

| | | |
|----------------------|--|-------------|
| DOCUMENT SOURCE | Lawrence Berkeley Laboratory Archives and Records Office | |
| RECORDS SERIES TITLE | Applied Science Division: Scientists' Papers - Papers of William E. Siri | |
| ACCESSION NO. | 434-91-0131 | COPY |
| FILE CODE NO. | 19-14-18 | |
| CARTON NO. | 7 | |
| FOLDER NAME | Dr. Leo Meyer (Marshall Island Natives) | |
| NOTES | | |
| FOUND BY | Perry Hall | |

404628

R

Dr. Meyers Subjects Recount

6/14/63

10 Min counts

| Contents | Halo # | CPM | Ratio | Efficiency | Quench/Correction | CPM - B Kg | Corrected to 2 cc at 1/25° 50° |
|----------|--------|--------|-------|------------|-------------------|------------|--------------------------------|
| A | A | 10,100 | 0.75 | 14.97 | 2.67 | 10,069 | 26,688 |
| B | B | 6,666 | 0.76 | 15.01 | 2.66 | 6,635 | 17,549 |
| C | 39 | 6,086 | 0.75 | 14.97 | 2.67 | 6,055 | 16,167 |
| D | 40 | 8,015 | 0.73 | 14.00 | 2.86 | 7,984 | 22,834 |
| E | 41 | 5,968 | 0.74 | 14.94 | 2.68 | 5,937 | 15,911 |
| F | 42 | 7,825 | 0.75 | 14.97 | 2.67 | 7,794 | 20,810 |
| G | 43 | 6,508 | 0.74 | 14.94 | 2.68 | 6,477 | 17,358 |
| H | 44 | 6,134 | 0.75 | 14.97 | 2.67 | 6,103 | 16,295 |
| I | 45 | 8,622 | 0.74 | 14.94 | 2.68 | 8,591 | 23,024 |
| J | 46 | 7,812 | 0.74 | 14.94 | 2.68 | 7,781 | 20,853 |
| K | 47 | 8,556 | 0.74 | " | " | 8,525 | 22,847 |
| L | 48 | 6,555 | 0.74 | " | " | 6,524 | 17,484 |
| M | 49 | 10,078 | 0.74 | " | " | 10,047 | 26,926 |
| N | 50 | 9,638 | 0.75 | 14.97 | 2.67 | 9,607 | 25,651 |
| O | 51 | 11,535 | 0.74 | 14.94 | 2.68 | 11,504 | 30,831 |
| P | 52 | 9,283 | 0.75 | 14.97 | 2.67 | 9,252 | 24,703 |
| Q | 53 | 7,886 | 0.74 | 14.94 | 2.68 | 7,855 | 21,051 |
| R | 54 | 6,106 | 0.73 | 14.00 | 2.86 | 6,075 | 17,374 |
| S | 55 | 9,997 | 0.75 | 14.97 | 2.67 | 9,966 | 26,609 |
| T | 56 | 5,937 | 0.73 | 14.00 | 2.86 | 5,906 | 16,891 |
| U | 57 | 1,958 | 0.76 | 15.01 | 2.66 | 1,927 | 17,085 |
| V | 59 | 31 | 1.94 | — | — | 6,423 | — |
| W | 59 | 10,456 | 0.73 | 14.00 | 2.86 | 10,425 | 29,816 |

BEST COPY AVAILABLE

1958
2/17
1923

| | | |
|----------------------|--|-------------|
| DOCUMENT SOURCE | Lawrence Berkeley Laboratory Archives and Records Office | |
| RECORDS SERIES TITLE | Applied Science Division: Scientists' Papers - Papers of William E. Siri | |
| ACCESSION NO. | 434-91-0131 | COPY |
| FILE CODE NO. | 19-14-18 | |
| CARTON NO. | 7 | |
| FOLDER NAME | Dr. Leo Meyer (Marshall Island Natives) | |
| NOTES | | |
| FOUND BY | Perry Hall | |

Counting water (H^3) distilled from urine by freeze drying. Channels Ratio

232 16,363 CPM — in 2cc H_2O from distilled urine
 — 29 Bkg
 16,334 CPM Ratio 0.76 eff. 15.01

I brought all samples to the same efficiency and the unquench H^3 std is 40. For sample 232 this meant multiplying CPM by 2.66 = 27,428

My std was 2cc of distilled H_2O containing 25,000 of the dose the subjects took.

(Corrected for 40% efficiency)

$$\frac{\text{Std (CPM-Bkg)}}{\text{subject (CPM-Bkg)}} = \frac{29,904}{27,428} = 1.088$$

X dilution factor of 25000 = 27200
 this is now Total Body Water in cc
 = 27,200 L.

L x 0.975 converts to kg H_2O = 26.792 kg

$$\% H_2O = \frac{\text{kg } H_2O}{\text{Total body wt}} = \frac{26.792}{46.36} = 57.79\%$$

$$\% \text{ Fat in Human body} = 100 - \frac{\% H_2O}{0.72} = (100 - 80.26) = 19.74$$

wt of fat = % Fat x Bd. wt = 9.15

Lean Body WT = Total Body wt - Fat = 46.36 kg - 9.15 kg
 37.21 kg