



WHR = Waist circumference (cm) divided by hip circumference (cm).

Adult waist to hip ratio is a continuous variable. Adult waist to hip ratio cannot be calculated if either component necessary for its calculation (i.e. abdominal circumference or hip circumference) has not been collected (i.e. is coded to 999.9).

Adult cut-off points for waist to hip ratio, that may define increased risk of cardiovascular disease and all cause mortality, range from 0.9 to 1.0 for men and 0.8 to 0.9 for women (Croft et al. 1995, Bray 1987, Bjorntorp 1985). These values are based primarily on evidence of increased risk of death in European populations, and may not be appropriate for all age and ethnic groups.

In Australia and New Zealand, the cutoffs of > 0.9 for males and > 0.8 for females were used in the Australian Bureau of Statistics' 1995 National Nutrition Survey.

As there are no cut-off points for waist to hip ratio for children and adolescents, it is not necessary to calculate this item for those aged under 18 years.

Collection Methods: WHR should be derived after the data entry of waist circumference and hip circumference. It should be stored on the raw data set as a continuous variable and should not be aggregated or rounded.

Related metadata: is calculated using Waist circumference - measured version 2  
is calculated using Hip circumference - measured version 2  
supersedes previous derived data element Adult abdomen to hip ratio version 1

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### *Administrative Attributes*

Source Document:

Source Organisation: National Health Data Committee  
National Centre for Monitoring Cardiovascular Disease  
Australian Institute of Health and Welfare

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Comments: This data element applies to persons aged 18 years or older as no cut off points have been developed for children and adolescents. It is recommended for use in population surveys and health care settings.

More recently it has emerged that waist circumference alone, or in combination with other metabolic measures, is a better indicator of risk and reduces the errors in waist-to-hip ratio measurements. Waist to hip ratio is therefore no longer a commonly used measure. It is recommended that in population surveys, sociodemographic

