

Maltodextrin - Nutella Powder

Maltodextrin is a starch or polymer made from multiple glucose units, which is used to stabilise food with a high fat content and turn them into melt-in-the-mouth powders. Maltodextrin has very low density and a helix structure with hydrophobic (water-hating) parts on the inside and hydrophilic (water-loving) parts on the outside. Oil gathers in the insides of the helices, so the oil droplets are separated from each other by the gaps between the maltodextrin units and stabilized in the 3D network of maltodextrin making a very stable emulsion. Water or heat break down the structure and release the oil.

The steps to create a powder from oil are simple:

- 1. If the high fat food is solid it should first be liquefied and chilled. Items like Nutella and peanut butter can be used as they are.
- 2. Mix the food in a bowl with maltodextrin using a starting ratio of 60% fat to 40% Tapioca Maltodextrin.
- 3. Add more maltodextrin if necessary.
- 4. The powder can be fluffed up in a food processor or by passed through a sieve (optional).

Try it with

- Olive Oil
- Caramel
- Nutella
- Coconut oil
- Bacon
- Peanut Butter
- White Chocolate