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RADIATION STANDARDS, INCLUDING FALLOUT 225

have been included. Some infant and adult diet samples have also been tested.

Each sample is a composite of three full meals a day, plus snacks, for a total of seven or fourteen days. Thus each contains literally a hundred or more individual foods, purchased in local retail markets and cooked in local waters, in the proportions in which they are normally eaten. These samples are prepared for us in the various cities by home economists, who have performed yeoman service for these studies.

RADIOISOTOPES STUDIED

Strontium-90 has been the major fallout component which has been determined in all of the studies, but the samples have been explored for other radioisotopes as well. In the January 1961 study we determined eight radioisotopes (strontium-90, cesium-137, cerium-144, zinc 65, plutonium-139, radium-226, potassium-40, and lead-210) five of which are man-made, the other three naturally-occurring. In the May and June 1961 series we determined six of these radioisotopes. In our present series we are measuring strontium-89, strontium-90, and cesium-137; we also looked for iodine-131 in several samples. We have also determined calcium in all of these studies.

In most of these studies we have also tested the milk and wheat components of the total diet samples. The object of these side studies has been two-fold: to determine the contribution of these foods to the total intake of fallout, and to determine whether either of these foods, tested alone, can be used as an index of the total intake.

Our present study includes a study of total diet samples, both teen-age and infant, at four times during the first six months of this year, in a total of 30 cities. The study also includes samples of milk and wheat products. The major purpose is to determine the patterns of distribution in our foods

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