



COVID-19 lockdown impacts on eating patterns and lifestyle behaviours of residents of Western Sydney: Fact not Fiction

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Lockdown measures imposed in Australia to slow the transmission of COVID-19 protected most Australians from the virus⁽¹⁾. In some areas in NSW, specifically Western Sydney areas, more stringent lockdown regulations were implemented from July to September 2021, referred to as local governmental areas (LGAs) of concern⁽²⁾. Preliminary evidence showed that people's lifestyle such as dietary and physical activity behaviours and mental health during lockdown were altered from before lockdown⁽³⁾. However, intermediate and longer-term impacts on nutrition and physical health are unclear, especially in LGAs of concern. We aimed to examine the impacts of the lockdown on nutritional behaviour of residents of Western Sydney. Mixed methods were employed including quantitative surveys such as ASA-24 and qualitative focus groups, using R software for quantitative analysis. Data was collected from 523 survey participants in addition to 42 focus group participants. The sample was representative of age, gender, county of birth and area of residence. Sixty-two percent reported decreases in their physical activity level post-lockdown compared with pre-lockdown, and 15% reported increases in their physical activity level post-lockdown compared with during the lockdown, and 12% reported decreases. Self-reported weight increased in 50% of the participants post-lockdown compared with pre-lockdown and decreased in 13% of the participants. Forty percent self-reported a decrease in their body weight post-lockdown compared with during the lockdown while 16% self-reported an increase in their body weight post-lockdown compared with during the lockdown. Food security status was reported as much worse in seven percent of the participants post-lockdown compared with pre-lockdown while being unvaried in 93% of the participants. Food security status remained unvaried post-lockdown compared with during the lockdown in 93% of the participants but much better in six percent. Eating habits were self-reported as much worse by 52% of the participants post-lockdown compared with pre-lockdown and much better by nine percent. Forty-eight percent of the participants self-reported their eating habits as much better post-lockdown compared with during the lockdown and 10% as much worse. COVID-19 lockdown negatively impacted eating behaviours, physical activity and body weight of Western Sydney residents with minimal impacts on food security. Further analyses are required to examine the associations between eating patterns, physical activity, body weight and food security and age, gender, country of birth and area of residence of participants. These findings can later be used to draft policies that can be put in practice in case of future pandemics in Australia, or in the case of other common natural disasters, such as bushfires and floods.

Keywords: COVID-19 lockdown; Western Sydney; nutritional impacts; lifestyle behaviours

Ethics Declaration

Yes

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References

1. Adekunle A, Meehan M, Rojas-Alvarez D *et al.* (2020) *Aust N Z J Public Health* **44**, 257–259.
2. King CB, Tame L, Ergler C *et al.* (2023) *AJSI* 1–18.
3. Mekanna AN, Panchal SK & Li L (2022) *Nutrition Reviews* **81**, 790–803.