# Life Is Sweet, Anyway

## Honey, Maple Sugar, Corn and Sorghum Syrup Will Substitute for Sugar; Fruit More Healthful for Sweets

By EDWIN NEFF

MERICANS, until recently accustomed to all the sugar they could eat, are learning that life-on-less-sugar is not too sour

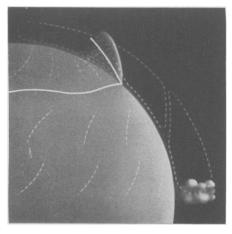
Mr. and Mrs. America now slip a lump of maple sugar or a teaspoonful of honey into the breakfast coffee—or have convinced themselves they really need no sweetening at all in coffee or tea.

Their children are learning to reach for a handful of raisins instead of a chocolate drop. There is even a glimmer of hope that young Americans will learn to like fruit drinks instead of sugar-rich pop.

But most active in the patriotic life on rationed sugar will be American housewives. To help them meet their families' craving for sweets, the Department of Agriculture's Bureau of Home Economics



#### THE POLAR FRONT THEORY



From the Instructional Sound Film
"The Weather"

Ninety-eight Film Subjects Are Now Available in the Physical and Biological Sciences

Write for Booklet S

Erpi Classroom Films Inc.

1841 Broadway, New York, N. Y.

has published a carefully tested list of more than a score of reduced-sugar recipes.

A mimeographed copy can be had by mailing a penny postcard to the Consumers Division, Office of Price Control, Washington, D. C., which is distributing the recipes.

These recipes are based on scientific research which proves that fruit, corn syrup, honey, maple sugar and syrup, and sorghum syrup can be partially or completely substituted for sugar. B. H. E. diet authorities are convinced that America will discover that even with less sugar it's a sweet world after all.

Uncle Sam's cooks have learned, for example, that a cup of sugar may be replaced by a cup of honey, or 1½ cups of sorghum syrup, two cups of corn syrup, or a cup of maple syrup. When liquid sweeteners are used, the amount of liquid in other ingredients should be reduced about one-third.

The recipes were designed to make the most of natural sugar in fruits and other foods to help spread your sugar ration. The Bureau of Home Economics has added these sugar thrift rules:

- 1. Serve cooked fruits hot to get the most of their sweetness.
- 2. Save syrup from canned fruit to sweeten other fruit, pudding sauce or vegetables.
- 3. Add a pinch of salt to increase the sweetening power of sugar in cooked food.
- 4. Be sure all sugar is completely dissolved to get full sweetness.

Here are a few of the Bureau's recipes, worked out in the experimental kitchens at Beltsville, Md., amidst jars of honey, sorghum syrup and neat little piles of buff-colored maple sugar blocks.

#### **Dried Fruit Sandwich**

Cook dried fruit and drain. Chop and mix with creamed butter, cottage cheese, or peanut butter. Spread between slices of bread for sandwiches.

#### Hot Dried Fruit Sandwich

Make sandwiches with dried fruit filling, as suggested above. For six sandwiches, beat up two eggs with ¾ cup

of milk, I tablespoon of sugar, and salt to season. Dip the sandwiches into the egg mixture and fry in a little melted fat until golden brown on both sides. For an open face sandwich, serve hot dried fruit sauce over a slice of fried bread or toast.

#### Pecan Pie

I cup pecans, 3 eggs, ½ cup sugar, I cup corn syrup, ½ teaspoon salt, I teaspoon vanilla, ¼ cup melted butter or other fat.

Beat the eggs, add sugar and the syrup, then the salt and vanilla, and last the melted fat. Place the pecans in the bottom of an unbaked piecrust. Add the filling and bake slowly in a moderate oven (350° F.) for 50 to 60 minutes. The nuts will rise to the top of the pie filling and form a crusted layer.

From the Office of Price Administration comes a suggestion to try less sugar in your coffee or tea, and substitute fresh fruit salad for desserts.



**TAPPING** 

This tree, 10 inches in diameter, is the smallest size of maple tree that it is advisable to tap for the sap that will become maple syrup and sugar. The photograph is from the Department of Agriculture



POURING SAP

In this large container, the sap will be transported to shed or kitchen where it will be boiled down to syrup or sugar. The photograph is from the U. S. Department of Agriculture.

Perhaps at this time a word about saccharin may be wise. It can be used in coffee or tea in place of sugar, but it is not a sugar substitute since it has no food value. Saccharin is a condiment just as are salt, pepper, cinnamon or vinegar. It is 450 times as sweet as sugar, and except when greatly diluted actually tastes bitter to some people. It was discovered at the Johns Hopkins University in 1879 by a German student named Fahlberg. He had been trying to synthesize a certain organic compound, but without success. He noticed, however, that he obtained some crystals in the bottom of the flask with which he had been working, and that these left a sweetish taste on his hand. Upon dissolving them in water, he found the crystals had a sweetening power many times that of sugar. Hence he named his crystals saccharin, after saccharon, Greek for sugar or sweetening. Saccharin was first manufactured in the United States in 1901 by the Monsanto Chemical Company of St. Louis.

Today it is used primarily in mouth washes, tooth pastes and powders, and in medicines where sugar is not desirable. It is also sold in tablet form for diabetics and others who must avoid sugar. The Federal Food and Drug Administration does not recognize its use by manufactur-

ers of foods and beverages except in special products to be prescribed by physicians as part of a special diet. However, experimental evidence fails to show any harmful effects resulting from the use of saccharin.

Meanwhile, don't worry about the effect of less sugar upon your health. Doctors and diet authorities, who for years have been begging the public to eat less sugar, are delighted at rationing. They are convinced this country will be actually better off. For while sugar is one of the purest forms of energy available for the human body, there are plenty of other energy sources—sweet potatoes, cornstarch, whole-wheat bread. These foods have an immense advantage over sugar. They not only provide energy, but also vitamins and minerals which refining has removed from sugar.

Nor is sugar necessary for the epicure. Paul C. Standley, of the department of botany, Field Museum of Natural History, Chicago, recalls that "sugar was unknown to the ancient Greeks and Romans except soldiers campaigning in the extreme Orient.

"The fabulous Lucullan banquets of Rome's epicures were graced by no sugar except that contained in honey, and in dates and other fruits!"

Why worry about sugar? People lived without it for centuries.

Science News Letter, April 11, 1942



BUSY

Honey, potent and pleasant sweetener, will be stored in the comb the bees are building.

## NEW BOOKS

#### **PHYSICS**

By Frank L. Robeson

Clearly written and thorough, this new book will serve equally well as a first year text for either engineering or general science and arts students. To be published in April. \$4.00 (probable).

#### PHYSICAL SCIENCE

By Ehret, Spock, Schneider, van der Merwe & Wahlert

College physics, chemistry, geology, astronomy, and mathematics are, in this new text, surveyed and unified by presenting the fundamentals and by emphasizing their interrelation. To be published in May. \$3.90 (probable).

#### **COLLEGE ZOOLOGY**

By Robert W. Hegner

This highly successful basic text for introductory courses in zoology is brought completely up to date with the publication of the new fifth edition. To be published in May. \$3.75 (probable).

#### **GEOMORPHOLOGY**

By O. D. von Engeln

This comprehensive basic text for courses in Geomorphology and Physiography will also be of great use to engineers, soil scientists, etc. It uses the genetic approach throughout. To be published in April. \$4.50 (probable).

#### THE EARTH AND MAN

By Darrell H. Davis

This new text for introductory college courses in geography covers both physical and economic geography. The material is built around ideas and facts of human significance and is tied up with live issues from everyday life. To be published in May. \$4.25 (probable).

#### ECOLOGICAL CROP GEOGRAPHY

By Karl H. W. Klages

A world concept of field crop distribution is given in this new text, with the reasons, both socio-economic and ecological and physiological, underlying that distribution. The latter are treated in especially full detail. To be published in May. \$4.50 (probable).

## MACMILLAN