# CO FRESH

Oyster mushroom value chain by Pilze-Nagy Ltd.

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Innovations in Agri-food, Nitra, Slovakia Tuesday, 6<sup>th</sup> February 2024

co-fresh.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101000852

#### CO•A•FRESH

## Pilze-Nagy Ltd.

The largest oyster mushroom producer and exporter in Central EU, located in Kecskemét, Hungary

Started its operation in early 1990s

#### Core activities:

- producing substrate for oyster mushrooms,
- growing oyster mushrooms,
- distributing fresh oyster mushrooms on the wholesale and retail markets,
- generating electric power and heat energy sourcing from biogas production





**Circular oyster mushroom production** 

#### Product #4:

#### Digestate:

- Returned back to the field
- Securing nutrient recycling
- Closing the loop

#### Product #3:

#### Biogas:

- Renewable
- Heat is used to dry mushroom
- Electricity sold to the grid



#### Product #1:

#### Mushroom substrate:

- Pasteurized, inoculated and wrapped blocks of wheat straw
- Organic version also

#### Product #2:

#### Oyster mushroom:

- Fresh, dried and processed into pate
- High nutritional value
- Organic version also

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## Oyster mushroom value chain: CO-FRESH project motivation

Expanding the value chain and network with novel products and markets by improving efficiency and sustainability





## Challenges

No direct reach to the consumer and brand is not conveyed – selling fresh oyster mushroom under the brand of the retail

Anomalies of the fresh vegetable market – price and conditions dictated by the retail, short shelf life, quick and adaptive logistics

**Pressure on the packaging** – need to update the packaging due to possible legal reasons and public opinions





## Solutions

#### **Solution 1**

Approach new markets 1 – new recipes and products for the HoReCa sector

#### **Solution 2**

Approach new markets 2 – branding and communication strategy for the products destined for the HoReCa sector

#### **Solution 3**

Upgrade packaging technology – new packaging solutions for the fresh oyster mushroom



## **Innovation 1:**

New recipes and processed food for Horeca based on oyster mushroom

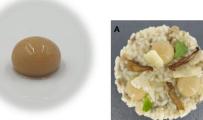
## **Innovation leader:**

**PILZE & CNTA** 





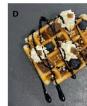


















CNTA developed a set of new ingredients and recipes **based on oyster mushroom** – spherification and frozen aerated rocks were shortlisted together with PILZE

**PILZE started scale-up for spherification** – trials and improvements of the recipe still ongoing

In cooperation with players of HoReCa PILZE – development of processed food for the HoReCa sector which is easy and quick to serve and finalize







## **Innovation 2:**

Responsible mushroom consumption campaign with the Horeca sector

## **Innovation leader:**

**UHOH & PILZE** 





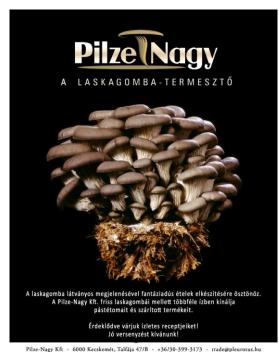
UHOH suggested two types of branding strategy – jointly with PILZE benefit centred was selected

**UHOH validated it in a consumer survey** – generally positive answers with higher purchase intention and innovativeness





PILZE established links to HoReCa – two experimental communication campaigns launched, first with Heroes of Sustainable Dining, second with SEF (Chef) Club organizing Meal of Hungary competition with oyster mushroom now an obligatory ingredient









## **Innovation 3:**

Low carbon packaging technology

## **Innovation leader:**

**CNTA & PILZE** 

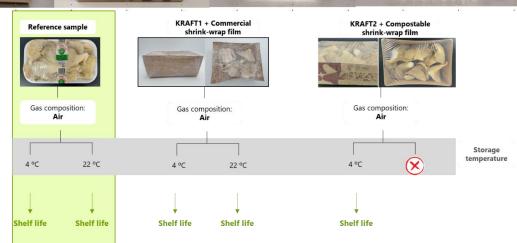




KRAFT1 KRAFT2 APET MAPET

CNTA carried out market research and identified potential sustainable solutions for PILZE – jointly with PILZE four packaging were shortlisted

CNTA performed packaging and storage tests – PILZE repeated the test in own packaging line







## Our value proposition

Creating more value-added products under own branding with enhanced sustainability and efficiency.



## Thank you!

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