

Functional foods
Nutrition Dept- 2nd stage
EXPERIMENT (3)

Pasta fortified with dietary fibre

Introduction

The special characteristics and compositional qualities of pasta have placed it in an important position in modern society's daily diets. It is easy to cook and store, it is a low glycemic food product, it has low sodium content, it has cholesterol-free fat and it is a rich source of complex carbohydrates.

Dietary fiber has been identified as an important component of a healthy diet and it is defined as the component of plant cells that resist digestion by human digestion enzymes. Such components include cellulose, hemicellulose, lignin, inulin, resistant starch (RS) and other constituents distributed in the bran and starchy endosperm parts of the grain. Consumption of these components has been associated with the reduced risk of chronic diseases.

Formulating pasta with dietary fiber produces modifications that may cause many problems in the quality of the final product; in consequence, more research has to be done to better understand how different fiber additions affect pasta quality, cooking properties and texture. In order to obtain a good-quality final product with better health promoting properties, the main objective of the study was to study the quality of the pasta formulated with inulin and hemp seed.

Criteria of assessment

Cooking quality of pasta samples

Cooking quality parameters such as minimal cooking time, weight increase index, and cooking losses were determined.

Water solubility index and water absorption index

How much water can absorb during cooking

Texture characteristics assessment

The pasta samples were cooked according to the minimum cooking time set. The test material prepared in this way was subjected to instrumental testing.

Organoleptic analysis

The organoleptic properties of cooked pasta were assessed by an 18-person (25–50 years old)