

Effects of Temperature Dryer on Allicin and Pirovic Acid Measurements Garlic Powder after Drying Process

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Abstract : Introduction: Dried Garlic has plentiful health and medicinal value and is used in industrial food the forms of flakes or powders. Many health and medicinal properties of Garlic are attributed to allicin. This substance is produced enzymatically after crushing. Since temperature affected on enzymatic action, then is important factor on pirovic acid and allicin retention. Materials and Methods: This study investigated the effects of temperature on qualitative characteristics such as color of powder and pirovic acid and allicin retention in a convective hot-air dryer. For this reason, half cloves of Shushtar Garlics (*Allium sativum* L.) were dried at air temperatures of 50 and 70°C. Results: Results showed that increasing temperature was resulted changing color. Pirovic acid increased when half cloves Garlic were dried at 70°C. Allicin of half cloves also increased with increasing temperature. Conclusions: According to findings of this research, half cloves which dried in 70 degree centigrade can be introduced the best conditions for producing Garlic powder.

Keywords : garlic, drying, pirovic acid, allicin

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