

Green Flour

Ahmed, Menatallah (School: El Adadia El Thanawia For Girls)

Mohamed, Shahd (School: El Adadia El Thanawia For Girls)

The investigation aimed to study the utilization of prickly pear pads for production of flour as a new source of food products in the market. As known, the world is facing food and water crisis. That's why, this study focused on solving the problem of Prickly pear waste as well as wheat flour shortage while using prickly pear which can be planted with little amount of water. For instance, Egypt imports wheat with 2.6 milliard dollar per 11 months. Furthermore, the wheat flour consumption annually increases 1.9 % in Egypt. In this study, prickly pear pads have been utilized for flour production same as the other kinds of flours. By drying and grinding the pads of prickly pear, a green flour could be obtained after doing experimental analyses such as in vitro cytotoxicity test, FT-IR, GC mass and XRD. The results showed that it has no side effects on normal cells, it's gluten free and it can be mixed with other types of flours like wheat flour. By this study, prickly pear flour can solve the shortage of wheat in the market.