

History of sugar essay



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The Production and Consumption of Sugar The production of sugar has shaped our world throughout the centuries. From its humble beginning, to its royal induction it has now made a household name as a necessity. It has changed our society into sugar addicts with a never ending urge for sweetness.

Production of this craving has lead to an over abundant consumption. Consumption so great that is has defined humans through culture and history. The journey has marked the path of this once less then famous compound into a substance that is in everything our society consumes today. The history of sugar can be traced through the years as a milestone in many nations and as an economical splendor. It is a crop that changed the meaning of the word sweet.

Sugar, chemically speaking, is an organic compound called sucrose, which is made up of two simpler sugars. It is composed of twelve carbons, twenty-two hydrogens, and eleven oxygen atoms. They form two structural rings, a glucose and a fructose ring. Sugar can be extracted form many different sources. Throughout history sugar cane has been the most important.

There are six different types of sugar cane. The one know best is the *Saccharum officinarum* which is the main source of sucrose. The process of extraction is in a series of steps which involved a great deal in precision of changing temperatures. Changing the state of the juices helps isolate the sucrose from the rest. After the sugar cane has been chopped, grounded, pressed, and submerged in liquid the temperature raises so the water can evaporate.

At this point the water boils away leaving the solution supersaturated. This means the liquid is holding an over abundant amount of sucrose, a solution can do this at very high temperature. The liquid is slowly cooled and as it does a crystallized substance forms. The crystal is the solid form of sugar and the syrup left behind is molasses and is very sweet. These two states of sugar make it useful in different way and in different foods. Sugar in its raw state is full of nutrients and other elements from the sugar cane plant itself.

Today sugar is refined to extract all the impurities out. Our world would not be the same if sugar was not discover sure honey a natural competitor as sweetened our hearts but how can a cup of sugar or an ounce of syrup change society over the years? “ Sweetness and Power”, p. 21; www.exploratorium.edu.) There are many doubt of when sugar cane was discovered and used to create some type of sugar substance.

Some say it was New Guinea but other say that the “ reed” that the India native people speak of is sugar. Many are still oblivious to the important history of sugar. Sugar is a hard crop to grow it is very tempemental toward weather and climate. The spread of sugar is due to the invasion of the Arabs. They learned the make it from the India people. As their conquest reined the art of sugar making was passed on.

Soon North Africa and Spain and several Mediterranean islands have the knowledge of processing sugar. The crusades approached and the Europeans were exposed to the spice. As this luxury was becoming known throughout Europe curiosity hit to product and trade there own sugar industry rather then buying it from others. The growing consumption of sugar in Europe

sparked an industrial movement to crop the sugar cane. Europe's new sense of authority to make an income out of sugar led to the spread to the other side of the world.

The New World was introduced to sugar cane by Christopher Columbus in 1493 in the Spanish town of Santo Domingo. By the seventeenth century every major country had a sugar plantation in the Caribbean and was consuming more sugar each year. England, after the territorial conquest, led the European trade of this luxury spice. As sugar's production rose the price lowered offering it as a choice for the common people (Sweetness and Power, p. 20-28, 30-32.) Sugar has a lot of calories needed for energy so substitution became the cause for most of the carbohydrate intake; however, when sugar was the only thing being consumed it promotes a bad habit.

It is a habit that has yet to be broken. During the sixteenth century Queen Elizabeth was described at the age of sixty-five to have an oblong face, small eyes, a hooked nose, narrow lips, and black teeth. This is how the royal recognized; they were overweight and unhealthy looking. " By 1750 the poorest English farm laborer's wife took sugar with her tea," said R.

Davis in the Economic History Review. As sugar became affordable to the poor it began to be used in everything. It was essential a cheap way out to get the carbohydrates and it tasted good doing it. The craving for the sweet treat grew and more production was needed. Also it was in such a demand that England at the time had to make the choice of refining the sugar themselves to keep up with the growing addiction (Sweetness and Power, p.

45, 134, 148-150.) At the start of the year 1544 England began refining her own sugar. It has reached a peak in the sixteenth century as a condiment with numerous uses. Sidney Mintz in her book *Sweetness and Power* said it best: " The world in which sugar was used primarily as a spice is longed vanished; now sugar is all about us. It is how sweet we want it and how much we need that matter not the benefits or disadvantage it has.

As the knowledge of sugar grew, the usages and limits expanded as well as the texture. The craft of refine has not ancient so the pure white sugar we have today has been cultured. Process takes several steps and it was very expensive centuries ago. Now refining sugar is a household name and is readily available everywhere you go no matter what countries (*Sweetness and Power*, p. 45.) The refining process can be broken down into five steps.

The first is taking the raw sugar mixing it with a high purity level. The liquid is put in to a centrifuged and spun until the pellet of sugar is extract from the liquid. This leaves the sugar without some of the impurities. This first process is Affination. The second stage is called Carbonization. In this step the sugar is dissolved in a liquor.

To remove some of the non-sugar and more color chalk is cultured and grown in the solution. As the chalk clusters it sticks to the non-sugars thus when filter the non-sugar and some of the color is removed. The next step is too remove most of the color. The decolorization process can be performed in two different methods.

One uses a granular activated carbon and the other uses an ion exchange resin. The first one removes most of the color and little inorganic but the

second removes a lot of inorganic substances and little color. It is evaporated before going on to the next step. The boiling process job is to evaporate off all the water and to prep it for the crystal to grow well. With the help of sugar dust and a centrifuge the sugar is spun out of the liquor and dried. The last stage is recovery; its purpose is to reuse or turn this liquor into refiner's molasses.

Today these steps are fast, common and make the sugar we can not live without (www.sucrose.com/1ref.html.) Sugar has impacted our society just by its history. With each year sugar has made its place on our shelves and in our stomach indefinitely.

Sweetness has never been really defined until the first sugar cane was pressed together in the lands of India or in New Guinea. Without the spread of its consumption in Europe it would have never reached the New world. The astonishing versatility of sucrose has surpassed its incomparable means as it shaped our culture to accept nothing less than the pure white spice that has made its way not only as a permanent condiment but as a necessity. 1. Sweetness and Power- The Place of Sugar in Modern History.

Mintz, Sidney W. Penguin Group Inc. New York, New York. 1986 2. "How sugar is Refined"; "How sugar is Made," www.sucrose.com.

3. The Accidental Scientist, The Science of Cooking, www.exploratorium.edu.

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