

# Nomad Foods

## Landmark study from Nomad Foods confirms potential to increase freezer temperatures and reduce carbon emissions

- *Twelve month pilot study, conducted by Campden BRI, reveals that a 3 degrees Celsius increase in frozen food storage temperatures could reduce freezer energy consumption by +10% with no need to reformulate products<sup>1</sup>*
- *Europe's leading frozen food manufacturer is inviting the wider industry to join them in pushing for increased frozen storage temperatures across the value chain*

FELTHAM, England – February 29<sup>th</sup>, 2024 – Nomad Foods, the company behind some of Europe's best-known food brands including Birds Eye, Findus, iglo, Ledo and Frikom has today announced the twelve-month results of its landmark study that could change the temperature at which we store frozen food, leading to significant carbon emission reductions and cost savings.

The twelve month results, with leading food science and technology organisation Campden BRI, build on a successful six month pilot that Nomad Foods announced last summer and further validate the notion that storing frozen food at -15°C, instead of the industry standard -18°C (zero degrees Fahrenheit), can reduce freezer energy consumption by 10-11% without any noticeable impact on product safety, texture, taste or nutritional value.

Nine savoury frozen products were included in the study; poultry, coated fish, natural fish, vegetables, plant-based foods and pizza. Four temperatures (ranging from -18°C up to -9°C) and eight key areas including food safety, texture, nutrition, energy use and packaging impact were tested. Results showed no significant change to the products at -15°C, albeit for -12°C and -9°C there was a drop in Vitamin C for vegetable products and some changes in sensory performance.

The findings come as the frozen food industry celebrates 100 years since flash-freezing was first invented by Clarence Birdseye in 1924. Nomad Foods is now leading conversations with key industry players with the aim of forming an alliance to drive further progress. The business is also looking at its own manufacturing sites to see where it could introduce -15°C.

Stéfan Descheemaeker, Nomad Foods' Chief Executive Officer, said, "For 100 years frozen food has played a critical role in bringing great tasting, nutritious, convenient and affordable food to consumers, while minimising waste. Over the next 100 years, as pressure intensifies to address the global food systems contribution to climate change, I am confident that frozen food can be a key part of the solution.

"Frozen food already compares very well against alternatives in terms of carbon footprint. Our study shows there is potential to further reduce energy consumption and carbon emissions when storing or transporting frozen food, with just a simple temperature change. We are working to establish an industry alliance to put these findings into action and, hopefully in time, deliver widespread change. Clarence Birdseye created a new industry and we are very proud to keep improving on his inspiring legacy."

The British Frozen Food Federation (BFFF) has also hailed the Nomad Foods study as a significant step forward for the frozen industry.

Rupert Ashby, Chief Executive Officer at British Frozen Food Federation, said: "As we celebrate the 100th year of frozen food, we must recognise our moral obligation to improve sustainable operations and challenge ourselves to see what is possible. We know that warming up the storage temperature of frozen food by just a few degrees could significantly impact carbon emissions, reduce energy consumption, and improve our bottom lines. Such a small change could be an exciting step towards a more sustainable and environmentally friendly industry. Frozen food reduces waste, preserves nutrition, and needs no additives. It's already a great option for foodservice and retail sectors, as well as for consumers at home. We need the industry to join forces and see what can be achieved to secure the next 100 years of success for frozen food."

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Emma Hanby Associate Director at Campden BRI said: “Our study has comprehensively demonstrated that frozen food producers can safely increase their freezer temperatures to -15°C without compromising the quality and safety of their products. I commend Nomad Foods for leading this study and sharing the findings for the benefit of the whole frozen food sector.”

In addition to investigating temperature changes, Nomad Foods published an industry leading [life cycle analysis](#) of its leading frozen food products in 2022 which showed that frozen food performs very well against alternatives in terms of carbon footprint, partly due to much lower levels of food waste.<sup>3</sup>

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## About Nomad Foods

Nomad Foods (NYSE: NOMD) is Europe's leading frozen foods company. The company's portfolio of iconic brands, which includes Birds Eye, Findus, iglo, Ledo and Frikom, have been a part of consumers' meals for generations, standing for great tasting food that is convenient, high quality and nutritious. Nomad Foods is headquartered in the United Kingdom. Additional information may be found at [www.nomadfoods.com](http://www.nomadfoods.com).

## About Campden BRI

With over 3,000 member companies in 80 countries, Campden BRI ([www.campdenbri.co.uk](http://www.campdenbri.co.uk)) is the trusted, premier, independent technical partner of choice for the food and drink industry, working with all of the top 10 UK retailers, the top 15 global food and drink manufacturers and many of the world's biggest brands. Leveraging its 250 plus world-renowned technical experts in the UK and Europe, it helps to make food safer, tastier, healthier, affordable, sustainable, convenient and innovative, underpinned by investment in meaningful research and science.

Campden BRI offers an extensive range of services and products including consultancy, analysis and testing, processing and manufacturing troubleshooting and advice, training and legislation, regulatory and labelling advisory services. Members and clients benefit from industry-leading facilities for analysis, product and process development and sensory and consumer studies, which include a specialist brewing and wine division.

## About British Frozen Food Federation

BFFF is the leading trade association for the frozen food sector. Its mission is to promote and protect the interests of the frozen food industry. Members cover the entire cold chain of supply. The Federation campaigns with its members to educate, promote and inform consumers, retailers, and the foodservice sector about the value of frozen food. [www.bfff.co.uk](http://www.bfff.co.uk)

## Notes to editors

1. The objective of the Nomad Foods/Campden BRI pilot study was to identify the potential to increase the temperature that frozen food is stored at on a large scale, without reformulating products. The six month pilot was conducted between November 2022 and November 2023 with results measured for storage at -18°C, -15°C, -12°C and up to -9°C.

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The pilot focused on eight key areas across 13 individual tests:

- Microbiological
- Sensory
- Texture analysis
- Oxidative Rancidity
- Drip loss
- Nutrition
- Energy usage
- Packaging impact

Nine frozen products were tested

- Crumb coated chicken
- 2 types of fish fingers (wild caught pollock and farmed Basa)
- Salmon fillets
- Garden peas
- Leaf spinach
- Mixed vegetables
- Plant based meatballs
- Margherita pizza

2. Mixed Veg refers to Birds Eye Steamfresh Family Favourites mix of carrots, broccoli and sweetcorn
3. In 2022 Nomad Foods published results of an industry leading peer-reviewed Life Cycle Assessment study comparing a range of frozen foods to their alternatives. Further details on the study and 100 page technical report are available online.

<https://www.nomadfoods.com/news/nomad-foods-urges-food-industry-to-adopt-end-to-end-carbon-impact-product-assessment-to-help-tackle-the-climate-emergency/>

<https://www.nomadfoods.com/news/nomad-foods-publishes-third-party-technical-report-of-its-peer-reviewed-life-cycle-assessment-lca-study/>