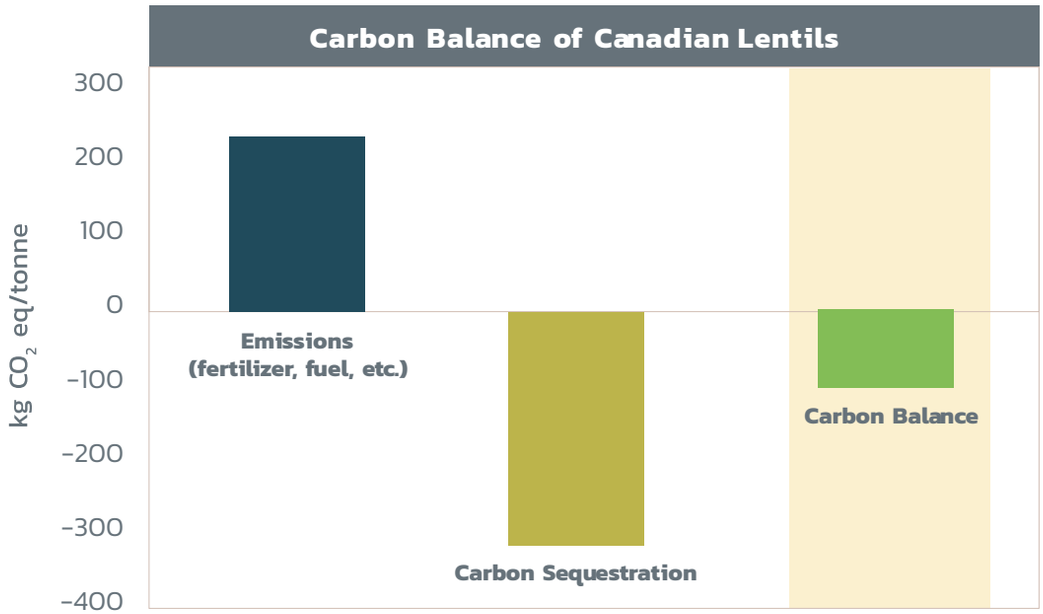
RELENTILESSLY SUSTAINABLE

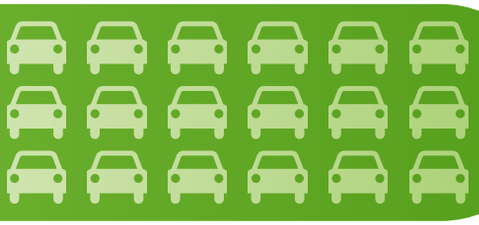
Grown using regenerative agriculture principles, Canadian lentils hold exceptional potential to power sustainable food products. Learn how incorporating lentils into your products can enhance their sustainability profile to meet growing consumer demand.

A LOW CARBON INGREDIENT

Canadian lentils are produced using modern, sustainable growing practices, and grown in a cold, dry environment that naturally maximizes carbon sequestration. This carbon sequestration has been shown to negate the emissions, meaning that lentils grown in Canada are carbon-negative[1].



The lentils produced in Canada in 2021 reduced carbon emissions by 1.7 million metric tonnes*, equivalent to removing 370,000 cars from the road for a year[2].



*Greenhouse gas emissions expressed as carbon dioxide equivalents

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WHY ARE CANADIAN LENTILS SUSTAINABLE?

NITROGEN-FIXING CROP

Producing and using nitrogen fertilizers contributes a significant portion of the carbon footprint of agriculture and food production. Lentils form relationships with specific soil bacteria to convert nitrogen from the air into a form the plants can use (symbiotic nitrogen fixation). As a result, lentils need little to no nitrogen fertilizer applied, giving them a naturally lower carbon footprint than most foods.

LOW WATER FOOTPRINT

Lentils use very little water and are grown almost entirely without irrigation. They thrive in semi-arid conditions and can withstand drought stress. Unlike other crops in rotation, lentils draw water from shallower soil layers, leaving more water deep in the soil for the next year's crop.

MODERN GROWING PRACTICES

Canadian lentil growers use modern, sustainable practices such as precision agriculture and no-till production. No-till production aligns with the principles of regenerative agriculture, reducing inputs and emissions.

CANADIAN CLIMATE

The dry and cold Canadian climate creates conditions that reduce soil emissions. These conditions, combined with no-till farming, help capture and store carbon in the soil, unlike other growing regions that may lose carbon to the atmosphere.

IMPROVED SOIL HEALTH

Lentils produce a number of different compounds that feed soil microbes, supporting a healthy and diverse microbial community that is able to decompose and cycle nutrients more efficiently. A diverse population of soil microorganisms also acts to 'crowd out' disease-causing bacteria and fungi, making for healthier plants.

SUSTAINABLE ROTATIONS

Crops like wheat or barley grown after lentils in the same field have lower carbon footprints and produce higher yields. This is because lentils improve soil fertility, water availability, and soil microbial health[3].

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IMPACT ON FOOD PRODUCTS

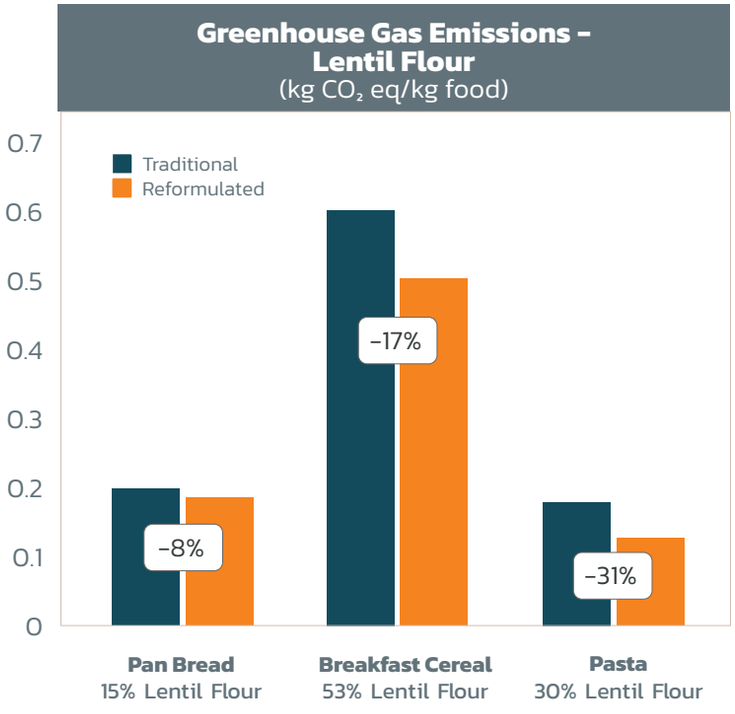
Agricultural production often accounts for the largest share of a food product's sustainability footprint. Lentils' strong environmental benefits on the farm extend to finished products, helping to significantly reduce key impacts such as carbon footprint and water use.

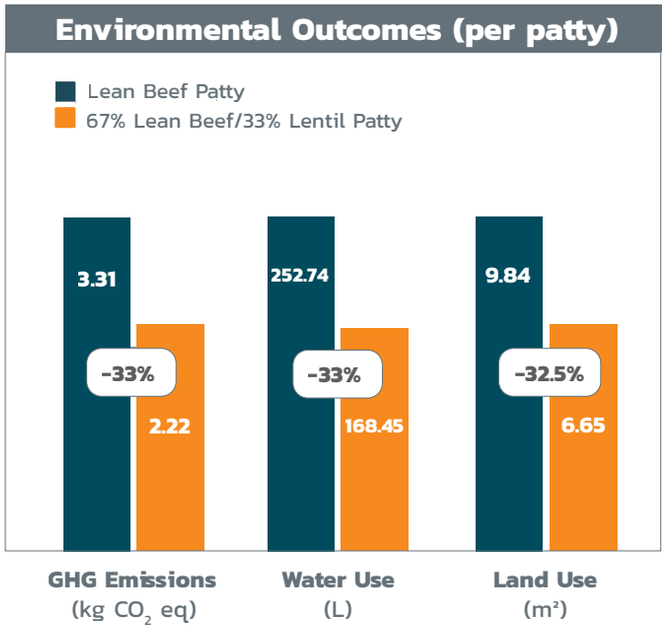
CEREAL-BASED FOODS

Incorporating lentil flour into staple products like breakfast cereal, pan bread, and pasta has been shown to lower their greenhouse gas emissions up to 31%[4].

MEAT PRODUCTS

Incorporating 33% whole lentils into a beef burger patty has been shown to substantially reduce the product's environmental footprint, including carbon emissions, land use, and water consumption[5].





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QUESTIONS?

Book a meeting with one of our experts.

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