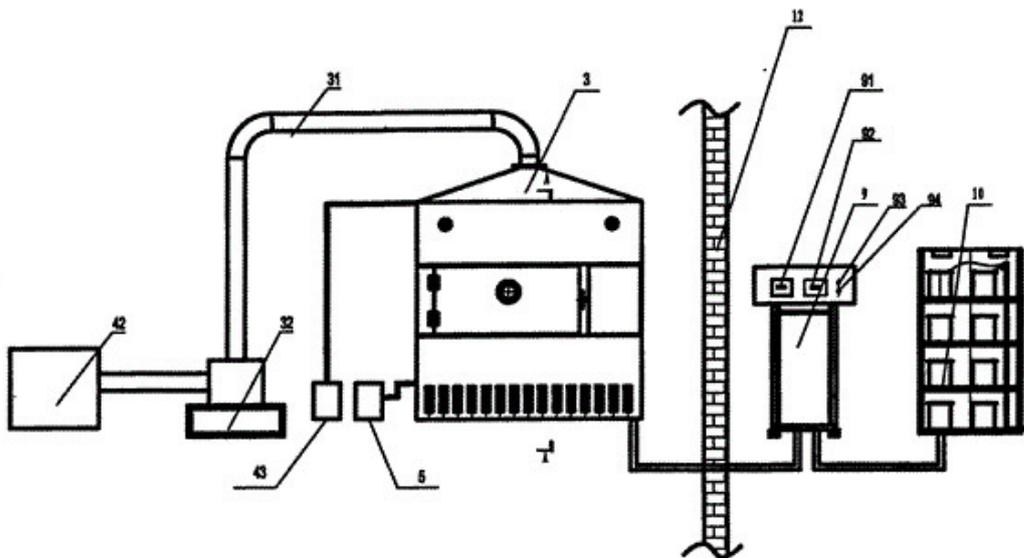


# Effects of different drying methods on rehydration and quality of carrot

Abstract: Rehydration experiments were carried out on dried carrot products obtained by hot air drying, [microwave drying equipment](#) and combination of hot air drying and microwave drying. The effects of different drying methods and combination of different parameters on rehydration and sensory quality of dried carrot products were analyzed.

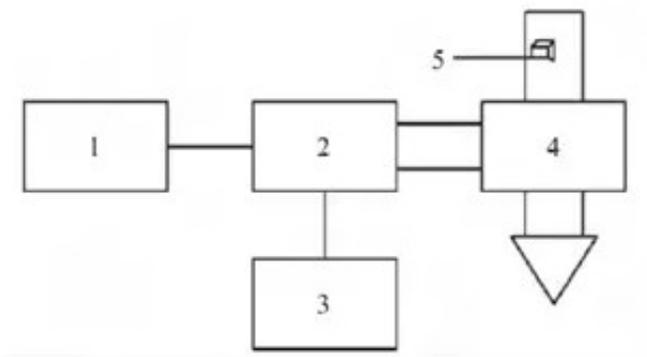


The results showed that the rehydration performance and sensory quality of dried carrot products obtained by different drying methods were significantly different. Reducing hot air temperature, shortening hot air drying time and reducing microwave heating power could improve the rehydration and quality of dried carrot products. Hot air temperature and hot air drying of combined hot air and microwave drying could improve the rehydration and quality of dried carrot products. When the moisture content and microwave power of the finished material are 65 C, 50 W and 170W respectively, the dry products have ideal sensory properties.

The rehydration ratio is 6.02.

Key words: hot air drying; hot air; microwave combined drying; [microwave drying carrot](#); rehydration; sensory characteristics

Combined drying of hot air and microwave is a new technology which combines the characteristics of microwave drying and hot air drying. In recent years, the combination of hot air and microwave drying has been widely used in the drying of fruits and vegetables, but the research on the rehydration of dried fruits and vegetables is less.



The rehydration of dry products is an important index to measure the quality of dry products. Its quality is mainly affected by drying methods and drying conditions. Therefore, the key to the production of dry products is to obtain good quality and low cost dry products, reasonable drying methods and drying conditions.

In this paper, the rehydration and sensory properties of carrot products obtained by hot air and microwave combined drying, hot air drying and microwave drying were studied. The effects of different drying methods on rehydration and sensory properties of dried carrot products were discussed in order to provide a basis for adopting correct and reasonable drying methods. On the basis.