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Extension FactSheet

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Maple Candy and Other Confections

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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 300ºF. 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 212ºF 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 45ºF 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 45ºF 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 30ºF above the boiling temperature of pure water, allowing it to cool to about 150ºF, 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 34ºF 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 200ºF but not less than 160ºF, 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 24ºF 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 70ºF or cooler), and then stirring the chilled syrup at room temperature until crystallization 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 crystallization process is then complete, and the spread can be transferred to an appropriate container. Maple spread is best stored at low temperatures, 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 temperature.

Make maple fondant by heating maple syrup to a temperature 27ºF 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 70ºF or cooler), and then stirring the chilled syrup at room temperature 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 40ºF 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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