

# Comparative investigation on spray dried powder from soymilk and sprouted soybean milk

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■ **ABSTRACT** : In order to study the comparative investigation on spray dried soymilk and sprouted soybean milk powder, TAMS-38 variety of soybean was used. The sprouted soybean prepared by soaking it in normal water for 4 h, followed by six number of rinsings at an interval of six hours at room temperature of  $28 (\pm 2^{\circ} \text{C})$ . The soymilk and sprouted soybean milk prepared were dried using laboratory spray drier at  $178 - 182^{\circ} \text{C}$  and feed rate of 350-375 mL/h keeping other machine parameters constant. The difference between ash (7.5 to 7.75 %), fat (10.8 to 11.5 %) and moisture content (0.066 to 0.076 kg/kg dm) of the soymilk powder and sprouted soybean milk powder were non-significantly differed from each other while protein content of sprouted soybean milk powder (27.44 %) was significantly low as compared to that in soymilk powder (37.48 %). Vitamin C and vitamin A of sprouted soybean milk powder (21.15 mg and 1.4  $\mu\text{g}$  per 100g), was significantly high as compared to that in soymilk powder (8.99 mg and 0.09  $\mu\text{g}$  per 100 g), respectively. The sensory qualities of reconstituted soymilk and sprouted soybean milk were higher than soymilk and spouted soybean milk, respectively. The shelf life of spray dried soymilk powder was 46 days (about 1.5 months), and that of spray dried powder of spouted soybean milk was 49 days (about 1.5 months) if stored at  $30^{\circ} \text{C}$  temperature and 95 per cent RH and packed in metalized polyester (140 gauge).

■ **KEY WORDS** : Soymilk, Soymilk powder, Sprouted soybean, Spray drying, Milk powder, Vitamin A, Vitamin C, Shelf life

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