

Parent - Adult Offspring Correlations of Anthropometric Measurements in an Urban Indian Population

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ABSTRACT Genetics and environment influence on anthropometric traits have been studied using intrafamilial correlation and regression analyses on a sample of 85 nuclear Aggarwal families. Highly significant correlation values of midparent-offspring and parent-offspring for body measurements (except upper arm circumference and skinfolds at biceps and triceps) suggest strong genetic component in the expression of these traits. Heritability estimates are found to be higher for linear measurements than for breadth and least for girths and skinfold measurements. Partitioning of phenotypic values show fifty percent contribution of additive genetic variance (V_A/V_p), twenty-one percent of dominance variance (V_D/V_p) and twenty-nine percent of environmental deviation (V_E/V_p).