

cuits. Rationed out to the men at the rate of six cans a day, this reserve chow provides four pounds of food for a day. This is less than the American soldier is accustomed to regularly, but then the reserve ration is intended only for use when normal transport is interrupted, and the Quartermaster Corps does not recommend its use even then for more than three days.

That brings us back to Ration D, which is the newest equivalent of the old British Iron Ration, and all the other last-ditch rations in history.

The Iron Ration was so distinctly a last-resort meal that British soldiers used to say the orders were:

"Never eat your Iron Ration until after you've starved to death!"

Even the present tinned emergency ration supplied to British fighters carries the warning, "To be consumed only when no other ration of any other kind is procurable."

The American soldier's chocolate bar carries no stern warning—only instructions to eat it slowly. Nor has any effort been made to make the new ration unpalatable, Major Logan states. After all, a man who sits down to a chocolate bar supper, when somewhere back in camp other men are getting a round meal, needn't be additionally harassed by finding the ration is deliberately made just barely edible.

Uses of the new emergency ration by civilians are not the Army's problem. But Quartermaster Corps officers can see that the energy ration might fit into other situations, provided the public recognizes its limitations.

The Army's Ration D may become familiar to a public that will never get even a taste of Rations A, B, and C.

Science News Letter, June 22, 1940

ICHTHYOLOGY

Higher Fish Species Born Alive in Membrane

THE EMBRYOS of higher fish species that are born alive instead of being hatched from eggs laid in the water are surrounded before birth with sheathing membranes somewhat resembling those of the warm-blooded animals that are uniformly born alive, Dr. C. L. Turner of Northwestern University has found. Although there are considerable differences in detail and in mode of functioning, even the technical names are the same: amnion, chorion, allantois.

Science News Letter, June 22, 1940



CANNED CHOW FOR THE ARMY

The U. S. Army's new reserve ration, alphabetically called C, is shown served up. For real emergency use, the doughboy is supplied with Ration D, a specialized chocolate bar, shown lower right, partly opened.

NUTRITION

Vitamin Famine Prevalent In the United States

Chronic Deficiency is Due to Unbalanced Diet And Also to Loss of Vitamins in Processing of Food

WAR may be causing famine in Europe but here in America, even without war, there is a chronic famine, Dr. Tom D. Spies, of Birmingham, Ala., declared at the meeting of the American Medical Association. The chronic famine we have here is a starving for vitamins, minerals and other precious substances found in minute amounts in foods. Large numbers of people are starved for these substances partly because they do not eat enough of the foods containing them and partly because foods as they come to the table today have lost much of their normal content of these protective substances.

About 90 per cent. of the vitamin B₁, preventive of beriberi, in bread has been lost from the flour in the milling process. Water soluble vitamins are also lost to us by being washed out of the soil, so

the plants today do not furnish enough of these to the animals and men that live on them, Dr. Spies said.

Death figures do not show the extent of this chronic famine in America, Dr. W. H. Sebrell of the U. S. Public Health Service declared. This, partly, is because deaths from this cause are not all recorded as pellagra or scurvy or beriberi deaths. Partly, too, it is because this famine does not kill, although it keeps people ailing and miserable and unfit for work. At least 100,000 people are probably suffering from pellagra, Dr. Sebrell estimates.

For a more complete picture of the extent of the vitamin deficiency in the country, Dr. Sebrell turned to figures on consumption of vitamin pills and similar preparations. In 1938 the people of the United States spent more than \$100,000,-