Maple season is late winter and early spring. At this time, commercial and hobby maple producers in Ohio and other parts of northeastern North America tap trees, collect sap, and process it to produce maple syrup. Real maple syrup is a pure, natural product with a unique flavor. It is delicious just as it is, served as a topping over pancakes, waffles, ice cream, crushed ice (maple snowcone), or other foods. Or, it can be used as a sugar substitute in cooking a variety of dishes.

Maple syrup can also be processed into a wide variety of confections including granulated or molded maple sugar, molded soft-sugar candy, maple cream, maple fondant, and "Jack Wax" or "Maple on Snow." These confections are easy to make, delicious to eat, and make excellent gifts.

The process of making maple confections is simple—heat maple syrup to the desired temperature and then cool it with or without stirring. The temperature to which it is heated, how rapidly it is cooled, and whether it is stirred as it cools, determines the confection made. In the directions that appear in this fact sheet, a temperature range rather than a specific temperature is recommended for making most confections. Many factors affect confection making, including barometric pressure, humidity, and the character of the syrup used. Often, the recommended finishing temperature must be adjusted upward or downward to produce the desired characteristics.

Making small quantities of maple confections requires little special equipment. A kitchen stove will provide a steady, easily controlled heat source. A variety of spoons, ladles, and pans are necessary, as is a candy or other thermometer with a temperature range of 200 to 300°F. For some confections, a trough or container will be needed; this container must be large enough for stirring or to function as a water/ice bath for rapidly cooling the heated pan of syrup. Rubber candy molds also will be required if candy or molded sugar is made. Common recommendations for new rubber candy molds are to boil them for 10 to 15 minutes in a mild solution of Sal Soda, Caustic Soda, Arm & Hammer Washing Soda, or Arm & Hammer Baking Soda (1/4 pound to a gallon of water), scrub them well with a semi-stiff brush, and rinse them well with clear, cold water. If the molded confections are sticking, a thin coat of glycerine may be applied with a brush and the excess blotted with a soft cloth. After the molds have been used a couple of times, the glycerine should not be needed. Occasionally the first candy made in new rubber molds has a bitter taste and should be discarded. After use, rubber molds should be placed in warm water until the sugar dissolves, rinsed in clean water, and then placed upside down in a rack to dry.

When heating the maple syrup, experiment to achieve the right combination of pan depth, depth of syrup, and heat to avoid burning the syrup or foaming over. Begin with moderate heat and no more than 1-1/2 inches of syrup in an eight-inch deep pan. If foaming becomes excessive, it can be reduced using a drop of commercial defoamer or vegetable-based oil.

An important step in making any maple confection is determining the boiling temperature of water. The temperature necessary to produce a particular confection is stated in degrees Fahrenheit above the boiling temperature of pure water. Pure water boils at 212°F only at standard atmospheric pressure. It varies with altitude and weather conditions (low and high pressure). The temperature of boiling water is easily determined by determining its temperature with the candy thermometer.

Maple Sugar (Granulated or Molded)

Much of the maple syrup made in colonial times was processed into maple sugar. In this form, it was easier to store and transport and could easily be reconstituted to syrup by adding water. Today, maple sugar can be used as a partial or complete substitute for cane
sugar, depending on the degree of maple flavor wanted. Try it as a
sweetener on cereal or in tea, as a substitute in baking, or when
making glazes or sauces for meats.

Make granulated maple sugar by heating maple syrup to a
temperature 40 to 45°F above the boiling temperature of pure water,
immediately transferring the syrup to a trough or flat pan, stirring
until granulation is achieved and all apparent moisture is gone. At
this point, the product may be sieved through a coarse screen (e.g.,
1/8-inch hardware screen) to produce a uniform product. Making
granulated maple sugar can be difficult when the humidity is high.

Make molded hard maple sugar by heating maple syrup to a
temperature 40 to 45°F above the boiling temperature of pure water,
immediately transferring the syrup to a trough or flat pan, stirring it
until crystals form, and then packing it into molds (with a spoon,
spatula, or putty knife) to harden. Note that this is not maple candy,
but a molded form of sugar that is quite hard.

"Crunchy" Hard Maple Sugar Candy

A relatively hard, crunchy, molded maple sugar candy is made
by heating maple syrup to a temperature 28 to 30°F above the boiling
temperature of pure water, allowing it to cool to about 150°F,
stirring it to develop a plastic consistency containing relatively large
crystals, and pouring or packing it into molds.

Molded Soft Sugar Candy

This is the relatively soft maple sugar candy often seen molded
in a variety of shapes such as maple leaves. Make soft sugar candy
by heating maple syrup to a temperature of approximately 32 to
34°F above the boiling temperature of pure water, pouring the syrup
into a flat pan or trough, and allowing it to cool undisturbed to at least
200°F but not less than 160°F, stirring until the syrup is soft and
plastic, and then pouring or packing it into molds. Molded candies
commonly set up in 10 to 30 minutes. Candies formed by pouring
rather than packing will have an attractive glazed surface.

Maple Spread (Cream or Butter)

Maple spread is a smooth, semisolid, creamy-maple spread
that is a delicious topping for toast, muffins, plain donuts, or similar
products. In many areas, maple spread is referred to as maple cream.
Most Ohio producers reserve the term maple cream for the nougat
product described in the following section. Maple spread is made by
heating the syrup to the prescribed temperature, cooling it rapidly,
and then stirring to produce a product with very small, almost
undetectable crystals.

Not all syrup is suitable for making maple spread. Almost all
the sugar in maple sap is sucrose, but during processing to maple
syrup some sucrose is converted to invert sugar. Syrup containing
more than four percent invert sugar is unsuited for making maple
spread. There are tests to determine the amount of invert sugar in
maple syrup, but they are complicated. As a rule, light colored syrup
(U.S. Grade A Light Amber) contains small amounts of invert sugar
and can be successfully creamed or made into smooth nougat.
Darker syrup is more likely to contain higher quantities of invert
sugar, though some contain amounts low enough to be successfully
creamed. Without testing for invert sugars, it is best to stick to the
light syrups for creaming and nougat making.

Make maple spread by heating maple syrup to a temperature 22
to 24°F above the boiling temperature of pure water, cooling the
syrup rapidly in a water or ice bath to room temperature (at least 90
and preferably 70°F or cooler), and then stirring the chilled syrup at
room temperature until crystalization is complete. When stirred,
the cooled syrup first becomes more fluid (less stiff), and then
stiffens and shows a tendency to "set-up." At this point, it loses its
shiny appearance and develops a dull or flat look. The crystalization
process is then complete, and the spread can be transferred to an
appropriate container. Maple spread is best stored at low tempera-
tures, ideally in a refrigerator or freezer.

Maple Fondant or Nougat (Ohio Maple Cream)

Maple fondant or nougat, sometimes called Ohio maple cream,
is a "fudge-like" maple product that is often described as the candy
form of maple spread. Good maple fondant requires the same low
invert sugar content as maple spread. It is made in the same manner
as maple cream except that the syrup is heated to a higher tempera-
ture.

Make maple fondant by heating maple syrup to a temperature
27°F above the boiling point of pure water, cooling the syrup rapidly
in a water or ice bath to room temperature (at least 90 and preferably
70°F or cooler), and then stirring the chilled syrup at room tempera-
ture until it sets to a soft solid. Maple fondant can be packed into
molds, formed into a small "cake," or dropped in small pieces onto
a marble surface, waxed paper, or a metal sheet.

"Jack Wax" or "Maple on Snow"

"Jack Wax" or "Maple on Snow" is a maple product produced
by pouring hot maple syrup over snow or crushed or cracked ice. It
is most commonly eaten quickly, rather than stored for future use.

Make "Jack Wax" or "Maple on Snow" by heating maple syrup
to a temperature 18 to 40°F above the boiling temperature of pure
water and immediately pouring the heated syrup over snow or
cracked or crushed ice. The nature of the product produced depends
on the temperature attained. At the lower end of the temperature
range, the "Jack Wax" will be taffy-like, and chewy; at the upper end
of the temperature range it will be much harder, and more glass-like.

More Information

Those interested in a more comprehensive discussion of maple
confections may wish to obtain a copy of the North American Maple
Syrup Producers Manual, a 178-page manual dealing with all
aspects of maple product production from sugarbush management
to marketing. This manual may be purchased through your local
county Ohio State University Extension office. Ask for Ohio State
University Extension Bulletin 856. Those interested in trying their
hand at making maple syrup will also find the North American
Maple Syrup Producers Manual useful, along with Hobby Maple
Syrup Production, Extension Fact Sheet F-36.

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