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UTILIZATION OF OSTRICH OIL IN FOODS

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Abstract. Ostrich (*Struthio camelus*) was used as a new source of animal fats. Some physical and chemical properties for the ostrich oil compared with other fats (beef, bafflo, cattle, sheep and chicken), fatty acid composition and unsaponifiable matter were determined. Ostrich oil was fractionated to liquid and solid fractions and determined some characteistics of two fractions. Blendig sunflower oil with olein fraction showed that oxidative stability, which was evaluated by the Rancimat method at 100°C was obtained from ostrich oil by dry fractionatoin. The results indicated that blending sunflower oil with olein fraction on effective method to prepare more stable vegetable oils. Ostrich olein was mixed separately with sunflower oil at (8:2, 7:3 and 5:5, v/v). The frying process was conducted at 180°C±5°C for 20 hr, 5hr per day. Some physicochemical properties of non–fried and fried oil mixtures were measured at various heating periods. The results demonstrate that mixing ostrich olein with sunflower oil increased the stability and hence improved the quality of sunflower oil during frying process. Ostrich stearin was used to replace fat in cake manufacture at ratios (0.00, 25.00, 50.00 and 75.00%). Sensory evaluations of cakes were determined. Data revealed that replacements of fat with ostrich stearin improved sensory characteristics of baked cake.

***Keywords*:** Ratite family, ostrich oil, fractionation, blending, frying process, bakery products.