

Softshell Turtle Egg Gummies

I. Title of Research: Softshell Turtle Egg Gummies

II. Research Team Members

Department	Name	Position
Food Science	Shin-Yu Chen	Assistant Professor
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III. Development Idea

To increase consumer acceptance of softshell turtle-based products and enhance the value-added potential for softshell turtle farmers, this project aims to develop softshell turtle eggs into a fun and engaging snack, encouraging consumers to try softshell turtle-related products. Additionally, involving students in the project allows them to gain hands-on experience in product development, nutritional labeling, and other processes, fostering talent in product research and development for the food industry.

IV. Technological Competition and Industrial Application

The production process for gummy products is complex, where any slight variation in procedures or steps can lead to issues with texture and molding. In this project, softshell turtle egg powder is first freeze-dried, with natural colorants used in place of artificial dyes. We then test gummy formula ratios and processing steps to produce softshell turtle egg gummies, followed by product packaging design and nutritional labeling for commercial packaging. By leveraging the cute appearance of the product, we aim to enhance consumer acceptance of softshell turtle egg products, expanding the domestic market for softshell turtles and reducing the impact of export fluctuations on the local softshell turtle farming industry.

V. Merchandise Statement of Achievement

This project analyzed the nutritional

composition of softshell turtle eggs. Per 100 g of dry weight, the egg yolk contains 56.63 g of protein, 26.78 g of fat, and 5.35 g of ash, while the egg white contains 56.31 g of protein, 4.11 g of fat, and 21.34 g of ash. The eggs are rich in unsaturated fatty acids, including EPA and DHA. Finally, freeze-dried softshell turtle egg powder was combined with natural coloring extracted from green peas to create a visually appealing and tasty gummy. With custom-designed packaging, this project developed a healthy, functional snack that appeals to consumers.



Fig. 1: Softshell turtle egg gummies



Fig. 2: Softshell turtle egg gummies packaging design