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A Scoping Review on the Global Nutrition Transition: Mapping the Evidence on Dietary Changes in General Adult Populations

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Background information

A robust global evidence base on the ongoing nutrition transition is lacking, though crucial to develop and improve disease prevention policies and nutrition on a population level.

This scoping review aims to identify, explore and map the literature on the nutrition transition based on dietary changes reported in general adult populations globally.

Methodology

A comprehensive search was conducted using PubMed, ScienceDirect and Web of Science databases between July 2019 and March 2022. The inclusion and exclusion criteria were predefined. The search strategy yielded 4820 potential studies, which were screened and assessed for eligibility. The included studies were subjected to a descriptive analysis to identify trends and patterns in the data. The covidence software was used for data analysis. The protocol has been published¹

Table 1: Inclusion criteria of eligible studies

Study inclusion criteria
Written in English
Includes data on dietary intake or dietary behaviours
Reports on more than one-time point
Reports on adults population (18 years and older)
Reports on a general population
Reviews analysing and reporting on secondary data



Examples of questions:

- What are the different nutrition transition patterns reported in healthy adult populations?
- Are there countries/region-specific dietary patterns consistently reported?
- What are the main sources of data generated?

Figure 1: Step-wise protocol based on Arksey and O'Malley's scoping review methodology²

Results

Table 2: Selected characteristics of European studies (n= 2)

Authors	Country	Participants	Time period	DA	Findings
Newby P. K. et al., 2006	Sweden	33, 840 w	1987 and 1997	FFQ	V&F↑, seafood↑, refined grains↑, soda↑, sugary foods↑
del Mar Bibiloni M. et al, 2017	Balearic Islands, Spain	2,588 m&W	1) 1999 - 2000 2) 2009 - 2010	24-HDR & FFQ	The adherence to Mediterranean Diet was overall 43.1% in 1) & 44.6% in 2)

25 studies that met the inclusion criteria covered a small range of populations globally. These populations included Chinese (n=9), South Korean (n=4), South African (n=4), Australian (n=1), European (n=2) and American (n=5).

Overall, the data suggest an increase in healthy dietary behaviors over time on a global level, with some changes reported on the processed nature of foods.

Conclusion

This scoping review highlights the need for more studies describing dietary changes in general adult populations, particularly larger scale studies using gold standard data collection methods to further understand the driving factors behind the changes and their impact on health outcomes.

¹Singh JE, et al. (2020) Dokova K, et al. *BMJ Open* 2020;1

²Arksey, H. and L. O'Malley (2005) *International Journal of Social Research Methodology*. 8(1): p. 19-32.

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