

## Obtaining Nutritive Powder from Peel of *Mangifera Indica* L. (Mango) as a Food Additive

**Authors :** Chajira Garrote, Laura Arango, Lourdes Merino

**Abstract :** This research explains how to obtain nutritious powder from a variety of ripe mango peels Hilacha (*Mangifera indica* L.) to use it as a food additive. Also, this study intends to use efficiently the by-products resulting from the operations of mango pulp manufacturing process by processing companies with the aim of giving them an added value. The physical and chemical characteristics of the mango peels and the benefits that may help humans, were studied. Unit operations are explained for the processing of mango peels and the production of nutritive powder as a food additive. Emphasis is placed on the preliminary operations applied to the raw material and on the drying method, which is very important in this project to obtain the suitable characteristics of the nutritive powder. Once the powder was obtained, it was subjected to laboratory tests to determine its functional properties: water retention capacity (WRC) and oil retention capacity (ORC), also a sensory analysis for the powder was performed to determine the product profile. The nutritive powder from the ripe mango peels reported excellent WRC and ORC values: 7.236 g of water / g B.S. and 1.796 g water / g B.S. respectively and the sensory analysis defined a complete profile of color, odor and texture of the nutritive powder, which is suitable to use it in the food industry.

**Keywords :** mango, peel, powder, nutritive, functional properties, sensory analysis

**Conference Title :** ICHNFS 2017 : International Conference on Human Nutrition and Food Sciences

**Conference Location :** Rome, Italy

**Conference Dates :** September 18-19, 2017