

RELATIONSHIPS BETWEEN PHYSICAL EXERCISE INDEX AND  
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Lack of physical exercise has been associated with the increase in coronary heart disease in predisposed populations. On the other hand, recent epidemiological reports from the Framinham Study and others, cast doubts about associations between dietary intake and serum cholesterol levels. Physical Exercise Index was studied by the Harvard Step Test in one hundred young individuals between 16-35 years of age. These subjects were participants in a Nutritional Survey sponsored by the Nutrition Section of the OIR (NIH). The subjects included in the present study were derived from communities in the Republic of Honduras (Central America). In each community a systematic random sample of house-holds was included in the survey. Serum samples for cholesterol level determinations were obtained before the exercise test was performed. Negative correlations were found between basal pulse rate vs physical exercise index ( $-.31$ ), skin fold thickness vs physical exercise index ( $-.31$ ), and serum cholesterol vs physical exercise index ( $-.20$ ). The regression line of cholesterol vs physical exercise index was  $Y = 209.2 - 0.698X$ . These studies suggest that individual variability in serum cholesterol values in a fairly homogeneous population could be partially accounted for by the physical fitness of the individuals. (Supported in part by U.S.P.H.S. NIH Grant HE-13205-01).

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