

Figure 1: Schematic of HFCS Production from Corn Starch

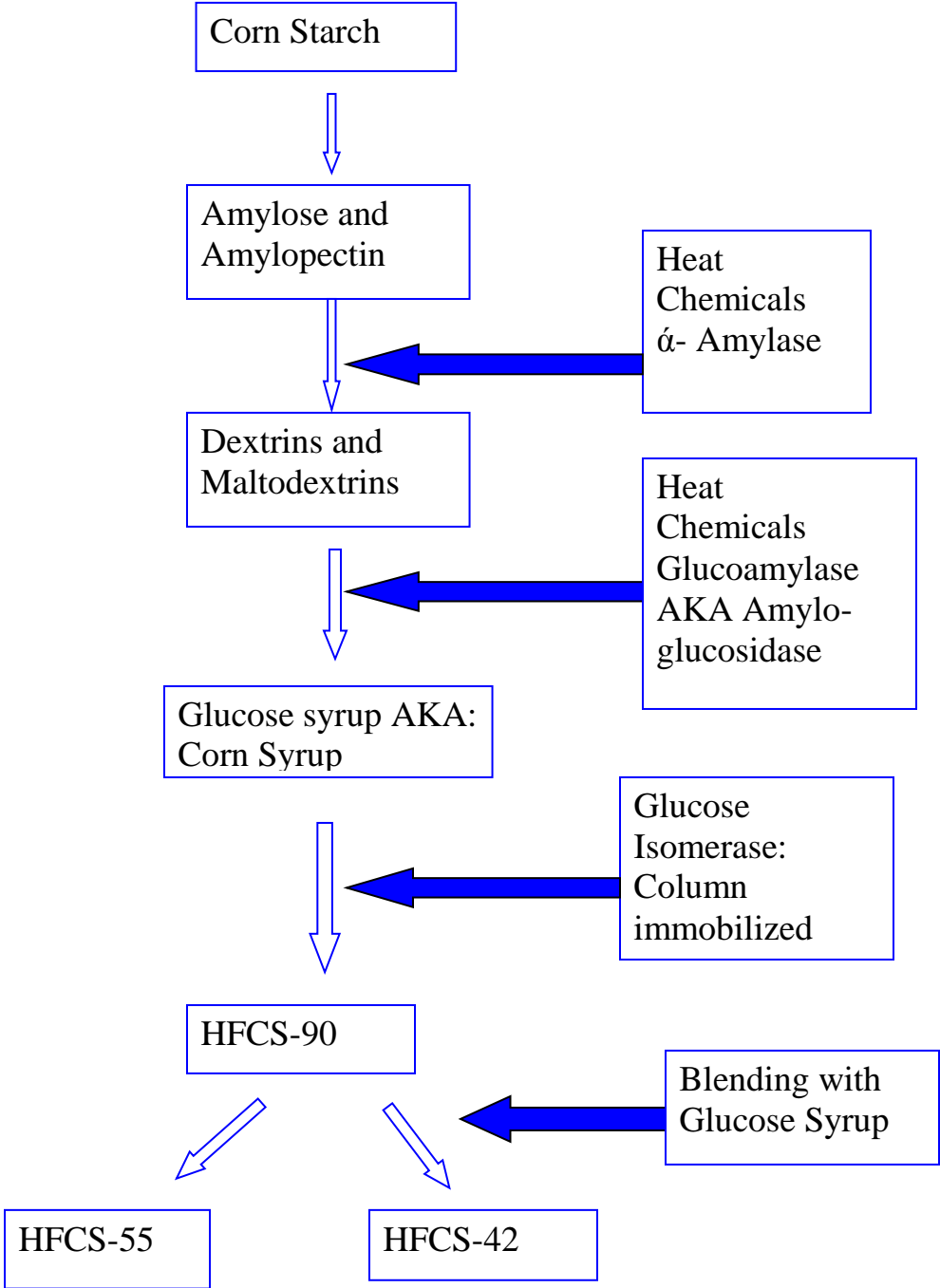


Figure 1: Schematic of HFCS Production from Corn Starch. Amylose and Amylopectin are the two components of starch. The production of glucose syrup from corn starch is dependent on the activity of various amylases and glucoamylase (also known as amyloglucosidase), heat and chemicals such as caustic soda and/or hydrochloric acid. Glucose syrup produced is then passed through an immobilized column of glucose isomerase where glucose is isomerized to fructose to yield HFCS, primarily HFCS-90 which is then blended with glucose syrup to produce HFCS-55 and HFCS-42.