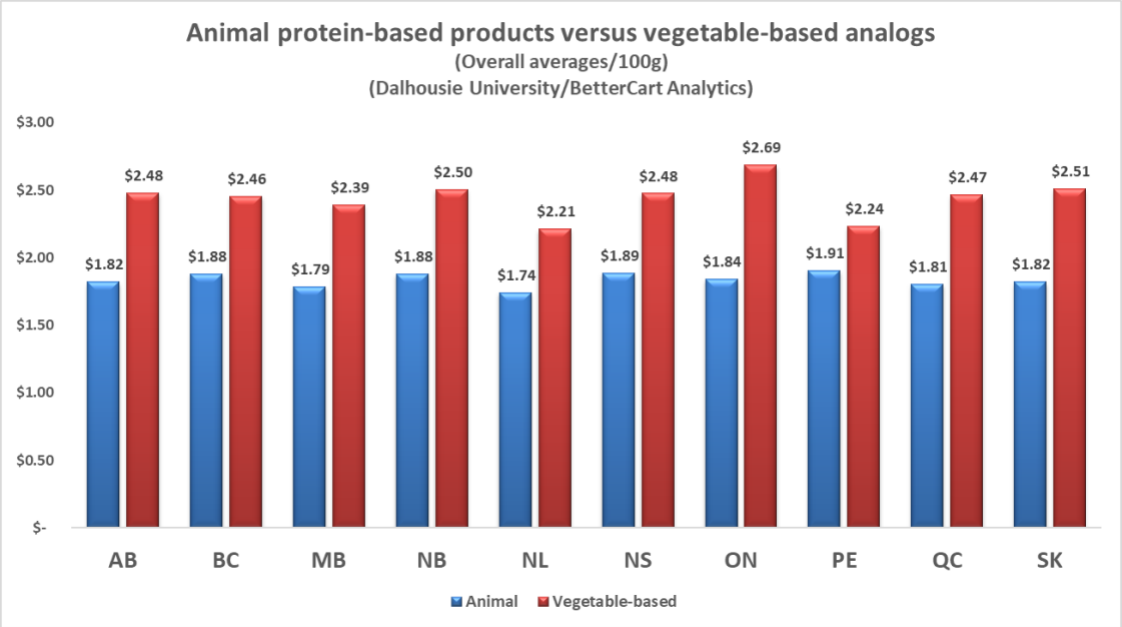
New report suggests plant-based products are on average 38% more expensive than animal-based equivalents despite higher meat prices

HALIFAX, N.S. (April 28, 2022) – Over the last few years, many have claimed that plant-based products are typically more expensive than regular meat products. But meat prices have gone up significantly over the same time period. This past year, pork, chicken, beef, and other meat products have increased significantly, according to Statistics Canada:

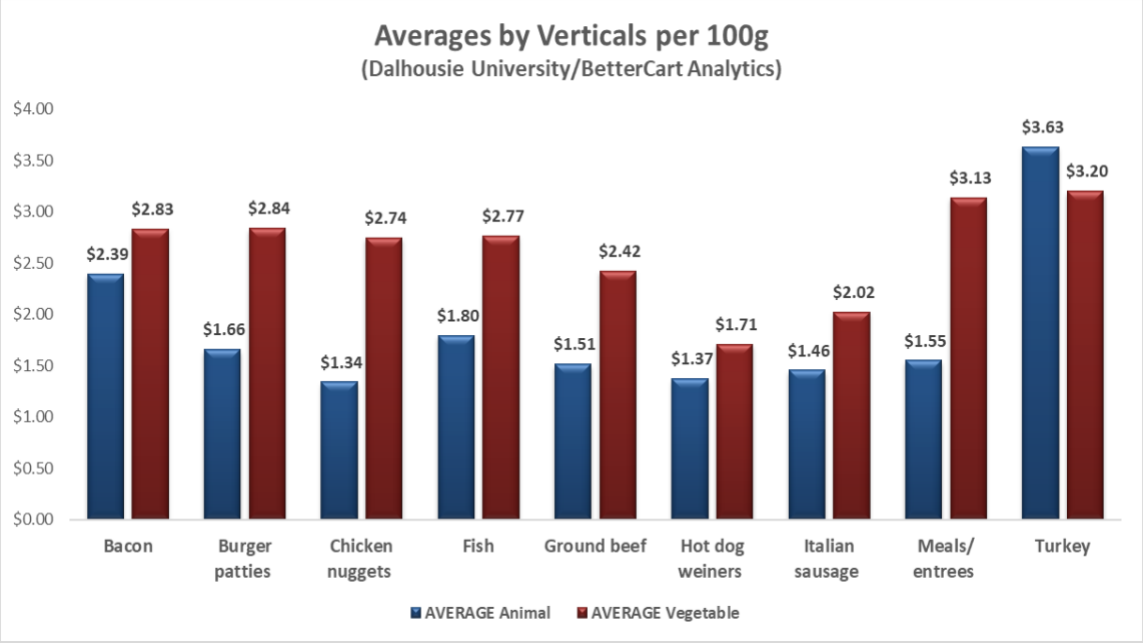
PRODUCTS	***INCREASE OVER 12 MONTHS***
ROUND STEAK, 1 KILOGRAM	10%
SIRLOIN STEAK, 1 KILOGRAM	15%
PRIME RIB ROAST, 1 KILOGRAM	18%
BLADE ROAST, 1 KILOGRAM	26%
GROUND BEEF, 1 KILOGRAM	12%
PORK CHOPS, 1 KILOGRAM	9%
CHICKEN, 1 KILOGRAM	4%
BACON, 500 GRAMS	17%

With meat prices increasing dramatically, it was time to look at prices across the country. The Agri-Food Analytics Lab at Dalhousie University, in partnership with BetterCart Analytics, compared prices of animal protein-based products with available vegetable-protein analogs, also known as plant-based alternatives. The study excluded some animal protein-based products such as dairy, and other vegetable protein options such as tofu, and unprocessed vegetable proteins such as chickpeas and lentils since comparisons were not possible. The study compared products and not diets per se.



Agri-Food Analytics Lab
Faculty of Agriculture | Dalhousie University
Agricultural Campus | PO Box 550 | Truro Nova Scotia B2N 5E3 Canada| aal@dal.ca
dal.ca/aal

A comparison of averages among provinces proved interesting. In all cases, animal protein-based products were still more affordable than vegetable-based analogs. The lowest meat price average in the country was in Newfoundland and Labrador ($1.74), followed by Manitoba ($1.79). Meat is most expensive in Prince Edward Island ($1.91), followed by New Brunswick ($1.88) and British Columbia ($1.88). For vegetable-based analogs, the most expensive province is Ontario ($2.69), followed by New Brunswick ($2.50) and Saskatchewan ($2.50). The most affordable provinces to buy vegetable-based analogs are Newfoundland and Labrador ($2.21) and Prince Edward Island ($2.24). The province with the largest difference between the two categories is Ontario ($0.84), followed by Saskatchewan ($0.69).



“Some of these results are not too surprising, but the gap is more significant than expected,” said **Sylvain Charlebois**, Director of the Agri-Food Analytics Lab at Dalhousie University. “Vegetable analogs are everywhere but they are still priced competitively, for the most part,” said Charlebois.

The study looked at meat categories for which vegetable-protein analogs exist. In all cases, with one exception, vegetable-protein analogs were more expensive. The one category with the highest difference is chicken nuggets (+104%). Meals and entrees are second (+102%), followed by burger patties (+71%). Turkey is the only category where analogs are less expensive (-12%). Overall, when combining all categories, vegetable-based analogs are 38% more expensive that comparable, animal-based products.

“The proprietary technology that we have developed allows us to aggregate and de-aggregate retail prices across the country,” said **Melanie Morrison**, President and CEO of BetterCart Analytics. “Within hours, we can capture millions of data points and, once the data are analysed,

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we are in a position to start generating definitive statements about specific grocery products and categories on a pan-Canadian scale”.”

CATEGORIES	AVERAGE PRICE DIFFERENCES BETWEEN ANIMAL BASED AND ANALOGS
BACON	18%
BURGER PATTIES	71%
CHICKEN NUGGETS	104%
FISH	54%
GROUND BEEF	60%
HOT DOG WEINERS	25%
ITALIAN SAUSAGE	39%
MEALS/ ENTREES	102%
TURKEY	(12%)
OVERALL	38%

End of report.

Full report here: https://www.dal.ca/sites/agri-food.html

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dal.ca/aal

Contacts

Sylvain Charlebois, Director

Agri-Food Analytics Lab, Dalhousie University

sylvain.charlebois@dal.ca

Melanie Morrison, President and CEO BetterCart Analytics

BetterCart Analytics (www.BetterCartAnalytics.com)

melanie@bettercart.ca

Janet Music, Research Program Coordinator

Agri-Food Analytics Lab, Dalhousie University

janet.music@dal.ca

Methodology: Using machine learning and artificial intelligence (ML-driven AI), the survey examined over 1million discrete price data points across the country, from January 1 to March 31. A total of 55 different products were included in the survey, and prices at stores operated by Loblaws, Sobeys, Metro, Walmart, and Save-on-Foods, were analysed, across 10 provinces. The report does not identify brands or stores explicitly, though de-aggregated insights are available from BetterCart Analytics, upon request. Comparisons were made based on 100 grams of product for both animal-based protein products and plant-based protein analogues. Prices for each product, within the distinct protein verticals under investigation, were averaged successively at the following levels: by store, city, and province . Note that the nutrient density of products was not considered for this survey.

Disclosure: Funding for this survey was provided by **BetterCart Analytics** and **Dalhousie University**.