

Sandra Wiebe, Master's of Development Practice Program, University of Arizona - December 20, 2018

Transforming our current food system into a sustainable food system is at the forefront for climate change targets reaching [1]. improving water quality, improving health, and reducing the number of animals subjected to the cruelties of the industrial animal agriculture system. One method to catalyze transformation towards more this а sustainable food system is by decreasing the amount of animal-based products and increasing the consumption of plant-based products throughout institutions around the nation.

The Humane Society of the United States encourages and enables this shift to more sustainable food systems through their Forward Food training where the work with chiefs nationwide to empower them to create and offer more plant-based cuisines. In the past few years, HSUS has held over 175 events, trained over 2,000 chefs and implemented hundreds of meat reduction strategies. In partnership with food service providers, such as Sodexo and Aramark, an increase in plant-based menu options have been rolling out at universities across the nation. The objective of this policy brief is to present a better understanding on consumers' perspectives surrounding plant-based menu options to improve the sustainability of these initiatives.

#### **KEY RECOMMENDATIONS**

Increase the awareness and promotion of plant-based menu options and widely promote their benefits to health

Highlight local products when used in a dining hall and strengthen connections with local farmers

Integrate plant-based options into the menu, promote items through a separate station, and increase the highlighting of plant-based options

Consider incentives for plant-based consumption, such as a price decrease for consumers eating only plant-based items in dining hall for the meal.

Expand, highlight, and promote multi-level collaboration between food service providers and student groups/centers.

Create a plant-based eating guide that explains how to eat a healthy plant-based diet, as well as the positive impact that plant-based foods has on the local farmers, the environment and the animals.

Increase variety and taste of plant-based options in the menu, as this is integral to increasing demand and sustainability

Utilize surveys and social media methods to determine students' preferences for a variety of dishes and as a platform for requests for plant-based menu option and ideas

# Research

In the fall of 2018, 250 surveys were administered with consumers at universities in the Washington DC, Maryland and Virginia area where Forward Food training had taken place and an increase in plant-based menu options were rolled out into the dining halls. These institutions include: George Mason University, James Madison University and Liberty University. This research focuses on what framing methods the students align with, what approach the students prefer for increasing plant-based menu options, and whether collaboration with student groups on campus increases their support for increasing plant-based menu options into the dining halls. This research will assist food service providers in how to meaningfully integrate and market plantbased options within their institutions' dining halls.

A question to identify segmented consumption patterns [2] at the dining hall was included to cross-tabulate against variables (framing, collaboration). approach, The participant responses allowed for the groupings of: Plantbased Abstainers (those who rarely consume plant-based meals), Standard Consumers (those who consumed a mix of plant-based and animalbased meals) and Plant-based Consumers (those who primarily consumed plant-based meals).

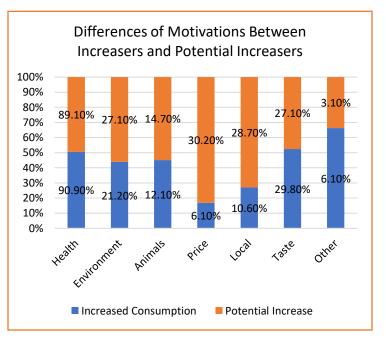
# Results

Only 31% of the population were aware of the increase in plant-based menu options from their food services providers. However, while only 31% of the participants were aware of the increase in plant-based menu options, 52.9% reported an increase in plant-based consumption. This large increase in consumption of plant-based foods aligns with the food service providers' decision to incorporate more plant-based menu items into the dining halls.

## Framing

Concerning the framing methods, consumers overwhelming favored personal health as the largest factor for their increase in plant-based consumption (90.9%) or their potential increase in plant-based consumption (89.1%). These finding show the integral role that motivations of personal health play in transitioning consumers to diets higher in plant-based consumption and a health lens should be utilized as the primary messaging/ framing technique to increase student buy-in and the sustainability of these initiatives. These results highlight a few key differences between the current reasons for increase of plant-based consumption and the potential increase of plant-based consumption including price and local products. There is a large increase in looking towards price as a motivator for increasing their consumption of plant-based foods.

**Figure 1.** Differences of Motivations for Consumption and Potential Consumption



\*Increasers (those stating their consumption of plant-based foods has increased were asked were asked "For what reason(s) have you increased your intake of plant-based options? (please check all that apply)"). Potential increasers (those stating their consumption has not increased were asked "For what reasons (if any) would you consider increasing your plant-based food consumption? (please check all that apply)) Currently, only 6.1% of the study population are motivated by prices, however, 30.20% are motivated by price for consideration of increasing plant-based food consumption. Additionally, while only 10.80% of the study population have already increased their plant-based consumption with the motivation of eating local foods, 28.70% consider local foods as a motivator for potential increase. These two factors could play a pivotal role in policy formation and framing methods should include a focus on localized products and price.

### Approach

In terms of the approach, findings are consistent among all three subgroups for the approaches that they prefer. This is good in terms of policy and implementation as there is group consensus between the subgroups and thus, works to the majority of the population. For all three subgroups, integrating plant-based menu options into the menu ranked highest (89% in favor), followed by highlighting plant-based menu options (73.5% in favor) and separate plant-based stations a (73% in favor). All three subgroups ranked having plant based only days extremely low (19.7%).

# **Collaboration**

The data revealed that while there are collaborations with each university explored, only 12.8 % of respondents said they were aware of collaboration with students' groups on campus with their food service providers. Yet, in terms of the rating the consumers gave for how effective collaboration with student groups would be in increasing their support for increasing plant-based menu options, 54.8 % rated either very effective or effective, 38.2% stated undecided and only 7% stated somewhat effective or not effective. Due to the high response rate of all consumers' reporting that these initiatives would increase their support, it is indicated that existing collaborations should be highlighted, promoted, strengthened and expanded.

## **Sustainability**

The primary themes identified by the participants for sustainability were increased awareness and promotion of the plant-based menu options and increased variety.

Table 1. Identified Themes in Open-ended Sustainability	y
Question	

Theme	Frequency	Percentage
	of theme	of
		responses
Awareness and promotion of plant-	47	20.9%
based options		
Increased variety	47	20.9%
Taste	34	15.17%
Health and health benefit awareness	24	10.7%
Approaches	14	6.25%
Local sourcing	11	4.9%
Price and incentives	11	4.9%
Access	7	3.12%
Environmental benefit awareness	5	2.23%

The promotion and awareness theme covered topics such as more advertisement (current options, new options, benefits of plant-based foods, visual reminders of plantbased options), calling for constant feedback from students on opinions of plant-based menu options (surveys and statistics), using social media to increase awareness on options and benefits, encouraging students of eat more diverse foods, providing and spreading knowledge on plant-based foods and how to eat a healthy plant based diet (presentations on plant-based products, plant-based consumption guide).

Participants highlighted the importance of incentives and price for the sustainability of increasing plant-based menu options into dining halls. In this, the respondents' called for a price reduction for consumers eating only plantbased foods and other incentives to support the shift to plant-based eating. Here, strategic marketing for price incentives should be considered.

While the food service providers are making larger, transformative change by rolling out more plant-based menu options into the universities across the nation, this research supports a better understanding of the consumers' perspective to increase the sustainability and success of such initiatives

#### References:

- 1. Girod, B.; van Vuuren, D.P.; Hertwich, E.G. Climate policy through changing consumption choices: Options and obstacles for reducing greenhouse gas emissions. Glob. Environ. Chang. 2014, 25, 5–15.
- 2. Lentz, Connelly, Mirosa, & Jowett. (2018). Gauging attitudes and behaviours: Meat consumption and potential reduction. *Appetite*, *127*, 230-241.