

**R**esearch **P**aper

## Development and organoleptic evaluation of ashwagandha (*Withania somnifera*) based value added product and its effect on anthropometric parameters of underweight adolescent girls

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Received: 05.10.2012; Revised: 28.01.2013; Accepted: 09.04.2013

■ABSTRACT : The present study was conducted to standardize and develop a value added product from ashwagandha and to assess its clinical effect on anthropometric parameters of underweight due to its good therapeutic value. Three types of ashwagandha biscuits were prepared *viz.*, by the incorporation of ashwagandha root powder, ashwagandha leaf powder and ashwagandha root+leaf powder. The sensory evaluation of the biscuits showed that they were liked by the panel of judges. The products prepared by the incorporation of ashwagandha leaf powder were acceptable in comparison to the products prepared by the incorporation of ashwagandha leaf powder but from medicinal point of view, they were acceptable. The product was studied for shelf-life and the sensory evaluation was done on 10<sup>th</sup> day, 20<sup>th</sup> day and 30<sup>th</sup> day of storage period over 30 days. The results showed that there was a slight change in the sensory attributes during the storage period. The clinical effect of ashwagandha root powder biscuit was undertaken on 10 underweight adolescent girls chosen from Smt. Indramani Mandelia Shiksha Niketan, Town Pilani, Rajasthan. The initial weight and the BMI of the test group with mean values of 39.70 and 16.66 increased significantly to a mean of 41.90 and 17.59 finally over a period of 1 month, respectively no significant change was observed in the weights and BMI of the control group. Thus, proving that ashwagandha is efficient in increasing the weight of those who are underweight.

**KEY WORDS :** Underweight, Anthropometric parameters, Underweight, Ashwagandha

■ HOW TO CITE THIS PAPER : Singh, Neha, Pande, Rashmi, Singh, Nivedita and Malhotra, S.R. (2013). Development and organoleptic evaluation of ashwagandha (*Withania somnifera*) based value added product and its effect on anthropometric parameters of underweight adolescent girls. *Asian J. Home Sci.*, **8** (1): 33-37.

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