Dairy cows provide important nutrients with little impact on the environment. Now more than ever, consumers want to understand how their food choices impact their health and the environment. In this modeling study, scientists used several U.S. data sources to examine the environmental and nutrient supply impact of removing dairy cattle from the U.S. food system and repurposing the land used to grow crops for dairy cattle.

Compared to the current system, the study found that when dairy cows were removed or retired to pasture, there was minimal to no reduction in greenhouse gas emissions and in most of the studied scenarios, the supply of essential nutrient was reduced. Scenarios where nutrient supply was unchanged also did not reduce greenhouse gas emissions. The minimal change in GHG is likely due to the nutrient density of dairy foods compared to other foods as well as the amounts of each food type needed to supply the necessary nutrients for the population.

*Data were from the US Department of Agriculture, Economic Research Service, Food Composition databases, US Environmental Protection Agency, United Nations Food and Agriculture Organizations and other peer-reviewed published sources.

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**KEY TAKEAWAYS**

- Removing dairy cows from the U.S. food system would have little impact on greenhouse gas emissions, but significant consequences on nutrient supply.
- U.S. dairy accounts for 1.58% of greenhouse gas emissions.

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**What’s the Trade-off?**

- **Replacing milk production with fruits & vegetables or nuts & legume**
  - **Minimal reduction in GHGE**
  - **Drastically reduces the supply of calcium, vitamin D, B12, B2 and alpha-linolenic acid**

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National Dairy Council’s (NDC) mission it to bring to life the dairy community’s shared vision of a healthy, happy, sustainable world with science as our foundation. On behalf of America’s dairy farmers and importers, NDC strives to help people thrive at every age through science-based information on dairy’s contributions to nutrition, health and sustainable food systems.

For more information visit www.USDairy.com
Greenhouse gas emissions (GHGE) are one way to measure environmental impact. Water use, land use, and soil composition are others.

According to the Environmental Protection Agency (EPA), the largest source of GHGE in the U.S. (28 percent) is from burning fossil fuels for electricity, heat, and transportation. Agriculture accounts for just 10% of GHGE, and dairy accounts for 1.58%.

References:

Tools To Get You Started on Sustainable Living

- Calculate your carbon footprint https://www3.epa.gov/carbon-footprint-calculator/
- Reduce food waste by planning your meals ahead https://choosemyplate.gov/budget-weekly-meals
- Learn about the Food Recovery Challenge (FRC) https://epa.gov/reducefoodwaste/food-recovery-challenge-frc
- Educate others to Be a Food Waste Warrior https://www.worldwildlife.org/teaching-resources/toolkits/food-waste-warrior-toolkit

Plants + Dairy = Better Together

Plants and dairy are a power couple!

Dairy foods can make plant-packed plates better by adding nutrients, flavor, texture, and satisfaction. Dairy’s nutrients—like high quality protein, calcium, and vitamin B12—can help enhance those leafy greens. Try these winning combos for a nutritious and delicious meal or snack.

<table>
<thead>
<tr>
<th>Dairy Foods</th>
<th>Fruits, Vegetables, Nuts and Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ricotta Cheese</td>
<td>Strawberries, Almonds and Honey</td>
</tr>
<tr>
<td>Icelandic Yogurt</td>
<td>Chia Seeds and Pears</td>
</tr>
<tr>
<td>French Onion Greek Yogurt Dip</td>
<td>Carrots</td>
</tr>
<tr>
<td>Kefir</td>
<td>Frozen Mango</td>
</tr>
<tr>
<td>Grilled Haloumi Cheese</td>
<td>Leafy Green Salad and Olive Oil</td>
</tr>
<tr>
<td>Tzatziki Sauce</td>
<td>Quinoa, Olives and Tomatoes</td>
</tr>
<tr>
<td>Warm Milk</td>
<td>Cocoa and cinnamon</td>
</tr>
<tr>
<td>Fresh Mozzarella</td>
<td>Peaches and Basil</td>
</tr>
</tbody>
</table>

Plants and dairy are a power couple!