

NEWS AND VIEWS

The Myth of “Healthy” Obese: Meta-Analysis

There has been a recent interest in the subgroup of individuals who are overweight and obese but have normal features despite of adiposity. Many people believe that despite increased adiposity, these overweight and obese individuals may have normal metabolic features. As per the meta-analysis, published in the *Annals of Internal Medicine*, the occurrence of optimum levels of blood glucose, blood pressure, and triglycerides protects these individuals from the cardiovascular diseases.

In this study normal weight individuals with its adverse effects have been described. However, it is not clear whether metabolic phenotypic changes morbidity and mortality associated with higher body mass index (BMI). The purpose of this review is to determine the effect of metabolic status on all-cause mortality and cardiovascular events in normal-weight, overweight, and obese individuals. All the studies were identified from the electronic databases. The present study evaluated all causes of mortality and cardiovascular diseases. The clinical characteristics of 6 patient groups defined by BMI category as normal weight/overweight/obesity and metabolic status of healthy /unhealthy as defined by the presence and absence of components of the metabolic syndrome by Adult Treatment Panel III or International Diabetes Federation criteria. The data were extracted by two independent reviewers. The reference group was metabolically healthy people of normal weight.

The analysis included eight observational studies comprising of 61386 patients who were evaluated for all-cause mortality and cardiovascular events. Metabolically healthy obese individuals with a relative risk (RR) of 1.24, 95% CI, 1.05 to 1.55 had increased risk for events compared with those who are metabolically healthy normal weight individuals.

In the four studies with 10 years follow up, all the metabolically unhealthy groups had similar elevated risk with normal weight having relative risk (RR) of 3.14, CI 2.36 to 3.93, overweight with RR of 2.70, CI 2.08 to 3.30 and obese with RR of 2.65, CI 2.18 to 3.12. The review does not describe the exposure to metabolic- BMI.

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Morning-After Pill: Less effective in Overweight Women.

Food and Drug Administration (FDA) is investigating that whether emergency contraception (plan B one step and generics) has reduced result in women over a certain weight as Reuters reports. The agency's review was encouraged by European health regulators ordering a change in label on a similar product, as it was found to lose effectiveness starting roughly at 165 lb while becoming ineffective after 176 lb.

A nurse practitioner with *NEJM Journal Watch*, Anne Moore; commented. According to the Centers for Disease Control (CDC), the average American woman weighs 166.2 pounds, that raises a concern about the result of this type of emergency contraception among many U.S. women. The conflict to make emergency contraception available has been long and tiring. But it is to be hoped that this recent information will not discourage users as this may still be the best option available.

CNN. <https://edition.cnn.com/2013/11/25/health/emergency-contraceptives-weight/index.html>

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Apparent vitamin D deficiencies in Blacks: A protein variant at fault.

Vitamin D is a hormone that helps to control the calcium concentration in our body and is important for the development of strong bones. The prevalence of Vitamin D deficiency in Blacks misleads what is measured clinically as per the *NEJM* study.

In this study a total of 2100 samples of blacks and whites were analyzed. The mean levels of both 25-hydroxyvitamin D and Vitamin D binding protein were lower among Blacks. Still Blacks have higher bone mineral density than Whites and same levels of bioavailable Vitamin D. The reason behind this lies in variation of genes associated with vitamin D binding protein. The variation is more dominant in Blacks with lower levels of binding protein. The authors conclude from this study that lower levels of 25-hydroxyvitamin D do not indicate any deficiency.

The results raise a question that there is need of supplementation in persons with low levels of both total 25-hydroxyvitamin D and vitamin D binding protein in order to to improve the determination of vitamin D status in diverse populations.

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