

EFFECT OF SOAKING AND ROASTING TREATMENT ON PHYSICO-CHEMICAL PROPERTIES OF FLAXSEEDS

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Abstract—Flaxseeds (*Linum usitatissimum*) commonly known as Alsi is one of the emerging minor oil seed which is nutritionally rich in proteins, fats (alpha-linoleic acid), dietary fibers and antioxidants. Flaxseed also plays a vital role in prevention of serious health diseases like diabetes, heart diseases, gastro-intestinal diseases. The presence of non-nutrient factors in flaxseeds may cause serious health issues in human. Hence processing treatment such as roasting, soaking, boiling are adopted so that their nutritional quality can be enhanced. The present study was carried out to analyze the effect of different treatments viz. soaking (0.1 M and 0.15 M NaCl) and roasting (108°C for 10 min in hot air oven) on physico-chemical properties of flaxseeds. Soaking of flaxseeds with 0.1 M NaCl solution was compared with untreated flaxseed, the moisture content(%), ash content (%) and crude fat (%) ranged from 6.2-6.4, 1.5-2.0, 28.0-29.4 % and 6.8-7.7, 2.8-3.6, 25.4-36.0% respectively. However, considerable variation in fat content% (35.8-36.0), ash content (1.5-2.0) and moisture content% (6.6-6.8) were determined by soaking flaxseeds with 0.15 M NaCl solution. The ash content was found in roasted flaxseeds i.e. 1.99-2.79%.

Keywords: flaxseeds, soaking, roasting, physico-chemical properties.