IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

CENTER FOR FOOD SAFETY, 660 Pennsylvania Avenue, SE, #302 Washington, District of Columbia 20003 *Plaintiff,* v. KATHLEEN SEBELIUS, SECRETARY OF U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 200 Independence Avenue, SW Washington, District of Columbia 20201 and MARGARET A. HAMBURG, M.D., COMMISSIONER OF U.S. FOOD AND DRUG ADMINISTRATION, 5600 Fishers Lane Rockville, MD 20854 *Defendants*.	**Case No. 1:14-cv-267** **COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF** **Administrative Procedure Act Case**

COMPLAINT

I. NATURE OF ACTION

1. This is an action for declaratory and injunctive relief challenging the United States Food and Drug Administration (FDA or the agency)'s unlawful action of exempting substances that are generally recognized as safe (GRAS) from regulation as food additives under a proposed rule for more than fifteen years. By indefinitely operating under a proposed rule in lieu of promulgating a final rule, FDA has deprived the public of the vital procedural rights afforded by the Administrative Procedure Act (APA). FDA's implementation of the proposed rule without considering and responding to public comments, and its failure to promulgate a final GRAS rule, violates the rulemaking requirements of the APA.

2. FDA began operating under its proposed GRAS rule at the time the proposed rule was published. *See* Substances Generally Recognized as Safe, 62 Fed. Reg. 18938, 18954-18955 (proposed April 17, 1997). Now, more than fifteen years later, FDA is still operating under this proposed rule.

3. Not only does FDA's action violate the APA's rulemaking requirements, but it exempts substances from food additive regulations despite the fact that they may pose serious risks to human health and welfare.

4. Several substances that have achieved GRAS status through the proposed rule that may pose serious risks to human health include, but are not limited to: Volatile Oil of Mustard, Olestra, and mycoprotein (known by the brand name "Quorn").

5. Volatile Oil of Mustard and its chief component, allyl isothiocyanate (AITC), were introduced under the proposed rule in 2003 and 2005, respectively. AITC is used as a preservative either directly in food or incorporated into food packaging. Several scientific studies have found that AITC is a potential human carcinogen, including a two-year carcinogenesis bioassay in rats conducted by scientists at the National Institutes of Health. An evaluation of similar proposed uses of AITC by the European Food Safety Authority concluded that the uses would expose children to several-fold higher levels of AITC than is considered safe.

6. Olestra was introduced under the proposed rule in 1996 over the objections of many health professionals for limited use in savory snacks such as corn chips. Olestra is an indigestible, man-made compound of sugar and fat with the sensory properties of fat, used to wholly or partially replace normal fat in low-fat or fat-free foods for the purpose of reducing caloric consumption. Over 18,000 people submitted to FDA reports of adverse reactions they attributed to Olestra, including anal leakage, severe diarrhea, and other gastrointestinal complaints. Olestra also depletes the body of vitamins A, D, E, K, and a range of carotenoid compounds, such as lycopene, that are associated with reduced risk of heart disease and certain cancers. In 2003, Proctor & Gamble prevailed upon FDA to eliminate the requirement for a label warning consumers of Olestra's adverse effects. Since the 2003 label revocation, two additional GRAS notifications submitted under the proposed rule have expanded the range of GRAS uses of Olestra to include a large array of ready-to-eat and ready-to-heat products, including baked goods, cheese, frostings and icings, mayonnaise, ice cream, frozen yogurt, breakfast bars, and chocolate.

7. Mycoprotein (known by its brand name "Quorn") was introduced under the proposed rule in 2001. This additive is a fungus-based meat substitute that has been shown to cause hazardous allergic reactions that include vomiting, diarrhea, hives or broken blood vessels in the gastrointestinal tract or eyes, and life-threatening anaphylaxis.

8. As these products illustrate, FDA's failure to comply with the APA has had serious consequences, exposing Plaintiff and the public to risky products without adequate procedural due process or meaningful agency oversight. This Court should declare that FDA has violated the APA by operating under a proposed rule that did not undergo the rulemaking procedures required by the APA. In addition, this Court should vacate the proposed rule and require FDA to apply the previous GRAS rule until and unless FDA properly promulgates a new GRAS rule in accordance with APA requirements.

II. JURISDICTION

9. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 (federal

question) and 28 U.S.C. § 1346 (United States as defendant).

10. The relief requested is specifically authorized pursuant to 28 U.S.C. § 1651 (writs) and 28 U.S.C. §§ 2201-02 (declaratory relief). An actual controversy exists between the parties within the meaning of 28 U.S.C. § 2201 (declaratory judgments).

11. Plaintiffs have a right to bring this action pursuant to the APA, 5 U.S.C. § 702.

III. VENUE

12. Venue properly lies in this Court pursuant to 28 U.S.C. § 1391(e) because the Plaintiff resides in this District.

IV. PARTIES

13. Plaintiff Center for Food Safety (CFS) is a nationwide nonprofit organization incorporated in the District of Columbia, with offices in the District of Columbia; San Francisco, California; and Portland, Oregon. Founded in 1997, CFS is dedicated to addressing the human health, environmental, economic, ethical, and social impacts associated with the development and commercialization of industrial agricultural and food processing technologies.

14. CFS has more than 400,000 members, including members in every state across the country, many of whom purchase and consume products containing potentially harmful substances that have been granted GRAS status unlawfully through FDA's proposed rule. CFS and its members are being, and will be, adversely affected by FDA's continued failure to respond to public comments and properly promulgate a final GRAS rule that adequately protects human health and safety.

15. CFS combines multiple tools and strategies in pursuing its goals, including public education, grassroots organizing, public and policymaker outreach, media outreach, campaigning, petitioning, submitting comments on agency rules, and when necessary, litigation. CFS has active campaigns dedicated to protecting food safety and preventing potentially harmful and untested substances from entering our food supply.

16. With regard to education, CFS disseminates to government agencies, members of Congress, and the general public a wide array of informational materials regarding new food

substances and their actual and potential harms.

17. CFS and its members support thorough, comprehensive scientific review of any new and potentially dangerous substances introduced into our food supply. To that end, CFS and its members believe it is imperative that FDA promotes a responsible approach to the approval of substances as GRAS and require a thorough, independent review and analysis of all scientific evidence prior to granting GRAS status to any substance.

18. CFS also sends action alerts to its membership. These action alerts generate public involvement, education, and engagement with governmental officials on issues related to fighting the health and environmental impacts of industrial agriculture and promoting a more sustainable, healthier food system. Collectively, the dissemination of this material has made CFS an information clearinghouse for public involvement and governmental oversight of food safety issues.

19. Defendant Kathleen Sebelius is the Secretary of the United States Department of Health and Human Services, and is sued in her official capacity.

20. Defendant Dr. Margaret A. Hamburg is the Commissioner of FDA, and is sued in her official capacity. As Commissioner, Dr. Hamburg has the ultimate responsibility for FDA's activities and policies.

V. LEGAL BACKGROUND

Administrative Procedure Act

21. Pursuant to the APA, "[g]eneral notice of proposed rulemaking shall be published in the Federal Register." 5 U.S.C. § 553(b). In addition, agencies are required to give "interested persons an opportunity to participate in the rule making." *Id.* § 553(c). "After consideration of the relevant matter presented, the agency shall incorporate in the rules adopted a concise general statement of their basis and purpose." *Id.*

22. The APA defines a "rule" that is subject to its requirements as "the whole or part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy . . . and includes the approval or prescription for

the future of . . . valuations, costs, or accounting, or practices bearing on any of the foregoing." *Id.* § 551(4).

23. The APA provides that "[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action . . . is entitled to judicial review thereof." *Id.* § 702.

24. Courts shall "hold unlawful and set aside agency action . . . found to be . . . arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law," or "without observance of procedure required by law." *Id.* § 706(2)(A), (D).

Food Additives Amendment of 1958

25. In 1958, Congress enacted the Food Additives Amendment to the Federal Food, Drug, and Cosmetic Act in response to public concern about the increased use of chemicals in foods and food processing. Food Additives Amendment of 1958, Pub. L. No. 85-929, 72 Stat. 1784 (codified as amended in scattered sections of 21 U.S.C.). The 1958 amendment required manufacturers to demonstrate the safety of a proposed new food additive and FDA to approve the use before it could be used in food. *See* 62 Fed. Reg. at 18938. The amendment also included the so-called Delaney Clause, which states that "no additive shall be deemed to be safe if it is found to induce cancer when ingested by man or animal, or if it is found, after tests which are appropriate for the evaluation of the safety of food additives, to induce cancer in man or animal." 72 Stat. at 1786 (codified at 21 U.S.C. § 348(c)(3)(A)).

26. The 1958 amendment required FDA to initiate a formal review process when a manufacturer petitioned FDA to approve a new food additive. The petition process requires FDA to notify the public; provide an opportunity for comment; and, if FDA deems the additive's intended use to be safe, issue a regulation allowing the use. 21 U.S.C. § 348; 21 C.F.R. § 170.35(c)(4)-(c)(6).

27. Under the 1958 amendment, a substance is generally considered a food additive:

> if such substance is *not* generally recognized among experts qualified by scientific training and experience to evaluate its safety, as having been adequately shown through scientific procedures (or, in the case of a substance used in food prior to

> January 1, 1958, through either scientific procedures or experience based on common use in food[1]) to be safe under the conditions of its intended use.

21 U.S.C. § 321(s) (emphasis added).

28. Thus, the GRAS concept emerged as an exception to the definition of "food additive" under the 1958 amendment, 62 Fed. Reg. at 18939; substances that are GRAS are exempt from the definition of food additives, 21 U.S.C. § 321(s). A substance that is GRAS for a particular use may be marketed for that use without the formal FDA review and premarket approval required for other food additives. 62 Fed. Reg. at 18939.

The Petition Process

29. In the 1970s, FDA promulgated implementing regulations that established criteria for determining when a substance was eligible to be classified as GRAS, and developed the process by which FDA could affirm a substance's GRAS status. 21 C.F.R. § 170.30 (eligibility for classification as GRAS); *id.* § 170.35 (affirmation of GRAS status).

30. Under these regulations, a substance is eligible for GRAS status only if there is both "technical evidence" and "common knowledge" of its safety. 62 Fed. Reg. at 18940. Establishing "technical evidence" requires either scientific evidence or proof that the substance was commonly used in food prior to 1958. 21 C.F.R. § 170.30(a); 62 Fed. Reg. at 18940. Establishing "common knowledge" requires satisfying a two-prong test: the technical evidence must (1) be generally available, and (2) show consensus among qualified experts that the substance is safe for its intended use. 62 Fed. Reg. at 18940. The first prong is often satisfied if the information is published in a peer-reviewed scientific journal. *Id.* The second prong is more difficult to establish, but is often satisfied by an opinion of an expert scientific panel convened for this purpose. *Id.* at 18940-41.

31. The regulations define "safe" or "safety" as "a reasonable certainty in the minds

[1] FDA incorporated into its regulations as GRAS a list of a multitude of substances that were used in food prior to 1958. 62 Fed. Reg. at 18939; 21 C.F.R. §§ 182, 582.

of competent scientists that the substance is not harmful under the intended conditions of use." 21 C.F.R. § 170.3(i). In determining safety, the probable consumption of the substance, the cumulative effect of the substance in the diet, and "appropriate" safety factors must all be considered. *Id.* "General recognition of safety based upon scientific procedures shall require the same quantity and quality of scientific evidence as is required to obtain approval of a food additive regulation for the ingredient." *Id*. § 170.30(b).

32. FDA may affirm the GRAS status of substances either on its own initiative or by petition. *Id*. § 170.35(a). In order to receive FDA affirmation that a substance is GRAS by petition, the petitioner must demonstrate that the substance satisfies the eligibility requirements, including general scientific agreement about its safety, and provide FDA with all backup information supporting the petition. *Id*. § 170.35(c)(1).

33. FDA has explicitly recognized that the petition process may "reduc[e] the health risks from substances independently determined to be GRAS if FDA review of the information supporting independent GRAS determinations uncovers an erroneous determination which, if undetected, could lead to health risks." 62 Fed. Reg. at 18958.

34. Within thirty days of receiving a petition, FDA must publish a notice of filing in the Federal Register and allow a 60-day comment period. 21 C.F.R. § 170.35(c)(2), (c)(4). After considering the petition, scientific data, and comments, FDA can either publish an order adding the substance to the list of affirmed GRAS substances or publish a ruling that the substance is not GRAS and is therefore considered a food additive. *Id*. § 170.35(c)(5)-(6). The explanation must be published in the Federal Register. *Id.*

The Notification Process

35. In April of 1997, FDA published a notice of proposed rulemaking in the Federal Register to change the GRAS process. The proposed rule eliminated the GRAS petition process and replaced it with a simplified notification process. 62 Fed. Reg. at 18941 (to be codified at 21 C.F.R. § 170.36).

36. Under the proposed rule, any person may notify FDA that a proposed substance is

GRAS by submitting a "GRAS exemption claim." *Id.* A GRAS exemption claim includes a short description of the substance, the applicable conditions of its use, and the basis for the GRAS determination (i.e., through scientific testing or common use in food). *Id.* The notifier no longer needs to provide backup information, and instead must only summarize the information and make it available to FDA for review upon FDA's request. *Id*. at 18958.

37. FDA may question a notifier's conclusion that a use of a substance is GRAS "if the information provided in a notice: (1) [d]oes not adequately establish technical evidence of safety; (2) is not generally available; (3) does not convince the agency that there is the requisite expert consensus about the safety of the substance for its intended use; or (4) is so poorly presented that the basis for GRAS determination is not clear." *Id*. at 18950. FDA can also question the claim if it is "aware of information that is not included in the notice but raises important public health issues." *Id.*

38. Thus, under this notification process, FDA no longer conducts its own detailed analysis to evaluate the data. In fact, FDA no longer affirms whether or not a substance's use is GRAS at all—it merely issues an opinion on a notifier's independent determination that it is. *Id.* The process merely requires FDA to inform the notifier in a letter, within 90 days, of one of the following responses: (1) FDA has no questions, thereby allowing the substance to be used in food without further FDA intervention; (2) the notice is not sufficient to determine whether the substance is GRAS; or (3) FDA has ceased to evaluate the GRAS notice at the company's request.[2]

The "Interim" Notification Process

39. As part of the notice of proposed rulemaking, FDA announced an "interim" notification process that would be used "between the time of publication of this proposal and any

[2] U.S. Gov't Accountability Office, *GAO-10-246, Food Safety: FDA Should Strengthen Its Oversight of Food Ingredients Determined to Be Generally Recognized as Safe (GRAS)* 6 (2010) [hereinafter GAO Report], available at http://www.gao.gov/assets/310/300743.pdf.

final rule based on this proposal." 62 Fed. Reg. at 18954. The "interim" process simply directs manufacturers to use the notification process described in the proposed rule. Worse than the proposed rule, however, the "interim" process explicitly does not bind the agency to any timeframe for responding to notifications. *Id.* In the notice, FDA expressly acknowledged that the "interim" procedure would need further clarification before becoming final; it created an option for manufacturers needing additional guidance to request consultation with FDA "because such consultation may identify sections of the proposed procedure that may require clarification in any final rule based on the proposal." *Id.* at 18955.

VI. STATEMENT OF FACTS

40. The 1958 Food Additive Amendments intended to save the time and resources of both food manufacturers and FDA by excluding GRAS substances from the definition of a food additive, thus exempting them from compliance with the corresponding burdensome food additive regulations. *Id*. at 18938-39.

41. However, numerous substances have been classified as GRAS despite the fact that their safety had not been adequately established at the time or was later shown to be unsafe. For example, cyclamate salts, a class of artificial sweeteners, were removed from the GRAS list because they were connected to cancer. *See* Exemption of Certain Food Additives From the Requirement of Tolerances: Cyclamic Acid and Its Salts, 34 Fed. Reg. 17063, 17063-64 (1969).

42. In the 1970s, FDA initiated a systematic review to resolve the status of a number of substances commonly added to food, and subsequently reclassified various substances. *See* Eligibility of Substances for Classification as Generally Recognized as Safe in Food, 35 Fed. Reg. 18623, 18623-24 (1970). This effort lasted ten years and raised questions about the safety of almost three dozen GRAS substances. GAO Report at 20. FDA has not conducted a similar systematic review since. *Id.* at 21.

43. Despite the problems already inherent with GRAS determinations, FDA introduced the GRAS notification process in order to use even fewer agency resources than the

existing petition process. 62 Fed. Reg. at 18941. Unfortunately, safety standards suffer even further as a result of less agency involvement and oversight.

44. Particularly alarming is the fact that FDA's inclusion of an "interim" notification process in the proposed rule essentially purported to allow FDA to operate under the proposed rule indefinitely, until a final rule is promulgated. *Id*. at 18954. Until the rule is finalized, manufacturers can use the notification procedure just as described in the proposed rule. *Id.* Contrary to the requirements of the APA, 5 U.S.C. § 553, the agency put the proposed rule into place upon publication of the notice of proposed rulemaking, before the public was able to provide comment and before the agency considered such comments and finalized the rule.

45. Since 1998, when FDA received its first GRAS notice under the "interim" notification procedure prescribed by the proposed rule, over 473 GRAS notices have been submitted to the agency.[3] Of these, FDA has had "no questions" on 348 notices, review of 76 notices were "ceased at notifier's request," 33 notices are "pending," and 16 notices did "not provide a basis for a GRAS determination."[4]

46. FDA held two comment periods for the proposed rule: one when it published the proposed rule in 1997, and the second when it reopened the comment period in 2010 to elicit updated comments. *See* Substances Generally Recognized as Safe; Reopening of the Comment Period, 75 Fed. Reg. 81536 (proposed Dec. 28, 2010). The 2010 comment period closed on March 28, 2011. *Id.* FDA has still not responded to *any* comments from *either* comment period. To this day the agency continues to use the rule it proposed in 1997, having never responded to comments nor properly promulgated a final rule.

47. CFS's programmatic predecessor, International Center for Technology

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[3] FDA, *GRAS Notice Inventory*, http://www.accessdata.fda.gov/scripts/fcn/fcnNavigation.cfm?rpt=grasListing&displayAll=true (last visited Dec. 11, 2013).

[4] *Id.*

Assessment (ICTA), submitted comments during the 1997 comment period.[5] These comments make several points that FDA has a duty under the APA to consider, respond to, and incorporate into the promulgation of a final rule. *See* 5 U.S.C. § 553. These points include but are not limited to:

a. The GRAS notification process is contrary to the clear intent of Congress under the 1958 Food Additive Amendments and other statutory requirements, and is an arbitrary and capricious abdication of the agency's oversight role. ICTA Comments at 1.

b. By using a notification procedure in lieu of petitioning, the public loses a process that could uncover erroneous determinations because FDA no longer independently evaluates data supporting a GRAS determination, but instead reviews the notifier's summary of the data. The notifier does not even submit back-up information. *Id.* at 3 (citing 62 Fed. Reg. at 18958). Relatedly, there is no longer an easily accessible collection of data made available to the public. This puts the burden on the public and other public interest groups to independently gather this data to monitor food safety. *Id.*

c. Additionally, the agency's broadening of the definition of "common knowledge" with respect to the safety of a substance makes the provision virtually meaningless. *Id.* For example, instead of requiring peer-reviewed studies, FDA now considers the term "studies" to include virtually any "scientific data and scientific information," which is merely summarized for the agency. *Id.*

d. In sum, the new notification process results in a public more at risk from dangerous food additives, as well as a public unable to be fully informed on the food it is

[5] Int'l Ctr. for Tech. Assessment, *Comments Concerning Docket No. 97 N-0103* (submitted July 16, 1997) [hereinafter ICTA Comments], *available at* http://www.centerforfoodsafety.org/files/97-gras-comments062_02365.pdf.

consuming. *Id.* at 4.

48. These concerns have been borne out. Between 2004 and 2008, eleven citizen petitions were submitted to the agency urging FDA to reconsider the safety of various GRAS substances. GAO Report at 22. These petitions challenge the safety of the following substances and corresponding concerns: (1) milk protein concentrate (lack of evidence for GRAS status), submitted April 2004; (2) partially hydrogenated vegetable oils (increased risk of coronary heart disease from trans fats), submitted in May 2004; (3) aluminum-based food additives (link to Alzheimer's disease and elderly cognitive impairment), submitted September 2005; (4) salt (risk of elevated blood pressure from excess salt consumption), submitted November 2005; (5) carbon monoxide gas in fresh meat packaging (consumer deception and food safety risks), submitted November 2005; (6) carbon monoxide in fresh tuna packaging (consumer deception and food safety risks), submitted March 2006; (7) diacetyl (lung disease and impairment from inhalation of substance), submitted September 2006; (8) iodized salt (lack of information on food ingredient labels), submitted May 2007; (9) monosodium glutamate (linked to rise in obesity, diabetes, and autism), submitted December 2007; (10) carrageenan and similar substances (harmful effects on human intestinal cells), submitted June 2008; and (11) stevia extracts (therapeutic uses of the substances and questions about their safety), submitted October 2008. *Id.* at 23. FDA has not yet issued a decision on the majority of these petitions, citing limited resources and other agency priorities.[6] *Id.*

[6] FDA denied the stevia extracts petition in December 2009. *See* Letter from Stephen Sundlof, Director, Ctr. for Food Safety and Applied Nutrition (CFSAN), to Barry Coburn, Coburn & Coffman PLLC (Dec. 9, 2009), *available at* http://www.regulations.gov/#!documentDetail;D=FDA-2008-P-0542-0008. FDA denied the monosodium glutamate petition in November 2012. *See* Letter from Michael Landan, Director, CFSAN, to John Erb (Nov. 8, 2012), *available at* http://www.regulations.gov/#!documentDetail;D=FDA-2007-P-0178-0090. In November 2013 FDA announced its intention to reclassify partially hydrogenated oils, although it has yet to respond directly to the 2004 petition or to another petition submitted in August 2009. *See* Tentative Determination Regarding Partially Hydrogenated Oils; Request for Comments and for Scientific Data and Information, 78 Fed. Reg. 67169 (Nov. 8, 2013).

49. In 2010, the Government Accountability Office (GAO) issued a report sharply criticizing FDA's GRAS program (GAO Report). The report included six recommendations to shore up the GRAS program in an effort to help ensure a safer regulatory regime. GAO Report at 34-36. These recommendations call on FDA to:

a. require any company that conducts a GRAS determination to provide FDA with basic information—as defined by the agency to allow for adequate oversight—about this determination, such as the substance's identity and intended uses, and to incorporate such information into relevant agency databases and its public website;

b. minimize the potential for conflicts of interest in companies' GRAS determinations, including taking steps such as issuing guidance for companies on conflicts of interest and requiring information in GRAS notices regarding expert panelists' independence;

c. monitor the appropriateness of companies' GRAS determinations through random audits or some other means, including issuing guidance on how to document GRAS determinations;

d. finalize the rule that governs the notification program, including taking into account the experience of the program to date, incorporating input from a new public comment period, and reporting to Congress and the public the agency's timeline for making it final;

e. reconsider the safety of GRAS substances in a more systematic manner, including taking steps such as allocating sufficient resources to respond to citizen petitions in a timely manner, developing criteria for the circumstances under which the agency will reconsider the safety of a GRAS substance, and considering how to collect information from companies on their reconsiderations; and

f. help ensure the safety of engineered nanomaterials that companies market as GRAS substances without the agency's knowledge, including taking steps such as issuing guidance recommended by the agency's nanotechnology taskforce, developing an

agency definition of engineered nanomaterials, and requiring companies to inform FDA if their GRAS determinations involve engineered nanomaterials.

Id. at 35-36.

50. In response to the GAO report, FDA reopened the comment period on the proposed rule in 2010. The renewed comment period closed on March 28, 2011. 75 Fed. Reg. at 81536. However, FDA has not responded to any comments and the rule still has not been finalized.

51. The only other GAO report recommendation that FDA partially addressed was with regard to engineered nanomaterials. In 2012, FDA issued draft guidance for the industry on this topic. Draft Guidance for Industry, 77 Fed. Reg. 24722 (Apr. 25, 2012). Thus, the GRAS regulatory regime remains flawed, exposing the public to potentially hazardous substances with or without FDA's knowledge.

52. The Journal of the American Medical Association (JAMA), a peer-reviewed medical journal published by the American Medical Association, published a report (JAMA Study) on August 7, 2013, outlining conflicts of interest in GRAS determinations specifically covering the post-1997 period, when the "interim" notification process went into effect, through 2012.[7] The JAMA Study criticizes several aspects of FDA's current action and calls into question substances granted GRAS status under the potentially biased, deficient policy. Its criticisms include: financial conflicts of interest are ubiquitous in determinations that an additive is GRAS; independent review in GRAS determinations is lacking, raising concerns about the integrity of the process; and manufacturers are not required to inform FDA of independent determinations.[8] JAMA Study at 1, 4. A 2011 report cited by the JAMA Study estimated that

[7] Neltner, et al., *Conflicts of Interest in Approvals of Additives to Food Determined to Be Generally Recognized as Safe Out of Balance*, 173 J. Am. Med. Assoc. Internal Med. 2032, 2032-36 (2013) [hereinafter JAMA Study].

[8] Interestingly, the study found that of the 451 GRAS notices submitted to FDA between 1997 and 2012, 22.4% were submitted by an employee of the substance manufacturer, 13.3% were

more than 10,000 additives are allowed in food, 43% of which have GRAS status. *Id.* at 2 (citation omitted). For an estimated 1,000 of these additives, manufacturers made the GRAS determinations without notifying FDA. *Id*. The JAMA Study recommends that to minimize conflicts of interest, "an essential first step is for the FDA to require that it be notified of all GRAS determinations and the financial conflicts of interest of those who make these determinations." *Id*. at 5.

53. A Pew Charitable Trusts 2013 report (Pew Report) revealed results of a comprehensive assessment of FDA's food additives regulatory program.[9] The Pew Report confirmed the 2010 findings of the GAO Report and identified additional problems that plague the "disjointed food safety regulatory system" and prevent FDA from ensuring that the use of food additives is safe. Pew Report at 2. The Report cautions that if one of these chemicals was causing health problems "short of immediate serious injury," it is "unlikely that FDA would detect the problems unless the food industry alerted it," particularly where the health consequences take years or even decades to manifest. *Id*. at 7.

54. The "interim" notification process leaves the safety of food additives up to food manufacturers. As Pew found, over the past decade, *almost all* new chemicals added directly to food have gone through the GRAS exemption process rather than the formal approval process intended by Congress. *Id.* at 1.

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submitted by an employee of a consulting firm selected by a manufacturer, and 64.3% were submitted by an expert panel selected by the manufacturer or a firm that was a consultant to the manufacturer. *Id.* at 2. There were no instances where a manufacturer that submitted a GRAS notice to FDA used a standing expert panel selected by a third party—the method least likely to involve a conflict of interest. *Id.* at 3. Curiously, of the members who made up the panels, almost all of them had doctor of philosophy degrees. *Id.* at 4.

[9] Pew Charitable Trusts, *Fixing the Oversight of Chemicals Added to Our Food: Findings and Recommendations of Pew's Assessment of the U.S. Food Additives Program*, (Nov. 2013) [hereinafter Pew Report], *available at* http://www.pewhealth.org/uploadedFiles/PHG/Content_Level_Pages/Reports/Food-Additives-Capstone-Report.pdf.

Potentially Harmful Substances Approved as GRAS Under the Proposed Rule

Volatile Oil of Mustard

55. Under the "interim" notification process, GRAS notifications were submitted for volatile oil of mustard and its chief component allyl isothiocyanate (AITC) for use as a preservative either directly in food or incorporated into food packaging. FDA responded with "no questions" letters for each.[10]

56. As early as 1982, however, scientists with the National Institutes of Health's National Toxicology Program found that AITC is carcinogenic to rats in a two-year carcinogenesis bioassay.[11] In 2000, another research team found that AITC is "genotoxic [damages DNA], and probably carcinogenic."[12] The authoritative International Agency for Research on Cancer found "limited evidence in experimental animals for the carcinogenicity of allyl isothiocyanate."[13] In 2013, still another team found that inhalation of this volatile substance could "exert tumor-promoting effects in [small cell lung cancer] cells."[14]

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[10] *See* FDA, *GRAS Notice Inventory: GRN No. 180*, http://www.accessdata.fda.gov/scripts/fcn/fcnDetailNavigation.cfm?rpt=grasListing&id=180 (last visited Jan. 16, 2014); FDA, *GRAS Inventory: GRN No. 133*, http://www.accessdata.fda.gov/scripts/fcn/fcnDetailNavigation.cfm?rpt=grasListing&id=133 (last visited Jan. 16, 2014).

[11] U.S. Dep't of Health and Human Servs., Nat'l Toxicol. Program, *NTP Technical Report on the Carcinogenesis Bioassay of Ally1 Isothiocyanate*, Pub. No. (NIH) 83- 1790 (1981); *see also* J.K. Dunnick, et al., *Carcinogenesis Bioassay of Allyl Isothiocyanate*, 2 Fundamental & Applied Toxicology 114, 114-120 (1982).

[12] F. Kassie and S. Knasmuller, *Genotoxic Effects of Isothiocyanate (AITC) and Phenethyl isothiocyanate (PEITC)*, 127 Chemico-Biological Interactions 163, 163-180 (2000).

[13] Int'l Agency for Research on Cancer, *Allyl isothiocyanate*, 73 Int'l Agency for Research on Cancer Monograph 37, 37-48 (1999).

[14] E.A. Schaefer, et al., *Stimulation of the chemosensory TRPA1 Cation Channel by Volatile Toxic Substances Promotes Cell Survival of Small Cell Lung Cancer Cells*, 85 Biochemical Pharmacology 426, 426-438 (2013).

57. GRAS notifications for this substance stress that AITC is found naturally in certain foods. But Plaintiff CFS has identified an error that FDA did not detect: Mitsubishi, the manufacturer, made a 1,000-fold calculation error that led to gross overstatement of the amount of AITC consumed in non-mustard brassica foods.[15] This miscalculation has resulted in the false impression that AITC exposure from the proposed preservative applications was negligible, when in fact it would lead to substantially increased exposure to AITC over levels found naturally in brassica foods. Relying on Mitsubishi's faulty summary, FDA issued a "no questions" letter.[16]

58. In contrast, the European Food Safety Authority completed an independent evaluation of AITC for a similar food preservative application, albeit for a different range of foods, and concluded that it would lead to children being exposed to two- to four-fold more AITC than is considered safe. The evaluation also concluded that it would lead to some adults being exposed to AITC at levels eight-fold greater than this "acceptable daily intake."[17]

Olestra

59. Olestra is an entirely-manufactured compound not found in nature, a novel chemical combination of sugar and fat. It is an indigestible substance with the sensory properties of fat, and is used to wholly or partially replace normal fat in low-fat or fat-free foods for the purpose of reducing caloric consumption.

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[15] *See* Mitsubishi, *Notification of claim for general recognition of safety of allyl iosthiocyanate in a food shelf life extension and anti-spoilage system* 14, T.1 (Aug. 10, 2005), *available at* http://www.accessdata.fda.gov/scripts/fcn/gras_notices/grn0180.pdf (overstating the AITC concentration of non-mustard brassicas by 1,000-fold due to confusion of grams with kilograms).

[16] FDA, *GRAS Notice Inventory: GRN No. 180*, http://www.accessdata.fda.gov/scripts/fcn/fcnDetailNavigation.cfm?rpt=grasListing&id=180 (last visited Jan. 16, 2014).

[17] European Food Safety Auth. (EFSA) Panel on Food Additives and Nutrient Sources Added to Food (ANS), *Scientific Opinion on the Safety of Allyl isothiocyanate for the Proposed Uses as a Food Additive*, 8 EFSA J. 1943 (2010).

60. FDA originally issued a "no questions" letter for limited use of Olestra in savory snacks such as corn chips in 1996, but its approval was sharply criticized by scores of nutritional experts.[18] More than 18,000 people have submitted to FDA reports of adverse reactions that they attribute to Olestra. Adverse reactions include anal leakage, severe diarrhea, and abdominal cramps, among other gastrointestinal complaints.[19] Olestra also depletes the body of fat-soluble vitamins A, D, E, and K, as well as a range of carotenoid compounds, such as lycopene, which are associated with reduced risk of heart disease and certain cancers.[20] For these reasons, Olestra-containing foods originally had to bear a label warning of these side effects. In 2003, the lobbying efforts of Proctor & Gamble led FDA to eliminate the requirement that Olestra-containing foods bear the warning label.

61. Supplementing Olestra with vitamins A, D, E and K does not alleviate carotenoid depletion. Hence, Olestra consumption may lead to increased risk of heart disease and cancer. Animal studies suggest that, contrary to its intended purpose of reducing obesity, foods containing Olestra may actually contribute to weight gain by disrupting appetite regulation, or the body's use of sensory cues to gauge and regulate caloric intake.[21]

62. Two GRAS notifications submitted after FDA's 1996 "no questions" letter and 2003 label revocation have expanded the range of GRAS uses of Olestra.[22] Manufacturers now

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[18] Ctr. for Sci. in the Pub. Interest, *What the Experts Say About Olestra: Quotes from Prominent Doctors and Scientists*, http://www.cspinet.org/olestra/experts.html (last visited Jan. 16, 2014).

[19] Ctr. for Sci. in the Pub. Interest, *A Brief History of Olestra*, http://www.cspinet.org/olestra/history.html (last visited Jan. 16, 2014).

[20] Ctr. for Sci. in the Pub. Interest, *The Problems with Olestra: Olestra Rapidly Depletes Blood Levels of Many Valuable Fat-soluble Substances, including Carotenoids*, http://www.cspinet.org/olestra/11cons.html (last visited Jan. 16, 2014).

[21] S.E. Swithers, et al., *Fat Substitutes Promote Weight Gain in Rats Consuming High-fat Diets*, 125 Behavioral Neurosci. 512, 512-518 (2011).

[22] FDA, *GRAS Notice Inventory: GRN No. 227*, http://www.accessdata.fda.gov/scripts/fcn/fcnDetailNavigation.cfm?rpt=grasListing&id=227

use Olestra in a large array of ready-to-eat and ready-to-heat products, including baked goods, cheese, frostings and icings, mayonnaise, ice cream, frozen yogurt, breakfast bars, and chocolate. According to Proctor & Gamble, these additional uses nearly double the average consumption of Olestra by Americans.

Mycoprotein (Quorn)

63. FDA was notified of the GRAS status of mycoprotein (known by its brand name "Quorn"),[23] a fungus-derived protein, in 2001. Quorn is used as a meat substitute, and has proven to be a hazardous allergen that in sensitive individuals causes vomiting, diarrhea, hives or broken blood vessels in the gastrointestinal tract or eyes, and life-threatening anaphylactic reactions.[24] While Quorn's manufacturer, Marlow Foods, told FDA in its GRAS notification that only 1 in 146,000 Britons suffered adverse reactions from Quorn, a letter published in a medical journal reported that 4.5% of Britons who eat Quorn suffer adverse reactions–over 6,000-fold more than reported by Marlow Foods. This high incidence rate makes Quorn more likely to cause adverse reactions than shellfish, milk, peanuts, and other commonly allergenic foods. In addition, an unpublished study by Marlow Foods conducted in 1977–78 found that 10% of Quorn consumers suffered nausea, vomiting, or stomach pain. Marlow apparently did not inform FDA of the existence or results of this study when it first applied for GRAS status.

64. It is unclear whether Quorn can cause toxic as well as allergic reactions. However, Quorn is produced from the fungal species *Fusarium venenatum*. Some 50 *Fusarium*

(last visited Jan. 16, 2014); FDA, *GRAS Notice Inventory: GRN No. 325*, http://www.accessdata.fda.gov/scripts/fcn/fcnDetailNavigation.cfm?rpt=grasListing&id=325 (last visited Jan. 16, 2014).

[23] FDA, *GRAS Notice Inventory: GRN No. 91*, http://www.accessdata.fda.gov/scripts/fcn/fcnDetailNavigation.cfm?rpt=grasListing&id=91 (last visited Jan. 16, 2014)

[24] Ctr. for Sci. in the Pub. Interest, *4.5% of Britons Report Problems After Eating Quorn*, http://www.cspinet.org/new/200309231.html (last visited Jan. 16, 2014).

strains are known to produce highly toxic mycotoxins (such as fumonisins), though Marlow contends that this particular strain does not.

Harm to Plaintiff

65. Plaintiff's interests are adversely affected by Defendants' continued operation under the proposed rule, which allows hundreds of GRAS substances to be placed in food through the "interim" notification process without premarket approval.

66. FDA's proposed rule went into effect indefinitely upon publication of notice in the Federal Register, prior to public comment. The interests of Plaintiff and its procedural due process rights are adversely affected by FDA's decision to implement a rule without following the notice-and-comment rulemaking procedures mandated by the APA.

67. CFS's programmatic predecessor, ICTA, submitted comments to FDA during the 1997 comment period. The interests of Plaintiff and its procedural due process rights are adversely affected by Defendants' failure to respond to its comments and the comments of others, as required by the APA.

68. FDA's failure to properly promulgate a final GRAS rule also injures the interests of Plaintiff and its individual members. The proposed rule has allowed potentially unsafe substances into the market, thereby increasing the risk of harm to the health and safety of Plaintiff's members. Plaintiff's members have purchased or consumed substances that have achieved GRAS status through the proposed rule that may pose serious risks to human health. These substances include, but are not limited to, Volatile Oil of Mustard, Olestra, and mycoprotein. The risks of these substances include, but are not limited to, increased risk of cancer, heart disease, toxic allergic reactions, and gastrointestinal issues.

69. Had FDA considered and responded to comments on the proposed rule prior to implementing it, potentially unsafe substances that obtained GRAS status under the proposed rule may have been denied GRAS status. Moreover, had FDA followed proper APA rulemaking procedure, it would still be operating under its previous rule until its final GRAS rule was promulgated. Potentially unsafe substances that obtained GRAS status under the proposed rule

may have been denied GRAS status under the previous rule.

70. The relief sought in this case will provide redress for Plaintiff's ongoing harms and aid in preventing additional future damages from GRAS substances.

CAUSE OF ACTION

71. Plaintiff incorporates by reference all allegations contained in paragraphs 1 through 70 *supra*.

72. The APA requires agencies to give an opportunity for meaningful public participation before an agency rule becomes final. 5 U.S.C. § 553.

73. The APA defines a "rule" as "the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy." *Id.* § 551(4).

74. "A person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action . . . is entitled to judicial review thereof." *Id.* § 702.

75. Courts "shall hold unlawful and set aside agency action . . . found to be . . . arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law" or "without observance of procedure required by law." *Id.* § 706(2)(A), (D).

76. FDA's proposed rule constitutes final agency action within the meaning of the APA, 5 U.S.C. §§ 551(13), 704.

77. FDA's proposed rule went into effect indefinitely upon publication of notice in the Federal Register. The public did not have an opportunity to comment on the rule before it went into effect as required by 5 U.S.C. § 553.

78. More than fifteen years later, FDA continues to use the proposed rule to determine the rights and obligations of food additive manufacturers. It does so despite never having responded to public comments as required by 5 U.S.C. § 553.

79. FDA's use of a regulation that was not promulgated in accordance with the rulemaking requirements of the APA constitutes final agency action that is arbitrary, capricious, not in accordance with law, and without observance of procedure required by law.

80. Plaintiff and its members are adversely affected by FDA's use of a regulation that was not promulgated in accordance with the rulemaking requirements of the APA.

REQUEST FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter an Order:

(1) Declaring that the Defendants have violated the APA by operating under the proposed GRAS notification rule;

(2) Declaring that the Defendants continue to be in violation of the APA by failing to respond to comments and properly promulgate a final GRAS rule;

(3) Vacating the proposed notification rule and reinstating the GRAS rule previously in force until Defendants properly promulgate a final GRAS rule;

(4) Retaining jurisdiction in this action to ensure compliance with its decree;

(5) Awarding Plaintiff attorney fees and all other reasonable expenses incurred in pursuit of this action; and

(6) Granting other such injunctive and/or declaratory relief as the Court deems necessary, just and proper.

Respectfully submitted this 20th day of February, 2014.

/s/ Donna F. Solen
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