



OUR DAILY BREAD – REVAMPED

HEALTHBREAD: Naturally-enriched bakery products are good for consumers and SMEs in Europe

The project: Developing new bread products by applying advanced milling technologies, dedicated dough-fermentation and optimum baking processes

All over Europe the actual intake of dietary fibre is substantially below the recommended level of 25 to 35 grams per day for adults. Research over the last decade clearly indicates that the dietary fibre of whole grains, together with its closely associated minerals, vitamins and other beneficial compounds contributes to health. In recent dietary recommendations, cereal fibre is therefore considered a preferred source of fibre. A major shift from white to wholegrain bread would contribute to lowering the incidence of non-communicable diseases such as colon cancer, heart diseases, and type-2 diabetes.

However, most Europeans prefer the mild taste, soft crumb and crispy crusts of conventionally-processed white bread. Here, the EU funded project, HEALTHBREAD, steps in. This FP-7 project further develops the results of the predecessor project, the FP-6-funded HEALTHGRAIN project. Its goal is to produce bread products high in fibre and other bio-active compounds from grain, whilst retaining the desired sensory attributes.

The bio-active compounds are concentrated primarily in the bran and in the germ of the grain. Advanced milling technologies obtain wheat fractions high in fibre, minerals, B-vitamins and anti-oxidants and include properties such as light colour and mild taste. To improve the bio-accessibility of the bio-active compounds, long yeast fermentation processes ('slow food', 'bio-processing') are introduced. Major anti-oxidative and anti-inflammatory effects can also be reached by optimising the fermentation of the wheat fractions. Consumer demands for healthier bread options are driving these new product developments. SME bakeries can quickly adapt to these changes since HEALTHBREAD will deliver business plans to successfully market naturally-enriched bread products with the desired properties such as high volumes, crumb softness, light colour and great flavour.

The products: Fibre-rich bread loafs and rolls, easy to digest and tasty

Ensuring product-quality, safety and consistency across multiple scales, HEALTHBREAD products go beyond standard white bread or wholegrain bread products. By using specific

parts of the wheat grain kernels, breads with higher levels of dietary fibre and beneficial nutrients such as B-vitamins, minerals and anti-oxidants are being obtained. The innovative results of the HEALTHBREAD project are a range of bread products varying in appearance and taste, all rich in healthy cereal fibre, with a mild flavour. This is achieved through fractionating, applying the bio-processing fermentation, and selecting wheat types with light colour and mildness in taste and with significantly better availability of minerals for uptake in the body.

The end-users: The HEALTHBREAD brand product is first purchasable at traditional bakeries

Without compromising on the taste associated with conventional white and whole-grain breads, the HealthBread project proposes new healthy bread products for local and regional markets.

The loyal traditional consumers of SME bakeries who engage in the HEALTHBREAD project will have the opportunity to purchase the new nutritionally enriched bread products as the first end-users. Consumer groups across four countries will taste and experience the difference of choosing a healthier bread option not yet available in Europe.

The inventors: Research organisations, technology institutions, industry, craftsmen, consumer teams, communication experts and international mentoring partners

Driven by eight European SME bakeries from Austria, Germany, Italy and the Netherlands, the HEALTHBREAD project also



draws on the expertise of internationally acclaimed scientists, and industrial partners. 17 organisations joined in the two-year collaborative project linking science, innovation and craftsmanship. The project is coordinated by TNO (Netherlands Organisation for Applied Scientific Research). With the potential to impact on the economic growth of SMEs, the project will disseminate knowledge across the baking sector in Europe.

An innovative 'mentoring system' was established to link-up the knowledge-creation within local operating SME artisan bakeries, industry partners and international research institutions. Three HEALTHBREAD partners with experience in communication with international research, EU project regulations and bakeries acted as mentoring partners using their mother tongue. This management innovation may serve as a model for the successfully linking of locally operative small companies to innovative international research.

Development stage: Marketing preparation phase

A comprehensive business plan for HEALTHBREAD's eight bakeries will allow the identification of a marketing vision and illustrate a strategy with short, medium and long-term objectives. These business plans are confidential documents exclusively dealing with how these SME bakeries will be able to develop a product design, produce a marketing strategy and employ a marketing plan to enhance sales. Objectives outlined in these business plans are SMART (Specific, Measurable, Achievable, Realistic and Time framed). After the first testing phases in traditional bakeries in four countries, the brand will be launched in Europe. Details of the various locations of the HEALTHBREAD bakeries can be found on the website <http://www.healthbread.eu/>.

Policy impact: Contributing to public health and promoting innovation by SMEs

The grand challenge: Health, demographic change and wellbeing assessments in population studies consistently indicate that the consumption of cereal fibre and other valuable compounds contained in three slices of bread significantly contributes to the prevention of heart diseases, diabetes and colon cancer. For the many consumers who are not inclined to consume wholegrain bread, HEALTHBREAD has developed attractive bread products.

The project also contributed to the innovative power of SME bakeries throughout Europe. The project successfully developed innovative products by elaborating and applying scientific and technological results from a former EU-funded research project. It thus not only contributes to the EU 2020 goals of an innovative and a sustainable Europe, but also to the competitiveness of European food SMEs and the food industry.

Next steps: HEALTHBREAD manual, IPR management, 'Bakers Bundle', roll-out

On completion of the HEALTHBREAD project, the dissemination of the HEALTHBREAD manual will provide bakeries across Europe with guidelines on how to select flours and fermentation processes in order to produce naturally enriched breads, as well as strategies to reach consumers. HEALTHBREAD partners predict that over the next four years, new, nutritionally enriched 'wholegrain' and 'white' bread products will be produced across Europe. The sale of such products will provide SME bakeries with a competitive edge within the bakery sector across national and European markets.

To fully exploit the knowledge generated by the project and launch the brand, a number of IPR management and business-development concepts are being considered. One such marketing strategy includes a 'Bakers Bundle' which can be obtained from national distributors and will be made available to SME bakers across Europe. The 'Bakers Bundle' will present a package which includes a licence to sell products under the brand, the delivery of a certain number of kilograms of ingredients and an opportunity to attend training and receive support on how to develop brand potential and enhance consumer interest. The launch of new nutritionally enriched products will take place on the completion of the project in September 2014.



HEALTHBREAD

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