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Children's Activity Levels: A Review of Studies Conducted on British Children

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International concern has been expressed by educators and health professionals that the physical activity levels of children have declined during past decades (Gortmaker, Dietz, Sobol & Wehler, 1987; Ross, Pate, Lohman & Christenson, 1987). British researchers also fear that levels of activity in British children may have declined. Researchers such as Williams, (1988); Armstrong, (1989); Armstrong et al., (1990a); (1990b) are concerned that children's activity levels may have declined to such an extent as to be detrimental to health.

Armstrong (1989) states 'many children seldom experience the intensity and duration of physical activity associated with a low CHD in adults.' Research evidence quite clearly justifies the importance of and need for physical activity in childhood. It is known that physical activity in children is inversely associated with the coronary heart disease risk factors such as blood pressure (Strazullo et al., 1988), serum lipoproteins (Durant, Linder & Mahoney, 1983) and obesity (Clark & Blair, 1988; Walberg & Ward, 1985). Such relationships may be considered to be of particular importance and concern given the evidence that coronary heart disease may have its origins in childhood (Lauer, Conner, Leaverton, Reiter & Clarke, 1975; Newman et. al., 1986).

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In the past, knowledge has tended to have been generated regarding the effects of exercise on performance capacities rather than on activity levels. Many factors are known to influence performance, however, such as age, sex, genetics, health status, and a host of socio-cultural circumstances. Such information is, therefore, of

only limited value in evaluating the effect of habitual physical activity on health. As such researchers interested in children's health have recognised the need to look at children's physical activity patterns to provide the relevant information (Saris, 1986).

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Despite acknowledgement of the need to investigate children's activity patterns relatively little is known about children's participation in physical activity or the relationship between children's physical activity and health (Parcel et al., 1987).

There is a dearth of information available on the physical activity levels of children in Britain in particular. By comparison, the United States, Canada and Australia have conducted large-scale national fitness and activity surveys to assess how active their child populations are (The National Children and Youth Fitness Study, (McGinnes, 1987); The Canada Fitness Survey, 1981; The Australian Health and Fitness Survey, 1985). As yet we have no activity data on such a large scale.

Following concerns both over children's low activity levels, and over the limited information on children's activity in this country, there is a need to examine the evidence that is available on the activity patterns of our young people. This paper reviews a number of studies which have measured and reported the physical activity levels of British children of all ages.

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One of the earliest studies to be conducted on British children involved the completion of activity diaries (Durnin 1967). Activity levels were assessed from one week's diary information. Low levels of activity amongst children, particularly