



## **DigiEduHack Solution**

### **Lisbon - Hack The Food System**

### **Challenge: Lisbon - Hack The Food System Challenge 2020**

## **OrangeBee**

### **Alert consumers and industries to food waste and promote solution**

OrangeBee is a food product based on sustainability. It's a fermented vegetable preparation that values parts of food that are culturally rejected and have the aim to encourage changes in industrial production and in the consumption habits of a heterogeneous consumer audience.

### **Team: OrangeBee**

#### **Team members**

Bárbara Vitoriano and Adelaide Olim

#### **Members roles and background**

Bárbara Vitoriano, Multidisciplinar Designer

Adelaide Olim, Food Biotechnologist

#### **Contact details**

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## **Solution Details**

### **Solution description**

We believe that, by adding innovative and sustainable food options in the market, related to

recognized and traditional flavors and products, we can change industrial and domestic behaviors.

OrangeBee is a differentiating food product that values parts of food from the Mediterranean culture that are normally and culturally wasted, but they're in perfect condition, safe to be eaten, and can be delicious!

It is a fermented product, also known as a vegetal alternative to yogurt, that provides a mixture of textures with a fruity flavor. It is made from byproducts of Portuguese food industries: orange peels, aquafaba (boiling water from the most consumed beans in Portugal: chickpeas, black beans, and red beans), and yacon syrup, made from the fragile roots of yacon. The product is also sprinkled with bee pollen, an ingredient that is not known by the common consumer but has a lot of health benefits, such as the source of antioxidants.

The packaging follows the sustainable concept of OrangeBee: a glass container, which makes it reusable and recyclable, a biodegradable cover made of potato starch, a byproduct of the chips industry.

Regarding the pedagogical side of the project, the packaging contains collective and entertaining information on the back, that provides to the consumer a gradual interest with parts of foods that are normally rejected at home. This interaction between the consumer and the concept of OrangeBee aims to change domestic behaviors by explaining the origin of the ingredients, some curiosities, and simple practices to transform them into delicious meals. In this way, OrangeBee contributes to the sustainable management of food resources, promotes the informed consumption of food, and creates people's awareness of the impact that food has on society and on the planet.

## **Solution context**

Food waste is a huge contemporary problem. We realized that there are parts of food that can be used instead of being thrown away both at an industrial and domestically. OrangeBee is a new innovative and sustainable option in the market changes the way the industries look at this waste, and communicating this problem, and giving suggestions to solve it.

## **Solution target group**

The OrangeBee product was created based on the growing market of consumers concerned with the sustainability of food products and curious people that are available to try innovative options, the market for intolerants to gluten and lactose, and also for consumers that follow a vegetarian diet, however, it covers a heterogeneous and varied target audience, from kids to elderly, and it is reflected on the graphic image of the product and the communication that is simple and use figurative and illustrative characters of the ingredients.

## **Solution impact**

The impact is reflected not only in the secondary circuits inspired by the circular economy that we created with various local companies so that they provide us with by-products, but also at the consumer's life, and how they look at their own food waste at home, giving ideas of how to enjoy, prepare and transform them into something delicious.

## **Solution tweet text**

An innovative and sustainable food production that values parts of food that are culturally rejected and has the aim to encourage changes in industrial production and in domestic consumption habits.

## **Solution innovativeness**

The product is original by itself for the mixture of the ingredients that are uncommon. By our research, there's no other vegetal alternative to yogurt that uses aquafaba as a base ingredient, bee pollen as a topping, or orange peels in the constitution.

It is also original by the communication that is associated with the brand because the goal is to encourage a change in eating habits in the way people manage their food waste at home. The package contains collectible cards hidden on the back, that tell the origin of parts of food that are usually wasted and presents delicious gastronomic solutions on how to enjoy them.

## **Solution transferability**

We believe that the solution of using culturally wasted parts of food on new products can and should be used by the food industry, but also at home. There are a lot of other ingredients that are wasted daily and can be consumed and it is important to alert people and industries to the fact that, if these foods are fit for human consumption, they can be transformed into new products.

## **Solution sustainability**

In the mid-term, our plan is to start producing this vegetable preparation and increase production by establishing contact with more suppliers. In a long term, we want to develop more sustainable products for the brand, using the same byproducts ingredients and maybe other ones. We believe that the introduction of this kind of product in the market will change the perspective of food industries about food waste, changing behaviors not only in industries but also at our homes.

## **Solution team work**

The way to solve big problems such as food waste, in our understanding, is important to develop and discuss ideas through different areas of study, and that's why our team is interdisciplinary, joining together the knowledge of Design with the Food Biotechnology.

This interdisciplinary team helped us to answer lots of questions that appear in the process of developing this product, not only in the formulation phase but also in the concept, communication that we wanted to transmit, and business plan.