



OUR PURPOSE

We are Sprau[™]. We are the awakers.

We awaken the bean through a process called germination, the initial spark that lights up the existing energy that will continue to rise and shine, just as spring awakens nature and everything in it.

We awaken the bean through germination, we awaken it to its full potential, making the nutrients available and the bean easier for digestion, and easy to enjoy in the everyday diet.

This gives us humans the energy to rise to the occasion too. We are thus awakened to what the planet needs and can become, to its potential of healing and sustainability.

We reimagined germination for food, thus contributing to a shift towards sustainable and healthy eating habits.

We *nature* the bean – slowly, carefully – so that it reaches its full potential, to a beanful of life.

We have been experts in germination since 1897.





Without germination, the bean is but potential – a micro-universe, in stasis.

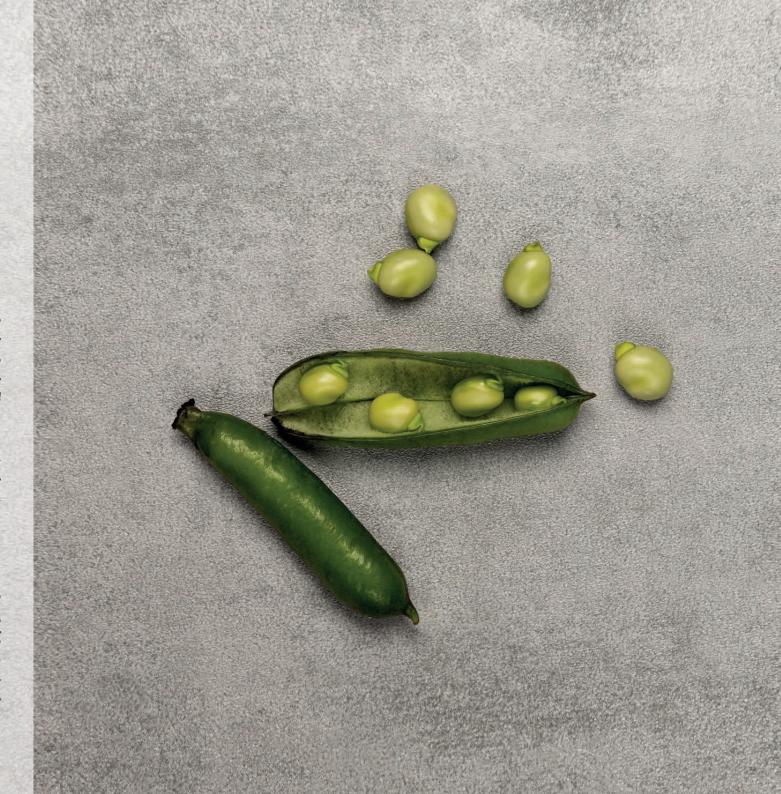


ORIGIN

We rediscovered an ancient crop, faba bean, that has been present in Finland since the 13th century, and carefully selected the most favourable local subspecies, *Vicia faba* var. *minor*.

Our faba beans come from northern Finnish terrain, located at the northernmost point for faba bean cultivation in the world – 63°N.

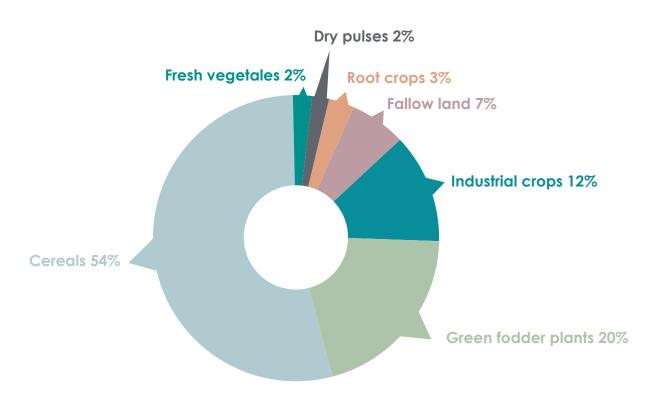
Northern high latitude agriculture is unique due to North Atlantic Drift. Therefore, temperatures during the growing season are typically higher than elsewhere at comparable latitudes. The long summer days give a short but intense growing season.





SUSTAINABILITY

Faba beans are underutilized as protein-rich source.



Society is becoming more aware and concerned about the role the food system plays in climate change.

Consider this: cattle and dairy cows account for as much as 60% of agricultural emissions! Plant protein is roughly 30 times less carbonintensive than animal-based protein from ruminant animals. In addition, the land required to grow the feed to produce animal protein is 6-17 times higher than plant-based protein.

Lately, the interest in pulses has increased globally, as they play an important role both in a healthy, plant-based diet and in sustainable agriculture. The development of this crop has, however, not received much attention, as cereal crops have been more dominating. In Europe, only 2% of arable land is used for cultivation of pulses.



By making the faba bean more accessible and easier to enjoy in an everyday diet, Sprau[™] drives the shift towards a more sustainable food production and consumption.

The Faba bean contributes to the sustainability of cereal-dominated cropping systems via:

- Strong biological nitrogen fixation capability
- Improving soil fertility
- Increasing biodiversity
- Hosting and feeding pollinating insects

A shift towards a more sustainable food production requires innovative ways of using faba bean in direct human consumption.

One such innovation is Sprau[™], the germinated faba bean and the spark that strives to awaken a more sustainable now.



HEALTH & NUTRITION

Pulses are one of the most valuable sources for replacing meat and dairy products in the human diet due to their nutritional value and functional versatility. On top of being an excellent source of plant-based protein, pulses store dietary fiber, minerals and vitamins.

For many consumers, all the good nutrition in beans is out of reach because of the digestive discomfort caused by alpha-galactosides, belonging to the group of FODMAPs.

Alpha-galactosides are indigestible antinutritive compounds that nature intended for plants, not for humans.



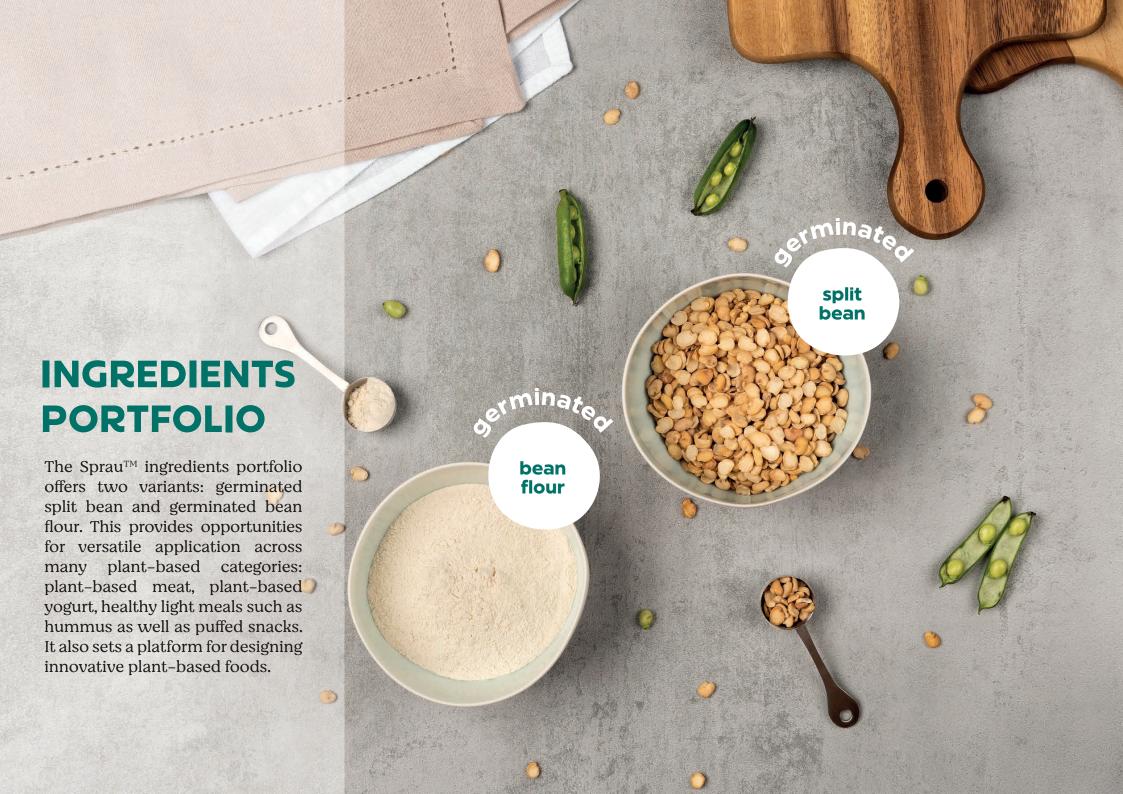


Since ancient times in Egypt, people used to germinate dried faba beans before cooking them as a way to boost nutrition. And no wonder, as germination is a natural process that awakens the metabolic activity within the bean. It mobilizes its nutrient reserve through activation of its own enzymes and makes it easier for digestion.

The germinating bean naturally removes the alphagalactosides, while leaving other components of dietary fiber to promote gut health. A sufficient intake of dietary fiber protects you from lifestyle diseases such as cancer, cardiovascular disease, and diabetes. Unfortunately, fiber–rich plant parts and fiber–rich plants often end up as feed, whereas us humans eat the refined starch and protein.

Sprau™ is more than plant protein. We give you the whole bean!







SPRAU™ FABA BEAN BENEFITS

Health & Nutrition Benefits

Easy for digestion:

- Low in antinutritives (e.g. alpha-galactosides and tannins)
- Fast and efficient digestibility of protein

Great source of macro and micronutrients:

- High in protein (35%)
- High quality protein (amino acid score over 80%)
- Source of dietary fiber (5%)
- High in minerals magnesium, calcium, zinc, potassium and group B vitamins such as folate

All natural:

- Awakened by nature's own process of germination
- Organic upon request

Application Benefits

Favorable for fermented products:

Germination releases sugars and amino acids for fermentation

Mild flavour by our unique treatment:*

 Mild, cereal like flavour enabling multiple applications and diversity in flavour design

Retained, natural functionality of proteins:

- High solubility (typically 75% at pH 7)
- Good gelling and emulsification properties

Convenient to use:

- Does not require soaking prior to cooking
- Cooking time: split beans 20 min, flour 5 min

^{*}patent pending

APPLICATION PORTFOLIO PLATFORMS

Our philosophy in health & nutrition is built on two key beliefs:

- The wholesome macro and micronutrient balance of raw plant material should not be ruined by ultra-processing.
- Our wellbeing relies on a healthy diet, rich in plant-based foods. However, food is good for you only when eaten.

 Therefore, healthy food needs to be convenient and tasty as well.

Sprau $^{\text{TM}}$ has been designed based on this very philosophy, to help you craft healthy, tasty and convenient foods for the growing group of conscious consumers.

Foresight and innovation are in Sprau's DNA. We dare to explore and experiment. We are passionate about crafting healthy and sustainable foods together with our customers.

We designed three cornerstone platforms, addressing key consumer occasions and aiming at creating added value for our customers through collaborative innovation:

- Healthy Start of the Day
- Center of the Plate
- Healthy Snacking



HEALTHY START OF THE DAY

Sprau[™] faba bean-based yogurt

Sprau[™] faba bean-based yogurt has a strong fit for application among plant-based fermented products specifically, because germination releases sugars and amino acids favorable for fermentation. It also has demonstrated good emulsification and gelling properties, and is therefore beneficial in the design of spoonable products.

A recipe of plant-based yogurt crafted through fermentation of $Sprau^{TM}$ germinated faba bean flour with a special blend of live active probiotic cultures is available upon request.



CENTER OF THE PLATE

Sprau[™] faba bean-based patty

Flexitarians are today searching for plant-based meat that can replace the animal-based meat at the center of the plate. They are not willing to compromise on satiety and sensory experience.

For this purpose, we have prototyped plant-based patties based on $Sprau^{TM}$ germinated bean flour. It is crafted to deliver a healthy balance of macro and micronutrients, making it an optimal "center of the plate".





Sprau[™] faba bean-based tempeh

We also cater to customers who are looking for only those plant-based foods that have been through traditional natural processes, from seed to plate, and are open to explore different flavours, new to Western culture.

Our tempeh is crafted by fermenting organic SprauTM faba split beans with *Rhizopus* starter culture.

A recipe of tempeh is available upon request.

HEALTHY SNACKING

Sprau[™] faba bean-based crunchy snacks

The busy lifestyle of urban dwellers has driven the need for savory snacks that are not only satiating and tasty, but healthy as well. Sprau[™] germinated bean has a balanced macronutrient composition: high protein/high fibre/low fat.

Snacks from puffed Sprau[™] germinated beans are full of nutrients, crunch and flavour. They are a good source of dietary fiber and are high in protein to fuel one's cravings for a healthy small snack in between meals. Puffs come in natural flavour, and in a range of savory and indulgent variants.









FI EUROPE CONNECT 2020

Virtual Event 23 November – 4 December

If you are as passionate about shaping sustainable and healthy foods and spurring a brighter future as we are, let's talk.

CONNECT





WE'RE MEANT TO BEAN

Have an idea or just a wish to make an innovative, sustainable food? SprauTM can be your ally! We're always looking for partners in making food choices healthier, and future brighter.

CONNECT

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