# Physical activity - health benefit

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## Identifying and Definitional Attributes

Data Dictionary: NHDraftDD

Knowledgebase ID: 000450 Version number: 0

Metadata type: DERIVED DATA ELEMENT

Registration NHDC Admin status: DRAFT

Authority: Effective date: 01-JUL-00

Definition: Participation in walking and leisure time physical activity of

sufficient intensity and duration.

Adequacy is measured in terms of whether physical activity confers

a health benefit.

Context: Public health: Adequate physical activity for health results from

participation in physical activity of sufficient duration and intensity. Although there is no clear absolute threshold for health benefit, the accrual of 150 minutes of moderate (at least) intensity physical activity over a period of one week is thought to confer health benefit.

Walking is included as a moderate intensity physical activity.

Health benefits can also be obtained by participation in vigorous physical activity, in approximate proportion to the total amount of activity performed, measured either as energy expenditure or minutes of physical activity (Pate et al. 1995). Participation in vigorous leisure time physical activity for 60 to 90 minutes over a period of a week will also confer health benefit.

Physical activity - health benefit is calculated by:

- vigorous physical activity is to be weighted by a factor of 2, to account for its greater intensity.
- summing the total minutes of walking, moderate and/or vigorous physical activity.

Health benefit obtained is minutes walking plus minutes moderate plus (2 times minutes vigorous) is greater than or equal to 150 mins.

Adequate physical activity for health benefit is calculated as being greater than or equal to 150 minutes of walking and/or moderate physical activity, and/or vigorous physical activity per week (where

vigorous physical activity is weighted by a factor of two to account for its greater intensity).

Physical activity related to gardening and yard work is not included in this definition at this stage, because there is currently limited research on the validity of the self-reported intensity of these activities. Due to the widespread participation in gardening and yard work as self-reported leisure time activities, this validation work is required as a matter of urgency.

## Relational and Representational Attributes

Datatype: Numeric

Representational

form:

Representation N

layout:

Minimum Size: 1 Maximum Size: 1

Data Domain: 1 Adequate physical activity for health benefit

2 Inadequate physical activity for health benefit

9 Insufficient information/unknown

Collection Methods: The recommended standard for collecting this information to

derive this data element collects only leisure time physical activity,

is questions 2, 6, 8 in the Standard Questions on Leisure Time

Physical Activity Participation Among Adults.

Related metadata: relates to the data element concept Physical activity version 0

relates to the data element Physical activity - context version 0

is calculated using Physical activity - duration version 0

relates to the data element Physical activity - frequency version 0

is calculated using Physical activity - intensity version 0 relates to the data element Physical activity - type version 0

#### Administrative Attributes

Source Document: Standard Questions on Leisure Time Physical Activity

Participation Among Adults (1999).

Pate RR, Pratt M, Blair SN et al. 1995. Physical activity and public health. A recommendation from the Centers for Disease Control and

Prevention and the American College of Sports Medicine. JAMA 273:402-7.

United States Department of Health and Human Services 1996. The Surgeon General's Report on Physical Activity and Health. Washington: US Government Printing Office.

Source Organisation: Australian Institute of Health and Welfare (AIHW)

Comments: Where this information is collected by survey and the sample permits, population estimates should be presented by sex and 5-year age groups. Summary statistics may need to be adjusted for age and other relevant variables.

It is recommended that in surveys of physical activity participation, data on age, sex, other socio-demographic variables and, where it is possible and desirable to do so, that data on knowledge of and attitudes toward physical activity may also be collected.

International physical activity data collection instruments are currently being developed. Once these methods have been developed and validated they may be appropriate for use in Australian surveys and would be recommended in addition to, or to supersede the currently recommended standard instrument.

It is also recommended that when physical activity is investigated in relation to health, data on other risk factors including overweight and obesity, smoking, high blood pressure and alcohol consumption should be collected.

A range of methods can be used to assess adequate physical activity in a population. The United States Surgeon General's Report on Physical Activity and Health makes no absolute statements about the calculation of adequate physical activity. However, the recommendation for 'regular moderate physical activity on most days of the week'? can be interpreted as accruing at least 150 minutes of moderate intensity leisure time physical activity per week. More vigorous physical activity is also known to confer health benefits in approximate proportion to the total

amount of activity performed, measured either as energy expenditure or minutes of physical activity. In terms of energy expenditure, 150 minutes of moderate intensity physical activity equates with vigorous activity for a total tome of 60 to 90 minutes, depending on the intensity of the activity.

Members of the Expert Working Group for the Measurement of Physical Activity are currently developing a methodology to define adequate physical activity using energy expenditure estimates to be used in conjunction with this data element.

The Standard Questions on Leisure Time Physical Activity Participation Among Adults can be obtained from the National Centre for Monitoring Cardiovascular Disease at the AIHW, telephone 02 6244 1000.

### Data Element Links

Information Model Entities linked to this Data Element
NHIM Lifestyle characteristic

Data Agreements which include this Data Element