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## Exploring uptake and adherence to 'healthy eating' interventions in low socio-economic communities via a thematic narrative synthesis

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Low socioeconomic status (SES) is associated with an increased risk of overweight and obesity, consequently elevating the likelihood of non-communicable diseases such as cardiovascular disease and type II diabetes<sup>(1)</sup>. Although dietary interventions offer a promising solution to address this issue, engaging low-SES groups is challenging; uptake and adherence tends to be suboptimal<sup>(2,3)</sup>. The aim of this review was to understand current levels of uptake and adherence and to identify the drivers of optimal uptake and adherence in community-based dietary interventions for populations with low socioeconomic status.

A systematic review of studies published prior to December 12, 2022, identified 114 relevant records. Full text screening, data extraction and coding was conducted by two independent reviewers. A thematic analysis and narrative synthesis was carried out to explore factors associated with uptake and adherence, alongside a basic descriptive analysis of current uptake and adherence rates.

Of the 114 included records, 88 reported uptake and 110 reported adherence. On average, uptake stood at 80%, indicating a 20% shortfall and potential compromise to validity. Adherence averaged 72%, with only 36 records meeting the recommended threshold of 80%<sup>(4)</sup>. Thematic analysis revealed barriers and facilitators to engagement. Participants faced various challenges hindering engagement, including logistical obstacles such as transportation issues and scheduling conflicts, alongside socioeconomic constraints like low income and competing life stressors. Lack of personal motivation and family resistance further impeded participation, reflecting the influence of social norms. Environmental barriers, including the availability of fast food and program fidelity challenges, also contributed to lower program uptake. Social support and community engagement played a pivotal role in enhancing intervention participation, fostering supportive networks and shared knowledge among participants. Practical support and accessibility measures, such as logistical assistance and intervention adaptability, facilitated retention by reducing barriers to engagement. Tailored interventions, incorporating cultural competence and personalized approaches, effectively addressed participants' specific needs and preferences. Additionally, motivational strategies, including goal setting and positive reinforcement, encouraged sustained engagement by boosting participants' self-efficacy and commitment to healthy behaviours.

The observed uptake and adherence rates highlight the persistent challenge of participant engagement and retention in dietary interventions among low-income populations. Interventions addressing logistical, socioeconomic, and motivational barriers, along with tailored and culturally competent interventions, are key for improving engagement and retention in future interventions, thereby enhancing their effectiveness in combating diet-related health disparities.

## Acknowledgments

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## References

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