



## Press release

### **Solar Foods is leading the world to the future of food with Solein® – the world's most sustainable protein**

Solar Foods is a Finnish food technology and hydrogen fermentation company on a mission to revolutionize global food production. Solar Foods produces Solein®, a versatile, nutritionally rich protein powder suitable to be used as an ingredient in different kinds of foods and products. Solein is produced using carbon dioxide and renewable electricity – literally food made out of thin air – and it can be compared to the discovery of the potato: Solar Foods is introducing an entirely new ingredient to the world of food. In short, Solein is a revolutionary leap in food science and presents all of humanity an opportunity to reap a previously undiscovered harvest.

Solein doesn't require agriculture, or land in general, to grow. Based on a lifecycle analysis study, Solein's comparative greenhouse gas emissions are approximately 1% that of meat protein and about 20% of plant protein production. Producing Solein is also 100 times more efficient in its water use and 20 times more efficient in land use than plant proteins. Producing Solein is not dependent on climate or weather conditions, so it can be produced virtually anywhere in the world. There is a harvest every day, and the food will never run out.

Without the limitations of traditional farming, this method of food production has the potential to transform the sustainability, availability and transparency of what we eat and where food can be produced.

#### **About Solein®**

Solein is an all-purpose protein grown with the air we breathe: The unique bioprocess takes a single microbe, one of the billion different ones found in nature, and grows it by fermenting it using air and electricity. The production doesn't harm the environment, plants or animals.

Solein is a nutritionally dense and versatile ingredient which can replace protein virtually in any food, for example animal or plant protein in different snacks and beverages, noodles & pasta, or bakery products and spreads. Solein contains all the essential amino acids, and it can also be used as a fortifier to complement the nutritional profile of various foods: it can be a source of iron, fiber and B vitamins, and it can also bring different techno-functionalities into food products.

Solein is exceptionally functional: it vanishes into foods and doesn't change the taste of familiar, everyday food products. It is gluten-free, GMO-free, dairy-free, soy-free and vegan, and it does not contain known allergens.

Solein received its first novel food approval in Singapore in the end of 2022, and Solein has been available there in limited-edition test marketing products. In September 2024 Solein obtained the self-affirmed GRAS status in the United States, opening the doors to enter a completely new market. Solein is now available to be sold also in the US, and the company is able to start the first commercial steps there during the year 2024.

## **About Solar Foods**

Founded in 2017 in Finland as a spin-off from the work done at VTT Technical Research Centre of Finland, Solar Foods is working on the food revolution by combining foodtech with cleantech.

Solar Foods' first commercial-scale production facility Factory 01 started operations in April 2024. The maximum production capacity of the facility is 160 tons per year, which is the same amount as a 300-cow dairy farm would produce milk protein or 50 000 chickens would produce egg protein in a year. Beyond Solein, Solar Foods is researching and developing other potential products that the company's technological platform could create.

While Solar Foods' main focus is on helping transform the food system on Earth, the company also looks to help humanity reach the stars. Solar Foods' Space & Resilience business researches and develops the possibilities of producing Solein in outer space.

Solar Foods is listed on the Nasdaq Helsinki First North Growth Market Finland marketplace.

### **Additional information:**

Maria Rämö, Communications and Engagement Manager, [maria@solarfoods.com](mailto:maria@solarfoods.com), tel. +358 10 579 3283

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