Comparison of dehydrated and freeze-dried foods

Detail Introduction :

Many people think of dehydration and freeze-drying as the same thing. Not really; they are very diffe

dehydration process

No matter what method of food preservation is used, moisture needs to be removed. Dehydration is commonly used method. Dehydration has been a way of keeping food fresh for thousands of years, back to at least 12,000 BC. The Romans and Middle Eastern people used to put fruits and vegetables house, then fire-roasted and smoked them to make dry food.

Modern dehydration technology has made it simple to use machines to circulate hot and cold air thro food. This removes most of the moisture. The temperature is controlled enough to remove moisture wilt and harden the food.

Freeze drying process

Freeze-drying is a relatively new modern preservation process. However, it should be known that you freeze-dry at home without high-tech equipment. Some reports say freeze-drying originated in the In Empire. But more reliable sources show that freeze-drying was invented during World War II when it to preserve blood plasma, medicines, and later army food.

The lyophilization process is relatively simple. Food is placed on large shelves inside the vacuum char temperature drops below freezing and then gradually increases. Moisture in food is converted from s form to gas, thus preserving food structure and nutritional value.

main difference

Moisture - The main goal of food preservation is to remove moisture, so food does not spoil and grow Dehydration removes 90-95% of the water, while freeze-drying removes 98-99%. Therefore, the shelf be longer.

Shelf Life - Moisture removal rate directly affects shelf life. Dehydrated foods such as dried fruits, veg and powders have a shelf life of about 15-20 years; dehydrated foods such as honey, sugar, salt, hard and oats have a shelf life of more than 30 years. On the other hand, frozen, dehydrated foods have a shelf life than dried fruits and vegetables, lasting 25-30 years.

Nutrient Facts — Freeze drying retains most vitamins and minerals, according to a U.S. Institute of He study. But compared with fresh fruits and vegetables, freeze-dried foods lack some vitamins, such as C, which breaks down faster. Dehydration does not change dietary fiber or iron content. However, dehydration breaks down vitamins and minerals during preservation, so the nutritional value is not a as freeze-dried foods. Dehydration can lead to the loss of vitamins A and C, niacin, riboflavin, and thia

Appearance vs. Structure - One of the main differences between dehydrated and freeze-dried foods i

appearance. Dehydrated food will become brittle and hard, while frozen, dehydrated food will becom
immediately in the mouth. Weight is another difference. Freeze-dried foods are much lighter in weigh
dehydrated foods.

Cooking - Dehydrated foods need to be cooked and eaten. However, only boiled water is required for
dried food. Add hot or cold water and wait at least 5 minutes before eating.

Price - In general, dehydrated foods are cheaper than cold-dried foods. Both freeze-dried and dehydr
foods have pros and cons, and if you're on a tight budget, dehydrated foods are the better option.