update noted: “We believe that butter flavoring vapors in the air caused lung disease in workers at this plant.” NIOSH Gilster-Mary Lee Worker Update at 1; Plaintiffs’ App. at 557. The update also discussed quality control room workers’ exposures, observing:

Many quality control workers had abnormal breathing tests and have continued risk even after the ventilation changes in the plant. Based on our survey results, we believe that they may receive many peak exposures to flavoring vapors when

microwaving the popcorn bags, opening them, and measuring the amount of hot popcorn. When the popcorn/flavorings temperature increases, the vapors increased, although the high exposures only lasted for seconds or a few minutes. We are concerned about these short peak exposures in the quality control room and have provided recommendations for control.

NIOSH Gilster-Mary Lee Update at 2; Plaintiffs' App. at 558. NIOSH assessed real time air sampling in the Gilster-Mary Lee quality control room using a Fourier Transform Infrared Gas Analyzer and found peak diacetyl concentrations of 56 parts per million inside a microwave bag immediately after popping and 13 parts per million near the bag opening during dumping of the popped corn in a container. The Flavoring Defendants contest these measurements and contend that NIOSH's results of air sampling were inaccurate.

f. NIOSH's investigation at American Pop Corn

In the early fall of 2001, NIOSH contacted American Pop Corn, through Iowa's Department of Public Health, regarding the health of its popcorn manufacturing employees as a result of the events at the Jasper Popcorn Plant. In September 21, 2001, Greg Hoffman, American Pop Corn's Vice President of Production, met with NIOSH's Dr. Kullman. Based on the meeting, American Pop Corn decided to allow NIOSH access to their microwave facility in order to conduct sampling and testing. According to Hoffman, American Pop Corn was "absolutely" on notice of some kind of health "issue" going on in the popcorn industry. On September 26, 2001, NIOSH conducted a walk-through survey at the American Pop Corn plant in Sioux City, Iowa. From November 2002 through July 2003, NIOSH issued recommendations to American Pop Corn related to "engineering controls," "flavoring substitution," "work practices," "respiratory protection program," and "medical surveillance." NIOSH's recommendation concerning "flavoring substitution," stated:

Although much remains to be learned regarding the compounds in butter flavorings that may have toxicity and what are safe levels of exposure, the possibility of replacing liquid or past flavorings formulations with low emissions powders should be explored. A powdered flavoring that generates little dust when handled, and has low emissions of VOCs before and after it is added to heated soybean oil, may be safer than a dustier powder that can be inhaled by workers.

NIOSH American Pop Corn Report at 11; Defendants' App. at 90.

g. Wall Street Journal article and its fallout

On October 3, 2001, the Wall Street Journal published an article, "Butter Flavoring May Pose A Risk To Food Workers," disclosing that NIOSH discovered respiratory problems among the workers at the Jasper plant. In the article, International Flavors is quoted as stating: "'We do not believe that any of our products are responsible for any injuries that the plaintiffs may have suffered.'" Wall Street Journal Article at 1-2; Plaintiffs' App. at 748-49.

Two days after the Wall Street Journal article was published, American Pop Corn and another popcorn manufacturer created the Popcorn Board's Ad Hoc Committee on Worker Safety ("the Ad Hoc Committee"). The Ad Hoc Committee's purpose was to learn about the status of the investigation at the Jasper plant and what the microwave popcorn industry could do to ensure workers' safety.

Jim Montealegre and Michael Bey, both GVMF vice presidents, were members of the Ad Hoc Committee. Jim Collins, a General Mills industrial hygienist, also served on the Ad Hoc Committee. On October 10, 2001, the Ad Hoc Committee held its first meeting. Both Montealegre and Bey attended this meeting. Two NIOSH investigators at the Jasper plant presented the current status of their investigation at the Jasper plant. On October 15, 2001, the Ad Hoc Committee circulated a personal protective equipment ("PPE") tip sheet among its members, including Montealegre and

Bey. The PPE tip sheet recommended mandatory respiratory usage for workers in flavoring mixing rooms.

On October 20, 2001, the Ad Hoc Committee, which included Collins and representatives of ConAgra, met in Chicago with NIOSH investigators. A NIOSH representative explained problems experienced at the Jasper popcorn plant in 2000 and NIOSH's investigation regarding the purported link between diacetyl exposure and lung disease. Following this meeting, ConAgra did not modify its packaging of Orville Redenbacher microwave popcorn to warn consumers about the alleged risks of exposure to butter flavorings containing diacetyl. On October 23, 2001, the Ad Hoc Committee circulated a ventilation tip sheet among its members, including Montealegre and Bey.

h. Jasper plant litigation

On September 7, 2001, workers from the Jasper plant brought suit against International Flavors regarding respiratory disease allegedly being caused by exposure to microwave popcorn butter flavorings. On June 13, 2002, International Flavors filed a Form 8-K with the Securities and Exchange Commission.⁶ In this 8-K form, International Flavors reported in part that:

International Flavors & Fragrances Inc. (IFF) is filing today further information regarding a purported class action brought against it in circuit court of Jasper County, Missouri, on behalf of employees at a plant owned and operated by Gilster-Mary Lee Corp. in Jasper, Missouri. . .

⁶Form 8-K is a form that publically traded companies must file with the Securities Exchange Commission under the Securities Exchange Act of 1934 when material events with the company occur. See www.sec.gov/about/forms/form8-k.pdf.

IFF's flavors, including butter flavor that is the subject of the lawsuit, meet the requirements of the U.S. Food and Drug Administration (FDA). IFF's flavors are safe for handling and use by workers in food manufacturing plants when used according to specified safety procedures. These procedures are detailed in instructions that IFF provides to all of its customers for the safe handling and use of its flavors. These instructions were provided to the Gilster-Mary Lee Jasper, Missouri plant for the butter flavor. They include the appropriate engineering controls, such as adequate ventilation, proper handling procedures and respiratory protection for workers. IFF's customers are responsible for assuring that their employees follow these standards.

The preliminary report issued by the National Institute for Occupational Safety and Health (NIOSH) indicates that these instructions were not followed at the Gilster-Mary Lee Jasper, Missouri plant. As a result, IFF believes that any injuries the plaintiffs may have suffered are related to inadequate workplace conditions, including insufficient ventilation and the failure of the employer to assure that its employees used appropriate respiratory protection.

Diacetyl is one of many ingredients in the butter flavor, but the flavor is only one of a number of substances the workers handled or were exposed to. Neither NIOSH in its report nor any other body that has investigated the Jasper plant has identified a specific cause of any injuries or illnesses that the workers may have suffered. In fact, the NIOSH report states that any one or more of a number of substances, including: volatile organic compounds other than diacetyl, and respirable dust, concentrations of all of which were measured by NIOSH "may be a marker for the causative agent or agents in the mixing and microwave popcorn production areas."

. . . .

In manufacturing flavors, IFF employees routinely handle and use significantly higher concentrations of ingredients, including diacetyl, than those in the butter flavor provided to Gilster-Mary Lee. Yet no IFF employee has ever suffered respiratory illness or injury as a result of handling and use. IFF's own experience reinforces the conclusion that any injuries or illnesses that the Jasper plant employees may have suffered were caused not by IFF flavors or any of their ingredients but by inadequate workplace conditions at the facility.

International Flavors's 8-K Form at 1-2; Plaintiffs' App. at 382-83. On March 15, 2004, International Flavors filed another 8-K form which substantially repeated the information contained in its 2002 8-K form.

i. NIOSH's investigation at ConAgra

In 2002, NIOSH received a request for a Health Hazard Evaluation at ConAgra's microwave popcorn plant in Marion, Ohio. NIOSH eventually investigated not only ConAgra's Marion plant, but both other ConAgra plants, including its Hamburg, Iowa, plant. As a result of those investigations, NIOSH made recommendations to ConAgra to implement additional protective measures for its workers. Following NIOSH's investigation, a number of ConAgra workers at its Marion plant filed lawsuits alleging that they developed lung disease allegedly caused by their exposure to butter flavorings at the plant. In December 2004, NIOSH published the results of its investigation of the Marion plant.

j. Miscellaneous events in 2002

In 2002, ConAgra attended the FEMA workshop on "Respiratory Safety in the Flavor and Fragrance Workplace." FEMA informed attendees of the risk associated with butter flavorings exposure and steps to improve worker health. In October 2002, the Popcorn Board signed an alliance agreement with the Occupational Safety and Health Administration ("OSHA"). The purpose of this agreement was to provide

microwave popcorn companies with information to assist them in protecting employee health and safety, particularly in reducing and preventing the incidence of obstructive lung disease in the workplace. On October 31, 2002, NIOSH drafted an “alert” which provided industry-wide recommendations to reduce or eliminate exposure to butter flavorings hazards in the workplace. NIOSH submitted a draft of this alert to the Ad Hoc Committee for its input. Both Montealegre and Bey were copied in on the memorandum with the attached NIOSH draft alert.

On April 26, 2002, the United States Centers for Disease Control and Prevention published a report entitled, “Fixed Obstructive Lung Disease in Workers at a Microwave Popcorn Factory—Missouri, 2000-2002.” In this report, the CDC stated that it had “no evidence to suggest risk for consumers in the preparation and consumption of microwave popcorn.” CDC Report at 1; Defendants’ App. at 496. In July 2004, NIOSH issued a Health Hazard Evaluation Report regarding American Pop Corn, HETA #2001-0474-2943. NIOSH found that “[s]ix of 13 workers with experience as mixers had abnormal lung function.” NIOSH American Pop Corn Report at iii; Defendants’ App. at 76.

k. The Flavoring Defendants’ product testing and warnings

Both the Flavoring Defendants have research and development facilities. Bush Boake’s facility is located in Mercedes, New Jersey, and International Flavors’s facility is in South Brunswick, New Jersey.

Bush Boake used diacetyl in some of its butter flavorings. Bush Boake did not test the flavoring ingredients or the mixtures in its butter flavorings to determine if they were safe to eat. In December 1991, Bush Boake planned to conduct air sampling at its flavorings plant for eight chemicals, including diacetyl, in March 1992. In 1993, Bush Boake knew that some of its employees “showed breathing problems on the pulmonary function testing.” Bush Boake Memo at 2; Plaintiffs’ App. at 326. On September 20,

1993, Bush Boake's "production formula" for product 85030 warned Bush Boake employees that the ingredient diacetyl had a hazard rating of 2 which constituted a "moderate" inhalation hazard. By November 1993, Bush Boake made respirators available to compounders. In 1994, Bush Boake instituted a Respiratory Protection Program for employees working around a variety of chemicals. One of the "potential respiratory exposures" identified in the Respiratory Protection Program for prevention in the compounding room was diacetyl. In 1995, Carlos Montenegro, a member of Bush Boake's safety committee, performed a literature review concerning the toxicity of diacetyl. After completing his research, Montenegro made no safety recommendations concerning diacetyl and discarded the literature he had collected in his research.

Bush Boake supplied several butter flavorings to ConAgra which contained diacetyl. On August 18, 2004, Michael O'Donnell, ConAgra's Vice President of Ingredients Enterprise Procurements, wrote to International Flavors requesting additional information regarding International Flavors's butter flavorings. O'Donnell wrote in pertinent part:

In fact, the MSDS sheets themselves cause more questions than they answer, because clearly IFF has done some sort of scientific analysis of the butter flavors that they have not shared with ConAgra Foods. I have a series of questions to this point for clarification later in this letter.

Our concern has been greatly heightened over the last several days when on Monday you provided me with the FEMA Respiratory Health and Safety in the Flavor Manufacturing Workplace. Based on just a cursory reading of this Report, it is clear that the flavoring manufacturers have been working for quite some time on analyzing butter flavors and various compounds used to create them, but have failed to provide any of that information to your customers.

Moreover, and even more surprising, was your e-mail to me indicating that your insurance companies will no longer insure butter flavors containing diacetyl for use in microwave popcorn, that you are no longer selling these butter flavors to any of your other microwave popcorn customers, just us, and that you have already started working on new flavors to replace the current butter flavors, without even talking to ConAgra Foods' Research and Development scientists. All this activity is cause for concern, especially changing our butter flavors without consulting with our R&D team when there is no scientific evidence indicating that there is a health hazard to consumers or employees with these butter flavors.

O'Donnell Letter at 1; Plaintiffs' App. at 693. O'Donnell goes on to make the following specific request: "IFF has clearly created a risk assessment associated with diacetyl. Please identify the research data and reports on which this assessment is based." O'Donnell letter at 1; Plaintiffs' App. at 693.

On September 1, 2004, Ronald Senna, International Flavors's Vice President of Corporate Safety, Environmental & Regulatory Affairs, responded to O'Donnell's letter. In response to O'Donnell's question, Senna answered:

IFF has not performed a risk assessment for diacetyl since there is very limited scientific information to allow such an assessment to be performed. In addition, the variability of use of this substances [sic] by our customers does not allow such an assessment to be conducted by IFF since it requires both hazard and customer workplace exposure information which is not available to IFF.

Senna Letter at 1-2; Symrise's Supp. App. at 630-31.

1. The 2007 Rosati study

In 2007, the United States Environmental Protection Agency ("EPA") conducted "the first study to take a comprehensive look at chemicals released while microwaving an entire conventional microwave popcorn product." Rosati Study at 701; Plaintiffs'

App. at 560. The Rosati study “identified and quantified chemical emissions released in the process of popping and opening a bag of microwave popcorn.” Rosati Study at 701; Plaintiffs’ App. at 560. The study noted the exposure risks to quality control workers:

Quality control (QC) personnel, who pop corn and open bags, had a high incidence of respiratory and dermal symptoms (Kanwal et al., 2006; Kreiss et al., 2002). NIOSH scientists confirm that workers in the QC areas have shown an increased risk of lung disease (Kanwal et al., 2006). This prompted the EPA’s interest in what is released into the immediate environment when microwaving popcorn, and its potential to impact indoor air quality.

Rosati Study at 701; Plaintiffs’ App. at 560. The study further noted the similarity between the vapors from cooking microwave popcorn in a microwave and those found in microwave popcorn plants, observing:

Numerous chemicals were measured in the air exiting the chamber during microwave popcorn popping and opening. The predominant emitted chemicals agreed with those chemicals sampled by NIOSH inside microwave popcorn manufacturing plants (Kullman et al., 2005) with the exception of methyl ethyl ketone (MEK).

Rosati Study at 706; Plaintiffs’ App. at 565. The study found that “chemicals continue to be released from microwave popcorn after bag opening.” Rosati Study at 706; Plaintiffs’ App. at 565.

m. Miscellaneous events in 2008

On February 12, 2008, Dr. Mitchell A. Cheeseman, Director of the United States Food and Drug Administration, stated: “We’re looking at the available information we have on the potential for consumer exposure and how that relates to the available safety data. . . . At this time . . . we still consider diacetyl used as a flavoring agent to be safe for consumers.” Columbia Dispatch Article at 1; Defendants’ App. at

512. The next month, on March 13, 2008, Dr. Daniel Morgan of the National Institute of Environmental Health Science is quoted stating:

There's a lot of concern about whether it's safe to eat microwave popcorn at home. I think we have to understand that the amounts of diacetyl present in foods and in the microwave popcorn is very low. And to my knowledge, there are no data showing it's unsafe to consume food containing diacetyl. This is primarily an occupational-type hazard[.]”

WebMD Article at 1; Defendants’ App. at 510.

On December 4, 2008, a comment was posted on the NIOSH science blog, stating in part:

Unlike workers, so far there have not been peer-reviewed scientific studies showing that consumers using products such as microwave popcorn that contain butter flavoring chemicals are at increased risk for lung disease. . . .

Currently, even though there is little to suggest significant risk to normal consumers, a sensible precautionary approach is appropriate. Consumers could take simple precautions to minimize the amount of diacetyl and other chemicals that they breathe. Cooking or popping of products containing diacetyl and other butter flavoring chemicals should be done in a food preparation area with adequate exhaust ventilation. Good ventilation will help dilute and remove vapors. In the case of microwave popcorn, the popped bags should be allowed to cool before they are opened, which will also decrease exposure to vapors.

NIOSH Blog; Defendants’ App. at 503-04.

5. *Diacetyl free butter flavorings alternatives*

Givaudan or Tastemaster developed a butter flavoring that did not contain diacetyl. The record does not establish when this product was developed or sold. ConAgra also developed a diacetyl free butter flavoring by removing the diacetyl and

rebalancing the remaining ingredients. Again, the record does not establish when ConAgra created this butter flavoring. Elan Chemical Co., Inc. advertised a product “Butterome” as a diacetyl replacement. The record, however, does not establish whether Butterome was a successful replacement for diacetyl. In September 2002, St. Louis flavors was developing butter flavoring that contained little or no diacetyl. The record also does not establish when the Flavoring Defendants became aware of a commercially feasible alternative to butter flavorings containing diacetyl. On December 17, 2007, ConAgra issued a news release announcing its introduction of Orville Redenbacher microwave popcorn without diacetyl

6. *Dr. David Egilman*

Dr. David Egilman, the Stults’ causation expert, has opined that the highest rate of diacetyl emission occurs when microwave popcorn bags are opened, and the second highest occurs during popping. Dr. Egilman also concludes that diacetyl remains in the air up to 40 minutes after cooking microwave popcorn. In his opinion, he describes the causal link between the Flavoring Defendants’ conduct and David’s injuries as follows:

Had they tested and warned appropriately diacetyl would never have been added to the product and, if it had been, a warning would have made it unlikely that Mr. Stults would have used the product. Finally, had he used it, a warning would have resulted in a correct diagnosis and an elimination of the exposure after she [sic] got sick reducing the severity of his disease.

Egilman Report at 93; Plaintiffs’ App. at 662.

According to Dr. Egilman, neither of the Flavoring Defendants shared their knowledge that diacetyl posed a respiratory hazard with its customers. The Flavoring Defendants hotly contest all of Dr. Egilman’s opinions.

B. Procedural Background

On August 23, 2011, plaintiffs David Stults and Barbara Stults filed their First Amended Complaint against several manufacturers and distributors of microwave popcorn and several suppliers of butter flavorings containing diacetyl.⁷ The Stults allege claims of strict liability, negligence, breach of warranty, and loss of consortium. The Stults' claims all stem from David's alleged respiratory injury resulting from his exposure to popcorn containing butter flavorings containing diacetyl. The parties are before me by virtue of diversity of citizenship. *See* 28 U.S.C. § 1332.

The Flavoring Defendants have filed the following motions for summary judgment:

The Flavoring Defendants' Joint Motion For Partial Summary Judgment on Plaintiffs' Strict Liability Claim (docket no. 146); the Flavoring Defendants' Joint Motion For Partial Summary Judgment As To Counts II-IV Based On Michigan's Three-Year Statute Of Limitation (docket no. 154); the Flavoring Defendants' Motion for Partial Summary Judgment Regarding Failure To Warn (docket no. 156); the Flavoring Defendants' Joint Motion For Partial Summary Judgment on Strict Liability Under Iowa Law (docket no. 159); the Flavoring Defendants' Joint Motion For Summary Judgment on Plaintiffs' Breach of Implied Warranty Claim (docket no. 161).

⁷All of the manufacturers and distributors of microwave popcorn and all of the suppliers of butter flavorings except Bush Boake and International Flavors, Sensient, L.L.C. and Symrise, Inc. have been dismissed. Additionally, the parties have advised me that the Stults have reached settlements with Symrise and Sensient, but have not yet filed notices of dismissal. The parties' settlements make it unnecessary for me to consider Sensient and Symrise's pending motions for summary judgment.

In their Joint Motion For Partial Summary Judgment on Plaintiffs' Strict Liability Claim, the Flavoring Defendants argue that Michigan law should govern the Stults' claims against them and that, under Michigan law, the Stults' strict liability claims fail because Michigan only allows a plaintiff to recover under negligence or warranty theory in a products liability case.

In their Joint Motion For Partial Summary Judgment As To Counts II-IV Based On Michigan's Three-Year Statute Of Limitation, the Flavoring Defendants contend that the Stults' negligence and breach of implied warranty claims are time-barred under Michigan's three year statute of limitations.

In their Joint Motion For Partial Summary Judgment Regarding Failure To Warn, the Flavoring Defendants contend that the Stults' failure to warn claims fail as a matter of law because there is no evidence that any alleged failure to warn was the proximate cause of David's injuries. The Flavoring Defendants also argue that because the microwave popcorn manufacturers were sophisticated users of flavorings, they were in a better position to warn consumers of their products.

In their Joint Motion For Partial Summary Judgment On Plaintiffs' Breach Of Warranty Claim, the Flavoring Defendants make four arguments. First, the Flavoring Defendants contend that the breach of implied warranty claims are redundant of the Stults' negligent claims under either Iowa or Michigan law. Second, the Flavoring Defendants argue that the Stults have offered no proof of a product defect, and, therefore, they cannot sustain their design defect negligence claims under either Iowa or Michigan law. Finally, the Flavoring Defendants argue on any failure to warn that occurred after June 11, 2009, because any failure to warn after that date could not be a proximate cause of David's alleged injury under Iowa law.

The Stults filed timely resistances to all of the Flavoring Defendants' motions for summary judgment. The Flavoring Defendants, in turn, filed timely reply briefs in support of their motions.

II. LEGAL ANALYSIS

A. Summary Judgment Standards

Motions for summary judgment essentially “define disputed facts and issues and . . . dispose of unmeritorious claims [or defenses].” *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 585 (2007) (internal quotation marks and citation omitted); *see Celotex Corp. v. Catrett*, 477 U.S. 317, 323-24 (1986) (“One of the principal purposes of the summary judgment rule is to isolate and dispose of factually unsupported claims or defenses. . . .”). Summary judgment is only appropriate when “the pleadings, depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that there is no *genuine* issue of *material* fact and that the moving party is entitled to a judgment as a matter of law.” FED. R. CIV. P. 56(c) (emphasis added); *see Woods v. DaimlerChrysler Corp.*, 409 F.3d 984, 990 (8th Cir. 2005) (“Summary judgment is appropriate if viewing the record in the light most favorable to the nonmoving party, there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law.”).

A fact is *material* when it “‘might affect the outcome of the suit under the governing law.’” *Johnson v. Crooks*, 326 F.3d 995, 1005 (8th Cir. 2003) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). Thus, “the substantive law will identify which facts are material.” *Anderson*, 477 U.S. at 248. An issue of material fact is *genuine* if it has a real basis in the record, *Hartnagel v. Norman*, 953 F.2d 394, 395 (8th Cir. 1992) (citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986)), or when “‘a reasonable jury could return a

verdict for the nonmoving party’ on the question,” *Woods*, 409 F.3d at 990 (quoting *Anderson*, 477 U.S. at 248); see *Diesel Machinery, Inc. v. B.R. Lee Indus., Inc.*, 418 F.3d 820, 832 (8th Cir. 2005) (stating genuineness depends on “whether a reasonable jury could return a verdict for the non-moving party based on the evidence”).

Procedurally, the moving party bears “the initial responsibility of informing the district court of the basis for its motion and identifying those portions of the record which show a lack of a genuine issue,” *Hartnagel*, 953 F.2d at 395 (citing *Celotex*, 477 U.S. at 323), and demonstrating that it is entitled to judgment according to law. See *Celotex*, 477 U.S. at 323 (“[T]he motion may, and should, be granted so long as whatever is before the district court demonstrates that the standard for the entry of summary judgment, as set forth in Rule 56(c), is satisfied.”). Once the moving party has successfully carried its burden under Rule 56(c), the nonmoving party has an affirmative burden to go beyond the pleadings and by depositions, affidavits, or otherwise, designate “specific facts showing that there is a genuine issue for trial.” FED. R. CIV. P. 56(e); *Mosley v. City of Northwoods, Mo.*, 415 F.3d 908, 910 (8th Cir. 2005) (“The nonmoving party may not ‘rest on mere allegations or denials, but must demonstrate on the record the existence of specific facts which create a genuine issue for trial.’” (quoting *Krenik v. County of Le Sueur*, 47 F.3d 953, 957 (8th Cir. 1995))).

As the Eighth Circuit Court of Appeals has explained,

“On a motion for summary judgment, ‘facts must be viewed in the light most favorable to the nonmoving party only if there is a genuine dispute as to those facts.’” *Ricci v. DeStefano*, ---U.S. ----, 129 S. Ct. 2658, 2677, 174 L. Ed. 2d 490 (2009) quoting *Scott v. Harris*, 550 U.S. 372, 380, 127 S. Ct. 1769, 167 L. Ed. 2d 686 (2007) (internal quotations omitted). “Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530

U.S. 133, 150, 120 S. Ct. 2097, 147 L. Ed. 2d 105 (2000), *quoting Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255, 106 S. Ct. 2505, 91 L. Ed. 2d 202 (1986). The nonmovant “must do more than simply show that there is some metaphysical doubt as to the material facts,” and must come forward with “specific facts showing that there is a genuine issue for trial.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87, 106 S. Ct. 1348, 89 L. Ed. 2d 538 (1986). “‘Where the record taken as a whole could not lead a rational trier of fact to find for the nonmoving party, there is no genuine issue for trial.’” *Ricci*, 129 S. Ct. at 2677, *quoting Matsushita*, 475 U.S. at 587, 106 S. Ct. 1348.

Torgerson v. City of Rochester, 643 F.3d 1031, 1042–43 (8th Cir. 2011) (*en banc*).

Summary judgment is particularly appropriate when only questions of law are involved, rather than factual issues that may or may not be subject to genuine dispute. *See, e.g., Cremona v. R.S. Bacon Veneer Co.*, 433 F.3d 617, 620 (8th Cir. 2006). Consequently, I turn to consider the parties’ arguments for and against summary judgment.

B. Choice Of Law

The Flavoring Defendants have filed two motions for summary judgment directed at the Stults’ strict liability claims. In one, they argue that Michigan law should govern the Stults’ claims against the Flavoring Defendants and that, under Michigan law, the Stults’ strict liability claims fail. In the second, the Flavoring Defendants repeat the contention that Michigan law should govern the Stults’ claims against them and the Stults’ claims of strict liability fail under that law but alternatively argue that, even if Iowa law applies to the Stults’ strict liability claims, their claims fail. Before analyzing the Stults’ strict liability claims, I must first resolve which state’s law should apply—the law of Michigan, where the Stults reside and where the Stults

purchased, and David ate, the microwave popcorn giving rise to this case, or the law of Iowa, the state where much of the microwave popcorn was produced and packaged. Then I will turn to the question of whether the Stults' strict liability claims are viable.

1. Is there a “true conflict” of laws?

This is not the first time I have confronted the often knotty problem of what law applies to specific common-law and statutory claims in a diversity action. *Estate of Pigorsch ex rel. Martin v. York College*, 734 F. Supp.2d 704, 711 (N.D. Iowa 2010); *Johnson v. American Leather Specialties Corp.*, 578 F. Supp. 2d 1154, 1162 (N.D. Iowa 2008); *John Morrell & Co. v. Halbur*, 476 F. Supp.2d 1061, 1074-1075 (N.D. Iowa 2007); *Jones ex rel. Jones v. Winnebago Indus. Inc.*, 460 F.Supp.2d 953, 963-975 (N.D. Iowa 2006); *Jones Distrib. Co., Inc. v. White Consol. Indus., Inc.*, 943 F. Supp. 1445, 1458 (N.D. Iowa 1996); *Harlan Feeders, Inc. v. Grand Labs., Inc.*, 881 F. Supp. 1400, 1402-04 (N.D. Iowa 1995); *Curtis 1000, Inc. v. Youngblade*, 878 F. Supp. 1224, 1251-54 (N.D. Iowa 1995). However, before applying any choice-of-law rules, I must determine whether or not there is a “true conflict” between the laws of the nominee states, because if there is no such “true conflict,” then no choice of law is required. *See Bacon v. Liberty Mut. Ins. Co.*, 688 F.3d 362, 366 (8th Cir. 2012) (concluding that no choice of law analysis is necessary where there was no “true conflict” between Iowa and Nebraska law); *Modern Equip. Co. v. Continental Western Ins. Co., Inc.*, 355 F.3d 1125, 1128 n. 7 (8th Cir. 2004) (“If there is not a true conflict between the laws of Nebraska and Iowa on the pertinent issue, then no choice-of-law is required.”); *Consul General of Republic of Indonesia v. Bill's Rentals, Inc.*, 330 F.3d 1041, 1045 (8th Cir. 2003) (“Before considering any issues of conflict of laws, we must first determine whether ‘there actually is a difference between the relevant laws of the different states.’”) (quoting *Phillips v. Marist Soc'y of Washington Province*, 80 F.3d 274, 276 (8th Cir.1996) (internal quotation marks omitted); *Harlan Feeders, Inc.*,

Inc., 881 F. Supp. at 1405 (noting that there must be a “true conflict” between the laws of the possible jurisdictions on the pertinent issue before any choice of law need be made). Here, the Flavoring Defendants have asserted that a “true conflict” exists between Michigan law and Iowa law. Specifically, the Flavoring Defendants assert that Michigan has not recognized strict liability as a theory of recovery in products liability cases. See *Phillips v. J.L. Hudson*, 263 N.W.2d 3, 4 (Mich. Ct. App. 1977) (“Michigan does not recognize ‘strict liability’ as a theory of recovery.”); *Johnson v. Chrysler Corp.*, 254 N.W.2d 569, 571 (Mich. Ct. App. 1977) (observing that “strict liability has not been recognized” as a theory of recovery in the area of products liability); see also *Toth v. Yoder Co.*, 749 F.2d 1190, 1193 (6th Cir. 1994) (“[I]n Michigan only two theories of recovery are recognized in products liability cases, negligence and implied warranty, not strict liability.”); *Hendrian v. Safety-Kleen Sys., Inc.* No. 08-14371, 2012 WL 3758229, at *6 (E.D. Mich. Aug. 20, 2012) (noting that “‘strict liability’ is not a valid products liability theory in Michigan.”). On the other hand, Iowa recognizes claims of strict liability in products liability cases. See *Scott v. Dutton-Lainson Co.*, 774 N.W.2d 501, 504 (Iowa 2009) (recognizes that strict liability is appropriate in manufacturing defect cases, but not defective product cases); *Olson v. Prosoco, Inc.*, 522 N.W.2d 284, 289 (Iowa 1994) (“We believe that the correct submission of instructions regarding a failure to warn claim for damages is under a theory of negligence and the claim should not be submitted as a theory of strict liability.”). The Stults have not disputed the Flavoring Defendants’ contention that the laws of the two states are in “true conflict,” and I agree. Therefore, I turn to the question of what state's law should apply.

2. Choice of law rules

In a diversity action such as this, to determine what state's law applies to the the Stults’ claims, I must use the choice-of-law rules of the forum state, in this case, Iowa.

See, e.g., Klaxon Co. v. Stentor Elec. Mfg. Co., 313 U.S. 487, 496 (1941) (the conflict-of-laws rules to be applied by a federal court are the rules of the forum state, because “[o]therwise the accident of diversity of citizenship would constantly disturb equal administration of justice in coordinate state and federal courts sitting side by side”); *H & R Block Tax Servs. L.L.C. v. Franklin*, 691 F.3d 941, 943 (8th Cir. 2012) (“‘Federal courts sitting in diversity apply the choice-of-law rules of the forum state.’”) (quoting *Cicle v. Chase Bank USA*, 583 F.3d 549, 553 (8th Cir. 2009)); *John T. Jones Const. Co. v. Hoot General Const. Co.*, 613 F.3d 778, 783 (8th Cir. 2010) (“We apply the choice-of-law rules of the forum state in a diversity action.”); *Allianz Ins. Co. of Canada v. Sanftleben*, 454 F.3d 853, 855 (8th Cir. 2006) (“In a diversity case, a district court sitting in Minnesota applies Minnesota's choice-of-law rules.”); *Larken, Inc. v. Wray*, 189 F.3d 729, 732–33 (8th Cir. 1999) (“A federal court must apply the choice of law rules of the forum state—in this case, Iowa.”). I, therefore, turn to consideration of Iowa's conflict-of-laws rules.

As the Iowa Supreme Court has explained:

Iowa has abandoned the *lex loci delicti* rule in which the law of the place of injury governs every issue in a tort action. We now follow the Restatement [(Second) of Conflict of Laws]'s “most significant relationship” methodology for choice of law issues. *Cameron v. Hardisty*, 407 N.W.2d 595, 597 (Iowa 1987); *Berghammer v. Smith*, 185 N.W.2d 226, 231 (Iowa 1971). The theory behind this approach is that rather than focusing on a single factor, “the court of the forum should apply the policy of the state with the most interest in the litigants and the outcome of the litigation.” *Fuerste v. Bemis*, 156 N.W.2d 831, 834 (Iowa 1968).

Veasley v. CRST Int'l, Inc., 553 N.W.2d 896, 897 (Iowa 1996).⁸ More specifically still, the court explained that, for a tort case, such as the one now before me,

The most significant relationship test is that which is stated as follows in the Restatement (Second) Conflict of Laws:

(1) The rights and liabilities of the parties with respect to an issue in tort are determined by the local law of the state which, with respect to that issue, has the most significant relationship to the occurrence and the parties under the principles stated in § 6.

(2) Contacts to be taken into account in applying the principles of § 6 to determine the law applicable to an issue include:

(a) the place where the injury occurred,

(b) the place where the conduct causing the injury occurred,

(c) the domicile, residence, nationality, place of incorporation, and place of business of the parties, and

⁸ I have repeatedly recognized that the “most significant relationship” test varies depending upon whether the claim at issue sounds in contract or tort. *See, e.g., Pigorsch ex rel. Martin*, 734 F. Supp.2d at 712 n.2; *Sioux Biochem., Inc. v. Cargill, Inc.*, 410 F. Supp.2d 785, 799 (N.D. Iowa 2005); *Webster Indus., Inc. v. Northwood Doors, Inc.*, 320 F. Supp.2d 821, 831 n. 3 (N.D. Iowa 2004); *L & L Builders Co. v. Mayer Assoc. Servs., Inc.*, 46 F. Supp.2d 875, 881 (N.D. Iowa 1999); *Dethmers Mfg. Co. v. Automatic Equip. Mfg. Co.*, 23 F.Supp.2d 974, 1002 (N.D. Iowa 1998); *Harlan Feeders, Inc. v. Grand Labs., Inc.*, 881 F. Supp. at 1405. While Iowa courts apply Restatement (Second) of Conflicts of Laws § 188 to contract claims, they apply Restatement (Second) of Conflicts of Laws § 145(2) to tort claims. *Dethmers*, 23 F. Supp.2d at 1002 (contract) & 1004 (tort). Here, where only tort claims are at issue, the “most significant relationship” test is set out in § 145(2), as stated in *Veasley*.

(d) the place where the relationship, if any, between the parties is centered.

These contacts are to be evaluated according to their relative importance with respect to the particular issue.

RESTATEMENT (SECOND) CONFLICT OF LAWS § 145 (1971).

We recognized in *Joseph L. Wilmotte & Co. v. Rosenman Brothers*, 258 N.W.2d 317, 326 (Iowa 1977), that the situation-specific sections of the Restatement, such as section 145, incorporate the provisions set forth in section 6 thereof. These principles are as follows:

(1) A court, subject to constitutional restrictions, will follow a statutory directive of its own state on choice of law.

(2) Where there is no such directive, the factors relevant to the choice of the applicable rule of law include

(a) the needs of the interstate and international systems,

(b) the relevant policies of the forum,

(c) the relevant policies of other interested states and the relative interests of those states in the determination of the particular issue,

(d) the protection of justified expectations,

(e) the basic policies underlying the particular field of law,

(f) certainty, predictability, and uniformity of result, and

(g) ease in the determination and application of the rule to be applied.

RESTATEMENT (SECOND) CONFLICT OF LAWS § 6 (1971).

Veasley, 553 N.W.2d at 897–98. As § 145 states, the “contacts” listed in § 145(2) “are to be evaluated according to their relative importance with respect to the particular issue.” RESTATEMENT (SECOND) OF CONFLICTS OF LAWS § 145(2). Thus, I will determine the relative importance of the various § 145(2) “contacts,” as well as whether those “contacts” weigh in favor of application of Michigan or Iowa law, then consider the § 6 “factors” in light of the pertinent “contacts.”

3. *The § 145(2) “contacts”*

a. *Place where injury occurred*

The Flavoring Defendants argue that this factor significantly favors application of Michigan’s law while the Stults argue that Michigan was merely a fortuitous location for the injury and is not entitled to significant weight in the choice of law analysis. Iowa courts have recognized that, among the § 145(2) “contacts,” the “place where the injury occurred”—here, Michigan—has little importance, at least where the state that is the place of injury has no other interest in the case. *Cameron v. Hardisty*, 407 N.W.2d 595, 597 (Iowa 1987) (finding that Iowa law, instead of Nebraska law, controlled in automobile accident negligence case because Nebraska was merely the place of accident and none of the parties resided in Nebraska); RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 145 cmt. e (“[T]he place of injury will not play an important role . . . when the place of injury can be said to be fortuitous or . . . bears little relation to the occurrence and the parties with respect to the particular issues.”). As discussed below, Michigan has other interests in this case, and I find that, under the facts here, the place where the injury occurred is relevant. Consequently, in determining which state has the most significant relationship to the occurrence and the parties, I will give some weight to the fact that the injury occurred in Michigan.

b. The place where the conduct causing the injury occurred

Turning to the next § 145(2) “contact,” I must consider the “place where conduct causing the injury occurred.” RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 145(2)(b). Courts have recognized in products liability cases that the place where the allegedly defective product was designed, marketed, or manufactured is “the place where the conduct causing the injury occurred,” and have given significant weight to that factor in the conflict-of-laws calculus. *See, e.g., McLennan v. American Eurocopter Corp., Inc.*, 245 F.3d 403, 426 (5th Cir. 2001) (Texas had the most significant relationship to a products liability claim because Texas was the place where the conduct giving rise to his injuries occurred, where Texas was the place where the helicopter was marketed and manufactured, and where the service bulletins and records concerning the operation of the aircraft were sent and maintained); *MacDonald v. General Motors Corp.*, 110 F.3d 337, 342 (6th Cir. 1997) (the “place of conduct causing injury” was both Tennessee, the sight of the accident, and Michigan, the state where the defendant designed the allegedly defective van). I, likewise, conclude that, in a products liability case such as this, in which the plaintiffs allege defective design, or defective warnings, the place where conduct causing injury is the location where the design, manufacture, and marketing of the allegedly defective product occurred.

The parties dispute the location of the design, manufacture, and marketing of the alleged defective products. The Stults contend that the microwave popcorn with butter flavorings containing diacetyl is the product at issue. The Flavoring Defendants, on the other hand, focus on the butter flavorings containing diacetyl. Thus, I must identify the allegedly defective product at issue here in order to determine the place where the conduct causing injury occurred.

The Stults allege, in their Complaint, that: “At all relevant times, Defendants’ microwave popcorn and/or butter flavoring were in a defective condition in that they

cause human disease and injury, including, but not limited to: bronchiolitis obliterans, respiratory disease, severe lung impairment, shortness of breath, and fatigue.” Complaint at ¶ 14. The Stults further allege that “the defective condition of Defendants’ microwave popcorn and/or butter flavoring was unreasonably dangerous to the user or consumer, including Plaintiff David Stults. . . .” Thus, the Stults’ allege that both the microwave popcorn and the butter flavorings were defective products. Therefore, I will consider both the microwave popcorn and the butter flavorings as the defective products for the purposes of this motion.

Some of the microwave popcorn at issue was made in Iowa, and marketed in both Iowa and Michigan. The Flavoring Defendants’ butter flavorings containing diacetyl were not designed, marketed, or manufactured in Iowa or Michigan. Thus, taking into consideration all of the evidence in the record, and considering all of the facts in the light most favorable to the Stults, I find that the “contact” identified in § 145(2)(b) as “the place where the conduct causing injury occurred” is neutral and does not favor application of either Iowa or Michigan law.

c. Place of domicile, residence, incorporation, or business

The third § 145(2) “contact” is “the domicile, residence, nationality, place of incorporation, and place of business of the parties.” RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 145(2)(c). There is clearly a division here between Michigan as the Stults’ residence, and New York, Bush Boake and International Flavors’s principal place of business. As Comment e to § 145 explains,

In the case of other torts [i.e., other than reputation, financial, or privacy torts], the importance of [the § 145(2)(c)] contacts depends largely upon the extent to which they are grouped with other contacts. The fact, for example, that one of the parties is domiciled or does business in a given state will usually carry little weight of itself. On the other hand, the fact that the domicile and place

of business of all parties are grouped in a single state is an important factor to be considered in determining the state of the applicable law. The state where these contacts are grouped is particularly likely to be the state of the applicable law if either the defendant's conduct or the plaintiff's injury occurred there. This state may also be the state of the applicable law when conduct and injury occurred in a place that is fortuitous and bears little relation to the occurrence and the parties (see § 146, Comments d-e).

Restatement (Second) of Conflict of Laws § 145, cmt. e. Here, the Stults' residence in Michigan "groups" with both the "place of injury" and "the place where the conduct causing injury occurred." See *Dorman v. Emerson Elec. Co.*, 23 F.3d 1354, 1359 (8th Cir. 1994) (finding the plaintiff's domicile in Canada was significant when Canada was also the place of injury and the place where the plaintiff purchased and used the allegedly defective product). On the other hand, none of the Flavoring Defendants' place of business is grouped with their conduct allegedly causing injury. Therefore, the § 145(2)(c) "contacts" weigh in favor of Michigan.

d. Place where the relationship was centered

The final § 145(2) "contact" is "the place where the relationship, if any, between the parties is centered." RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 145(2)(d). The parties agree that there was no "relationship" between the Stults and any of the Flavoring Defendants. The Restatement expressly contemplates that there may be no "place where the relationship is centered." See RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 145(2)(d) (a pertinent contact is "the place where the relationship, if any, between the parties is centered") (emphasis added); see *id.*, cmt. e (considering the place where the relationship between the parties is centered "[w]hen there is a relationship between the plaintiff and the defendant"). Thus, I conclude that the "place where the relationship is centered" is not a relevant "contact" here, because there simply was no "relationship" between the Stults and the Flavoring Defendants.

e. Summary of the § 145(2) “contacts”

The preceding analysis shows that this case involves the following § 145(2) “contacts”: the “place of injury” is Michigan, but that “contact” is of slight rather than “presumptive” importance; the “place where the conduct causing the injury occurred” is in both Iowa and Michigan since some of the microwave popcorn at issue was made in Iowa, and marketed in both Iowa and Michigan; the Stults’ residence in Michigan can be “grouped” with other contacts so that their contact with Michigan is of considerably greater weight; and there is no place where the relationship between the Stults and the Flavoring Defendants is centered. Thus, based on the § 145(2) “contacts,” Michigan has the dominant interest of the nominee states.

4. The § 6 Factors

My consideration of the § 145(2) “contacts” is not the end of the conflict-of-laws analysis, however, because as § 145(1) makes clear, the question is which state “has the most significant relationship to the occurrence and the parties under the principles stated in § 6,” *see* RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 145(1), and also makes clear that the § 145(2) “contacts” are merely the “[c]ontacts to be taken into account in applying the principles of § 6 to determine the law applicable to an issue. . . .” *Id.* at § 145(2); *accord Veasley*, 553 N.W.2d at 898 (“[T]he situation-specific sections of the Restatement, such as section 145, incorporate the provisions set forth in section 6 thereof.”). Therefore, I must now consider the § 6 “principles,” at least to the extent that I find that they are implicated here, in light of the pertinent § 145(2) “contacts.”

The Comments to § 145 explain that “[t]he factors in Subsection (2) of the rule of § 6 vary somewhat in importance from field to field.” *Id.*, cmt. b. More specifically, the Comments explain that the § 6 factors of relatively greater importance for a tort action are “the needs of the interstate and international systems [§ 6(2)(a)],

the relevant policies of the forum [§ 6(2)(b)], the relevant policies of other interested states [§ 6(2)(c)] and particularly of the state with the dominant interest in the determination of the particular issue, and the ease in the determination and application of the law to be applied [§ 6(2)(g)].” *Id.*; *cf. Veasley*, 553 N.W.2d at 898 (also discounting, in an automobile accident case, the importance of the factors in § 6(2)(d) and (f), but finding that the factor in (g) was “of little importance” in such a case, because the defendant would either be held liable or it would not, without any “esoteric or complex substantive laws. . .involved”). I will consider these relatively more important factors in turn.⁹

a. Needs of the interstate and international systems

The Comments to § 6 concerning “the needs of the interstate and international systems,” the factor identified in § 6(2)(a), provide little insight, because they are concerned with what choice-of-law rules further the needs of the interstate and international systems, rather than with what forum's substantive law furthers the needs of the interstate and international systems. *See* RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 6, cmt. d. More helpful is the Iowa Supreme Court’s observation in *Veasley*, that “[r]espect for interstate and international systems is maintained when the forum state, when choosing to apply its own law, has a ‘substantive connection’ with the issue.” *Veasley*, 553 N.W.2d at 899 (quoting *Milkovich v. Saari*, 295 Minn. 155, 203 N.W.2d 408, 417 (1973)). Focusing on whether or not there was such a “substantive connection,” the Iowa Supreme Court concluded in *Veasley* that Iowa's owner's liability law, which was at issue in that case, “is not so abnormal that an application of Iowa law would greatly disrupt interstate order.” *Id.* Similarly, here,

⁹The Stults did not discuss any of the § 6 factors in their brief.

based on consideration of the § 145(2) “contacts” above, which reveal that Michigan is the state with the “dominant” interest, Michigan has an appropriate “substantive connection” with the products liability and other tort issues involved in this case so that “[r]espect for interstate and international systems is maintained” by choosing Michigan law as the applicable law. *Id.* Moreover, Michigan’s products liability and damages laws are “not so abnormal that an application of Iowa law would greatly disrupt interstate order” in this case, either. *Cf. id.* Therefore, this factor supports the application of Michigan law.

b. Relevant policies of the forum and other interested states

The second and third relatively more important § 6 factors in a tort case are “the relevant policies of the forum,” RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 6(2)(b), and “the relevant policies of other interested states and the relative interests of those states in the determination of the particular issue,” *id.* at § 6(2)(c), respectively. *Id.* § 145, cmt. b (identifying these factors as ones of relatively greater importance in a tort case); *cf. Veasley*, 553 N.W.2d at 898 (also discounting, in an automobile accident case, the importance of other § 6(2) factors). The Comments to § 145 indicate that what is of particular concern with regard to the § 6(2)(c) factor is the policies of “the state with the dominant interest in the determination of the particular issue.” *Id.* at § 145, cmt. b. Thus, these two factors should logically be considered together here, where Iowa is the forum state and Michigan is the state that I have determined has the dominant interest in the issues in this case, based on the § 145(2) “contacts.”

My difficulty with respect to these two factors is that the parties have provided scant authority and limited discussion regarding the policies behind the general tort laws of either nominee states, Iowa and Michigan. An underlying policy of the tort law of Michigan is to compensate victims. *See Neal v. Miller*, 778 F. Supp.2d 378, 386 (W.D. Mich. 1991) (“Under Michigan law, a tort victim is entitled to a fair and

adequate award of damages to compensate for all physical and mental harm proximately caused by the tortfeasor's actions.”). Iowa shares that underlying policy. *See Jones*, 460 F. Supp.2d at 973. Accordingly, the § 6(2)(b) and (c) factors are neutral.

c. Ease of determination and application of the law

The final § 6(2) factor of relatively greater significance in a tort case is the “ease in the determination and application of the rule to be applied.” RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 6(2)(g). I find no significant impediment to my determining and apply either Iowa or Michigan law in this case. Consequently, this factor is neutral.

d. Other § 6(2) factors

The remaining § 6(2) factors are of relatively lesser importance in this tort case, Those factors are “(d) the protection of justified expectations, (e) the basic policies underlying the particular field of law, [and] (f) certainty, predictability, and uniformity of result.” RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 6(2)(d)-(f). Having considered each of these factors, I conclude that none of these factors weigh against the application of Michigan law in this case.

5. Summary

Upon consideration of the § 145(2) “contacts” and the § 6 “factors” that make up the “most significant relationship” test for conflict-of-laws determinations under Iowa law, I conclude that Michigan has the dominant interest in the issues presented and that application of Michigan law is in keeping with the pertinent factors. Therefore, the substantive legal issues in this case will be governed by Michigan law.

C. Strict Liability Claims

As discussed above, the Flavoring Defendants have filed two motions for summary judgment challenging the viability of the Stults’ strict liability claims. The

Flavoring Defendants assert that the Stults' strict liability claims must be dismissed because Michigan does not recognize strict liability as a theory of recovery in products liability cases. The Flavoring Defendants' assertion is correct. "[I]n Michigan only two theories of recovery are recognized in products liability cases, negligence and implied warranty, not strict liability." *Toth v. Yoder Co.*, 749 F.2d 1190, 1193; *see Phillips*, 263 N.W.2d at 4; *Johnson*, 254 N.W.2d at 571; *see also Hendrian*, No. 08-14371, 2012 WL 3758229, at *6. Therefore, the Flavoring Defendants' joint motions for summary judgment on the Stults' strict liability claims are granted.

D. Timeliness Of Claims

The Flavoring Defendants also seek summary judgment on the Stults' negligence and breach of implied warranty claims on the ground that those claims are time-barred under Michigan's three year statute of limitations. The Stults contend that their claims are timely. Before analyzing the timeliness of the Stults' negligence and breach of implied warranty claims, I must first resolve which state's statute of limitations should apply—the law of Iowa, the forum state, or the law of Michigan, the state that I have found has the most significant relationship to the parties and the occurrence.

1. Choice of laws

As stated above, under the most significant relationship test, I find that Michigan substantive law applies. This determination, however, does not resolve the issue of the applicable statute of limitations. For choice of law questions involving the applicable statute of limitations, Iowa applies the revised version of Restatement (Second) of Conflict of Laws § 142. *See Washburn v. Soper*, 319 F.3d 338, 342 (8th Cir. 2003).¹⁰

¹⁰ The Stults contend that I should not use the revised version of § 142 to

(Footnote continued . . .

Section 142 provides:

Whether a claim will be maintained against the defense of the statute of limitations is determined under the principles stated in § 6. In general, unless the exceptional circumstances of the case make such a result unreasonable:

- (1) The forum will apply its own statute of limitations barring the claim.
- (2) The forum will apply its own statute of limitations permitting the claim unless:

determine the applicable statute of limitations because the Iowa Supreme Court has not considered that provision. They argue that Iowa law requires application of the “right-remedy” analysis embodied in the pre-1988 version of the Restatement (Second) of Conflict of Laws §§ 142 and 143. I disagree. In the absence of an intervening decision of the Iowa Supreme Court on the issue, the Eighth Circuit Court of Appeals’ decision in *Washburn* is controlling precedent. *See M.M ex rel. L.R. v. Special Sch. Dist. No. 1*, 512 F.3d 455, 459 (8th Cir. 2008) (holding that district court erred in not following binding Eighth Circuit precedent and noting that circuit precedent “is controlling until overruled by our court *en banc*, by the Supreme Court, or by Congress.”); *Xiong v. Minnesota*, 195 F.3d 424, (8th Cir. 1999) (holding that “district court had no power to replace governing circuit law with its own view.”); *see also Reiser v. Residential Funding Corp.*, 380 F.3d 1027, 1029 (7th Cir. 2004) (“In a hierarchical system, decisions of a superior court are authoritative on inferior courts. Just as the court of appeals must follow decisions of the Supreme Court whether or not we agree with them, so district judges must follow the decisions of this court whether or not they agree.”) (citations omitted)); *Batts v. Tow-Motor Forklift Co.*, 66 F.3d 743, 747 (5th Cir. 1995) (observing that district court was bound by circuit “interpretation of state law absent a subsequent state court decision or statutory amendment that rendered this court’s prior decision clearly wrong.”); *cf. AIG Centennial Ins. Co. v. Fraley-Landers*, 450 F.3d 761, 767-768 (8th Cir. 2006) (“Although our circuit has never specifically determined the binding effect of a state law determination by a prior panel, other circuits defer to prior panel decisions absent a ‘subsequent state court decision or statutory amendment that makes [the prior federal opinion] clearly wrong.’”) (quoting *Broussard v. Southern Pac. Transp. Co.*, 665 F.2d 1387, 1389 (5th Cir. 1982) (*en banc*) (internal quotation marks and citation omitted)).

(a) maintenance of the claim would serve no substantial interest of the forum; and

(b) the claim would be barred under the statute of limitations of a state having a more significant relationship to the parties and the occurrence.

RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 142.

Thus, under § 142, barring “exceptional circumstances” that would make the “result unreasonable,” the forum state’s statute of limitations applies unless: (1) maintenance of the claim does not serve a “substantial interest” of the forum state; and (2) the claim would be barred under “the statute of limitations of a state having a more significant relationship to the parties and the occurrence.” RESTATEMENT (SECOND), CONFLICT OF LAWS § 142. I take up each of these requirements in turn.

a. Substantial interest in claims

I first consider whether Iowa has any substantial interest that would be advanced by permitting the Stults’ claims and conclude that it does not. The “substantial interest” test should be conducted with some sensitivity to the results of the “most significant relationship” test. *See Stanley v. CF-VH Assocs., Inc.*, 956 F. Supp. 55, 59 (D. Mass. 1997); *see also* RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 142 cmt. e (“[A] claim will not be maintained if it is barred by the statute of limitations of the state which, with respect to the statute of limitations, is the state of most significant relationship to the occurrence and the parties under the principles stated in § 6.”). Michigan clearly has a greater interest than Iowa in the Stults’ claims. Michigan is where David lives and where he bought and consumed the butter flavored microwave popcorn containing diacetyl. Michigan is the place of David’s injuries. Michigan is also the location where David obtains treatment for his medical condition. Michigan may also become burdened by the cost of medical treatment for David’s serious,

chronic condition. None of the Flavoring Defendants are corporate citizens of Iowa. None of the butter flavorings containing diacetyl, the product at the heart of this case, were manufactured in Iowa. What's more, here, Iowa has no substantial interest in protecting its own residents from having to defend stale claims, since the Flavoring Defendants are not residents of Iowa.

Applying Iowa's limitations period would frustrate a substantial interest of Michigan, the state with a closer connection with the case. *See* RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 142 cmt. g ("the forum should not entertain a claim when doing so would not advance any local interest and would frustrate the policy of a state with a closer connection with the case and whose statute of limitations would bar the claim"). The Restatement's writers have recognized that "[t]he basic purpose of a statute of limitations is to protect both the parties and the local courts against the prosecution of stale claims. A state has a substantial interest in preventing the prosecution in its courts of claims which it deems to be 'stale.'" RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 142 cmt. f.; *see Washburn*, 319 F.3d at 343 (recognizing that the purpose of statute of limitations "is essentially two-fold: to protect both defendants and courts from stale claims."); *K.E.S. v. United States*, 38 F.3d 1027, 1030 (8th Cir. 1994) (noting that the purpose of statutes of limitations is "to 'protect defendants and the courts from having to deal with cases in which the search for truth may be seriously impaired by the loss of evidence,' while 'affording plaintiffs what the legislature deems a reasonable time to present their claims.'" (quoting *United States v. Kubrick*, 444 U.S. 111, 117 (1979))); *see also Lawyers Title Ins. Corp. v. Dearborn Title Corp.*, 118 F.3d 1157, 1166 (7th Cir. 1997) ("Statutes of limitations are ordinarily for the protection of defendants[,] . . . but they also protect the courts from the burden of adjudicating old claims." (citations omitted)). Michigan has a three year statute of limitations for personal injury claims and does not recognize the common law

discovery rule. *Trentadue v. Buckler Automatic Lawn Sprinkler Co.*, 738 N.W.2d 664, 670 (Mich. 2007). Michigan's substantial interest in preventing the prosecution of stale claims would be frustrated by application of Iowa's limitations period because it would impose the common law discovery rule in direct contravention of Michigan's statutory scheme.¹¹

Thus, I conclude that Iowa does not have a substantial interest in the Stults' claims and turn to the issue of whether the Stults' claims are barred under Michigan law.

b. Michigan statute of limitations

The Michigan statute of limitations for products liability claims is three years. MICH. COMP. LAWS § 600.5805(10). A products liability claim "accrues at the time the wrong upon which the claim is based was done regardless of the time when damage results." *Id.* at § 600.5827. As noted above, the Michigan Supreme Court has held that, under Michigan's statute, no discovery rule exists to toll the limitations period. *See Trentadue*, 738 N.W.2d at 670. Michigan's common law discovery rule provided that "a claim does not accrue until a plaintiff knows, or objectively should know, that he has a cause of action and can allege it in a proper complaint." *Id.* Prior to

¹¹ The Stults' claim that Iowa has a substantial interest in seeing that dangerous products are not shipped into the state is totally disconnected from the interests behind Iowa's statute of limitations or application of the discovery rule. As noted above, the purpose of Iowa's statute of limitations is to protect "both defendants and courts from stale claims." *Washburn*, 319 F.3d at 343. The discovery rule allows the tolling of the statutory period of limitations when a plaintiff could not have reasonably discovered the elements of a cause of action within the limitations period. *See Swartzendruber v. Schimmel*, 613 N.W.2d 646, 650 (Iowa 2000). Application of Iowa's discovery rule does not further Iowa's interest in preventing dangerous products from being imported into Iowa because it does nothing to prevent or limit such importation.

Trentadue, Michigan courts applied the discovery rule to cases governed by § 600.5827 by using a definition of “accrues” that incorporated a discovery requirement. *See, e.g., Thomas v. Process Equip. Corp.*, 397 N.W.2d 224, 227 (Mich. 1986) (“In determining when a cause of action accrues for purposes of a statute of limitations, the general rule is that a cause accrues only when all the necessary elements have occurred and can be alleged in a proper complaint.”). *Trentadue* overruled these cases. *Trentadue*, 738 N.W.2d at 672.

Application of Michigan Compiled Law § 600.5827 and *Trentadue*, here, requires the conclusion that the Stults’ negligence and breach of implied warranty claims are time-barred. The relevant statutory period for products liability claims is three years and that period began to accrue when the wrong occurred or, more specific to this case, when David ate microwave popcorn containing the Flavoring Defendants’ butter flavorings containing diacetyl. *See Smith v. Stryker Corp.*, No. 294916, 2011 WL 445646, at *1 (Mich. Ct. App. Feb. 8, 2011) (holding in products liability case that the “wrong occurred” during plaintiff’s use of the product).

It is undisputed that the only brand of microwave popcorn David ate that contained any of the Flavoring Defendants’ butter flavorings containing diacetyl was ConAgra’s Orville Redenbacher Butter. The Flavoring Defendants stopped selling butter flavorings containing diacetyl, including the Orville Redenbacher flavorings, by January 2005. The summary judgment record does not disclose the last time David ate microwave popcorn containing butter flavorings with diacetyl. Even assuming, for the sake of argument, that David purchased and ate some of the last Orville Reddenbacher Butter microwave popcorn containing the Flavoring Defendants’ butter flavorings containing diacetyl, the Stults’ negligence and breach of implied warranty claims accrued, collectively, at some point in 2005. Therefore, the Stults’ August 24, 2011, negligence and breach of implied warranty claims are time barred under Michigan law.

2. Conclusion

Thus, I find under Restatement § 142 that Michigan's three year statute of limitations applies to the Stults' claims. For the reasons discussed above, I find that the Stults' negligence and breach of implied warranty claims are time barred under Michigan law. Therefore, the Flavoring Defendants' joint motion for summary judgment as to the Stults' negligence and breach of implied warranty claims is also granted.

E. Loss Of Consortium Claim

Since I have granted summary judgment on the Stults' strict liability, negligence, and breach of implied warranty claims, Barbara's loss of consortium claim fails as a matter of law, as it is entirely derivative. *See Wesche v. Mecosta Cnty. Rd. Comm'n*, 746 N.W.2d 847, (Mich. 2008) (Weaver, J. concurring in part and dissenting in part) ("A claim for loss of consortium is a separate legal claim for damages suffered not by the injured party, but by a spouse, parent, or child who claims damages for the loss of the injured party's society and companionship. It is a derivative claim in that it does not arise at all unless the injured party has sustained some legally cognizable harm or injury."). Therefore, the Flavoring Defendants' joint motion for summary judgment as to Barbara's loss of consortium claim is also granted.

III. CONCLUSION

Accordingly, for the reasons discussed above, it is ordered:

1. Defendants International Flavors and Bush Boake's Joint Motions For Partial Summary Judgment On Plaintiffs' Strict Liability Claim are granted.

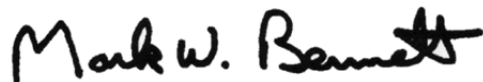
2. Defendants International Flavors and Bush Boake's Joint Motions For Partial Summary Judgment As To Counts II-IV Based On Michigan's Three-Year Statute Of Limitation is granted.

3. Defendants International Flavors and Bush Boake's Joint Motion For Partial Summary Judgment Regarding Failure To Warn is denied as moot.

4. Defendants International Flavors and Bush Boake's Joint Motion For Summary Judgment on Plaintiffs' Breach of Implied Warranty Claim is denied as moot. Judgment shall enter accordingly.

IT IS SO ORDERED.

DATED this 24th day of December, 2013.

A handwritten signature in black ink that reads "Mark W. Bennett". The signature is written in a cursive, slightly stylized font. The "M" is large and loops around the "a". The "B" is also large and loops around the "e". The signature is positioned above a horizontal line.

MARK W. BENNETT
U.S. DISTRICT COURT JUDGE
NORTHERN DISTRICT OF IOWA