

Effect of blending defatted flaxseed flour on physical and microbiological characteristics of crackers

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ABSTRACT: In the present study defatted flaxseed flour was incorporated in different proportions from 0-30% for the preparation of omega-3 fatty acid enriched crackers. The developed products were packed in laminate aluminium pouches to ascertain changes in physical, sensory and microbiological characteristics. The mean width (4.50 cm), thickness (0.43 cm) and omega-3 fatty acid (18.74%) were observed highest in treatment S₇ (30% flaxseed flour). Colour values (a and b) increased whereas, L value decreased with storage. Sensory evaluation of crackers revealed that S₄ (15% flaxseed flour) recorded highest mean score for colour (8.13), texture (8.19), taste (8.25), crispness (8.16) and overall acceptability (8.18). With the addition of partially defatted roasted flaxseed flour, total plate count decreased whereas, with storage total plate count increased.

Key Words: Sensory, physical, hunter colour value, microbiological, storage, flaxseed.