Starch Jellies —
Manufacturing Methods and Formulas

For many years, the confectionery industry has utilized the formulas in Walter Richmond’s book, Choice Confections. This book was originally written in 1954 and has been reprinted four times. Presently the book is in the process of being updated. As part of this updating process chapters will periodically appear in The Manufacturing Confectioner. We solicit any comments, suggestions or formulas that readers have pertaining to the chapters in this issue.

Not many retail shops have facilities to produce cast starch jellies, as the making of starch jellies calls for a drying room. However, several formulas for the manufacture of starch jellies are included in this chapter for the retail confectioner who has the required facilities.

**Starch (Corn)**

There are many uses for corn starch in a candy shop and different types of starch are made to fill each need.

Powdered starch used as a moulding starch comes in two grades. Regular powdered starch is very dry and does not always hold the impression of the mould. A special moulding starch containing a small percentage of oil gives a more firm sidewall to the impressions.

As moulding starch is used it becomes less free flowing. Old moulding starch can be freshened up by the addition of plain powdered starch instead of special moulding starch.

Regular powdered starch is also used for dusting slabs, tables, trays and candies. A very fine dusting starch known as 3x starch is better for dusting marshmallow goods.

Starch for cooking purposes comes in various forms and jellying strengths.

The jellying strength is graded by a fluidity test. Lower fluidity starches boil with a heavy body and form jellies with a short texture. Thick-boiling starches are used for Turkish paste and starch jellies that have a short-breaking texture. Higher-fluidity starches are thinner boiling and are used in starch jellies that have a more stringy texture.

**Jelly Gums**

Jellies or gums whose body is formed by the use of corn starch or gum arabic are two distinct types and are classified as starch jellies or gum arabic jellies.

Unless your factory is equipped to thoroughly dry the moulding starch, no attempt should be made to produce cast starch jellies. A drying room to remove the excess moisture in starch jellies is an asset, but not absolutely necessary. Turkish paste, which is poured in trays, can be made on an open fire gas furnace or in steam kettles.

Most starch jellies now made utilize higher-fluidity starches. Jellies made from starch with a 60 to 70 fluidity rating are more tender and clearer looking than jellies made with starches with a fluidity rating under 60.

Before starch can act as a jellying agent every grain must be fully saturated with water and expanded by heat. Sweating will occur unless the starch is fully expanded. Using 1 gallon of water to each pound of starch will insure a fully saturated starch solution.