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# Fondant and Cream Basics for the Confectioner

***For the confectioner, the three main uses for fondant are in the manufacture of creams, as a graining agent and for bonbon coating.***

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Fondants and creams are widely used in the candy industry and are the base for many of our processes and finished confections. We will examine their attributes, formulations and how best to use them in our products.

### **FONDANT**

Fondant is a component ingredient that is used throughout the food industry in items such as icings, frostings and frosted cereals. In confectionery it is often used as a graining agent and the base for cream confections.

Fondant, as we know it, is a semi-solid white, sticky mass that can be difficult to use. But what is it really? Fondant is micro-crystalline sugar suspended in a saturated sugar syrup—in essence, a sugar paste. Its very fine particle size (5–15 $\mu$ ) makes it a superior graining agent and provides the smooth mouthfeel found in creams and other confections. Traditional cooked fondant and dry fondant sugar are the two types most familiar to confectioners.

In the manufacture of traditional cooked fondant, a sugar syrup solution is cooked and it recrystallizes into very fine particles under controlled conditions. The majority of the formulation is sucrose with the

remainder being a syrup (glucose, corn, tapioca, etc.) and water. Fondant formulas are generally expressed by the ratio of sugar to syrups with 80/20, 90/10 and 100 percent sugar being most common. As the ratio of sugar to syrups increases, the stickiness decreases, while water activity ( $A_w$ ), crystal size, texture hardness, moisture content and the rate of crystallization increase.

The formulation (Figure 1) will be somewhat dependent on the final application. Fondants that require a shorter texture and more standup quality (such as for extruded creams) will have a higher percentage of sugar (90/10 fondant) while confections that require a longer flowy texture (such as for cast creams) will have an increased amount of syrups (80/20 fondant).

### **Ingredients**

The ingredient list for making fondants is simple: sugar, syrups/humectants and water. However, the ratios and quality can greatly affect the final product.

Sugar is generally 80 to 90 percent of the solids content of fondant. The purity and color of the sugar can affect the whiteness of the finished fondant. Filtration of the sugar syrup solution can help to produce a consistent whiter fondant. An all-sugar fon- ➤



*Randy Hofberger is the president of R&D Candy Consultants, which he founded following a career in quality assurance, customer technical service, industrial product development and production. He has worked at Carnation, Ko-Pak and Nestlé.*