

Dehydrated vs. Freeze-Dried: What's the Difference?

Dehydrated foods and freeze-dried foods are both useful for many reasons, such as disaster preparation, camping or long-term food storage. Both are good choices, but dehydrated food and freeze-dried food have some key differences.

Definition

Dehydrated foods are selected at the peak of ripeness and subjected to a low temperature heating process that evaporates 98 percent of the water within the food to preserve the item without impacting the nutritional value.

Freeze-drying is the sublimation/removal of water content from frozen food. The dehydration occurs under a vacuum, with the plant/animal product solidly frozen during the process. Shrinkage is eliminated or minimized, and a near-perfect preservation results. Freeze-dried food lasts longer than other preserved food and is very light, which makes it perfect for space travel.

Size

The processes used to dehydrate or freeze-dry food shrink the items to about one-third of their original size. Upon rehydrating, the food returns to its original size.

Time Frame

Most dehydrated foods will stay edible for up to 12 years if unopened. Freeze-dried foods last up to 25 years if they remain sealed.

Preparation

Dehydrated food requires rehydration and preparation to eat, while freeze-dried food can be eaten directly from the container if necessary, although it is more palatable if rehydrated first. It also rehydrates more quickly than dehydrated food, which is why it is often used in Just Add Water meals.

Considerations

Dehydrated foods are typically cheaper than freeze-dried foods due to their shorter shelf life and the expense of the process involved in freeze drying. Also, some foods lend themselves more to one process or the other: freeze dried or dehydrated potato chunks for example. *Freeze dried* potato pieces will rehydrate more quickly than *dehydrated* potato pieces, but they cost more to produce. So you will see freeze dried potatoes in the pouches designed for backpackers and hikers since they want to add boiling water and eat their meal in a shorter time period. For long term storage, you will often see dehydrated potatoes because you can get more food for your money, and it is alright if it takes a few minutes longer to rehydrate.