

INTRODUCTION

In India, Onion is an important crop among vegetables with the largest area (16%). A large quantity of onion is used as fresh; however, some of the surplus quantities of onion and garlic available in the market are processed by dehydration units and are meant mainly for export and for armed forces. Dried and processed vegetables constitute between 40-42% of total exports of processed products both by volume and by value. Dehydrated products are wholesome, nutritious and palatable. Dehydrated onions are the single largest import items in Germany, United States, U.K. and Netherlands both in quantity and value items.

Onion powder and garlic powder from fresh onion and garlic obtained by dehydration process in a dryer also undergo lots of physical and chemical changes such as softening, caking, loss of flavour, etc. Free flowing difficulty and caking are common problems in onion and garlic powders due to moisture exchange between food product and its surrounding atmosphere. These changes can be controlled after providing adequate packaging. Dehydrated onion and garlic and accelerated freeze dried vegetables are highly sensitive to moisture.

Various types of flexible packaging materials have made significant strides in the packaging industry and it is possible to select the right type of packaging material/system for a specific purpose by undertaking an indepth study on the presently used systems of packaging as well as alternate systems/techniques with a view of evaluating them and suggesting improvements/alternate materials or methods of packaging.

The improved system of packaging would help to retain the quality of product over a longer period of time, thereby helping to market it locally and increase the exports as well.