

Flour milling in the UK

FACTS AND FIGURES
2018



A VITAL ROLE IN SUPPLYING
THE NATION'S FOOD



UK FLOUR MILLING INDUSTRY 2018

Flour remains at the heart of UK food consumption. Wheat flour is a versatile and nutritionally valuable food and is used for making bread, biscuits, cakes, pies, pizzas, pastries, batters, coatings, and many other foodstuffs. The UK is self-sufficient in flour and also supplies most of the flour used in the Republic of Ireland.

Our raw material is wheat which is the most widely grown crop in the UK. Flour millers also use rye, spelt, durum wheat, malted barley and some minor grains to produce a range of products for different markets.

Our industry is compact and highly efficient with a total annual turnover from all sources of approximately £1.25 billion.

nabim is the trade association representing the sector; our members account for 99% of the flour produced in the UK and Republic of Ireland.



OUR SUPPLY CHAIN

The flour milling industry is the third link in the supply chain that connects farmers to consumers. Approximately 45% of the UK wheat area is planted with varieties having bread or biscuit making potential (**nabim** groups 1-3). This is bought by UK millers from grain merchants, farmers and central stores in the UK.

Our customer base is diverse ranging from large plant bakeries to craft bakers, biscuit & cake makers, other food processors, retailers and household consumers.

GROUP	DESCRIPTION	% OF 2017 UK WHEAT CROP
nabim Group 1	Consistent bread-making wheats. 13% protein, 250s HFN and specific weights 76kh/l.	27
nabim Group 2	Bread-making potential. Some are inconsistent, others suit specialist flours.	13
nabim Group 3	Soft wheats for biscuits, cakes etc. Low protein and an extensible but not elastic gluten.	5
nabim Group 4	Feed wheats.	48
Varieties not on the Recommended List.		7

WHEAT

Most of the wheat used by UK millers is grown in the UK. For breadmaking, **nabim** group 1 varieties are preferred since they contain high levels of appropriate quality proteins. Other varieties are grown for specific breadmaking uses and the production of biscuits, cakes, batters and coatings. Specifications are exact and flours must consistently perform to the stated level, which depends on the quality and characteristics of the wheat being used to make the flour. Imports, where necessary, are sourced mainly from Germany, Canada, France and the USA.

The UK flour milling industry is the largest single processor of British wheat, using 4.3 million tonnes of the average 16 million tonnes annual wheat harvest. Our sector works hard to encourage production of the best varieties and to make use of what UK farmers produce. The result is that usage of home-grown wheat is now double the level of forty years ago; and a large number of flours



and breads are now produced entirely from homegrown wheat.

In 2018, the proportion of UK wheat used by flour millers will exceed 84% which is a level approaching the all-time high of 87% in 2011. A proportion of imported wheat is milled mainly because it has different qualities used to produce stronger flours that are required by our customers.

UK WHEAT USAGE (000 TONNES)						
	1988/9	1998/9	2008/09	2015/2016	2016/2017	2017/18(e)
Total UK harvest	11.714	15.018	17.227	16.506	14.347	14.837
Total wheat usage *	5.121	5.660	6.836	7.357	8.120	7.625
Home grown usage	3.796	4.632	5.627	6.413	7.178	6.709
EU usage	835	452	623	604	396	385
Third country usage	490	576	586	340	546	531

*Prior to 2012/13 usage includes malt, seeds and breakfast cereals. All figures include starch, biofuels and others

FLOUR MILLING

Flour milling is an efficient and largely automated part of the food industry. It has evolved a long way from the days of water- and wind-driven mills. Modern flour mills are electrically driven and rely on a combination of skills and high technology to function as continuous-flow operations. Many of the larger mills operate for more than 360 days per year.

In the last five years the industry has seen a modernisation in capacity with several new mills being built and substantial investment in new facilities at some other sites. There are 30 member companies operating 51 mills. The four largest companies account for approximately 65% of UK flour production with a further ten companies producing significant quantities of flour. Many smaller millers have developed niche ranges such as flours for speciality or ethnic breads.

Two member companies mill durum wheat used to make pasta and others mill grains including spelt, rye, maize, rice, emmer wheat, buckwheat and malted barley.

The quality and safety of both raw materials and end product is paramount to the industry. Assured sources guarantee good standards of crop production and food safety, backed up by independent inspections.

UK FLOUR PRODUCTION (000 TONNES)						
	1988/9	1998/9	2008/09	2015/2016	2016/2017	2017/18(e)
Total flour production	3.974	4.478	4.861	5.134	5.630	5.552
FLOUR TYPE (%)						
White breadmaking	53,5	53,6	48,7	48,6	44,1	45,1
Brown breadmaking	3,5	3,2	2,4	1,0	0,9	0,9
Wholemeal breadmaking	6,3	4,3	6,0	5,7	4,7	4,6
Biscuit	14,6	12,7	11,9	8,1	7,1	7,5
Cake	1,9	1,7	1,7	2,1	2,1	2,4
Pre-packed household	5,8	4,0	3,4	3,3	2,9	3,0
Food ingredients	N/A	N/A	3,6	4,9	5,1	5,2
Starch manufacture and other	14,5	20,5	22,4	26,2	33,1	31,4

FLOUR PRODUCTS

As a result of advances in technology and the skill of the miller, the industry produces more than 400 different types of flour to meet increasingly specific customer demands for the vast range of products lining supermarket shelves. Much of the flour that is produced is sold in bulk to

the large bakers and food manufacturers. Smaller amounts go to craft and in-store bakeries; some is pre-packed and retailed direct to consumers. The other main products from flour milling are bran for human consumption and 'wheatfeed' used in the manufacture of livestock feeds.

ECONOMICS

Wheat is the main input cost for flour, although energy and transport are also significant. Although the majority of wheat used by millers is grown in the UK, its cost fluctuates on a daily basis as a result of movements in the world market - much like oil. Key influences include the area of crops planted, yield, weather conditions and the quality of crops.

Electricity is the main source of energy used by flour millers. The UK government's policies mean that more than half of this cost is linked to support for the renewables sector or climate change policies.

The UK's decision to leave the European Union will have far-reaching economic impacts but will not change the fundamentals of how grain markets operate. Changes in the support to UK farmers from government will probably impact from 2020 and many wheat farmers are now examining costs of production.

UK flour millers will continue to require access to wheat from around the world (including the EU) and wish to maintain a trading relationship with the Republic of Ireland, which buys 80% of its flour from the UK.



OUR PARTNERS

The UK milling industry continues to liaise with UK government, the devolved administrations and other stakeholders such as the Food Standards Agency.

Within the sector we work closely with plant breeders to produce wheat varieties with suitable levels of functionality; and with farmers, agronomists, grain merchants and others in the agricultural supply chain through their respective trade associations. Flour millers are levy-paying stakeholders in AHDB and actively participate in its work directly and through its committees.

nabim is an active member of European Flour Millers (EFM) and participates in all of its work. EFM is itself a member of PFP the association representing the European primary food processing industry. Through these, **nabim** works with European institutions and international organisations.

RESEARCH

The milling industry assists in steering the research and knowledge exchange programme which, in recent years, has funded several projects of significance to the flour milling sector. **nabim** and individual milling companies are members of Campden BRI and participate in the 'member-funded' programmes. Milling companies also fund near-market research to assist their own competitiveness.

nabim continues to participate in the BBSRC research clubs; and is involved in candidate projects submitted for funding to Innovate UK.

OUR ENVIRONMENT AND SUSTAINABILITY

The sustainability of the flour supply chain is of paramount importance to our members. The milling process produces virtually no waste; however, energy is a significant cost within the sector and our members are always eager to increase energy efficiency and reduce associated environmental impacts. Through close links with the Environment Agency, WRAP and the FDF, **nabim** assists members in understanding relevant environmental issues and in meeting environmental targets.

OUR PEOPLE

The flour milling industry is committed to the development of its workforce and **nabim** plays a key part in the development and delivery of training resources.

A distance-learning programme has been the cornerstone of flour milling training for many years. The programme is kept up-to-date and studied each year by hundreds of students around the world. To this has been added an e-learning resource and videos to demonstrate the activities within the closed milling process; and most recently a 'virtual flour mill' has been built.

In addition to more general development events, **nabim** runs advanced milling training courses, supported by Campden BRI and the Buhler Training Centre in Switzerland.

nabim also assists the industry's efforts to maintain high standards of occupational health and safety. We collate and disseminate data on accidents, dangerous occurrences and ill health, and facilitate discussion of a range of safety topics, including the provision of seminars. We work closely with the HSE, are a member of the Food and Drink Manufacture Forum, and a signatory to the latter's Common Strategy, itself a part of the HSE's strategy of 'Helping Great Britain Work Well'.

INFORMATION ABOUT OUR PRODUCTS

nabim's subsidiary, the Flour Advisory Bureau (FAB) is a central source of information on all matters relating to flour and bread in the UK. Its website (www.fabflour.co.uk) has a wealth of information for consumers, the media and health professionals. Flour and bread are a major source of several vitamins and minerals for people in the UK, as well as being the most significant source of fibre. Nevertheless, bread is sometimes maligned in the popular press; it is notable that although bread consumption per person has fallen over the past twenty years, obesity rates have risen.

nabim works with the Federation of Bakers and others to commission research into consumer attitudes and develop communication activities aimed at addressing misconceptions about flour and bread. The Association also works with the AHDB to provide grainchain.com – a curriculum-linked educational resource which provides everything required to teach children the provenance of grain-based food, its nutritional value and role in a balanced diet, together with practical cooking skills.

In addition to providing free classroom-based resources such as lesson plans, activity sheets and videos, grainchain also offer hands-on experiences designed to cultivate a passion for baking. These include baking days for children and teacher training sessions.



FOR FURTHER INFORMATION CONTACT:

The National Association of British and Irish Millers

21 Arlington Street, London, SW1A 1RN

Tel: 020 7493 2521

Fax: 020 7493 6785

e-mail: info@nabim.org.uk

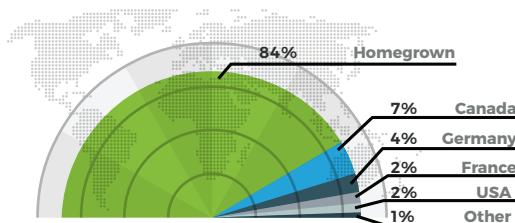
www.nabim.org.uk

www.fabflour.co.uk

www.grainchain.com

THE UK FLOUR MILLING INDUSTRY

SUPPORTING BRITAIN'S FARMERS



84% of wheat milled in
THE UK WAS HOMEGROWN

STRENGTHENING BRITAIN'S ECONOMY

5 million tonnes of wheat milled each year | **£1.25bn** annual turnover

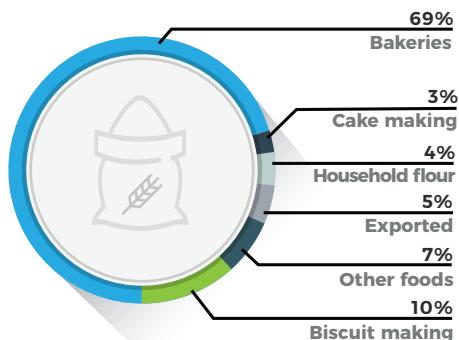
SUSTAINING BRITAIN'S HEALTH

FLOUR IS A VITAL SOURCE OF MANY VITAMINS AND MINERALS And low in fat and sugars



SUPPLYING BRITAIN'S FOOD

WHERE DOES FLOUR GO AFTER THE MILL?



130
million

SLICES OF BREAD

5
million

PACKETS OF BISCUIT

4.5
million

CAKES & BUNS

2
million

PIZZAS

MADE FROM BRITISH FLOUR ARE PURCHASED IN THE UK EVERYDAY

BREAD MOST POPULAR ITEM BOUGHT IN BRITAIN

99.8% HOUSEHOLDS BUY BREAD



MORE PEOPLE IN BRITAIN BUY BREAD THAN TOILET PAPER