

Preferences for dietary oils and fats in cooking and food preparation methods: a cross-sectional analysis of Australian adults

N.A. Wilson¹, A. Villani² and E. Mantzioris³

¹*Clinical and Health Sciences, University of South Australia, Adelaide, SA 5001, Australia,*

²*School of Health and Behavioural Sciences, University of the Sunshine Coast, Sunshine Coast, Qld. 4556, Australia and*

³*Clinical and Health Sciences & Alliance in Research in Nutrition, Exercise and Activity (ARENA), University of South Australia, Adelaide, SA 5001, Australia*

Dietary oils and fats contain different fatty acid compositions which are associated with cardiometabolic disease risk and other health outcomes.^(1,2) Despite their influence on health and disease, the types of dietary oils and fats predominately used in Australian households remains unknown. The aim of this study was to investigate the use of dietary oils and fats in cooking and food preparation in Australian adults. A cross-sectional study using a mixed methodological approach was undertaken amongst Australian adults aged ≥ 18 years. Participants were recruited via social media platforms requesting voluntary participation in an online survey. The survey tool included questions related to the types of dietary oils and fats used for different cooking methods, daily quantities used, and the perceived motivators for preferred use of oil in cooking and food preparation. A total of $n = 1248$ participants responded to the survey. Participants were mostly female ($n = 1143$; 91.6%) aged between 25 and 44 years ($n = 707$; 56.7%) and were overweight (body mass index: 26.7 ± 5.6 kg/m²) but were otherwise healthy. The majority of participants ($n = 1055$; 84.5%) reported using some form of olive oil as their main source of oil for cooking and food preparation. Almost half ($n = 514$; 48.7%) of those that used olive oil reported using less than one tablespoon per day. Two-thirds of the sample ($n = 816$; 65.4%) reported using extra virgin olive oil and this was mainly used in raw food preparation methods ($n = 882$; 71.5%) or savoury baking and roasting ($n = 724$; 58%). Fewer households reported using rice bran oil ($n = 57$; 4.6%), canola oil ($n = 54$; 4.3%), and vegetable oils ($n = 22$; 1.8%) and these were most commonly used for shallow frying (canola: $n = 140$; 11.2%, rice bran: $n = 117$; 9.4%) and deep frying (vegetable: $n = 123$; 9.9%). The most frequently reported motivator for olive oil use (predominant oil used) included the perceived health benefits of olive oil ($n = 561$; 53.2%), flavour and taste, including the flavour of infused olive oils ($n = 503$; 47.7%), versatility for use across different cooking methods ($n = 112$; 10.6%) and convenience ($n = 98$; 9.3%). Findings from this cross-sectional analysis suggest that the majority of households in Australia use some form of olive oil as the preferred oil in cooking and food preparation, primarily due to its perceived health benefits, sensory preference and versatility. Further investigation into current consumer understanding of the potential health benefits and sensory preferences related to olive oil use will inform strategies for health care professional advice around the use of oils in cooking and food preparation for optimal health and disease prevention.

References

1. Kim Y, Je Y & Giovannucci EL (2021) *Clin Nutr* 40, 1060–1070.
2. Hooper L, Martin N, Jimoh OF, et al. (2020) *Cochrane Database Syst Rev* 8, CD011737.