

AVERAGE BIRTH WEIGHT IN MALTA

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No study of the average birth weight in Malta has yet been made. According to popular belief the Maltese tend to have large babies and to judge by hearsay statements a weight of 14 lbs. is by no means a rarity. It was originally intended to study the birth weight with reference to the age of the mother, parity, duration of gestation and social class. However it was soon found that the records available were inadequate for such a project and it was decided to study only the average birth weight.

Material

The sample is taken from the weights of 4103 (2091 male and 2012 female) live babies of Maltese parents born during the years 1951 to 1959 inclusive. The figures were collected from: (1) St. Luke's Hospital (1318 male and 1289 female); (2) Blue Sisters Hospital (599 male and 550 female); (3) David Bruce Military Hospital (126 male and 130 female), and (4) The Malta Memorial District Nursing Association (48 male and 43 female). During this period there were 79,504 live births (40971 male and 38533 female in Malta). The babies considered here were live single births. Stillbirths and multiple births were excluded from the sample.

In this study only the following factors were considered: (a) Birth weight; (b) Birth order; (c) Sex. The birth weight is obtained from the most reliable sources; from the hospital if the baby was born there and from the attending M.M.D.N.A. midwife if the baby was born at home. In no case was the weight obtained from the mother because of the tendency of the mothers to exaggerate. The figures available showed birth weights recorded to the

nearest ounce or to the nearest half pound. It was therefore decided to classify the weights in intervals of half pounds, two typical intervals being 6 lb. 9½ oz.—7 lb. 1½ oz. and 7 lb. 1½ oz.—7 lbs. 9½ oz. This was done to minimise errors due to the above approximations, it being very much more likely that an overestimate rather than an underestimate would be made. Because of the various difficulties already mentioned in collecting data, it has not been thought worth while applying any refined analysis, and only the mean weights and dispersions have been worked out.

Discussion

The average weight of the first born male was found to be 7 lb. 5.3 oz. (S.D. 19.5 oz) and of the female 7 lb. 0.8 oz. (S.D. 19.5 oz). It will be seen that there is a tendency for the weight to increase with every additional baby, the rate being slightly lower for female babies. No acceptable explanation has been found to show why the second born male child tends to be heavier than the third or fourth. In the case of the female it is the third born which tends to be heavier than the first few babies. The mean weight for all recorded births was 7 lb. 9.8 oz. (7.61 lb.) for boys and 7 lb. 4.7 oz. (7.29 lb.) for girls. The standard deviations were 22.0 oz. and 21.8 oz. respectively. These figures are slightly higher than those of English babies (Report 1959). The average birth weight of boys was 7.53 lb. (S.D. 1.18 lb.) and of girls 7.21 lb. (S.D. 1.13 lb.).

Summary

This study is intended to give an indication of the average Maltese birth weight.

TABLE I

Frequency distribution of weights classified by sex and birth order.

| * Weight | 1st baby | | 2nd | | 3rd | | 4th | | 5th | | 6th | | 7th and later | | 2nd and later | | Totals | |
|-----------------------------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----|---------------|------|--------|------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| $\frac{3}{4}$ — 1 | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | 1 | — | 1 | — |
| $1\frac{1}{4}$ — $1\frac{1}{2}$ | — | 1 | — | — | — | — | 2 | 1 | — | — | — | — | — | 2 | 2 | 3 | 2 | 4 |
| $1\frac{3}{4}$ — 2 | — | 1 | — | — | 1 | — | 1 | — | — | 1 | 2 | — | 1 | 1 | 5 | 2 | 5 | 3 |
| $2\frac{1}{4}$ — $2\frac{1}{2}$ | 3 | 1 | 1 | — | — | — | 1 | — | 1 | 1 | — | — | 2 | 3 | 5 | 4 | 8 | 5 |
| $2\frac{3}{4}$ — 3 | 2 | 1 | — | — | 1 | — | 1 | — | — | 1 | — | — | 3 | 5 | 5 | 6 | 7 | 7 |
| $3\frac{1}{4}$ — $3\frac{1}{2}$ | 4 | 2 | — | — | 1 | 1 | — | 2 | 1 | — | 1 | — | 1 | 3 | 4 | 6 | 8 | 8 |
| $3\frac{3}{4}$ — 4 | 3 | 3 | 1 | 4 | 1 | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 9 | 3 | 16 | 13 | 19 | 16 |
| $4\frac{1}{4}$ — $4\frac{1}{2}$ | 7 | 9 | 1 | 1 | 3 | 3 | 1 | 2 | — | 2 | — | 1 | — | 4 | 5 | 13 | 12 | 22 |
| $4\frac{3}{4}$ — 5 | 8 | 16 | 5 | 3 | 1 | 4 | 2 | 4 | — | 3 | 2 | 4 | 7 | 9 | 17 | 27 | 25 | 43 |
| $5\frac{1}{4}$ — $5\frac{1}{2}$ | 12 | 18 | 7 | 9 | 3 | 3 | 1 | 7 | 2 | 3 | 1 | 3 | 6 | 11 | 20 | 36 | 32 | 54 |
| $5\frac{3}{4}$ — 6 | 39 | 62 | 16 | 21 | 6 | 14 | 9 | 9 | 8 | 8 | 4 | 5 | 19 | 24 | 62 | 81 | 101 | 143 |
| $6\frac{1}{4}$ — $6\frac{1}{2}$ | 54 | 72 | 20 | 41 | 16 | 13 | 6 | 13 | 6 | 8 | 2 | 13 | 17 | 29 | 67 | 117 | 121 | 189 |
| $6\frac{3}{4}$ — 7 | 127 | 127 | 50 | 60 | 35 | 44 | 27 | 28 | 25 | 23 | 9 | 20 | 31 | 53 | 177 | 228 | 304 | 355 |
| $7\frac{1}{4}$ — $7\frac{1}{2}$ | 122 | 112 | 63 | 63 | 54 | 49 | 37 | 35 | 20 | 17 | 10 | 17 | 44 | 47 | 228 | 228 | 350 | 340 |
| $7\frac{3}{4}$ — 8 | 109 | 86 | 60 | 55 | 47 | 42 | 40 | 40 | 26 | 24 | 17 | 19 | 64 | 70 | 254 | 250 | 363 | 336 |
| $8\frac{1}{4}$ — $8\frac{1}{2}$ | 74 | 50 | 51 | 35 | 42 | 22 | 28 | 23 | 20 | 14 | 19 | 9 | 32 | 45 | 192 | 148 | 266 | 198 |
| $8\frac{3}{4}$ — 9 | 42 | 30 | 53 | 14 | 21 | 30 | 27 | 23 | 14 | 10 | 14 | 18 | 70 | 35 | 199 | 130 | 241 | 160 |
| $9\frac{1}{4}$ — $9\frac{1}{2}$ | 21 | 4 | 20 | 11 | 10 | 10 | 14 | 4 | 9 | 5 | 6 | 2 | 25 | 11 | 84 | 43 | 105 | 47 |
| $9\frac{3}{4}$ — 10 | 15 | 11 | 16 | 7 | 2 | 2 | 7 | 3 | 7 | 2 | 7 | 2 | 16 | 18 | 55 | 34 | 70 | 45 |
| $10\frac{1}{4}$ — $10\frac{1}{2}$ | 1 | 2 | 3 | 1 | 5 | — | 3 | 2 | 3 | — | 1 | 1 | 5 | 6 | 20 | 10 | 21 | 12 |
| $10\frac{3}{4}$ — 11 | 1 | — | 4 | — | 4 | 1 | 1 | 4 | 1 | 3 | 3 | — | 9 | 6 | 22 | 14 | 23 | 14 |
| $11\frac{1}{4}$ — $11\frac{1}{2}$ | — | 1 | — | — | — | — | — | — | — | — | — | — | 1 | — | 1 | — | 1 | 1 |
| $11\frac{3}{4}$ — 12 | 1 | — | 1 | — | — | — | — | — | — | — | — | — | 1 | 6 | 2 | 6 | 3 | 6 |
| $12\frac{1}{4}$ — $12\frac{1}{2}$ | — | — | — | — | — | — | 1 | — | — | — | — | — | 2 | 2 | 3 | 2 | 3 | 2 |
| $12\frac{3}{4}$ — 13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| $13\frac{1}{4}$ — $13\frac{1}{2}$ | — | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | 1 | — | 1 |
| $13\frac{3}{4}$ — 14 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| $14\frac{1}{4}$ — $14\frac{1}{2}$ | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1 |
| | 645 | 610 | 372 | 325 | 253 | 239 | 212 | 203 | 144 | 126 | 99 | 115 | 366 | 394 | 1446 | 1402 | 2091 | 2012 |

* Interval $6\frac{3}{4}$ — 7 = 6 lb. $9\frac{1}{2}$ ozs. — 7 lb. $1\frac{1}{2}$ ozs. $7\frac{1}{4}$ — $7\frac{1}{2}$ = 7 lb. $1\frac{1}{2}$ ozs. — 7 lb. $9\frac{1}{2}$ ozs.

TABLE II

**The Mean Weights and the Standard Deviation
for the Frequency Distribution shown in Table I**

| | <i>Number of Children</i> | | <i>Meanweight</i> | | <i>Standard Deviation</i> | |
|------------------------|---------------------------|---------------|-------------------|----------------|---------------------------|---------------|
| | <i>Male</i> | <i>Female</i> | <i>Male</i> | <i>Female</i> | <i>Male</i> | <i>Female</i> |
| 1st Baby | 645 | 610 | 7 lb. 5.3 ozs. | 7 lb. 0.8 ozs. | 19.5 ozs. | 19.6 ozs. |
| 2nd Baby | 372 | 325 | 7 lb. 12.4 ozs. | 7 lb. 4.8 ozs. | 19.6 ozs. | 17.5 ozs. |
| 3rd Baby | 253 | 239 | 7 lb. 10.1 ozs. | 7 lb. 7.4 ozs. | 19.7 ozs. | 18.0 ozs. |
| 4th Baby | 212 | 203 | 7 lb. 10.9 ozs. | 7 lb. 7.0 ozs. | 24.0 ozs. | 22.6 ozs. |
| 5th Baby | 144 | 126 | 7 lb. 11.6 ozs. | 7 lb. 5.1 ozs. | 20.7 ozs. | 23.7 ozs. |
| 6th Baby | 99 | 115 | 7 lb. 14.1 ozs. | 7 lb. 6.1 ozs. | 25.7 ozs. | 19.4 ozs. |
| 7th Baby & Later | 366 | 394 | 7 lb. 12.6 ozs. | 7 lb. 7.8 ozs. | 26.6 ozs. | 28.1 ozs. |
| 2nd Baby & Later | 1446 | 1402 | 7 lb. 11.9 ozs. | 7 lb. 6.5 ozs. | 22.8 ozs. | 22.4 ozs. |
| All recorded Births | 2091 | 2012 | 7 lb. 9.3 ozs. | 7 lb. 4.7 ozs. | 22.0 ozs. | 21.8 ozs. |

The average of the first born male was 7 lb. 5.3 oz. and of the female 7 lb. 0.8 oz. There is a general tendency for the birth to increase with every additional birth. The second male and the third female tend to be heavier than the first few babies. The average weight of all recorded births is 7 lb. 9.8 oz. for boys and 7 lb. 4.7 oz. for

girls. The average weight is slightly higher than that of English babies.

Reference

Standards of Normal Weight in Infancy. Ministry Health. Reports on Public Health and Medical Subjects. No. 99. H.M.S.O. 1959.

