Shook, Hardy & Bacon L.L.P.

ISSUE 376 | JANUARY 7, 2011

FOOD & BEVERAGE LITIGATION UPDATE

CONTENTS

LEGISLATION, REGULATIONS AND STANDARDS

Food Safety Law's Long Journey Concludes, Funding Issues Could Stall Reforms

President Barack Obama (D) signed the FDA Food Safety Modernization Act (H.R. 2751) into law on January 4, 2011, ending a complicated legislative journey that began with House approval in 2009. In essence, the law gives the Food and Drug Administration (FDA) the authority to order food product recalls, calls for more frequent facility inspections, enhances FDA's ability to oversee food imports, requires food facilities to have written safety plans, establishes science-based standards for the safe production and harvesting of produce, and exempts small farms that sell directly to local consumers from a number of provisions.

As Commissioner of Food and Drugs Margaret Hamburg has noted, while some of the changes take effect immediately, others depend on budgeting. According to her blog post, "The funding we get each year, which affects our staffing and our vital and far-ranging operations, will also affect how this legislation is implemented. . . . Without more funding, we will be challenged to implement the law fully without compromising other key functions."

House Republicans have made decreasing government spending a priority, so resources to carry out the legislation's new mandates may be limited. The incoming chair of the House Appropriations Agriculture Subcommittee has reportedly indicated that he wants to decrease the costs associated with the law, claiming that existing regulations are doing a "darn good job." *See FDA Food Safety Blog*, *National Journal Daily*, January 4, 2011.

USDA to Require Nutrition Facts Panels on Meat, Poultry

The U.S. Department of Agriculture (USDA) has issued a final rule requiring mandatory nutrition labeling on 40 major cuts of single-ingredient, raw meat and poultry products. The Nutrition Labeling and Education Act of 1990 requires nutrition facts labels on most foods regulated by the Food and Drug Administration, but USDA-regulated meat and poultry has been exempt, allowing producers to supply the information on a voluntary basis.

Shook, Hardy & Bacon L.L.P.

FOOD & BEVERAGE LITIGATION UPDATE

ISSUE 376 | JANUARY 7, 2011

SHB offers expert, efficient and innovative representation to clients targeted by food lawyers and regulators. We know that the successful resolution of food-related matters requires a comprehensive strategy developed in partnership with our clients.

For additional information on SHB's Agribusiness & Food Safety capabilities, please contact

Mark Anstoetter
816-474-6550
manstoetter@shb.com

or

Madeleine McDonough
816-474-6550
202-783-8400
mmcdonough@shb.com

If you have questions about this issue of the Update, or would like to receive supporting documentation, please contact Mary Boyd (mboyd@shb.com) or Dale Walker (dwalker@shb.com); 816-474-6550.

Effective January 1, 2012, the rule calls for packages of ground or chopped meat and poultry to feature nutrition fact panels on their labels, and whole, raw cuts of meat and poultry to either include facts panels on their package labels or have them available for consumers at the point-of-purchase. Designed to educate consumers about nutrition and diets, the rule requires the labels to supply the number of calories and the grams of total fat and saturated fat.

"Additionally, any product that lists a lean percentage statement, such as '76 percent lean,' on its label also will list its fat percentage, making it easier for consumers to understand the amounts of lean protein and fat in their purchase," according to a USDA news release. Major cuts of raw, single-ingredient meat and poultry products include whole or boneless chicken breasts and other pieces, and beef whole cuts such as brisket or tenderloin steak. Ground or chopped meat and poultry products include hamburger and ground turkey.

New York University Nutrition Professor Marion Nestle was among those who welcomed the new rule, telling a news source that the labels "will be very helpful to people who are bewildered by what's in meat. But people will be quite shocked at the calories and fat." *See Federal Register, USDA News Release* and *USA Today*, December 29, 2010.

FDA Seeks New Comments on 1997 Proposed Changes to GRAS Rule

The Food and Drug Administration (FDA) has **reopened** the comment period on revisions proposed in 1997 to its rule regarding substances generally recognized as safe (GRAS). Written or electronic comments are requested by March 28, 2011.

The proposed revisions would "replace the voluntary GRAS affirmation petition process . . . with a voluntary notification procedure whereby any person may notify us of a determination that a particular use of a substance in human food . . . or in food for animals . . . is GRAS." The proposal would also "clarify the criteria . . . whereby the use of a substance is not subject to the premarket approval requirements of the [Food, Drug, and Cosmetic Act] because it is GRAS." The *Federal Register* notice refers to several developments since 1997, including the use of nanotechnology in foods, a Government Accountability Office (GAO) report on FDA oversight of GRAS foods and the agency's experience with the notification procedures during an interim period. Additional information about the GAO report appears in **Issue 341** of this *Update*.

In light of these intervening developments as well as comments already received, FDA seeks comments on particular aspects of the proposal. Among them are (i) the use of certain terms and definitions such as "scientific procedures"; (ii) whether submissions should exclude non-public information, given their availability for public disclosure; (iii) the inclusion of additional informa-

tion about engineered nanomaterials; (iv) whether submissions for substances to be used in the food of an animal used to produce human food should include information about target animal and human safety; and (v) how to address substances intended for use in products under the U.S. Department of Agriculture's jurisdiction. Comments previously submitted should not be resubmitted. *See Federal Register*, December 28, 2010.

FDA Announces Plan to Help Curb Unapproved Animal Drugs

The Food and Drug Administration (FDA) has **announced** an initiative to address "the prevalence of animal drug products marketed in the United States without approval or other legal marketing status." Unapproved animal drugs on the market include injectable vitamins, shampoos, liniments, and electrolyte and glucose solutions.

FDA is concerned that the safety and effectiveness of these drugs has not been demonstrated and is open "to using both the agency's existing authority and new approaches to make more drugs legally available to veterinarians, animal producers and pet owners," according to a December 20, 2010, press release. The agency requests comments by February 18, 2011, on ways to increase the availability of legally marketed animal drugs and has launched a Web page detailing problems involving the use of unapproved products. *See Federal Register, FDA Press Release,* December 20, 2010.

IOM Forum to Discuss FDA's Food Safety Role

The Institute of Medicine (IOM) has **announced** a January 28, 2011, forum to discuss the Food and Drug Administration's (FDA) role in ensuring safe food. IOM's Committee on Review of FDA will meet in Washington, D.C., with agency representatives to review the recommendations put forth in its June 2010 report, *Enhancing Food Safety,* which described FDA as "reactive, lacking a systematic focus on prevention." The findings specifically asked FDA to adopt a "risk-based model" that involves increased coordination "with state and other federal agencies that share responsibility for protecting the nation's food supply." It also called on Congress to amend the Food, Drug, and Cosmetic Act "to explicitly provide the authority FDA needs to fulfill its food safety mission."

NTP Workshop to Explore Role of Environmental Chemicals in Diabetes, Obesity

The Department of Health and Human Services' National Toxicology Program (NTP) has **announced** a January 11-13, 2011, workshop in Raleigh, North Carolina, to address how environmental chemicals may be contributing to the "epidemics of diabetes and obesity."

Workshop participants will (i) "evaluate strengths/weaknesses, consistency, and biological plausibility of findings reported in humans and experimental animals

for certain environmental chemicals including arsenic, cadmium, chlorinated organohalogens, other organohalogens, bisphenol A, phthalates, and organotins"; (ii) "identify the most useful and relevant endpoints in experimental animals and *in vitro* models"; (iii) "identify relevant pathways and biological targets for assays for the Toxicology Testing in the 21st Century ('Tox21') high throughput screening initiative"; and (iv) "identify data gaps and areas for future evaluation/research." *See Federal Register,* December 10, 2010.

NIOSH Assesses Occupational Exposure to Carbon Nanotubes, Nanofibers

The National Institute for Occupational Safety and Health (NIOSH) has **announced** the availability of a draft document that contains a toxicological assessment of the potential health risks of occupational exposure to carbon nanotubes and nanofibers. The **draft document** also provides recommendations for the safe handling of these materials, which can be found in many applications, including food packaging.

NIOSH will hold a public meeting on February 3, 2011, in Cincinnati, Ohio, to explore (i) "whether the hazard identification, risk estimation, and discussion of health effects for carbon nanotubes and nanofibers are a reasonable reflection of the current understanding of the evidence in the scientific literature"; (ii) "workplaces and occupations where exposure to carbon nanotubes and nanofibers occur"; (iii) "current strategies for controlling occupational exposure to carbon nanotubes and nanofibers (*e.g.,* engineering controls, work practices, personal protective equipment"; (iv) "current exposure measurement methods and challenges in measuring workplace exposures to carbon nanotubes and nanofibers"; and (v) "areas for future collaborative efforts (*e.g.,* research, communication, development of exposure measurement and control strategies)." NIOSH requests comments by February 18, 2011. *See Federal Register,* December 23, 2010.

UK to Relax Regulations on Beer and Bread Sales

The U.K. Department for Business, Innovation and Skills has announced plans to relax regulations governing the sale of beer, wine and unwrapped bread loaves. Science Minister David Willetts apparently confirmed the government's intention to scrap laws stipulating that unpackaged bread "weighing more than 300g must be made up in quantities of 400g or multiples of it." He also indicated changes to the beer and wine laws, which currently state that pubs and other premises cannot sell wine "in measures less than 125ml while beer must be sold in thirds, halves or multiples of half-pints." Under the new rules, these businesses will be able to sell wine in measures under 75ml; beer in "schooners" that are equal to two-thirds of a pint; and fortified wine in smaller sizes of 50ml and 70ml.

"This is exactly the sort of unnecessary red tape the government wants to remove. No pub or restaurant should break the law by selling a customer a sample of wine. We have listened to consumers and businesses. They have called for fixed quantities to be kept but with greater flexibility," Willetts said. The

government plans to introduce a statutory instrument with these alterations during the upcoming Parliamentary session. *See The Guardian,* January 4, 2011.

Germany Investigates Dioxin-Tainted Eggs

German officials have launched an investigation into an animal feed supplier that allegedly distributed a dioxin-tainted additive to 25 feed manufacturers, who in turn sold products to hundreds of poultry, pork and egg farms in Lower Saxony, North Rhine-Westphalia, Thuringia, Saxony, and Brandenburg. According to media sources, Uetersen-based Harles & Jentzsch GmbH made its additive from mixed fatty acids approved only for industrial use and obtained from a biodiesel company. The Federal Ministry for Food, Agriculture and Consumer Protection (BMELV) has since reported that some additive samples contained 77 times the approved limit for dioxin, an industrial byproduct allegedly linked to cancer, although the agency has not received any health notifications related to consumer products.

The revelation has drawn international attention, with South Korea and Slovakia blocking German pork and poultry imports after 136,000 tainted eggs were sold to the Netherlands. As a precaution, BMELV has apparently halted sales at approximately 4,700 farms and ordered the culling of 8,000 chickens. "This strategy is resulting in a high number of closed farms, which in the course of testing and clarification in the coming days will be reduced," German Agriculture Minister Ilse Aigner was quoted as saying.

Meanwhile, German farmers have evidently demanded compensation for their losses, estimating them at approximately US$79 million per week. In addition, as one BMELV spokesperson told the press, the prosecutors' search of the implicated firm suggests "a high level of illegal activity. There are indications that the company was not even officially registered, in order not to expose itself to official controls." *See BarfBlog,* January 3, 2011; *Reuters,* January 4, 2011; *BBC News, Spiegel Online* and *The Local,* January 5, 2011; *EUROPA Memo,* January 6, 2011; and *BBC News,* January 7, 2011.

LITIGATION

Cases Recently Filed—Food Pyramid, Caffeine/Alcohol Drinks, Salad Dressing, and Bottled Water

The Physicians Committee for Responsible Medicine (PCRM) has filed a lawsuit seeking a response to its petition calling for the withdrawal of the federal government's "current MyPyramid food diagram and dietary guidelines" and the adoption of PCRM's "*Power Plate* food diagram and dietary guidelines." ***PCRM v. Vilsack*, No. 11-00038 (U.S. Dist. Ct., D.D.C., filed January 5, 2011)**. Brought against the secretaries of the U.S. Department of Agriculture (USDA) and Department of Health and Human Services (HHS), the complaint for injunctive relief calls

the agencies' food diagram "ineffective and confusing" and alleges that it "fails to promote overall health and well-being." PCRM contends that USDA and HHS have violated the Administrative Procedure Act by failing to respond to its petition in a "reasonable time." PCRM's "Power Plate" would eliminate all animal-derived products from the diet.

A Florida resident has filed a putative class action against Phusion Projects, LLC, claiming that the company's Four Loko® caffeinated alcoholic beverage "causes sickness and alcohol poisoning, and even death." ***Thomas v. Phusion Projects, LLC, No. 11-20035 (U.S. Dist. Ct., S.D. Fla., filed January 5, 2011)***. Asserting damages in excess of $5 million, she seeks to certify a class of Florida consumers, alleging violations of the state's Deceptive and Unfair Trade Practices Act and unjust enrichment. While the named plaintiff purportedly experienced ill effects from consuming the product, she claims injury from being "deprived of the benefit of her bargain[, spending] money purchasing Four Loko at a premium price when Four Loko actually had less value than was reflected in that price she paid for Four Loko." She seeks an injunction to stop the company from making deceptive claims about the product, restitution, disgorgement, the establishment of a constructive trust from excessive revenues derived from the product's sale, actual damages, attorney's fees, costs, and interest.

According to a news source, a New York resident has filed a putative class action in a California federal court against a company that makes salad dressings, alleging that its products are falsely advertised as low in fat and calories, when they are apparently neither. *Cooperman v. Galeos, LLC*, No. 10-1815 (U.S. Dist. Ct., C.D. Cal., filed November 29, 2010). The Miso Dressings® at issue are purportedly featured on the reality TV show "The Biggest Loser." The plaintiff alleges that independent testing shows the products are not as advertised and that she would not have purchased the products had she known the truth. Seeking damages in excess of $5 million, the plaintiff alleges violations of California's unfair competition and false advertising laws, as well as the Consumers Legal Remedy Act, and breach of warranty, negligent misrepresentation, and unjust enrichment. *See Mealey's Class Actions*, December 17, 2010.

FIJI Water Co. has reportedly been sued for allegedly making false statements about producing carbon-negative bottled water. *Worthington v. FIJI Water Co.*, No. n/a (U.S. Dist. Ct., C.D. Cal., S. Div., filed December 20, 2010). The company has allegedly claimed since 2007 that it offset 120 percent of its emissions in producing the bottled water, and the plaintiff, on behalf of a putative class of consumers, contends that this claim "induced countless consumers to pay a premium for bottled water." The plaintiff alleges that she would not have purchased the water if she had known that the claim was deceptive and misleading; she apparently challenges the company's carbon accounting method, referred to as "forward crediting," and avers that the company's water operations "do not remove more carbon from the atmosphere than they release into it." According to the company's Website, its reforestation program in Fiji is

part of the offset program. The complaint seeks monetary damages, statutory penalties, attorney's fees, and costs. *See Reuters*, January 4, 2011; *Fast Company*, January 5, 2011.

Cases Recently Settled—Dairy Price Fixing, BPA in Baby Bottles

Northeast dairy farmers have reportedly settled their price-fixing claims against Dean Foods Co. for $30 million and injunctive relief requiring the company to buy a portion of its raw milk from multiple sources. *Allen v. Dairy Farmers of America*, No. n/a (U.S. Dist. Ct., D. Vt., settlement reached December 24, 2010). While the agreement requires court approval, it would reportedly allow some 5,000 to 10,000 farmers to file claims for monetary damages over allegations that Dean Foods would buy milk only through Dairy Farmers of America (DFA) and its affiliates in the region. According to counsel for the plaintiffs, the case will continue against DFA, to resolve claims that "the nation's largest cooperative monopolized a level of distribution of fluid milk in the Northeast and forced dairy farmers to join DFA or its marketing affiliate [Dairy Marketing Services] to survive." *See DairyLine.com*, December 24, 2010; *Worcester Business Journal*, December 27, 2010; and *Burlington Free Press*, December 28, 2010.

A baby bottle manufacturer has reportedly agreed to settle multidistrict litigation (MDL) claims that it and other companies failed to adequately disclose the presence of bisphenol A (BPA) in their products. *In re: Bisphenol-A Polycarbonate Plastic Prods. Liab. Litig.*, MDL No. 1967 (U.S. Dist. Ct., W.D. Mo., settlement filed January 3, 2011). Philips Electronics North America Corps., which makes baby bottles and "sippy cups," has apparently agreed to provide refunds or vouchers for other company products to consumers who file a claim and will not knowingly produce products containing BPA for at least four years. Vouchers will be provided to consumers who lack proof of purchase, and the amount to be paid out to these class members will not exceed $3 million. Each of the 19 named plaintiffs will reportedly receive $1,000, and the company has agreed to pay $2.5 million in legal fees.

Meanwhile, the Environmental Protection Agency has apparently submitted for White House Office of Management & Budget review its plan to test BPA for "potential endocrine-related adverse effects in environmental organisms at low concentrations." The agency reportedly plans to issue a notice of proposed rulemaking related to the toxicity testing by October 2011. *See Inside EPA*, January 4, 2011.

Cases Recently Decided—Exploding Snails, State Alcohol Beverage Laws, *E. Coli*-Tainted Meat Outbreak

According to a news source, a small claims court in California has exonerated two seafood restaurant supervisors for alleged negligence in the case of the exploding escargot. More details about the case appear in Issue 373 of this

Update. In a two-page ruling, the court apparently determined, "There was absolutely no evidence whatsoever on what caused the escargot to spontaneously splatter grease upon being touched by the plaintiffs. There was no evidence that Seafood Peddler did not exercise reasonable care in the preparation or service of the escargot." The court also opined that diners should have a "reasonable expectation" of injury "due to hot grease in orders of escargot which are prepared and served with 'hot garlic butter.'" Pleased with the ruling, the restaurant's owner reportedly noted that orders for escargot have surged since news about the lawsuit became public. *See Marin Independent Journal*, December 15, 2010.

The Third Circuit Court of Appeals has determined that certain aspects of New Jersey's Alcohol Beverage Control Law violate the dormant Commerce Clause of the U.S. Constitution. ***Freeman v. Corzine*, Nos. 08-3268, 08-3302 (3d Cir., decided February 17, 2010)**. According to the court, New Jersey has a "three-tier" structure for alcohol distribution and sales under which "alcoholic beverages are sold by (1) suppliers and manufacturers to (2) wholesalers, who in turn sell to (3) retailers, who then sell alcohol to consumers." While similar systems in other states have been found legitimate, any "straightforward attempts to discriminate in favor of local producers" are ordinarily stricken as unconstitutional. This case involved a challenge to the state's regulation of wine. The appeals court upheld the state's fee schedule for retail and wholesale licenses, found that the direct sales and importation provisions of the law were unconstitutional, and affirmed the lower court's ruling that New Jersey's ban on direct shipments of wine is constitutional.

A federal court in the District of Columbia has dismissed claims filed by 12 plaintiffs who alleged injury as the result of an *E. coli* outbreak linked to ground meat distributed by the now-bankrupt Topps Meat Co. LLC. *Abedrabbo vo. Topps Meat Co. LLC*, No. 09-01838 (U.S. Dist. Ct., D.D.C., decided December 21, 2010). Because the matter involved personal injury only, the court lacked jurisdiction to consider it under the Magnuson-Moss Act, which the plaintiffs relied on to establish jurisdiction. This law contains three exceptions allowing personal injury cases to be tried under its ambit, but the claims did not meet any of them, according to the court. *See Product Liability Law 360*, December 22, 2010.

EU Confectioners Not Entitled to Trademark for Chocolate Rabbits and Reindeer

Having considered the matter for some six years, the General Court of the European Union (EU) has determined that chocolate makers Lindt & Sprüngli AG and August Storck AG cannot register certain three-dimensional shapes, their colored wrappings and ribbons as European Community trademarks. According to the court, chocolate rabbits, reindeer, bells, and mice "cannot be considered to be capable of identifying the commercial origin of the goods they designate." The court opined that the Lindt & Sprüngli application involved shapes typical of those "presented at certain times of the year, in particular at Easter and Christmas." The August Storck application was "made up of a combination of

standard presentation elements, typical of the goods concerned," said the court. *See General Court of the European Union Press Release No. 124/10*, December 17, 2010.

OTHER DEVELOPMENTS

Health Groups Champion Soft Drink Warnings

The Center for Science in the Public Interest (CSPI) has published a January 3, 2011, letter to Food and Drug Administration (FDA) Commissioner Margaret Hamburg that calls for health warnings on sugar-sweetened beverages. Signed by the American Public Health Association, California Center for Public Health Advocacy, Trust for America's Health, and other groups, the letter asks FDA to require the use of warning labels on "all beverages with more than 1.1 grams of sugar, high-fructose corn syrup, or other added caloric sweeteners per ounce."

Building on a 2005 CSPI petition, the signatories specifically cite "overwhelming evidence linking consumption of soft drinks to serious diseases." They recommend that the agency use its "ample legal authority" under the Federal Food, Drug, and Cosmetic Act to require warning labels such as (i) "The U.S. Government recommends that you drink fewer sugary drinks to prevent weight gain, tooth decay, heart disease and diabetes"; (ii) "Drinking too many sugary drinks can promote diabetes and heart disease"; (iii) "For better health, the U.S. Government recommends that you limit your consumption of sugary drinks"; (iv) "This drink contains 250 calories. Consider switching to water."

"Although by no means a cure for America's obesity problem, warning labels are a standard public health tool that has been effectively used to raise public awareness of the hazards of tobacco use and the excessive consumption of alcoholic beverages," states the letter, which claims that sugar-sweetened beverages "have been directly linked to obesity, a major contributor to coronary heart disease, stroke, type 2 diabetes, and some forms of cancer." *See CSPI Press Release,* January 3, 2011.

WikiLeaks Reveals U.S. Embassy Cable on GM Crops

WikiLeaks, which has made its reputation by placing otherwise unavailable documents on the Internet, has released a December 2010 cable from the U.S. Embassy in Paris in which the ambassador expresses concerns about European action on genetically modified (GM) crops. The cable calls for the preparation of a retaliation list of those countries opposing GM crops to "make clear that the current path has real costs to EU interests and could help strengthen European pro-biotech voices." According to the cable, "the pro-biotech side in France—including within the farm union—have told us that retaliation is the only way to begin to turn this issue in France."

The cable notes that legislation currently pending before the French National Assembly and Senate "could make any biotech planting impossible in practical terms. The law would make farmers and seed companies legally liable for pollen drift and sets the stage for inordinately large cropping distances. The publication of a registry identifying cultivation of GMOs at the parcel level may be the most significant measure given the propensity for activists to destroy GMO crops in the field." The British press characterized the cable as advice to "Washington to start a military-style trade war against any European country which opposed genetically modified (GM) crops." Other released cables reportedly show efforts by U.S. diplomats around the world to "push[] GM crops as a strategic government and commercial imperative." *See Guardian*, January 3, 2011.

TFAH Releases 2010 Agroterrorism Report

Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation have issued their eighth annual report, ***Ready or Not? Protecting the Public from Diseases, Disasters, and Bioterrorism***, which warns that financial woes threaten recent gains made in public health protection. According to a December 14, 2010, TFAH press release, no state scored lower than five on 10 key indicators of public health preparedness, with three states scoring a perfect 10. But the report also cautioned that these developments are now "in real jeopardy due to severe budget cuts by federal, state, and local governments."

In particular, TFAH noted that "10 states do not have an electronic syndromic surveillance system that can report and exchange information to rapidly detect disease outbreaks," while "21 states were not able to rapidly identify disease-causing *E.coli* O157:H7 and submit the lab results in 90 percent of cases within four days." The report also identified "ongoing major gaps in emergency health preparedness," including (i) gaps in funding and infrastructure; (ii) the lack of an integrated, national approach to biosurveillance; (iii) an insufficient number of adequately trained public health experts; (iv) gaps in vaccine and pharmaceutical research, development and manufacturing; (v) the inability to expand normal health services during an emergency; and (vi) gaps in community resiliency support.

Researcher Urges FDA to Revise *Trans* Fat Labeling Policy

A Case Western Reserve University School of Medicine researcher has called for the Food and Drug Administration (FDA) to change its *trans* fat labeling guidelines to reflect more accurate levels of the fat in foods. Eric Brandt, "Deception of *Trans* Fats on Food and Drug Administration Food Labels: A Proposed Revision to the Presentation of *Trans* Fats on Food Labels," *American Journal of Health Promotion,* January/February 2011.

Current FDA regulations allow *trans* fat content of less than .5 grams to be listed as 0 grams of fat on food labels. Brandt claims that the policy is misleading and

"may result in people thinking they are consuming foods with no *trans* fats, when in fact they may be consuming food that cumulatively include *trans* fats in excess of 1 percent of total dietary consumption." He recommends that *trans* fat content be labeled in .1-gram increments.

SCIENTIFIC/TECHNICAL ITEMS

New Studies Examine Nanoparticles in Food Chain

According to University of Kentucky researchers, manufactured nanoparticles discharged into waste streams could wind up in agricultural biosolids and thus enter the food chain. Jonathan D. Judy, et al., "Evidence for Biomagnification of Gold Nanoparticles within a Terrestrial Food Chain," *Environmental Science & Technology,* December 2010. The study's authors reportedly used gold nanoparticles to examine the uptake mechanism of tobacco plants and tobacco hookworms, finding that while both organisms absorbed nanoparticles, the hookworm exhibited concentrations 6 to 12 times higher than the plant. "We expected [nanoparticles] to accumulate, but not biomagnify like that," said University of Kentucky environmental toxicologist Paul Bertsch in describing the process by which substances increase in concentration higher up the food chain.

Meanwhile, a second study has raised questions about how predatory microbes retain nanoparticles. R. Werlin, et al., "Biomagnification of cadmium selenide quantum dots in a simple experimental microbial food chain," *Nature Technology,* December 2010. University of California, Santa Barbara, researchers have apparently discovered concentrated levels of cadmium selenide nanoparticles in predatory *Tetrahymena thermophila* protozoa, which feed on bacteria. "The observed biomagnification from bacterial prey is significant because bacteria are at the base of environmental food webs," concludes the abstract. *See Wired Science,* January 5, 2011.

Bumble Bee Decline to Affect Agricultural Crops

A recent study has reportedly confirmed a massive die-off in four North American bumble bee species, raising concerns about the effects on agricultural crops and native plants. Sydney Cameron, et al., "Patterns of Widespread Decline in North American Bumble Bees," *PNAS,* January 3, 2011. Led by University of Illinois Entomology Professor Sydney Cameron, researchers examined eight species, comparing approximately 73,000 historical records with data from "intensive nationwide surveys" involving more than 16,000 specimens. Their findings apparently indicated that "the relative abundances of four species have declined by up to 96% and that their surveyed geographic ranges have contracted by 23–87%, some within the last 20 [years]."

Shook, Hardy & Bacon L.L.P.

FOOD & BEVERAGE LITIGATION UPDATE

ISSUE 376 | JANUARY 7, 2011

According to a January 3, 2011, University of Illinois press release, the study authors suspect that pathogens, habitat loss and low genetic diversity could all be contributing to the decline. They also noted that bumble bees, which are adapted to colder climates, help pollinate crops such as tomatoes, blueberries and cranberries. "This could be the tip of the iceberg," Cameron said. "It may be that the role that these four species play in pollinating plants could be taken up by other species of bumble bees. But if additional species begin to fall out due to things we're not aware of, we could be in trouble." *See Scientific American,* January 5, 2011.

Red Meat Allegedly Linked to Women's Stroke Risk

A recent study has reportedly suggested that women who consume more than 3.6 ounces of red meat daily had a 42-percent risk of cerebral infarction compared to those who ate less than 1 ounce. Susanna C. Larsso, et al., "Red Meat Consumption and Risk of Stroke in Swedish Women," *Stroke,* December 2010. Swedish researchers evidently examined data from 34,670 women ages 39 to 73, finding that over 10 years, participants in the top quintile for red meat consumption were at a 22-percent increased risk of cerebral infarction over the bottom quintile. In addition, women who reported eating at least 1.5 ounces of processed meat per day had 24-percent greater risk than those who ate less than half an ounce.

The study's authors, however, did not draw any conclusions about other types of stroke, nor did they find increased risks related to fresh meat and poultry consumption. Red and processed meat consumption also appeared to increase cerebral infarction risk only for non-smokers and women without diabetes. *See Reuters,* December 31, 2010; *AOL Health,* January 3, 2010.

OFFICE LOCATIONS

Geneva, Switzerland
+41-22-787-2000
Houston, Texas
+1-713-227-8008
Irvine, California
+1-949-475-1500
Kansas City, Missouri
+1-816-474-6550
London, England
+44-207-332-4500
Miami, Florida
+1-305-358-5171
San Francisco, California
+1-415-544-1900
Tampa, Florida
+1-813-202-7100
Washington, D.C.
+1-202-783-8400