Effect of dining room interventions on nutritional, clinical and functional outcomes of patients in hospital, rehabilitation and aged-care settings:
A systematic review.

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Rationale
Malnutrition is common within hospitals and residential aged care facilities (RACF), and is associated with poor clinical outcomes, poor quality of life and increased health system costs. Current literature suggests that dietary intake of people in hospital and RACFs may be improved by foodservice interventions, but evidence related to communal dining and/or dining room enhancements has not yet been synthesised. This systematic review aimed to identify the impact of these interventions on nutritional, clinical and functional outcomes in hospital and RACF settings.

Methods
• Five electronic databases were searched in March 2020.
• Inclusion: Studies that considered the impact of communal dining and/or dining room enhancement on outcomes related to malnutrition in hospital, rehabilitation and RACF settings.
• Risk of bias was assessed using the Academy of Nutrition and Dietetics’ Quality Criteria Checklist.
• Overall quality was assessed using GRADEpro software.
• Outcome data were combined narratively for communal dining and dining room enhancements respectively.

Results
• Eighteen articles from 17 unique studies were identified.
• One randomised control trial (moderate quality) and 16 observational studies (all low quality).
• Communal dining interventions (4 studies, n = 490) were associated with greater energy and protein intake and higher measures of quality of life than non-communal mealtime settings.
• Dining room enhancement interventions (14 studies, n = 912) contributed to increased total food, energy, protein and fluid intake.

Conclusion
A conditional recommendation for dining room and/or dining room enhancements can be made as they demonstrated the potential to positively influence nutritional, clinical and/or functional outcomes.