

Real Chocolate Basics

Nothing beats the flavor of real chocolate. Real chocolate contains cocoa butter and must be tempered to ensure successful candy making.

Chocolate, one of the most popular flavors in the world, comes from the cocoa bean. The process of fermenting, drying, and roasting and separating the nibs from the shells of the beans allows for the creation of a variety of products ranging from unsweetened cocoa powder, to chocolate liquor, and cocoa butter. The addition of sugar, lecithin and vanilla creates, depending on the amount of sugar added, bittersweet, semisweet or sweet chocolate. White chocolate lacks cocoa powder, but does contain cocoa butter. See "Real Chocolate Types" handout for more information on real chocolate.

Real chocolate must be tempered, a process of melting and cooling chocolate so it maintains a creamy texture. Chocolate that is not tempered properly can form dull streaks, will likely have a chalky texture, and will remain sticky.

What is tempering?

Tempering is the process of heating and cooling the chocolate under controlled conditions allowing the cocoa butter crystals to solidify in an orderly fashion. When chocolate is melted, the crystals in cocoa butter dissolve and become unstable. As the chocolate sets, the cocoa butter rises to the surface and forms a chalky, gray film. The temperature of the chocolate must be precise when dipping or molding. Even tiny variations can ruin the outcome. Chocolate that is properly tempered will have a smooth, shiny finish and a nice snap. Chocolate that is not properly tempered will appear speckled, matte and may crumble. Chocolate tempers best in a cool room.

Tempering Chocolate

Microwave Method: Starting with one pound of chocolate, set aside 1/4 pound. Place the remaining 3/4 pound real chocolate wafers or chopped real chocolate chunks in a microwaveable bowl. Microwave on high for 30 seconds. Stir. Microwave for 30 more seconds, stir. Microwave for 20 seconds, stir. Continue this process for 10 seconds at a time until 2/3 of the chocolate is melted. Remove from microwave and place a "chocolate tempering thermometer" into the chocolate. Stir frequently. **Dark chocolate** is ready for candy making when the temperature is between 86° F and 90° F. Dark chocolate should be retempered when the temperature falls below 86° F. **Milk or white chocolate** is ready for candy making when the temperature is between 84° F and 87° F. Milk or white chocolate should be retempered when the temperature gets below 84° F.

Always have unmelted chocolate in the bowl with the melted chocolate to keep the chocolate tempered. As the chocolate is melted, the 1/4 pound that was set aside may be added to "seed" the melted chocolate. Frequently stir the chocolate. When the proper temperature is reached, place bowl in microwave a few seconds. Add some unmelted chocolate and place candy thermometer in chocolate. Stir frequently. When chocolate goes down to the proper temperature, the chocolate is ready to work with again.

Double Boiler: Starting with one pound of chocolate, set aside 1/4 pound. Place the remaining 3/4 pound real chocolate wafers or chopped real chocolate chunks in top pan of a double boiler. Boil water in the bottom pan of a double boiler. Take off the heat and place top pan containing the chocolate over the bottom pan. Stir until 2/3 of the chocolate is melted. Place a "chocolate tempering thermometer" into the chocolate. Stir frequently. **Dark chocolate** is ready for candy making when the temperature is between 86° F and 90° F. Dark chocolate should be retempered when the temperature falls below 86° F. **Milk or white chocolate** is ready for candy making when the temperature is between 84° F and 87° F. Milk or white chocolate should be retempered when the temperature gets below 84° F.

As the chocolate is melted, the 1/4 pound that was set aside may be added to "seed" the melted chocolate. Frequently stir the chocolate. When the chocolate drops below the proper temperature, replace the cool water in the bottom pan with very warm water. Add some unmelted chocolate and place candy thermometer in chocolate. Stir frequently. When proper temperature is reached, the chocolate is ready to work with again. Use the water in the bottom pan to control the temperature of the chocolate.

Melting Chocolate

If using real chocolate as an ingredient, such as in brownies, just melt and use. Tempering is not necessary.

Microwave Method: Place the chocolate in a microwave safe bowl. Microwave on high for 40 seconds. Stir.

Microwave on high for another 30 seconds. Stir. Continue heating for only a few seconds at a time until nearly all chocolate is fluid. Remove from microwave and stir until completely fluid.

Double Boiler Method: Fill bottom part of double boiler about 1/3 full of water. Heat to nearly boiling point. Take the pan off the stove. Place the top pan containing the chocolate on the bottom pan with the hot water. Stir until fluid. Never have the top pan over the bottom pan when the bottom pan is on the stove with boiling or simmering water.

Flavoring Chocolate

When flavoring chocolate use oils or concentrated flavors only. Extracts cannot be used because they are water based and would thicken and ruin chocolate. We recommend adding 12 to 15 drops per pound. If using chocolate as an ingredient such as in fudge, it is acceptable to use extracts.

Coloring Chocolate

To color white chocolate a special color can be achieved by adding candy color, which is oil based. Water based coloring may ruin chocolate. To use AmeriColor Soft Gels in chocolate add 1½ tablespoons of Flo-Coat and 1 teaspoon of the Soft Gel to one pound of chocolate. The Flo-Coat will evenly disperse the Soft Gel Paste into the chocolate, resulting in a smooth and pourable consistency. If the chocolate begins to set, more Flo-Coat may be added without harming the chocolate, regardless of the quantity used to maintain the desired consistency. Too much coloring can give the candy a bitter taste. It may be best to use candy coatings if a dark color is desired.

Storing Chocolate

Chocolate should be kept in an air tight container at room temperature. Freezing chocolate may add excess moisture and cause the chocolate to be difficult to melt properly. For best results use chocolate within six months. Older chocolate is often difficult to work with.

When to Use Candy Coating or Real Chocolate

For dipping, molding, barks, candy coating is an ideal choice for novice candy-makers. Simply melt and use. Good quality candy coating is easy to use, delicious in taste and an excellent alternative to real chocolate. Beginners will enjoy the ease of working with candy coating while advanced candy makers may prefer working with real chocolate. Always use a high quality real chocolate when using chocolate as an ingredient in recipes such as brownies, cakes, mousse, or other baked treats.