

MEDDELELSER OM GRØNLAND

UDGIVNE AF

KOMMISSIONEN FOR VIDENSKABELIGE UNDERSØGELSER I GRØNLAND

Bd. 202 · Nr. 2

ANTHROPOMETRICAL STUDIES ON
GREENLANDERS FROM TWO VILLAGES IN
THE UPERNAVIK AREA

BY

J. BALSLEV JØRGENSEN, JENS DAHL AND
SANJAI SANGVICHIE

WITH 9 FIGURES AND 14 TABLES



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Contents

	Page
Preface	5
Material and technique	5
Measurements of the Body	8
Measurements of the Head	15
Comparisons.....	16
Conclusion	20
Summary	20
Literature.....	24

Preface

The anthropometrical studies in Augpilagtoq and Kraulshavn, Upernavik Municipality, were carried out during two expeditions; in 1968 to Augpilagtoq and in 1969 to Kraulshavn.

In 1968 the expedition included several human-biological aspects and was joined by scientists from the other Scandinavian countries.

In 1969 the expedition included many biological aspects too, but this year all members were Danes.

Both expeditions were financed by grants from Statens Lægevidenskabelige Forskningsråd (L 78/68 and 512-33/69).

The ministry for Greenland granted free transportation for some of the members of the expeditions.

Material and Technique

The present work is a report on the results of anthropometrical investigations in Augpilagtoq and Kraulshavn in 1968 and 1969.

The anthropometrical investigations are part of a major research programme, carried out in these villages in the Upernavik area in the northern part of Westgreenland.

The aim of the investigations was a biological description of a Greenlandic population, still—as far as possible—living mainly in the traditional way, depending on hunting of sea mammals. Excepting Thule and Eastgreenland, the Upernavik area is one of the few places where such conditions still exist, and only in the villages. As Augpilagtoq and Kraulshavn are the largest of the villages, they were selected in order to get populations of reasonable sizes.

Demographic investigations, which were parts of the total programme, have made it clear that the population of a village is a very unstable matter and that much immigration and emigration take place. On the other hand it has also been found that the population movements occur mainly between the northern villages of the Upernavik district, and that movements to or from the town of Upernavik and the villages in the southern part of the area only take place in a minor degree.

Considering the demographic conditions, it should be possible to pool the two populations, but in order not to miss minor differences, it has

been decided to compare the two villages mutually, before adding up the materials, to one population.

The demographic studies on the people from Augpilagtoq and Kraulshavn have in part consisted of elaboration of genealogies. It has been possible to trace all families 4–5 generations back to the middle of the 19th century. Analysis of the genealogies has furthermore given the interesting result that during the last 100 years hardly any mixed mating between Greenlanders and Europeans have occurred. Accordingly the hybridization, which undoubtedly exists, goes further back in time. With much reservation, the genealogies may indicate a degree of hybridization of 20 percent European and 80 percent Eskimo ancestors.

The anthropometrical investigations consisted of measurements of the entire populations both children and adults. The material has however been separated into two parts; one consisting of measurements on children, and one of measurements on adults only. Only the adult material will be examined here. The measurements on the children will be treated in a separate publication with special respect to growth conditions.

All measurements are performed according to the proposals of the International Biological Programme—Human Adaptability section (IBP Handbook no. 9 1969). As for the present investigations these proposals are the same as the definitions of MARTIN (1957).

It should be mentioned that besides ordinary anthropometrical examinations, skinfold thickness measurements have been registered too. They have been treated in an earlier publication in connection with corresponding measurements from the Thule area. (GILBERG, JØRGENSEN & LAUGHLIN, 1974).

The present material includes measurements on all individuals over 20 years of age. The material has primarily been separated into male and female groups. Next, a separation in three age groups have been made, 20–40, 41–60 and over 60 years. The last separation being made in order to try the possibility of age variations in the adult groups.

Means and standard deviations for each measurement in all the different age and sex groups are given in the collective tables 10–14.

Table 1. *The material.*

Age	Augpilagtoq			Kraulshavn		
	♂	♀	♂ + ♀	♂	♀	♂ + ♀
21–40.....	17	14	31	15	10	25
41–60.....	6	8	14	7	7	14
over 60.....	3	1	4	2	1	3
Total.....	26	23	49	24	18	42

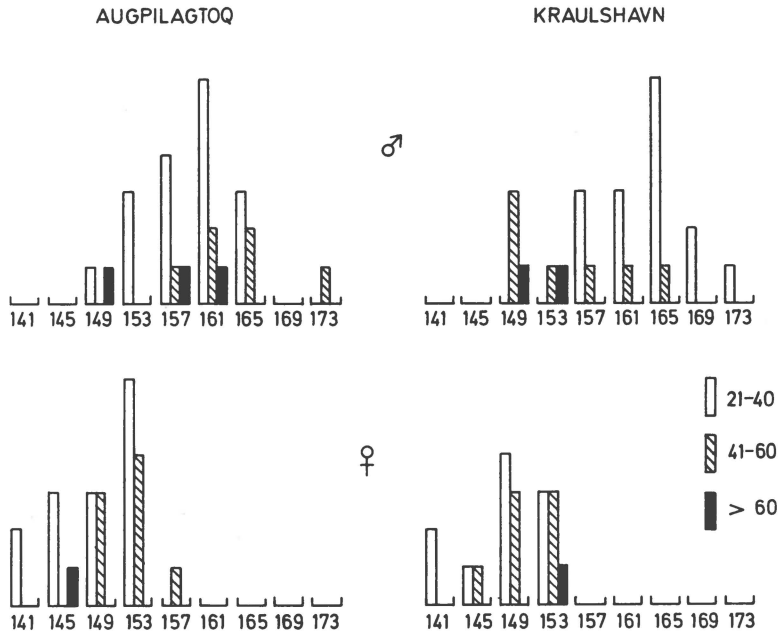


Fig. 1 a. Distribution of statures.

The size and composition of the material appear from table 1. The size is not impressive, but it must be kept in mind that the total number of adult Westgreenlanders living in villages and subsisting on sea mammal hunting is very small and that actually a major part of them are included in the present material. An implication of the restricted size of the material must be that the results of the statistical analyses can be no more than indications. Definite conclusions cannot be drawn.

The numerical distribution of the observations has been estimated from diagrammes only. Such have been drawn for all measurements, the most important are illustrated in fig. 1. According to the diagrammes, there is no reason to believe that the distribution should not be normal, and hence it will be assumed from now on, that the distribution of the measurements is normal.

From the estimates of the standard deviations (collective tables 10-13) it will appear that major, significant differences between standard deviations do not exist.

Assuming then that the distribution is normal, and that there are no differences in standard deviations diversities between the populations could only be demonstrated as differences between mean values.

More advanced and complicated statistical methods have not been applied. The reason is that the small population size in all events would prohibit final conclusions to be drawn.

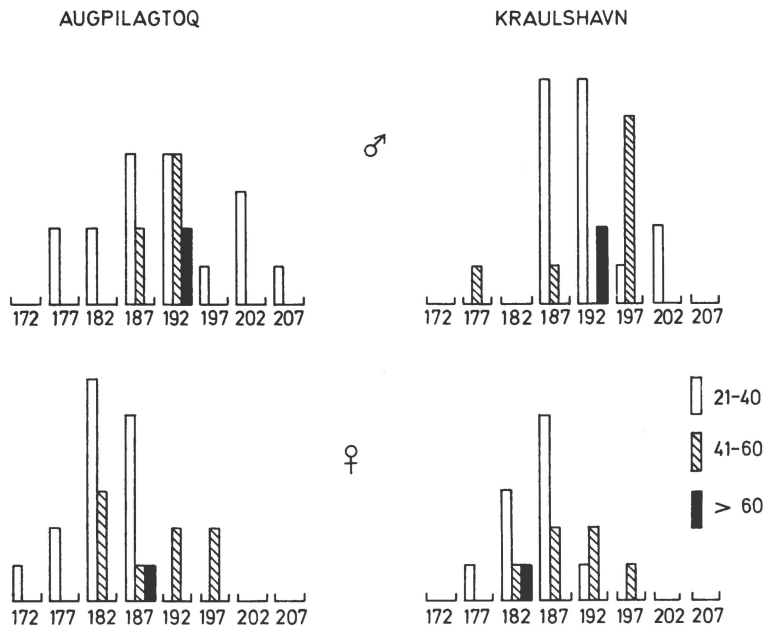


Fig. 1 b. Distribution of head lengths.

A detailed examination and evaluation of each single measurement will not be performed. All means and standard deviations are given in the collective tables. From these it appears that the likeness between the populations of Augpilagtoq and Kraulshavn is extreme, only few and small differences being found. A more detailed analysis of the differences and similarities of the more important measurements will be attempted. In connection with that, the mean values from Augpilagtoq and Kraulshavn will be compared with corresponding values from the Thule area (GILBERG *et al.*, 1974). In the Thule material the separation into age and sex groups has been supplemented with a separation into pure and hybrid Thule Eskimos. Pure Thule Eskimos are people with more than 50 percent Thule ancestors, whereas hybrid Thule Eskimos are people with more than 50 percent of ancestors from outside the Thule district. Most of these, however, are Westgreenlanders, and accordingly there is by no means talk of a 50 percent hybridization with Europeans.

Measurements of the Body

Stature. A tendency to higher stature during the last decades has been demonstrated in several populations. This increase in stature has manifested itself with varying speed and is probably mainly dependant on social conditions, such as nutrition, housing, medical care etc. It follows

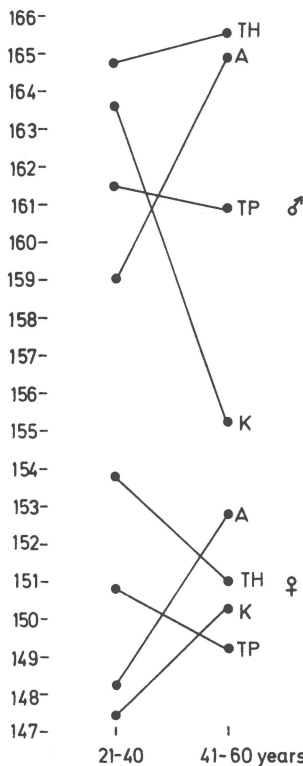


Fig. 2. Age variation in stature.

that the rate of increase of stature depends on the intensity of the social development of the community.

In an earlier publication of some measurements from Augpilagtoq (J. B. JØRGENSEN & SKROBAK-KACZINSKY, 1972) a higher stature among young people (under 20 years of age) was clearly demonstrated.

The diagramme (fig. 2) was prepared in order to detect eventual corresponding changes in the older age groups. It shows obviously that any definite tendency cannot be found, even not taking into account the small number of individuals in each group. Accordingly the increase in stature cannot have started in Augpilagtoq and Kraulshavn before 20 years ago.

The mean values and standard deviations for stature in all groups appear in table 2, and the mutual correlations are further illustrated in fig. 3. It will be seen that there are no general difference between the values for Augpilagtoq, Kraulshavn and Thule. In some instances one group, in other another group show the highest figures. The only constant variation is a difference between pure and hybrid Thule Eskimos. The hybrids are in all sex and age groups taller than the pure Thule Eskimos.

Table 2. *Measurements of the Body.*

	Stature			Sitting Height			Rel. n	Sitt. M	H.
	n	M	s	n	M	s			
Augpilagtoq ad.	17	159,02	4,33	16	84,54	2,19	16	,532	
Augpilagtoq mat.	6	164,90	5,64	6	85,90	3,21	6	,521	
Kraulshavn ad.	15	163,62	4,54	15	90,13	3,98	15	,551	
Kraulshavn mat.	7	155,17	6,95	7	84,56	4,51	7	,545	
Thule unmix. ad.	17	161,47	4,17	17	85,76	3,08	17	,531	
Thule unmix mat.	14	160,89	5,24	14	83,75	3,33	14	,521	
Thule hybr. ad.	20	164,73	5,76	20	87,18	2,92	20	,529	
Thule hybr. mat.	5	165,50	8,13	5	86,40	3,65	5	,522	
									♀
Augpilagtoq ad.	14	148,19	4,38	14	79,54	2,82	14	,537	
Augpilagtoq mat.	8	152,78	4,67	8	80,69	3,98	8	,528	
Kraulshavn ad.	10	147,40	4,30	10	82,51	3,25	10	,560	
Kraulshavn mat.	7	150,34	2,11	7	81,04	2,40	7	,539	
Thule unmix. ad.	20	150,80	3,52	21	80,17	3,47	20	,531	
Thule unmix. mat.	12	149,21	5,29	13	77,42	4,33	12	,519	
Thule hybr. ad.	14	153,82	5,18	14	82,79	3,26	14	,538	
Thule hybr. mat.	2	151,00	—	2	78,25	—	2	,518	

The values for *sitting height*, as an expression of the length of the trunk are also found in table 2, and are graphically compared in fig. 4. The only persistent variation between the groups is higher values for the Thule hybrids.

Table 2 finally gives the values for the *relative sitting height*, as an expression of the proportions of the body in contrast to the absolute measurements. Consequently the figures for men and women are nearly equal, in spite of the difference in stature between the sexes. A closer examination, however, seems to reveal that both men and women from Kraulshavn show higher relative sitting heights than the others. In other words, people from Kraulshavn are a bit stouter in body-build than people from Augpilagtoq and Thule.

The measurements of the *upper extremity* are shown in table 3 and fig. 5. There are no reasons for suggesting differences in these measurements except between the sexes.

Shoulder Breadth, Bicondylar Breadth of the Humerus, Upperarm Circumference and Calf Circumference (table 4) are all dimensions reflecting the stoutness of the body. The bicondylar breadth of the humerus is definitely larger in the Kraulshavn male population than in the others, and reversely are the bicondylar breadth of the humerus of the women from Kraulshavn smaller than the others. For the males the same tendency is found in upper arm circumference. The rest of these measurements show good agreement except for the sexual dimorphism.

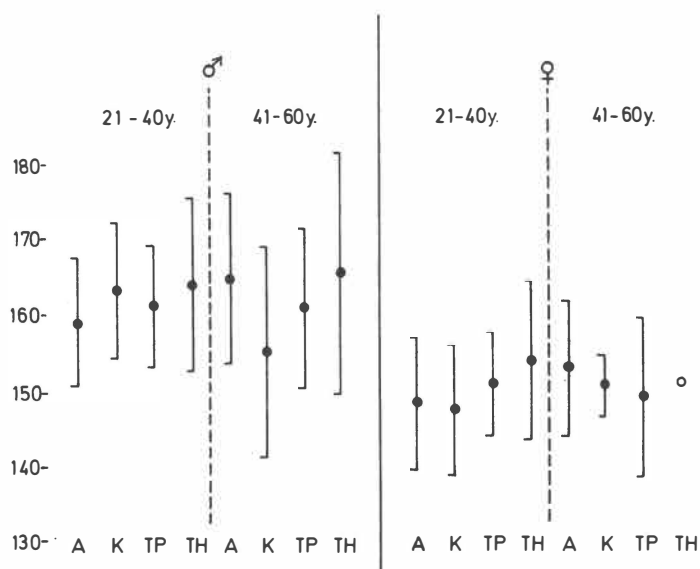


Fig. 3. Stature. Means and $2 \times$ standard deviations.

A: Augpilagtoq, K: Kraulshavn, TP: Pure Thuleeskimos, TH: Thule hybrids.

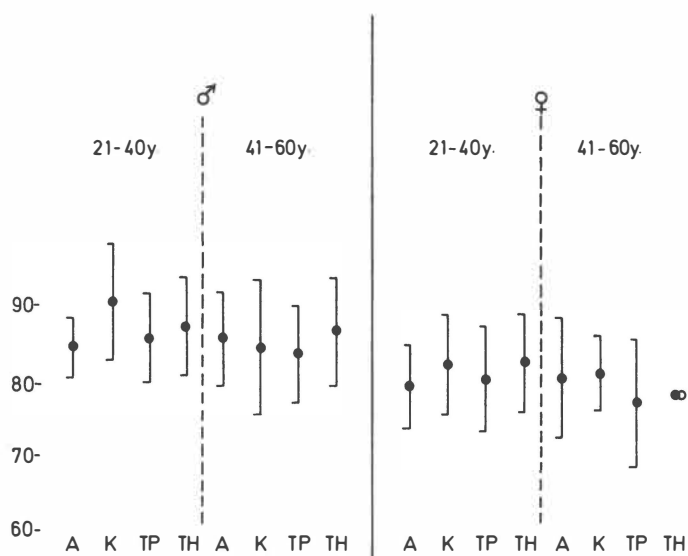


Fig. 4. Sitting height.

From this examination of the body measurements and proportions it may be concluded:

1. The four groups of Greenlanders are generally very much alike.
2. The men from Kraulshavn differ in a minor degree being of stouter constitution and with stronger upper extremities.

Table 3. *Measurements of the Body.*

	Arm Length (L)			δ Bicondyl. Br. (L)			Biacrom. Br.		
	n	M	s	n	M	s	n	M	s
Augpilagtoq ad.	16	69,41	2,97	16	6,61	,37	15	36,93	1,65
Augpilagtoq mat.	6	72,77	3,64	6	6,80	,28	6	37,72	0,73
Kraulshavn ad.	15	70,16	3,37	15	7,72	,29	15	38,17	1,45
Kraulshavn mat.	7	67,21	2,50	7	7,77	,32	7	35,50	1,86
Thule unmix ad.	17	70,27	2,35	17	6,79	,25			
Thule unmix. mat.	13	68,08	2,60	14	6,94	,21			
Thule hybr. ad.	20	69,72	3,37	20	6,94	,47			
Thule hybr. mat.	5	68,00	4,78	5	7,10	,53			

	δ			♀		
	n	M	s	n	M	s
Augpilagtoq ad.	14	63,77	3,34	14	5,76	,19
Augpilagtoq mat.	8	67,45	2,23	8	6,03	,51
Kraulshavn ad.	10	63,03	3,30	10	6,65	,55
Kraulshavn mat.	7	65,21	2,18	7	6,80	,39
Thule unmix. ad.	22	63,43	2,04	22	5,93	,30
Thule unmix. mat.	13	63,73	2,16	14	6,08	,26
Thule hybr. ad.	14	64,71	3,46	13	6,08	,33
Thule hybr. mat.	2	66,00	—	2	6,15	—

Table 4. *Measurements of the Body.*

	Upper Arm Circ.			δ Calf Circumf.		
	n	M	s	n	M	s
Augpilagtoq ad.	16	26,85	1,77	15	34,17	2,13
Augpilagtoq mat.	5	27,68	1,65	6	34,65	1,55
Kraulshavn ad.	15	29,93	1,98	15	34,91	2,66
Kraulshavn mat.	7	30,10	2,43	7	33,24	2,05
Thule unmix. ad.	17	27,68	1,96	17	34,35	1,31
Thule unmix. mat.	14	26,89	1,63	14	33,61	2,01
Thule hybr. ad.	20	28,37	2,56	20	34,85	2,65
Thule hybr. mat.	5	28,30	1,35	5	34,00	0,61

	♀		
	n	M	s
Augpilagtoq ad.	14	24,86	2,21
Augpilagtoq mat.	8	25,56	5,05
Kraulshavn ad.	10	26,46	1,16
Kraulshavn mat.	7	26,40	2,59
Thule unmix. ad.	22	25,61	2,23
Thule unmix. mat.	14	24,39	2,10
Thule hybr. ad.	14	26,43	2,57
Thule hybr. mat.	2	24,50	—

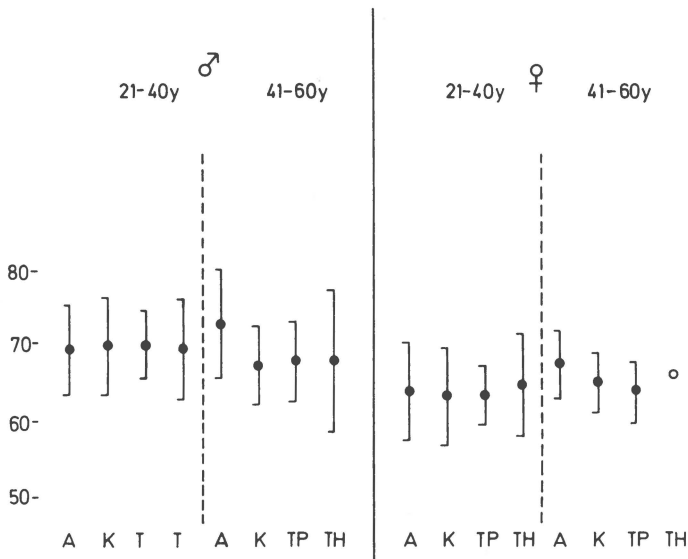


Fig. 5. Arm length.

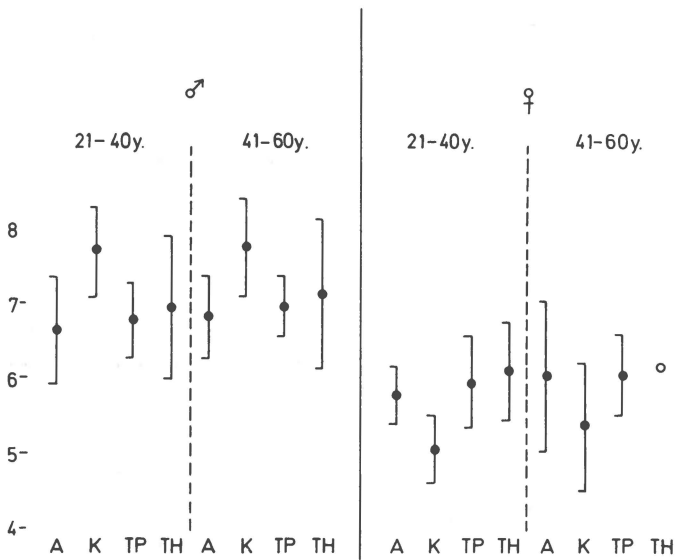


Fig. 6. Bicondylar humerus breadth.

This heavier development of the body and arms could be explained by a more intensive hunting activity in Kraulshavn, combined with a stronger dependency on hunting alone in this village. Such an explanation must, however, be investigated more thoroughly through examinations of the economical life of all the villages.

Table 5. *Measurements of the Head.*

	Max. Length			♂ Max. Breadth			B/L	
	n	M	s	n	M	s	n	M
Augpilagtoq ad.	17	192,53	7,14	16	150,68	3,29	16	,790
Augpilagtoq mat.	6	191,17	2,48	6	155,50	3,62	6	,814
Kraulshavn ad.	15	191,53	5,5	15	154,80	4,1	15	,809
Kraulshavn mat.	7	193,57	7,7	7	150,57	6,1	7	,779
Thule unmix. ad.	17	198,71	5,63	17	152,2	3,07	17	,767
Thule unmix. mat.	14	196,93	4,46	14	149,3	5,28	14	,762
Thule hybr. ad.	20	200,30	6,57	20	156,65	5,58	20	,783
Thule hybr. mat.	5	206,00	9,67	5	156,20	3,83	5	,760
					♀			
Augpilagtoq ad.	14	182,64	3,24	14	143,21	4,00	14	,784
Augpilagtoq mat.	8	189,37	7,15	8	147,63	7,23	8	,780
Kraulshavn ad.	10	184,60	4,7	10	147,50	4,0	10	,799
Kraulshavn mat.	6	188,83	5,7	6	150,17	5,8	6	,795
Thule unmix. ad.	22	188,95	4,23	22	144,77	5,89	22	,766
Thule unmix. mat.	14	189,50	4,24	14	145,21	4,04	14	,767
Thule hybr. ad.	14	192,14	4,67	14	149,85	3,68	14	,780
Thule hybr. mat.	2	193,50	—	2	153,0	—	2	,791

Table 6. *Measurements of the Face.*

	Bizygomatic Breadth			♂ Bigonial Breadth			Facial Height		
	n	M	s	n	M	s	n	M	s
Augpilagtoq ad.	17	144,65	4,34	17	111,35	5,80	15	120,93	5,23
Augpilagtoq mat.	6	147,17	3,55	6	114,50	7,12	4	119,50	10,08
Kraulshavn ad.	15	146,13	3,8	15	114,67	5,1	15	121,47	7,7
Kraulshavn mat.	6	146,50	6,7	7	118,57	4,5	7	121,14	9,9
Thule unmix. ad.	17	146,24	5,09	17	112,94	4,96	17	121,59	5,36
Thule unmix. mat.	14	148,71	4,92	13	118,31	5,23	14	121,21	6,02
Thule hybr. ad.	20	148,65	4,27	20	113,05	6,48	20	123,95	5,55
Thule hybr. mat.	5	151,80	4,32	5	111,80	9,15	5	122,80	7,19
								♀	
Augpilagtoq ad.	14	134,36	5,33	14	102,29	3,99	5	112,60	3,71
Augpilagtoq mat.	8	139,13	6,71	8	106,88	6,10	3	115,33	4,62
Kraulshavn ad.	9	136,20	9,0	10	103,50	4,6	10	108,40	6,4
Kraulshavn mat.	6	137,50	9,5	6	105,00	6,1	6	108,17	7,0
Thule unmix. ad.	22	138,30	4,74	22	107,41	3,74	22	114,64	5,31
Thule unmix. mat.	14	139,70	3,15	14	110,00	6,16	14	113,50	7,21
Thule hybr. ad.	14	142,14	4,44	14	109,85	3,55	14	115,86	4,29
Thule hybr. mat.	2	144,00	—	2	107,00	—	2	109,50	—

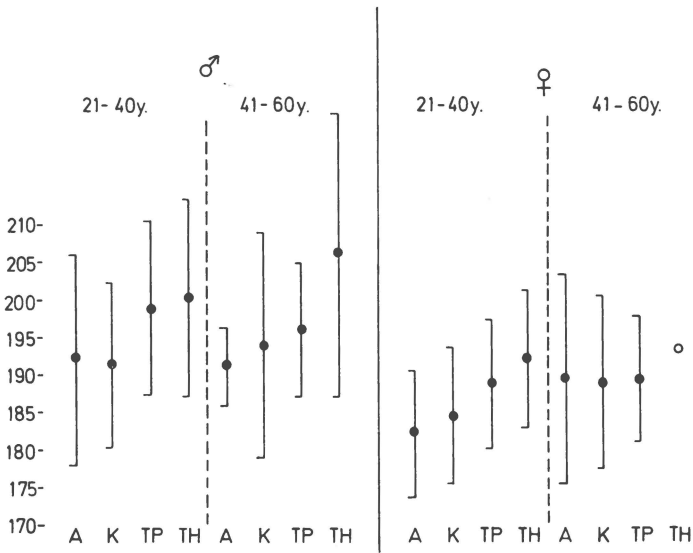


Fig. 7. Head length.

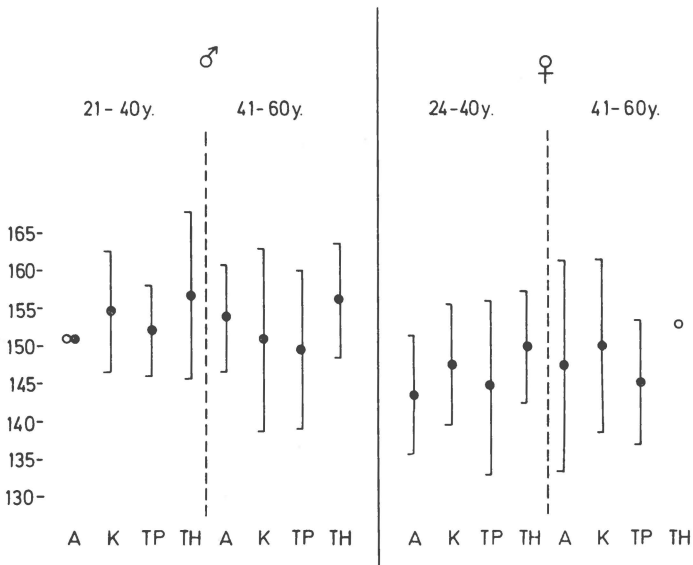


Fig. 8. Head breadth.

Measurements of the Head

The mean values for *Maximum Length* and *Maximum Breadth* are given in table 5 and fig. 7 and 8. Only small and inconsistent differences are found between the Augpilagtoq, Kraulshavn and pure Thule Eskimos. The hybrids from Thule, however, have larger heads than the other

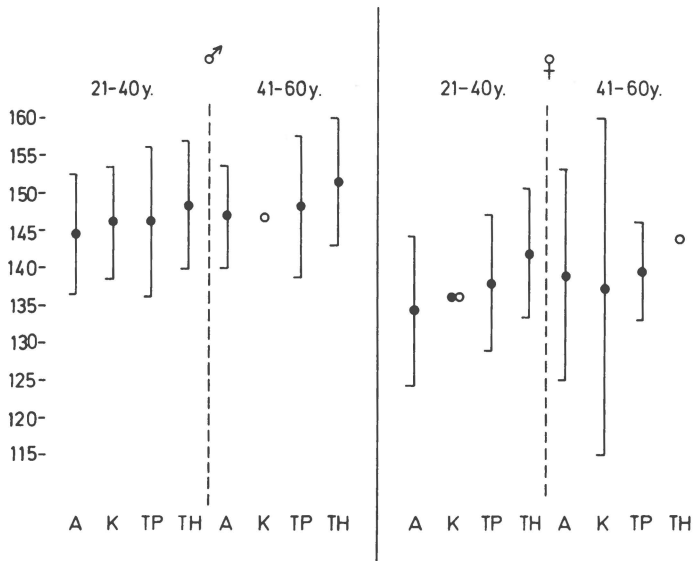


Fig. 9. Bizygomatic breadth.

groups. The proportions of the head, revealed in the *Breadth/Length Index* (Table 5) are the same in all investigated Greenlanders.

The measurements of the *Face* are given in tables 6 and 7, and show close agreement between all groups too.

The final conclusion of this examination and comparison of Greenlanders from Augpilagtoq and Kraulshavn, and of pure and hybrid Thule Eskimos must be:

1. The hybrids from Thule are larger in all dimensions than both Greenlanders from Westgreenland and pure Thule Eskimos.
2. Among the Westgreenlanders the Kraulshavn men stand out a little being of slightly heavier body-build.
3. The differences between the Augpilagtoq and Kraulshavn populations are on the whole nevertheless so small, that they will be put together in one group, representing the villages of the northern part of the Upernavik area.

Comparisons

For comparison with the present investigations from the northern Upernavik area a number of earlier publications are available.

A large number of Westgreenlanders, both pure and hybrids were examined by SØREN HANSEN in 1889 and the results published in 1893 (SØREN HANSEN, 1893). SØREN HANSEN took only few measurements on each person, but the most important were then at least determined on a very large material.

Table 7. *Measurements of the Face.*

	Upper Facial Height			♂ Facial H. Bizyg. B.		Nasal Index	
	n	M	s	n	M	n	M
Augpilagtoq ad.	15	71,93	3,41	15	,832	16	,665
Augpilagtoq mat.	6	72,33	4,41	4	,811	6	,700
Kraulshavn ad.	13	72,23	5,2	15	,831	15	,702
Kraulshavn mat.	6	74,50	4,7	7	,841	7	,737
Thule unmix. ad.	17	68,71	3,67				
Thule unmix. mat.	14	70,93	5,18				
Thule hybr. ad.	20	69,55	5,31				
Thule hybr. mat.	5	76,60	11,73				
				♀			
Augpilagtoq ad.	11	63,82	2,23	5	,832	14	,661
Augpilagtoq mat.	7	65,29	5,77	3	,848	8	,678
Kraulshavn ad.	4	65,00	5,1	10	,781	10	,678
Kraulshavn mat.	1	61,00	—	6	,789	6	,774
Thule unmix. ad.	22	67,00	3,60				
Thule unmix. mat.	14	66,00	4,30				
Thule hybr. ad.	14	69,14	4,90				
Thule hybr. mat.	2	68,00	—				

A population of mixed Greenlanders from the Julianehåb area was investigated by V. FABRICIUS-HANSEN (1949).

From Angmagssalik two publications are available (SKELLER, 1954; GESSAIN, 1960), comprising probably some measurements on the same individuals, but with several years interval.

In Wainwright, Alaska, the Eskimos have been thoroughly investigated anthropometrically, and the results are published (JAMISON, 1970). As the research in Wainwright was conducted along the same lines as in Greenland, the results are included in the present comparisons.

It will be seen from tables 8 and 9 that the Wainwright Eskimos are definitely taller than the Greenlanders, but that the proportions of the body are much the same in the two populations.

In Greenland, the values from Angmagssalik are a little bit higher than those from the groups from Westgreenland.

In shoulder breadth and arm length the Wainwright Eskimos also show the highest values.

A comparison of the measurements of the head reveals very small variations in head length but major variations in head breadth, and consequently in breadth/length index. The Wainwright Eskimos have the broadest heads, the Eastgreenlanders the most narrow. The now living Greenlanders have values in between. Correspondingly the Wainwright Eskimos are brachycephalic, whereas the now living Westgreenlanders are mesocephalic, near the borderline to brachycephaly.

Table 8. *Comparison with other Investigations (Body).*

	Stature		Sitting H.		Rel. Sitt. H.		Arm L. (L)		Biacr. Br.	
Upernavik (1968-69)	45	160.7	44	86.6	44	53.9	44	69.8	43	37.2
West Greenland (SØREN HANSEN, 1893)	(500)	162			451	51.9				
Julianehåb (FABR.-HANSEN, 1949)	128	159.3	130	85.4					130	36.8
♂ Angmagssalik (SKELLER, 1954)	166	162.0	153	83.8	201	51.4	153	72.1	154	37.2
Angmagssalik (GESSAIN, 1960)	113	162.4	110	89.2	110	54.9	113	76.1	114	36.5
Wainwright (JAMISON, 1970)	50	167.0	51	88.4	51	53.0	50	72.3(R)	50	38.8
Upernavik (1968-69)	39	149.3	39	80.8	35	54.1	39	64.6	39	33.7
West Greenland (SØREN HANSEN, 1893)	(400)	152			407	52.6				
Julianehåb (FABR.-HANSEN, 1949)	143	150.1	141	81.7					137	33.8
♀ Angmagssalik (SKELLER, 1954)	203	153.3	163	80.8	199	52.7	160	68.1	161	34.3
Angmagssalik (GESSAIN, 1960)	139	152.6	138	85.7	138	56.1	144	71.6	142	33.2
Wainwright (JAMISON, 1970)	43	156.2	41	84.0			42	67.3(R)	42	35.6

Table 9. *Comparison with other Investigations (Head).*

	Head Length		Head Breadth		B/L × 100		Facial H.		Bizygomatic B.		Bigonial B.	
Upernavik (1968-69) West Greenland (SØREN HANSEN, 1893)	45	192.2	44	152.7	44	79.8	41	212.0	44	145.8	45	114.0
♂ Julianehåb FABR.-HANSEN, 1949)	130	193.1	128	152.2	130	78.9	126	127.7	128	145.7		
Angmagssalik (SKELLER, 1954) .	172	192.5	173	147.0	225	76.7	172	125.9	172	144.5	173	113.7
Angmagssalik (GESSAIN, 1960) ..	134	193.7	134	147.4	134	76.1	135	123.5	135	144.7	135	117.7
Wainwright (JAMISON, 1970) ..	51	189.8	51	155.2	51	81.8	51	128.7	51	151.2	51	115.9
Upernavik (1968-69) West Greenland (SØREN HANSEN, 1893)	38	185.6	38	146.4	38	78.9	24	110.1	37	136.3	38	104.0
♀ Julianehåb FABR.-HANSEN, 1949)	142	187.0	142	147.0	142	78.7	141	121.3	141	139.1		
Angmagssalik (SKELLER, 1954) .	206	186.4	206	142.2	245	76.3	206	116.8	204	139.4	205	110.1
Angmagssalik (GESSAIN, 1960) ..	171	186.0	171	142.0	171	76.3	171	114.2	171	138.9	171	111.5
Wainwright (JAMISON, 1970) ..	42	185.5	42	149.5	42	80.7	42	121.3	42	143.3	42	108.2

In the facial measurements the Upernavik groups distinguish themselves with a low upper facial height. As this measurement is very dependent on the dental condition, and also not very strictly defined, there may be other explanations to this difference than genetical diversities.

In all other facial dimensions the agreement between the groups is conspicuous.

Conclusion

From an anthropometrical point of view the people from Aug-pilagtoq and Kraulshavn in the northern Upernavik area, together with the Greenlanders from Angmagssalik, Julianehåb and Thule constitute one single population.

Minor variations between these groups may be attributed to: less hybridization (Angmagssalik), more hybridization (hybrids from Thule) or minor differences in life conditions (Kraulshavn males).

The Greenlanders are, anthropometrically, very close to the Wainwright Eskimos, except in head breadth. The Wainwright Eskimos are also achieving a taller stature and in general larger body dimensions than the Greenlanders.

Summary

The result of anthropometrical investigations on the inhabitants of two villages in the Upernavik area has been:

1. There is a slight difference in constitution between the men of the two villages, the Kraulshavn men having a relatively stouter body and stronger upper extremities.

2. With this exception the two populations show very great similarity, and may be considered as belonging to one single population.

3. No difference between age groups has been demonstrated, and consequently no secular trend towards increased stature in the grown-up population detected.

4. Comparisons with other Eskimos have shown, that the general type is very much the same everywhere in Greenland, but that the Thule Eskimos of mixed origin are somewhat larger than the more pure Eskimos. The same apply to the Wainwright Eskimos.

Table 10. *Measurements of Men from Augpilagtoq.*

	21-40			41-60			60 →		
	n	M	s	n	M	s	n	M	s
Weight									
Stature	17	159.0	4.32	6	164.9	5.64	3	156.7	5.23
Suprasternal height	17	128.2	4.21	6	133.7	5.31	3	127.6	5.26
Sitting height	16	84.5	2.19	6	85.9	3.21	3	81.6	2.65
Arm length	16	69.4	2.97	6	72.8	3.64	3	70.1	2.18
Upper arm length	16	30.7	1.73	6	32.8	2.42	3	32.3	1.47
Biacromial breadth	15	36.9	1.65	6	37.7	.73	3	34.9	1.10
Bicristal breadth	15	28.2	1.34	6	29.8	2.12	3	29.3	.21
Bicondylar humerus breadth	16	6.61	.37	6	6.8	.28	3	6.6	.32
Bicondylar femur breadth	15	9.2	.62	6	9.3	.40	3	9.4	.25
Wrist breadth	16	5.8	.33	6	6.3	1.16	3	5.8	.21
Hand breadth	16	7.9	.33	6	7.8	.83	3	7.8	.26
Ankle breadth	15	7.4	.45	6	7.1	.69	3	7.3	.12
Neck circumference	16	35.5	1.53	6	35.6	1.00	3	34.7	.76
Upper arm circumference	16	26.8	1.77	5	27.7	1.65	3	25.0	1.70
Calf circumference	15	34.2	2.13	6	34.6	1.55	3	31.0	.92
Head length	17	19.25	.71	6	19.11	.25	3	19.46	.47
Head breadth	17	15.34	1.11	6	15.55	.36	3	15.40	.60
Bizygomatic breadth	17	14.50	.43	6	14.71	.35	3	14.93	.38
Bigonial breadth	17	11.13	.58	6	11.45	.71	3	11.50	.50
Nose height	16	5.40	.31	6	5.45	.37	3	5.43	.21
Total facial height	15	12.09	.52	4	11.95	1.01			
Upper facial height	15	7.19	.34	6	7.23	.44	3	7.20	.20
Nose breadth	16	3.59	.34	6	3.80	.31	3	3.70	.36
Mouth breadth	16	5.39	.56	6	5.28	.42	3	5.53	.25

Table 11. *Measurements of Women from Augpilagtoq.*

	21-40			41-60			60 →	
	n	M	s	n	M	s	n	M
Weight								
Stature	14	148.2	4.38	8	152.8	4.66	1	145.9
Suprasternal height	14	119.2	3.49	8	124.3	3.94	1	119.1
Sitting height	14	79.5	2.82	8	80.7	3.98	1	74.8
Arm length	14	63.8	3.33	8	67.4	2.23	1	65.6
Upper arm length	14	28.6	1.14	8	29.8	1.21	1	29.2
Biacromial breadth	14	33.5	1.22	8	33.7	2.24	1	31.3
Bicristal breadth	13	27.7	1.90	7	29.5	1.28	1	29.0
Bicondylar humerus breadth	14	5.7	.19	8	6.0	.51	1	5.8
Bicondylar femur breadth	14	8.2	.31	8	8.2	.89	1	8.8
Wrist breadth	14	5.2	.32	8	5.4	.50	1	5.4
Hand breadth	14	7.2	.42	8	7.4	.34	1	7.2
Ankle breadth	14	6.5	.27	8	6.6	.35	1	6.6
Neck circumference	14	30.1	1.69	8	31.7	1.98	1	30.0
Upper arm circumference	14	24.9	2.21	8	25.6	5.05	1	25.2
Calf circumference	14	32.2	2.08	8	31.7	5.14	1	30.6
Head length	14	18.26	.42	8	18.94	.71	1	18.50
Head breadth	14	14.32	.40	8	14.76	.72	1	15.10
Bizygomatic breadth	14	13.43	.53	8	13.91	.67	1	14.50
Bigonial breadth	14	10.23	.40	8	10.69	.61	1	10.20
Nose height	14	4.89	.35	8	5.05	.29	1	4.90
Total facial height	5	11.26	.37	3	11.53	.46		
Upper facial height	11	6.38	.22	7	6.53	.58		
Nose breadth	14	3.21	.34	8	3.42	.26	1	3.70
Mouth breadth	14	4.83	.39	8	4.95	.41	1	4.30

Table 13. *Measurements of Women from Kraulshavn.*

	21-40			41-60			60 →	
	n	M	s	n	M	s	n	M
Weight								
Stature	10	147.4	4.30	7	150.3	2.11	1	151.7
Suprasternal height	10	119.2	3.56	7	122.0	2.78	1	124.3
Sitting height	10	82.5	3.25	7	81.0	2.40	1	82.3
Arm length	10	63.0	3.30	7	65.2	2.18	1	65.0
Upper arm length	10	26.8	2.22	7	28.3	2.06	1	26.9
Biacromial breadth	10	33.3	2.04	7	34.5	1.87	1	32.8
Bicristal breadth	9	27.0	1.57	7	28.8	1.07	1	25.5
Bicondylar humerus breadth	10	6.7	.55	7	6.8	.39	1	6.6
Bicondylar femur breadth	10	8.6	.35	7	9.1	.33	1	8.9
Wrist breadth	10	5.0	.22	7	5.4	.35	1	5.2
Hand breadth	10	6.9	.35	7	7.0	.42	1	7.3
Ankle breadth	10	6.5	.34	7	6.8	.29	1	6.9
Neck circumference								
Upper arm circumference	10	26.5	1.16	7	26.4	2.59	1	22.9
Calf circumference	10	31.9	1.42	7	31.4	1.55	1	31.0
Head length	10	18.46	.47	6	18.83	.57	1	18.2
Head breadth	10	14.75	.40	6	15.02	.58	1	14.2
Bizygomatic breadth	9	13.62		6	13.75	.95	1	13.50
Bigonial breadth	10	10.35	.46	6	10.50	.61	1	11.10
Nose height	10	4.82	.31	6	4.62	.34	1	4.40
Total facial height	10	10.84	.64	6	10.82	.70	1	10.40
Upper facial height	4	6.50	.51	1	6.10			
Nose breadth	10	3.26	.24	6	3.55	.39	1	3.70
Mouth breadth								

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