

The British Frozen Food Industry – Fresh Facts on Frozen



Introduction

The Fresh Facts on Frozen booklet brings together global information and facts about the benefits of frozen food.

Frozen food was around as early as 3,000 BC where we have evidence that the ancient Chinese used ice cellars to preserve food through the cold winter months. It was introduced commercially by Clarence Birdseye in 1917 and has continued to be a vital food source since then.

Over the last 30 years dramatic new harvest-to-freeze and refrigeration technologies have shifted frozen into a new age. A raft of new research projects and studies on frozen food along with a body of scientific proof now shows that:

- **Frozen food will save you money.**
- **The quality and taste of frozen food is better than ever.**

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Saving you money



Competitive Prices

Fact

Frozen food is a cost effective option

- Making the same dish from scratch can cost an average of 30% more than buying in the frozen counterpart¹
- Frozen food is not season dependent and therefore unaffected by out-of-season price rises
- It is more cost effective to ship many frozen foods than to use air freight to deliver them fresh.

References

¹. BFFF (2009) Cost comparison of Frozen Food and Fresh Food. A BFFF project in conjunction with Manchester Food Research Centre.



Saving you money



Portion Control

Fact

Frozen food offers greater portion control

Evidence:

- With frozen, you only cook what you need – the rest can be stored and used at a later date
- Pre-prepared frozen meals are packed in specific quantities for appropriate serving sizes
- Frozen fish, meat and poultry products are sold in consistent sizes per pack meaning there are no extra large or small portions.



Reduced waste

Fact

Using frozen food can significantly reduce food waste

Evidence:

- Preparing vegetables in-house means 10% of that product becomes waste¹
- The long shelf life of frozen food stops goods spoiling before they are cooked
- You can use as little or as much frozen food as is needed.

References

¹. BFFF (2009) Cost comparison of Frozen Food and Fresh Food. A BFFF project in conjunction with Manchester Food Research Centre.



Saving you money



Variety and availability

Fact

Frozen offers a greater variety and better availability of food

Evidence:

- Frozen makes tasty seasonal food available all year round - such as New Zealand lamb, asparagus and passion fruit
- Frozen foods with more exotic ingredients can be sourced and stored year-round
- Using frozen food offers better stock control - as its longer shelf life allows for advanced purchase and longer term storage.



Labour savings

Fact

Using frozen food can cut labour time in the kitchen

Evidence:

- Buying in complex dishes such as profiteroles or canapés significantly reduces preparation time in the kitchen¹
- Frozen food reduces the time spent preparing in the kitchen - such as peeling, chopping, de-boning and de-skinning
- Choosing frozen reduces cleaning time in the kitchen - as there is much less preparation involved.

References

¹. BFFF (2009) Cost comparison of Frozen Food and Fresh Food. A BFFF project in conjunction with Manchester Food Research Centre.



Saving you money

Flexibility and convenience



Fact

Frozen food offers great flexibility and convenience

Evidence:

- Frozen food allows you to cope with fluctuations in customer menu choices and cover numbers
- Frozen offers better stock control - giving you increased menu flexibility and stability
- Pre-prepared frozen meals are quick and convenient to reheat and require little preparation.



Great Quality



Freezing technology

Fact

Technological improvements in freezing technology have improved the quality of frozen food

Evidence:

- Most commercial foods are now 'quick frozen' - this process minimizes any cell structure damage¹
- It is impossible for bacteria, yeast or mould to multiply on frozen food meaning that as long as it is stored at the correct temperature it will not spoil²
- Freezing preserves food in its freshest state locking in the nutritional qualities, fresh flavours and natural textures of the food.

References

¹. BFFF (2010) The British Frozen Food Industry – A Food Vision. A BFFF project in conjunction with Sheffield Hallam University and Refrigeration Developments and Testing Ltd.

². Potter NN and Hotchkiss JH (1998) Food Science. 5th edition. Springer Science.



Great quality



Freshness

Fact

Frozen food is often fresher than 'fresh' food

Evidence:

- Frozen fish is frozen at sea soon after it is caught. Fish sold as fresh can take up to 14 days in the supply chain before it reaches the wholesaler or retailer
- Fresh produce can spend from three to seven days in the supply chain causing their nutritional qualities to diminish¹
- Quick freezing techniques used in the manufacture of frozen breads and pre-prepared meals take products from cooked to frozen in minutes.

References

¹. Bushway et al. (1989) Comparison of ascorbic acid content of supermarket versus roadside stand produce. *Journal of Food Quality*. 12:99-105. carotenoids. *Journal of the American Oil Chemists' Society*. 78:665-675.



Nutrition

Fact

The nutritional profile of frozen food is just as good as fresh

Evidence:

- In scientific tests, frozen vegetables have proven to contain the same and often higher levels of vitamins than fresh¹
- Frozen vegetables have their nutritional qualities locked in and remain in this fresh state until they are cooked² whereas the nutritional content of fresh vegetables starts to decrease as soon as they are harvested
- Freezing is an entirely natural process and needs no preservatives.

References

¹. Favell DJ [1998]. A comparison of the vitamin C content of fresh and frozen vegetables. Food Chemistry. 62(1):59-64.

². BFFF [2010] The British Frozen Food Industry – A Food Vision. A BFFF project in conjunction with Sheffield Hallam University and Refrigeration Developments and Testing Ltd.



Great quality



Storage and shelf life

Fact

Frozen food offers ease of storage and a long shelf life

Evidence:

- The typical shelf life of a frozen product is between 6 and 12 months
- Frozen foods are supplied in easy to manage and store formats that will last until the product is used up
- Unused items can be easily returned to the freezer.



Safety and hygiene

Fact

Frozen food is a safe and hygienic choice

Evidence:

- Freezing stops all microbiological activity including harmful pathogens that cause food poisoning¹
- Frozen foods stored at -18°C or lower will remain safe indefinitely
- Freezing is an entirely natural process.

References

¹. BFFF (2009) Cost comparison of Frozen Food and Fresh Food. A BFFF project in conjunction with Manchester Food Research Centre.



Great quality



Sustainability

Fact

Frozen food is a secure and sustainable food source

Evidence:

- The freezing of abundant and seasonal foods ensures a sustainable and continuous supply
- Frozen food creates less kitchen waste compared to preparing meals from scratch
- At least 15% of purchased fresh food and drink is disposed of without consumption¹ causing unnecessary landfill waste and product demand.

References

1. WRAP (2009) Household food and drink waste in the UK.



Traceability

Fact

Frozen food is equally as traceable as fresh food

Evidence:

- Since January 2005, it has been a legal requirement for all food businesses to implement a traceability system - including supplier details, goods details and dates
- Every frozen food manufacturer is required to keep documentation on where their food has come from and where it is going – this method continues all the way up the supply chain enabling food to be traced back to its exact point of origin
- Vast supply chain improvements in recent years allow customers to track their frozen food through every step of its journey.

For further information or to download a copy
of this booklet, please visit www.bfff.co.uk.



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