

See enclosure 2

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HSA: JH:krw

December 18, 1958

Dr. Robert A. Conard Jr.
Medical Division
Brookhaven National Laboratory
Associated Universities, Inc.
Upton, Long Island, New York

Dear Dr. Conard:

I am enclosing a table of the complete data that we have on the Marshall Island food samples. These samples were analyzed in our laboratory and all information available to us is reported.

It is my personal feeling that these values are extremely high if we are to consider them as being a steady diet. If we had to estimate the present average level of Strontium-90 in the American diet it would be below 10 $\mu\text{c Sr}^{90}/\text{g Ca}$. The average value in the Marshallese samples is of the order of 900 and this might lead to a bone content in children of greater than 100 $\mu\text{c Sr}^{90}/\text{g Ca}$. Naturally these figures are purely conjectural but are based on comparison of the appropriate levels in American food and bone, and the food samples mentioned.

We would be happy to analyze further samples if they are required to clarify the general picture.

Sincerely,

John H. Harley, Chief
Analytical Branch

Enclosures:
1. Table

cc: C. L. Dunham, DBM
G. M. Dunning, DBM (2)
S. A. Lough, HS
L. B. Whitney, HSA

OFFICE ▶	HSA				
SURNAME ▶	HARLEY:krw				
DATE ▶	12-18-58				

HASL Number	Sample	Grams rec'd at HASL Measured	d/m Sr ⁹⁰ in HASL Sample Measured	d/m Sr ⁹⁰ per gram (wet weight) Calculated	Total Sr ⁹⁰ in Sample (d/m) Calculated	mg Ca per gram Measured	mg Ca in Sample Calculated	S. U. Calculated
8603	Arrowroot	176.7	15.4 ±1.4	0.087± .006	20.6 ±1.8	2.06	365	19±2
8604	Bread	30.2	2.39±1.2	0.079± .040	3.97±2.0	0.093	3	390±21
8605	Coconut Milk	92.3	30.2 ±1.6	0.328± .018	49.9 ±2.7	0.15	14	1000±55
8606	Green Coconut	108.7	6.96±1.5	0.064± .014	10.5 ±2.3	0.14	15	210±45
8607	Cooked Fish	38.6	3.12±1.1	0.081± .028	5.55±1.9	0.13	5	280±100
8608	Ripe Coconut	10.8	2.14±1.0	0.198± .095	6.10±2.9	0.075	1	1200±590
8609	Pandanus	27.4	83.7 ±2.4	3.06 ± .088	267.0 ±7.7	0.15	4	9300±270
8610	Rice	34.6	2.34±1.0	0.068± .030	6.4 ±2.8	0.11	4	340±130
8611	Water (500 ml.)		17.7 ±1.5	--	--	--	--	--
	TOTAL	370					411	900

* Calculated to entire sample including amount not sent to HASL.

Errors expressed are one standard deviation of counting and do not include possible chemical errors.