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Handbook on Maize (Corn) Processing and Manufacture of Maize Products

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About the Book

Handbook on Maize (Corn) Processing and Manufacture of Maize Products

(Oil, Starch, Corn Steep Liquor, Syrup, Cornmeal, Popcorn, Flakes, Gluten, Husk, Anhydrous Dextrose, High Maltose Syrup, Maltodextrin Powder, Monohydrate Dextrose, Sorbitol, Ethanol, Cattle Feed with Manufacturing Processes, Equipment Details and Plant Layout)

In India, maize is becoming third most significant crop. Its significance stems from the fact that it is utilised not only for human food and animal feed, but also for corn starch manufacturing, corn oil production, and the generation of baby corns. Additionally, maize stover, the leaves and stalk of the maize plant, is used for forage, biofuel production, and chemical production.
Corn is also processed into a multitude of food and industrial products including:-
? Corn Starch is a yellow powder made from finely ground, dried corn, while cornstarch is a fine, white powder made from the starchy part of a corn kernel.
? High fructose corn syrup (HFCS) is a sweetener derived from corn syrup, which is processed from corn.
? Corn oil contains some healthy components like vitamin E and phytosterols, but overall it's not considered a healthy fat.
? Corn ethanol is produced from corn biomass and is the main source of ethanol fuel, mandated to be blended with gasoline in the Renewable Fuel Standard.
? Some strains of corn (Zea mays) are cultivated specifically as popping corns.
? Dextrose Anhydrous can be used as sweetener in baked goods, candies, gums, dairy products like some ice-creams and frozen yogurts, canned foods, cured meats etc.
? Maltose is a sugar that tastes less sweet than table sugar. It contains no fructose and is used as a substitute for high-fructose corn syrup.
? Maltodextrin is a white powder made from corn. To make it, first the starches are cooked, and then acids or enzymes such as heat-stable bacterial alpha-amylase are added to break it down further.
? Dextrose is the name of a simple sugar made from corn that's chemically identical to glucose, or blood sugar.
? Sorbitol, or glucitol as it is sometimes called, is a slow-metabolizing sugar alcohol derived from fruits, corn

and seaweed.
The global maize market is expected to grow at a CAGR of 3.8%. The factors that affect the demand for starch mainly include population growth and industrial development of a country; specifically the food and beverage, textiles, paper and printing, pharmaceuticals and other health and beauty products, and adhesives.
The demand for high-fructose corn syrup (HFCS) sweeteners across the country is majorly due to its wide usage in the confectionery, bakery, and beverage industries, especially soft drink manufacturing. Rising health awareness among consumers has resulted into increasing preference for corn oil due to its health benefits. More ethanol production means more demand for corn. According to the most recent statistics released by the U.S. Department of Agriculture, 35%, or 5.25 billion bushels, of the projected 15.062 billion bushels of corn harvested will be processed into ethanol.
The book covers a wide range of topics connected to Maize Products, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipments.
A complete guide on Maize (Corn) Processing and Manufacture of Maize Products manufacture and entrepreneurship. This book serves as a one-stop shop for everything you need to know about the Maize manufacturing industry, which is ripe with opportunity for manufacturers, merchants, and entrepreneurs. This is the only book that covers Maize (Corn) Processing and Manufacture of Maize Products in depth. From concept through equipment procurement, it is a veritable feast of how-to information.

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