Prevalence of Heart Lesions Related to BMI (Body Mass Index) in a Large Teenage Cohort Machluf, Yossy¹; Chaiter, Yoram²; <u>Fink, Daniel</u>³

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Evaluation of a 22 year (birth dates from 1971-1994) cohort (113,694 from one geographical area of Israel) of army recruits between the ages of 16 and 19, revealed a statistically significant higher prevalence of diagnosed cardiac anomalies among underweight (<10th % BMI) recruits compared to normal weight recruits (10-85th %) and lower prevalence of diagnosed cardiac anomalies among overweight (85-95th %) and among obese (>95th %) recruits compared to the normal population. This trend is significant for males and females separately. The odds ratios for obese/ overweight/ normal/ and underweight are 0.66/ 0.74/ 1.0 (by definition)/ and 2.47 for males and 0.35/ 0.54/ 1.0 (by definition)/ and 1.47 for females. All P values are less than 0.05 and most less than 0.01. We will present subgroup analysis exploring the reasons for this trend.