

Plant-Based Convenience Foods: How healthy are they?

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Plant and Animal (Whole)Food Sources

Macronutrients

Micronutrients

Lower energy density



High carbohydrate High fibre

Vitamins C, B₉ potassium, magnesium

Higher energy density



High protein High fat Vitamins B₁₂, D iron, calcium, zinc, iodine & choline

Simplified representation of the complementary nature of a selection of nutrients found in plant and animal foods.



Project Overview

Protein Elements

Meals

Meatballs
Sausages
(Chicken) Nuggets
(Beef) Burgers
Lasagne
Curry & Rice
Chilli & Rice
Pizza
Cottage Pie
Spaghetti Bolognese

5 plant versions5 animal versions

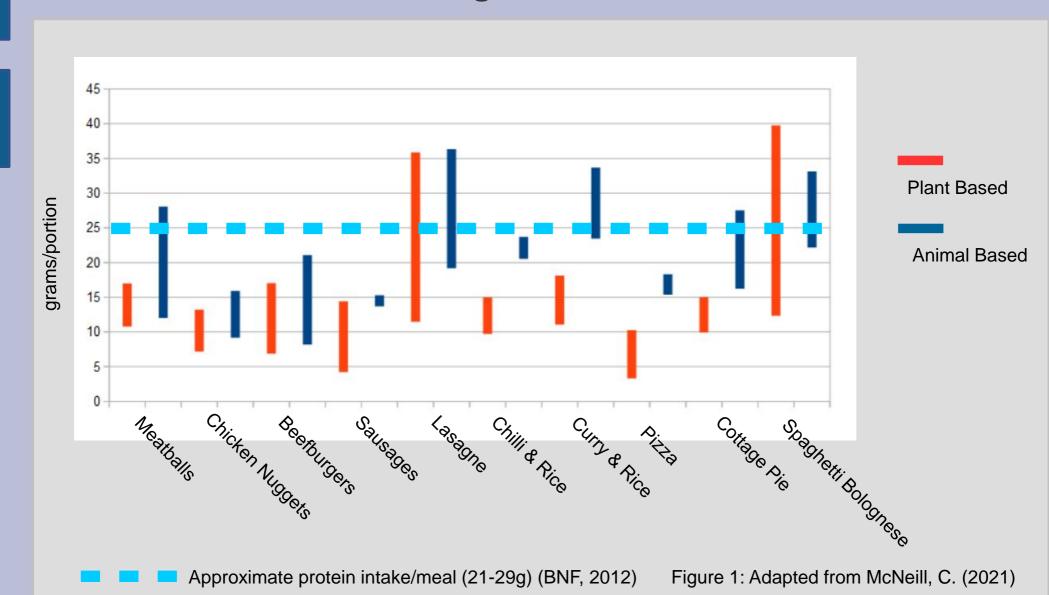
Data from front- and back-of-packaging collated

Averages taken for each set of data points for each set of 5 products

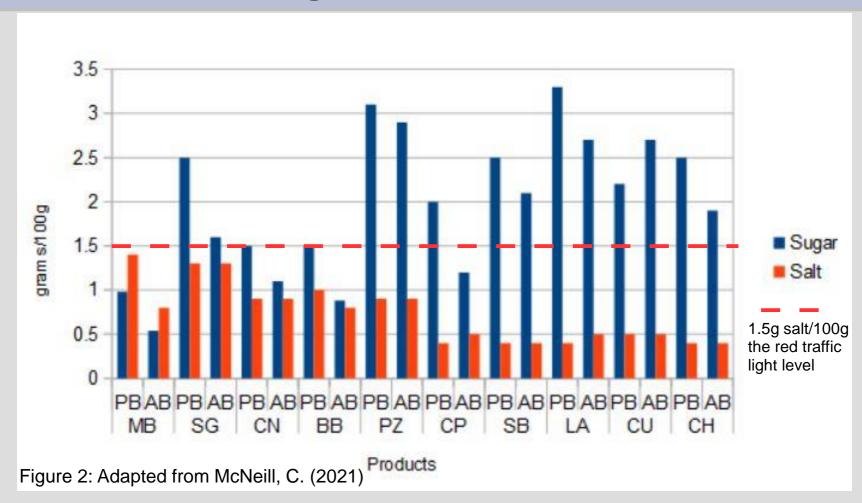
Statistical analysis

Comparisons made and conclusions drawn

Protein Range within Products



Salt & Sugar Content in the Products



PB - Plant Based AB - Animal Based

MB – Meatballs SG – Sausages CN – Chicken Nuggets

BB – Burgers

PZ – Pizza

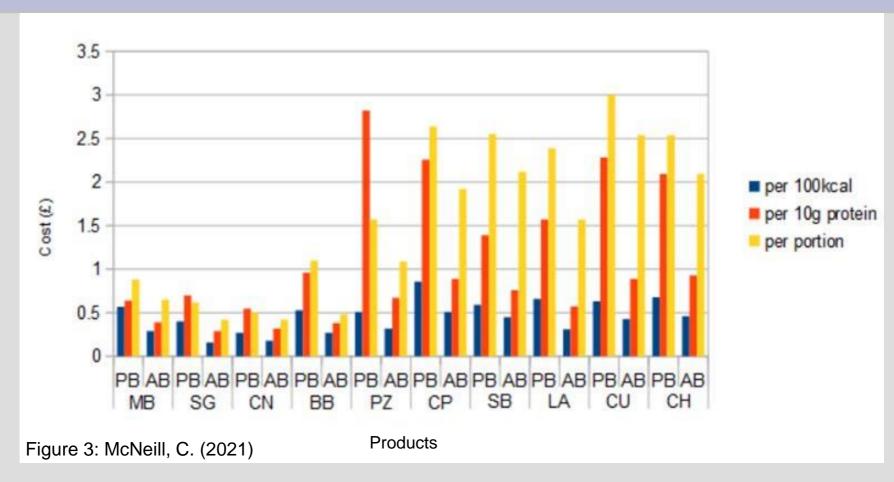
CP – Cottage Pie

LA - Lasagne

CU - Curry & Rice

SB – Spaghetti Bolognese CH - Chilli & Rice

Price Comparison between Products



PB-Plant Based AB - Animal Based

MB – Meatballs CN – Chicken Nuggets SG – Sausages

BB – Burgers

PZ – Pizza CP – Cottage Pie

LA - Lasagne CU - Curry & Rice

SB - Spaghetti Bolognese CH - Chilli & Rice

Conclusions

Plant-based products were found to have:

- Lower levels of protein
- Higher levels of added sugar
- Low levels of micronutrient fortification (e.g. iron, calcium, iodine, vitamin B₁₂)
- Higher fibre content
- * Higher price

References & Credits

- BNF (2012) 'Protein' https://www.nutrition.org.uk/nutritionscience/nutrients-food-and-ingredients/protein.html?start=2 [Last accessed: 14 January 2021].
- McNeill, C. (2021) 'Do Novel Plant-Based Convenience Foods Vary from Animal-Based Versions in the same Way as Plant-Based and Omnivore Dietary Patterns Vary? Are they lower in fat, protein and energy and higher in carbohydrate and fibre?' MSc Thesis, Oxford Brookes University

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Thank you for listening https://www.linkedin.com/in/catherine-mcneill-81a433206/