

Effects of drying methods on the quality of dried sea cucumbers from Sabah – A Review

Abstract

Sea cucumbers are one of the highly appreciated commodities amongst traditional health practitioner for its retrospective health properties. Societies with knowledge of sea cucumbers usually demand for good processed dried sea cucumber. There are several options of post-processing of fresh, live sea cucumbers; freeze drying, cabinet drying, sun drying, smoke drying and much more. Sun drying procedures easy to be initiated and is a free source of energy. However, it is hard to control the hygienic capacity of sun drying process as to ensure optimum conditions during drying process where drying temperature will affects the drying rate and end products. Not only the value of dried sea cucumber depends on its own species, but, the size of the product and the quality of the post-processing in term of sensory attributes (colour, smell, appearance, texture and overall acceptance). Freeze drying process maintained better quality yields from the physicochemical properties and rate of drying aspects if compared to sun drying, hot air drying and air drying through moisture removal. Freeze drying ensured good appearance if compared to air drying, but requires greater energy and longer drying. The natural therapeutic properties of sea cucumbers should be investigated more, while its development and establishment of sea cucumber SOP could strengthened the post-harvest standard quality, economical values and sustainability.