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The blood pressures and heart rate, in girls, during adolescence. Biometrical constants for 1,700 cases.

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In a previous paper before this Society[1] the writer discussed the source and methods used in obtaining this data.

The biometrical constants determined were, the correlation coefficients, means, standard deviations, each with its probable error, and the probable error of a single observation.

Correlation of systolic pressure, diastolic pressure, pulse pressure and pulse rate was made with age in years, height in inches and weight in pounds. These constants were determined for six different groups of data, *i. e.*, schoolgirls who had not reached puberty, schoolgirls who had reached puberty, total schoolgirls, schoolgirls who had reached puberty and college girls, college girls, and finally the total schoolgirl and college girl population.

The numerical values of the constants will be published elsewhere and only the general conclusions given here.

Conclusions:

1—Blood pressure and pulse rate data for schoolgirls and college girls must be correlated separately. That for schoolgirls must further be separated into a group of girls who have reached puberty and a group who have not.

2—When systolic pressure is correlated with weight, height and age:

a—Schoolgirls who have not menstruated show the greatest correlation with the factors, weight, height and age, in the order named.

b—Schoolgirls who have reached puberty show correlation, in this order, with weight and height but none with age. These coefficients are less than those in (a).

c—College girls show significant correlation only with weight.

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1 Burlage, S. R., PROC. SOC. EXP. BIOL. AND MED., 1922, xix, 247.

3—When diostolic pressure is correlated with weight, height and age:

a—Schoolgirls who have not reached puberty show the greatest correlation with the factors, weight, height and age, in the order named. The correlation however is not as great as that found with systolic pressure.

b—Schoolgirls who have reached puberty show correlation in the same order as in (a) but the coefficients are less in each case.

c—Here too, the college girls show correlation with weight only, and this coefficient is less than that for systolic pressure.

4—When pulse pressure is correlated with weight, height and age:

a—The schoolgirls who have not reached puberty show correlation with the factors in the order named. These coefficients are less than those for diastolic pressure.

b—Neither the schoolgirls who have reached puberty nor the college girls show significant correlation with any of the factors.

5—When pulse rate is correlated with height, age and weight:

a—The schoolgirls who have not reached puberty show correlation with the factors in the order named.

b—The schoolgirls who have reached puberty show a correlation with age and weight, in this order.

c—The college girls show no significant correlation with any of the factors.

Of course these correlations with pulse are negative correlations.

6—When considering the data from girls who have reached the age of puberty, there seems to be in most cases, a better correlation, in all of the series studied, in the schoolgirl group than in the college girl group.