

## DEVELOPMENT OF THE OPTIMAL COMPOSITION AND PREPARATION OF PASTA WITH VEGETABLE ADDITIVES

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**Abstract.** The aim of the work is to optimize the composition of a new food product enriched with biologically active compounds-pasta from wheat flour in combination with soy flour and pumpkin puree. Pumpkin is rich in unique compounds such as antioxidants and vitamins, which allow foods to have an important protective effect [1]. When pumpkin is added to the pasta recipe, the content of biologically active substance in the products increases, as well as the color of the pasta improves, which makes them more acceptable to the consumer. Soya bean, a plant based-protein consumed worldwide has proven data to improve the nutritional value of food products when served as supplements [2]. To make pasta, we used different proportions of wheat flour, soy flour and pumpkin puree, which were mixed with other ingredients such as vegetable oil, salt and drinking water. Addition of these non-traditional ingredients did not affect the cooking quality as compared to the control. Other analysis such as water holding capacity, oil holding capacity, optimal cooking time and weight increase also done to confirmed the cooking quality of pasta. Additionally, analysis such as protein, total sugar level, moisture, and ash were determined for the obtained pasta samples. The protein content of the pasta made from a mixture of wheat and soya bean flour increased as compared to the control but decreased with the addition of pumpkin puree. There was a significant difference between pasta with all the non-traditional ingredients and the control in terms of carbohydrate.

Pasta incorporated with all the ingredients had better acceptability as compared to the other samples. As shown by organoleptic (sensory) analysis, pumpkin puree and soya bean improved the color of pasta samples based on consumer acceptability and did not affect the taste and smell of the modified pasta.

Therefore, incorporating non-traditional ingredients such as soya bean flour and pumpkin puree into pasta could be a promising way of developing improved pasta which is nutrient-rich and possess the functional properties.

### References

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