Characterization of a fermented soy product with kefir and soy fiber

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The fibers addition in fermented products change the physical, chemical, microbiological and sensorial characteristics. The objective of this study was to characterize chemically, microbiologically and sensory acceptance of a fermented soy product with kefir and 3% addition of soy fiber to compare it with the fermented product without fibers. The chemical composition was evaluated by moisture, ash, protein, fat and total dietary fiber determinations. The microbiological aspects were evaluated by lactic acid bacteria, Lactococcus lactis and Leuconostoc spp counts and yeast counts. Sensory analysis by attributes acceptance test with 68 untrained consumers. Addition of 3% soy fibers resulted in a fermented soy product with 83.9% moisture, 3.24% protein, 0.37% ash, 1.21% total dietary fiber. The product with 3% of soy fiber addition had total count of lactic acid bacteria, Lactococcus lactis and Leuconostoc sp similar to the product without addition of fibers. Minor yeast count was observed in the product with 3% soy fiber. The product without fiber showed grades ranging from 7.3 to 7.6 for the color, flavor, texture, taste and overall acceptance attributes in 1-9 scale. The product without fiber had a higher acceptance for the attributes color, aroma, texture, flavor and overall acceptance. Therefore, the addition of 3% soy fiber in the fermented soy product with kefir showed better chemical characteristics with higher protein and dietary fiber content and lower sensory acceptance.