

DIETETICS

Summer Drinks Have Long History

Old World Contributed Iced Tea, Iced Coffee, Lemonade; Vanilla, Pineapple, Chocolate, Are Gifts of the Americas

By EMILY C. DAVIS

YOU CLIMB up on the soda fountain stool and murmur, "What've you got?"

And the soda clerk automatically drones back, "Strawbry, vunilla, choclet, orrunge, maple, pynapl, lemn, razbry—" as if it were the most natural thing in the world for all those flavors to be at his command, in a row of spouts before him.

But if soda clerks, and soda drinkers, ever took time out to do a little serious research on the situation—which sounds like an absurd warm weather suggestion—they might raise one over-heated eyebrow, anyway, over the "triumph of civilization" which the long line of flavors represents.

Cleopatra never imagined anything like it. Nor any other ancient and sophisticated royalty you can think of. So many flavors to choose from at once, or to mix into glorified punch in the home kitchen, would have dazed your ancestors not so many generations back.

Even a slight and not-too-energetic dip into serious research brings up impressive facts about hot weather drinks.



Discovering America, for example, was a big turning point in the history of flavors. No America—no chocolate, vanilla, pineapple, or even maple. The Indians had those and they were real American products. True, a sweet sap can be extracted from Old World maple trees but it is not the rich yield of the American sugar maple. The Indians deserve

credit for giving maple sugar to the world, it is generally admitted.

Contrariwise, without Old World contributions, there would be no orange, lemon, lime, peach, almond, or ginger in the modern flavor list.

Historians tell many quaint incidents of fruits and flavors being carried off from one country to amaze and delight another. The Greeks became acquainted with bananas when Alexander the Great returned from an East Indian expedition. The orange was spread from its Oriental home through Europe on the tide of Mohammedan conquest. Lucullus, who revelled in luxuries, introduced cherries to Roman banqueters from foreign lands near the Black Sea.

The Wandering Strawberry

The strawberry had a particularly curious adventure. Strawberry flavor as we know it is American. For although the Old World had its strawberries, modern aristocratic berries are descended from American berries carried over to Europe by early explorers and returned by the colonists.

Exploration and trade, penetrating far corners of the earth, are still adding new flavors to quench the civilized world's thirst pleasantly. And chemists concocting synthetic flavors copied from nature, or finding ways to store elusive flavors in cans and bottles on the shelf, are still doing their bit to extend the line-up. The delicate essence of apple, for instance, was isolated a few years back by a Government chemist, and may yet gain popularity in apple ice cream.

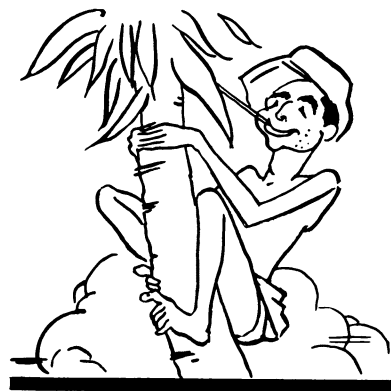
Ethiopians invented coffee and the Chinese started tea drinking. But when, nobody knows.

One thing is certain. "What to drink on a thirsty, hot day?" is a question as worldwide as summer weather and as old as man.

Stone Age man dragged himself out of his cave on a blazing hot afternoon and shambled down to the nearest stream for a cool drink. It was about all he could do—unless he caught on to drinking sap, fresh or fermented. Primitive folk in India today know that sap-sipping trick. In the East Indian heat, sugary sap of

palm trees ferments fast. So the native can shin up a tree, cut the central bud to form a depression, and next day shin up again with a straw to drink palm wine.

Stone Age cave men may not have been quick-witted enough to try that sort of stunt. But as soon as man learned to sow grain and began to take on culture, he invented drinks, many of them, and he had been inventing, mixing and tasting ever since.



Beer, for instance, has a very old and varied history. Babylonians and their neighbors devised scores of separately named kinds of beer, and Egyptians ran close second. Scholars can point to a Babylonian beer recipe dating from 2800 B.C. It sounds even older when you say 4,700 years ago. Wine, of course, is older than that, considering that nature makes it when conditions favor, and has been making it for uncounted ages.

The exact date in history when a Chinaman first drank a cup of tea is lost—a sad thought, for it was a memorable occasion and deserved a proper tablet or at least a dutiful historian at the tea-drinker's elbow.

But about 2700 B.C., the scholarly emperor Chen Nung is traditionally said to have soberly praised tea drinking.

"Tea is better than wine," Chen Nung is quoted as saying, "for it leadeth not to intoxication, neither does it cause a man to say foolish things and repent thereof in his sober moments. It is better than water for it does not carry disease."

It was a few thousand years after that—3,600 years, to be somewhere near the date—that Japan took to tea. It sounds like a long interval, even for the conservative East, but, then, Chinese tradition may be wrong in crediting so old an Emperor as Chen Nung with tea drinking.

England began its Age of Tea not so long before the Boston Tea Party. Sam

Pepys, noted diary writer in the seventeenth century, included tea drinking among his novel pleasures and adventures.

The world owes its coffee drinking to Ethiopia. But no one has yet discovered how many centuries Ethiopians kept their coffee-bean drink to themselves. If Ethiopians were enjoying coffee in the days of King Solomon, Nebuchadnezzar or Julius Caesar, the secret never got out. Or else, the dark brew was under-rated by wanderers who might have carried its fame back to Egypt, Greece, or Rome.

In any case, it was about the twelfth century A.D. before Arabians borrowed coffee from Abyssinians, and several more centuries before England had its coffee houses and "speakeasies" where coffee was stealthily sold without benefit of the required tax.

Iced lemonade for the Emperor!

That was the order in the Mongol Emperor's palace, when hot weather thirst struck medieval China.

Cold chocolate and more of it!

That was what Aztec Emperor Montezuma called for in his Mexican palace, across the sea in undiscovered America.

What thirsty royalties drank probably tasted no better than the long, cool drinks of modern kitchens and soda fountains, but they did get fancy service. There is no denying that.

The Emperor's lemonade in China was so extremely personal and important a matter that he appointed a high official to see about it.



The record of one Lord High Lemonade Mixer, or whatever his medieval title would be, was described by Dr. Berthold Laufer, late curator of anthropology at the Field Museum of Natural History. The court lemonade maker was Mar Sergius, a Christian who founded a Nestorian church in China, 1281 A.D.

Mar Sergius was famed, as his ancestors before him, for his skill at preparing

cool drinks known as sherbets, including lemonade. He had a diploma from the Mongol Emperor—a gold tablet—granting him the privilege of specializing in this honorable task. And he was obliged to send to the court each year forty jars of sherbet, made from juices of lemons, grapes, quinces, and oranges.

On various occasions, Mar Sergius was ordered to journey posthaste to various points in the empire to prepare the drinks for special functions.

The sherbets, Dr. Laufer explained, were believed by the Chinese to have curative powers. And this was long before the important nutritive value of vitamins in fruit could be even guessed at.

The custodian of the royal chocolate pot in the Aztec palace was, if anything, more impressive. He had a much bigger job. Montezuma drank fifty pitchers of chocolate a day himself, and he demanded perfect service.

Imperial Chocolatl

Prescott in his famous work, "The Conquest of Mexico," gives the picture vividly:

"The Emperor took no other beverage than the chocolatl, a preparation of chocolate, flavored with vanilla and other spices, and so prepared as to be reduced to a froth of the consistency of honey, which gradually dissolves in the mouth. The beverage, if so it could be called, was served in golden goblets, with spoons of the same metal or of tortoise-shell finely wrought.

"The Emperor was exceedingly fond of it, to judge from the quantity—no less than fifty jars or pitchers being prepared for his daily consumption! Two thousand more were allowed for that of his household."

There are two main reasons for drinking something—whatever you like best—on a hot day. But some drinks rate high, some low, on these two points: cooling value and nutrition value.

It is worth while checking up, sometime, to see what you get out of your hot weather drinking.

To start off with an unpopular truth, a hot drink is more cooling than an iced one, other things being equal. The hot drink cools by making you perspire. The evaporating perspiration lowers the temperature of your body. The cold drink, contrarily enough, causes the body to increase heat production.

However, "other things" are not always equal between hot and cold drinks. If a hot drink contain shovel-loads of sugar, and much cream or chocolate, it may be a heating drink after all. For sugars and starches and fats stoked into

the body engine burn with a high heat production. On the other hand, fruits and vegetables produce comparatively little heat as the body consumes them, even taken in cold.



But whether you prefer your drinks hot or cold, it is advisable not to take them highly iced. So physicians generally agree. And if they are iced, drink slowly. (They last longer that way, anyhow).

Balancing the values on hot weather drinks has to be done in a very general way, because the ingredients that rate minus for cooling may rate a good plus for their food value. Flavored milk or cream beverages, for example, are an excellent means of keeping up the milk ration in your diet.

Fruits are deservedly popular in hot weather drinks because they meet so many requirements. Besides their flavor, they provide water, sugar and important vitamins, and, as already said, they do not heat up the engine. Many vegetables have the same advantages, and the tomato and sauerkraut juice cocktails now popular may be only a starter when drink inventors get to work on vegetable drink possibilities.

Incidentally, a good idea for keeping cool comes from laboratories working at the serious business of helping miners to withstand intense heat. This is the discovery that a simple pinch of salt in your drinking water will help you to stand heat. The amount of salt added should be small, not enough to make the water really distasteful.

The physiology of it is this: when you perspire, the body loses salt as well as water. The exhaustion you feel in these circumstances is due to loss of both these elements, not a mere need of water alone.

Salted water may not be a delightful drink, but it is one of the very practical things that can be "done about the weather," Mark Twain to the contrary notwithstanding.

Cool Drinks From Many Lands

Mexican Cocoa

- 6 cups milk
- 1 cup sugar
- 2 tsp. vanilla
- 6 heaping tsp. cocoa
- 2 eggs

Cream sugar and eggs well together. Blend the cocoa with a cup of cold milk, and cook with the rest of the milk in a double boiler, for about five minutes. Remove from fire, and slowly stir into the egg and sugar mixture, stirring continuously until it is well mixed. Add vanilla and beat with egg beater until deep foam rises. Serve hot or cold with a dusting of cinnamon on each cup.

Chinese Lemonade

Chinese lemonade has these proportions, as recommended in a modern Chinese cook book: One half-pint lemon juice, strained, combined with one pint of sugar and three pints of water. Keep it cold.

Indian Maple Drink

Maple sugar in cold spring water is a native American beverage idea. A Chipewewa hostess up Minnesota way served this to Miss Frances Densmore, scientific collector of Indian songs, one hot summer afternoon. "A most refreshing drink," Miss Densmore found it, "especially when one sits under the trees from which the sugar was made."

Norwegian Fruit Soup

Fruit soups are a good hot-weather idea from Scandinavia. More versatile than most soups, the fruit soup can be served to open a meal, to top it off, or to go with afternoon coffee:

- 1 cup prunes
- 1 cup raisins

- 2 qts. cold water
- 1 lemon
- $\frac{1}{2}$ cup grape juice
- $\frac{1}{4}$ cup minute tapioca
- sugar to taste

Put prunes and raisins on to boil with the cold water. When the fruit comes to a boil, add the tapioca and cook until tapioca is tender and translucent. Add the lemon sliced thin, one-half cup grape juice (or grape jelly), and sugar to taste. Serve cold.

Tomato-Kraut Cocktail

Mix equal quantities of tomato juice and sauerkraut juice. About one-half teaspoonful of lemon juice may be added to a cocktail sized serving.

Honey Blossom

A simple drink that has considerable food value is this, described by Cornell University's home economics department:

Add three ounces, or about one and one-half tablespoons of honey and two to three ounces of fresh lemon juice or orange juice to a pint of milk. Shake it until the honey is blended. Serve cool.

Frosted Coffee

Make the coffee strong—about one and one-half times as strong as for a hot drink. Pour the hot coffee directly over the ice. Add sugar and cream to taste, and a spoonful of ice cream. Serve at once. Do not store in refrigerator.

Fruit Punch

And to show what Americans can do with tea, here is a popular up-to-date fruit-tea mixture from that best-seller cook book, "Aunt Sammy's Radio Recipes Revised." Aunt Sammy, now sold by the U. S. Superintendent of Documents for fifteen cents, was on the Department of Agriculture's free list for a while, but, pay or free, the book recently passed the 715,000 mark.

- 4 cups sugar
- 3 cups water
- 2 dozen lemons
- 2 qts. Strawberry juice (or other berry juice) bottled, or 2 qts. crushed fresh fruit
- 1 dozen oranges
- 2 qts. freshly made strong tea
- $\frac{1}{2}$ tsp. salt
- 1 qt. ginger ale or carbonated water

Boil sugar and water together to make heavy sirup, and cool. Scrub oranges and lemons, and squeeze out juice. Barely cover the fruit skins with water, let stand for an hour or longer, pour off the water, and add to the fruit juice. Add the other fruits, sirup, and tea. Just before serving, add chopped ice, the ginger ale or carbonated water, and, if the punch is too strong, ice water in small quantities until the desired strength is found.

Science News Letter, August 17, 1935

ENTOMOLOGY

Japanese Beetle Pest Spreading in Cities

JAPANESE beetle season is now at its peak. Although the first beetles of the season were found about a week later than usual this year, warm sunny weather during July helped the foliage destroyers to catch up to the schedule.

Residents of parts of New Jersey and Pennsylvania where the beetles were first discovered in 1916 will be pleased to learn that the beetles are becoming less numerous in these localities.

Unfortunately this cannot be said of other areas, for in general the pests are more numerous this year than usual. They appear to be slowly spreading throughout the East.

Large metropolitan areas of New York, Philadelphia, Wilmington, and Baltimore are one field of noticeable expansion for the beetles this year. They are being found there in city streets and parks, as well as suburban residential sections. Other points outside the area of continuous infestation report noticeable damage for the first time.

This year's increase was expected by entomologists, because of favorable weather conditions during the summer last year. Frequent rains during July and August 1934 were especially favorable to larval development.

One annoying feature of the beetle season occurring during the past few weeks was the sudden invasion of New Jersey beaches from the Atlantic Highlands and Sea Bright down to Manasquan. Millions of the beetles were blown by storms into the ocean, to be cast back by the waves onto the beaches of summer resorts. Bathers complained of getting beetles in their mouths, noses, and inside their bathing suits.

A note of encouragement comes with the report to Science Service of C. H. Hadley, at the Moorestown, N. J. Station of the Bureau of Entomology and Plant Quarantine, that increased feeding on the beetles by birds has been noticed.

Science News Letter, August 17, 1935

● RADIO

Tuesday, August 20, 3:30 p. m., E.S.T.
WHY WE NEED BIRDS AND MAMMALS, by Dr. Joseph Grinnell, Professor of Zoology, University of California.

Tuesday, August 27, 3:30 p. m., E.S.T.
BEFORE COLUMBUS CAME, by Dr. H. J. Spinden, Curator of Prehistoric and Primitive Art, Brooklyn Museum.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.