



Government of **Western Australia**
Department of **Health**

Prevalence of sufficient fruit and vegetable consumption, children 4 to 15 years, Western Australia

2015

WA Health and Wellbeing Surveillance System

Health Survey Unit

Epidemiology Branch

health.wa.gov.au

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1. Background

The information contained in this report was taken from the WA Health and Wellbeing Surveillance System (HWSS) from 1 January to 31 December 2015. The HWSS is an ongoing data collection interviewing over 6,000 people each year by a Computer Assisted Telephone Interview (CATI). Households are selected from the White Pages by a stratified random process with over-sampling representative to the population in rural and remote areas. The HWSS was developed to monitor the health and wellbeing of Western Australians. Respondents are asked a range of questions on indicators related to health and wellbeing, including chronic health conditions, lifestyle risk factors, protective factors and socio-demographics which parents/carers respond to on behalf of children 0 to 15 years. Data can be considered representative of the general population but will not be representative of small or specific groups such as Aboriginal people or people from non-English speaking backgrounds.

The data is weighted to compensate for oversampling in the remote and rural areas of WA and then adjusted to the age and sex distribution of the WA population using the 2014 Estimated Resident Population.

2. Variables

Information is provided on the prevalence of sufficient fruit and vegetable consumption for children 4 to 15 years based on the 2013 NHMRC Australian Dietary Guidelines.¹ These guidelines include a number of recommendations that incorporate half serves. The current questions in the HWSS do not allow for half serves to be collected so for reporting purposes any recommendation that includes a half serve has been rounded down to the nearest whole serves. Table 1 presents the 2013 NHMRC child fruit and vegetable guideline minimum serves along with the minimum serves of fruit and vegetables used in HWSS reporting to measure sufficient fruit and vegetable consumption.

¹ National Health and Medical Research Council, 2013, Australian Dietary Guidelines, NHMRC, Canberra. Accessed: 19 February 2013. Available from: http://www.nhmrc.gov.au/files/nhmrc/publications/attachments/n55_australian_dietary_guidelines.pdf.

Table 1: NHMRC 2013 fruit and vegetable daily consumption guidelines and HWSS reporting definitions, children 4 to 15 years

	NHMRC Guidelines: Minimum recommended daily serves of fruit	NHMRC Guidelines: Minimum recommended daily serves of vegetables		HWSS sufficient fruit and vegetable consumption for reporting: Minimum serves per day	
	Children	Girls	Boys	Fruit	Vegetables
4 to 8 years	1.5	4.5	4.5	1	4
9 to 11 years	2	5	5	2	5
12 to 15 years	2	5	5.5	2	5

3. Regions Analysed

Information is provided for children 4 to 15 years in Western Australia (n = 650).

4. Confidence Intervals

Each table presents the estimate of the prevalence along with the 95% confidence interval around that estimate.

The 95 per cent confidence interval is the range between which the true estimate would lie 95 out of 100 times. Overlapping confidence intervals indicate that there is probably no difference in the estimates being compared. The wider the confidence interval is around an estimate the less precise that estimate is and the more caution that should be applied with using it.

The level of stability around an estimate can also be guided by the relative standard error (RSE). The RSE is a measure of the extent to which the survey estimate is likely to be different from the actual population result. Estimates with RSEs above 25% are considered unreliable for general use. Therefore, throughout this report, estimates between 25% and 50% have been annotated by an asterisk (*) and should be used with caution. Estimates with RSEs above 50% have been withheld.

Further information on how to determine whether or not a difference is statistically significant can be found at: health.wa.gov.au/publications/pop_surveys.cfm

5. Results

Table 2 presents the prevalence of sufficient daily fruit consumption for children 4 to 15 years. The prevalence of sufficient daily fruit consumption decreased with age. Children aged 12 to 15 years had a significantly lower prevalence of sufficient fruit consumption (56.4%) compared with children 4 to 11 years (88.8%) and children 6 to 11 years (84.7%). There was no difference in the prevalence of boys and girls aged 4 to 15 years eating sufficient daily serves of fruit.

Table 2: Prevalence of sufficient daily fruit consumption, children 4 to 15 years, HWSS 2015

	Eats sufficient daily serves of fruit for age and gender ^		
	%	95% CI	
Age Group			
4 to 11 yrs	88.8	(84.6 -	92.9)
6 to 11 yrs	84.7	(79.2 -	90.2)
12 to 15 yrs	56.4	(48.2 -	64.6)
Gender - 4 to 15 years			
Boys	75.2	(69.2 -	81.1)
Girls	82.1	(76.1 -	88.1)
Children - 4 to 15 years	78.5	(74.3 -	82.7)

^ For reporting purposes guidelines that include half serves have been rounded down to the nearest whole number.

Table 3 presents the prevalence of sufficient daily vegetable consumption for children 4 to 15 years. The prevalence of sufficient daily vegetable consumption decreased with age although the differences between the age groups were not statistically significant. There was no difference in the prevalence of boys and girls aged 4 to 15 years eating sufficient daily serves of vegetables.

Table 3: Prevalence of sufficient daily vegetable consumption, children 4 to 15 years, HWSS 2015

	Eats sufficient daily serves of vegetables for age and gender ^		
	%	95% CI	
Age Group			
4 to 11 yrs	16.9	(10.9 -	23.0)
6 to 11 yrs	11.9	(6.4 -	17.4)
12 to 15 yrs	8.6 *	(4.3 -	12.9)
Gender - 4 to 15 years			
Boys	15.9	(8.9 -	23.0)
Girls	12.5	(7.7 -	17.4)
Children - 4 to 15 years	14.3	(9.9 -	18.7)

^ For reporting purposes guidelines that include half serves have been rounded down to the nearest whole number.

* Prevalence estimate has a RSE between 25%-50% and should be used with caution.

Table 4 presents the prevalence of sufficient daily fruit and vegetable consumption combined for children 4 to 15 years. The prevalence of sufficient daily fruit and vegetable consumption decreased with age although the differences between the age groups were not statistically significant. There was no difference in the prevalence of boys and girls aged 4 to 15 years eating sufficient daily serves of vegetables.

Table 4: Prevalence of sufficient daily fruit and vegetable consumption, children 4 to 15 years, HWSS 2015

	Eats sufficient daily serves of fruit and vegetables for age and gender ^		
	%	95% CI	
Age Group			
4 to 11 yrs	16.6	(10.6 -	22.6)
6 to 11 yrs	11.5	(6.0 -	16.9)
12 to 15 yrs	6.8 *	(3.0 -	10.6)
Gender - 4 to 15 years			
Boys	15.0	(8.0 -	22.0)
Girls	11.8	(7.1 -	16.5)
Children - 4 to 15 years	13.5	(9.1 -	17.8)

^ For reporting purposes guidelines that include half serves have been rounded down to the nearest whole number.
 * Prevalence estimate has a RSE between 25%-50% and should be used with caution.



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