



Protein Snacks

CNTA & SANYGRAN

Like a
PRO



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LIKE-A-PRO is a EU-funded project aiming to facilitate sustainable and healthy diets by mainstreaming alternative proteins and products, making them more available, accessible and acceptable.

Benefits of plant-based protein snacks

Plant-based protein snacks combine the convenience and sensory appeal of familiar savoury snacks with enhanced nutritional value. They provide an accessible way to incorporate alternative proteins into everyday consumption while responding to growing demand for healthier, plant-based and protein-rich products. Their ready-to-eat format makes them particularly attractive for mainstream consumers seeking convenient nutrition without changing established snacking habits.



Development challenges

Developing competitive protein-enriched snacks requires balancing nutritional quality with taste, crunchiness, texture and consumer acceptance. Incorporating legume proteins into extruded formulations can affect product expansion, hardness and processing consistency. Manufacturers must also ensure microbiological stability, suitable shelf life and compatibility with industrial production while maintaining cost-effective and scalable manufacturing processes.



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CNTA & SANYGRAN's solution

Within LIKE-A-PRO, CNTA and SANYGRAN developed a ready-to-eat savoury snack enriched with fava bean protein, combining corn semolina (68.95%), fava bean protein (29.55%) and salt (1.50%). Using twin-screw dry extrusion technology, the partners optimised the formulation to obtain an expanded, crispy snack with improved nutritional characteristics and a familiar consumption format.

Following pilot-scale development at CNTA, industrial trials at SANYGRAN demonstrated the feasibility of producing expanded high-protein snacks using existing dry-extrusion infrastructure, providing a foundation for further commercial-scale production. The developed solutions offer four key advantages:



Simple, legume-based formulation

The snack combines just three ingredients: corn semolina (68.95%), fava bean protein (29.55%) and salt (1.50%). This straightforward formulation introduces a substantial proportion of plant protein into a familiar savoury snack format.



Four complementary nutritional claims

Providing 21.74 g protein, 4.37 g fibre, 2.50 g fat and 1.17 g sugars per 100 g, the snack qualifies as "high protein", "source of fibre", "low fat" and "low sugars", offering clear differentiation from conventional cereal-based snacks.



Convenient format with demonstrated storage stability

The ready-to-eat extruded snack combines familiar snacking convenience with acceptable sensory performance and stability over 60 days of storage under the tested conditions, supporting its potential for everyday consumption.



Industrial production demonstrated through dry extrusion

Following pilot-scale development at CNTA, production feasibility was demonstrated using SANYGRAN's existing industrial twin-screw extrusion equipment. This established processing route supports further commercial scale-up without requiring fundamentally new manufacturing technology.

Commercial potential and B2B value proposition

SANYGRAN's fava bean protein snacks offer opportunities in the growing protein-enriched and plant-based snack market, particularly within retail, private-label, convenience and foodservice channels. Through its B2B approach, combining legume-processing expertise, scalable manufacturing and customer-specific product development, SANYGRAN enables food companies to expand their portfolios with nutritionally differentiated savoury snacks. The product's adaptable format, flavouring and packaging options support commercial flexibility and integration into existing distribution channels.

Overall, the developments achieved within the LIKE-A-PRO project demonstrate the feasibility of integrating fava bean protein into nutritionally enhanced and industrially scalable savoury snacks. By combining high protein content, a simple ingredient profile, acceptable sensory performance and validated dry-extrusion processing, CNTA and SANYGRAN's solution provides a promising approach to next-generation plant-based snacking, supporting product diversification and new commercial opportunities in the functional snack market.

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