Duckweed can go on the menu

The European Food Safety Authority (EFSA) gave its official approval in February 2025 for various species of water lentils, better known as duckweed, to be used for production and human consumption as a vegetable in the EU. The approval follows almost ten years of research by Wageningen.

Researcher Ingrid van der Meer submitted the approval application to EFSA herself. 'We had to provide an extensive dossier proving that the water lentils can be grown using hygienic and sustainable methods and that they are healthy and safe to eat.' Greenhouse cultivation was set up for the research and the plant was analysed in detail, looking at such aspects as the protein and starch content, the amount of minerals and the presence of pathogens, allergens, pesticides and toxins. Then the digestion, health effects and perceived flavour were studied using test subjects.

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For example, a taste panel tried various dishes, including soups and hotpot. 'Water lentils have a slightly nutty flavour and quite a bite, despite being so small.'

According to Van der Meer, water lentils can play a key role in the protein transition, the effort to increase the share of proteins from plant products in our diets at the expense of animal proteins. 'They contain a lot of vitamins and minerals, and they have a good protein profile that scores well for the essential amino acids. A particularly interesting feature of water lentils is their exponential growth, which leads to very high yields per hectare. They are cultivated in a closed environment in shallow water. Cultivation therefore does not require farmland or pesticides and relatively few nutrients are needed.'

Van der Meer is working on projects to get companies and consumers excited about water lentils, and she is studying ways to package and store them. 'You could sell them fresh, or as deep frozen blocks, or incorporated in products such as pesto, soup and ravioli. Now it is up to the food industry to decide what to do. It would be wonderful if we could have water lentils on sale in supermarkets in a year's time.'

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