American Heart Association Call to Action: Obesity as a Major Risk Factor for Coronary Heart Disease

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In response to the emerging body of scientific, medical, and behavioral data about the link between excess adiposity and coronary heart disease, the American Heart Association (AHA) has reclassified obesity as a major, modifiable risk factor for coronary heart disease.

In doing so, the AHA focuses more of its attention and resources on the role of obesity in cardiovascular disease and issues a “call to action” to the medical and research community, as well as the public. The actions that we request are listed below and begin with the need for more funding for research on obesity, particularly the interrelated roles of the biochemical and behavioral factors that underlie weight regulation. Only through such research can we better understand this disorder and develop more effective preventive strategies and treatments for obesity.

Obesity research today is in its infancy, at a stage comparable to lipid research 20 years ago. From epidemiology studies, we have learned that obesity is a serious risk factor for coronary heart disease, on a par with cigarette smoking, physical inactivity, and high blood cholesterol. Because the research on this “new” risk factor for heart disease is in its infancy, the solutions are less clear. Few drugs exist to prevent and treat obesity, and certainly there are no drugs comparable to the “statins” to reduce high blood cholesterol. The long-term effects of the few treatments available remain unknown. There are few tools for treatment, in part because we are still learning about the complex causes of excess weight.

What we do know is that modest weight reductions of 5% to 10% of body weight can decrease blood pressure and total blood cholesterol, improve glucose tolerance in diabetic patients and those with impaired glucose tolerance prone to develop diabetes, and reduce the severity of obstructive sleep apnea. Given the rise in the prevalence of obesity, even these small changes can be important to the nation’s health.

The number of both men and women who are overweight is increasing. How is overweight defined? The AHA has adopted the body mass index (BMI) as an indicator to measure adiposity. BMI is defined as weight in kilograms divided by height in meters squared (kg/m²). A BMI between 25 and 30 is considered overweight, and a BMI >30 is considered obese.

According to NHANES III (1988–1991), 65 700 000 American adults (30 million men and 35.6 million women) exceed the healthy weight range defined by the US dietary guidelines. National Center for Health Statistics data from NHANES III show the same alarming trend in children and adolescents.

However, the measurement of excess weight is not an exact science. It is sometimes difficult to establish a threshold level of BMI to define obesity, especially in women, because in women, a BMI as low as 21 may be associated with the greatest protection from coronary heart disease mortality. For many women, a BMI near 30 may not be a threat to cardiovascular health when the increase in adipose tissue is distributed in the pelvis and not in the abdomen. Unfortunately, a BMI-based definition fails to take body fat distribution into account.

The causes of obesity are complex. Although genes play an important role in determining how individuals metabolize calories, lifestyle may play the dominant role. For example, people have become more sedentary both on the job and during their leisure time.

According to the Physical Activity and Health report by the Surgeon General (1996), low levels of activity, resulting in fewer calories used than consumed, contribute to the high prevalence of obesity in the United States. Nevertheless, inactivity is only half of the lifestyle equation. Calories also count.

Over the past three decades, public health authorities have exhorted Americans to eat no more than 30% of total calories from fat and have emphasized the importance of limiting consumption of saturated fat to no more than 10% of total calories. In the matter of fat restriction, we have done a good job of educating consumers. In the 1960s, the average person consumed ≈40% to 42% of their total calories from fat. Recent statistics from the early 1990s indicate that most people are consuming ≈34% of their total calories from fat.

However, despite indications that the percentage of calories consumed as fat is decreasing, surveys indicate that we are consuming more calories overall.

Simply put, fat restriction is only part of a heart-healthy diet. To address the problem of obesity, it is vitally important that we couple the message to the public of calorie restriction...
with our message of lower fat consumption. In addition, we need to emphasize consuming fruits and vegetables—at least five a day—as an excellent way to help individuals restrict calories, attain a sense of satiety, and consume nutrients, such as folate, vitamin B$_6$, and vitamin B$_{12}$, that are important for overall cardiovascular health.

The key to decreasing obesity in the United States may be prevention, especially because so few effective strategies exist to help people who are already obese lose weight and maintain a healthier weight. Prevention has become even more important because of the increasing prevalence of obesity in children and adolescents. In light of the emergent evidence about the increasing prevalence of obesity and its link to coronary heart disease, we urge healthcare providers, legislators, insurers, and the public to take action on the following points:

- Support more research into weight regulation, the causes of obesity, and the outcomes of obesity treatment.
- Recognize that the causes of obesity are complex and that both genetics and behavior are part of the emerging picture. Obesity should not be a basis for moral judgment; overweight should not be a cause of job, social, or peer discrimination.
- Nurture efforts that encourage individuals to take small steps toward increasing physical activity, such as walking up stairs instead of taking an elevator, parking farther away from an individual’s destination, and other incremental increases in physical activity. Encourage those who are able to exercise regularly, for example by walking briskly 30 minutes a day most days of the week.
- Encourage state and local authorities to provide more opportunities for safe, community-based physical activity programs, such as walking and biking paths, and the broader use of existing facilities, such as school swimming pools.
- Eliminate complacency by healthcare providers and individuals about obesity: it is a phenotype that carries with it many comorbidities, ie, hypertension, glucose intolerance, hypercholesterolemia, hypertriglycerideremia, and reduction of HDL cholesterol, related to coronary heart disease.
- Make the treatment of obesity a shared responsibility between healthcare provider and individual, and emphasize the “whole” person. Include counseling on diet, physical activity, appropriate medical interventions, and social support. Once obese, always “obese”; strategies for maintaining decreased weight need to be in place for a lifetime.
- Emphasize the total dietary picture to individuals: we must add total calorie restriction and an emphasis on fruits and vegetables to our messages on low fat consumption.
- Educate the public about the importance of preventing obesity.
- Develop effective educational programs aimed at preventing the development of obesity in childhood.
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