Dextrins are a group of low-molecular-weight carbohydrates produced by the hydrolysis of starch or glycogen. Dextrins are mixtures of polymers of D-glucose units linked by α-(1→4) or α-(1→6) glycosidic bonds.

Dextrins can be produced from starch using enzymes like amylases, as during digestion in the human body and during malting and mashing, or by applying dry heat under acidic conditions (pyrolysis or roasting). The latter process is used industrially, and also occurs on the surface of bread during the baking process, contributing to flavor, color, and crispness. Dextrins produced by heat are also known as pyrodextrins. During roasting under acid condition the starch hydrolyses and short chained starch parts partially rebranch with α-(1,6) bonds to the degraded starch molecule. See also Maillard Reaction.

Dextrins are white, yellow, or brown powders that are partially or fully water-soluble, yielding optically active solutions of low viscosity. Most of them can be detected with iodine solution, giving a red coloration; one distinguishes erythrodextrin (dextrin that colours red) and achrodextrin (giving no colour).

White and yellow dextrins from starch roasted with little or no acid are called British gum.
Maltodextrin is a polysaccharide that is used as a food additive. It is produced from starch by partial hydrolysis and is usually found as a white hygroscopic spray-dried powder. Maltodextrin is easily digestible, being absorbed as rapidly as glucose and might be either moderately sweet or almost flavorless. It is commonly used for the production of soft drinks and candy. It can also be found as an ingredient in a variety of other processed foods.

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