

Nutrition, physical activity and obesity programs

Impact and outcome indicators

An indicator (or performance measure) is a concrete way of measuring change in desired outputs, impacts and outcomes over a specific time period in your program. This list of indicators has been compiled to assist in improving the quality of evidence that is collected in evaluations for nutrition, physical activity and obesity programs.

The following table (overleaf) defines a common set of indicators that can be used for evaluating these types of health programs. These indicators are validated statewide or national indicators and have reliable information sources such as the Victorian Population Health Survey (VPHS) and the Victorian Child Health and Wellbeing Survey (VCHWS). Victorian state indicators are consistent with those collected at a national level by the Australian Bureau of Statistics.

By specifying an agreed list of indicators there is a greater opportunity to compare the impacts and outcomes of different programs and to strengthen the evidence base for guiding future policy and program development. A list of tools for measuring these indicators is also available.

This document is also available in PDF format on the internet at:

www.health.vic.gov.au/health_promotion/evidence_evaluation/cdp_tools.htm

Indicators	Population group	Source	Numerator	Denominator
Increased physical activity				
Proportion of adults aged 18 years and over who undertook the recommended levels of physical activity in the past week	Adults aged 18 years and over	Victorian Population Health Survey (VPHS) ⁱ	Number of adults aged 18 years and over who are reported to undertake the recommended moderately intense levels of physical activity for 150 minutes or more every week ¹	Number of adults 18 years and over in the sample
Proportion of children and young people who do the recommended levels of physical activity every day ⁱⁱ	Children (5–12 years)	Victorian Child Health and Wellbeing Survey (VCHWS) ⁱⁱⁱ	Number of children aged five to under 13 years who are reported to be physically active for 60 minutes or more every day ²	Number of children aged five to under 13 years in the sample
	Adolescents (13–17 years)	Victorian Adolescent Health and Wellbeing Survey (VAHWS)	Number of young people aged 13–17 years who are reported to be physically active for 60 minutes or more every day ³	Number of young people aged 13–17 years in the sample
Decreased sedentary behaviour				
<i>No agreed adult indicator currently available</i>				
Proportion of children and young people who use electronic media for more than two hours per day ^{iv}	Children (5–12 years)	VCHWS	Number of children aged five to under 13 years who spend more than two hours a day with electronic media (including TV, videos, DVDs and/or computers) ²	Number of children aged five to under 13 years of age in the sample
	Adolescents (13–17 years)	VAHWS	Number of young people aged 13–17 years who spend more than 2 hours a day with electronic media (including TV, videos, DVDs and/or computers) ³	The number of young people aged 13–17 years in the sample

i. The VPHS is a statewide annual survey reported at Department of Health regional level. Local government area level data are reported every three years from 2008, then in 2011 and 2014. See <www.health.vic.gov.au/healthstatus/vphs>. The VPHS has a statewide sample size of 7,500 people. The VPHS local government area sample size is 34,000.

ii. There are currently no guidelines for physical activity levels for children aged under five years.

iii. The VCHWS data is collected every three years from 2006. The VCHWS has a sample size of 5,000 parents or carers of Victorian children aged from birth to 12 years. Local government area level data is reported for 25 Best Start sites in 2007. The Victorian VAHWS is planned to be collected for adolescents every three years from 2009. See <www.education.vic.gov.au/about/directions/children/vcams>.

iv. There are currently no guidelines for use of electronic media for children aged under five years.

Indicators	Population group	Source	Numerator	Denominator
Increased healthy eating				
Proportion of adults meeting the minimum recommended levels of fruit and vegetable consumption	Adults 19 years and over	VPHS	Number of adults who eat the minimum recommended five serves of vegetables and two serves of fruit every day ⁴	Number of adults in the sample
Proportion of children and young people who eat the minimum recommended serves of fruit and vegetable every day ^v	Children (4 to under 13 years)	VCHWS	Number of children aged 4 to under 13 years who eat the minimum recommended serves of vegetables (for 4–7 years: two serves; 8–11 years: three serves; 12 years: four serves) and fruit (for 4–11 years: one serve; 12 years: three serves) daily ⁵	Number of children aged four to under 13 years in the sample
	Adolescents (13–17 years) ^{vi}	VAHWS	Number of young people aged 13–17 years who eat the minimum recommended serves (three fruit and four vegetables daily) ⁵	Number of young people aged 13–17 years in the sample
Proportion of infants breastfed	Infants at three and six months	VCHWS	Number of infants exclusively and fully breastfed at three and six months of age	Number of infants aged three months to less than two years where the respondent was the biological mother
Decrease in energy-dense, micronutrient-poor foods				
<i>No agreed indicator currently available</i>				
Intake of energy-dense drinks, soft drinks, fruit juice and cordial				
<i>No agreed indicator currently available</i>				

v. There are currently no guidelines for fruit and vegetable intake for children aged under four years.

vi. The National Health and Medical Research Council's dietary guidelines for children and adolescents in Australia are available at www.nhmrc.gov.au/files/nhmrc/file/publications/synopses/n34.pdf.

Indicators	Population group	Source	Numerator	Denominator
Overweight and obesity				
Proportion of adults who are overweight or obese	Population aged 18 years and over	VPHS <i>Self-reported measure</i> ^{vii}	The number of adults who have a BMI indicating they are overweight or obese ^{viii}	Population aged 18 years and over
		National Nutrition Survey 1995 ⁶ <i>Measured data</i>		
Proportion of children and young people who are overweight or obese ^{ix}	Children aged 2–14 years Children aged 4–17 years	National Children’s Nutrition and Physical Activity Survey 2007 ⁷ <i>No data source yet identified in Victoria</i>	Number of children whose BMI score is above the international cut-off point for ‘overweight’ and ‘obese’ for their age and sex in the sample ⁸	Number of children aged 2–14 years in the sample

Please note the same data source can be reported in different ways. For example, the indicator ‘Proportion meeting recommended levels of fruit and vegetable consumption’ is reported by the VPHS as a proportion for fruit and vegetable separately. A reporting requirement of the *National Partnership Agreement* is to measure an increase in the mean number of daily serves (see Appendix). In this example the data source and questions are the same although the way the data is presented is different.

vii. It is important to note that studies comparing measured and self-reported height and weight have shown that people tend to underestimate their weight and overestimate their height, which results in an underestimation of body mass index (BMI) measurement. Therefore, estimates of overweight and obesity that are based on self-reported information are likely to underestimate true prevalence in a population. A further note is that BMI calculations fail to consider lean body mass, such that the BMI formula may classify a healthy, muscular individual with very low body fat as being obese. A BMI of greater than or equal to 25 is considered overweight obese and greater than 30 is considered obese.

viii. The World Health Organization’s international classification of BMI is available at http://apps.who.int/bmi/index.jsp?introPage=intro_3.html

ix. There are currently no recommended definitions for overweight or obesity in children aged under two years.

References

1. Department of Health and Ageing. *National physical activity guidelines for Australians*. Canberra: AusInfo; 1999.
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4. Department of Health and Ageing, National Health and Medical Research Council. *Food for health-dietary guidelines for Australians (A guide to healthy eating)*. Canberra: AusInfo; 2005.
5. National Health and Medical Research Council. *Dietary guidelines for children and adolescents in Australia incorporating the infant feeding guidelines for health workers*. Canberra: AusInfo; 2003.
6. McLennan W, Podger A. *National Nutrition Survey selected highlights. Australia 1995*. Canberra: Australian Bureau of Statistics; 1997.
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8. Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. *British Medical Journal*. 2000;320(7244):1240–1243.

Further information

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Appendix: National performance indicators

The following indicators and outcomes have been agreed at a national level by the Australian and state and territory governments to address the rising prevalence of lifestyle-related chronic diseases. Performance indicators in the *National Partnership Agreement* are consistent with performance targets in the *National Healthcare Agreement*. The indicators and outcomes relevant to nutrition, physical activity and obesity include the following.

The National Partnership Agreement on Preventative Health

Outcomes

- Increase the proportion of children and adults at healthy body weight by three percentage points within 10 years
- Increase the proportion of children and adults meeting national guidelines for healthy eating and physical activity by 15 per cent within six years

Performance benchmarks

- Increase in proportion of children at unhealthy weight held at less than five per cent from baseline for each state by 2013; proportion of children at healthy weight returned to baseline level by 2015.
- Increase in mean number of daily serves of fruit and vegetables consumed by children by at least 0.2 for fruits and 0.5 for vegetables from baseline for each state by 2013; 0.6 for fruits and 1.5 for vegetables from baseline by 2015.
- Increase in proportion of children participating in at least 60 minutes of moderate physical activity every day from baseline for each state by five per cent by 2013; by 15 per cent by 2015.
- Increase in proportion of adults at unhealthy weight held at less than five per cent from baseline for each state by 2013; proportion of adults at healthy weight returned to baseline level by 2015.
- Increase in mean number of daily serves of fruit and vegetables consumed by adults by at least 0.2 for fruits and 0.5 for vegetables from baseline for each state by 2013; 0.6 for fruits and 1.5 for vegetables from baseline by 2015.
- Increase in proportion of adults participating in at least 30 minutes of moderate physical activity on five or more days of the week of five per cent from baseline for each state by 2013; 15 per cent from baseline by 2015.

Performance indicators are:

- children and adults at a healthy body weight
- children and adults meeting the national guidelines for fruit and vegetable consumption
- children and adults meeting the national guidelines for physical activity.

National Preventative Health Strategy

Relevant target

- Halt and reverse the rise in overweight and obesity.

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