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SOUTH PACIFIC COMMISSION

COMPARATIVE GROWTH PATTERNS

Wala-Rano, Malekula (New Hebrides)  
Papua New Guinea.  
Mariana Islands (TTPI),  
Aitutaki (Cook Islands).  
Apia. (Western Samoa)

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South Pacific Commission  
Noumea, New Caledonia,  
July 1975

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## COMPARATIVE GROWTH PATTERNS

Our growth survey covered 5 populations:

1. Melanesian children in Wala-Rano village, Malekula, in the New Hebrides (0-5 years, n = 144).
2. Melanesian children in Papua New Guinea (0-6 years, n = 780).
3. Micronesian (Chamorro and Carolinian) children in the Mariana District of the Trust Territory of the Pacific Islands (0-6 years, n = 912).
4. Polynesian children in Aitutaki, Cook Islands (0-6 years, n = 330).
5. Polynesian children in Apia, Western Samoa (0-3 years, n = 336).

All samples, especially in Wala-Rano and Aitutaki, were small and in some age groups there were just a few children.

To have a rough idea of differences in growth patterns of these children, we plotted some of their growth curves on the same figure:

- length for age in centimeters,
- weight for age in kilograms,
- weight for length (kg/cm),
- sitting length (crown-rump length) in percentage of total length,
- head circumference in centimeters.

### 1. LENGTH

Polynesian children (Aitutaki, Apia) were on the average taller than Micronesian (Marianas) and Melanesian (Papua New Guinea, Wala-Rano) children.

Melanesian children in Papua New Guinea were as tall as or even taller than Micronesian children.

Wala-Rano Melanesian children form the smallest group.

In all groups, the growth curve for length was parallel to the Harvard Standard curve up to 9 months. Between 9 and 21 months, the growth rates of these children were under the Harvard Standard growth rate, and by the age of 18 months all mean lengths for age were under Harvard Standards.

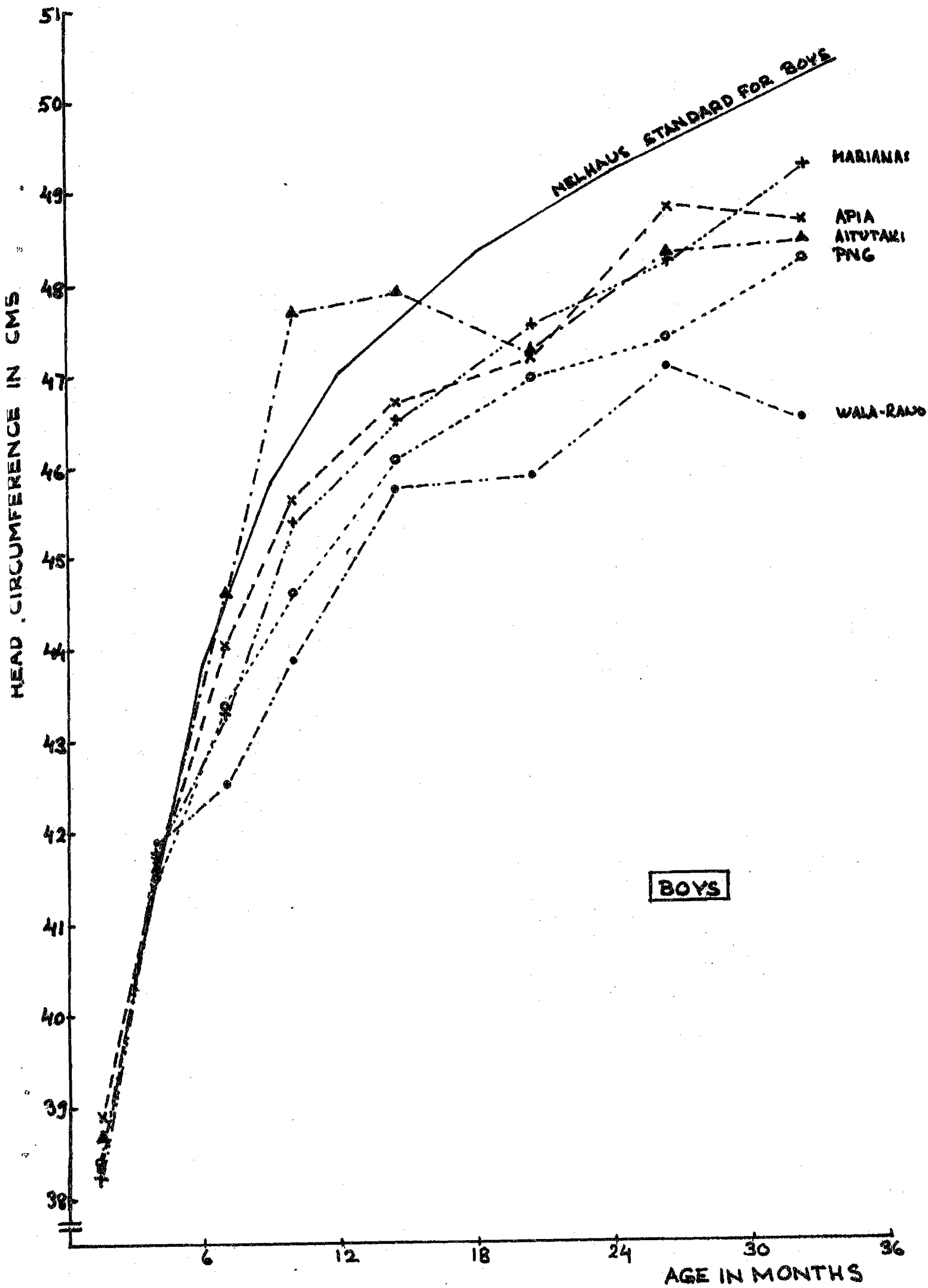
After 21 months, the growth curves were again parallel to the standard curve.

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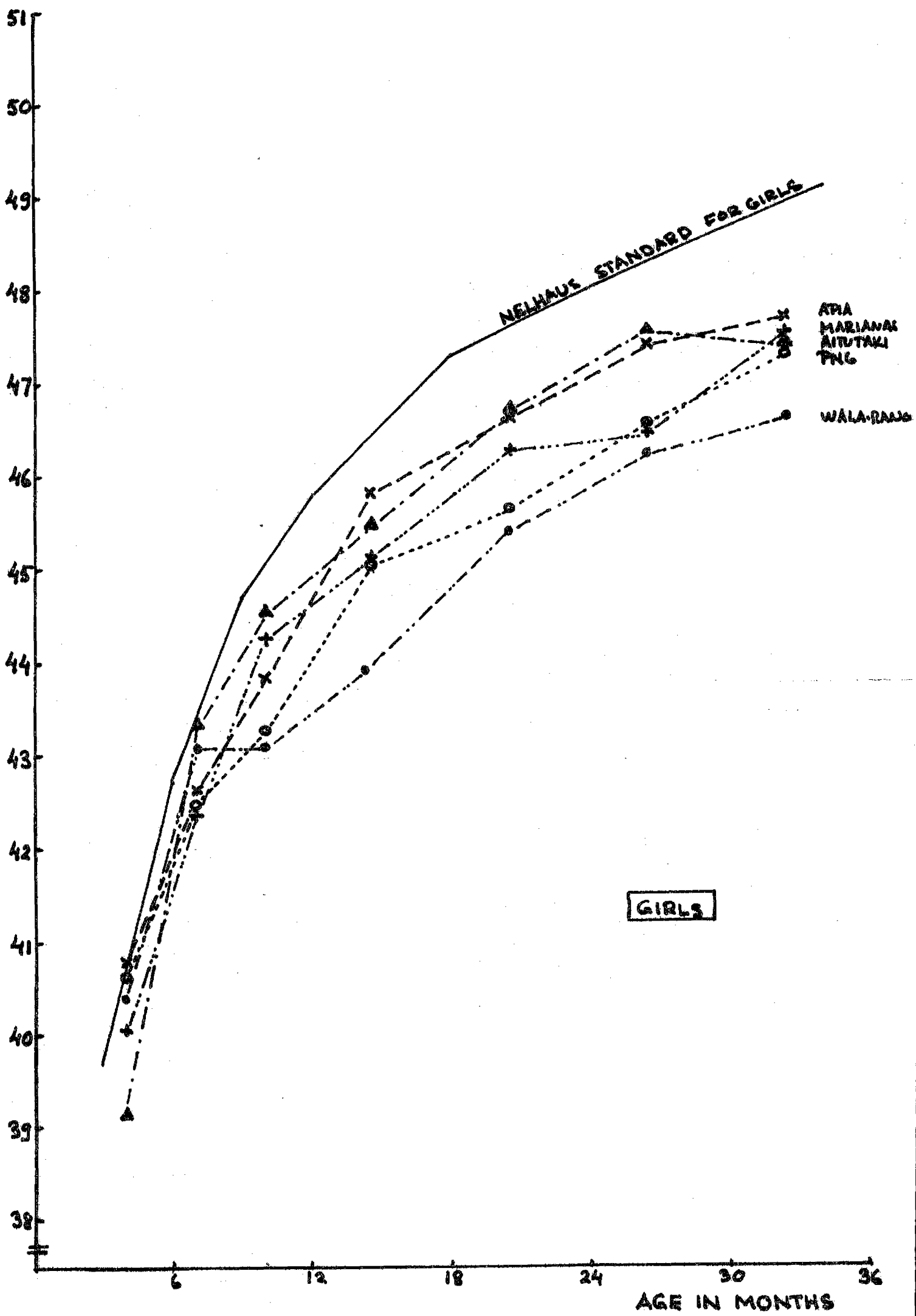
TO: THE DIRECTOR, NATIONAL BUREAU OF STANDARDS  
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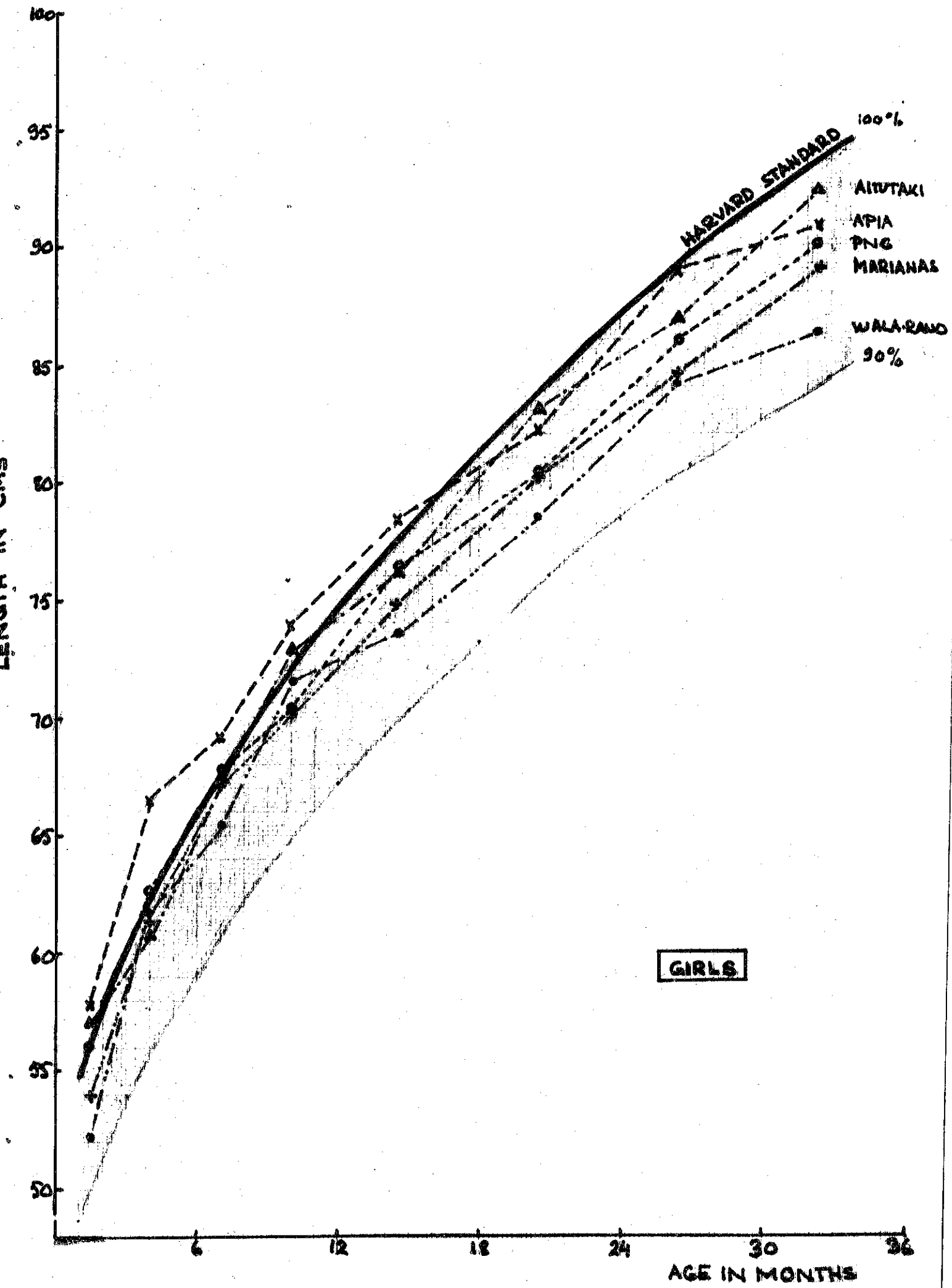
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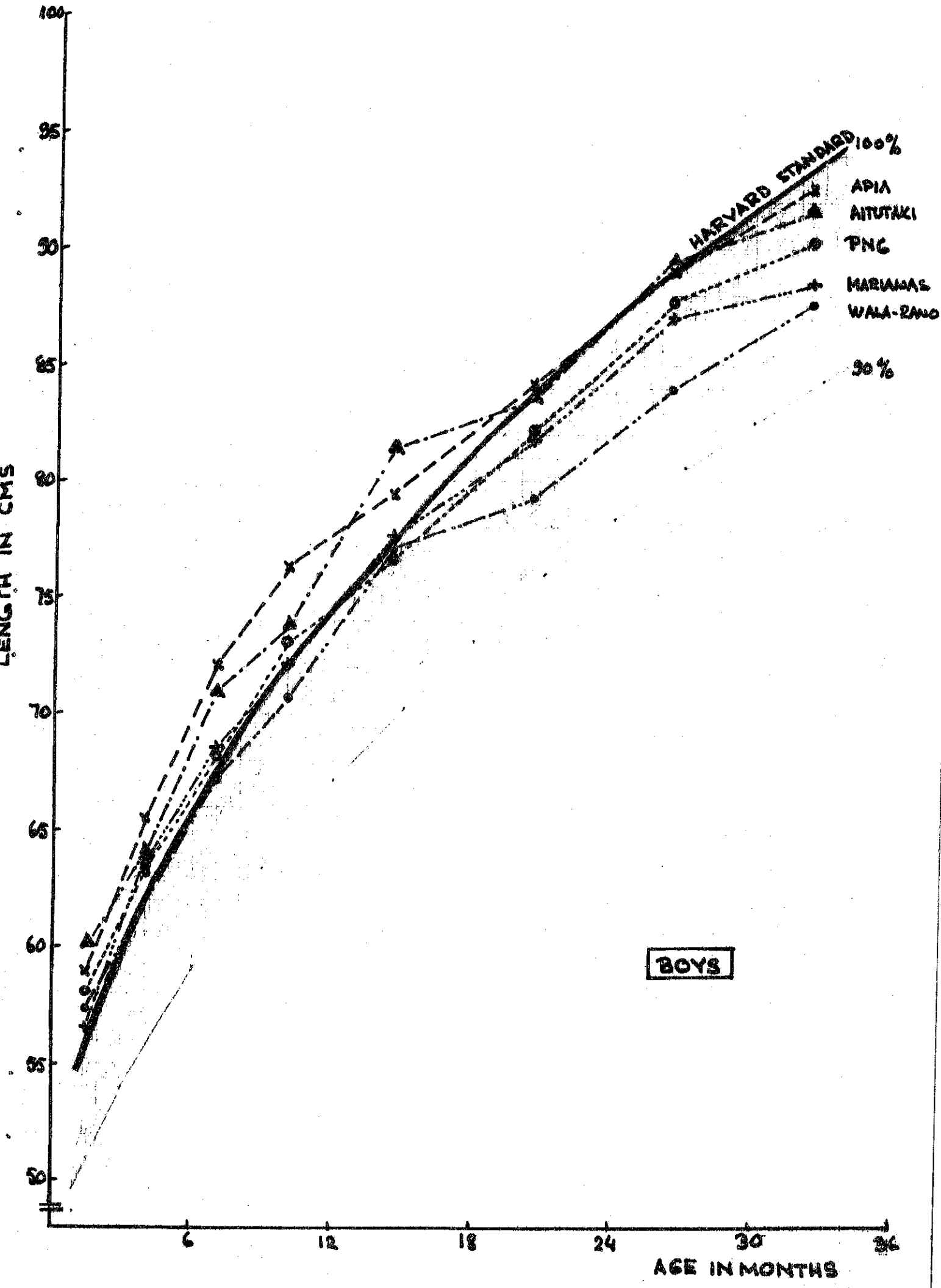
RE: <sup>13</sup>C NMR SPECTROSCOPY OF POLYMERIZATION



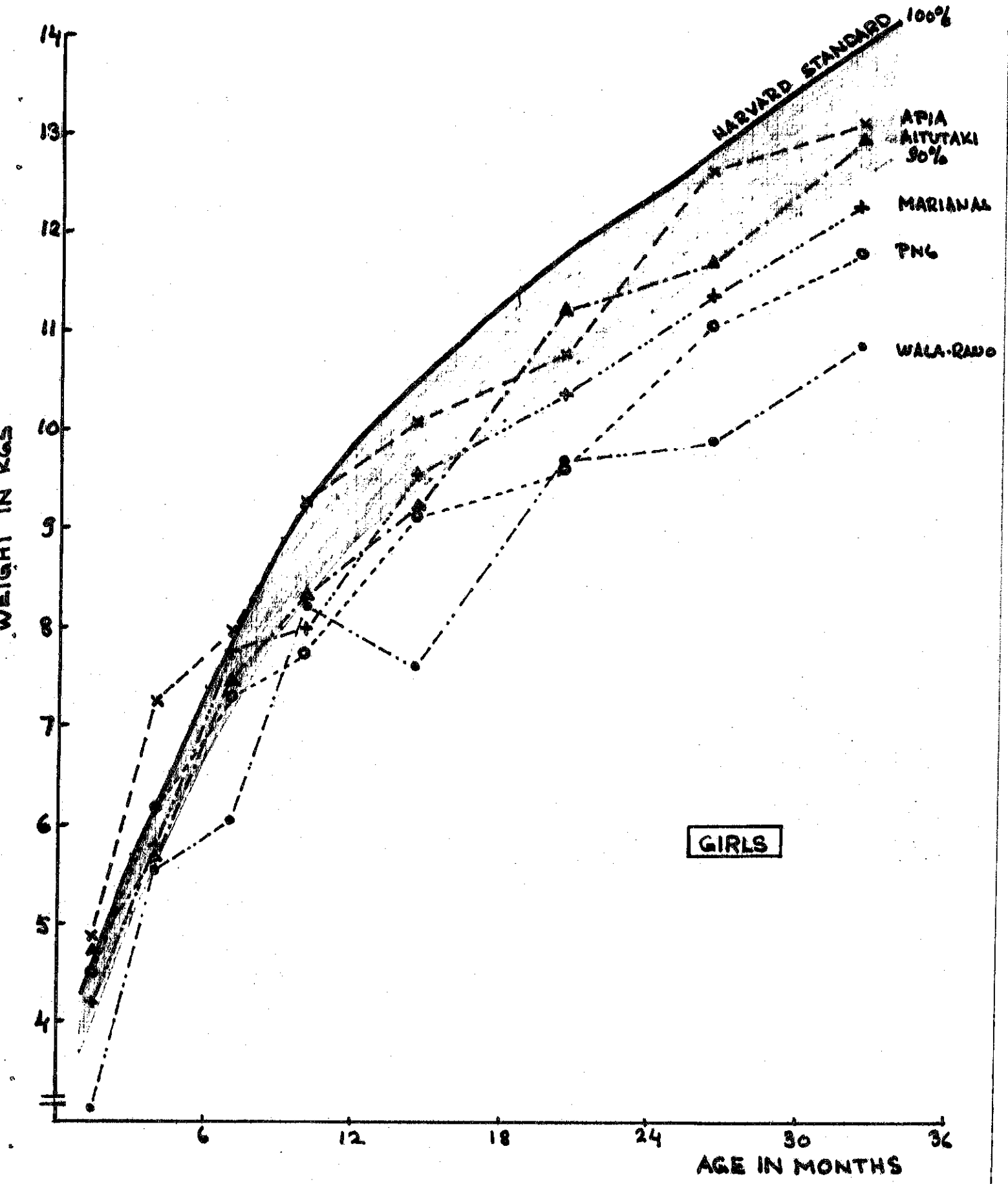
HEAD CIRCUMFERENCE IN CMS

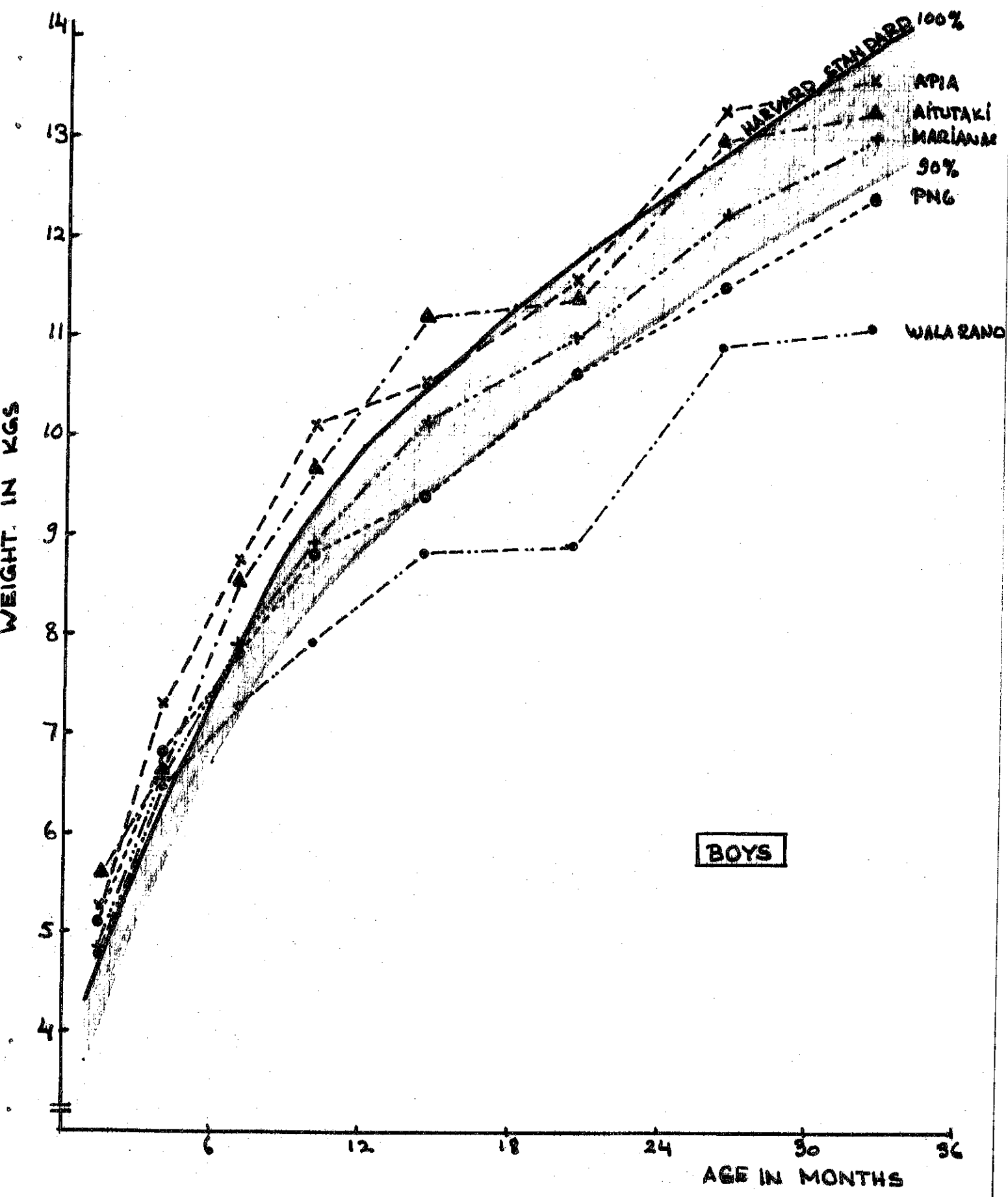




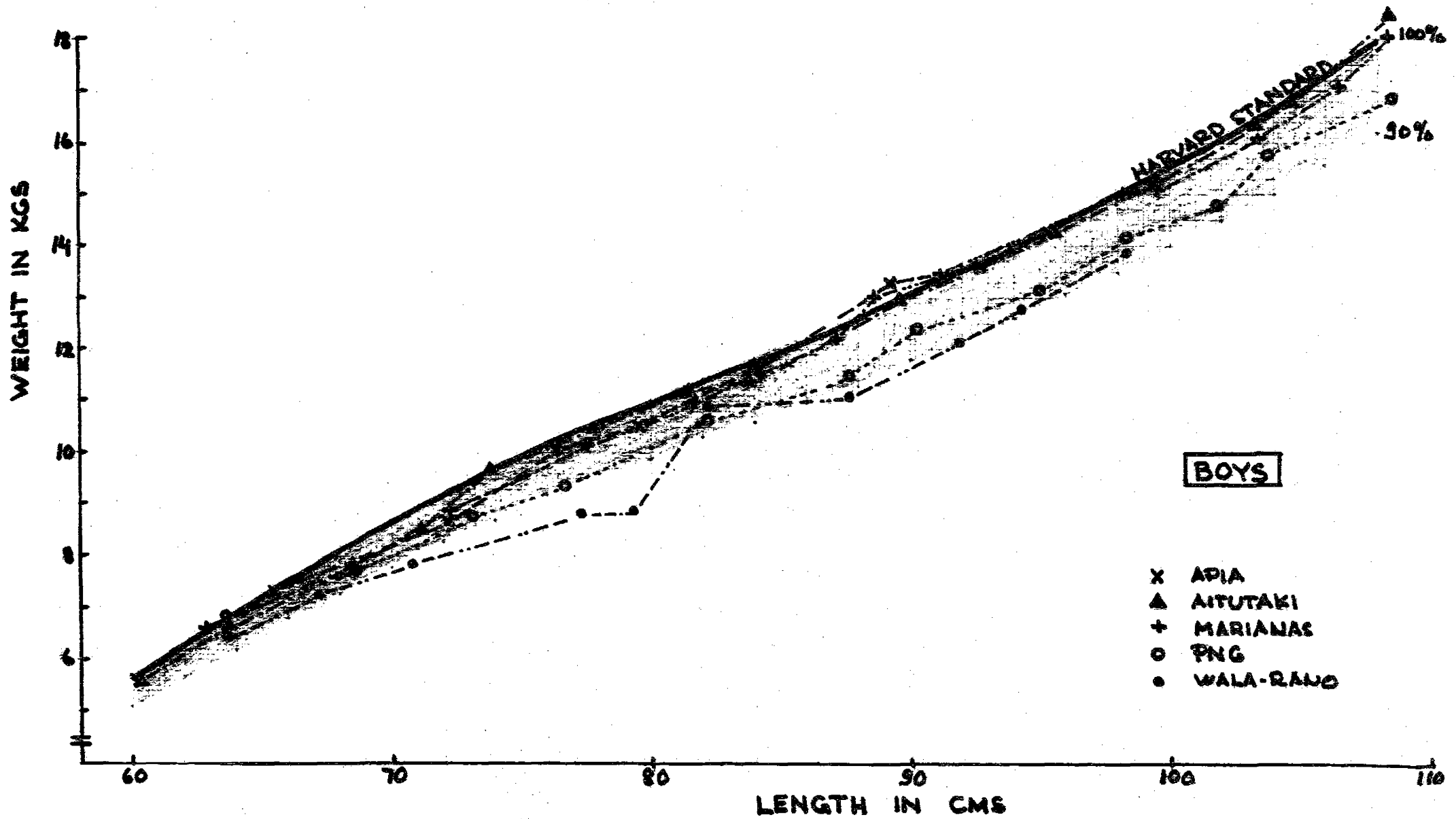








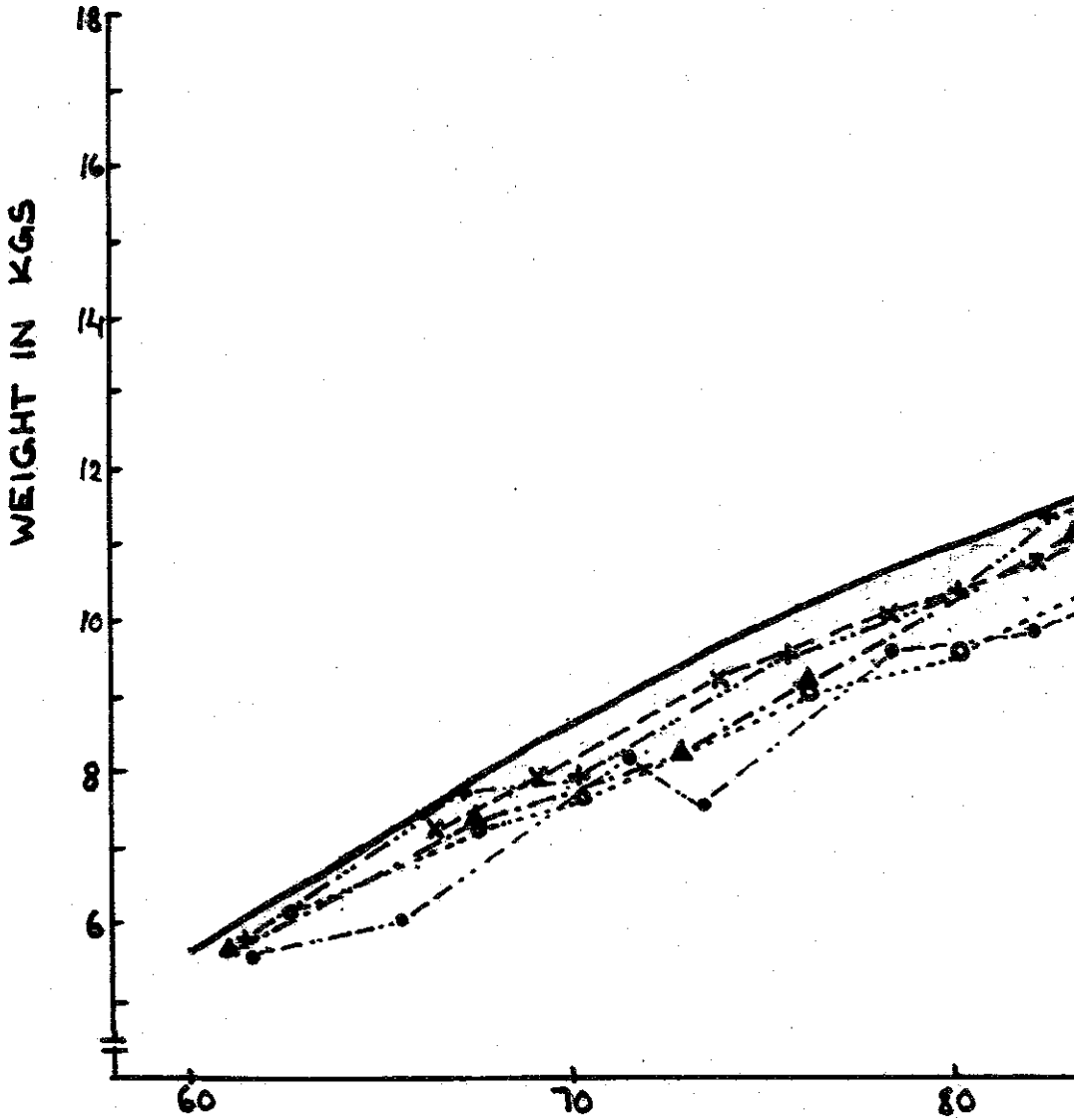
# WEIGHT (KG) FOR LENGTH (CM)

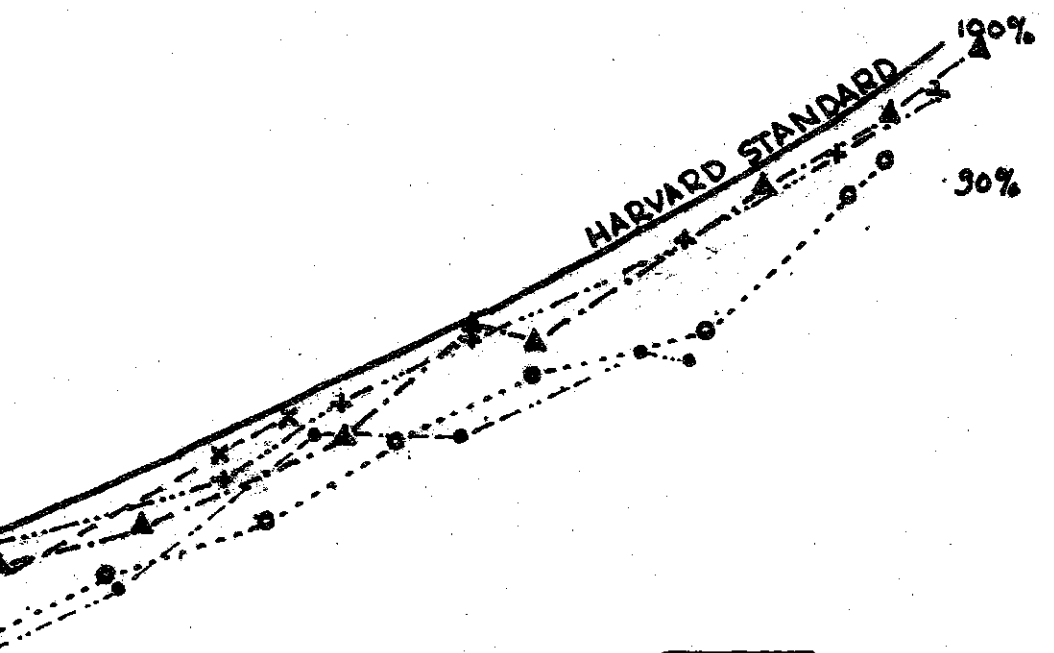


**BOYS**

- x APIA
- ▲ AITUTAKI
- + MARIANAS
- PNG
- WALA-RAUO

# WEIGHT (KG) FOR LENGTH (CM)





**GIRLS**

- x APIA
- ▲ AITUTAKI
- + MARIANAS
- PNG
- WALA-RANO

LENGTH IN CMS

90 100 110

