

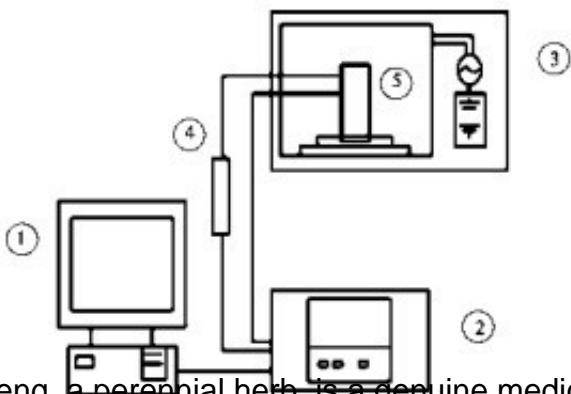
Effect of Microwave Drying Technology on Ginseng Processing

Abstract: Microwave drying technology has been widely used in ginseng processing. It has the characteristics of high efficiency, sterilization and energy saving.



In this paper, through three typical cases, the effective and reasonable use of [microwave drying equipment](#) in human participation is expounded. The results showed that microwave drying technology was effectively used in the pre-treatment of ginseng active ingredient extraction in ginseng processing technology. This technology will be of great significance to the pharmaceutical and food processing industries in the future.

Key words: [Ginseng microwave drying](#), foam separation, high performance liquid chromatography



Ginseng, a perennial herb, is a genuine medicinal material in Northeast China and is widely used in the processing and production of food and medicine. Microwave drying technology is an assistant method of extracting and drying sterilization through microwave. Nowadays, microwave drying technology is widely used in order to prevent food from deteriorating in the early stage for storage. Ultraviolet lamp, steam, high pressure, cobalt 60, ozone, nitrogen filling and preservative are usually used to sterilize. Microwave drying technology also opens up an

ideal way to sterilize materials in a short time. Both inside and outside sterilize without destroying nutrients.

In the past 30 years, a great deal of research has been done on food, especially bagged and bottled food. Microwave irradiation in a short time can quickly heat up and sterilize. Compared with conventional methods, it can maintain better taste, color and nutrition. In China, microwave drying technology of food has been adopted by more and more food manufacturers.

In addition to thermal effect, microwave drying may also have non-thermal effect. At present, the degree and rule of microwave drying on drug composition are not very clear. The selection of microwave drying process should take into account the properties of materials and their applicability to microwave technology, and be determined on the basis of full research according to the comparative research results of specific varieties.

The change of drying process should be determined on the basis of full study, and the corresponding change research should be carried out. Consistency of drug or food quality before and after modification should be studied, chemical composition (including overall component evaluation, fingerprint and other indicators) before and after modification, physical and chemical properties of dried materials and their extent, as well as their effects on subsequent preparation process, possible effects on absorption and utilization of drug or food ingredients, and attention should be paid to the application of microwave technology on drug effectiveness, The impact of safety.