Salt of the Earth

By E. R. Yarham

Salt, everyday and common substance as it is, has played a prominent part in the world's history, and is still very precious in Africa and the East, and not infrequently a native chief barters away one of his numerous wives for it. Salt is, because of the way civilized man cooks his food, indispensable to countless millions of people.

It is invaluable in maintaining health, especially in the tropics. A striking affirmation of this came from India. A medical report on the health of troops there said that an extra salt ration was beneficial in the maintenance of general health in hot weather, and it was of the utmost use in the prevention or reduction of heat-strokes and the effects of heat.

Used by Miners

The famous traveller, the late A. F. Tschiffeley, who made the epic horseback on from America to New York, commenting on this, said during his journeys through hot desert regions, particularly along the Peruvian coast, he always carried with him a bottle containing a mixture of lemon and lime juice, mixed with salt water. The natives advised him to do this, as it prevents exhaustion caused by the loss of salt from perspiration. In confirmation of this, the beneficial effects of water mixed with a little salt are well-known to Welsh miners who work in certain hot pits.

Salt has been used by man from time immemorial, although it appears from the "Odyssey" that in the time of the Greeks certain inland tribes knew nothing about mined salt, nor did some Indian peoples until the coming of Europeans, and

the same was true of parts of America. Only where men live mainly on milk and flesh—the latter consumed raw or roasted—is it possible to go without ordinary salt. That is why some of the nomads of the desert are able to live without salt, among them the Bedouins of Southern Arabia. Salt is the mark of an agricultural people, and a cereal or vegetable diet necessitates the use of salt, boiled meat also calls for it.

No Salt as Punishment

The value of salt to people living somewhat artificial existences has been known for centuries, and the Middle Ages, which succeeded in discovering every refinement of torture, made use of this knowledge. In Holland one of the legal punishments was to deprive a man of salt, and this caused depression and illness. Criminals in Sweden were at one time allowed, as an alternative to capital punishment, to abstain from salt for a month, with the result that they usually died. During sieges and famines lack of salt always causes suffering and ill-health. In medieval times salt was of such importance in the diet that one's social standing was shown by whether one sat above or below the salt at table.

A medical man, and three students, one a woman, underwent deprivation of salt in order to test the effects on the human body. It took about a week to render the body deficient in salt. The experimenters ate salt-free food, special bread and milk, salt-free butter, thrice-boiled vegetables, jam, fruit, and home-made salt-free toffee. They also lost as much salt as possible through perspiration. Strange symptoms soon supervened.

Symptoms of Salt Lack

The four lost their appetite, and a peculiar sensation arose in the mouth which was not a true thirst. All food seemed to be tasteless, cigarettes lost their flavour, and there was a feeling of sickness. Cramp developed in the muscles, and the experimenters suffered from excessive fatigue and a general sense of exhaustion. The doctor even found shaving tiring, and his arm felt unable to move. Two of the students "got into an extraordinary interesting state in which they were content to sit and do nothing in a chair, sometimes for hours on end." They all became

worn-looking and ill, although they continued to eat.

The evidence is that salt does play a vital part in the chemical processes of the body, and the fact that most people find they require it cannot be entirely put down to the fact that civilized races are inclined to reduce very greatly the food value of their diet by over-cooking. The primitive native will make periodic treks to the sea in order to have a meal cooked in salt water now and then, as he believes he will be sick if he does not have it so. Missionaries in such count ies as New Guinea bear testimony as to this habit.

Animals know nothing of dietetics, yet some seem to crave for salt, and dogs and other wild beasts regularly resort to springs containing salt. Herbivores, in particular, seek after it, and places where it is found are favoured by ruminants. In primeval forests these creatures make paths converging on the salt deposits from all directions. Salt seems essential to their health and vigour.



Meadow Bank Salt Mine—Loading Rock Salt at the working face. (Photo: Imperial Chemical Industries Ltd.)

Salt as "Money"

We begin to see why salt has played such a tremendous part in the history of civilization. Perhaps salt is not necessary for human existence, and in that sense is a luxury, but there is no doubt that, living artificially as men do, salt is an essential item in their diet. Men have longed for it and enjoyed it since prehistoric times, and they have always consumed it when they could get it—and as suggested, not only men but beasts.

It was one of the first articles of trade and is still a medium of exchange in the East. Cakes of it have been used as money for countless years. Marco Polo spoke of this, and salt played an important part in system financial the Mogul of Emperors. Salt was also used as money in Tibet, Abyssinia, and other parts of Africa, and the custom persists in some areas. It was the custom, too, for Roman soldiers to receive salt as part of their pay. This amount was known as "salarium," salt money. Hence the word "salary."

In the East salt taxes were so exorbitant that trouble often arose, and there have been many instances of this in India. Because of the heavy taxation salt in the Orient frequently reached the consumer in an impure state, largely mixed with earth. This explains the New Testament phrase, "the salt which has lost its savour." What happens is that the salt is washed out of the mixture, and the salt which has lost its savour is the impurity which is left.

Salt Caravans of Timbuctoo

Among the most remarkable sights the world can show are the great salt caravans of the Sahara. Thousands of camels cross the vast wastes of the desert, laden with salt, which is more precious than gold to the tribesmen.

Modern methods of communications are seen in the Sahara nowadays, for motor coaches and lorries regularly cross it, but it will be long before mechanical transport replaces the long, slow marches of the salt caravans, some of which number Their arrival, twice 15,000 camels. annually, is one of the sights of the year at Timbuctoo, much of whose wealth was founded on salt. renown as a mart for the bartering of this commodity spread to Europe, and at the beight of its glory the fabulous city was the resort of wealthy and learned classes, many of the houses boasted large libraries, and education reached a high standard.

The Sahara route is not the only famous salt highway. In early times incense shared with salt the distinction of being the chief economic and religious necessities of the people. In consequence we find that many of the great highways of trade of the ancient world were established in order to convey them, and the route to Timbuctoo is a survival of these.

The great Greek historian—the Father of History—Herodotus, records the vast trade between the Syrian ports and the Persian Gulf, which owed its inception to the renowned salt of Palmyra, once a mighty merchant city, now a collection of Arab hovels in Syria. One of the oldest roads in Italy is the Via Salaria, a salt road; the immense salt fields of Northern India were worked long before the invasion of Alexander the Great; and there was an important trade between Greece and Southern Russia, the salt pans being at the mouth of the Dnieper.

Before the Norman Conquest the salt pans of Cheshire and Worcestershire supplied not only Britain but Northern Gaul. The route followed by the pack-trains was south to the Thames, which was forded at Westminster.

"Note: Lee Foundation for Nutritional Research is a non-profite public-service institution, chartered to investigate and disseminate flutritieflal information. The attached publication is not literature or labeling for any product, nor shall it be employed as such by anyone. In accordance with the right of freedom of the press guaranteed to the Foundation by the First Amendment of the U.S. Constitution, the attached publication is issued and distributed for informational purposes."

Reprint No. 99 Price - .10¢

Reprinted from World Science Review July - 1958 (No. 66)

by
LEE FOUNDATION FOR NUTRITIONAL RESEARCH
Milwaukee 1, Wisconsin