Cantaloupe Seeds: An Exploitable Waste

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The state of Coahuila de Zaragoza in Mexico is a leading producer of cantaloupe (Cucumis melo). Unfortunately, overproduction of this fruit is a common phenomenon in the south part of this state. In June of 2015, 2 to 3 tons of cantaloupes were destroyed by the farmers of the area. The objective of this research is to explore a sustainable alternative and nutritional properties of the seeds found in cantaloupe based waste. The methodology of this project was divided into five parts (labeled A-E) in which, it was determined the composition and physical characteristics of cantaloupe to determine mass and measurement, bromatological analysis on cantaloupe seed powder, gas chromatography to determine fatty acid composition. The results showed that the cantaloupe powder has 66-69% of linoleic acid, which is known for the reduction of low density lipoprotein and an increase in high density lipoprotein as well as lean body mass. Additionally, it was shown that the cantaloupe's seed powder is rich in nutrients such as: protein, fiber, and dry material. Based on the results it can be concluded that the cantaloupe seed powder is rich in nutrients. Through this project, a value added to the fruit is proposed due to the extraction of seed powder that could be used for animal or human consumption in the future.

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