Abstract

The bachelor thesis is focused on the characteristics of the three most important pseudocereals, specifically buckwheat, quinoa and amaranth. It pays particular attention to their general features, origin and history of planting, utilization and especially their nutritional value and their effect on human health. They are also discussed in terms of their importance in a gluten-free diet. Due to their rich nutritional value and their natural gluten-free origin, pseudocereals are recognized as a highly valuable nutrient with great potential. Like cereals, they are a source of starch, fibre and vegetable protein, although their content and quality are higher than the majority of cereals. In addition, they are a source of vitamins, minerals and other bioactive substances. As with other plant foods, they also contain antinutritional substances which may negatively impact the availability of certain nutrients. Consumption of pseudocereals and their products may be beneficial, particularly for persons on a gluten-free, vegetarian or vegan diet.

The practical part of the thesis is divided into three parts. The first one is research, which investigated the respondents' awareness of pseudocereals, the frequency of their consumption and the reasons that determine their consumption. The second part involves a market survey that was conducted in a total of 12 stores. This included both conventional supermarkets and health food stores. It monitored the availability of pseudocereals and pseudocereal products. The last part represents a sensory assessment which looked at the sensory perception of the dishes made from buckwheat, quinoa and amaranth.

The results of the research showed that respondents have a poor awareness of pseudocereals. Also, they do not consume them very often. Most respondents stated that they eat pseudocereals less than once a month or not at all. Buckwheat was ranked as the most frequently consumed pseudocereal. Amaranth is consumed the least frequently. The distribution of buckwheat, quinoa and quinoa products in the market was fair. On the other hand, amaranth was generally available only in health food stores. There was also a relatively wide range of products containing pseudocereals, including mainly instant porridges, cookies, crisps and other extruded products. In terms of sensory evaluation, dishes containing buckwheat and quinoa were significantly better rated than those containing amaranth. However, all dishes were generally sensory acceptable to the respondents.

Key words: pseudocereals, buckwheat, quinoa, amarant, nutrition