

Make Innovation HAPPEN

**MIH Knowledge Article:
A Tibetan barley snack could signal a big
opportunity for Scotland's major food crop**

Scotland
A LAND OF
food and drink

SCOTLAND
IT'S TIME TO INSPIRE

The logo consists of the word 'CAN' in white letters on a teal vertical bar, and the word 'DO' in white letters on a yellow vertical bar, positioned to the right of the teal bar.

As Scotland's most important and valuable crop, barley is used to make whisky, beer and animal feed. In other parts of the world it's part of a staple diet, and could be all set to become the main ingredient of a new on-the-go food snack.

Barley is the fourth most important cereal crop in the world, and is grown in more than 100 countries. In Scotland, it's the major crop grown, followed by wheat, rapeseed oil, and potatoes. But is barley underperforming? Could it deliver even more value to Scottish producers and manufacturers.

The health benefits of barley

Although wheat has overtaken barley as a major global food source, it's making a comeback. It's versatile, coming in whole grain, flaked, or milled forms, and it has the potential to play an important part in the healthy snack market.

Barley is high in fibre - in particular, beta-glucan, which is a soluble fibre. This is said to improve gut health, help to keep the heart healthy, regulate blood sugar levels, and could even reduce the risk of intestinal cancer. Barley is also rich in calcium, iron, zinc, potassium, magnesium, vitamin E, B1, B2 and antioxidants.

Tsampa: the Tibetan barley snack

The main ingredients of tsampa are: roasted barley flour, butter, tea or milk and sugar. Tsampa is a traditional Tibetan food based on roasted whole grain barley, ground into a flour.

Historically, it's been eaten by Tibetans to support their meditation practice, as it's energy-dense and nutritious. Today, it's enjoyed by many cultures around the world.

Tsampa Tsnacks in the US

Two students from Charlottesville in the US have seized on the potential of tsampa by developing Tibetan-inspired snacks called Tsampa Tsnacks.

Available in the form of a nutrition-packed ball, it comes in a range of flavours and includes ingredients like coconut, cranberry, almonds and dates.

Tsampa energy bars from Berlin

Berlin-based company, Tsampa, also saw a gap in the market and has developed tsampa-based energy bars and fitness snacks.

The team behind the German snack start-up hope that the trend towards healthier snacking will see its product find mainstream success. Tsampa bars comes in various flavours including choco, goji, cacao nibs, CellAmin and espresso.

Barley+ in Australia

Freedom Foods was a finalist in the 2018 World Innovation Awards best snack category, with its Barley+ Seven Seeds bars.

Barley+ is a range of breakfast muesli, flatbread wraps and muesli bars that contain BARLEYmax. It's is a high-fibre, non-GMO barley whole grain, developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) by using natural breeding systems.

Scotland's Barley Hub

The James Hutton Institute in Scotland has developed Barley Hub in collaboration with the University of Dundee. The hub is an open platform dedicated to cutting-edge barley research.

Barley is not just one of Scotland's most important crops, and a fundamental component of many key industries, but it has global importance. The Barley Hub is at the heart of driving crop innovation in Scotland and is a great resource for companies looking to make more out of the crop in a sustainable and responsible way.

Innovation support for Scottish food and drink companies

If you want to understand more about added-value barley in Scotland get in touch with our Make Innovation Happen team.

Make Innovation Happen is a single source of innovation support for businesses involved in the Scottish food and drink supply chain.

Scotland Food & Drink, Scottish Enterprise and Highlands & Islands Enterprise work in partnership across academia, the public sector and the industry to deliver a comprehensive innovation support service.

Make Innovation Happen can help your business by providing:

- [Access to 'connectors'](#), who can offer support, advice and mentoring, as well as direction to appropriate support
- Ideas and insights on how to innovate through articles and events
- Funding through the [Collaborative Innovation Fund](#)
- Help to access other innovation services provided by Scottish Government, [Scottish Enterprise](#), Highlands & Islands Enterprise, Interface and others

To find out more about the support available, please get in touch with the Make Innovation Happen team:

www.makeinnovationhappen.scot
enquiries@makeinnovationhappen.scot
0300 013 3385

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