

# **NEWSLETTER NO. 5**

**"Let's produce new functional bakery products for people with digestive disorders" - *FBforPDD***

**Project no.: 2019-1-RO01-KA202-063170**

**Programme: Erasmus+ 2014-2020**

**Key Action 2: Strategic Partnership Projects for vocational education and training**

**Implementation period: December 2019 – November 2021 (+ 9 months)**

**Partners:**

- **PATRONATUL ROMÂN DIN INDUSTRIA DE MORĂRIT, PANIFICAȚIE ȘI PRODUSE FĂINOASE ROMPAN (Coordinator)**
- **KERRY INGREDIENTS (IRELAND) LIMITED (P1)**
- **SZEGEDI TUDOMANYEGYETEM, UNGARIA (P2)**
- **UNIVERSITA DEGLI STUDI DI BARI ALDO MORO, ITALIA (P3)**
- **UNIVERSITATEA DE ȘTIINȚE AGRICOLE ȘI MEDICINA VETERINARĂ A BANATULUI REGELE MIHAI I AL ROMÂNIEI DIN TIMIȘOARA ROMANIA (P4)**
- **UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE "CAROL DAVILA" DIN BUCUREȘTI, ROMANIA (P5)**

During the project, activity A3 – Elaboration of handbook “Manufacturing functional bakery products” was unfolded during the period October 2020 – November 2021. Following this activity the handbook “Manufacturing functional bakery products” was elaborated and it addressed the technological specialists in the bakery industry and nutritionists.



## **Chapter 1. The importance of functional bakery products consumption**

1.1.Functional food and its role in human health

1.2.Cereals and cereal derivatives - nutritional value, consumption recommendations

1.3.The role of cereals in promoting and maintaining health

1.4.The role of dietary fiber in the diet

## **Chapter 2. Types of functional bakery products**

2.1.Types of functional bakery products

2.2.Analysis of the assortment range of bakery products with a functional role

2.3.Types of functional bakery products identified in the partner countries

### **Chapter 3. Newly developed functional bakery products depending on the digestive disorders**

#### 3.1. Functional bakery products with digestive disorders:

Gastroesophageal reflux

Celiac disease

Ulcerative colitis

Indigestion

Ulcers

Irritable bowel syndrome

#### 3.2. Newly developed functional bakery products produced in present depending on the digestive disorders

### **Chapter 4. Manufacturing technology for bakery products with added soluble fibre**

4.1. Dietary fibers: description, health benefits, functionalities, and application in bakery

4.2. Application of acacia fiber (Emulgold) in white tin bread

### **Chapter 5. Technology for the manufacture of bakery products with the addition of probiotics for the regulation of the digestive system**

5.1. Probiotics used in baking: general, role, use

5.2. The role of intestinal microbiota

5.3. Technology for the manufacture of bakery products with GanedenBC30

### **Chapter 6. Technology for manufacturing bakery products with low sugar and fat content**

6.1. Sugars in bakery products

6.2. Fats used in the manufacture of bakery products

6.3. Technology for manufacturing low-sugar bakery products

6.4. Technology for manufacturing low-fat bakery products

The handbook was disseminated at the multiplier events organized during the project's implementation.

Also during the project, activity A5 – Elaboration of Guideline for professionals regarding “Manufacturing functional bakery products” was unfolded.



- Responsible for A5: SZEGEDY TUDOMANYEGYETEM(P2)
- **Period: Month 24 - Month 30 of implementation**
- December 2021 – May 2022

The guideline developed in the project is addressed directly to the professionals in this sector from the partner countries.

Training professionals is extremely important in a field in continuous development worldwide. The process for gaining knowledges, abilities and skills necessary for completing certain tasks at the workplace is essential, the final purpose being that of improving the work quality of employees. By increasing the training level of employees we wish to obtain consistent results of their work.

In this moment, in none of the partner countries such a material doesn't exist, specially destined to professionals employees from the sector of manufacturing flour products in Romania, Italy, Hungary and Ireland.

The guideline is innovative both for Romania and also for the foreign countries. The project idea came from the need to have a guideline destined to professionals in the bakery industry that in present have specific knowledge regarding producing bakery products, but due to the continuous and aggressive evolution of developing new technologies, permanently require training. Only through a well trained speciality

personnel we can always answer to new requirements of the population regarding the actual lifestyle, the need to consume functional foods.

The Guideline is structured as follows:

- **Chapter 1. The importance of functional bakery products consumption**
- **Chapter 2. Types of functional bakery products**
- **Chapter 3. Newly developed functional bakery products depending on the digestive disorders**
- **Chapter 4. Manufacturing technology for bakery products with added soluble fiber**
- **Chapter 5. Technology for the manufacture of bakery products with the addition of probiotics for the regulation of the digestive system**
- **Chapter 6. Technology for the manufacture of bakery products with low sugar and fat content**

