Testimony on HB 6519, an Act Concerning the Labeling of Genetically Engineered Food, before the Committee on Public Health

Hartford, CT By Michael Hansen, Ph.D. Senior Scientist Consumers Union March 15, 2013

Dear Committee members,

Thank you for the opportunity to present testimony in support of HB 6519, an Act Concerning the Labeling of Genetically Engineered Food. My name is Michael Hansen and I am a senior scientist at Consumers Union1¹ (CU), the policy and advocacy arm of Consumer Reports. I have worked on the issue of genetically engineered (GE) foods for more than 20 years and have been involved in the decisions/debate about these foods at the state, national and international levels.

Genetic engineering is very different than conventional forms of breeding. Genetic engineering allows exchanges of genes between life forms that could never do so naturally. Scientists have used GE to put spider silk genes into goats and human genes into rice plants using. Indeed, there is global agreement that because genetic engineering is different than conventional breeding, safety assessments should be completed for all GE foods, including crops and animals, prior to marketing.

The human safety problems that may arise from GE include introduction of new allergens or increased levels of naturally occurring allergens, of plant toxins, and changes in nutrition. There may also be other unintended effects.

The United States, however, unlike all other developed countries, does not require safety testing for genetically engineered (GE) plants, although it does require testing for GE animals. The US Food and Drug Administration (FDA) have not made a conclusion about the safety for genetically engineered (GE) plants or the safety of the technology as a whole. Instead, in the end, FDA says it is up to the companies to determine safety of any GE food.

Just last June, the American Medical Association's House on Delegates voted to change its policy on "bioengineered" foods to one that states: "**Our AMA supports mandatory pre-market systematic safety assessments of bioengineered foods** and encourages: (a) development and validation of additional techniques for the detection and/or assessment of unintended effects; (b) continued use of methods to detect substantive changes in nutrient or toxicant levels in bioengineered foods as part of a substantial equivalence evaluation; (c)

¹ Consumers Union is the public policy and advocacy division of Consumer Reports. Consumers Union works for telecommunications reform, health reform, food and product safety, financial reform, and other consumer issues. Consumer Reports, a non-profit, is the world's largest independent product-testing organization. Using its more than 50 labs, auto test center, and survey research center, the nonprofit rates thousands of products and services annually. Founded in 1936, Consumer Reports has over 8 million subscribers to its magazine, website, and other publications.

development and use of alternative transformation technologies to avoid utilization of antibiotic resistance markers that code for clinically relevant antibiotics, where feasible; and (d) that priority should be given to basic research in food allergenicity to support the development of improved methods for identifying potential allergens. The FDA is urged to remain alert to new data on the health consequences of bioengineered foods and update its regulatory policies accordingly"² **bold** added.

There is considerable evidence of health issue with GE foods. FDA is posed to approve a GE salmon, engineered to reach market weight in half the time of wild salmon. However, company data suggest that it may exhibit increased allergenicity.³

A carefully designed meta-analysis of 19 published studies involving mammals fed GE corn or soy found damage in the kidney, liver and bone marrow, which could be potential indicators for the onset of chronic diseases.⁴

A long-term feeding study published in October, 2012 found that GE corn caused tumors and premature death.⁵ The study, by Dr. Eric-Giles Séralini and colleagues was viciously attacked in the media by pro-GE and industry-affiliated scientists in what appear to have been an orchestrated campaign.⁶ However, both the French Food Safety Agency (ANSES)⁷ and the European Food Safety Authority (EFSA)⁸ have agreed with Dr. Séralini that such long-term safety assessment should be done on GE foods.

Finally, at least 62 countries, which together include more than half the world's population, (including all European Union, China, India, Japan, Korea, Australia, Russia, Brazil and South Africa), require labeling of GE foods.⁹ A number of polls from 1995 to 2011 have found that between 70% and 95% of Americans polled supported mandatory labeling.¹⁰ Such labeling is important because consumers have a right to choose the foods they eat and to avoid any unintended health effects.

For all these reasons, CU support HB 6519.

http://www.sciencedirect.com/science/article/pii/S0278691512005637

⁶ Bardocz S, Clark A, Ewen S, Hansen, M, Heinemann J, Latham J, Pusztai A, Schubert D and A Wilson. 2012. Séralini and science: An open letter. *Independent Science News*. At:

http://independentsciencenews.org/health/seralini-and-science-nk603-rat-study-roundup/

⁹ See <u>http://www.centerforfoodsafety.org/ge-map/</u>

² <u>http://www.ama-assn.org/resources/doc/yps/ref-comm-e-grid.pdf</u>

³ Hansen, M. 2010. Submission to FDA's Veterinary Medicine Advisory Committee meeting on safety assessment of AquAdvantage Salmon. <u>http://www.consumersunion.org/pdf/CU-comments-GE-salmon-0910.pdf</u>

⁴ Séralini, G-E, Mesnage, R., Clair, E., Gress, S., de Vendômois, JS and D. Cellier. 2011. Genetically modified crops safety assessments: present limits and possible improvements. *Environmental Sciences Europe*, 23: 10. At: http://www.enveurope.com/content/pdf/2190-4715-23-10.pdf

⁵ Séralini et al. 2012. Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize. *Food and Chemical Toxicology*, 50: 4221-4231.

⁷ Reaction of ANSES (French Agency for food, environmental and occupational health and safety) to Seralini et al. study <u>http://www.anses.fr/Documents/PRES2012CPA20EN.pdf</u>

⁸ Commission and EFSA agree need for two-year GMO feeding studies EU Food Policy, 17 December 2012 http://www.eufoodpolicy.com/cgi-bin/view_article.pl?id=5590

¹⁰ http://gefoodlabels.org/gmo-labeling/polls-on-gmo-labeling/