

A radiological survey was performed at Bikini by a medical team headed by Dr. Robert A. Conard, Brookhaven National Laboratory, in April 1974. In a preliminary report of the findings of the survey, Dr. Conard stated that gamma spectrographic analysis (whole-body counts) were carried out on 31 people at Bikini, including members of the families who had returned. Preliminary analysis of the data give the ~~estimate that~~ of the

~~data give~~ the following estimated average body burden of cesium-137^x(¹³⁷Cs):

<u>Number</u>	<u>Body burden (uCi, ¹³⁷Cs)</u>	<u>%MPC*</u>
18 males	0.129	4.3
13 females	0.073	2.6

*Using 3 uCi MPC-based on the standard 1/10 of the maximum permissible burden for industrial populations which is 30 uCi according the the Recommendations of the International Commission on Radiological Protection, ICRP Publication 2 (1959).

In the report Dr. Conard stated:

"A gamma survey was carried out on Bikini Island using a scintillation type survey meter calibrated for ¹³⁷Cs which represents about 95% of the gamma radiation on the island. Preliminary analyses ~~showed roughly the following levels on the island.~~ *all of the data are available however to be published in the near future.*

A. Village (Living area)	Average uR/hr.
Inside cement houses with coral covered yards	2.38
Outside cement houses with coral covered yards	3.95
Inside cement houses without yard covered coral	2.95
Outside cement houses without yard covered coral	9.44
Along village road	13.1
B. Interior-coconut groves	41.6

It is gratifying that the levels are below those previously reported. Assuming that the average Bikini person spends 85% of their time in the village and 15% in the interior area the whole body dose would be about the same as the average U. S. citizen receives from natural background, the background level being higher in the United States than on Bikini. A more

~~definitive gamma survey with thermoluminescent dosimeters will be made at Bikini on the next survey."~~

It should be emphasized that it will be at least 5 to 6 years before any of the fruits grown on Bikini will be used as a part of the regular diet. Radiation survey teams will visit the area on a regular basis to monitor personnel and the environment, making whole body counts on personnel and collecting and analyzing samples such as water and vegetation used for foods as well as a survey of the external gamma levels in the living area.