

remilk.[®]



To the Milky Way and beyond!

**Founded in
2019**

By Aviv Wolff
and Dr. Ori Cohavi

\$150M Raised

**Commercial
Scale**

Production in several
locations around the world

100 Employees

**Commercial
Agreements**

With some of the world's
largest food companies

**Regulatory
Approvals**

US, Israel, Singapore



Real Dairy.
No Cows.



An inevitable disruption.

Our planet is enduring an unprecedented crisis caused by our food systems.

Drinking 1 glass of milk a day, every day, for a year (200ml)



Adds up to an annual footprint of:

Land

2 tennis courts (652m²)

Water

703 showers (45,733 liters of water)

Emissions

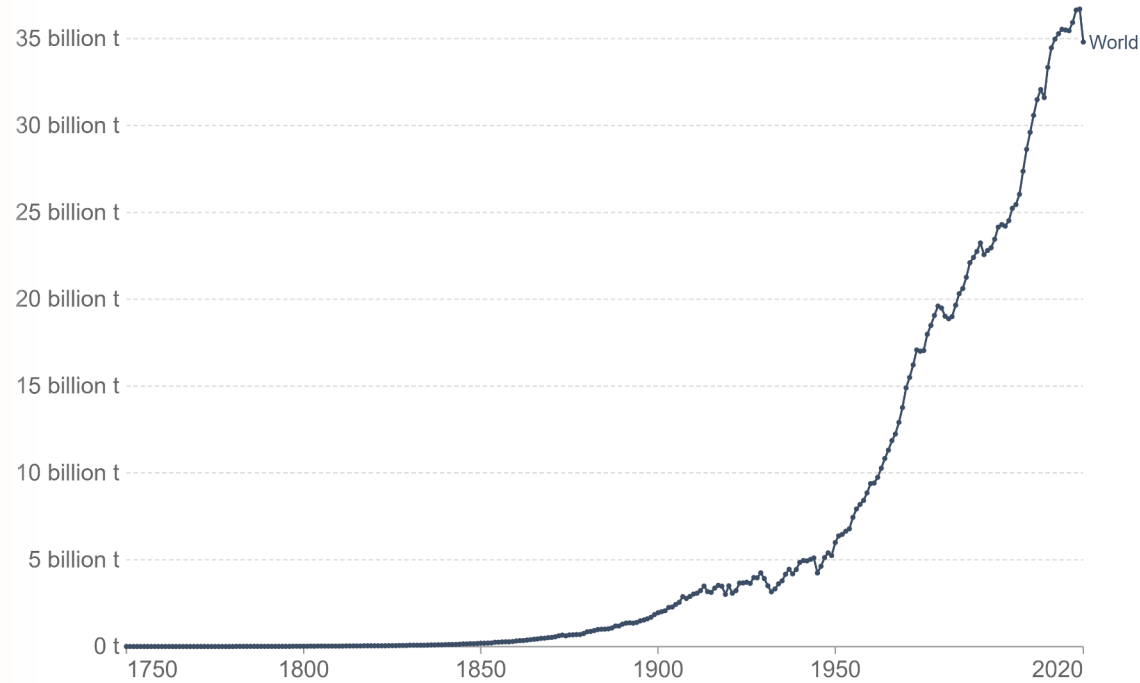
585 miles in your car (229kg GHG)

Combating climate crisis.

Annual CO₂ emissions

Carbon dioxide (CO₂) emissions from fossil fuels and industry. Land use change is not included.

Our World
in Data



Source: Global Carbon Project

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/ • CC BY

Source: <https://climate.nasa.gov/global-warming-vs-climate-change>, <https://climate.nasa.gov/effects>,
<https://www.un.org/en/climatechange/net-zero-coalition>,
<https://www.mckinsey.com/~media/mckinsey/industries/agriculture/our%20insights/reducing%20agriculture%20emissions%20through%20improved%20farming%20practices/agriculture-and-climate-change.pdf>

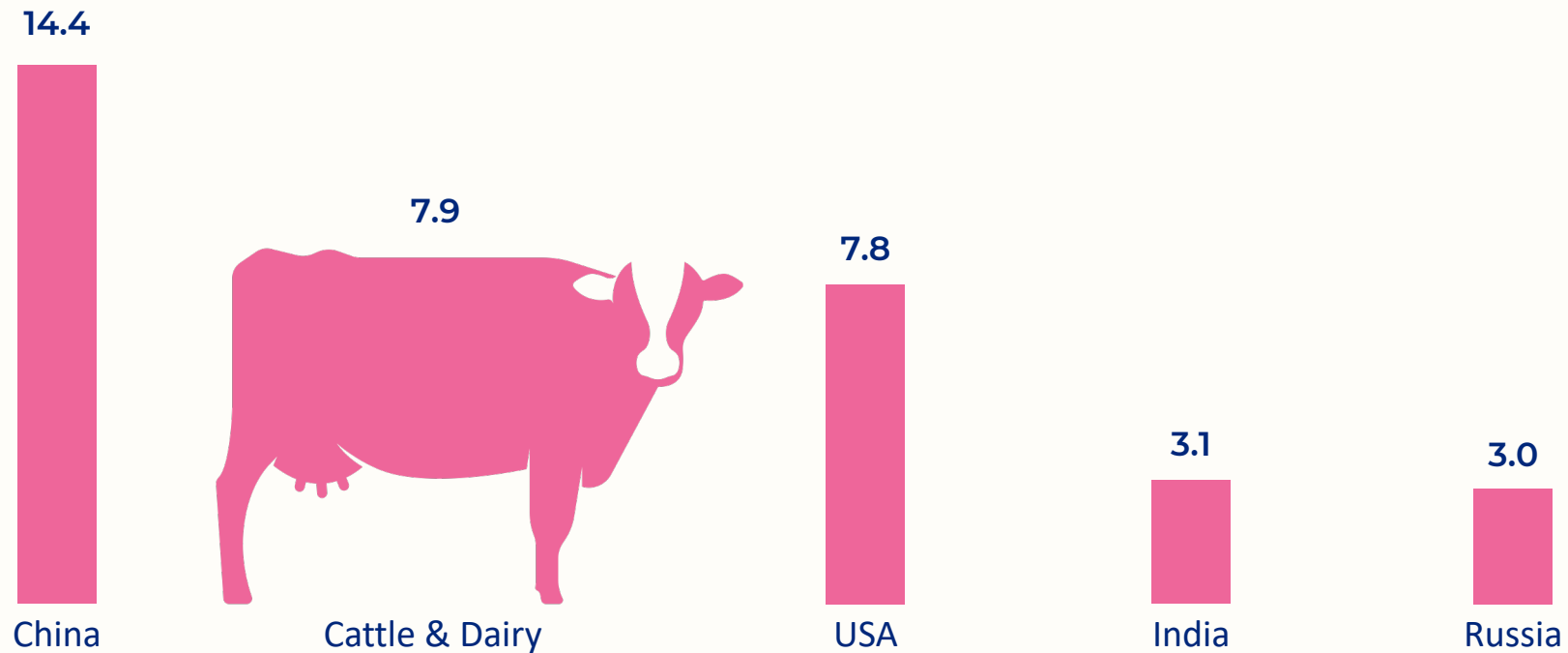


Emissions.

Combating climate crisis.

Livestock farming is the **second highest** source of emissions, greater than **all forms of transportation** combined, second only to energy.

2016 GHG emissions by country (top three GHGs), GtCO₂e



McKinsey
& Company

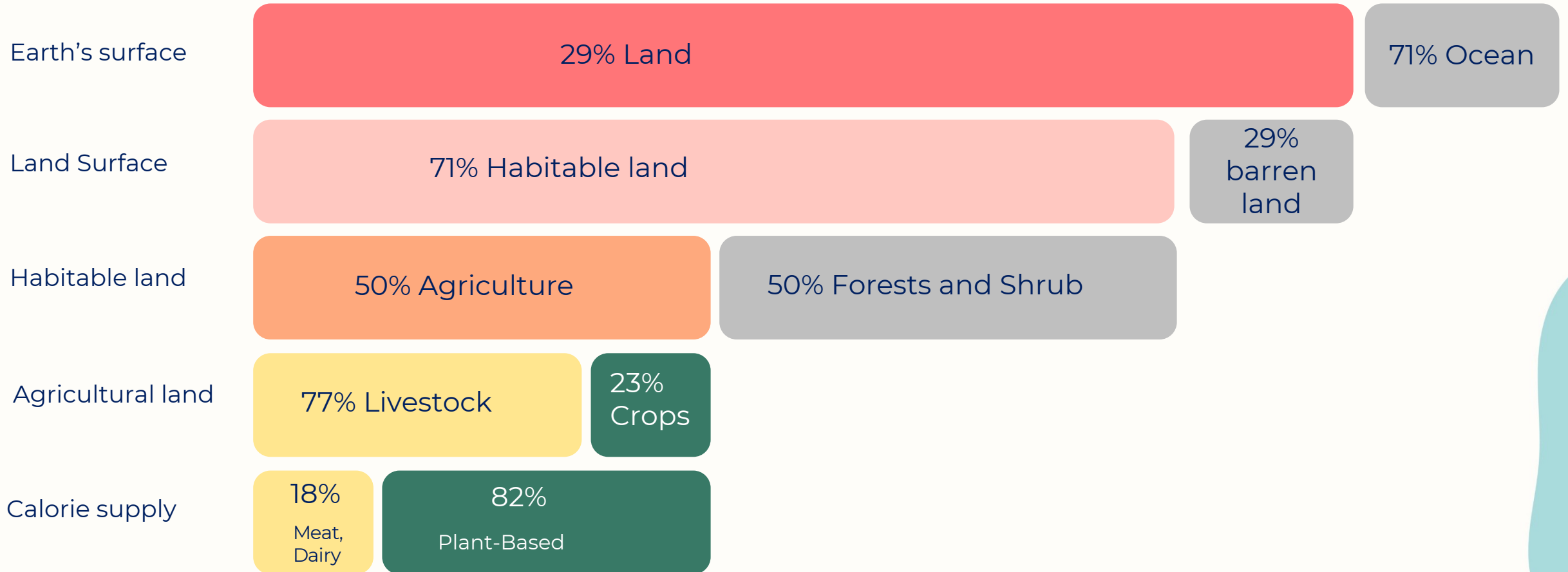
Source: <https://climate.nasa.gov/global-warming-vs-climate-change>, <https://climate.nasa.gov/effects>, <https://www.un.org/en/climatechange/net-zero-coalition>, <https://www.mckinsey.com/~media/mckinsey/industries/agriculture/our%20insights/reducing%20agriculture%20emissions%20through%20improved%20farming%20practices/agriculture-and-climate-change.pdf>



STRICTLY PRIVATE AND CONFIDENTIAL

Land.

Half of the World's Habitable Land is Used for Agriculture.



Source: <https://ourworldindata.org/land-use>, 2019



STRICTLY PRIVATE AND CONFIDENTIAL

Water.

Using water to produce ... mostly water?

628.2 liters of water are used to produce 1 liter of cow's milk.



87% Water

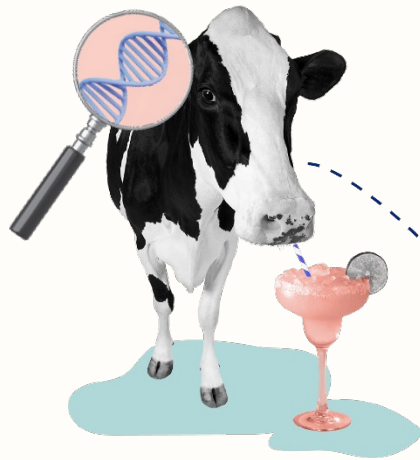
**13% Fats, Proteins,
Sugars, & Minerals**

Remilk dares to rethink dairy.

Leveraging biology for mass production of dairy.

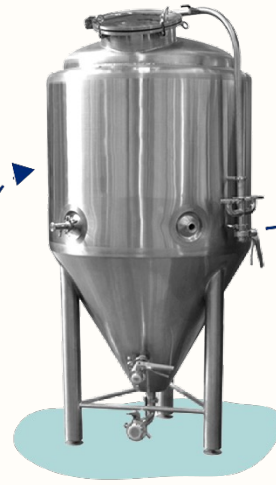


Reimagine the process.



Transformation

Cow-milk genes are inserted into Remilk's modular protein expression platform and are then transformed into a microorganism.



Fermentation

The transformed cells are fermented under tightly controlled conditions to produce the highest possible yield.



Isolation

Remilk's platform enables highly efficient expression for the simplest, most scalable isolation of the proteins.



Formulation

Proteins are dried and combined with top natural ingredients to create premium dairy products.



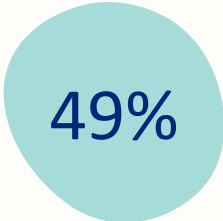
Same, but better.

Numerous tastings have proven Remilk products to be indistinguishable from regular dairy products.

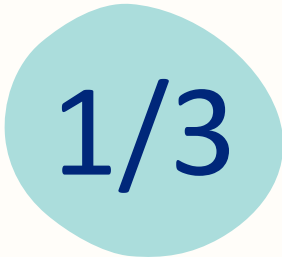


Animal-free foods are booming.

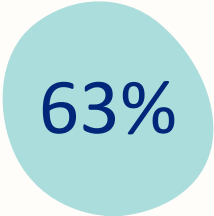
Customer dietary preferences drive exponential growth.



of Gen-Z consumers are ashamed to order dairy in public ¹



of the U.S. population identifies as flexitarian ^{2,3}



are trying to incorporate plant-based foods into their diet ³



Reasons for dairy avoidance ⁴

- 63%** Lactose intolerance and dairy sensitivity
- 24%** Avoiding growth hormones
- 24%** Reducing saturated fat consumption

- 20%** Animal rights/cruelty issues
- 18%** Avoiding antibiotics in dairy
- 15%** Environmental reasons

¹ <https://news.arlafoods.co.uk/news> ² Flexitarians are defined as consumers who eat a mostly vegetarian or plant-based diet with the occasional inclusion of animal-based products; ³ GFI.org (March 2019); ⁴ Cargill (September 2018).

Outperform.

A superior product, in every way.

Remilk V.S Traditional Dairy



100% animal-free.



Lactose, cholesterol, growth hormones, and antibiotics free.



Fundamentally more resource-efficient.

- 1% of land
- 3% of GHG emissions²
- 4% of feedstock¹
- 10% of water¹

Remilk V.S Plant-Based



No compromise in taste.



Nutritious and rich in protein.

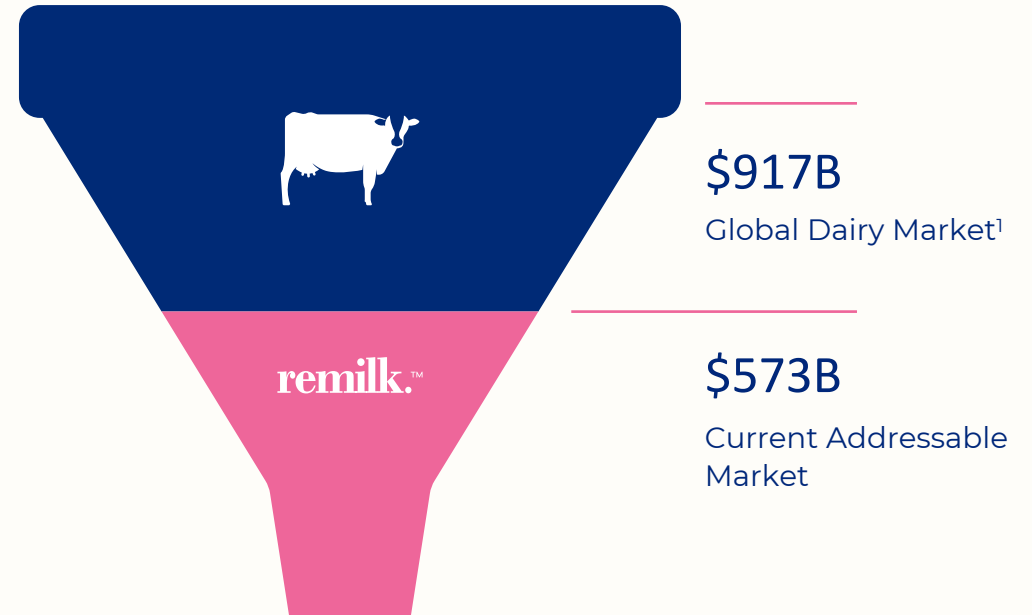


Product functionality, allowing every imaginable dairy product.

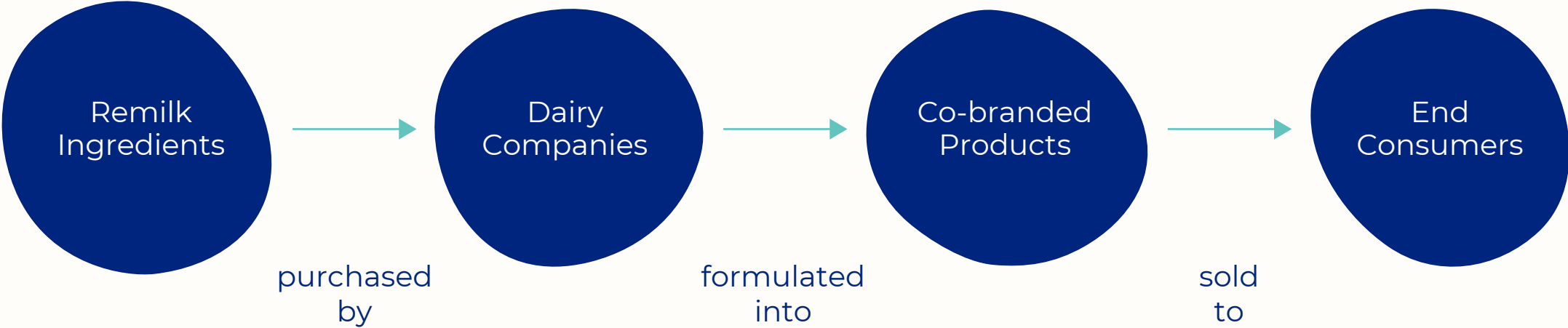
¹ RethinkX (September 2019); ² WSP USA (February 2021).

The dairy market.

Customer dietary preferences drive exponential growth.



How we work with our partners.



Introducing the next generation of dairy.



Sustainable

Easy on our planet and respectful of its precious resources.



Nutritious

Clean and healthy, without dairy's nasty downsides.



Kind

Real dairy without a single animal cell.



Reliable

Ensures a stable supply of healthy, clean dairy 24/7 all year round.



MODULAR LAYERS OF PROTECTION

1. Genetically-Modified-Organisms (GMOs) – New “Composition-of-matter”
2. Promoter/Enhancer/Helper factor & Gene of Interest (GOI) & GMOs – Specific pairings
3. Protein isolation/purification/extract – Methods, Products & by-products
4. Intermediate products, mixes, compositions, formulations – Technological bottlenecks
5. Post Translational Modifications (PTMs) – Influence on protein identity/behavior
6. Product composition vs. Product formulation – Ingredient list vs. ingredient relationship
7. Innovative Product vs. Traditional Product – Organoleptic & Rheologic, Characterization & Comparison



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Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(54) Title: METHODS OF PRODUCING ANIMAL-FREE CASEIN COMPOSITIONS, CASEIN COMPOSITIONS AND USE OF SAME

(57) Abstract: The present disclosure provides a method of artificially-producing casein micelles under non-natural conditions. Also provided by the present disclosure are casein micelles and casein compositions comprising the casein micelles. Uses of the casein micelles and/or compositions are also disclosed.

WO 2022/038601 A1



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(71) Applicant: **RE-MILK LTD.** [IL/IL]; 6 Ilan Ramon St., Ness Ziona 7403639 (IL).

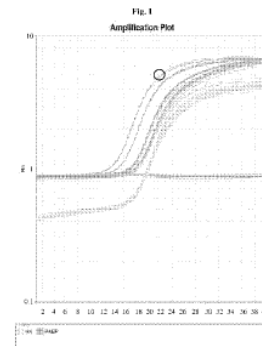
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(54) Title: DAIRY ANALOGUES COMPRISING BETA-LACTOGLOBULIN



(57) Abstract: The present invention provides transgenic yeast microorganisms useful for production of high amounts of recombinant beta-lactoglobulin (BEG), and isolates of the BEG obtained from the transgenic yeasts. The invention further provides dairy analogue food products comprising BEG, such as recombinant BEG, as the main milk protein, and methods for producing such dairy analogue food products.

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Thank you.

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