

Physico Chemical Study of the Shelf Life of Selected Churnas (Powders)

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06 Nov.

MHS32

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Churnas are the powdered form of drug preparations, used among Ayurveda and indigenous medical practitioners. According to sharangadhara samhitha the shelf life (Saviryata avadhi) for the Churna is two months. However, the drug manufacturing company mention different shelf life for the Churnas irrespective of the sharangadhara samhitha. The chemical and physical changes of churnas directly influence on the potency of drug and directly influence the recovery progress of patient. Therefore, the objective of the study was to find out chemical, physical and microbial changes of selected churnas within nine months. Three powders were selected and stored under normal room temperature and humidity in airtight glass containers and the above mentioned qualities were observed in initial stage and after two, three, six, and nine months. Data were analyzed using Statistical Package for the Social Sciences (SPSS). No significant changes were observed in mean values of colour, odour, taste, consistency and touch against the time duration. Analyzed data revealed that significant different between initial month and after third month and no significant different between initial month and second month when considering pH and ash values. Loss of drying values revealed the significant difference (p value not given) among initial month and every other month. Total bacterial count was significantly (no p value) elevated after two months and total viable count was significantly reduced after two months. Considering significant variances of parameters, it can be concluded that the churna are best to use within two months of production and churnas gradually lose their physical and chemical qualities when exceeding their' shelf life.

Keywords: Churnas, physico-chemical parameters, Saviryata avadhi, Sharangadhara samhitha