

Does physical activity counteract the adverse effects of weight?

Physical activity and maintenance of a healthy body weight are associated with a lower risk of hypertension (high blood pressure). While physical activity does reduce the risk of hypertension in overweight women, it does not remove it. Compared with healthy-weight active women the risk of hypertension in obese active women is more than three times higher. The risk in obese, inactive women is almost five times higher.

What is this research about?

There is persuasive evidence that obesity increases, while physical activity decreases the risk of cardiovascular disease. However, contradictory findings from previous studies have led to debate about the relative importance of weight and physical activity with respect to risk of future adverse health outcomes.

Little is known about the effect of physical activity on the association between weight and hypertension. This research investigated how physical activity changes the effect of BMI on hypertension risk in mid-aged women.



What did the researchers do?

Researchers investigated the individual and combined effects of BMI and physical activity on the rates of hypertension in 10,000 women (born 1946-51) in the Australian Longitudinal Study on Women's Health. Participants' BMI, physical activity and hypertension were measured at three-yearly intervals for 14 years (1996 to 2010).

What did the research find?

Both high BMI and low physical activity were individually associated with an increased risk of hypertension. However high BMI showed the highest risk.

The combined effects of BMI and physical activity showed that being active reduced (but did not eliminate) the risk of hypertension associated with being overweight or obese.

Women who were obese but physically active had double the risk of hypertension as inactive, healthy weight women.

How can you use this research?

The lowest risk of hypertension was in healthy-weight women who reported moderate or high levels of physical activity. This reinforces the importance of maintaining a healthy weight and being physically active in order to reduce the risk of hypertension in mid-aged women.

The risk of hypertension associated with being overweight and obese reduced considerably with increased physical activity levels, therefore overweight and obese women should be encouraged to be more physically active.

Citation:

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