

HOW DO PLANT MILKS COMPARE TO COW'S MILK?

HOW ARE PLANT MILKS MADE?

Plant milks are made from water-based plant extracts. Almond, coconut, oat, rice and soy milks are popular examples. Regardless of type, similar processes are used to make them.

1 Extraction

Wet process: soaked and wet milled; Dry process: dry milled. Flour extracted.

2 Separation

Centrifuging or filtering to remove fibrous components.

3 Formulation

Addition of water, fats, flavours, vitamins, minerals, thickeners, and stabilisers.

4 Homogenisation

Reduces the size of fat globules, dispersing them evenly and giving a smooth texture.

5 Heat treatment

Kills bacteria which could cause spoilage or illness.

6 Packaging & distribution

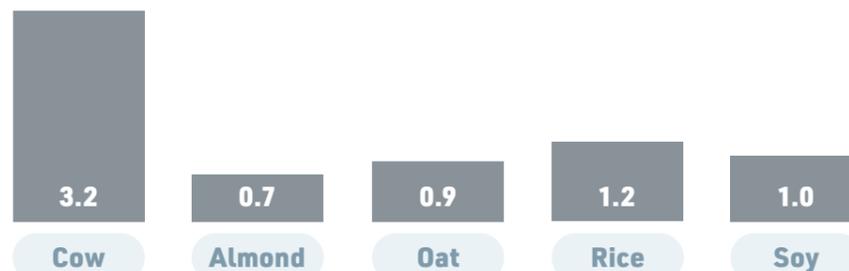
Milk packaged for distribution to stores.



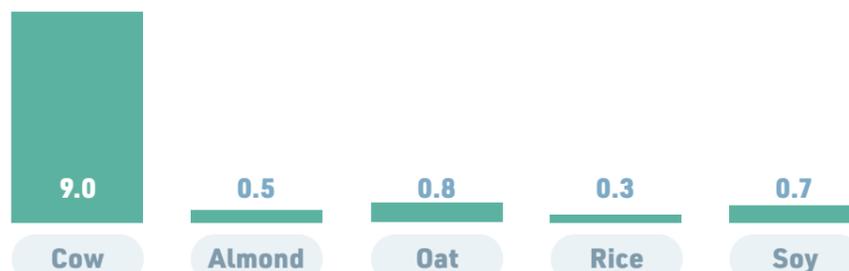
ENVIRONMENTAL IMPACTS

Production of plant-based milks is more environmentally friendly than the production of cow's milk in a number of aspects. The figures below are per litre of milk.

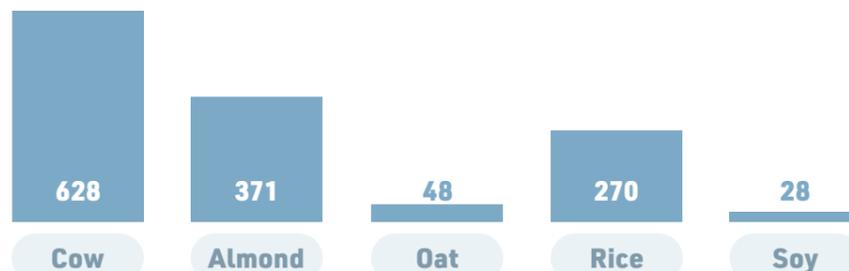
Carbon emissions (kilograms of CO₂ equivalents)



Land use (metres squared)



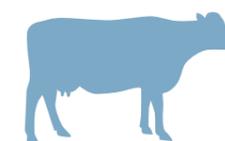
Water use (litres)



Source: <https://blog.datawrapper.de/cow-milk-and-vegan-milk-alternatives/>

NUTRITION OF PLANT MILKS

Plant milks are naturally lower in calcium than cow's milk. Most have calcium added to bring it to a similar level to cow's milk, though some of this added calcium may settle out of solution.



Calcium: 1.23 mg per mL

Calcium RDA: 700 mg

Iodine, important for making thyroid hormones, is found in lower levels in plant milk compared to cow milk. Some plant milk manufacturers now fortify their milk with iodine, but others do not.



Iodine: 0.3-0.4 µg per mL

Iodine: ~0.02 µg per mL

Iodine RDA: 140 µg

Plant milks contain small amounts of vitamin D and are often fortified with vitamin B₁₂. Plant milk protein content is variable but for all types it is lower than the protein content of cow's milk.

Milk protein content (per 100 mL)



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