The Use of Sugar

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It is a pleasure to be in a country that is one of the world's largest producers of cane sugar, and a very real honor to be asked to address this distinguished gathering. I have been asked to say that the views expressed herein are those of your author, not those of The Coca-Cola Company.

The topic herewith is "The Use of Sugar." The use of sugar is something that, doubtless, the members of this group have affected and been affected by for most of their careers. So, obviously it is a topic in which you are acutely interested. In much the same way, the topic is one in which your author is deeply interested.

Sugar has been a personal love for over a quarter of a century. Your author assisted in the formation of the United States post-war sugar policy, and with the firm's staff made many improvements in Coca-Cola operations over the years. The use of sugar as the primary ingredient has been crucial to the production of Coca-Cola and most of the firm's other products since their development.

Coca-Cola USA is responsible for supplying sugar for 41 different locations, i.e., syrup plants and Foods' Division plants. This sugar is an ingredient in over 65 products produced at these plants. These factories have a combined use of several thousand tonnes a day, making this company the world's largest user of sugar. Almost all of this sugar is shipped in the form of dry bulk sugar in jumbo "airslide" cars, or in bulk trucks.

Coca-Cola's sugar purchasing is totally centralized. The Purchasing Department has responsibility for the logistics as well as the buying of sugar. While the firm's use is restricted to refined sugar of very high quality, it is a large buyer of raw sugar that which has been refined under "tolling" agreements.

Speaking of quality, the company has often regarded as one of the most demanding customers of the industry in the United States. This is because Coca-Cola has steadfastly refused to accept sugar that does not meet company specifications. Coca-Cola's stand in this respect has helped to upgrade the quality of sugar throughout the United States. In fact, the ability of the United States cane sugar refining industry to produce and ship properly cured granulated sugar in bulk is, in large measure, the result of a joint development effort between Coca-Cola and the industry. Furthermore, Coca-Cola is quite willing to be of assistance elsewhere in the world if there is a request from the industry.
Coca-Cola's North America's purchase of sugar is limited to requirements within the United States. Throughout the rest of the world, most of the sugar needed is purchased by the local franchised bottler. As many are doubtless aware, the refined sugar available most places in the world does not meet Coke's high-quality standards. It is necessary for the local bottler to upgrade the quality by filtration or, in some cases, even by ion exchange.

Sugar usage is probably one of the most dynamic, changing facets of this age-old industry. The growth in the variety of non-food uses is well known to all. In Brazil, diversified use of sugar has grown through the expansion of the national alcohol production program. It has grown to the extent that Brazil's goal for the 1979-1980 harvest year would require no less than 41 percent of the nation's cane to be devoted to production of fuel alcohol. Now, while this program of alcohol production has been in operation in Brazil for 50 years, the growth in volume and technology that has occurred there in the past one or two years has been nothing less than overwhelming. This phenomenon must continue to occur elsewhere, as nations are forced to evaluate alternate sources of energy, due to the skyrocketing price of oil. In this regard, the production of fuel alcohol is receiving a high priority by the government of The Philippines.

Numerous other countries are examining the economics of alcohol from sugar cane and are developing fermentation programs to supplement their national fuel requirements and lessen the import of foreign oil. Hawaii, the leading sugar-producing state in the United States, has begun a pilot project to produce alcohol from cane. The industry there is also in the process of examining the possibility of more similar programs, including the production of alcohol from molasses. Their programs include an examination of all aspects of energy from cane, including growing techniques to maximize the amount of energy per hectare.

Also in the United States, the Commodity Credit Corporation has been guaranteeing loans up to US $15 million to finance pilot energy projects. The very first of these loans was made to a joint venture which is constructing a facility to produce alcohol from cane residue.

Tate & Lyle has embarked on a $39 million project to develop new uses for sugar. The firm presently has developed over 150 sucrose-based chemicals.

Interesting and important as these developments are as possible ways of alleviating the energy crisis, the first and foremost interest in the use of sugar is still, and will continue to be, its food uses. Coca-Cola's reliance on the sugar industry through the years to provide its major ingredient and your author's involvement in procurement of sugar have resulted in a long, and hopefully, mutually beneficial relationship with the sugar industry.

Sugar has always been regarded throughout the countries of the world as one of the good things of life. Among food items, it is one of the most basic luxuries, as well as a very low-cost source of food energy. It is the food
whose consumption grows most dramatically with economic improvements
in a country. When people have more discretionary income, their consumption
of the good things increases.

This has certainly been seen in the increase in consumption that has
occurred in the developing countries of the world as their standards of living
have improved. India's domestic consumption of sugar, as food, for 1978
was up 30 percent over 1976; China's was up 27 percent for the same period;
Sri Lanka's consumption was up 165 percent. These are not isolated examples.
These are clear indications of what occurs and what will continue to occur
in areas of the world that are just beginning to show an economic improvement.
Sugar will continue to serve people, not only as an inexpensive food source,
but also as a basic luxury. The implications of this for growth in the use of
sugar cannot be ignored.

Throughout the world, we at Coca-Cola have seen consumption of the
firm's products rise dramatically as economic stability and well-being have
advanced. Indeed, this phenomenal growth has occurred to the extent that
the domestic, i.e., United States, segment is no longer the largest part of Coca-
Cola sales.

Another area of growing and diversified use that industrial users are
witnessing is related to the importance of convenience and value to today's
consumers. More and more "sugar-added" products are experiencing popularity
with buyers who want the lower cost of a product they can mix themselves,
e.g., powdered soft drinks, with the convenience of sugar already included.
Increased usage in this type of item will, no doubt, increase the need for
sugar as the citizens of developed countries demand more ease of preparation.

This leads to a discussion of two movements, or factors, that have recently
been viewed by the cane and beet sugar industry as threats. The corn wet-
milling industry has developed a product, high-fructose corn syrup, that is
another nutritive sweetener, another sugar (or isoglucose, as it is called in
some countries). Indeed, in acidified products cane and beet sugar invert
actually assume for all practical purposes the identical properties of High-
Fructose Corn Syrup. Considering the ramifications of a product such as this,
there is no doubt about one thing. In countries that are not self sufficient
in cane and beet sugar production, where High-Fructose Syrups can be made
available at a competitive price, it will play a larger role than in other areas.
But, a role is all it will play. It is merely one more type of sugar in the array
of sweeteners which are available to consumers. For some applications, it
will possibly grow in popularity and use, but it could hardly become suitable
for all applications. There is little doubt that the world, in coming years,
will need all of the nutritive sweeteners that can be produced.

The second situation that must be addressed is that the attacks made
on sugar by health faddists. This is more common in the developed countries.
Charges are levelled at sugar and sugar products as "empty calories," "bad
for dental health," and so on. In some ways, this has been tied in with the
fructose issue. Fructose has been hailed as the "natural sweetener" — "the sweetener found in fruit." Fructose is no more natural than other nutritive sweeteners, or superior to them. The fact is that, although it lacks vitamins and minerals, refined sugar is an ideal source of energy. How can a calorie be "empty" — this is a misstatement of fact. It provides the fuel the body needs to be active. This is a crucial need in the developing countries, where food is not plentifully available. Even in developed areas, it is a convenient and fast source of energy. The value of this should never be ignored.

Your author is happy that the industry is beginning to "fight back" on this issue of the value of sugar as a food. Studies have been done to show that the potential dental threat of sugar is not greater than that of other sweeteners derived from fruit or corn. The value of sugar as an energy source is being more widely publicized by the industry and that is good.

Finally, a few words should be said about the International Sugar Agreement (I.S.A.) and its move toward full implementation. It has been received well by a large majority of importers and exporters. Parenthetically, your author had the pleasure to be an advisor to the United States Delegation in Geneva both in 1973 and 1977 and is aware how difficult it was to reach the present I.S.A. agreement.

Despite the obstacle the United States has had to overcome in its move toward ratification and implementation, it has adhered to the rules of the I.S.A., as have the other participants. The Agreement has worked well to date. The world price has risen to a profitable level for producing countries. However, the results of the current wave of speculation in gold, silver and, now in sugar, does not augur well for the future expanded use of sugar. The current price of world raw sugar is not justified by the fundamentals of supply and demand. A word of caution is in order, and, as the Agreement continues to exert its controls, one can look forward to a sugar market where user and producer alike receive "good value for a fair price paid."