

Impact of physical activity on the association of overweight and obesity with cardiovascular disease: The Rotterdam Study

While overweight and obesity increases the risk of other non-communicable diseases such as cardiovascular disease (CVD), engaging in physical activity (PA) is also associated with a decrease of such risks. This study aimed to better understand the role of PA on weight and CVD risk among adults (middle-aged and elderly).

Among the 5,344 participants included across the 15 years of data collection, 16.2% of experienced a CVD event. The risk of CVD was 1.33- and 1.35 times higher in people living with obesity, compared to active healthy-weight participants. Meanwhile, active participants with overweight and obesity did not show a higher CVD risk. Following other studies, these findings suggest that PA is a more significant determining risk factor for CVD than BMI in middle-aged and elderly adults.

To strengthen the previous literature, the study included diverse measures to quantify PA (housework, transport, leisure type). It can be concluded the benefit of exercise to prevent CVD mortality "irrespective and beyond" leisure time. Physical activity recommendations for the elderly should therefore be encouraged at international and national levels. Maintaining a healthy weight can offset the risks associate with being inactive and likewise, being active has a role in overweight and obesity prevention.

In summary, "regular physical activity reduces the CVD risk in older adults and that further benefits can be gained from maintaining a healthy weight."

Koolhaas, C., Dhana, K., Schoufour, J., Ikram, M., Kavousi, M. and Franco, O., 2017. Impact of physical activity on the association of overweight and obesity with cardiovascular disease: The Rotterdam Study. European Journal of Preventive Cardiology, 24(9), pp.934-941.

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