Adult—waist circumference risk indicator, Caucasian adult code N

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Adult—waist circumference risk indicator, Caucasian adult code N

Identifying and definitional attributes

Metadata item type:	Data Element
Short name:	Waist circumference risk indicator - adults
METEOR identifier:	270205
Registration status:	Health, Standard 01/03/2005
Definition:	The sex specific category of risk of metabolic complications associated with excess abdominal adiposity in adult Caucasians, as represented by a code.

Data element concept attributes

Identifying and definitional attributes

Data element concept:	Adult—waist circumference risk indicator
METEOR identifier:	269670
Registration status:	Health, Standard 01/03/2005
Definition:	An indicator of the sex specific category of risk of metabolic complications associated with excess abdominal adiposity in an adult.
Context:	Public health and health care: This metadata item is used as an indicator of risk of metabolic complications associated with overweight and obesity including dyslipidaemia, glucose intolerance and hypertension. On a population basis there is a strong association between abdominal obesity and health risk. Body fat distribution has emerged as an important predictor of obesity-related morbidity and mortality. Abdominal obesity, which is more common in men than women, has, in epidemiological studies, been closely associated with conditions such as coronary heart disease, stroke, non-insulin dependent diabetes mellitus and high blood pressure. Waist circumference as an indicator of risk can be used: • to indicate the prevalence of abdominal obesity and its sociodemographic distribution (problem identification); • to evaluate health promotion and disease prevention programs (assessment of interventions); • to monitor progress towards national public health policy; • to ascertain determinants and consequences of abdominal obesity; and • in nutrition and physical activity surveillance and long-term planning. Waist circumference is a convenient and simple measurement that is unrelated to height, correlates closely with body mass index (BMI) and waist-to-hip ratio (WHR) and is an approximate index of intra-abdominal fat mass and total body fat. Changes in waist circumference can reflect changes in risk factors for cardiovascular disease and other forms of chronic disease, even though the risks seem to vary in different populations.
Object class:	Adult
Property:	Waist circumference risk indicator

Value domain attributes

Identifying and definitional attributes

Value domain:	Waist circumference risk indicator for a Caucasian adult code N

METEOR identifier:	270774
Registration status:	Health, Standard 01/03/2005
Definition:	A code set representing the risk of metabolic complications associated with excess abdominal adiposity in Caucasian adults.

Representational attributes

Representation class:	Code
Data type:	Number
Format:	N
Maximum character length:	1

	Value	Meaning
Permissible values:	1	Not at risk (male waist circumference less than 94 cm, female waist circumference less than 80 cm)
	2	Increased (male waist circumference ≥ 94 cm, female waist circumference ≥ 80 cm)
	3	Substantially increased (male waist circumference ≥ 102 cm, female waist circumference ≥ 88 cm)
Supplementary values:	9	Not stated/inadequately described

Data element attributes

Collection and usage attributes

Guide for use:	This metadata item cannot be determined if waist circumference measured has not been collected (i.e. is coded to 999.9) and/or sex is not stated (i.e. coded to 9). This metadata item applies to persons aged 18 years or older.
Collection methods:	This metadata item should be derived after the data entry of waist circumference measured. It should be stored on the raw data set as a continuous variable and should not be aggregated or rounded.

Comments:

This metadata item is recommended for use in population surveys and health care settings.

Recent evidence suggests that waist circumference may provide a more practical correlate of abdominal fat distribution and associated ill health.

The identification of risk using waist circumference is population-specific and will depend on levels of obesity and other risk factors for cardiovascular disease and non-insulin dependent diabetes mellitus.

Populations differ in the level of risk associated with a particular waist circumference, so that globally applicable cut-off points cannot be developed. For example, complications associated with abdominal fat in black women and those of South Asian descent are markedly higher for a given level of BMI than in Europeans. Also, although women have almost the same absolute risk of coronary heart disease as men at the same WHR, they show increases in relative risk of coronary heart disease at lower waist circumferences than men. Thus, there is a need to develop sex-specific waist circumference cut-off points appropriate for different populations. Hence, the cut-off points used for this metadata item are associated with obesity in Caucasians. This issue is being investigated further.

Cut-off points for children and adolescents are also being developed. Research shows that a high childhood BMI and high trunk skin fold values are predictive of abdominal obesity as an adult and waist circumference measures in childhood track well into adulthood.

It is recommended that in population surveys, sociodemographic data including ethnicity should be collected, as well as other risk factors including physiological status (e.g. pregnancy), physical activity, smoking and alcohol consumption. Summary statistics may need to be adjusted for these variables.

National health metadata item currently exist for sex, date of birth, country of birth and Indigenous status and smoking. Metadata items are being developed for physical activity.

Source and reference attributes

Origin: World Health Organization

Reference documents: Obesity: Preventing and Managing the Global Epidemic: Report of a World Health Organization (WHO) Expert Committee. Geneva: WHO, 2000 as described by Han TS et al (1995)

Relational attributes

Related metadata references: Is re-engineered from Waist circumference risk indicator - adults, version 1, Derived DE, NHDD, NHIMG, Superseded 01/03/2005.pdf (20.5 KB)
No registration status