# Estimating the nutrient supply from agriculture in Scotland

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## Introduction

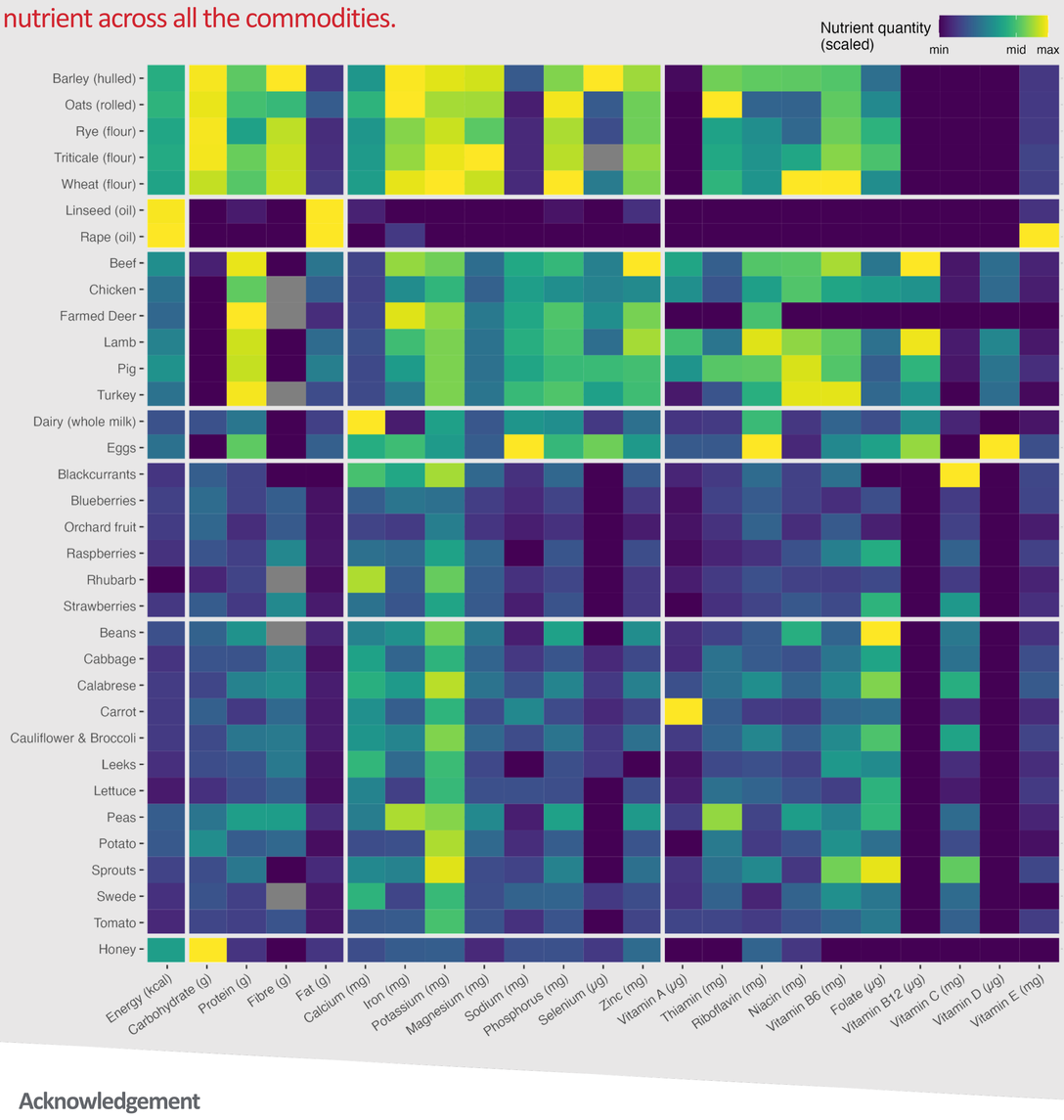
Net Zero targets increase the demand for land and potentially take land out of food production. To support choices about where and what might be produced, we present an estimate of the nutritional value of agricultural commodities produced in Scotland.

## Methods

- Agricultural census data were used to identify commodities for human consumption.
- Commodities matched to least processed form of foods.
- Nutrient data for each food were drawn from the UK Composition of Foods Integrated Dataset[1].
- Average yield and production data used to estimate the supply of nutrients up to the farm gate *(i.e.* prior to food processing).

**Figure 1 –** *Nutrients per 100g of least processed food*

Commodities were matched to the least processed form of their respective food, for example whole flour from wheat. Where appropriate, a weighted average was made of different derived foods, for example averaging across meat, fat and offal. Colours are scaled to show the relative amount of each nutrient across all the commodities.




## Results

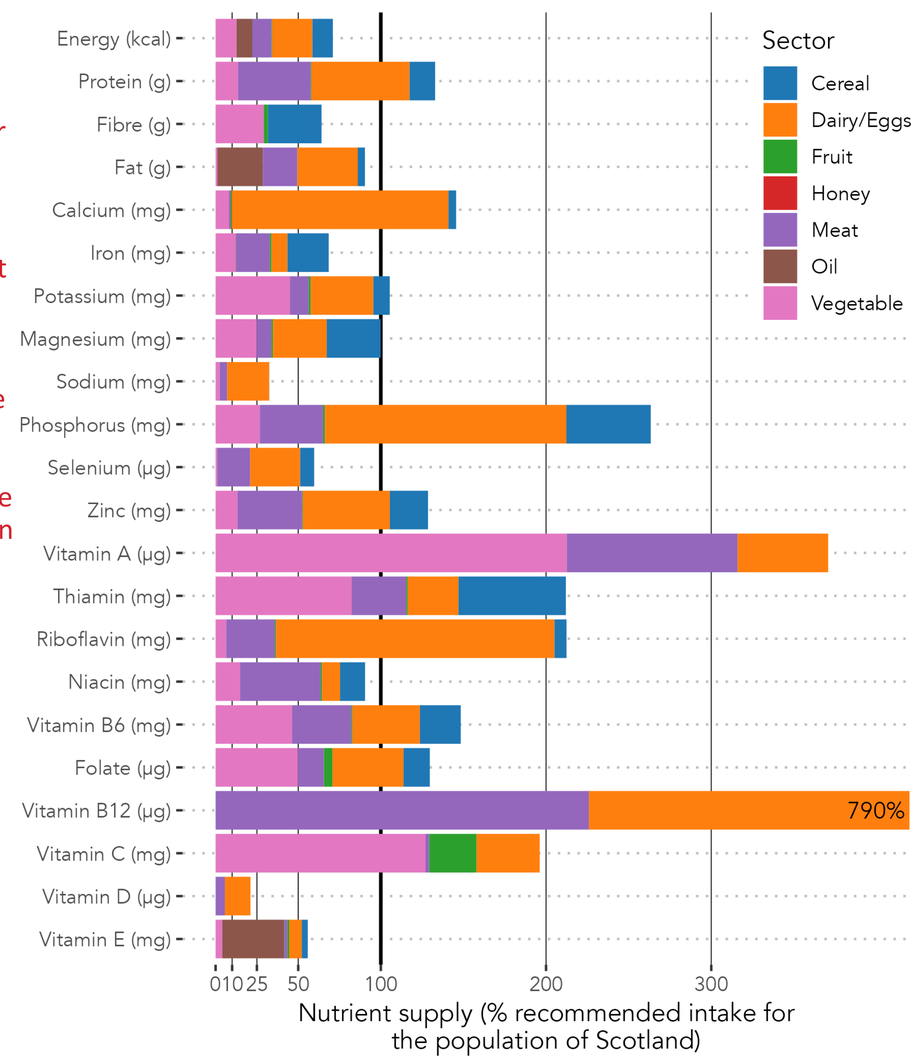
The potential nutrient supply from cereals is not realised because most production in Scotland is not for human consumption.

Considerable land is devoted to ruminant livestock (directly or producing fodder), but their contribution to nutrients is modest.

Milk, potatoes and carrots are produced in large quantities which means they contribute most to the supply of nutrients.

**Figure 2 –** *Estimated supply of nutrients by agricultural sector relative to population needs*

The theoretical supply of different nutrients, summed across sectors and presented relative to the recommended daily values for the current population of Scotland.




## Conclusions

- The nutrient supply from land in Scotland is not always what consumers have access to and the supply of nutrients changes in food processing.
- Understanding the potential and realised nutrient supply from domestic agricultural production helps to evidence a discussion about how agriculture is valued
- Opportunities exist to reimagine food production to maximise the supply of nutrients across Scotland and consider different uses of land.

**Acknowledgement**

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**References**

[1] **https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid**