

February 2, 2023

The Vegetarian Resource Group (VRG) is an independent non-profit organization dedicated to educating the public on vegetarianism and the interrelated issues of health, nutrition, environment, ethics, and world hunger. Our health professionals, activists, and educators work with businesses and individuals to bring about healthy changes in schools, workplaces, and the community. Registered dietitians and physicians aid in the development of nutrition-related publications and answer questions about the vegetarian and vegan diet. For the past 29 years, we have commissioned polls exploring vegetarian-related issues, results of which are often used by researchers, the food industry, and the media. Financial support comes primarily from memberships, contributions, and book sales.

We welcome the opportunity to comment on the Request for Information; Identifying Ambiguities, Gaps, Inefficiencies, and Uncertainties in the Coordinated Framework for the Regulation of Biotechnology. As a consumer organization representing vegetarians and vegans, we have a unique perspective on issues related to biotechnology, especially those involving the use of genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA).

*4. Describe any specific issues the agencies should consider in developing a plan to implement regulatory reform including any updated or new regulations or guidance documents.*

**Our response to question 4:**

Regulations and guidance documents should require the provision of clear, helpful label information that consumers can use to make informed choices about products produced using new or emerging biotechnology. An example of this is the labeling of foods that were produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA), due to concern for consumer confusion. We believe that the name or statement of identity of meat, poultry, dairy, egg, or other products comprised of or containing cultured animal cells should inform consumers about how the animal cells were produced. Vegetarians, including vegans, do not eat meat or poultry (and eggs and dairy products in the case of vegans) and would want to be aware that a product contains cultured animal cells. We assume that this would also be the case for those with an allergy to meat, poultry, dairy, or egg products and for those who avoid one or more products due to religious beliefs. In addition, consumers may not want to purchase products comprised of or containing cultured animal cells due to concerns about any negative environmental impact of producing these products.<sup>1</sup>

The limited acceptance of these products was shown by a survey conducted online within the United States by The Harris Poll on behalf of The Vegetarian Resource Group from June 22-24, 2020 among 2,074 U.S. adults ages 18 and older.<sup>2</sup> Approximately six percent of those surveyed are vegetarian



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(including vegans) all the time, and half of the vegetarians are also vegan (three percent). More than half (54%) of those surveyed always or sometimes eats vegetarian (including vegan) meals when eating out.

We asked if survey respondents would purchase a meat alternative grown from animal cell DNA obtained ten years ago, which does not currently involve the raising of animals. Only 12% of respondents said they would purchase such a product; 19% of vegetarians including vegans would purchase a meat alternative grown from animal cell DNA; 19% of those that sometimes or always eat vegan meals when eating out and 18% of those that sometimes or always eat vegetarian, including vegan, meals when eating out would purchase this type of meat alternative.<sup>2</sup>

Similarly, a 2021 national survey was commissioned by The Vegetarian Resource Group and conducted online by YouGov, of 8 -17 year-olds. This survey found that more than half (53%) of 8-17 year-olds sometimes or always eat vegetarian meals when eating out. As was done in the adult poll, we asked if survey respondents would purchase a meat alternative grown from cells (DNA) from an animal, which was collected years ago which does not currently involve the raising of animals. Only 9% of respondents said they would purchase a meat alternative grown from animal cell DNA.<sup>3</sup>

Since so many consumers would choose not to purchase a product produced using animal cell DNA, it is important that consumers be informed about the presence of cultured animal cells in products in clear, easily understood language. This should be indicated in the product name and in the ingredient list on the product label so that consumers can be aware of the product's composition.

In addition to label information, it is important for companies to have specific information about the source of these cells in their products on their websites since many people look on product websites for information. This information should also be presented in clear, easily understood language.

Guidance and regulations are also needed to prevent the use of confusing terminology on labels of products produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA). Terms such as "vegetarian," "vegan," "animal-free," or "plant-based" used on product labels of products produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA) are potentially confusing to consumers. Survey research indicates that U.S. consumers are not in favor of labeling products using animal cell DNA or derived from animal genes as "vegetarian," "vegan," "animal-free," or "plant-based."

A survey, conducted in the United States in March 2022 by YouGov on behalf of The Vegetarian Resource Group, consisted of 2,889 adults.<sup>4</sup> Over six in ten (62%) vegans didn't want meat and dairy alternatives that are made using NO animals or animal products but are based on animal cells or DNA extracted years ago from a live animal labeled as vegan. 62%-65% of those that ate vegan meals (not all those individuals are vegan) didn't want them labeled vegan, animal-free or plant-based, with an even higher percentage at 71% wanting the product to be labeled so it informs consumers that the products use animal cell DNA or is animal-gene derived.<sup>4</sup>

The terms "vegetarian," "vegan," and "plant-based" should not be used in the product name or on the product label of a food comprised of or containing cultured animal cells or produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA). This

terminology would be a misrepresentation of the food product. Although neither the USDA nor the FDA currently defines “vegetarian,” “vegan,” or “plant-based,” these terms are commonly used to imply that products do not contain ingredients from meat/fish/poultry (vegetarian) or from all animal products and by-products (vegan). “Plant-based” has a variety of meanings but it is commonly used to indicate that a product is vegetarian or vegan.<sup>5</sup> Having “vegetarian,” “vegan,” or “plant-based” on a label of a product containing cultured animal cells would be misleading to consumers.

Additionally, terms such as “non-animal” or “animal-free” should not be used in the product name or on the product label of a food comprised of or containing cultured animal cells or produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA). Use of these terms would be misleading for consumers who, for religious, ethical, philosophical, environmental, or other reasons do not want to purchase products in which animal products were used at some point in production.

The results of our surveys strongly support the need for updated or new regulations or guidance documents related for foods produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA).

*5. Describe any new or emerging biotechnology products that, based on lessons learned from past experiences or other information, the agencies should pay particular attention to in their evaluation of ambiguities, gaps, or uncertainties regarding statutory authorities and/or agency roles or processes.*

**Our response to question 5:**

We are concerned that the rush to market foods produced through genetic engineering based on the DNA of animals (whether based on actual DNA, cell lines, or virtual DNA) may not allow for adequate time to evaluate the safety of these foods for human consumption and for the environment. We urge the statutory authorities and/or agencies to develop rigorous requirements for safety evaluation.

*7. What is the highest priority issue for the agencies to address in the short term and in the long term?*

**Our response to question 7:**

As a consumer organization, we prioritize providing clear, helpful label information that consumers can use to make an informed choice. As discussed in our response to question 4, we believe that this is a high priority need that should be addressed in both the short term and the long term. Food labels should clearly indicate that products are animal DNA replicated, so that those with allergies, religious, or other concerns can differentiate these products from similar looking items.

Thank you for the opportunity to comment on this issue.

## References

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