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Author

Wright, Charlene, Dawson, Danielle, Kelly, Jaimon T, Campbell, Katrina L, Diversi, Tara, Hamilton, Kyra

Published

2025

Journal Title

Nutrition & Dietetics

Version

Version of Record (VoR)

DOI

10.1111/1747-0080.70050

Received: 14 April 2025 | Revised: 15 August 2025 | Accepted: 17 September 2025

DOI: 10.1111/1747-0080.70050

Nutrition & Dietetics Journal of Dietitians Australia WILEY

ORIGINAL RESEARCH

Understanding early dietary adoption after bariatric surgery: A qualitative study using the theory of planned behaviour

Charlene Wright PhD[1,2] | **Danielle Dawson MClinPsych**[1] | **Jaimon T. Kelly PhD**[3,4] | **Katrina L. Campbell PhD**[5] | **Tara Diversi MProfPsych**[6] | **Kyra Hamilton PhD**[1,7,8]

[1]School of Applied Psychology, Griffith University, Mount Gravatt, Queensland, Australia

[2]Centre for Quality and Patient Safety Research, Institute for Health Transformation, School of Nursing and Midwifery, Deakin University, Burwood, Victoria, Australia

[3]Centre for Online Health, Faculty of Medicine, The University of Queensland, Woolloongabba, Queensland, Australia

[4]Centre for Health Services Research, Faculty of Medicine, The University of Queensland, Woolloongabba, Queensland, Australia

[5]Healthcare Excellence and Innovation, Metro North Hospital and Health Service, Herston, Queensland, Australia

[6]Sophus Health, Tropic Tech & Innovation Network, Cairns, Queensland, Australia

[7]Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland

[8]Health Sciences Research Institute, University of California, Merced, California, USA

Correspondence
Charlene Wright, School of Applied Psychology, Griffith University, Mount Gravatt, Australia.
Email: charlene.wright@deakin.edu.au

Funding information
Open access publishing facilitated by Griffith University, as part of the Wiley - Griffith University agreement via the Council of Australian University Librarians.

Abstract

Aim: To explore how behavioural, normative, and control beliefs shape early dietary implementation after bariatric surgery by exploring patient and dietitian perspectives using the theory of planned behaviour framework.

Methods: Semi-structured interviews were conducted with 16 patients who had bariatric surgery within the past 12 months and 24 dietitians involved in postoperative care to explore beliefs about dietary recommendations. Interviews explored five key dietary recommendations with questions guided by the theory of planned behaviour framework. Data were analysed using a deductive and inductive approach.

Results: Behavioural beliefs indicated a complex relationship between perceived benefits and cognitive demands, with protein intake and symptom management emerging as key motivators. Normative beliefs highlighted the dual influence of supportive family environments and challenging workplace contexts, particularly regarding modified eating behaviours. Control beliefs demonstrated an integrated pattern where physical constraints, psychological factors, and environmental demands seemed to intersect to influence dietary implementation. Of the five key dietary recommendations, patients faced

unique challenges with vitamin supplementation due to the interaction between physical limitations and delayed reward perception. The cognitive burden of managing new dietary behaviours appeared to be a determinant of adoption across belief domains.

Conclusion: Early dietary changes after bariatric surgery seem to be influenced by psychological, social, and physical factors beyond education. Future interventions should aim to incorporate strategies to reduce cognitive load, address competing social pressures, and account for the temporal aspects of health-protective behaviours. Theory-based interventions that integrate implementation intention techniques, social support optimisation, and temporal self-regulation strategies may enhance dietary adherence during this critical adaptation phase.

KEYWORDS

bariatric surgery, behaviour change, dietary recommendations, qualitative research, theory of planned behaviour

1 | INTRODUCTION

Bariatric surgery yields significant weight loss and improvements in metabolic health outcomes.[1] Long-term success relies on following dietary recommendations (adequate fluid intake, sufficient protein intake, separation of food and liquid consumption, slow and mindful eating, and adherence to micronutrient supplementation) to optimise recovery, maintain lean muscle mass, and prevent complications.[1] Despite clear recommendations, adherence often declines over time,[2] with shifts toward increased caloric intake, maladaptive eating patterns, and suboptimal nutritional intake occurring as patients move beyond the immediate postoperative period.[3–8] Understanding early influences on dietary behaviour during the first 12 months post-surgery is key to sustaining long-term outcomes, as this period represents a critical window when patients establish new dietary patterns while adjusting to anatomical and physiological changes. Research demonstrates that adherence patterns established in the early postoperative period are predictive of long-term dietary maintenance and weight outcomes, with early dietary adherence significantly associated with sustained weight loss at 2 years post-surgery.[2]

The theory of planned behaviour explains how intentions to adopt health behaviours are shaped by beliefs.[9] According to the theory, the intention to engage in a behaviour is shaped by three core belief-based constructs: behavioural beliefs, which inform attitudes based on perceived benefits and disadvantages; normative beliefs, which reflect perceived social pressure and expectations from significant others; and control beliefs, which influence perceived behavioural control through facilitators and barriers to action.[9] The theory of planned behaviour has been used to understand physical activity after bariatric surgery.[10–12] However, its application to early postoperative dietary behaviours remains limited.[13]

This study builds on the theory of planned behaviour research in bariatric surgery,[14] by exploring how behavioural, normative, and control beliefs may influence early dietary adoption, using perspectives from both patients and dietitians. By combining lived and clinical insights, the study highlights key psychosocial drivers to inform theory-based interventions that address early barriers and support sustained dietary and weight management outcomes.

2 | METHODS

This qualitative study employed semi-structured, one-to-one interviews to explore beliefs about implementing postoperative dietary recommendations in the first 12 months after bariatric surgery. The study design was guided by the theory of planned behaviour framework,[9] using a deductive and inductive approach to explore behavioural, normative, and control beliefs influencing dietary implementation. The study protocol was approved by Griffith University Human Research Ethics Committee (ref no: 2022/247) and reported according to the consolidated criteria for reporting qualitative research checklist.[15]

Eligible participants included Australian residents aged 18 years or older who had undergone bariatric surgery in the past 12 months and dietitians involved in bariatric surgery patient care. The 12-month timeframe was

chosen to capture the critical period of early post-surgical adaptation, when patients establish new dietary patterns while adjusting to anatomical and physiological changes. This dual recruitment strategy aimed to capture lived experience ('context experts') and professional knowledge ('content experts'), providing complementary perspectives on early dietary implementation. Furthermore, the inclusion of dietitians' perspectives within the theory of planned behaviour framework is supported by their role as 'clinical observers' of patient belief patterns during dietary implementation. Healthcare providers frequently observe behavioural, normative, and control beliefs manifesting in patient interactions that may not be fully captured in patient self-reports alone.[16] This dual-perspective approach has been employed to triangulate findings and capture both lived experience and clinical observation.

Sample size considerations were guided by contemporary approaches to qualitative inquiry that emphasise information power, with data saturation used as the stopping criterion during data collection.[17] An initial target of 20 interviews per group was determined by assessing key dimensions of information power: study aim specificity (focused on dietary implementation beliefs), sample specificity (bariatric patients within 12 months and specialised dietitians), theoretical background (established theory of planned behaviour framework), quality of dialogue (semi-structured interview approach), and analysis strategy (deductive and inductive approach). This initial estimate provided a starting point, with the final sample size determined by data saturation during data collection.[18]

Recruitment occurred from May to December 2022 through multiple channels. Patients were recruited via social media platforms (Instagram, X [formerly Twitter], Facebook, and LinkedIn) and Australian bariatric surgery support forums. Dietitians were recruited through Dietitians Australia interest groups, newsletters, and professional networks. Interested participants registered via Microsoft Forms and were screened for eligibility by the lead author. Purposive sampling was employed based on the inclusion criteria, with all eligible participants who expressed interest invited to participate. None of the participants who scheduled an interview dropped out.

Interviews were conducted by the lead author, a female PhD and Accredited Practising Dietitian specialising in bariatric surgery, with expertise in qualitative research and multiple published qualitative studies. The lead researcher's background as an Accredited Practising Dietitian with bariatric surgery expertise provided clinical insight into dietary recommendations and implementation challenges. To enhance the rigour and credibility of the analysis, a second researcher who was a clinical psychology Masters student without clinical bariatric surgery experience was brought in to co-construct interpretations and add different perspectives to the analysis process. This researcher independently reviewed coded transcripts and engaged in regular reflexive discussions with the lead author. Rather than attempting to eliminate bias, these collaborative discussions aimed to examine how different professional backgrounds and theoretical orientations could enrich the interpretation of findings, with consensus meetings ensuring theoretical alignment while incorporating multiple analytical perspectives. This approach recognises that in qualitative research, diverse researcher perspectives contribute to more nuanced and credible interpretations rather than simply managing potential biases.

No prior relationship existed between the researcher and participants; however, participants were briefed on the purpose and reasons for doing the research. Interviews were conducted via telephone or videoconference at participants' convenience, with verbal consent obtained. Data were collected remotely, with no one else present besides the participants and the researcher during the interviews. Each interview was allocated 60 min. Demographic information was collected before each interview, including sex, age, procedure details (for patients), and professional experience (for dietitians).

The interview guide used the theory of planned behaviour to explore beliefs about dietary recommendations (Table S1). Questions explored participants' familiarity with recommendations, perceived advantages and disadvantages of adoption (behavioural beliefs), social influences (normative beliefs), and factors affecting adoption capability (control beliefs). The guide was designed to allow discussion of five key dietary recommendations (adequate fluid intake, meeting protein requirements, eating and drinking separately, eating slowly and chewing food extensively, and vitamin supplementation) in an integrated manner reflecting clinical practice. Questions were appropriately framed for each participant group while maintaining alignment with theory of planned behaviour constructs (Table S1).

Interviews were audio-recorded and supplemented with field notes. The interviewer maintained a reflective journal documenting theoretical insights and emerging patterns. Data collection continued until data saturation was achieved, evidenced by no new beliefs emerging in the final two interviews of each participant group. No repeat interviews were conducted, and transcripts were not returned to participants for comment or correction.

Several strategies were employed to enhance theoretical and methodological rigour. A detailed audit trail documented decisions and theoretical insights throughout data collection and analysis. The interview guide

underwent expert review and pilot testing with three participants to ensure theoretical fidelity and clinical relevance. The analysis process included researcher triangulation, with a second researcher independently reviewing codes and consensus discussions to resolve discrepancies. Member checking was not conducted, aligning with contemporary perspectives on theory-based qualitative analysis.[17] This decision reflected the theoretical nature of data interpretation and the time-sensitive context of early postoperative experiences.

Interview transcripts were analysed using thematic analysis in NVivo software, following a deductive and inductive approach guided by the theory of planned behaviour.[19] The lead author conducted initial coding, categorising data according to behavioural, normative, and control beliefs. All data were coded to the three predetermined theory of planned behaviour constructs: behavioural beliefs (perceived benefits and disadvantages), normative beliefs (supportive and unsupportive social influences), and control beliefs (facilitating factors and barriers) (Table S2). The coding process involved a hierarchical approach, with data first assigned to theory of planned behaviour constructs (deductively to predefined codes), then to positive/negative subcategories within each construct (deductively to pre-defined codes), and finally to specific thematic content that captured distinct belief patterns and experiences within each subcategory (inductively developed during analysis). Additionally, integrated themes that operated across multiple belief domains were also generated inductively during the analysis process (Table S2). A second researcher independently reviewed coded transcripts, providing feedback on theoretical alignment. Regular consensus discussions between researchers ensured consistent theoretical interpretation. The analysis process was concurrent with data collection, allowing for continuous monitoring of data saturation. Final themes were refined through iterative discussion between two researchers (the lead author and a second researcher) to ensure they represented participants' beliefs meaningfully while maintaining clear alignment with theoretical constructs. Participants did not provide feedback on the findings.

3 | RESULTS

The final sample consisted of 16 patients who had undergone bariatric surgery and 24 dietitians involved in postoperative care. Interviews had a mean duration of 27 min (range: 16–52 min) for patients and 29 min (range: 18–49 min) for dietitians. The patient cohort was predominantly female (87.5%), with a mean age of 40.8 ± 8.6 years. Most patients underwent their procedure in the private healthcare system (93.8%), and while participants who underwent different bariatric surgery procedures were included, the final sample predominantly comprised sleeve gastrectomy patients (81.3%). All participants underwent bariatric surgery for obesity and associated metabolic comorbidities, representing standard clinical indications for these procedures. Participants were distributed across different stages of postoperative recovery: 1–2 months ($n = 4$, 25.0%), 3–6 months ($n = 5$, 31.3%), and 7–12 months ($n = 7$, 43.8%) post-surgery. Among dietitians, 96.0% were female, with a mean age of 39.2 ± 12.9 years and an average of 8.9 ± 7.8 years of experience in bariatric nutrition. Most dietitians worked in private practice (62.5%) and urban settings (66.7%).

Data analysis indicated distinct belief patterns within each theory of planned behaviour construct (Figure 1). Each construct encompassed both positive and negative subcategories, with specific themes capturing the detailed belief content and experiences that influenced dietary implementation.

Within the behavioural beliefs (perceived benefits) subtheme, patients and dietitians emphasised the perceived benefits of following dietary recommendations, particularly regarding protein intake, symptom management, and overall well-being. Protein consumption was widely associated with muscle preservation, enhanced energy levels, and weight management. One patient highlighted this by stating, 'By keeping your protein goals, you're gonna [sic] burn fat instead of losing muscle. It's gonna [sic] help with long-term keeping the weight off' (Sleeve gastrectomy, 30 years old, 4 months postoperative). Dietitians reinforced these perspectives, emphasising the role of protein in mitigating sarcopenia and optimising recovery: 'They'll be less likely to get sarcopenia and muscle mass loss' (Dietitian, 10 years practising, public health system, urban community).

Participants associated compliance with the dietary recommendations with positive physical and psychological outcomes. One patient's experience highlighted the immediate behavioural consequences: 'I know what it was like when I wasn't adhering [to the dietary recommendations] and then what it is like when I am, and it's definitely better doing the right thing that's for sure' (Sleeve gastrectomy, 42 years old, 3 months postoperative). Several patients noted improvements in energy levels, mental health, and overall quality of life. One patient articulated, 'I'm feeling better, I'm feeling healthier, I don't know whether that's because I'm eating better or because I'm losing weight ... but I definitely think that just my overall sense of health and well-being has improved' (Sleeve gastrectomy, 45 years old, 6 months postoperative). Dietitians articulated multiple outcome

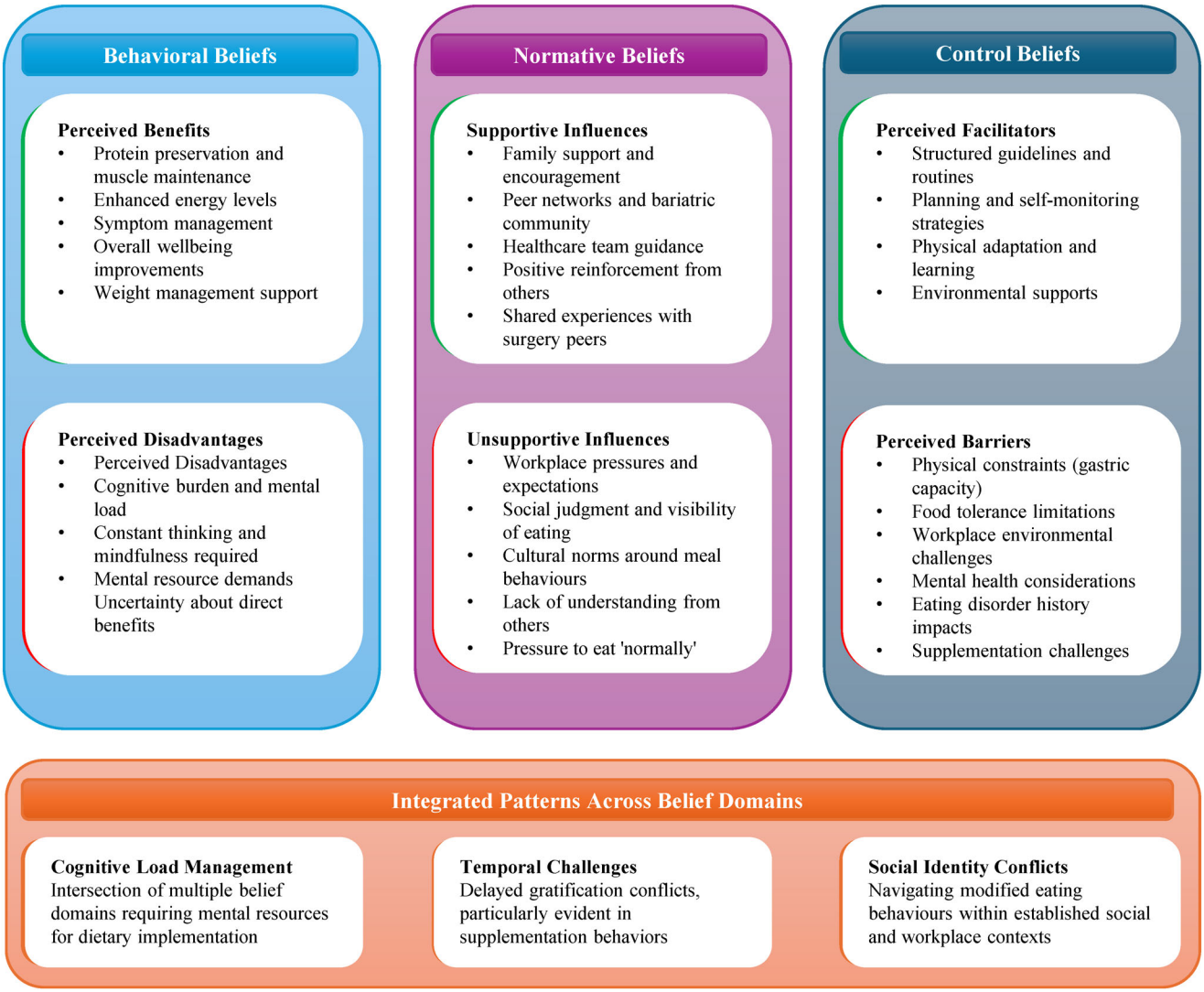

FIGURE 1 Theory of planned behaviour framework showing hierarchical themes and subthemes influencing early adoption of dietary recommendations after bariatric surgery, with facilitating and hindering belief patterns within each construct.

expectancies with following the dietary recommendations: 'They're gonna [sic] feel better, they're gonna [sic] have more energy, their mental health is better, their diabetes improves' (Dietitian, 10 years practicing, private health system, urban community).

Within the behavioural beliefs (perceived disadvantages) subtheme, some patients expressed uncertainty regarding the direct advantages of following the dietary recommendations. One patient admitted, 'I'm not even really sure what the benefits are' (Sleeve gastrectomy, 34 years old, 3 months postoperative). This suggests that perceived benefits may not always be understood or immediately apparent, reinforcing the need for sustained education and reinforcement strategies.

The cognitive demand of managing new dietary behaviours appeared to be as a significant disadvantage of following the recommendations. One patient described the mental resources required: 'The mental toll … as opposed to eating normally … you just constantly having to think' (Sleeve gastrectomy, 37 years old, 7 months postoperative). Dietitians also recognised this cognitive burden as a key determinant: 'Before they didn't have to think much about eating. Now there's a lot of thought involved and mindfulness that they have to remember with every [postoperative] stage' (Dietitian, 1.5 years practising, private health system, rural and remote community).

Within the normative beliefs (supportive influences) subtheme, social influences seemed to be a pivotal determinant of dietary engagement. Support from family members, peers, and healthcare professionals was frequently cited as a facilitator, with patients reporting increased motivation when receiving encouragement from their immediate social networks. One participant

described this support: 'I'm really lucky to have this really supportive partner and family ... helping remind me, "how much protein have you had today?"' (Sleeve gastrectomy, 42 years old, 3 months postoperative). Dietitians also highlighted peer support as a facilitator and the importance of multiple sources of normative influence, including other individuals who have also undergone bariatric surgery: 'For a lot of people, it's other people that have had the surgery as well' (Dietitian, 10 years practicing, private health system, urban community). One patient's account illustrated the need for positive support networks: 'I do need people around me that are (A) supportive of the choices that I've made and what I've done, but (B) that are gonna [sic] actually like positively affect that' (Sleeve gastrectomy, 3 months postoperative). The absence of social support was exemplified by another patient: 'I honestly have no one [supporting me]. My family said that they would support me in whatever I wanted to do, but they didn't think that I needed to have surgery' (Sleeve gastrectomy, 34 years old, 12 months postoperative).

Within the normative beliefs (unsupportive influences) subtheme, social perception pressures were described in the workplace and social environments. Patients reported heightened awareness of social comparison and perceived judgement regarding their modified eating behaviours. One participant articulated this normative pressure: 'If you didn't explain to people that you've had surgery people would always like look at ... for example the size of your lunch, or why do you always have food in front of you' (Roux-en-Y gastric bypass, 48 years old, 12 months postoperative). Work-related social expectations also posed challenges to following the dietary recommendations, particularly in settings where modified eating behaviours were conspicuous: 'People find it strange if you're not having a drink with your meal, so I'm really finding that one [recommendation] probably quite challenging [to adopt]' (Sleeve gastrectomy, 45 years old, 6 months postoperative). Dietitians acknowledged these normative challenges: 'There can be a lot of judgement with eating, and [eating] in an unusual way' (Dietitian, 6 years practising, private health system, urban community).

Within the control beliefs (facilitating factors) subtheme, external control beliefs centred on environmental facilitators. Structured dietary recommendations were perceived to enhance behavioural control, as noted by one patient: 'I think it's good to have a set of guidelines ... a bit of structure' (Sleeve gastrectomy, 34 years old, 12 months postoperative). Additional facilitators identified were planning, establishing routines, and self-monitoring: 'I am trying to stick to a routine so that I don't have to consciously think about "oh hang on a minute I've just eaten I can't drink for the next 20 minutes" or something like that' (Roux-en-Y gastric bypass, 48 years old, 12 months postoperative). Furthermore, patients described developing strategies to work with their new gastric capacity and learning which foods were better tolerated, representing adaptive control beliefs that facilitated dietary implementation.

Within the control beliefs (perceived barriers) subtheme, workplace environments often presented significant barriers, particularly for those in healthcare roles. One participant explained: 'Working during the day especially as a nurse ... I certainly struggle to get adequate breaks to go eat all the food I need to eat in a day to get my protein in' (Sleeve gastrectomy, 30 years old, 4 months postoperative).

Internal control beliefs encompassed mental health considerations and capacity for behavioural regulation. The interaction between mental health and eating disorder history appeared to be a complex influence on adopting dietary recommendations. While self-monitoring behaviours such as calorie counting were not among the five dietary recommendations being directly explored in this study, patients with prior eating disorders reported specific challenges in self-monitoring behaviours. One patient articulated this conflict: 'As a younger teenager, I had anorexia, so calorie counting is extremely triggering for me. So, I'm not gonna [sic] do that because if I do that, it's gonna [sic] like restart these thoughts' (Sleeve gastrectomy, 27 years old, 6 months postoperative). Dietitians also recognised how these psychological factors were impactful for 'Anyone who has a history of an eating disorder'. They noted that following the dietary recommendations 'has the potential to become obsessive' (Dietitian, 9 years practising, private health system, urban community).

Beliefs around gastric physical capacity seemed to be a fundamental determinant of perceived behavioural control in the early postoperative period. These beliefs were strongly influenced by the anatomical changes following surgery, particularly regarding portion size and food tolerance. One patient described these physical control limitations: 'Even if I chew stuff, my stomach just doesn't like texture of some things' (Sleeve gastrectomy, 35 years old, 3 months postoperative). Dietitians acknowledged how these physical constraints interacted with established behavioural patterns: 'Previous habits, definitely [are a barrier] ... It can be really hard to change those habits after the surgery' (Dietitian, 3 years practising, private health system, rural and remote community).

Both physical constraints and perceived immediate utility influenced control beliefs about vitamin supplementation. Physical challenges were evident, with one patient sharing: 'You consistently feel full, so just trying

to stomach them [multivitamins] and not get a bit nauseous after having them because you are already so full' (Sleeve gastrectomy, 36 years old, 8 months postoperative). The lack of immediately visible benefits also appeared to affect beliefs, as another patient explained: 'Taking vitamins ... that's not an instant benefit ... that's more long-term and something a bit harder for people to keep up with' (Mini gastric bypass, 48 years old, 3 months postoperative). Dietitians recognise these compounding challenges: 'Medication burden is a massive one in these patients because they're all taking so many tablets and you try to add on, you know, two multivitamins a day, and that's often way too much' (Dietitian, 5 years practising, public health system, urban community). Perceived behavioural control seemed to be challenged the most when multiple control factors intersected, such as workplace demands coinciding with physical limitations, or when mental health considerations complicated the implementation of self-monitoring strategies.

The theme 'integrated patterns across belief domains' captured three overarching patterns that transcended individual belief categories. First, cognitive load management emerged as participants described how the intersection of multiple belief domains created cumulative mental resource demands. Second, temporal challenges were evident, particularly in supplementation behaviours where delayed gratification conflicted with immediate physical discomfort. Third, social identity conflicts arose as participants navigated modified eating requirements within established social and workplace contexts where their new behaviours were highly visible.

4 | DISCUSSION

This study explored psychosocial factors influencing early dietary adoption after bariatric surgery, using the theory of planned behaviour across patient and dietitian perspectives. Understanding belief patterns during this critical phase can guide interventions that support sustained dietary adherence and improve postoperative outcomes. Findings demonstrate patterns in how patients and dietitians perceive and experience implementing the dietary recommendations through the lens of behavioural, normative, and control beliefs. Patients who described positive experiences with adopting the dietary recommendations often discussed these across multiple theoretical domains—expressing positive outcome expectations, describing supportive social influences, and identifying strategies that helped them maintain control over their dietary behaviours. However, challenges were also reported across these domains, particularly regarding physical limitations, social pressures, and the cognitive demands of managing new dietary behaviours in the early postoperative period. Understanding these belief patterns during this critical phase can help guide interventions that support sustained dietary adherence and aim to improve postoperative outcomes.

Patients described the cognitive effort needed to follow dietary recommendations as a barrier to adherence. This finding aligns with the Clinical Obesity Maintenance Model, which identifies executive function and health literacy as key drivers of obesity-maintaining behaviours,[20] while extending the understanding of how these cognitive demands may manifest in the post-bariatric surgery context. While the role of hypothalamic signalling, gut hormones, bile acids, and gut microbiota alterations in eating behaviour changes has been emphasised,[21] findings suggest that cognitive load may represent an equally important mediating mechanism between intention and behaviour. This interaction between physiological and cognitive factors builds on the systematic literature review of behaviour maintenance,[22] highlighting the interconnected nature of self-regulation resources and habit formation in sustained behaviour change. Results point to the potential need for theory-based interventions incorporating implementation intention strategies and habit formation techniques to reduce the cognitive resources required for dietary adherence, particularly given the established importance of perceived behavioural control in predicting post-bariatric surgery behaviour change.[23]

Social norms shaped dietary adherence, with family support aiding and workplace or social pressure hindering uptake. This aligns with research showing that relationships can complicate dietary change.[24,25] Findings demonstrate how competing normative influences in the post-bariatric context can create behavioural ambivalence that may undermine sustained dietary change. The tension between supportive family environments and challenging workplace settings aligns with research on social conformity in eating behaviours,[26] while highlighting the unique complexities patients who have undergone bariatric surgery face as they navigate established social norms with modified eating requirements. These findings build on observations about patients' struggle for normality in post-surgical life,[13,27] suggesting that social identity conflicts may be particularly salient in workplace environments where eating behaviours are more visible and subject to peer influence. While the potential benefits of group-based programs in fostering supportive social identities have been discussed in the literature,[28] findings suggest that interventions may benefit from also explicitly addressing strategies for managing obstructive social

influences, particularly in environments where modified eating behaviours conflict with established cultural and workplace norms.

Vitamin supplementation adherence was uniquely challenged by the interaction between physical constraints ('feeling full') and the absence of immediately perceivable benefits, revealing a distinct pattern of control beliefs and outcome expectations. This finding aligns with temporal self-regulation theory,[29] while extending it to demonstrate how delayed reward discounting may manifest in post-bariatric surgery supplementation behaviours. The prevalence of present hedonistic time perspective identified by Tucholska et al. (2021) in individuals awaiting bariatric surgery,[30] appears particularly relevant to supplementation adherence postoperatively, where immediate physical discomfort often outweighs recognised long-term health benefits. While a meta-analysis demonstrated moderate predictive ability of temporal self-regulation theory across health behaviours,[31] findings suggest its predictive value may be heightened in the post-bariatric surgery context where physical constraints amplify temporal conflicts. The success of autonomy-supportive approaches like the Bariatric Outcomes: Self-management for Sustained Surgical Success program in promoting self-regulation,[32] suggests that intervention strategies should explicitly address temporal aspects of vitamin supplementation benefits while fostering competence in managing physical challenges, particularly during the early postoperative period when gastric capacity is most restricted. Future research should examine whether staging vitamin supplementation guidance or utilising different vitamin supplement formulations, as clinically appropriate, might enhance adherence during this critical adaptation phase.

An integrated model of control beliefs appeared, characterised by the intersection of physical constraints (gastric capacity), psychological factors (eating disorder history), and environmental demands (workplace schedules). This interactive pattern appears to extend beyond traditional theoretical frameworks that typically examine control factors in isolation, suggesting that the variance in dietary adherence may be better explained through their combined effects. The examination of complex health interventions provides compelling support for this integrated perspective,[33] demonstrating superior outcomes when interventions simultaneously target physical, cognitive, and environmental determinants of behaviour change. The demonstrated efficacy of comprehensive approaches in managing other complex health conditions,[34] suggests particular promise for the post-bariatric surgery context, where patients must coordinate physical adaptation, psychological regulation, and environmental modification to achieve sustained dietary change. While meta-analysis of multifactorial interventions has highlighted the importance of careful implementation,[35] findings suggest the need for theory-based interventions that address interconnected control beliefs. Future longitudinal research should examine how these belief systems evolve throughout the postoperative period to inform optimal intervention timing and component integration.

Key methodological considerations warrant discussion. First, the predominance of laparoscopic sleeve gastrectomy patients from private healthcare settings may limit transferability to other surgical procedures or public health contexts. Additionally, while maximum variation sampling was not specifically implemented, the multi-platform recruitment strategy (social media, professional networks, and support forums) resulted in natural diversity across postoperative timeframes and geographic locations (and for dietitians, experience levels, and practice settings). The absence of maximum variation sampling represents a methodological limitation that may have introduced sampling bias, potentially limiting the diversity of perspectives captured and the transferability of findings. Future studies would benefit from implementing systematic maximum variation sampling to ensure comprehensive representation across key participant characteristics such as socioeconomic status, cultural backgrounds, procedure types, and healthcare system contexts. Overall, the patient sample composition reflects current Australian bariatric surgery patterns, where sleeve gastrectomy represents ~80% of procedures.[36] The sample size precluded meaningful comparison between procedure types, though this remains an important area for future research. Second, while the theory of planned behaviour provided a robust framework for understanding dietary implementation, its application may have constrained the ability to identify emergent themes beyond its theoretical constructs. This theoretical focus was necessary to build upon existing behavioural frameworks in bariatric surgery research, though future studies might benefit from more inductive approaches beyond the theory's constructs. Third, the cross-sectional nature of data collection, although spanning different postoperative timeframes (1–12 months), limited the ability to track how belief systems evolved throughout the adaptation period. While this design captured diverse experiences across the early postoperative journey, longitudinal research would better elucidate the temporal dynamics of dietary implementation. Fourth, while dietitians provided insights into patient belief patterns, this study did not explore detailed descriptions of habits, dietitian-recommended coping strategies, or perceived barriers to implementing solutions for common post-operative challenges. Future research examining healthcare provider perspectives on intervention strategies, resource

limitations, and systemic barriers could complement the theoretical understanding with practice-focused insights to identify gaps in service delivery. These methodological considerations, while important to acknowledge, do not diminish the study's contribution to exploring the determinants of early dietary adherence in bariatric surgery.

In conclusion, the theory of planned behaviour provided a valuable framework for understanding the complex determinants of adopting dietary recommendations in the early postoperative period. This study explored patient and dietitian perspectives and indicated how cognitive burden, competing social influences, supplementation challenges, and integrated control beliefs appear to shape dietary behaviours. Early postoperative interventions could extend beyond traditional education approaches to incorporate strategies that reduce cognitive load, address competing social pressures, and account for the temporal aspects of health-protective behaviours. Future theory-based intervention development may benefit from focusing on integrating implementation intention techniques, social support optimisation, and temporal self-regulation strategies to enhance dietary adherence during this critical adaptation phase. Such theoretically informed interventions may improve the immediate postoperative compliance and long-term behavioural maintenance of individuals who have undergone bariatric surgery.

AUTHOR CONTRIBUTIONS

CW collected the data. CW and DD analysed the data. CW wrote the first draft with contributions from JK. All authors reviewed and commented on subsequent drafts of the manuscript.

FUNDING STATEMENT

CW was supported by the Australian Postgraduate Research Intern (APR Intern) Stipend, and the industry partner Sophs Health was awarded a facilitation fee. CW was supported through an Australian Government RTP Stipend for the academic Doctor of Philosophy program.

CONFLICT OF INTEREST STATEMENT

Katrina Campbell was a Board member of Dietitians Australia (2018–2023). Tara Diversi was the President and Chair of the Board of Dietitians Australia (2019–2024). All other authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Charlene Wright https://orcid.org/0000-0003-2918-6032
Jaimon T. Kelly https://orcid.org/0000-0003-0232-5848
Katrina L. Campbell https://orcid.org/0000-0002-4479-1284
Kyra Hamilton https://orcid.org/0000-0001-9975-685X

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Wright C, Dawson D, Kelly JT, Campbell KL, Diversi T, Hamilton K. Understanding early dietary adoption after bariatric surgery: A qualitative study using the theory of planned behaviour. *Nutrition & Dietetics*. 2025;1-10. doi:10.1111/1747-0080.70050