Waist circumference linked to diabetes risk, independently of body mass index

June 5 2012

A collaborative re-analysis of data from the InterAct case-control study conducted by Claudia Langenberg and colleagues has established that waist circumference is associated with risk of type 2 diabetes, independently of body mass index (BMI).

Reporting in this week's PLoS Medicine, the researchers estimated the association of BMI and waist circumference with type 2 diabetes from measurements of weight, height and waist circumference, finding that both BMI and waist circumference were independently associated with type 2 diabetes risk but waist circumference was a stronger risk factor in women than in men.

These findings indicate that targeted measurement of waist circumference in overweight individuals (who now account for a third of the US and UK adult population) could be an effective strategy for the prevention of diabetes because it would allow the identification of a high-risk subgroup of people who might benefit from individualised lifestyle advice. The authors comment: "Our results clearly show the value that measurement of [waist circumference] may have in identifying which people among the large population of overweight individuals are at highest risk of diabetes."

More information: The InterAct Consortium (2012) Long-Term Risk of Incident Type 2 Diabetes and Measures of Overall and Regional Obesity: The EPIC-InterAct Case-Cohort Study. *PLoS Med* 9(6): e1001230. doi:10.1371/journal.pmed.1001230