



Process flow of egg powder

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HOW TO PREPARE EGG POWDER



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Cracked Raw egg



Dehydrated powder egg

Introduction

Powdered eggs are fresh eggs that are cracked, blended, and dehydrated to become powder. These eggs have extended shelf life and can be used like fresh eggs. In commercial settings, powdered eggs are commonly produced through spray-drying techniques. Despite the increased availability of fresh eggs, powdered eggs are a valuable option for homesteaders and campers as a preserved food.

Procedure

1. Crack fresh eggs and empty the contents into a bowl
2. Homogenize whole egg or separate albumin from the yolks. The choice depends on the product to be processed using powder egg.
3. Add stabilizers as recommended
4. Blend the mixture for 5 minutes at room temperature to form foam
5. Spread the beaten eggs on a glass or stainless steel baking sheet and let them **dry overnight**. In the morning, place the sheet in a **200°F (93°C) oven** for about 10 minutes to completely dry out the eggs.

6. **Storage:** Store your powdered eggs in an airtight container in a cool dark dry place.

In the industrial process, eggs are initially broken, and their shells are removed. The separated yolk and albumen undergo filtration and are stored at 4 Degrees Celsius. After pasteurization at around 65°C for 8-10 minutes, the mixture is dried using a spray dryer, producing egg powder.

Note: Refer to figure 1 for detailed industrial process flow for powder egg

Utilization of egg powder

1. Blend 1 tablespoon of powder with 2 tablespoons of water to approximate the equivalent of one egg. Then, cook the mixture over medium heat in a pan to prepare scrambled eggs.
2. To prepare a medium-sized egg, combine 1 tablespoon of egg powder with **2 tablespoons** of water. Alternatively, for an extra-large egg, mix 2 tablespoons of egg powder with **1/4 cup** of water.
3. When baking, there's no requirement to rehydrate the eggs before incorporating them into your mixture. Just add the required amount of egg powder and water to your mixture and follow the instructions provided by your recipe.

Benefits of Powdered Eggs

1. Extended shelf life
2. Less storage area, allowing for large quantities of eggs to be stored in a compact space
3. Easy rehydration for cooking,
4. Direct use in baking
5. Elimination of shell breakage contamination risks
6. Reduction of postharvest losses due to mechanical damage.

