Abstract

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Utilization of Spirulina to Improve the Nutritional Value of some Foods

In this study, the spirulina which is one of the blue-green algae rich in protein 61.57% and contains a high proportion of essential amino acids (38.81% of the protein) and a source of naturally rich in vitamins especially vitamin B complex such as vitamin B12 (193 μg / 100 g) and folic acid (9.66 mg / 100 g), which helps the growth and nutrition of the child brain, also rich in calcium and iron it containing (1043.625 and 338.765 mg / 100 g, respectively) to protect against osteoporosis and blood diseases as well as a high percentage of natural fibers. So, the spirulina is useful and necessary for the growth of infants and very suitable for children, especially in the growth phase, the elderly and the visually appetite. It also, helps a lot in cases of general weakness, anemia and chronic constipation. Spirulina contain a selenium element (0.0488mg/100 g) and many of the phytopigments such as chlorophyll and phycocyanin (1.472% and 14.18%), and those seen as a powerful antioxidant. Finally, spirulina called the ideal food for mankind and the World Health Organization considered its "super food" and the best food for the future because of its nutritional value is very high. The American space agency is working on a project to be grown in space and regards it as the main food for astronauts. All this and more is what makes the best food spirulina exists on the ground. It ensures the whole II food and alkaline balance of the body. Some food products such as (Snacks, biscuit and juices) were made. Biochemical parameters and histopathological examination were evaluated, also the evaluation of production cost of snack products were done. On the other hand, these products (Snacks, biscuit and juices) were economic cost and can produced on the scale of domestic and industrial scale, as well as can be exported to the outside.