



Print your own food

WUR and TNO are going to work with the food industry to print food for the ministry of Defence and for COPD patients.

The project in question (called Imagine) is all about personalized food. At present, people with special dietary needs have to make do with dietary advice.

The next step is 3D printing of 'personal' food. A 3D printer makes the product according to a personalized recipe.

A consortium of WUR, TNO, food companies and the ministry of Defence are going to work on this idea in the coming three years. The aim is to design such a printer with accessories, and then to test the

'Example of added value is printing fresh food in a submarine where space is scarce'

machine, says project leader Martijn Noort of Food & Biobased Research.

A long process at the ministry preceded the project. 'In that process, various scenarios were identified in which 3D-printing food could have added value,' explains Noort. 'For producing fresh food in a submarine where space is scarce, for example. Or a snack to keep fighter pilots alert.'

'One of the concepts has been worked out down to the level of a recipe for a product,' continues Noort. 'To what extent can we stretch the recipe by varying the composition of carbohydrates, proteins and fats, while keeping the product printable and tasty? We have even done the first consumer study on that.'

As well as the Defence ministry, the printer is also being tested for COPD patients in a hospital. Besides WUR, TNO and the ministry of Defence, others involved in Imagine are the GEA Group, Solipharma, Tate & Lyle and General Mills. Imagine is being developed within the Digital Food Processing Initiative of WUR, TNO and Eindhoven University of Technology. RK