Abstract

Osama M Morsy

Utilization of Spirulina Algae to Improve the Nutritional Value of Kiwifruits and Cantaloupe Nectar Blends

In this study use 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 ?g/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 (0.0488 mg/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. In this study, products supported with spirulina, kiwifruits and cantaloupe were manufactured. Two types of vegetable and fruit juices, green and were used frequently in commercial manufacturing (cantaloupe - kiwi). Spirulina was added to them at different ratios (zero “control samples”, 2.5, 5, 7.5, 10, 12.5 and 15%) The nectar blends were well studied to determine the best percentage of addition and the chemical, natural were done and sensory properties of nectar blends supported by spirulina. The all nectar blends prepared and supported by spirulina were highly accepted. Therefore, it is recommended to use spirulina in the field of strengthening juices, especially the rich types of chlorophyll, antioxidant and beneficial to public health such as kiwifruits and cantaloupe.