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EXTRACTION OF APPLE POMACE FROM JUICE PRODUCTION USING SUPERCRITICAL CO₂ EXTRACTION

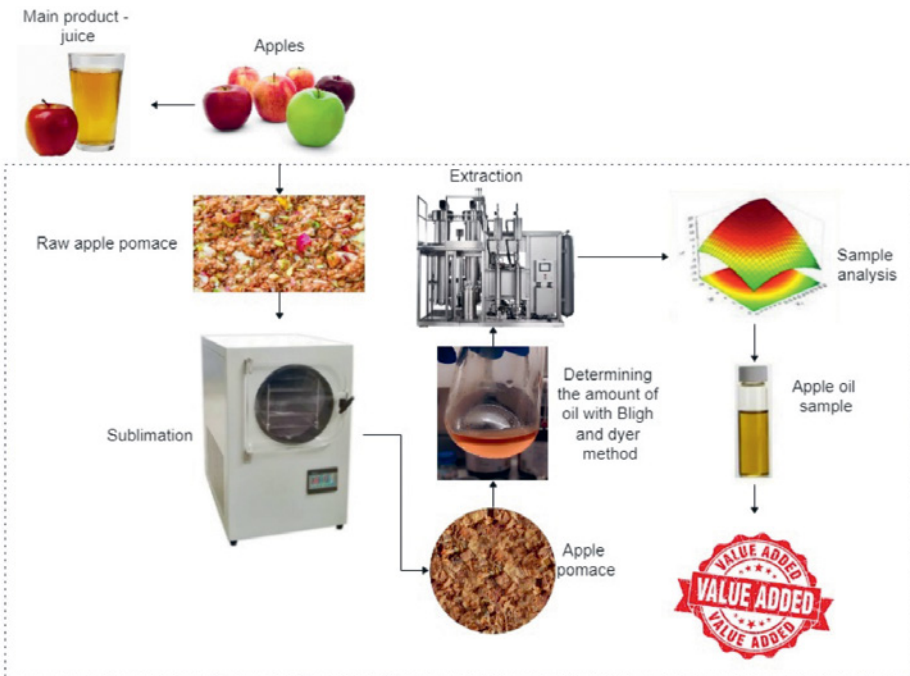
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Abstract – Apple pomace, a by-product of apple juice and cider production, is a sustainable raw material from which valuable products such as nutritional supplements and pectin can be obtained. It contains significant amounts of antioxidant compounds that have been linked to several health benefits. Both traditional and new technologies can be used to extract valuable components from apple pomace, with an emphasis on new and environmentally friendly methods. One such technique is the use of supercritical CO₂ extraction. This method is considered environmentally friendly, and it can be used to extract valuable compounds such as antioxidants and pectin from apple pomace. This article examines the extraction parameters of apple pomace and analyses the valuable substances in the extract samples. Apple pomace is a promising source of carbohydrates, proteins, amino acids, fatty acids, phenolic compounds, vitamins, and other compounds with a vast range of food applications.

Keywords – Added value products; agriculture; apple pomace; by-products; extraction



Pathway of apple by-products to apple oil using supercritical CO₂ extraction method.