

Hindu Business Line

Researchers to produce dairy products from yeast instead of cows

[Prashasti Awasthi](#) Mumbai | Updated on January 11, 2021 | Published on January 11, 2021



Researchers at Tel Aviv University are soon going to introduce a method where dairy products can be produced from yeast instead of cows.

Behind this development is Professor Tamir Tuller from the Biomedical Engineering Department of the Iby and Aladar Fleischman Faculty of Engineering at Tel Aviv University.

Together with food tech entrepreneur Dr Eyal Iffergan, Tuller established the startup company Imagindairy, which intends to produce cow's milk from yeast.

This comes when researchers scramble for milk substitutes as dairy farming has caused damage to the environment as well as to human health.

Also read: [Mother Dairy's revenue grew by 9% in FY19-20](#)

Professor Tuller explains that the goal of Imagindairy is to produce milk with all the important nutritional values of animal milk, and with the same taste, aroma, and texture, but without the suffering that cows endure, and without damage to the environment.

Imagindairy's milk and cheese products will actually be much healthier than milk that comes from animals since it will not contain cholesterol, lactose, or somatic cells.

Professor Tuller said in a statement, "Our startup also includes food engineers and food experts from the Strauss Company. Currently, they are trying to take milk proteins from yeast and produce cheese from them. This is a long process of improvement - of productivity, taste, and, of course, of the price. This product is not a milk substitute like almond or soy milk."

He added, "We plan to produce dairy products that will be identical to products that come from animals by introducing the yeast genome the genes that code for milk development in cows."

Also read: [After battling a volatile 2020, dairy players pin hopes on recovery this year](#)

Among other things, these models are used to make the production of heterologous proteins (proteins coded by genes that come from another organism) more efficient and thus cheaper.

Professor Tuller explained, “The genome of every living creature contains genes that encode the recipe for making chains of amino acids that make up proteins. However, it also contains information that encodes the complicated process that is known as ‘gene expression’ – the timing and pace of the creation of the proteins.”

“Gene expression is the process of turning information stored in “inanimate” DNA into proteins that are the ‘essence of life’ and are a major ingredient in every living thing that we know, from human beings to the coronavirus to cow's milk,” he added.

The findings of the study were published in the journal *News Medical and Life Sciences*.