

The background of the slide is a close-up, high-angle shot of numerous white, oval-shaped eggs. The eggs are packed closely together, filling the entire frame. They have a smooth, slightly glossy surface with some subtle variations in tone and texture, suggesting a natural, organic setting. The lighting is soft and even, highlighting the curves of the eggs without creating harsh shadows.

What ingredient startups need

(and what they get)

Corjan van den Berg
Sept 14, 2022 IFFI

Content.

- Who we were
- What (ingredient) startups need
- Who we are

Who we were.



Edgar Suarez Garcia, PhD
CTO (aka back-office)

Msc Chemical Engineering
PhD Bioprocess Engineering



Corjan van den Berg, PhD
CEO (aka front-office)

PhD Bioprocess engineering
Bsc Food tech

“A really well-balanced team!”



The facts.

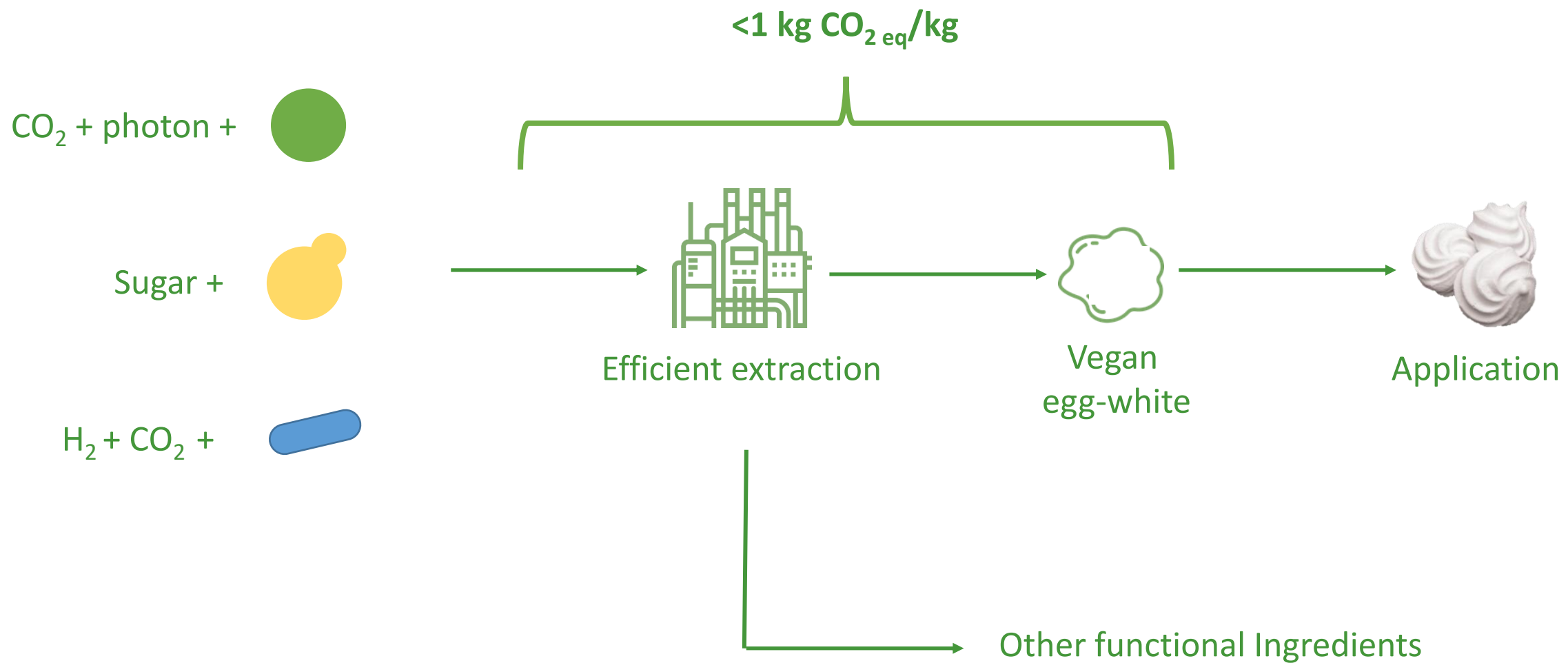
Currently, the total protein ingredient market consists of 70% of proteins from animal origin and 60% of it is egg-white.

Egg ingredients represent a global market size of 20 Bn\$.

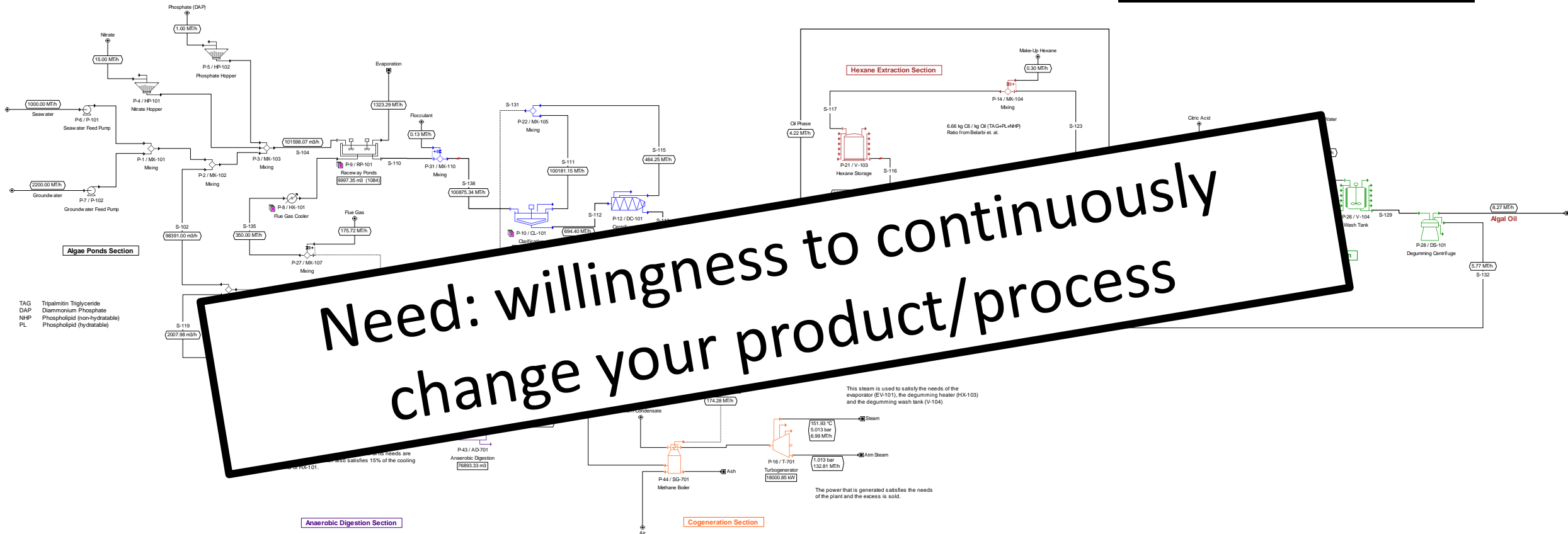
Used in meat replacers, bakery products, sauces and others due to technical functionalities.

Huge environmental impact:
40 kg CO₂/kg egg-white.

What we do.



Typical SCP processes



Process summary: 32 unit operations



Not happening anytime soon!!

Challenge: funding your ingredient start-up

Need: funding your ingredient start-up

Nice brainfart,
let's do an IPO!



Show me the business case,
scaleup strategy,
professional well-balanced
team, patent, proven
demonstration runs, first
customers on-boarded and
you'll get 100k!



Typical Capex costs during scaleup

50-300kEur

Lab scale

200-1000kEur

Pilot scale

2-10MEur

Demo scale

10-50MEur

Commercial scale



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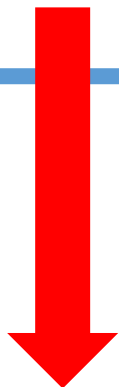
10-50MEur

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Pilot scale

Demo scale

Commercial scale



?

Cheap lab-space



WAGENINGEN
UNIVERSITY & RESEARCH



**prof.dr.ir. RH
(Rene) Wijffels**



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So how to go about piloting?



**Need: Be a penny pincher! ALWAYS
look for the cheapest option.**



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How to go about demonstrations?

Need 4: Rent high capex stuff as much as you can (preferably using subsidies)!



RUITENBERG
INNOVATION AS MAIN INGREDIENT

EFRO
EUROPEES FONDS
VOOR REGIONALE
ONTWIKKELING



Europese Unie

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Europees Fonds voor Regionale Ontwikkeling

Progress so far

So far, we have been able to move **from lab scale to full industrial equipment in 18 Months**



Jan
2020

FUMI Ingredients is
officially created
1 L batch
~10g product

July
2020

Start of FUMI & ABI joint
development agreement
10 L batch
<500g product

Dec
2020

Small-Scale Feasibility
Assessment
1.000 L batch
50 kg product

Oct
2021

Contract-Manufacturing
Feasibility Assessment &
Commercial validation

10.000 L batch
400kg product

- > **In 18 months**
we were able to scale the
process x10000
- > **Product quality**
has step changed and is
confirmed by customers

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Europees Fonds voor Regionale Ontwikkeling



Through **our partner ABInBev**, we secure supply and launch our first **revolutionary brewers' yeast ingredient solutions**



Centuries of
Brewing Heritage



Deep
Fermentation
Know-How



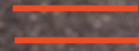
Highest Quality
Natural Yeast



Global
Footprint



FUMI
INGREDIENTS




revyve



We are Revyve

We are revyve:

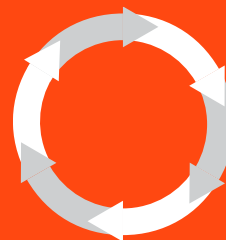
We create **simple, sustainable, microbial ingredients** that unlock the future of food



Our proprietary process enables **uniquely functional ingredients**



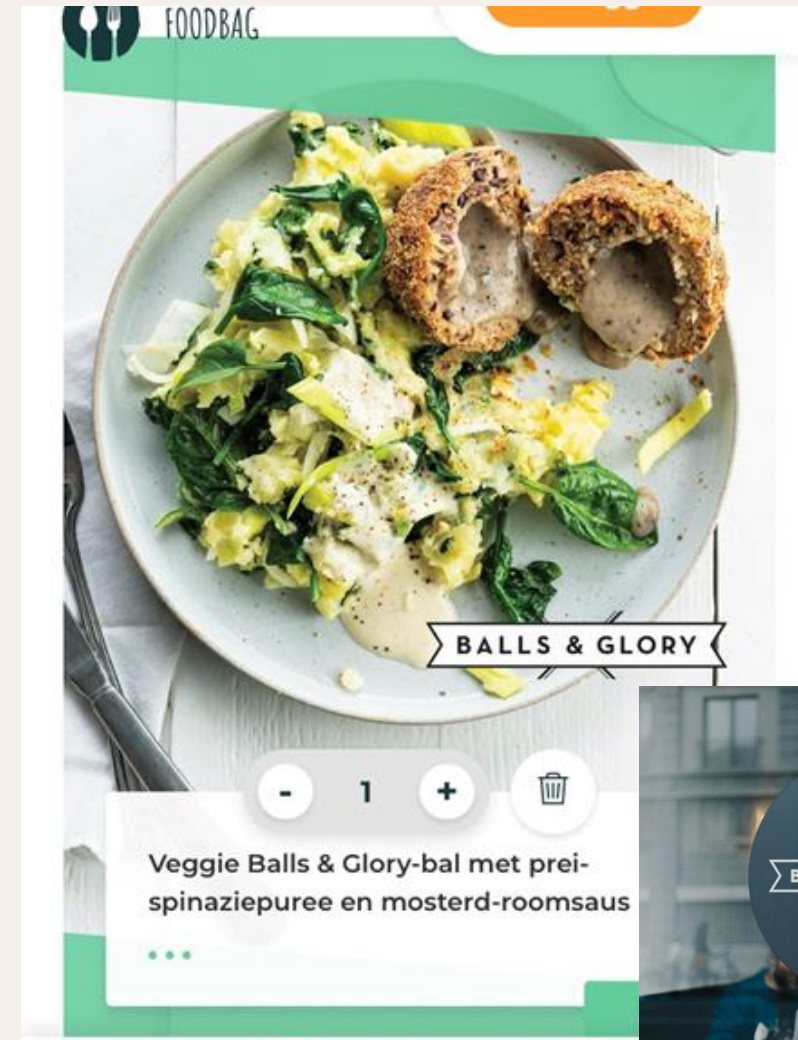
Our minimal processing philosophy is the key to the **healthy, clean label products** consumers desire



Our circular economy approach delivers **unmatched sustainability, scale and speed to market**

Progress so far

We launched
product in market in
food service through a
collaboration with a
famous TV Chef



The vegan meatballs were sold at the Tomorrowland festival, which is the Belgium's largest music festival.



Team

We have a **diverse team**
united by a common
dream to change our food
system



CEDRIC VERSTRAETEN

Founder & CEO

15 years in manufacturing, supply chain and innovation @ AB InBev and P&G



JORDANIA VALENTIM

CCO

>15years in Sales, Product Development and manufacturing @ Fonterra, Givaudan & DSM



EDGAR SUAREZ GARCIA

CTO

Phd. in Bioprocess engineering @ Wageningen University and >10 years in Biorefinery processing. Co-founder FUMI Ingredients.



CORJAN VD BERG

Growth Officer

Post-Doc in Industrial Biotech @ Delft University and >15 years in Algae processing. Co-founder FUMI Ingredients



AYNA ARORA

Business Development

Pastry Chef and food entrepreneur. 5 years in food tech



THIBAUT DE CONICK

Business Development

Business Development Bio-Engineer and brewer. 5 years in R&D @ AB InBev



JISCA DIEDERIK

Product Development

Master in Food technologies @ Wageningen University



LIAM MCCARTHY

Engineering

Chemical Engineer with >10 years experience in engineering and CAPEX management @ Cargill & Sedamil



Calvin Lo

Process scientist

PhD. in Biotech @ Wageningen University



VEERLE LUYCKS

Project Manager

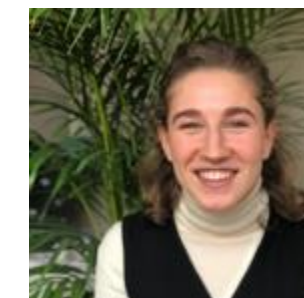
Project Manager 10 years experience in project management, supply & procurement @ AB InBev



ERWIN JANSSEN

Project Engineer

Msc. in Biotech & Process Engineering Bioprocessing engineering



SOPHIE BAGCHUS

Food Technologist

Msc. Food & Technologies and Msc. Nutrition and Health @ Wageningen University.

We are revyve

