

# Weight and Weight Gain Policy Brief

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## Scope

The aim of this policy brief is to outline research findings on weight and weight gain from the Australian Longitudinal Study on Women's Health published since the National Women's Health Policy, 2010.

## Research Findings

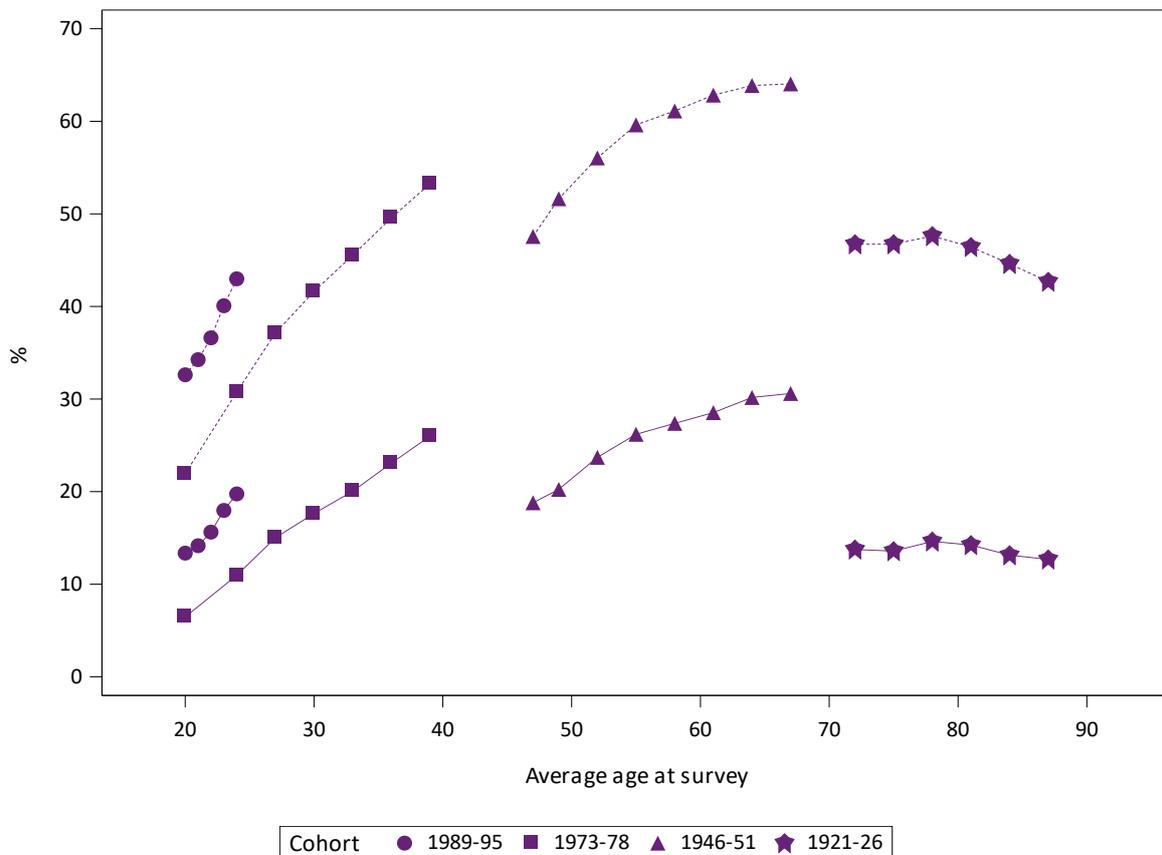
### Prevalence and trends of weight and weight gain

Body weight relative to height is measured by body mass index (BMI) (calculated as weight (kg) divided by height (m)<sup>2</sup> and classified as Underweight BMI <18.5 kg/m<sup>2</sup>, Normal (healthy) weight BMI 18.5–24.99 kg/m<sup>2</sup>, Overweight BMI 25–29.99 kg/m<sup>2</sup>, and Obese BMI ≥30 kg/m<sup>2</sup>).<sup>1</sup> The percentages of women who were overweight or obese are shown in Figure 1.<sup>2-5</sup>

There are clear patterns of increasing weight at all ages and among all cohorts, except for the oldest cohort.<sup>2-5</sup>

- Women born in 1989-95 were more likely to be obese (13%), or overweight or obese (32%) at the average age of 20 than women born in 1973-78 when they were aged 20 (6% and 22% respectively).
- Among women born in 1989-95, from 2013 to 2017 the prevalence of overweight and the prevalence of obesity each increased by about 1 percentage point per year.
- Among women born in 1973-78, from 1996 to 2015 respectively the prevalence of overweight increased from 15% to 27%, and obesity from 6% to 26%.

- When their average age was 39 years, women born in 1973-78 were more likely to be obese (26%), or overweight or obese (53%) than women born in 1946-51 when their average age was 47 (obese 18%, overweight or obese 47%).
- Each successively younger cohort experienced a greater rate of BMI increase than the older cohorts.



**Figure 1. Percentage of ALSWH participants who were obese (solid lines), or overweight or obese (dotted lines) by average age at each survey (for women born in 1989-95, 1973-78, 1946-51, and 1921-26).**

Sociodemographic, socioeconomic and lifestyle factors associated with weight and weight gain

Factors associated with high BMI and most weight gain included:

- Having less education<sup>6-9</sup>, having no paid job<sup>7</sup>, and lower perceived social class.<sup>10</sup>

- Already being overweight or obese.<sup>6,9</sup>
- Being inactive or spending relatively more time sitting.<sup>6,9,11,12</sup>
- Working full-time.<sup>13,14</sup>
- Experiencing higher perceived stress.<sup>15</sup>
- Being depressed.<sup>16</sup>
- Going through menopause.<sup>9</sup>
- Using more harmful weight control strategies (for example, use of laxatives, diuretics, diet pills, fasting, smoking).<sup>10</sup>
- The least weight gain was by women who followed the national guidelines for diet and physical activity and who did not regularly diet.<sup>17</sup>

### ALSWH has produced mixed findings for some factors

- Diet and weight gain. While higher dietary variety, especially fruit and vegetables, was associated with lower weight gain over 6 years in women in their 20s and 30s<sup>18</sup>, no association was found in women in their 40s and 50s.<sup>9,19</sup>
- Having children. Some analyses have shown higher weight gain after having a child but this finding may be confounded by marital status<sup>6</sup>, age at childbirth<sup>20</sup> and educational attainment.<sup>20</sup> Others found no association between parity and long-term weight gain.<sup>7</sup>

### Weight and chronic conditions

- Compared with healthy weight women at the age of 75 years: overweight women had similar **total life expectancy** but fewer **years of healthy life**; obese women had a shorter total life expectancy and more unhealthy years; and underweight women had the lowest total life expectancy and the fewest years of healthy life.<sup>21</sup>
- Overweight and obesity were associated with higher risk of:
  - hypertension and heart disease;<sup>12,22,23</sup>
  - back pain;<sup>24,25</sup>
  - foot problems;<sup>26</sup>
  - type II diabetes;<sup>27</sup>
  - asthma;<sup>23</sup>
  - urinary incontinence.<sup>28</sup>

- Higher BMI was associated with lower the risk of osteoporosis.<sup>12</sup>
- Weight cycling (repeatedly losing and gaining weight) was associated with more depressive symptoms.<sup>29</sup>
- Women who were obese before becoming pregnant, and those who gained weight before pregnancy had increased risk of gestational diabetes<sup>30</sup> and hypertensive disorders of pregnancy<sup>31</sup> compared with healthy weight women.
- Women with long-term obesity prior to becoming pregnant were at higher risk of having children with greater childhood body weight<sup>32</sup> and poorer physical and cognitive development.<sup>33</sup>
- Overweight and obese mid-age women were more likely to have a hysterectomy than healthy weight women<sup>34</sup> and those who gained more than 5kg over 3 years reported more menopausal symptoms.<sup>35</sup>
- Younger women with polycystic ovary syndrome (PCOS) had both higher weight and higher weight gain.<sup>36</sup> There was a bi-directional relationship between PCOS and obesity with the risk of reporting PCOS increasing with higher BMI.

### Use and cost of health services<sup>37</sup>

- The average number of MBS claims and costs per year were higher for obese women than for non-obese women until at least 78 years of age.
- Women who were obese had almost double the number of PBS prescriptions filled and higher PBS costs than non-obese women.
- Younger and mid-age women who were obese had higher hospital costs than non-obese women.

## Recommendations

- Despite a plethora of weight and physical activity public health endeavours, obesity and overweight remain among the greatest threats to health in Australia. More effective strategies are needed, focusing not just on childhood obesity, but on women and men of all ages. Based on experience with other campaigns that have been effective, these strategies should include substantial inter-sectoral actions in education, legislation and taxation.

- Public health policies to control weight gain, overweight and obesity should include actions that target groups at greatest risk, including socioeconomically disadvantaged women.
- Following national guidelines for diet and physical activity should be better promoted as being among the best methods to reduce weight and weight gain.

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