

Promoting a plant-rich diet through state and federal legislation

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Executive Summary

Research indicates that climate change is an imminent danger to society, and the agriculture industry is a significant contributor. A population's transition from a meat-rich to plant-rich diet along with supportive agricultural practices can have positive impacts on climate stability. This paper examines five categories of legislative proposals related to plant-rich diet: procurement, research and development, labeling, farmer support, and education. We find that promoting increased access to plant-rich foods to be more successful than restricting access to other foods. Procurement policies appear to be the most common and most likely to be implemented, while other categories are more limited in pro-plant-rich proposals and passed legislation. Significant obstacles to changing dietary behaviors are misconceptions regarding the healthfulness of a plant-based diet, as well as the political power of the meat and dairy industries. We argue that legislation that increases access to plant-based foods and mentions the health benefits of said foods is the most effective way to change behaviors while avoiding these obstacles.

Introduction

Climate change is one of the most pressing issues of our time, impacting nearly every facet of human lives. We have and will continue to see unprecedented changes in our climate, such as sea level rise and an increase in extreme weather events, which have been determined to be exacerbated by anthropogenic climate change.¹ The agriculture industry is one sector that has a large carbon footprint, contributing 24% of total greenhouse gas emissions.² Animal agriculture has a particularly large footprint, with livestock contributing 14.5% of global greenhouse gas emissions.³ As the impact of climate change becomes more immediately visible, we consider mitigating choices on both the personal and policy level, and one important target of this change is animal agriculture and our meat and dairy-heavy diets.

A pervasive misconception among Americans is that a plant-based diet cannot meet our basic nutritional needs. According to the USDA Dietary Guidelines for Americans, 2020-2025, adult Americans do not meet the daily recommended intake for dairy. Canada's Dietary Guidelines, on the other hand, emphasize water as the drink of choice and do not recommend an increase in dairy intake, suggesting that the US guidelines may not be entirely based in scientific fact and could be influenced by other factors such as the lobbying power of the dairy industry. According to the Mayo Clinic, a plant-rich diet helps with weight loss, lowering of cholesterol,

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and a reduced risk of heart disease.³ The USDA guidelines emphasize dairy as the primary choice for getting adequate nutrients such as vitamin D and calcium, and also references fortified soy products as an alternative. In reality, a whole host of alternatives such as dark green vegetables in the case of calcium⁶, are not emphasized in the USDA guidelines. There are many health benefits associated with reducing meat and dairy intake, such as a reduced risk of cardiovascular diseases and stroke.⁷ The USDA guidelines do not emphasize plant-based alternatives as a way to reduce risk of these health complications. If a plant-based alternative is mentioned, it is always second to a meat or dairy alternative, which appears to represent a lack of awareness by the US public of plant-based meal options that do meet all of our dietary needs.

In addition to mitigating health issues, increasing plant-based options also supports racial justice. Lactose intolerance is extremely prevalent in several ethnic and racial minority groups in the United States, affecting 90% of Asian Americans, 80% of African Americans, and 62 to 100% of Native Americans.⁹ White Americans show the lowest prevalence of lactose intolerance, so the emphasis on dairy by the US government points to a prioritization of the health of white Americans over other ethnic/racial groups.

While shifting to a more plant-rich or even wholly plant-based diet is increasingly common among individuals, legislative changes can better and faster work towards alleviating the meat and dairy industries' negative impact on the environment. We have identified five main categories of legislation that relate to plant-based diets: Procurement, Research and Development, Labeling, Farmer Support, and Education. In this report, we cover bills on both state and national levels in these categories that are centered on or relate to making plant-rich food options accessible to all Americans. By having healthier and more climate-friendly choices available, these actions do not have to be an expensive or difficult endeavor for groups or the individual. However, pushback by the meat industry and legislators against plant-based foods has reached the point where the movement against labeling plant-based milks and meats with words like “milk” and “beef” has become a focal point of legislation both on a state level and federally. We argue that focusing on an increase of options is more effective than attempts to limit animal products given the importance of commercial animal agriculture to the economy and the documented opposition to plant-based alternatives, especially in these states that are reliant on animal agriculture. By supporting legislation that helps small farms and larger farms alike in the production of climate-friendly options, we as constituents can support a just transition away from damaging agricultural techniques and toward more sustainable practices.

Methods

To locate legislation at both the federal and state levels, we searched three databases, Congress.gov, Nexis Uni, and ProQuest, using the keywords “plant-based” or “plant based”. These searches yielded a total of 42 bills, of which we used 34. We then extracted a summary, status (i.e., introduced, in committee, passed), date, and location for each bill. We also developed a set of keywords for each bill such as “labeling”, “access”, and “healthy food”. Based on this

search, we developed five categories of bills: procurement, labeling, farmer support, research and development, or education, using the keywords as a guideline to create each category.

Procurement

Procurement policy refers to institutions such as schools, prisons, hospitals, and government agencies increasing access to plant-based foods. Some prominent bills that have been passed are the California Senate Bill 1138 and the New York Senate Bill 1471A (Table 1). The California Bill required hospitals and prisons in California to provide wholesome plant-based meals. The New York Senate Bill had very similar wording, but 1471A only provides access in hospitals. The key themes that appear in the bills that are passed appear to be increasing the number of options available to the consumers. The hospital provisions benefit from an American Medical Association policy, entitled Healthy Food Options in Hospitals (H-150.949), that calls on hospitals to improve the health of patients, staff, and visitors by providing a variety of healthful food, including plant-based meals.

Other notable bills add more plant-based foods and beverages in schools in California, New York, Georgia, and Hawaii, and nationally (Table 1). The national bill, the Healthy Future Students and Earth Pilot Program Act, is the most recent, having been introduced in June 2021 (Table 1). The furthest a state policy regarding plant-based meals in schools has gone is the Georgia resolution, which was adopted in 2010. The main arguments justifying this resolution are centered around nutrition and health, specifically in meeting fruit and vegetable requirements for children to combat obesity, diabetes, and other diseases. The more recent policy proposals are more plant-based diet centric, which may be a factor in why they have not passed. One Hawaii bill from 2010 that focused on adding plant-based diets to schools to prevent obesity and to combat climate change was quickly struck down (Table 1). Introducing plant-based diets in schools is an important step in normalizing such diets, but current policy proposals may need to be framed as promoting health to improve chances of being passed.

Research and Development

We were unable to find substantive legislative proposals that were supportive of or against research related to plant-based diet. Research along these lines includes but is not limited to: plant-based meat alternatives, innovative plant-based farming techniques, and plant-based diet nutritional needs. We believe that most research and development funding and support would be found within agencies such as the USDA or the EPA. Our scope of research was centered around legislative policy, so our findings within agencies are limited. Within the USDA, we found one grant program that provides funding for urban agriculture and innovative agricultural production.⁶ Cities like Atlanta and Sacramento are using this grant to improve urban agriculture and this grant program incentivizes agricultural areas to innovate and be more sustainable. We believe that with further research within these specific agencies, there would be more policies that support research and development surrounding plant-based diets.

Labeling

Labeling of foods and beverages is an important part in normalizing and popularizing plant-based foods. Research has shown that how a product is labelled can influence whether consumers will buy it or not.⁸ Policy proposals against the labelling of plant-based meat alternatives have been proposed in Arkansas, Nebraska, New York, Pennsylvania, Texas, Wyoming, and nationally. In Nebraska, Pennsylvania, and Wyoming, legislation was passed that prohibited labelling food products as meat unless they were derived from livestock or poultry. This legislation has also been extended to beverages with plant-based milks in Pennsylvania, New York, and nationally (Table 1). One bill that passed in Arkansas but was blocked by a federal court, HB1407, even went so far as to make it illegal for companies to use words like “burger” and “sausage”, even with modifiers like “vegan” (Table 1).

Labeling legislation can be beneficial to plant-based diets, through either pro-plant-based labeling or anti-meat labeling legislation. Pro-plant-based examples could include emphasizing health benefits, carbon impact, and meat nutritional comparisons. Anti-meat examples could include showing the carbon impact, water consumption and other environmental impacts.

Farmer Support

This category of legislative initiatives supports smaller farms transitioning from climate damaging farming such as dairy or livestock to plant-based agriculture. In addition, combatting industrial farms and reducing the monopoly on agriculture by supporting smaller farmers may counter the influence of the livestock and dairy lobbyists. The USDA American Rescue Plan, funded by President Biden’s Executive Order, will help small farms compete with industrial meatpacking companies (Table 1). While this legislation is not necessarily climate friendly, the premise of removing the monopoly on livestock and dairy products from industry powerhouses is one option to consider. States like New York and California also have policies that are in committee to support small farms (Table 1). California has a provision within their program geared towards transitioning these small farms away from dairy and livestock farming and towards plant-based agriculture. Policy that supports small farmers is in line with our general mission to not restrict what people can eat but rather providing additional options. Another farm support legislative proposal that could be implemented to leave a positive impact on the climate is regenerative farming.

Education

We found no evidence of plant-rich diet education policy, which we view as an important gap. Education reform would be designed to move away from the commonly held belief that animal-based protein is required in every meal. In addition, education on the harmful climate effects of livestock and dairy products could increase the transition of younger generations to more plant-based options. Currently, there have not been any education policies created to show plant-based diets and meals as valid alternatives to meat-centric diets. Rather, there have been national resolutions to push dairy and meat-based protein as essential. The dairy resolution, S.R. 268,

passed a policy that outlined nutritional benefits of dairy as an important part of a healthy diet (Table 1). This type of education is a form of propaganda that is used to increase dairy sales. The meat resolution was another attempt to continue to dominate the food industry, but it failed to pass. These attempts to promote meat and dairy products hurt the climate by promoting behaviors that increase carbon emissions. In order to debunk the idea that meat is an important part of our diet, legislation needs to be passed to educate consumers on how plants can meet the same nutrients meat provides. While there hasn't been any passed legislation that emphasizes the importance of plant-based diets and their viability, updated health and education plans to incorporate the importance of plant-based diets will be necessary.

Michelle Obama's MyPlate diet movement replaced the USDA's food pyramid that was introduced in 1992.⁶ This new dietary guide simplified the confusing pyramid to make cooking healthy and wholesome meals easier for parents. Although the goal of this campaign was to improve health, the plan also emphasized dairy, which is not a necessary component to a healthy meal.

Conclusion

We argue that the best steps forward are to support legislation that increases access to affordable plant-based options so that people can make their own choices to convert their diets to be more plant-based, rather than attempting to restrict or tax meat and dairy, given the current political power of those industries. In addition, we feel that it is very important to emphasize the nutritional value of plant-based options as an argument for increasing access. There are wide misconceptions about the healthfulness of plant-based alternatives, and people are also more likely to respond to incentives such as health benefits which personally affect them, rather than environmental benefits which might seem more removed and abstract. We also feel that legislation regarding education about the harms of animal agriculture is important in conjunction with procurement legislation, given that a more educated public will be more likely to choose to change their own diets, especially if those plant-based options are accessible. Both research and development and support for farmers in transitioning towards plant-based agriculture are also important, although research and development is often not handled by legislative branches. The fight against plant-based alternatives via restrictions on labeling is a concerning obstacle, so we also feel that it is important to fight for the ability of these plant-based alternatives to be labeled using words related to the meat or dairy product they are replacing or imitating, so that we do not further reduce accessibility of these products. We do recognize, however, that it is possible that other labeling schemes that do not include words like "meat" or "milk" could be successful with proper education towards their nutritional benefit, which could help dispel the illusion that we need direct replacements for meat and dairy products in our diets. Taking on animal agriculture and the consumption of meat and dairy is an extremely important step in the fight against climate change and addressing these issues in government will be one of the most effective ways to make swift progress and change.

Table 1. Key legislation used to develop this report.

Bill	State	Year	Status	Description
Procurement				
S. 203	Federal	2021	Introduced	Allows tax credits and grants for activities that provide access to healthy food in food deserts
S. 1471A	New York	2019	Signed by Governor	Requires plant-based foods in hospitals for patients who request
S. 8571	New York	2018	In Committee	Requires public schools to offer plant-based food as an alternative at request of student or parent of student
S.B. 1138	California	2018	Passed	Provides plant-based foods access in hospitals and prisons
H.R. 4108	Federal	2021	Introduced	Proposes grants to school food authorities to provide 100% plant-based food and milk options
A.B. 558	California	2021	Introduced	Funding for plant-based meals and milks in schools
H.B. 1071	Maryland	2021	Introduced	To update minimum standards for inmate food services, including providing plant-based foods
H.R. 4870	Federal	2010	Introduced	To provide plant-based commodities to school meals
S.B. 2782	Hawaii	2020	Died in Committee	Requires the Department of Education to establish a plant-based food and beverage program to award funds to participating public schools who serve meals that include plant-based food or milk options
S.R. 886	Georgia	2010	Passed	Add options of plant-based meals and increase overall nutritional quality in school meals
H.B. 234	Kentucky	2020	Introduced	Require hospitals that provide inpatient or residential care to offer patients a plant-based food option for every meal or snack, at the request of a patient or patient's lawful representative, at no additional cost to the patient
H.B. 2348	Oregon	2021	In Committee	Requires hospitals and long term care facilities to make available to patients, residents, staff, and visitors plant-based meals and beverages. Prohibits hospitals from offering processed meats. Requires Department of Corrections to make available to adults in custody plant-based meals any time meals are served
H.R. 96	Kentucky	2012	Passed	Urges support for various plant-based diet programs
H.C.R. 193	Hawaii	2020	Died in Committee	Emphasizes health benefits of plant-based meals
S.1082	Federal	2021	Introduced	Prohibits a federal agency or contractor of an agency that provides food services to a dining facility of the agency from establishing a policy that prohibits serving a particular type of food.
S. 4644A	New York	2021	In Senate Committee	Directs department of health to develop state food standards for foods purchased, served, sold, and promoted by state agencies, programs, and institutions and on state property
H.R. 8077	Federal	2020	Introduced	To amend the Child Nutrition Act of 1966 to allow certain participants in the special supplemental nutrition program for women, infants, and children to elect to be issued a variety of types of milk, including whole milk, and for other purposes.

Labeling				
A. 507	New York	2021	In Committee	Provides that only products containing milk may use the term “milk product” on labels and advertisements; defines “milk product”
S. 3016	Federal	2019	Died in a previous Congress	To label plant-based meat alternatives as “imitation”
H.B. 1407	Arkansas	2019	Passed (Blocked by Federal Court)	Makes it illegal for companies to use words like burger, sausage, roast, etc. to describe products that are not made from animals even if modified with qualifiers such as vegan, veggie, or plant based
S. 1346	Federal	2021	Introduced	Requires “misbranded milk alternatives” to be enforced, and denies nutritional value of these alternatives
L.R. 13	Nebraska	2021	President/Speaker Signed	Urges federal agencies of the U.S. Government responsible for food labeling to establish and enforce standards for nomenclature of plant-based imitation milk and dairy food products
H.R. 222	Pennsylvania	2019	Passed House	Urges the FDA to enforce standard of identity in regards to milk
H.B. 316	Texas	2021	Introduced	Relating to labeling of plant-based foods
S.B. 68	Wyoming	2019	Signed by Governor	Prohibits labeling products as meat unless it is derived from livestock or poultry
Education				
S. Res. 268	Federal	2021	Agreed to in Senate	Outlines nutritional benefits of dairy as well as data supporting an argument for reduced emissions within the industry
H. Res. 804	Federal	2012	Died in House	Advocates animal protein as an important component in a balanced diet
A.C.R. 279	California	2018	Passed	To encourage Californians to include more healthy plant-based foods in their diet.
Farmer Support				
A. 7049A	New York	2019	In Committee	Sets goals for procurement of local food, stimulating urban and rural economies and supporting small farms
A.B. 1289	California	2021	In Committee	Helps small to mid-sized farms transition from livestock-based agriculture to plant/climate friendly agriculture through grants
H.R. 4140	Federal	2021	Introduced	Proposes additional economic assistance for livestock and meat producers (limiting loans to \$50,000,000 in most cases, but capping at \$100,000,000)
Research and Development				
S. 1337	Federal	2021	Introduced	Addresses impact of climate change on agriculture (and research on the inverse, with goals for the industry outlined)
S.F. 2483	Minnesota	2021	Introduced	To set up a grant program for plant-based food research and development
S. 2175	Rhode Island	2016	Died in Committee	Office of regulatory reform would work with various state departments to facilitate economic growth in the plant-based and agriculture industries

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