

**ABSTRACT**

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# Coronary Heart Disease Prevention

Earlier this year a report was produced by the British Cardiac Society, which makes recommendations aimed at reducing coronary heart disease (CHD). The Working Group, who produced the report state that the recommendations are based on the weight and consistency of the evidence and the likely balance of benefit and harm. They cannot be based on certainty of effectiveness. There has been a small decline in CHD mortality in England, Wales and Scotland since 1979 and this is most evident in men between 35-44 years. While it is not possible to identify the specific influences responsible, the report suggests that reduction in cigarette smoking and a healthier diet have probably contributed. However, it is recognised that multifactorial intervention trials have been very disappointing, although results of trials of lowering raised blood cholesterol or blood pressure in those at special risk are encouraging. It is also recognised that coronary atherosclerosis in adults has not yet been shown convincingly to regress, and other pathological processes leading to CHD, such as thrombosis and plaque fissure, may not be influenced greatly by control of the three main 'coronary risk factors' – cigarette smoking, raised blood cholesterol and raised blood pressure.

The benefit of dietary change is supported by data from several countries but there are significant exceptions which do not fit simply with a dietary hypothesis. Sweden reports similar dietary changes to the USA, but an increase in CHD mortality. Japan has an increase in fat intake but a decrease in CHD mortality. An apparent increase in saturated fat consumption is seen alongside decreased CHD mortality in Israel. This only emphasises the multifactorial nature of CHD. Data from American food consumption surveys indicate that the fall in fat intake has been accompanied by an increase in linoleic acid intake. The report suggests, in relation to the decline in CHD seen in America, these data are more consistent with a protective effect of essential fatty acids or a high ratio of essential to saturated fatty acids than of a harmful effect of saturated fatty acids. There is further support for this in the inverse relation between linoleic acid in adipose tissue and CHD.

The report makes a number of recommendations. Cigarette smoking should be eliminated, particularly among young people. Those with blood cholesterol concentrations above 6.5 mmol/l (250 mg/dl) should be given dietary advice aimed at reducing cholesterol levels below 5.2 mmol/l (200 mg/dl). The report endorses the recommendations of the Panel on Diet in Relation to Cardiovascular Disease (COMA, 1984) i.e. no more than 35% of food energy should be derived from fat or 15% from saturated fatty acids. The more stringent W.H.O. goals are not recommended for the general population but are suggested to be appropriate for individuals at special risk of CHD. This would mean limiting total fat intake to 30% of energy and saturated fatty acids to 10%. In line with COMA, there should be an increase in fibre-rich carbohydrates as compensation for the reduced fat intake. Individuals with diastolic blood pressure above 100mm Hg require treatment and attention to other risk factors. Obesity should be avoided by a combination of appropriate diet and regular exercise and physical activity should be encouraged as a normal part of daily living. The report recommends particular attention is paid to the provision of a healthy diet to children over the age of 5 years. In order to implement these recommendations, the report urges cardiologists, consultant physicians, general practitioners, health authorities and others to take a more active role. This includes a more co-ordinated and sustained effort to guide the media with accuracy, judgement and responsibility towards effective CHD prevention.

**Reference:**

The report of British Cardiac Society Working Group on Coronary Disease Prevention (1987).