The Role of Plant-Based Foods in Creating a Sustainable Future

Carb Workshop on Dairy and Livestock Methane in California

March 2022
WHO WE ARE

The Plant Based Foods Institute is a non-profit organization focused on driving a plant-based food system transition through policy and business strategies.

The Plant Based Foods Association, our sister trade organization, is a member-based trade organization with the mission to champion, strengthen, and elevate our members and the plant-based foods industry. We currently represent over 350 plant-based food companies.

OUR VISION

A world where values and business interests harmonize to create a plant-based food system that respects the dignity and health of all living beings and the planet.
Plant-based foods have the potential to feed more people with much less negative impact on the planet, animals, and humans.

On average, producing plant-based foods requires less land, water, and carbon-producing processes.

By growing foods for human consumption directly, we can mitigate the impact on the planet and create innovative solutions to feed the world’s growing population.
Global greenhouse gas emissions from animal-based foods are nearly twice that of plant-based foods.
PLANT-BASED DAIRY = SIGNIFICANT GHG REDUCTION

Greenhouse gas emissions

<table>
<thead>
<tr>
<th>Milk</th>
<th>Emissions (kg 2013)</th>
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</thead>
<tbody>
<tr>
<td>Dairy milk</td>
<td>3.15</td>
</tr>
<tr>
<td>Rice milk</td>
<td>1.18</td>
</tr>
<tr>
<td>Soy milk</td>
<td>0.98</td>
</tr>
<tr>
<td>Oat milk</td>
<td>0.9</td>
</tr>
<tr>
<td>Almond milk</td>
<td>0.7</td>
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LIFE CYCLE ANALYSES OF PLANT-BASED FOODS

Several PBFA members have conducted Life Cycle Analyses to illustrate the difference between their products and their animal-based counterparts.

- **Plant-Based Burger**
  - Produces 89% fewer GHG emissions
  - 87% less water
  - 96% less land use
  - Contributes 92% less aquatic pollutants

- **Plant-Based Burger**
  - Produces 90% fewer GHG emissions
  - 99% less impact on water scarcity
  - 93% less land use
  - Requires 46% less energy

- **Plant-Based Cheeses**
  - 50% lower climate impacts overall
  - 30% less land use

- **Plant-Based Milk**
  - 80% lower GHG emission
  - 60% less energy use
  - 80% less land use
ENVIRONMENTAL IMPACT OF FOODS IS A TOP DRIVER FOR GEN Z

Q: TOP THREE REASONS FOR EATING PLANT-BASED MORE OFTEN?
A: "BETTER FOR THE ENVIRONMENT"

Source: "The Rise of the Flexitarian", Mattson, June 2020
TOTAL U.S. PLANT-BASED FOOD MARKET, LAST 4 YEARS

- **2018**: $4.9B, +12%
- **2019**: $5.5B, +27%
- **2020**: $7.0B, +6.4%
- **2021**: $7.4B

Source: SPINS “plant-based positioned” product attribute, customized by PBFA and GFI to include private label and custom categories. 52-week, 104-week, 156-week, and 208-week periods ending December 26, 2021, from the SPINS Natural Enhanced and Conventional Multi Outlet (powered by IRI) grocery channels.
PLANT-BASED MILK IS CATEGORY'S GROWTH ENGINE

PLANT-BASED MILK VS. CONVENTIONAL MILK SALES GROWTH, 2021

-2%

Source: SPINS “plant-based positioned” product attribute, customized by PBFA and GFI to include private label and custom categories, 52-weeks ending December 26, 2021, from the SPINS Natural Enhanced and Conventional Multi Outlet (powered by IRI) grocery channels.
PLANT-BASED DAIRY VS. ANIMAL-BASED DAIRY SALES GROWTH, 2021

- **Cheese**: Plant-based +7%, Animal-based -2%
- **Yogurt**: Plant-based +9%, Animal-based +3%
- **Creamer**: Plant-based +33%, Animal-based 0%
- **Butter**: Plant-based +9%, Animal-based -12%
- **Ice Cream**: Plant-based +3%, Animal-based -2%

Source: SPINS “plant-based positioned” product attribute, customized by PBFA and GFI to include private label and custom categories, 52-weeks ending December 26, 2021, from the SPINS Natural Enhanced and Conventional Multi Outlet (powered by IRI) grocery channels.
RECOMMENDATIONS FOR CARB

1. Consider forming a Subgroup: Fostering markets for plant-based foods

2. Reduce herd/CAFO size support shift to plant-based

3. Consider the plant-based foods industry as a partner
THANK YOU!

For more information, contact:

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