Questions Most Frequently Asked About Sugar

1. What is sugar?

Sugar, or *sucrose*, is a carbohydrate that occurs naturally in every fruit and vegetable in the plant kingdom. It is a major product of *Photosynthesis*, the process by which plants transform the sun's energy into food. Sugar occurs in greatest quantities in sugarcane and sugar beets from which it is separated for commercial use.

2. Is there a difference between sugar produced from sugar beets and sugar produced from sugarcane?

There is no difference in the sugar produced from either cane or beet. Sugarcane, a giant grass, thrives in a warm, moist climate, storing sugar in its stalk. The sugar beet grows best in a temperate climate and stores its sugar in its white root. Sugar from both sources is produced by nature in the same fashion as all green plants produce sugar - as a means of storing the sun's energy.

3. How is sugar produced?

During the refining process, the natural sugar that is stored in the cane stalk or beet root is separated from the rest of the plant material. For sugarcane, this is accomplished by a) grinding the cane to extract the juice; b) boiling the juice until the syrup thickens and crystallizes; c) spinning the crystals in a centrifuge to produce raw sugar; d) shipping the raw sugar to a refinery where it is e) washed and filtered to remove impurities and color; and f) crystallized, dried and packaged. Beet sugar processing is accomplished in one continuous process without the raw sugar stage. The sugar beets are washed, sliced and soaked in hot water to remove the juice. The sugar-laden juice is purified, filtered, concentrated and dried in a series of steps similar to sugarcane processing.

4. What nutrients are present in sugar?

Sugar is pure carbohydrate, an important nutrient which supplies energy to the body. Vitamins and minerals are sometimes present, but in trace amounts. Sugar and other nutritive sweeteners play an important role in making other foods taste better and, through their many uses in cooking, increasing the variety of foods available.

5. Why is sugar found in many processed foods?

Sugar is prized for its sweet taste and has many other functions in cooking and baking. It contributes texture and color to baked goods. It is needed in the fermentation of yeast, which causes bread to rise. Sugar acts as a bulking agent (ice cream, baked goods) and preservative (jams, fruits), and it imparts a satisfying body of "mouth-feel" to beverages. In non-sweet foods - salad dressings, sauces, condiments - sugar enhances flavors and balances acid content in tomato and vinegar-based products.

6. What is honey?

Honey, is a mixture of sugars formed from nectar by an enzyme, invertase, present in the bodies of bees. Honey varies in composition and flavor, depending on the source of the nectar (clover, orange blossom, sage, etc.) A typical analysis of honey would show (exclusive of undetermined substances): 38% fructose, 31% glucose, 1% sucrose, 9% other sugars, 17% water and .017% ash.

7. Is honey more nutritious than granulated, powdered or brown sugar?

On an equal weight basis, there is very little nutritional difference between honey and sugar. Because it weighs more, a tablespoon of honey contains slightly more carbohydrates and calories than a tablespoon of sugar. Honey contains only insignificant amounts of some vitamins and minerals, and like sugar, should not be considered a source of these nutrients.