

## **Supporting Information**

## **Supplementary results**

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Albarqouni L, Greenwood H, Dowsett C, Glasziou PP. Lifestyle advice from general practitioners and changes in health-related behaviour in Australia: secondary analysis of 2020–21 National Health Survey data. *Med J Aust* 2024; doi: 10.5694/mja2.52285.

Table 1. Selected baseline socio-demographic of the 13 281 respondents to the 2020–21 National Health Survey (unweighted and weighted to the Australian population)

|   |        | Proportion |          |  |  |
|---|--------|------------|----------|--|--|
| Characteristics                         | Number | Unweighted | Weighted |  |  |
| Respondents                             | 13,281 |            |          |  |  |
| Age (years), mean (standard deviation)  | 41.2   | 23.5%      | 22.9%    |  |  |
| Sex (women)                             | 7026   | 53.0%      | 50.5%    |  |  |
| Marital status                          |        |            |          |  |  |
| Married                                 | 5527   | 51.5%      | 51.5%    |  |  |
| Widowed                                 | 578    | 5.4%       | 3.8%     |  |  |
| Divorced                                | 1111   | 10.3%      | 7.1%     |  |  |
| Separated                               | 348    | 3.2%       | 2.4%     |  |  |
| Never married                           | 3173   | 29.6%      | 35.2%    |  |  |
| Missing data                            | 2544   | _          | _        |  |  |
| Highest education level                 | 2011   |            |          |  |  |
| Postgraduate degree                     | 210    | 2.4%       | 1.5%     |  |  |
| Graduate degree                         | 428    | 4.8%       | 4.3%     |  |  |
| Bachelor's degree                       | 2524   | 28.5%      | 23.0%    |  |  |
|   |        |            |          |  |  |
| Advanced diploma, certificate III/IV    | 2937   | 33.2%      | 32.3%    |  |  |
| Year 0 or below                         | 1893   | 21.4%      | 27.1%    |  |  |
| Year 9 or below                         | 596    | 6.7%       | 8.0%     |  |  |
| Missing data                            | 4433   | 2.00/      | 2.70/    |  |  |
| Never attended school/Not determined    | 260    | 2.9%       | 3.7%     |  |  |
| Employment status                       | 6500   | 60.70/     | 61.40/   |  |  |
| Employed                                | 6522   | 60.7%      | 61.4%    |  |  |
| Unemployed                              | 330    | 3.1%       | 4.1%     |  |  |
| Not in the labour force                 | 3884   | 36.2%      | 34.5%    |  |  |
| Missing data                            | 2545   |            |          |  |  |
| Income level                            |        |            |          |  |  |
| Lowest quintile                         | 1962   | 18.4%      | 20.3%    |  |  |
| Second quintile                         | 1907   | 17.9%      | 19.7%    |  |  |
| Third quintile                          | 2106   | 19.7%      | 20.1%    |  |  |
| Fourth quintile                         | 2257   | 21.2%      | 20.0%    |  |  |
| Highest quintile                        | 2435   | 22.8%      | 20.0%    |  |  |
| Missing data                            | 2614   | _          |          |  |  |
| State/territory                         |        |            |          |  |  |
| New South Wales                         | 2679   | 20.2%      | 32.0%    |  |  |
| Victoria                                | 2019   | 15.2%      | 26.2%    |  |  |
| Queensland                              | 1765   | 13.3%      | 20.1%    |  |  |
| South Australia                         | 1569   | 11.8%      | 6.9%     |  |  |
| Western Australia                       | 1791   | 13.5%      | 10.2%    |  |  |
| Tasmania                                | 1520   | 11.4%      | 2.1%     |  |  |
| Northern Territory                      | 607    | 4.6%       | 0.7%     |  |  |
| Australian Capital Territory            | 1331   | 10.0%      | 1.7%     |  |  |
| Remoteness (postcode-based)             |        |            |          |  |  |
| Major cities                            | 8662   | 65.2%      | 74.2%    |  |  |
| Inner regional                          | 2751   | 20.7%      | 18.6%    |  |  |
| Outer regional                          | 1723   | 13.0%      | 7.0%     |  |  |
| Remote                                  | 145    | 1.1%       | 0.3%     |  |  |
| Body mass index                         |        |            |          |  |  |
| Underweight (< 18.5 kg/m <sup>2</sup> ) | 521    | 4.2%       | 4.3%     |  |  |
| Normal (18.5–24.9 kg/m²)                | 5323   | 42.9%      | 44.1%    |  |  |
| Overweight (25.0–29.9 kg/m²)            | 3799   | 30.6%      | 30.1%    |  |  |
| Obese ( $\geq 30.0 \text{ kg/m}^2$ )    | 2776   | 22.4%      | 21.5%    |  |  |
| Missing data                            | 862    |            | 21.370   |  |  |

Table 2. Responses of the 13 281 respondents to the 2020–21 National Health Survey (unweighted and weighted to Australian population)

|  | Proportion |            |          |  |  |
|--|------------|------------|----------|--|--|
| Characteristics  | Number     | Unweighted | Weighted |  |  |
| Smoking status   |            |            |          |  |  |
| Currently smoke  | 851        | 6.4%       | 9.1%     |  |  |
| Formerly smoked  | 3239       | 24.4%      | 21.2%    |  |  |
| Never smoked   | 6646       | 50.0%      | 50.9%    |  |  |
| Not applicable (under 15 years of age)                             | 2545       | 19.2%      | 18.8%    |  |  |
| Alcohol consumption  |            |            |          |  |  |
| Exceeded guidelines*   | 2701       | 20.1%      |          |  |  |
| Did not exceed guidelines  | 5447       | 5447 41.0% |          |  |  |
| None in past 12 months   | 2190       | 16.5%      | 17.0%    |  |  |
| Not applicable (under 15 years of age)                             | 2545       | 19.2%      | 18.8%    |  |  |
| Unknown  | 398        | 3.0%       | 3.7%     |  |  |
| Nutrition status <sup>†</sup>                                      |            |            |          |  |  |
| Satisfied recommendations  | 952        | 7.2%       | 6.5%     |  |  |
| Did not satisfy recommendations                                    | 12,009     | 90.4%      | 91.9%    |  |  |
| Not applicable (under 2 years of age)                              | 317        | 2.4%       | 2.4%     |  |  |
| Unknown  | 3          | < 0.1%     | < 0.1%   |  |  |
| Self-reported medical conditions                                   |            |            |          |  |  |
| Arthritis  | 2012       | 15.1%      | 12.5%    |  |  |
| Asthma   | 1415       | 10.7%      | 10.7%    |  |  |
| Back pain  | 2182       | 16.4%      | 15.7%    |  |  |
| Cancer   | 236        | 1.8%       | 1.7%     |  |  |
| Chronic obstructive pulmonary disease                              | 224        | 1.7%       | 1.5%     |  |  |
| Heart disease  | 596        | 4.5%       | 4.0%     |  |  |
| Diabetes   | 719        | 5.4%       | 5.3%     |  |  |
| Kidney disease   | 163        | 1.2%       | 1.1%     |  |  |
| Mental condition   | 2625       | 19.8%      | 20.1%    |  |  |
| At least one condition   | 6431       | 48.4%      | 46.6%    |  |  |
| Consulted a general practitioner in the past 12 months             |            |            |          |  |  |
| Yes  | 11,561     | 87.0%      | 86.5%    |  |  |
| No   | 1663       | 12.5%      | 13.0%    |  |  |
| Not known  | 57         | 0.4%       | < 0.1%   |  |  |
| Received lifestyle advice from a general practitioner <sup>‡</sup> |            |            |          |  |  |
| Alcohol intake   | 295        | 2.2%       | 2.0%     |  |  |
| Exercise   | 1044       | 7.9%       | 7.7%     |  |  |
| Healthy eating   | 1138       | 8.6%       | 9.0%     |  |  |
| Smoking  | 290        | 2.2%       | 2.7%     |  |  |
| Weight control   | 1461       | 11.0%      | 10.8%    |  |  |
| No lifestyle advice  | 6746       | 50.8%      | 50.0%    |  |  |
| Changes in lifestyle behaviour                                     |            |            |          |  |  |
| Reduced alcohol intake (total responses: 8148)                     | 1848       | 22.7%      | 23.6%    |  |  |
| Improved eating behaviour (total responses: 12,961)                | 2373       | 18.3%      | 19.5%    |  |  |
| Reduced smoking levels (total responses: 851)                      | 282        | 33.1%      | 35.8%    |  |  |

<sup>\* 2020</sup> Australian adult alcohol guideline: consumed more than ten standard drinks in past week, and consumed five or more standard drinks on any day in the past twelve months at least once a month. (1)

<sup>† 2013</sup> NHMRC Australian dietary guidelines: minimum recommended number of serves of fruit per day is one for children aged 2–3 years,  $1\frac{1}{2}$  for children aged 4–8 years, and two for people aged 9 years or older. The minimum recommended number of serves of vegetables per day is  $2\frac{1}{2}$  for children aged 2–3 years,  $4\frac{1}{2}$  for children aged 4–8 years, 5 for children aged 9–11 years, females aged 12 years or older, and males aged 70 years or older,  $5\frac{1}{2}$  for males aged 12–18 or 51-70 years, and six for males aged 19–50 years. (2)

Table 3. Lifestyle advice from general practitioners and positive changes in lifestyle behaviours during the past twelve mont hs

|  | Exceeded guideline alcohol use |            | Currently smokes |        | Below recommended intake of fruit and vegetables |                     |        |                       |                     |
|--|--------------------------------|------------|------------------|--------|--|---------------------|--------|-----------------------|---------------------|
|  | Number                         | Unweighted | Weighted         | Number | Unweighted proportion                            | Weighted proportion | Number | Unweighted proportion | Weighted proportion |
| Recalled receiving lifestyle advice from GPs       | 238                            | 9%         | 8%               | 228    | 28%  | 27%                 | 1072   | 9%                    | 9%                  |
| Changed lifestyle behaviours                       |                                |            |                  |        |  |                     |        |                       |                     |
| Yes  | 62                             | 26%        | 26%              | 103    | 45%  | 41%                 | 282    | 26%                   | 27%                 |
| No   | 176                            | 74%        | 74%              | 125    | 55%  | 59%                 | 790    | 74%                   | 73%                 |
| Did not recall receiving lifestyle advice from GPs | 2463                           | 91%        | 92%              | 576    | 72%  | 73%                 | 10937  | 91%                   | 91%                 |
| Changed lifestyle behaviours                       |                                |            |                  |        |  |                     |        |                       |                     |
| Yes  | 478                            | 19%        | 21%              | 179    | 31%  | 34%                 | 1871   | 17%                   | 18%                 |
| No   | 1985                           | 81%        | 79%              | 397    | 69%  | 66%                 | 9066   | 83%                   | 82%                 |

## References

- 1. National Health and Medical Research Council. Australian Alcohol Guidelines revised. 8 Dec 2020. https://www.health.gov.au/news/australian-alcohol-guidelines-revised (viewed Mar 2024).
- 2. National Health and Medical Research Council. Australian dietary guidelines (N55). Feb 2013. https://www.nhmrc.gov.au/adg (viewed Mar 2024).