

Cornerstone Youth Services Nutrition and Physical Activity Capacity Building Project

Final Report June 2021

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Table of Contents

List of Abbreviations	5
Acknowledgments	6
Executive Summary.....	7
Project Background	7
Project Phases	7
Phase 1 - Planning, Consultation and Literature review.....	7
Phase 2 - Staff Training	8
Phase 3 - Research Study.....	8
Phase 4 - Program and Service Mapping	9
Recommendations	10
Client Considerations.....	10
Staff Considerations.....	10
Implementation of a Dietetics Service	10
Potential Service Collaborations.....	10
Project Background.....	11
Project Overview and Scope	11
Project Governance	12
Project Context	12
National Context	12
Joint Position Statement	13
The Impact of the COVID-19 Pandemic	13
<i>headspace</i> Management Changes	14
Dietetics Service	14
Phase 1 - Consultation and Literature review	15
Consultation	15
Literature Review	15
Overview	15
Young People and Mental Health.....	15
Healthy Eating and Mental Health.....	16
Physical Activity and Mental Health	16
Behaviour Change Techniques	17
Table 1. Summary of Helpful Behaviour Change Techniques.....	18
Services and Systems-Based Interventions	17
Recommendations	19
Phase 2. Staff Training Sessions.....	20
Approach	20
Table 2. Overview of Staff Training Sessions.....	20
Training Attendance	21
Feedback	21
Data Analysis.....	21
Findings	22
<i>What was helpful?</i>	22
<i>What have been challenges to implementing skills?</i>	23
<i>Were the training logistics acceptable?</i>	23
<i>What other information do staff want?</i>	24
Phase 3. Research Study	25

Approach	25
Method	25
Design	25
Ethics.....	25
Participants	26
Data.....	26
Online Survey.....	26
Interviews/Focus Group	27
Recruitment	27
Survey Findings	27
Data Analysis.....	27
Demographics.....	28
Table 3. Demographic Information of Survey Participants (n=30)	29
Food and Nutrition	30
Sugary Drinks	31
Take-away Foods	31
Food Insecurity	32
Barriers and motivators for healthy eating	32
Physical Activity	34
Information Communication	36
Interviews and Focus Group Findings	37
Analysis	38
Findings.....	38
Table 4. Overview of Themes and Sub-themes	38
Healthy Eating.....	39
Table 5. Barriers and Enablers to Healthy Eating	41
Physical Activity	42
Table 6 Barriers and Enablers to Physical Activity.....	45
Summary	47
How do <i>headspace</i> clients compare nationally?	47
Strategies to Address Healthy Eating and Physical Activity Behaviours.....	48
Table 7. Strategies to Improve Healthy Eating and Physical Activity Behaviours	49
How can <i>headspace</i> help?	48
Limitations/Strengths and Considerations	50
Recommendations	50
Phase 4. Referral and Program Mapping.....	51
Approach	51
Referral Pathways	51
Dietetics services	51
Exercise Physiologists services.....	52
Locally Accessible Programs and Resources.....	52
<i>headspace</i> Programs with Nutrition and Exercise Services.....	52
Table 8. Accessible Lifestyle Programs	53
Applications (Apps) to Support Youth Healthy Eating and Physical Activity	55
Method	55
Results and Recommendations	55
Table 9. Top 5 Healthy Eating and Physical Activity Apps for Young People.....	56
Recommendations.....	56
Recommendations	57
Client Considerations	57

Staff Considerations	57
Implementation of a Dietetics Service	58
Potential Service Collaborations	59
References	60
Appendices.....	64
Appendix 1 – Project Plan	65
Appendix 2. September Progress Report	72
Appendix 3. Equally Well Consensus:	75
Appendix 4. A Blueprint for Protecting Physical Health in People with Mental Illness...	75
Appendix 5. Keeping Body and Mind Together	75
Appendix 6. Joint Position Statement	75
Appendix 7. Staff focus group on training needs - Summary	76
Appendix 8. Staff evaluation	80
Appendix 12. Dietetics Service Mapping Launceston	105
Appendix 13. Exercise Physiology Services Mapping Launceston	107
Appendix 14. Nutrition services within other <i>headspace</i> centres	108
Appendix 15 Student Applications report	110

List of Abbreviations

ABS – Australian Bureau of Statistics
CRH – Centre for Rural Health
CYS - Cornerstone Youth Services
GP – General Practitioner
YP – Young People
UTAS – University of Tasmania
SHS – School of Health Sciences
hART – <i>headspace</i> Advisory and Reference Team
BCT – Behaviour Change Techniques
BMI – Body Mass Index
KBM – Keeping Body in Mind
PYCY – Police and Community Youth Club
THS – Tasmanian Health Service

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Executive Summary

Project Background

Healthy eating and physical activity habits during adolescence help support normal development and establish lifelong healthy habits. The eating habits of many young people are inconsistent with dietary recommendations and, along with sedentary physical activity levels, escalate the risk of chronic diseases and mental health issues. Mental health conditions predominantly emerge during adolescence and are risk factors for overweight and metabolic complications. Early nutrition and physical activity interventions for young people at risk of developing a mental health condition is needed.

Cornerstone Youth Services (CYS) provides social and emotional support for young people in the greater Launceston area with mild to moderate mental health conditions via the *headspace* program. Cornerstone secured a \$47,000 grant from the Healthy Tasmania Fund to increase the capacity of *headspace* to deliver best-practice nutrition and physical activity interventions. Cornerstone approached the University of Tasmania (UTAS) Centre for Rural Health and School of Health Sciences to manage the project. The multidisciplinary project team consisted of clinician researchers from nutrition/dietetics, exercise science/physiology, physiotherapy, and clinical and health psychology.

The project was delivered during the height of COVID-19 lockdowns and the subsequent easing of restrictions. In consideration of resultant delays, a project extension was applied for and granted to 30 June 2021. In addition, there was a change of clinical manager mid-project; however, project outputs were completed.

Project Phases

Phase 1 - Planning, Consultation and Literature review

headspace management was consistently consulted with throughout the project, in addition to consultations with *headspace* staff and the *headspace* Advisory and Reference Group (hART).

A brief desktop review of literature was undertaken. In summary:

- Young adulthood is a significant period of rapid development coinciding with lifestyle changes, such as living situation (e.g., moving out of home), work/study status, social environment, and financial situation.
- Young adults have the poorest diet quality compared to any other age group.
- Mental health conditions affect one in five young people.
- Nutritional problems are more prevalent in individuals with mental health issues due to poor food choices, medications, lifestyle behaviours, poor social determinants, and behavioural problems.
- A good-quality diet, high in fruits and vegetables, is protective of mental health.

- Exercise is an effective treatment for people with acute or chronic mental illness.
- Exercise has been shown to improve mental health via changes to the structural and neurobiological composition of the brain, psychosocial mechanisms (including social connectedness, autonomy, self-acceptance, and mastery), and behavioural mechanisms (including improved coping skills and sleep hygiene).
- Individual behaviour change techniques (e.g., goal-setting) can be helpful.
- A combination of diet and physical activity interventions is more effective against preventing youth obesity than diet alone, with mindfulness approaches more effective in preventing eating disorder risk factors.
- There is growing evidence to support service-embedded nutrition and exercise interventions. Programs with accredited allied health staff have better outcomes than those with non-allied health staff.
- Although there is policy support and growing evidence for healthy eating and physical activity to improve youth mental health, there is limited evidence of on-the-ground implementation of systemic programs, referral pathways, and services specifically in the Australian youth mental health context.

Phase 2 - Staff Training

The project team developed, delivered, and evaluated three half-day training sessions aimed at increasing the capacity of *headspace* staff to deliver best-practice interventions aimed at improving nutrition and physical activity. Sessions were designed with input from *headspace* staff and best practice from the literature.

Sessions included topics such as: current guidelines; links between nutrition, physical activity, and mental health; the role/scope of health professions (e.g., dietitian, exercise physiologist etc); useful apps; nutrition; label reading; and nutrition “myth busting”.

The training was formally evaluated (with ethics approval) using brief interviews. Most staff found the sessions helpful, with some wanting more detailed information about mechanisms between nutrition, physical activity, and mental health. Staff varied in the perspectives of their scope of practice relating to nutrition and physical activity interventions, and often prioritised psychosocial wellbeing during sessions.

Referrals to exercise and nutrition professionals varied across the staff post-training; however, this related to known cost barriers for young people in the local area.

Phase 3 - Research Study

The aim of the research study was to collect data related to: food and physical activity understanding, beliefs, and behaviours; barriers and enablers to healthy eating, physical activity; and how and from whom young people attending *headspace* want to access information.

A mixed-methods study (online survey, interviews and a focus group) was ethically approved and undertaken with *headspace* Launceston clients aged 15-25 years, and hART members. Participants were recruited through *headspace* and via Facebook advertising.

In total, 30 surveys, 4 individual interviews and 1 focus group (involving 4 individuals) were completed.

Overall, there was strong recognition of the importance of food and physical activity behaviours on mental health status. Participants had a general awareness of healthy eating and physical activity guidelines but limited awareness of details, and most were not meeting recommendations for either. This was compounded by confusing messages, particularly about healthy eating on social media.

Participants identified multiple barriers and enablers to improving healthy eating and physical activity beyond knowledge. Participants felt that *headspace* could play a larger role in supporting clients around healthy eating and physical activity.

Phase 4 - Program and Service Mapping

In this phase there were three components: local mapping of services that offer nutrition or exercise interventions and local programs/resources; investigation of other *headspace* models nationally that include nutrition or exercise interventions; and a brief exploration of potential online applications (apps) to support young people with healthy eating and physical activity.

Local Mapping

Nine (9) dietetic services were identified locally, with none offering Medicare bulk billed services. Eight (8) local Exercise Physiologist services were identified, with 1 offering bulk billed services and another only charging the gap fee for the first session.

Five (5) additional community programs/resources that *headspace* clients could potentially access for free included Richmond Fellowship, Active Launceston, Diabetes Tasmania, the Child Health Association Tasmania, and the Butterfly Foundation.

headspace Models

Nationally, 22 *headspace* centres were identified as offering access to a dietitian and/or exercise physiologist. Of these, 6 responded to inquiries about their model. All 6 offered dietetics services only. Dietetics services were funded in varying ways, including core funding, fundraising, and Medicare bulk billing.

Applications

A UTAS student-led sub-project was undertaken to source, quality assess and provide recommendations for online applications (apps) focusing on physical activity and healthy eating to support mental health suitable for *headspace* Launceston clients. In total, 30 apps were reviewed, with 5 physical activity and 5 healthy eating apps recommended based on high quality scores.

Recommendations

Recommendations have been collated under four main areas: Client Considerations; Staff Considerations; Implementation of a Dietetics Service; and Potential Service Collaborations. A detailed rationale is discussed in the Recommendations section.

Client Considerations

Recommendation 1: That *headspace* staff regularly initiate conversations with clients about healthy eating and physical activity as part of standard service delivery.

Staff Considerations

Recommendation 2: That *headspace* staff familiarise themselves with and consider the use of apps as tailored to needs of clients.

Recommendation 3: That *headspace* staff be aware of, maintain, or implement use of recommended behaviour change techniques when working with *headspace* clients.

Recommendation 4: That scope of practice in relation to healthy eating and physical activity interventions be further clarified for all *headspace* staff.

Recommendation 5: That new staff be offered the training resource pack on healthy eating and physical and referral pathways as part of orientation.

Implementation of a Dietetics Service

Recommendation 6: That *headspace* management contact other *headspace* centres identified in this report to help with the implementation of the new dietetics service.

Recommendation 7: That *headspace* management contact the Keeping Body in Mind team to discuss the service models and implementation learnings.

Recommendation 8: That *headspace* incorporates additional role functions when implementing a dietetics service.

Recommendation 9: That *headspace* evaluates the new dietetics service.

Potential Service Collaborations

Recommendation 10: That *headspace* management proactively seek further discussion with community organisations identified within this report.

Recommendation 11: That referral information for free community programs identified within this project be embedded and tracked consistently across service delivery.

Project Background

Healthy eating and physical activity habits during adolescence help support normal growth and development and underpin the establishment of lifelong health and wellbeing. The eating habits of many young people are inconsistent with dietary recommendations and, along with sedentary physical activity levels, escalate risks of current and future obesity, type 2 diabetes and mental health issues. Mental health conditions predominantly emerge during adolescence and early adulthood. People with a mental health condition are more likely to be overweight and have metabolic complications.

Emerging research has demonstrated that healthy eating patterns (e.g., Mediterranean-style diets), based on whole grains, fruit and vegetables, lean protein and nuts, contribute to reducing obesity and metabolic chronic diseases, and to improving mental health. Early nutrition and physical activity interventions for young people at risk of developing a mental health condition are needed.

Cornerstone Youth Services (CYS) provides social and emotional support for young people with mild to moderate mental health conditions in the greater Launceston area. CYS professionals reported a need for: 1) developing their capacity to provide brief, nutrition-related interventions; 2) greater access to referral pathways and arrangements with community and government organisations that provide specialist nutrition support; and 3) greater understanding of how they can use evidence-based resources to evaluate a client's dietary habits and provide up-to-date advice about eating for health and wellbeing. CYS is uniquely placed to support healthy eating in this at-risk target group.

CYS secured a \$47,000 grant from the Healthy Tasmania Fund to increase its capacity to deliver best practice interventions aimed at improving both nutrition and mental health, and reducing obesity risk. CYS approached the University of Tasmania's School of Health Sciences (SHS) and Centre for Rural Health (CRH) to manage the full project.

Drawing on their multidisciplinary expertise (including nutrition and dietetics, clinical and health psychology, exercise science, exercise physiology, and physiotherapy), the project team proposed to enhance the existing project brief by incorporating physical activity across all elements of the proposed project. Physical activity is well recognised as an essential component of physical and mental health and wellbeing.

Project Overview and Scope

The overall aims of the project were to:

- increase capacity of CYS staff to deliver best-practice interventions aimed at improving nutrition, physical activity and mental health, and reducing obesity and associated metabolic complications risk;

- increase understanding about healthy nutrition and physical activity, and the behaviours and needs of young people accessing CYS services;
- increase opportunities for CYS to collaborate with external service/programs to support enabling healthy nutrition, physical activity and obesity prevention for CYS clients; and
- identify barriers and potential enablers for CYS clients accessing nutrition and physical activity supports.

This project consisted of four Phases (see Appendix 1 for details).

Phase 1 - Planning, Consultation and Literature Review

Phase 2 - Staff Training

Phase 3 - Research Study

Phase 4 - Program and Service Mapping

Specific outputs included:

- Project Plan
- A package of Training Resources and Materials
- Progress Report
- Final Report

Please note that, as the project focused specifically on the Launceston *headspace* service, we will refer to *headspace* rather than CYS in the body of the report.

Project Governance

The project team met fortnightly, with *headspace* management attending monthly, or fortnightly as needed, during the project. *headspace* management also received regular email updates from the project lead.

All research activities within the project were conducted in line with UTAS research ethics protocols and procedures. Any face-to-face activities were conducted in line with COVID safe procedures.

Project Context

Several contextual factors influenced the project, including national approaches and policies, as well as pragmatic factors.

National Context

The 5th National Mental Health and Suicide Prevention Plan (Appendix 2) commits to a nationally agreed set of priority areas and actions that are designed to achieve an integrated mental health system and that will be used to build a stronger, more transparent, accountable, efficient and effective mental health system¹. Priority

Area 5 (Improving the physical health of people living with mental illness and reducing early mortality) identifies individuals living with a mental illness as having significantly poorer physical health. Mental Health and physical health research have grown notably in the last few years, with the publication of censuses and guidelines aimed at improving the physical health outcomes of those living with a mental illness. These include:

- Equally Well Consensus² (Appendix 3)
- A Blueprint for Protecting Physical Health in People with Mental Illness: Directions for Health Promotion, Clinical Services and Future Research – The Lancet Psychiatry Commission³ (Appendix 4)
- Keeping Body and Mind Together: Improving the Physical Health and Life Expectancy of People with Serious Mental Illness - The Royal Australian and New Zealand College of Psychiatrists⁴ (Appendix 5)

Joint Position Statement

The Dietitians Association of Australia, Exercise & Sports Science Australia and the Australian Psychological Society⁵ jointly endorse (Appendix 6):

- increased access to dietary and exercise interventions in addition to evidence-based psychological and medical treatment for individuals experiencing mental illness;
- regular screening and ongoing monitoring of both physical and mental health for people experiencing mental illness;
- where indicated, referral to appropriately qualified allied health professionals to address lifestyle issues and physical health needs; and
- strengthening referral networks and collaboration between core professionals in the mental health treatment team.

The Impact of the COVID-19 Pandemic

The project was implemented throughout 2020, during which time the Tasmanian Government enforced COVID-19 public health restrictions. The Tasmanian health service landscape experienced significant disruption during the COVID-19 lockdown period; for example, *headspace* transitioned to offering telehealth to clients during this time. Concurrently, University of Tasmania (UTAS) restrictions were placed on conducting projects and research activities face to face, in line with public health guidance. There were also delays in appointing research assistants. COVID-19 also impacted on attendance at face-to-face training sessions for both staff and one presenter (who used Zoom to deliver one session).

With the *headspace* service focusing on adapting service delivery through COVID-19 and the UTAS delays, the project timelines were adjusted and adapted to suit the needs of *headspace* and avoid overburdening the service at a challenging time. In response, the project team requested and was granted a timeline extension on the project to 30 June 2022.

headspace Management Changes

Midway through the project, the *headspace* service manager resigned from the position. This manager had been the main conduit and collaborator on the project. The new manager was briefed on the project progress, and offered excellent support and input, and significantly contributed to the project's successful completion.

Dietetics Service

In the late stages of the project, a local dietetics practice approached *headspace* and was contracted to deliver services. Findings from the program-mapping component of the study will help inform *headspace* how best to implement this service, based on models used by other *headspace* services.



Phase 1 - Consultation and Literature review

Consultation

The first phase of the project involved consulting with *headspace* management about project phases, and planning and conducting a desktop literature review to examine current evidence-based approaches for supporting healthy eating and physical activity for young people attending youth mental health services.

Overall, as an impetus for this project, *headspace* management had anecdotally identified a significant local gap for referring clients to bulk billed or low-cost private dietitians and exercise professionals. Although *headspace* referred clients to one exercise program based at the Policy and Community Youth Club (PCYC), there was limited awareness of other community program options.

Literature Review

Overview

To most effectively explore the issues surrounding healthy eating and physical activity needs for young people accessing mental health service, a desktop literature review was conducted. This included searching electronic databases for published work on youth mental health and a search of grey literature. Search terms and key words included “mental health”, “community nutrition programs”, “community exercise programs”, “youth” and “*headspace*”.

Young People and Mental Health

Young people (aged 12-24 years) make up 13% of Australia’s population⁶. This is a key period in a young person’s life, as it is a time of rapid development and a critical period for developing good physical and mental health. When young people are in good health, they can successfully transition into full-time work, develop healthy lifestyles, and experience fewer challenges in life⁷. However, mental disorders are one of the most common conditions affecting children and adolescents, with 13.9% of people aged 4-17 years reporting mental disorder in the past 12 months⁸. Worldwide, mental illnesses cause more disability than any other illness in young people⁹.

A growing body of research links obesity to a higher incidence of mental health problems, such as depression and anxiety, in this age group¹⁰. Estimates from the ABS National Health Survey 2017-18 found that, while young people highly valued their physical and mental health¹¹, more than 41% (1.3 million) were overweight or obese¹². The relationship between obesity and mental health is complicated and involves many factors including both diet and physical activity.

During young adulthood, a time of rapid development, there is evidence of rapid weight gain, which coincides with marked declines in physical activity (PA) and dietary habits. Globally, young adults (aged 20-29 years) have the lowest diet quality compared with any other age group¹³. These negative behavioural patterns are

attributed to key transitional changes that occur during young adulthood, including changes in:

- living situation (i.e., moving out of home);
- social environment and influences (i.e., developing stronger peer networks and partner relationships);
- employment status (i.e., starting tertiary education);
- financial situation (i.e., becoming more financially independent).

Poor diet quality is one of the leading causes of mortality and disability worldwide; therefore, intervening while adults are still young is central to preventing noncommunicable chronic diseases and supporting healthy ageing¹³.

Healthy Eating and Mental Health

Nutritional problems are more prevalent in individuals with mental health issues due to a variety of reasons, including poor food choices¹⁴, medications¹⁵, lifestyle behaviours¹⁶, poor social determinants and behavioural problems¹⁷. Evidence suggests that good nutrition is essential for our mental health and that a number of mental health conditions may be influenced by dietary factors¹⁸

Strong associations have been established between unhealthy dietary patterns and poorer mental health in young people¹⁹. It is theorised that young people may either eat poorly as a form of self-medication, or that poor quality diets lack sufficient nutrient-dense foods, leading to nutrient deficiencies associated with mental health issues¹⁹. Diets high in ultra-processed foods that are high in salt, sugar and fat are now suggested to negatively affect the development of the brain^{20, 21}. Conversely, studies also suggest that a good quality, healthy diet – high in fruits and vegetables – can be protective of mental health^{22, 23}, reducing the likelihood for such problems in this population.

Physical Activity and Mental Health

Young adulthood is a period of not only physical development, but also psychological development. There is also growing evidence that exercise is an effective treatment for people with acute and chronic mental illness, with some studies suggesting that exercise is just as effective, if not more effective than medications, in reducing depressive symptoms²⁴, anxiety and stress symptoms²⁵. Exercise is now recommended as a key element of mental health treatment. Even one exercise session per week has been shown to have significant benefits in improving mental health in the acute and long term. Exercise can improve mood and offset negative side effects of common medications for mental illness, including improving body composition (lean muscle and reduced fat mass), blood pressure, cognition, and memory²⁶. There is good evidence that young adults are more likely to begin or continue to participate in physical activity and organised sport if friends and/or family also participate on a regular basis. The social connectiveness that results from this participation is invaluable for a young adult's mental and physical health.

Exercise has been shown to improve mental health via changes to the structural and neurobiological composition of the brain²⁷. Such changes encompass psychosocial

mechanisms, including improved social connectedness, autonomy, self-acceptance, and mastery²⁸, and behavioural mechanisms, including improved coping skills and sleep hygiene²⁹.

Behaviour Change Techniques

A common approach to supporting individuals to make behaviour changes is the use of Behaviour Change Techniques (BCTs). A BCT is defined as an “observable, replicable, and irreducible component of an intervention designed to alter or redirect causal processes that regulate behaviour; that is, a technique is proposed to be an ‘active ingredient’ of an intervention”³⁰.

A literature search did not find a review paper specifically focusing on supporting healthy eating and physical activity for youth accessing mental health services. Therefore, outcomes of reviews of interventions for general youth on preventing weight gain^{31, 32}, improving diet^{33, 34} and addressing obesity³⁵ were examined.

Overall, there was limited evidence for one-off/short-term, individual BCT-focused interventions for long-term behaviour change. In a review of 12 systematic reviews of interventions targeting the prevention and treatment of overweight and obesity in adolescent populations³⁵, there was some evidence to advocate for behaviour change interventions to improve Body Mass Index (BMI) and reduce weight in overweight/obese adolescent populations. However, “behaviour change interventions” were difficult to define due to multi-components/variations in reporting/under-reporting of intervention details. Several individual BCTs were, however, identified in the literature as having the potential to support effective change (see Table 1).

The combination of diet and physical activity interventions was shown to be a more effective tool against preventing youth obesity than diet alone³². Mindfulness-based approaches seemed to be more effective in preventing eating disorder risk factors (such as body image concerns and weight-control behaviours) and, as a consequence, would help maintain a healthy weight status and support wellbeing. In addition, social adjustment and anxiety are important components for weight-related prevention trials and should directly focus on improving interpersonal functioning and negative mood states³².

Interventions also need to be tailored and consider population context³⁴. A review of BCTs for reducing soft drink consumption in disadvantaged adolescents reported no effectiveness and concluded that one-size-fits-all interventions that are delivered in the same way to advantaged and disadvantaged groups may unintentionally lead to intervention-generated inequalities.

Services and Systems-Based Interventions

There is growing evidence to support lifestyle (nutrition and exercise) interventions and/or programs to be embedded into mental health services. Research has shown that programs using accredited allied health staff have better outcomes than those delivered by non-allied health staff³.

Table 1. Summary of Helpful Behaviour Change Techniques

Behaviour Change Technique	Example
Goal-setting	Setting a goal of eating two pieces of fruit per day
Self-monitoring	Tracking how many cans of Coke are consumed each day
Social reward	Organising a dinner out with friends to celebrate reaching a goal
Self-reward	Buying a new pair of shoes after reaching a goal
Social support	Organising a friend to go for a walk
Pre-planning	Packing gym clothes in the car to go to the gym straight after work
Action planning	Writing plans of when and where to consume an extra piece of vegetable per day for the next week
Problem-solving/barrier identification	Finding an indoor venue to walk in for rainy days
Habit formation	Prompting participants to fill half of their plate with either salad or cooked vegetables each night at dinner
Information about health consequences	Providing participants with morbidity and mortality statistics from related health conditions
Saliency of consequences	Presenting visual images of the negative consequences of eating unhealthily; e.g., blocked arteries
Adding objects to the environment	Provide participants with a free fruit and vegetable box to facilitate healthy eating

In Australia, a leading program is Keeping Body in Mind (KBM)³⁶. This program was developed to address cardiometabolic health issues for mental health consumers. KBM teams are based at Bondi, Maroubra, St George and Sutherland in New South Wales. Each team consists of a nurse, exercise physiologist, dietitian, and peer support worker. KBM is funded through the Southern Eastern Sydney Local Health District.

KBM uses an evidence-based model of care, providing a 12-week individualised program to support changes to diet, exercise, smoking, sleep, and stress, and to equip consumers with skills to sustain changes. Referrals to attend KBM can be made by clinicians or case managers³⁶.

In results obtained at two years post-trial, KBM participants had an increase in weight and waist circumference of 1.8 kg and 0.6 cm, respectively. Seventy-five percent of participants did not experience clinically significant weight gain. Discretionary food intake and glycemic load were 40% (1421 kJ/day) lower and 27% lower at two years, respectively, compared to baseline. Sodium intake was 308 mg/day lower at two years, compared to baseline³⁶.

Some international examples include the STRIDE program (Canada)³⁷ and the In SHAPE program (USA)³⁸. The STRIDE program is a two-phase program over 12 months (six months intervention and six months maintenance). The program uses a

multidisciplinary approach and includes nutrition intervention (DASH diet) and exercise (minimum of 20 minutes per week).

Results from this program included weight loss at six months, regardless of the antipsychotic medication use. Specifically, 36% of clients maintained >5% weight loss at 18 months and declines in fasting blood glucose levels and hospitalisation³⁷.

Similarly, In SHAPE provides one-on-one individual consultations with the clinical psychologist, dietitian, and fitness mentor. In results at 12 months, 49% of participants had achieved clinically significant weight loss or improvements in their cardiorespiratory fitness (24% had achieved both)³⁸.

Conclusion

Although there is policy support and growing evidence for healthy eating and physical activity to improve youth mental health, there is limited evidence of on-the-ground implementation of systemic programs, referral pathways and services specifically in the Australian youth mental health context.

Recommendations

Please see pages 56-58.

Phase 2. Staff Training Sessions

Approach

The aim of the three half-day staff training sessions was to increase the capacity of *headspace* staff to deliver best-practice interventions aimed at improving nutrition, physical activity and mental health, and reducing obesity risk.

Training sessions were designed by the project team using two sources. First, current evidence-based approaches from the literature search and, second, feedback from *headspace* staff who were consulted during a one-hour informal focus group to determine topics and education needs (see Appendix 7 for staff feedback).

Feedback was also sought after the first two sessions to co-design the third session. A training resource pack (separate file) was developed, including PowerPoints and additional resources for each session.

Staff communicated a range of interest and experiences relating to the topic and requested a range of levels of educational needs. For example, some wanted to understand current government guidelines, while others wanted information on specific topics. See Table 2 for the topic guide for staff training sessions.

Table 2. Overview of Staff Training Sessions

Session 1	Topics
Presenters: Exercise Physiologist Physiotherapist	<ul style="list-style-type: none"> • National Physical Activity Guidelines • Checking for Understanding • Physical Activity and Mental Health • Intervention Strategies • Exercise professional and Referral – Exercise physiologist, physiotherapist, personal trainer • Homework – try out a Physical Activity app
Session 2	
Presenters: Clinical and Health Psychologist Dietitian Nutritionist	<ul style="list-style-type: none"> • Review of Physical Activity app • National Dietary guidelines • Portion Sizes • Behaviour Change Techniques for Obesity/Diet • Mental Health and Nutrition • Scope of Practice and referring on – dietitian, nutritionist, naturopath • Homework – try out a Nutrition App
Session 3	
Two Dietitians Clinical and Health Psychologist	<ul style="list-style-type: none"> • Review a nutrition App • Food Label Reading • Social media myth busting • Current Community Programs available in Launceston

Training Attendance

Thirteen staff and one student (on placement) attended at least one of the three sessions. Attendance ranged between 9-12 individuals at each session, with eight staff attending all three sessions. Disciplines included social work, psychology, occupational therapy, medicine, and nursing.



*note all staff gave permission to be photographed

Feedback

The staff evaluation approach was developed in consultation with *headspace* management and in consideration of time pressures on *headspace* staff. A low-risk ethics application was approved to undertake the evaluation (see Appendix 8). Staff were invited to participate in a brief phone interview, during work time, with a member of the project team who had not delivered any of the training sessions. If staff were unable to participate in the phone interview, they were invited to respond via email to the interview questions with as much or as little information as they wished.

Initial attempts at recruitment for the evaluation via email invitation were not successful. In response, the *headspace* manager allowed time for staff to participate within their usual weekly staff meeting time, if they chose to, prioritising staff who had attended all three sessions.

Staff were offered a prompter of the topics covered in each session as a reminder, and a semi-structured interview guide (see Appendix 9) was used to elicit information. Interviews were recorded, then transcribed. Staff were offered the opportunity to review/edit their transcript.

Data Analysis

Data was analysed using a deductive or “top-down” approach, where key questions related to the outcomes of the training were developed and staff responses organised into theme areas for each, noting the strength of responses across the sample.

Findings

In total, seven staff members participated (six face-to-face interviews and one written response).

What was helpful?

The majority of staff found the workshop content helpful. Staff particularly valued revising the healthy eating and physical activity guidelines, the links between mental health, healthy eating and physical activity, benefits and risks of different foods and the practical aspect of label reading. Staff also appreciated understanding the roles and scope of practice of health professionals and evidence for healthy eating and exercise for people with mental health conditions.

those guidelines and some of those links directly to mental health...I've got a broad understanding that good nutrition is helpful for mental health, but I think that was helpful to get a bit more depth to it and having the evidence-based research was really important too...and you know, having the references and being able to look at that – Participant 1

Some staff also found the presentation on apps to be helpful; several have since recommended these to clients. Others were uncertain about the apps. Attitudes towards using the apps appeared to relate to personal comfort levels and interest.

Some staff (especially those who had significant background experience/interest in the topic area) requested more in-depth information on the “mechanisms” linking food, physical activity, and mental health (e.g., inflammation), so as to be better able to respond to clients asking “Why?”.

How did the training impact practice?

Impact of the training on daily practice varied. Many staff felt the training consolidated and reinforced previous existing knowledge. Several staff felt they learnt and implemented new skills. Examples that staff provided included: the use of the “habit stacking” strategy, delivering psychoeducation about physical activity and healthy eating, how to read food labels, explaining different types of fats, and exercise intensity.

Well, the habit stacking, I have incorporated to an extent. Behavioural change is a big part of helping people to create the changes in this role. So as far as, you know, starting with one thing and building on, but I felt like it was something that was useful – Participant 2

In terms of increasing skills in the number of referrals on for healthy eating and physical activity support, a limited number of staff had referred clients to dietitians or exercise professionals since completing the training. Some staff reported that



they were already referring clients on to dietitians. However, staff noted that cost was a barrier to referring clients on.

A minority of interviewees felt the training did not add to their existing skill set due to already practising within their (perceived) scope of practice regarding healthy eating and physical activity.

What have been challenges to implementing skills?

Staff identified several barriers to implementing techniques to support healthy eating or physical activity changes during client sessions. A major consideration was staff members' perspectives of their own scope of practice, which varied.

It's great for us to know, like, kind of the basics and, like, what is recommended and what is considered too much fat or to avoid it and what kind of choices are better. Like, the myths that was kind of good as well. But I don't tend to do that work with young people. Yeah. Like, we're usually focusing more on their mental health. You know, not really, like, on kind of their choices of food – Participant 6

Some staff focused mainly on psychosocial aspects during sessions; others felt referring on was more appropriate. Limited time to discuss healthy eating and physical activity was seen as a barrier, as were the client's priorities, level of interest, and engagement during sessions.

...but if we have six sessions with a client and I've got one on exercise and then one on dietary intake, it doesn't leave many more to talk about trauma – Participant 4

Were the training logistics acceptable?

Overall, staff were happy with the length of time to undertake the training, venue, catering and mix of activities. Staff felt the presenters were knowledgeable and accessible and appreciated the “non-lecturing”, conversational delivery style. Due to COVID-19 restrictions, one session required a presenter to Zoom in and there were

technical issues. Overall, staff preferred the face-to-face mode of training and appreciated the opportunity to spend time with their team.

I always prefer face to face. In the second session a presenter was required to zoom in; however, there were lots of connection issues and this was slightly frustrating as information wasn't covered how it was meant to. The face-to-face sessions allowed more interaction with others and provided greater opportunity for reflection and discussion – Participant 7

What other information do staff want?

Staff expressed interest in learning more detail about links between mental health, physical activity, and healthy eating. A minority were interested in body image and weight gain and alternative approaches to healthy eating.

Staff were also interested in having simple resources to hand out to clients during sessions (e.g., a card to take shopping, visual examples of portion sizes) and more programs to refer clients on to, particularly to support healthy eating. Staff also expressed a particular interest in having a dietitian on staff to support clients for internal referrals.

Recommendations

Please see pages 56-58.

Phase 3. Research Study

Approach

The aim of the research study was to examine the healthy eating and physical activity related knowledge, beliefs, behaviours and needs of young people (aged 15-25) who have accessed *headspace* Launceston services in the past 12 months.

A known challenge identified by *headspace* management at the outset was the difficulty eliciting feedback from clients who accessed the service. To encourage client feedback, funds were allocated to the budget to assist in engaging young people with the study. Participants were offered a \$5 drink voucher as immediate compensation for their time after completing the survey. They were also invited to enter a draw for one of thirty \$50 gift cards and one Fitbit Aspire (valued at \$130) at the end of the study. Young people who participated in the interview or focus group received an additional \$20 gift card.

Method

Design

The research was designed in consultation with *headspace* management with feedback from staff and the hART. The study included quantitative (brief online survey) and qualitative (one-to-one interviews and a focus group with the hART) approaches. These mixed methods offer depth of qualitative understanding, providing rich data from which to develop patterns, themes and experiences³⁹ and the reach of quantitative measures⁴⁰.

Ethics

There were significant ethical considerations regarding obtaining consent from young people to participate in the study. In balancing the need to elicit information directly from young people, with potential barriers such as need for parental consent, the decision was made to target *headspace* clients aged 15-25 years. The rationale for this is that those aged 15-17 years could reasonably self-assent for the study, given they are able to access *headspace* services without parental input (if deemed competent by a clinician).

Furthermore, as young people living under guardianship were not able to self-assent (due to legislation), an additional screening question was embedded to invite them to contact the research team directly to organise consent.

To increase confidence that those aged 15-17 were giving informed consent, a video explaining the study was provided. Additionally, two screening questions had to be answered correctly in order to participate.

Safety was paramount, so no questions that were considered potentially distressing or sensitive were included in the survey or interview, and the interviews/focus

groups were conducted by a clinical and health psychologist. The research materials were reviewed by *headspace* before submission for ethics approval.

The study received ethical approval from Human Research Ethics Committee of Tasmania (see Appendices 10 and 11 for study materials, survey and interview guide).

Participants

Eligible participants included:

- young people, aged between 15-25 years, who had attended at least one appointment with *headspace* within the last 12 months; and
- members of the *headspace* Advisory Reference Team aged 15-25 (hART; consisting of young people who offer advice on *headspace* service delivery).

Participants were excluded if they were:

- not a *headspace* client or hART member;
- attended *headspace* more than 12 months ago; and/or
- were current *headspace* clients aged 12-14 years.

Data

Data was collected relating to:

- quality of food intake, understanding of healthy food choices and food accessibility;
- understanding of physical activity requirements for maintenance of health, current levels of physical activity and types of activity undertaken;
- attitudes toward mental health, healthy eating and physical activity;
- how young people currently access information about nutrition and physical activity and how they would prefer to access this information;
- barriers and enablers young people experience when needing/accessing nutrition and physical activity supports; and
- demographics, including age, gender, mental health diagnosis, *headspace* service access, and living situation.

Data was collected through two methods:

Online Survey

The online survey was developed using adapted measures from existing validated tools, and questions were developed specific to the study aims. The survey was reviewed by *headspace* management and staff and a high school teacher. The hART members were invited to pilot the survey. The survey was simplified and shortened after feedback from *headspace* and language was set at age 12 reading level.

Interviews/Focus Group

At the end of the survey, participants could opt to leave their contact details and participate in a one-to-one interview. All hART members were also invited to participate in a focus group (or interview). The interview and focus group guide was developed from literature review findings and questions related to the study aims (see Appendix 11 for survey and guide).

Interviews and the focus group were held at *headspace* offices, by phone or online (e.g., via Zoom) at the preference of the participant and took 20-45 minutes. Interviews were conducted by a clinical and health psychologist from the research team.

Interviews were transcribed in Microsoft Word and sent to the participants to review and make any changes if they wanted, within a two-week period. Once returned, the transcripts were de-identified.

Recruitment

A recruitment strategy was developed in consultation with *headspace* management. Direct promotion of the study to current clients through mobile numbers or by mailout was not viable due to privacy concerns. Initially, it was agreed that *headspace* clinicians would promote the project during client sessions by handing out a card with the study link and a QR code (see Figure 1) during each session over a period of four weeks.

Over the first four weeks, there was minimal response to the study using this recruitment method (7 complete surveys and 1 interview request). In consultation with *headspace* management, it was agreed to use paid social media advertising. Due to project timelines, a three-week period was set to advertise the study.

Parameters on Facebook and Instagram were set to target to **15-25-year-olds living in Launceston and 53 km surrounds** (to include the known catchment area of clients). This online advertisement targeted approximately 20,000 youth in the area. Over three weeks, it reached **12,661 young people with 349 survey link clicks**.

Data collection was undertaken between February and May 2021.

Survey Findings

Data Analysis

In total, 85 potential participants attempted to enter the survey. Just over half (n=45; 53%) were unable to enter the survey, due to incorrectly answering the consent screening questions (some even had multiple attempts) or indicating they were in out-of-home care. Those who indicated they were living in out-of-home care were directed to contact the research team for consent processes (mandated under



Figure 1. Postcard used for face-to-face recruitment and the social media advertisement.

legislation and ethics); however, there were no enquiries from this sub-group of young people.

In total, 40 surveys were completed. After data cleaning, 10 surveys were excluded due to ineligibility (e.g., nil *headspace* appointments reported in the past year or outside the age parameters) or clear duplication (matched by IP address).

A total of **30 surveys** were included in the analysis. Due to this sample size, only descriptive analyses (using number and percentages) have been reported.

Demographics

There was an even range of ages across the sample. The majority of participants identified as female (67%). Nearly half (47%) were living out of home, with the majority (77%) living within the Launceston city area and engaged in study (70%).

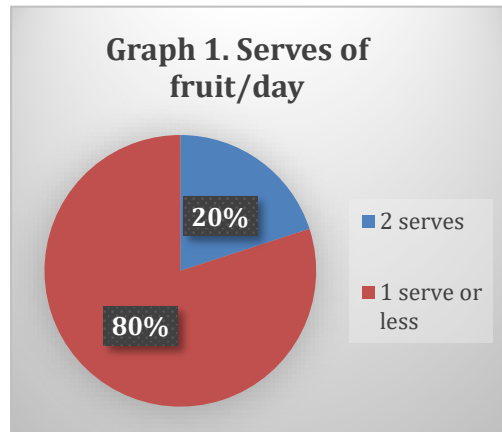
In addition, just over half (53%) worked part or full time. Most had a small number of contacts with *headspace* Launceston (60% less than 6 visits), with 7 (23%) reporting only one contact (see Table 3).

Table 3. Demographic Information of Survey Participants (n=30)

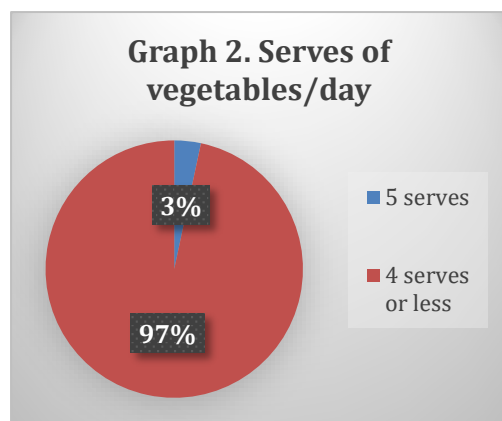
Age	Number	Percentage
15-17	11	37%
18-21	9	30%
22-25	8	27%
Unspecified	2	6%
Gender		
Female	20	67%
Male	9	30%
Unspecified	1	3%
Aboriginal/Torres Strait Islander		
Yes	2	6%
Living Situation		
Living out of home by myself or with others	14	47%
Living at home with both parents/step-parents	11	37%
I'm in short-term or unstable accommodation	2	7%
Living at home with 1 parent	1	3%
Unspecified	1	3%
Suburb/Town		
Launceston area	23	77%
Outside Launceston	4	13%
Unspecified	3	10%
Work/Study Status		
School/TAFE/Other education	21	70%
Part-time work	13	43%
Receive payments from Centrelink	10	33%
Full-time work	3	10%
Home/parenting duties	1	3%
Number of contacts with <i>headspace</i> in the past 12 months		
1-6 sessions	18	60%
7-11	3	10%
12+	6	20%
Not answered	3	10%
Mental health diagnosis		
Yes	16	53%
If yes, diagnosis		
Anxiety	13	43%
Depression	10	33%
Other: including Borderline Personality Disorder; ADHD, Autism Spectrum Disorder; eating disorder	4	13%

Food and Nutrition

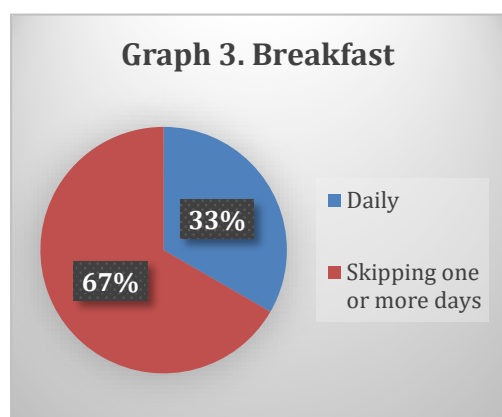
In this section, participants were asked to estimate the frequency of their fruit, vegetable, breakfast, water, sugary drinks and take-away consumption. Please note that blue sections of the pie chart indicate the appropriate guideline recommendations.



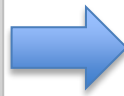
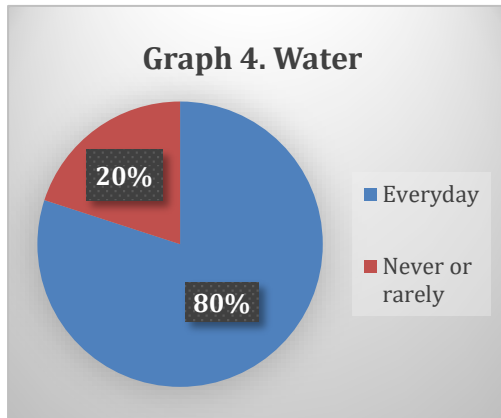
All participants (100%) who did not meet the recommendations of eating 2 serves of fruit per day reported knowing that they should eat **more fruit daily**.



Most (67%) of those who didn't eat 5 serves of vegetables per day thought they should eat **more** vegetables daily. **Some (27%)** thought they should continue to eat **below** the recommended serves each day.



57% thought they should have breakfast **more** often. **17%** who were **not** eating breakfast said they should continue with this frequency.

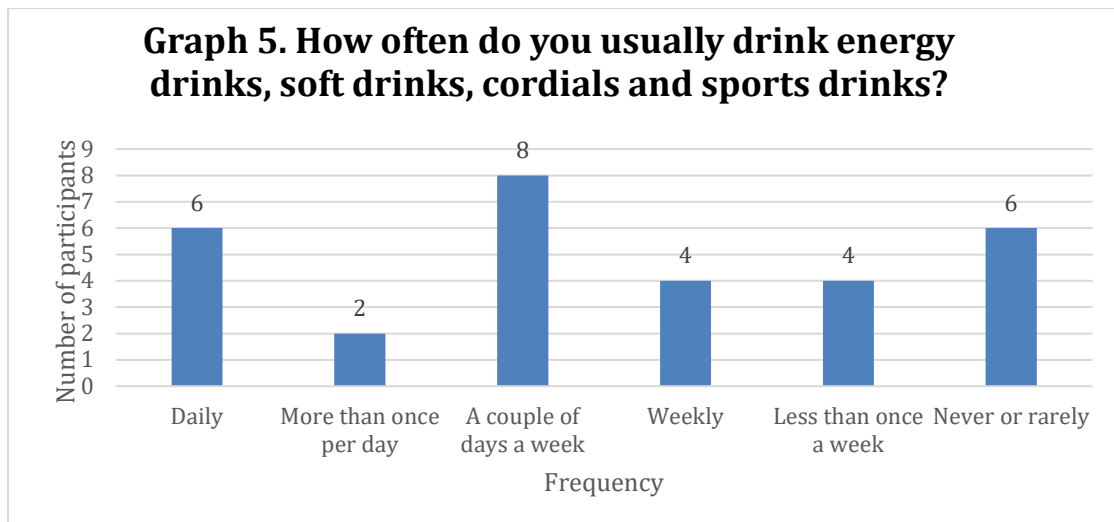


83% thought they should be drinking **more** water.

Sugary Drinks

Some (7%) participants consume drinks with added sugar daily or multiple times a day. Over a quarter (27%) consumed sugary drinks multiple times per week.

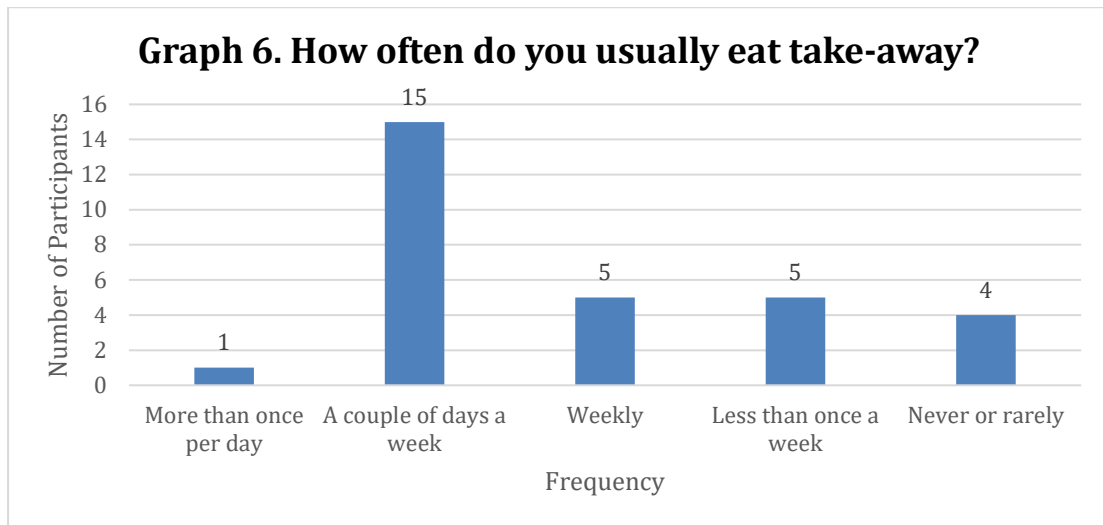
Most (70%) participants reported they should be consuming less drinks with added sugar. This included 87% (7 of 8) of participants who reported having drinks with added sugar daily or once per day.



Take-away Foods

Most (70%) participants reported having take-away each week or multiple times per week.

Less than half (47%) of the participants who bought take-away a couple of days a week to multiple times a day identified they should eat less take-away.

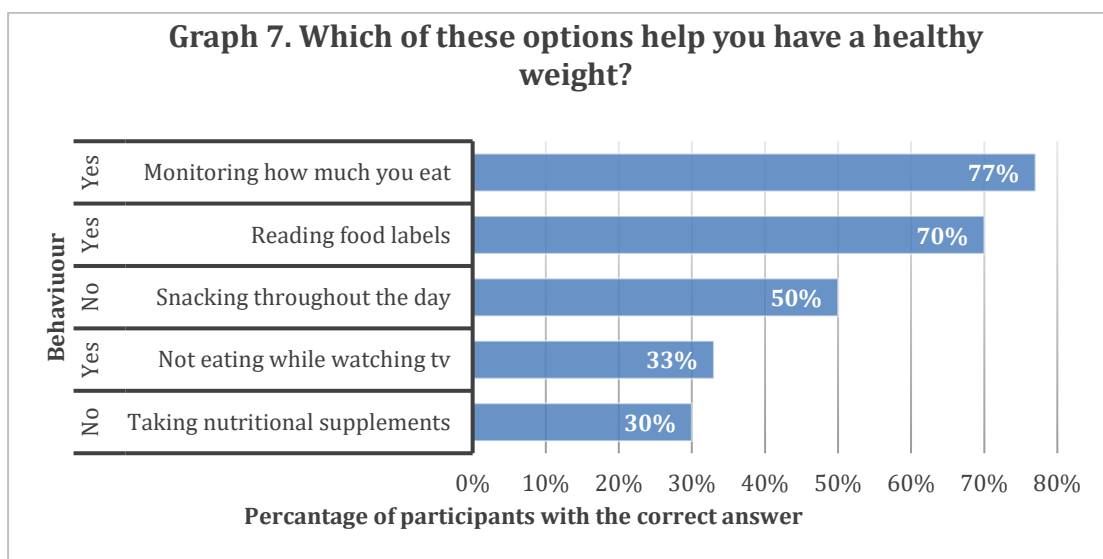


Food Insecurity

Over a third (37%) said over the past year them or their family had run out of food and not had any money to buy more.

Barriers and motivators for healthy eating

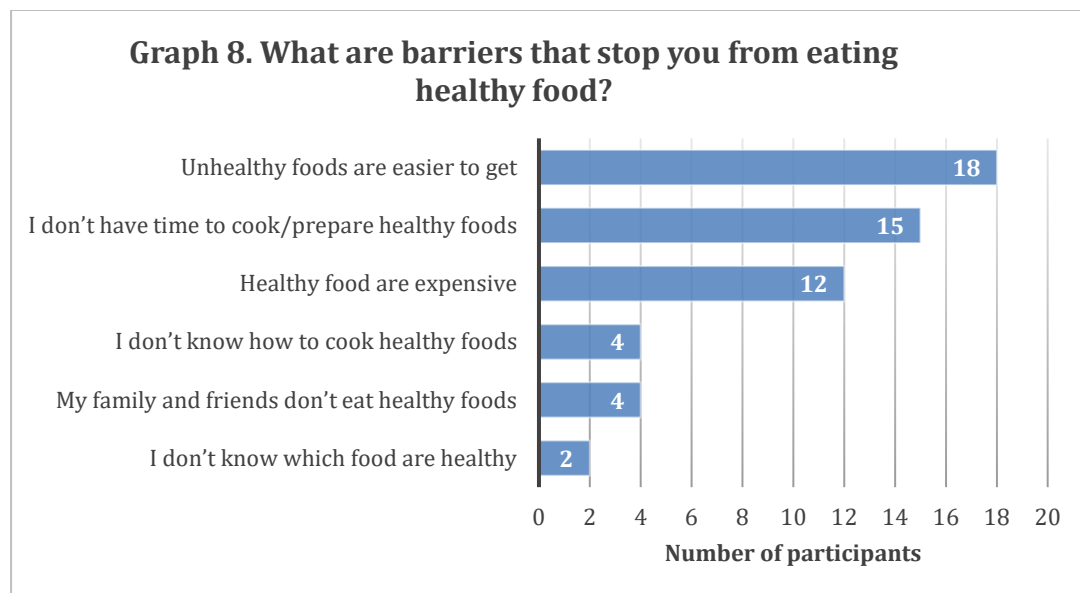
Participants were asked what helped them to maintain a healthy weight and what barriers and motivators impacted on healthy eating. Participants could choose multiple options.



Although most participants (>70%) **correctly** thought monitoring food intake and reading labels helped to maintain a healthy weight, the majority of participants also **incorrectly** thought taking nutritional supplements (70%), eating while watching TV (67%), or snacking (50%) helped maintain healthy weight.

The top barriers to eating healthy food were perception of easier access to unhealthy foods (60%), no time (50%) and perceived expense of healthy food (40%).

A third (33%) of participants identified both that unhealthy foods were easier to get and they had no time to prepare food. Only a minority (13%) reported that they did not know how to cook healthily or (7%) they did not know which foods were healthy.

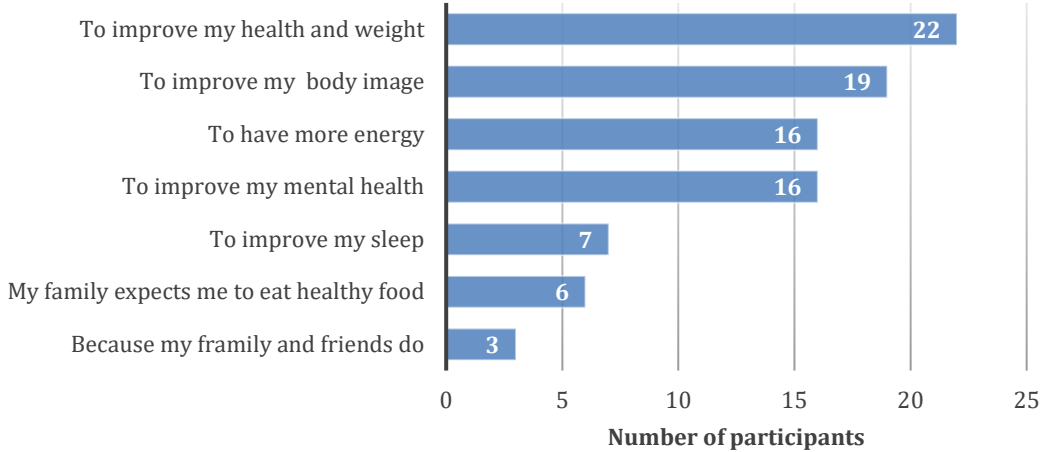


*Other written reasons included gastroparesis, no energy to cook and sensory issues.

The top motivators for eating healthy food were to improve health/weight (73%), improve body image (63%) and equally to have more energy or improve mental health (53%).

A third (33%) reported that they were motivated to eat healthily for all top three reasons; 40% reported that they were motivated to improve their mental health.

Graph 9. What motivates you to choose healthy foods?

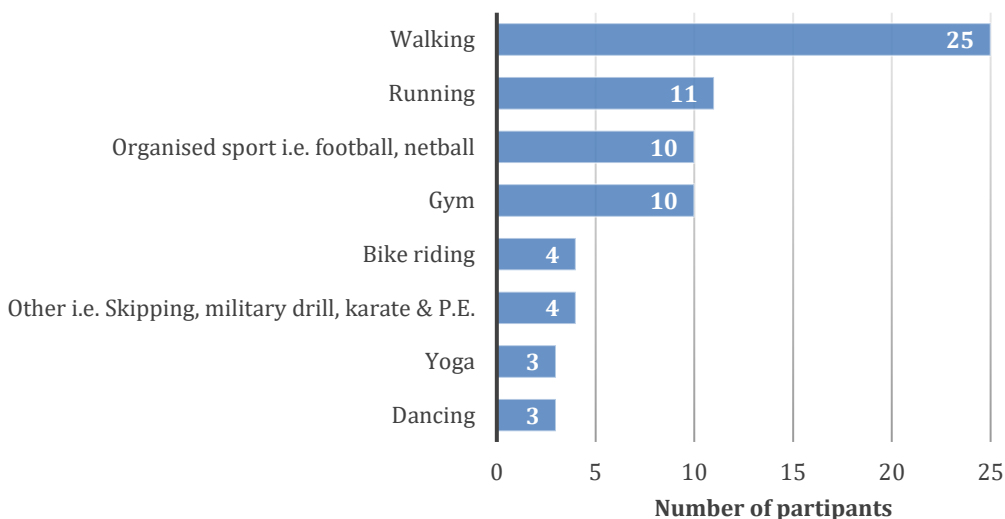


Physical Activity

In this section, participants were asked to identify the type of physical activity they did, barriers and motivators to engaging in physical activity (participants could choose multiple options), and whether they thought they should do more or less physical activity.

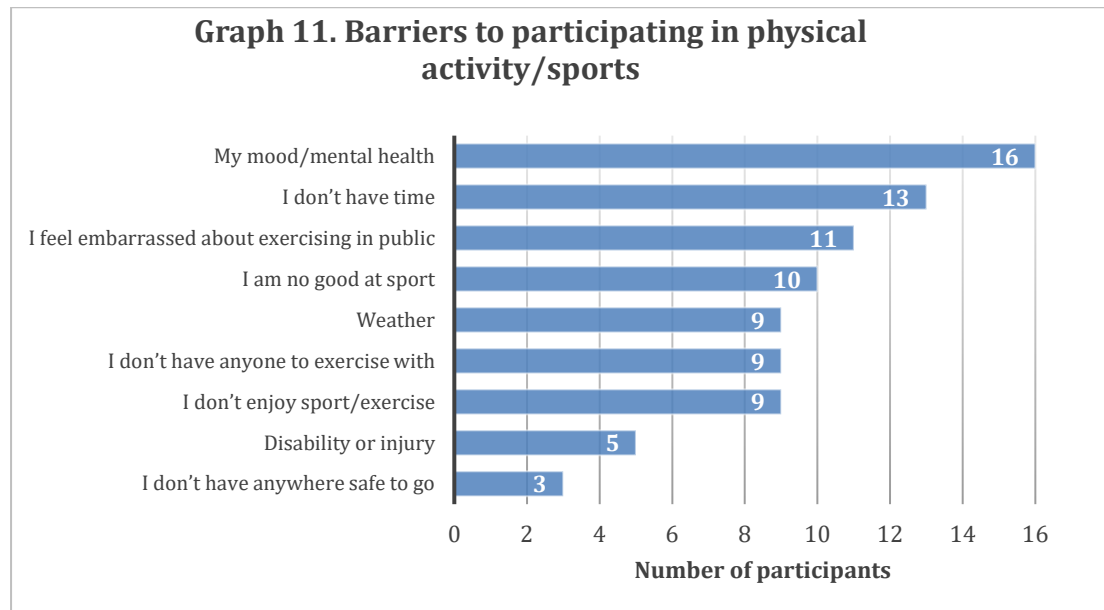
Most participants (83%) reported walking as their main form of physical activity. Nine participants (30%) both walked and ran.

Graph 10. What physical activity/sports do you usually do?

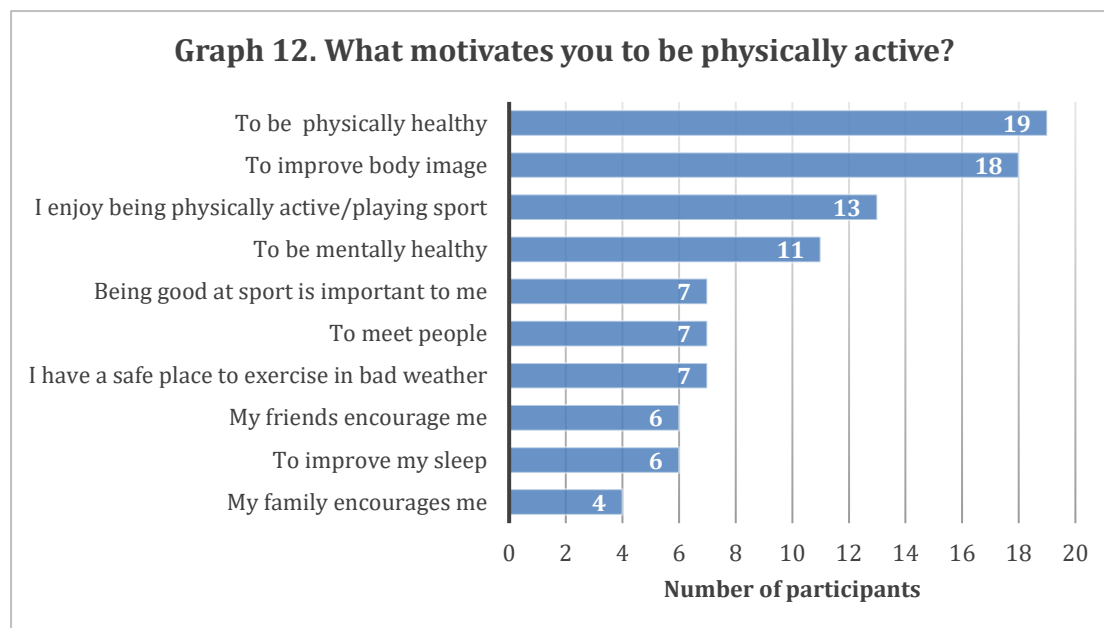


The top barriers to participating in physical activity included low mood/mental health (53%), lack of time (43%), embarrassment about exercising in public (37%) and not being “good” at sport (30%).

Of note, **no participants identified cost as a barrier** to physical activity and/or sports.



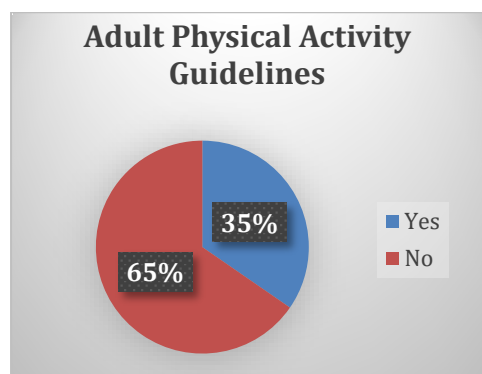
The top motivators for engaging in physical activity were to be physically healthy (63%), to improve body image (60%) and enjoyment (43%).



When comparing survey data to the national physical activity recommendations, results for those aged 15-17 years were compared against the children's physical activity guidelines and those 18+ against the adult physical activity guidelines.

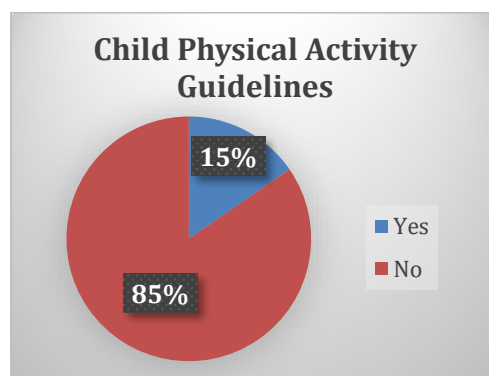
In total, 11 of the 30 participants (37%) were achieving the recommended minimum physical activity according to the relevant age-based guidelines (in blue).

For the two participants who did not give their age, neither the child nor adult guideline recommendations were met.



9/17 participants met the Adult guidelines of:

2.5 to 5 hours of moderate activity or 1.25 to 2.5 hours of vigorous activity or an equivalent combination of both.



2/11 participants met the Children's guidelines of:

60 minutes each day of moderate to vigorous physical activity

When compared to their actual activity, **16 out of 28 (57%) correctly identified** whether or not they needed to complete more activity.

Of the remaining 12, **7 (58%) believed they met the guidelines when they did not** and 5 (42%) who were **meeting** the relevant guidelines believed they needed to perform **more** physical activity each week.

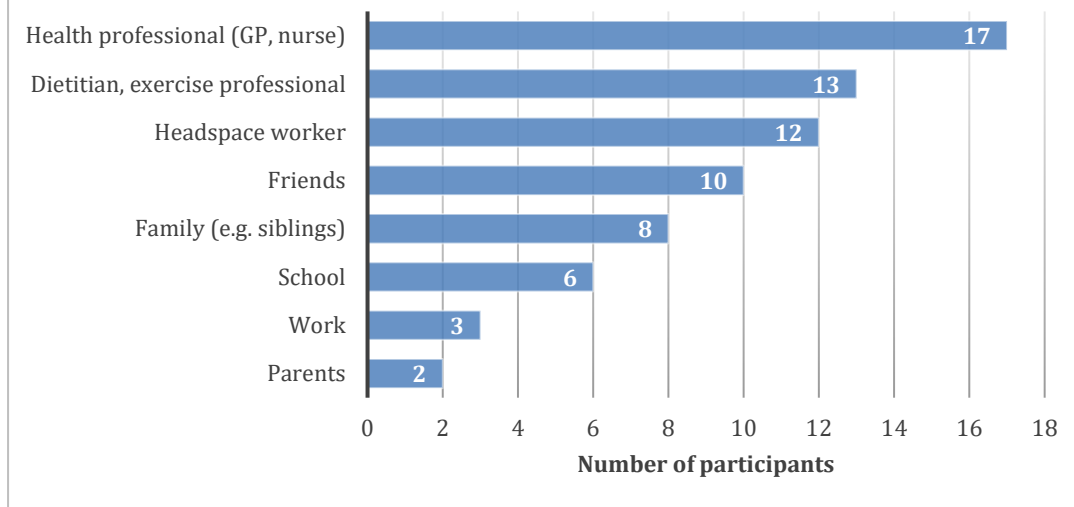
Information Communication

In this section, participants were asked from **WHOM** and **HOW** they wanted to receive information about physical activity and healthy eating.

The top three responses for WHO were: a health professional (57%) (e.g., GP) a dietitian or exercise professional (43%) and headspace staff (40%).

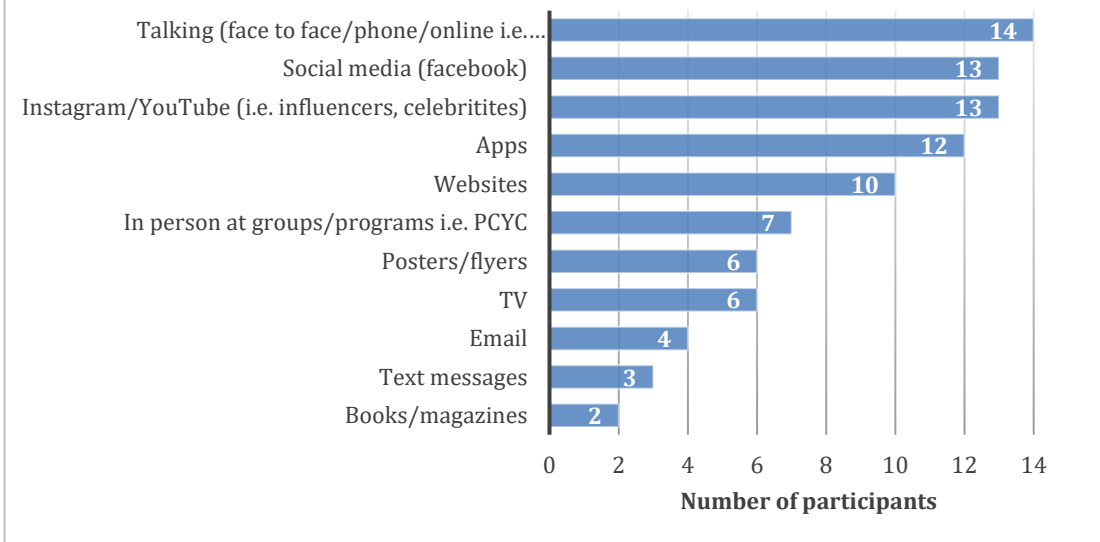
Nine (30%) wanted information from both **health professionals and dietitian or exercise professional.**

Graph 15. Who do you want to get your information about physical activity and healthy eating?



Nearly **half of participants (47%)** wanted information delivered through **face-to-face** means, **43%** wanted information delivered via **social media** (Facebook or Instagram) (influencers) and **40%** were interested in **apps**.

Graph 16. How do you want to get information about physical activity and healthy eating?



53% rated physical activity to support mental health as important or very important, with an average importance of 3.9/5

60% rated healthy eating to support mental health as important or very important, with an average importance of 3.6/5

Interviews and Focus Group Findings

Analysis

Data was analysed using an “inductive” approach, where codes were initially assigned to meaningful segments of text. Codes were then grouped into categories, then sub-themes, and overarching themes were identified.

Findings

In total, 8 young people participated, 4 in individual interviews and 4 in a focus group. Five out of 8 were hART members. Two identified as male, 6 as female; their ages ranged from 20-25.

Overall, participants were engaged with the topic areas, reflective of and motivated regarding their healthy eating and physical activity behaviours.

Four main themes and 11 sub-themes were identified (see Table 4).

Table 4. Overview of Themes and Sub-themes

Theme	Sub-theme
Healthy Eating	Healthy Eating Awareness
	Healthy Eating - Sources of Information
	Food Messages Growing up
	Barriers and Enablers to Healthy Eating
	Decision Making
	Attitudes about Dietitians
	What would be helpful?
Physical Activity	Physical Activity Awareness
	Physical Activity - Sources of Information
	Physical Activity Messages Growing up
	Barriers and Enablers to Physical Activity
Links with Mental Health	-
The Role of <i>headspace</i>	-

Healthy Eating

Healthy Eating Awareness

Most participants described fruit and vegetables as part of a healthy diet and used descriptors including “balance”, “variety of foods”, and moderation of sugar/fats.

It means a good balanced diet, and making sure that you're not having too much of one thing and not enough of another. So just making sure you've got a good balance of fruit and veg, and sweets and stuff like that, but in moderation – Participant 3

Some participants described having the “right” nutrition to support energy needs through the day and gave examples of the types of foods they thought were healthy. These examples mainly covered fruit, vegetable, protein and grain categories.

Fewer participants described vitamins and minerals, eating the “right” amount, low carbohydrate, probiotics and avoidance of processed meat as healthy food descriptors.

Most participants referenced a “pyramid”, “plate” or “2 fruit, 5 veg” when describing the national healthy eating guidelines but were unable to offer more detail.

Healthy Eating - Sources of Information

Most participants identified school (usually primary school) as their primary source of information. This was followed by the internet (Facebook, Tik Tok, websites, Instagram).

Fewer participants described other sources of information, such as friends, through tertiary studies, by attending Red Cross training and reading “light science” articles.

Most expressed concern about the confusing amount of information on the internet and challenges of knowing who to believe, particularly when paid advertising from “influencers” consumed their social media feed. A minority relayed awareness of government-sanctioned websites but also expressed uncertainty about the rigour of current “food science”.

General high school level education is probably the most that I've had about food without being involved in anything cooking. I think there is not enough to extend that knowledge, especially when you have things like fad diets all coming into socials – like as far as keto, paleo and all that kind of go, I do not favour any of them or disfavour any of them. I just see them as OK, this is what is currently the fad and this is the thing that I will see on my social media. Governmental recommendations or any general consensus recommendations – it's only bad stuff that I would see on my social media or hear from people – Participant 2

Food Messages Growing up

Participants described a variety of food messages growing up. Healthy messages included encouragement to eat fruit and vegetables, avoid processed/fast foods, have a balanced diet and to try everything.

My family was a bit more casual, just, "Make sure you eat your fruit and veggie." Or, "Eat your veggies on your plate. If you don't – if you can't finish everything on your plate, just make sure you eat enough veggies." That's what I had. I was pretty chill, so we're a pretty chill family – Focus Group

Less-healthy messages included clear the plate, food is comfort, lack of routine, needing to finish everything to get dessert, and the frequent presence of unhealthy foods. A few participants were able to reflect on the impact of negative messages into their current food behaviour.

We didn't have a great structure with food. So it was kind of serve yourself, not a lot of structured meal times, sitting down together. So it was kind of, you didn't really have anyone watching over like your portion controls or anything like that. So yeah, it was just kind of when you're hungry you eat... I snack a lot now, because whenever I'm hungry, I'm just used to just going and getting whatever I want, whenever I want. So portion control is a big thing. And then yeah, timing of meals – Participant 3

Barriers and Enablers to Healthy Eating

The most frequently reported barriers to healthy eating were accessibility or convenience of fast food, perceived cost of healthy foods, and no time to prepare.

Often eating healthily is more difficult than eating junk food. It's very easy to just walk past KFC or McDonalds or Dominoes or wherever and to just buy readymade bit of takeaway but to eat healthily, it takes more work – Participant 4

Table 5 displays all barriers and enablers to healthy eating listed by frequency reported.

The most frequently reported enablers to healthy eating were positive social support and cooking skills/confidence.

Yep, I definitely think that the people around you make an influence about what you eat. So my partner likes to eat quite healthily, he does a lot of meal prep, so then that encourages me to do the same. Yeah, who you surround yourself with, those sorts of things – Participant 3

Decision Making

In facing the confusion relating to healthy eating messages online, participants offered different strategies to assess the quality of information being presented. Logic and “gut feeling” were described, presence of links to government websites, attempts to look at facts and research and experimenting.

I think it's a bit of trial and error, finding out what sort of works for your body and what you can tolerate digesting, and how much you can withdraw from particular food groups and those sorts of things. And ultimately, just what gives you the energy to get through the day – Participant 3

Table 5. Barriers and Enablers to Healthy Eating

Barriers	Enablers
<p>Most Frequent</p> <ul style="list-style-type: none"> • Accessibility/convenience of fast food • Perceived cost of healthy foods • No time to prepare 	<p>Most Frequent</p> <ul style="list-style-type: none"> • Social support • Cooking skill and confidence
<p>Moderately Frequent</p> <ul style="list-style-type: none"> • Low mood/motivation • Limited cooking skills • Lack of social support/peer influence • Effort needed to prepare healthy foods • Emotional link with “junk” foods • Lack of knowledge about food 	<p>Moderately Frequent</p> <ul style="list-style-type: none"> • Feeling mentally well • Planning • Involvement in food preparation growing up
<p>Less Frequent</p> <ul style="list-style-type: none"> • Fatigue • Lack of planning • Not liking “taste” of healthy food • Enjoying fast foods • Frequent presence of unhealthy foods during childhood • Trauma associated with healthy food preparation 	<p>Less Frequent</p> <ul style="list-style-type: none"> • Access to easy, low-cost tasty recipes • Time to prepare food • Healthy food messages during childhood • Education • Income • Reflection on Weight gain • Feeling inspired to cook • Access to good seasonal food • Meal prepping • Self-care attitude • Wanting to save money • Lack of access to fast food options • Feedback on improving health status through healthy eating

Attitudes about Dietitians

Most were aware of the role of a dietitian; only one had previously seen one. Most were uncertain of the role of a dietitian, how to access one and the cost. Most were interested in the potential to access a dietitian to support healthy eating, with one suggesting more education was needed about the role of a dietitian.

I wouldn't be opposed to doing it (seeing a dietitian). I think it would be something that I would quite like to do. Then again, it comes into you've got to have time to do these things and they cost. There's a significant cost attribute involved – Participant 2

What would be helpful?

Some participants expressed they were unsure where to go for information and wanted a “one stop shop” to understand healthy options, wanted more information on specific diets, wanted a good “app” and wanted more investment in government guidelines being promoted. One suggested a “trusted Tik Tok channel” (Focus Group) would be helpful.

I haven't really found somewhere I can easily go to and be like OK, I want to eat healthy. Like I haven't really found a resource that – it would be amazing if there was somewhere I could go and be like OK, if I want to go vegan, this is how I do it healthy. Instead of being like I don't know how to make a change healthy – Participant 1



Physical Activity

Physical Activity Awareness

When asked to describe “physical activity”, participants described movement that increased heartrate, exercising and gave examples of exercising, running, walking and gym. Some linked physical activity to getting fitter/healthier or something that burned off calories and kept the body functioning.

So, like, walking – I don't know – going doing weights at the gym, anything that gets your heart racing, really, gets the blood flowing, is exercise – Participant 1

The majority of participants offered a general awareness of the existence of national physical activity guidelines, but little detail. The “Find 30” message was commonly offered by participants as a guideline; however, they did not describe any other components of the guidelines (e.g., intensity levels, strength or reducing sedentary behaviour). One participant who was unaware of the guidelines felt that, as long as they were active in their job, this was “enough”.

Physical Activity - Sources of Information

Compared to the number of sources of information participants used to access information on healthy eating, participants only described a few sources for physical activity. Most described learnings from school.

Probably like from school. Or, yes, like the internet, if anything pops up – Focus Group

Some described using social media for information, going to a friend who had knowledge of the area and seeking professional advice.

There was a distinct absence of confusion expressed about messages and information relating to physical activity, as compared to healthy eating.

Physical Activity Messages Growing up

Participants reported a range of messages relating to physical activity growing up. Positive messages related to participating in organised sports, to “Find 30” and involvement of family and pets.

In my family, when we were really young and everything was good, we used to play family cricket. There was the – all seven us, like especially playing – because we had a pretty big family, it was a nice game. And we would play that for hours on end. And then when we started to be, you know, teenagers and life got shitty, we got a dog and my job was to take the dog for a walk. So that was my physical activity when I was younger – Participant 1

Less-helpful messages included a lack of parental role models, parents being too busy to support sport, and preferencing other activities.

Non-existent. It was not something that... We are a very unathletic family. Some families embrace sports and their children do it at school and all of those things across the generations. We're more intellectual, that's our area – Participant 4

Some participants recognised the impact of less-helpful messages on their lack of confidence and enjoyment of current physical activity.

Barriers and Enablers to Participating in Physical Activity

The most frequently reported barriers to physical activity included no time, negative experiences during childhood, and low skills and confidence.

I don't necessarily do as much as I should or to the extent where maybe I will only go once a week rather than once a day. I would like to be able to go once a day but it's definitely something that I struggle to find time to fit in – Participant 2

The most frequently reported enabler to physical activity was positive social support.

We both go to the gym... We go with a few of our friends. And it would make it.. It's so fun...We sort of game-ify it – Focus Group

Table 6 displays all barriers and enablers to physical activity listed by frequency reported.

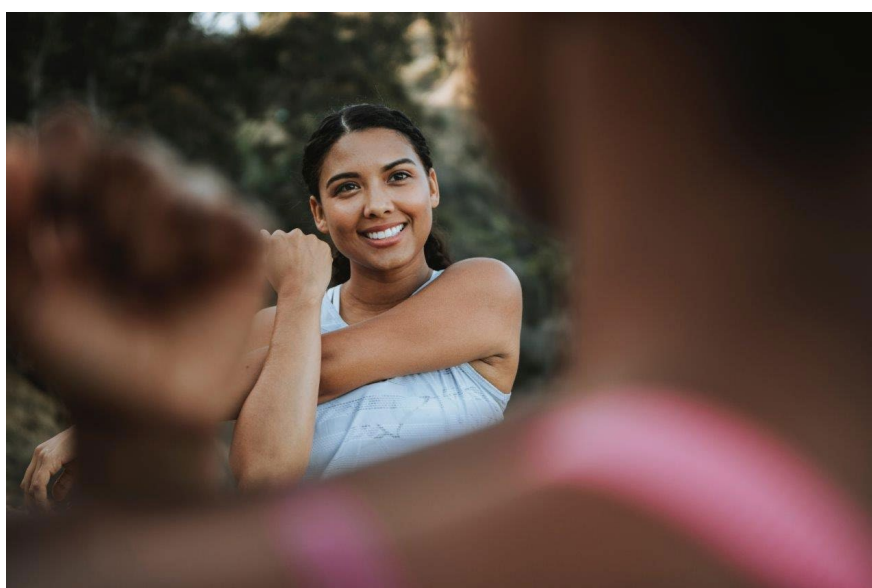
Links with Mental Health

All participants strongly recognised the bidirectional link between healthy eating, physical activity and their mental health.

I know for myself, when I'm feeling down, I tend to go towards not so good foods, and it never really makes me feel any better. It then leads to stuff like fatigue, because you're not getting the right sort of fuels in your body, and then potential weight gain and those sorts of things, which can then have a negative impact on your mental health... So eating the right sort of foods like your fruit and veggie gives you the energy, and then you can go out and go for your walk and build up, get your serotonin levels going. And that helps – Participant 3

Table 6 Barriers and Enablers to Physical Activity

Barriers	Enablers
<p>Most Frequent</p> <ul style="list-style-type: none"> • No time • Negative experiences during childhood • Low skills and confidence 	<p>Most Frequent</p> <ul style="list-style-type: none"> • Social support
<p>Moderately Frequent</p> <ul style="list-style-type: none"> • Self-conscious • Fatigue 	<p>Moderately Frequent</p> <ul style="list-style-type: none"> • Fun Competition • An introduction to a support person • Having a routine • Pets • History of positive experiences growing up • Shift in personal attitude towards Physical activity
<p>Less Frequent</p> <ul style="list-style-type: none"> • Lack of parental role models • Fear of trying new Physical activity • Dislike of physical activity • Lack of transport • No endorphin “rush” from physical activity • Low mood • Medical conditions 	<p>Less Frequent</p> <ul style="list-style-type: none"> • Being organised • Having positive parental role models growing up • Being able to travel for sport • Knowledge that physical activity improves mood • Having a friend who knows about physical activity • Encouragement from others • Being physical active at times to avoid other people (i.e., judgement from) • Access to a personal trainer



Participants were aware that physical activity improved their mood and reduced stress. Participants were also aware that poor eating habits (e.g., skipping meals), poor food quality or consuming unhealthy foods directly impacted their mood. Some were aware of certain foods that impacted their mood, but were unaware of specific details.

I notice that if I have a lot of junk food at night time, that I wake up the next morning and I don't feel as satisfied or happy in myself and that's not out of any sense of shame or guilt. To be clear, it's just on some level in my brain something's not ticking the right way and I just feel groggier, for want of a better term – Participant 4

One participant particularly noticed the negative impact of moving out of home on their healthy eating, physical activity and mental health. This participant was currently moving back home for more support.

The Role of headspace

All participants expressed that *headspace* could have a stronger role in supporting healthy eating and physical activity. Most participants felt it would be helpful for *headspace* staff to be proactive in raising the topic as part of sessions, rather than the young person having to raise the topic.

Participants felt that *headspace* staff could offer useful resources, facilitate referrals to health professionals, provide information on sports options and offer a personal link to these.

I had my therapist appointment this morning and we were talking about how my unhealthy eating was impacting me. It would have been awesome if she had a resource then that she could be like, "Actually, I know someone perfect to talk to you about that; here's who you can talk to, they are going to be able to help you with this." That sort of thing – Participant 1

One participant reflected they had had "general" conversations about healthy eating during *headspace* sessions, whilst another described a significant improvement in healthy eating and physical activity due to *headspace* sessions.

My food knowledge has drastically increased and through going to headspace and talking to my counsellor there, we had conversations about health, exercise and the five pillars kind of thing. Like, you've got to have your social life, your exercise, your diet, your sleep and all that kind of stuff. And I've noticed when I am consistently eating healthy for months at a time kind of thing, I am feeling more energetic, so I'm then exercising more. And I'm also feeling just a healthier person. So it does make me feel better, I think, eating healthy – Participant 2

When participants reflected on their past experiences of accessing support at *headspace* most acknowledged that receptivity to conversations initiated about healthy eating and physical activity during sessions would vary due to individual needs, maturity levels, priorities for attending sessions and motivation.

Most participants expressed enthusiasm for the idea of accessing a dietitian through *headspace*, whilst one suggested *headspace* could offer a supportive physical activity program to encourage those who were not confident about accessing mainstream options.

Summary

Overall, there was general agreement across the survey and interview/focus group responses. Interview and focus group participants were generally engaged, interested in and reflective of healthy eating and physical activity.

There was strong recognition of the impact of healthy and unhealthy food and physical activity behaviours on personal mental health status, with over half of participants viewing both healthy eating and physical activity as important/very important in managing their mental health.

Most participants were generally aware of how their diet compares to healthy eating recommendations, but had limited detailed knowledge and there was some confusion caused by social media messages; e.g., incorrect assumptions about the role of nutritional supplements.

Most participants were generally aware of the role of physical activity, but there was some uncertainty about different types of intensity and how much they should be doing compared to the national guidelines.

How do *headspace* clients compare nationally?

Healthy Eating and Food

- Most participants did not consume enough fruits and vegetables, which is similar to the results from previous youth studies in Australia⁴¹.
- Most participants (67%) were either skipping or not eating breakfast on a regular basis. This is much higher than recent studies, which showed only 8% of Australian adolescents skipped breakfast⁴².
- Over a quarter (27%) of the survey responses said they consumed drinks with added sugar daily, similar to past research⁴³.

- Despite most (70%) participants regularly consuming take-away foods, it is surprising that a major barrier to eating well was the perception of healthy foods being too expensive, whilst take-away foods were not seen as costly. Data from Australia shows that healthy diets are more affordable than current (unhealthy) diets in Australia⁴⁴.
- Access to healthy food might be a major issue in this group, with most participants (60%) reporting unhealthy food is easier to access.
- Over a third of respondents (37%) would be classified as food insecure, which means they had run out of food and could not afford to buy more⁴⁴.

Physical Activity

- 18% of those under the age of 18 were meeting the Australian Physical Activity guidelines for 12-17-year-olds. These results are similar to recent national data showing only 10.3% of 15-17-year-olds met the physical activity guidelines⁴⁵.
- 53% of those aged 18 or older were meeting Australian Physical Activity guidelines for adults. This is slightly lower than the proportion of 18-24-year-olds (64.1%) reported as engaging in 150 minutes of more of moderate vigorous exercise per week⁴⁶.

Strategies to Address Healthy Eating and Physical Activity Behaviours

Multiple barriers (beyond knowledge) were reported by participants as influencing healthy eating and physical activity behaviours. Table 7 offers strategies to address these.

How can *headspace* help?

Participants, particularly in the interviews/focus group, valued *headspace* as a service and felt *headspace* could play a bigger role in supporting healthy eating and physical activity. Suggestions are offered below.

- Despite use of social media, participants value face-to-face interactions. Participants want *headspace* staff to initiate conversations about healthy eating and physical activity (while recognising that receptivity will vary with each individual).
- Health professionals (doctors, dietitians and exercise professionals) are viewed as the most trusted source of information. *headspace* can continue to encourage clients to discuss or be referred to health professionals for their needs.
-

Table 7. Strategies to Improve Healthy Eating and Physical Activity Behaviours

Issue	Strategy
Poor Quality Diet	<p>Focus on strategies to:</p> <ul style="list-style-type: none"> • Aim for 2 fruits and 5 vegetables daily • Eat breakfast daily • How to cut down on sugary drinks and take-away foods • Understanding the high costs of take-away foods in comparison to healthy foods • Education that supplements are not needed to maintain a healthy weight
Barriers to Healthy Eating	<p>Explore strategies to address:</p> <ul style="list-style-type: none"> • Accessibility/Convenience of Fast Food • Perceived cost of healthy foods • Limited time to prepare • Unhealthy food messages during upbringing • Impact of food insecurity • Level of cooking/food preparation skills • Impact of transition to living out of home <p>Encourage:</p> <ul style="list-style-type: none"> • Ways of increasing social support around healthy eating • Improving cooking/food preparation skills • Strategies to improve time management and planning • Facilitation of referrals to healthy eating community programs
Barriers to Physical Activity	<p>Explore strategies to address:</p> <ul style="list-style-type: none"> • Low mood/mental health • Lack of time • Embarrassment about exercising in public • Not being “good” at sport/low skills/confidence • Past negative experiences • Unhealthy physical activity messages during upbringing <p>Encourage:</p> <ul style="list-style-type: none"> • Understanding about the positive impact of physical activity on mood • Incidental physical activity • Ways of increasing social support around physical activity • Way to improve confidence • Enjoyable physical activity options • Facilitation of referrals to physical activity community programs

- For clients with low confidence, *headspace* can work towards fostering collaborations with external community healthy eating and physical programs (recommended in this report) and facilitate a personal connection for clients to assist in the referral process.

Limitations/Strengths and Considerations

Recruitment for the study was challenging due to privacy concerns about using nominated phone numbers and addresses for existing clients. Using clinicians to recruit during sessions may have added additional burden to their already busy workload and clinical priorities during sessions. We are unaware the consistency of recruitment during this time.

Use of paid advertisement on social media increased response rates; however, we cannot be sure that all participants met the eligibility criteria for the study as responses were anonymous. Survey findings need to be interpreted with a degree of caution due to low numbers; however, similarities in most findings with other youth research offer some reassurance.

The use of the three screening questions for consent impacted the number of young people accessing the survey. In total, only 40 of 85 (47%) who attempted to access the survey were able to answer the screening questions correctly (despite efforts to provide multiple sources of study information). In addition, seven answered “yes” to being in out-of-home care; despite being directed to contact the research team to organise consent, none of the seven made contact.

It is possible that consent questions were not answered correctly due to low literacy levels, participants not reading/listening to the study information or the study information not being engaging enough for the needs of the cohort. Given the number of young people who did not access the survey, caution should be taken when generalising the findings to all young people who access *headspace*.

Recommendations

Please see pages 56-58.

Phase 4. Referral and Program Mapping

The aim of phase four was to collaborate with *headspace* management and explore potential ongoing referral pathways and partnerships focusing on enabling healthy eating, physical activity, and obesity prevention.

Approach

This phase included:

- brief mapping of health care providers/programs for young people (e.g., local and online accredited practising dietitians, exercise physiologists, student clinics, programs, etc) with potential synergies for *headspace* service delivery;
- investigating other *headspace* services nationally that incorporate healthy eating and/or physical activity programs or services; and
- brief exploration of the use of online applications (“apps”) to support young people with healthy eating and physical activity.

Referral Pathways

An online search was conducted to identify local dietitians and exercise physiologists that *headspace* could refer clients on to for specialised care. Details included: name of service; which clients the service accepted referrals from; whether it offered a mental health-specific service; wait list; cost details, including Medicare and/or bulk billing; and any additional useful programs or services available (e.g., group sessions).

Primary Health Tasmania has developed a Health Pathway on [Mental Health in Children and Young People](#) which clinicians and GPs at *headspace* can use to guide the assessment, management, and referral to Tasmanian Health Services (THS).

Password details are below:

Website URL: [Community HealthPathways Tasmania](#)

Username: connectingcare (all lower case)

Password: health (all lower case)

Dietetics services

Nine local dietetics services were identified (see Appendix 12). Eight offered services to adults, with three also specifying that they saw youth; one service only saw children. All of the services that offered individual consultations offered Medicare rebates with a GP management plan or Eating Disorder Management Plans. **No dietetics services were advertised as bulk billed.** Three services offered additional services, including cooking classes, shopping tours and group education sessions.

Exercise Physiologists services

Eight local Exercise Physiologists services were identified (see Appendix 13). Only one Exercise Physiology-led, mental health-specific program was identified in Launceston. This program is funded by the Richmond Fellowship and offers a group exercise program for youth with a diagnosed mental health condition. **One service bulk-billed** all Medicare appointments (Access Injury Management) and another practice (PhysioFit) charged only the gap fee for the first service. SPR conditioning and PhysioFit also offered group sessions specific for youth.

Locally Accessible Programs and Resources

Any other local, accessible programs/resources for young people were searched via online searches, health professional networks and word of mouth. In addition to PCYC (a program already accessed by *headspace*), five other programs were sourced (see Table 8).

headspace Programs with Nutrition and Exercise Services

A review of all *Headspace* programs in Australia was completed via a desktop search of the *headspace* national website. A total of **22** *headspace* programs were identified as offering access to a dietitian and/or exercise physiologist. These centres were contacted for more details.

6 of 22 *headspace* centres responded (see Appendix 14 for details). These six programs offered dietetics services only. One dietetics service was funded through fundraising; this service was provided for 12 hours each week. Another dietetics service (covering 2 centres) was funded through the company auspicing the *headspace* centre. Two other dietetics services (servicing a total of 3 *headspace* centres) used a funding model that was covered by Medicare and bulk billing of patients.

Dietetics services were offered, ranging from one day per fortnight to 1-2 days per week. One dietitian covered five out of the six services; these dietitians worked in private practice. Two dietitians, who also worked at Hunter New England Hospital and offered an outpatient service out of *headspace*, covered the last service. All services received internal referrals via the GP, using chronic management plans and/or eating disorder plans.

Table 8. Accessible Lifestyle Programs

Organisation	Program	Contact	Referral Criteria
Richmond Fellowship	<ul style="list-style-type: none"> • TAS Rec Program • Healthy eating/cooking classes • Art Therapy • Bush Walks • Exercise (coming soon) • 8-10 week program (runs with school terms) 	Nadia on 0439 952 252 to find out more, or email nadiac@rftas.org.au	<p>Self-refer or referral from health care provider</p> <p>Need to have a mental health diagnosis</p> <p>*No age specified</p>
Active Launceston	<ul style="list-style-type: none"> • Active Parks Yoga 	http://www.activelaunceston.com.au/	<p>Self-refer, more details available on the website</p> <p>Must be 18+ to participate</p>
Diabetes Tasmania	<ul style="list-style-type: none"> • Healthy eating • ShopSMART – learn to read food labels and how to identify healthy options • Healthy Eating Webinars (run by dietitian) 	https://diabetestas.org.au/events/	<p>Self-refer, more details available on the website</p> <p>Available to anyone</p>
Child Health Association Tasmania	<ul style="list-style-type: none"> • Offers Family Food Patch training statewide to parents, carers or community workers who have children 0-12yrs 	https://www.familiestasmania.org.au/ emma@familiestasmania.org.au	The course material is geared to empowering that cohort with resources, skills and knowledge that supports their family but that they

	<ul style="list-style-type: none"> • Currently updating their website to include free (recipes, food skills/literacy and activities etc) to promoting cost-effective and nutritious food that encourages eating vegetables and seasonal eating 		can also share within their networks as “peer educators”
DHHS: Healthy Young People	<ul style="list-style-type: none"> • Free resources promoting positive body image, adequate sleep, healthy eating, water consumption, physical activity and reduced sedentary time 	http://www.dhhs.tas.gov.au/healthyyoungpeople/about_hyp	These resources are aimed at secondary school students, teachers and school staff, youth workers, social workers and anyone who works with young people
Butterfly Foundation	<ul style="list-style-type: none"> • Online programs for patients with eating disorders • Workshops/seminars – some fully funded by TAS Government 	https://butterfly.org.au/ Recovery Program – Emerging: Free Program for Tasmanians with an eating disorder	Self-refer, more details available on the website Programs are available for those diagnosed with an eating disorder, family members, carers and friends. There are also services available for health professionals

Applications (Apps) to Support Youth Healthy Eating and Physical Activity

As the project progressed, an opportunity to add value to the project presented itself that also offered two UTAS students (exercise and sport science and healthy eating science) an applied, “real-world” interprofessional practicum project.

The aim of this sub-project was to source, quality assess and provide recommendations for online applications (apps) focusing on physical activity and healthy eating to support mental health that would be suitable for young people (12-25 years) who access Launceston *headspace* services. A summary of the project is presented below (see Appendix 15 for the full report).

Method

Three strategies were used to search for suitable, free apps aimed at 12-25-year-olds using search terms including “physical activity”, “nutrition”, “sport”, “healthy eating”, “boost fitness” and “be healthier”.

Apps were identified via:

- [VicHealth’s Healthy Living Apps Guide](#)
- [ReachOut’s ‘tools and apps’](#)
- Android and iOS app stores were searched and the top 10 results reviewed.

To assess the quality of the apps found, each app was used for around 20 minutes and graded using the [Mobile App Rating Scale \(MARS\)](#). This tool provides a score for level of engagement and functionality, aesthetics and information, as well as overall and subjective quality for an app. It also gives an app-specific score which assesses the app’s impact on the user’s knowledge, attitudes, intentions to change and likelihood of actual change in physical activity or healthy eating habits specifically. A total of 30 apps were reviewed (16 physical activity and 14 healthy eating). Please see Appendix 17 for full ratings on the MARS tool and link to the MARS rating scale.

Results and Recommendations

Apps with higher quality content and fewer inaccessible paid features tended to be supported by name brand businesses and scored higher in the aesthetics, app quality and subjective categories. The physical activity apps primarily focused on workout routines, whilst the healthy eating apps focused on energy intake and macronutrient distribution. The top 5 recommended apps from each category are described in Table 9.

Table 9. Top 5 Healthy Eating and Physical Activity Apps for Young People.

App name and brief description	Assessment results
Top 5 Physical Activity-Focused Apps	
Workout trainer home fitness coach - provides a range of workouts focused on certain fitness goals with detailed exercise descriptions	
Nike running - provides performance and motivational based recordings that assist in reaching a large variety of running goals	
Nike training club - provides large selection of home workouts and fitness plans covering a range of major muscle groups	
Fiton - provides workouts and fitness plans with a large selection of training types	
Samsung health - provides generalised health information on exercise, weight, glucose, menstruation and blood pressure management	
Top 5 Healthy Eating-Focused Apps	
Eat this much - uses simple visual data to provide <i>comprehensive</i> , accurate energy and macro+micronutrient data from reliable sources	
Cronometer - uses simple visual data to provide <i>very detailed</i> , accurate energy and macro+micronutrient data from reliable sources	
MyFitnessPal - uses simple visual data to provide <i>suitably detailed</i> , accurate energy and macro+micronutrient data from reliable sources	
GetFit - uses simple visual data to provide <i>detailed</i> , accurate energy and macro+micronutrient data from reliable sources	
CARROT Hunger - provides a fun, simple and engaging calorie counter for monitoring daily energy balance and weight management	

Recommendations

Please see pages 56-58.

Recommendations

Recommendations have been collated and justified under four main areas: Client Considerations; Staff Considerations; Implementation of a Dietetics Service; and Potential Service Collaborations. Recommendations are presented in no particular order.

Client Considerations

Recommendation 1: That *headspace* staff regularly initiate conversations with clients about healthy eating and physical activity as part of standard service delivery.

Rationale: Study participants reported multiple barriers (beyond knowledge) to improving healthy eating and physical activity, focusing on understanding and addressing these barriers (Table 7) may assist in improving outcomes for clients.

Staff Considerations

Recommendation 2: That *headspace* staff familiarise themselves with and consider the use of apps tailored to needs of clients.

Rationale: Study participants reported wanting headspace staff to instigate conversations about healthy eating and physical activity, despite recognition that receptivity to conversation varies. 40% of study participants were interested in the use of apps to support healthy eating and physical activity.

Recommendation 3: That *headspace* staff be aware of, maintain or implement use of recommended behaviour change techniques when working with *headspace* clients.

Rationale: The findings of the literature review support the use of behaviour change techniques (as identified in Table 1), headspace staff should maintain or implement use of these strategies when working with young people to address healthy eating and physical activity behaviours.

Recommendation 4: That scope of practice in relation to healthy eating and physical activity interventions be further clarified for all *headspace* staff.

Rationale: During the training evaluation, staff varied in perspectives of their scope of practice in relation to healthy eating and physical activity when working with clients. This may be impacting appropriate referrals on. Continued clarification of scope of practice would be helpful, particularly when implementing a dietetics service.

Recommendation 5: That new staff be offered the training resource pack on healthy eating and physical activity and referral pathways as part of orientation.

Rationale: Staff reported variation in understanding of healthy eating and physical activity interventions for clients and low awareness of free community program options. Orienting new staff with the training resource pack would help to increase awareness and understanding.

Implementation of a Dietetics Service

Recommendation 6: For *headspace* management to contact other *headspace* centres identified in this report for help with the implementation of the new dietetics service.

Recommendation 7: That *headspace* management contact the Keeping Body in Mind team to discuss the service models and implement learnings.

Rationale: The Keeping Body in Mind program has been shown to be a successful service-integrated model that may offer learnings that are applicable to headspace Launceston. Other identified headspace programs may also offer useful learnings from their experiences implementing dietetics services.

Recommendation 8: That *headspace* incorporate additional role functions when implementing a dietetics service.

Rationale: Findings from the service mapping, feedback from the staff training evaluation and perspectives of headspace clients suggest the new dietetics role should include (beyond individual sessions): provision of professional development education for staff; inclusion of dietitian input into case consultations/staff meeting for continuity of care and to address any referral barriers; offering regular nutrition advice via headspace social media; recommendations for nutrition information for clients to access in the waiting room and through clinician sessions.

Recommendation 9: That *headspace* evaluate the new dietetics service.

Rationale: Although multiple national policies support healthy eating and physical activity interventions for mental health populations, there is limited evidence in the literature detailing what works and how. Any future interventions should be formally evaluated to contribute to this growing body of research.

Potential Service Collaborations

Recommendation 10: That *headspace* management proactively seek further discussion with community organisations identified within this project.

Rationale: Richmond Fellowship, Active Launceston, Diabetes Tasmania, the Child Health Association Tasmania and the Butterfly Foundation offer free programs that may support headspace clients. There is potential to instigate and strengthen possible partnerships/referral pathways to better support clients.

Recommendation 11: That referral information for free community programs identified within this project be embedded and tracked consistently across service delivery.

Rationale: Currently, referrals to services/programs are undertaken inconsistently. Embedding referral information at key contact points (e.g., intake, discharge, etc) will prompt staff to open a conversation with young people. Systematically tracking referral patterns to external programs would offer headspace a clearer picture of the nutrition and physical activity needs of clients and maintain currency of programs available in the area.



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Appendices



PROJECT MANAGEMENT PLAN
Cornerstone Youth Services Nutrition and Physical Activity
Capacity Building Project
July 2020
Version 1

1. OVERVIEW

1.1 SUMMARY OF PROJECT

Healthy eating and physical activity habits during adolescence support normal growth and development and underpin the establishment of lifelong health and wellbeing. The eating habits of many young people are inconsistent with dietary recommendations. Adding to this, the prevalence of sedentary physical activity levels amongst this group continues to grow, which combined with poor eating habits, escalates the risk of current and future obesity, type 2 diabetes and mental health issues. Mental health conditions predominantly emerge during adolescence and early adulthood. People with a mental health condition are more likely to be overweight and have metabolic complications.

Emerging research has demonstrated that healthy eating patterns (e.g. Mediterranean-style diets) based on whole-grains, fruit and vegetables, lean protein and nuts contributes to reducing obesity and metabolic chronic diseases and improving mental health. Early nutrition intervention for young people at risk of developing a mental health condition is needed.

Cornerstone Youth Services (CYS) provides social and emotional support for young people in the greater Launceston area with mild to moderate mental health conditions. Cornerstone professionals reports a need for 1) Developing their capacity to provide brief nutrition-related interventions; 2) greater access to referral pathways and arrangements with community and government organisations that provide a specialist nutrition support and 3) greater understanding of evidence-based resources they can use to consider and evaluate a client's dietary habits, and to understand how to provide up-to-date advice about the amount and kinds of foods that people need to eat for health and wellbeing. Cornerstone are uniquely placed to support healthy eating in this at-risk target group.

The project team proposes to extend upon and value add to the existing project brief by incorporating physical activity across all elements of the proposed project. Physical activity is well recognised as an essential component of physical and mental

health and wellbeing. Consistent participation in physical activity and observation of healthy dietary habits can assist with managing or ameliorating metabolic complications and mental health issues.

2. OBJECTIVES AND SCOPE

2.1 Objectives

To increase the capacity of CYS to deliver best practice interventions aimed at improving nutrition, physical activity and mental health through:

- Undertaking a needs assessment with CYS staff to capture CYS staff skills, ability, knowledge and confidence about nutrition interventions for mental health, physical activity and referral activity
- Undertaking a needs assessment with CYS youth reference group (YRG) to capture the nutrition and physical activity understanding and needs of CYS clients and how to best engage young people within CYS about nutrition and physical activity.
- To develop and deliver a series of three training packages for CYS staff
- To assess the impact of the training on CYS staff skills, ability, knowledge and confidence about nutrition for mental health, physical activity and referral activity
- To gather data about recent CYS clients regarding diet quality, access to healthy food, understanding healthy food options, where/how healthy food information is accessed, current physical activity levels, barriers to participating in physical activity, awareness of the role of regular physical activity in the maintenance of health, and acceptable information delivery methods
- To investigate the opportunities for CYS to explore potential ongoing referral pathways and partnerships focusing on enabling healthy nutrition and physical activity including a brief scoping review, brief service/program mapping and identification of barriers and enablers to service/program access

2.2 Scope

The project scope involves the target population of staff, YRG members and recent clientele of Cornerstone Youth Services based predominantly in Launceston. The project will also seek to engage potential external services/supports to facilitate

increased access services/programs/supports that enable youth to improve nutrition and physical activity.

2.3 Deliverables

Outcomes

- Increased capacity of CYS staff to deliver best practice interventions aimed at improving nutrition, physical activity and mental health and reducing obesity and associated metabolic complications risk
- Increased understanding about healthy nutrition and physical activity, and the behaviours and needs of young people accessing CYS services
- Increased opportunities for CYS to collaborate with external service/programs to support enabling healthy nutrition, physical activity and obesity prevention for CYS clients
- Identification of barriers and potential enablers to support CYS clients accessing nutrition and physical activity supports

Outputs

- Project Plan
- A package of Training Resources and Materials
- Progress Report (due September 30th 2020)
- Final Report (due March 31st 2021)

3. Risk Identification and Mitigation

Risk	Likelihood			Consequence		
	High	Mod	Low	High	Mod	Low
1. Delay in approval of ethics						
2. Low participation rate in needs assessment						
3. Low participation rate to on-line survey						
4. Low Quality Survey Data						
5. Reporting timelines slippage						
6. Covid-19 and associated restrictions						

3.1 Risk Mitigation Strategies

1. Delay in approval of ethics

As the project requires a high risk ethics application requiring full HREC committee review we will inform the ethics committee of the time limited nature of the project. We will develop the project ethics application using previous high risk ethics application approaches to inform the current project.

2. Low participation rate in needs assessment

Project team will work closely with CYS to enable the best approach to engage with staff and YRG and appropriate use of incentives

3. Low participation rate to on-line survey

Project team will work closely with CYS and seek advice from the YRG regarding the most effective way to engage CYS clients in the research and use appropriate promotion and incentive strategies

4. Low Quality Survey Data

Project team will use evidence based measures to collect quantitative data and will seek feedback from the YRG on the face validity of measures to ensure data collected is rigorous.

5. Reporting timelines slippage

Project team will meet fortnightly. Project timelines will be a standing agenda item on the meeting agenda. The project lead will communicate at least fortnightly via meeting minutes to CYS regarding project progress

6. Covid-19

The project will be conducted and adhere to current Utas CoVid19 Risk management guidelines. The team will use UTAS facilities and resources available to undertake the project via online means as necessary in response to restrictions.

4 PROJECT MANAGEMENT PLAN

4.1 Governance Structures

Governance of the project is the primary responsibility of the project team. The project team comprises a Chief Investigator: Heather Bridgman and Associate Investigators: Sandra Murray, Katherine Kent, Andrew Williams, Marie-Louise Bird, Sibella Hardcastle and Courtney McGowan.

The project team will be supported by two casual RAs who will work under the direction of the Project CI. The CI is responsible for communicating fortnightly to CYS (Wayne Frost or appropriate representative) via fortnightly meeting minutes and project plan updates. CYS representation will attend monthly team meetings for verbal updates.

5. WORK PLAN

5.1 The project comprises six phases with several key tasks associated with each phase. Responsibility for completion of key tasks is with the CI and

Project Team members who may take the lead on individual tasks with support from the RA.

Acronyms:

CYS = Cornerstone Youth Services

hART = *headspace* Advisory and Reference Team

Team = UTAS project Team

RA = Casual Research Assistants

Months without year specified will take place 2020, Months in 2021 will be indicated by '2021'

Stage 1: Establishment				
Activity	Commence	Conclude/Due	Responsibility	Completed
Confirmation of project acceptance	June	July	HB WF	<input checked="" type="checkbox"/>
Establishment of project team	June	July	HB SM	<input checked="" type="checkbox"/>
Administrative requirements re recruitment of RA position	July	July	HB	<input checked="" type="checkbox"/>
Recruitment of Research Assistant	July	July	HB	<input checked="" type="checkbox"/>
Meeting of Project team fortnightly	June	March	Team RA	<input checked="" type="checkbox"/>
Drafting of project plan	July	August	HB WF	<input checked="" type="checkbox"/>
Stage 2: Planning				
Activity	Commence	Conclude/Due	Responsibility	Completed
Literature review to scope appropriate measures for data collection	July	September	Team	<input checked="" type="checkbox"/>
Draft Research Questions	August	August	Team	<input checked="" type="checkbox"/>
Draft data collection tools for CYS Staff, hART and CYS clients	July	August	Team	<input checked="" type="checkbox"/>
Develop strategy for recruiting/collecting CYS staff and hART data for the needs assessment	August	September	HB WF	<input checked="" type="checkbox"/>
Seek input from CYS hART regarding survey promotion/recruitment strategies	August	September	HB WF	<input checked="" type="checkbox"/>
Pilot online survey with CYS hART	October	October	HB	<input checked="" type="checkbox"/>
Finalise Data collection tools	August	August	Team	<input checked="" type="checkbox"/>
Finalise High Risk ethics application	11 th September	28 th August	Team	<input checked="" type="checkbox"/>
Develop Survey Recruitment/Promotion plan	September	September	Team. WF	<input checked="" type="checkbox"/>
Stage 3: Data Collection and Analysis				
Activity	Commence	Conclude/Due	Responsibility	Completed

Needs assessment data collection from: CYS Staff - Qualitative (focus group) and Quantitative (survey)	September*	October	HB team	<input checked="" type="checkbox"/>
Needs assessment data collection from: CYS hART - Qualitative (focus group)	February	March 2021		
Needs Assessment Data analysis	September	October	Team	<input checked="" type="checkbox"/>
Cross Sectional Survey Data Collection from CYS clients - Quantitative (online survey)	February 2021	April 2021	Team	<input checked="" type="checkbox"/>
Cross Sectional Survey Data Analysis	December	February 2021	Team	<input checked="" type="checkbox"/>
Post Staff Training data collection from CYS staff - Qualitative (interviews)	February 2021	March 2021	HB team	<input checked="" type="checkbox"/>
Post Staff Training Data Analysis	March 2021	March 2021	Team	<input checked="" type="checkbox"/>
<i>*Pending HREC Ethics approval</i>				
Stage 4: Development of Training Materials				
Activity	Commence	Conclude/Due	Responsibility	Completed
Development of training materials to increase capacity of CYS staff to deliver interventions for improving nutrition, physical activity and mental health	September	December	RAs, Team	<input checked="" type="checkbox"/>
Delivery of three training sessions over 6 weeks with approximately 10 CYS Staff There will be 3 training session: 30 November and 7 December 2020 between 9 and 12pm. Monday 22 nd February 10-1pm These are a Monday.	Monday 30 th Nov 9am-12pm Monday 7 th Dec 9am-12pm Monday 22 nd February 2021 10am-1pm	Early-December	Team	<input checked="" type="checkbox"/>
Training package finalised session 1 and 2	November	November	Team	<input checked="" type="checkbox"/>
Training package finalised session 3	January	February	Team	<input checked="" type="checkbox"/>
Stage 5: Exploring Potential Referral Pathways/partnerships				
Activity	Commence	Conclude/Due	Responsibility	Completed
A brief scoping review of nutrition and physical activity programs available for young people	November	March 2021	Team	<input checked="" type="checkbox"/>
Brief local mapping of accessible health care	November	February 2021	Team, WF	<input checked="" type="checkbox"/>

providers/programs for young people				
Identification of barriers and enablers to nutrition and exercise service/program access for young people	January 2021	February 2021	Team, WF	<input checked="" type="checkbox"/>
Stage 6: Governance/Reporting				
Activity	Commence	Conclude/Due	Responsibility	Completed
Fortnightly Team meetings	July	June 2021	Team	<input checked="" type="checkbox"/>
Fortnightly meeting minutes sent to CYS	July	June 2021	RA, HB	<input checked="" type="checkbox"/>
Monthly attendance at project team meeting	July	June 2021	WF, Team	<input checked="" type="checkbox"/>
Progress Report		September 30th	HB	<input checked="" type="checkbox"/>
Draft Report submitted for feedback from CYS		June 1st 2021	HB, RA, WF	<input checked="" type="checkbox"/>
Feedback on Draft Report from CYS		June 15 th 2021	WF	
Final Report submitted		June 28 th 2021	HB, RA	<input checked="" type="checkbox"/>

Appendix 2. September Progress Report

Stage 1: Establishment				
Activity	Commence	Conclude/Due	Responsibility	Completed
Confirmation of project acceptance	June	July	HB WF	<input checked="" type="checkbox"/>
Establishment of project team	June	July	HB SM	<input checked="" type="checkbox"/>
Administrative requirements re recruitment of RA position	July	July	HB	<input checked="" type="checkbox"/>
Recruitment of Research Assistant	July	July	HB	<input checked="" type="checkbox"/>
Meeting of Project team fortnightly	June	March	Team RA	<input type="checkbox"/>
Drafting of project plan	July	August	HB WF	<input checked="" type="checkbox"/>
Stage 2: Planning				
Activity	Commence	Conclude/Due	Responsibility	Completed
Literature review to scope appropriate measures for data collection	July	September	Team	<input checked="" type="checkbox"/>
Draft Research Questions	August	August	Team	<input checked="" type="checkbox"/>
Draft data collection tools for CYS Staff, YAG and CYS clients	July	August	Team	<input checked="" type="checkbox"/>
Develop strategy for recruiting/collecting CYS staff and YAG data for the needs assessment	August	September	HB WF	<input checked="" type="checkbox"/>
Seek input from CYS YAG regarding survey promotion/recruitment strategies	August	September	HB WF	<input checked="" type="checkbox"/>
Pilot online survey with CYS YRG	October	October	HB	<input type="checkbox"/>
Finalise Data collection tools	August	August	Team	<input checked="" type="checkbox"/>
Finalise High Risk ethics application	11 th September	28 th August	Team	<input checked="" type="checkbox"/>
Develop Survey Recruitment/Promotion plan	September	September	Team. WF	<input checked="" type="checkbox"/>
Stage 3: Data Collection and Analysis				
Activity	Commence	Conclude/Due	Responsibility	Completed
Needs assessment data collection from: CYS Staff - Qualitative (focus group) and Quantitative (survey)	September*	October	HB team	<input checked="" type="checkbox"/>
Needs assessment data collection from:				

CYS YRG - Qualitative (focus group)				
Needs Assessment Data analysis	September	October	Team	<input type="checkbox"/>
Cross Sectional Survey Data Collection from CYS clients - Quantitative (online survey)	October	December	Team	<input type="checkbox"/>
Cross Sectional Survey Data Analysis	December	February 2021	Team	<input type="checkbox"/>
Post Staff Training data collection from CYS staff - Qualitative (focus group) and Quantitative (survey)	December	February 2021	HB team	<input type="checkbox"/>
Post Staff Training Data Analysis	January 2021	February 2021	Team	<input type="checkbox"/>
<i>*Pending HREC Ethics approval</i>				
Stage 4: Development of Training Materials				
Activity	Commence	Conclude/Due	Responsibility	Completed
Development of training materials to increase capacity of CYS staff to deliver interventions for improving nutrition, physical activity and mental health	September	December	RAs, Team	<input type="checkbox"/>
Delivery of three training sessions over 6 weeks with approximately 10 CYS Staff There will be 3 training session: 16 and 30 November and 7 December 2020 between 9 and 12pm. These are a Monday.	Monday 16 th Nov 9am-12pm Monday 30 th Nov 9am-12pm Monday 7 th Dec 9am-12pm	Early-December	Team	<input type="checkbox"/>
Training package finalised	November	December	Team	<input type="checkbox"/>
Stage 5: Exploring Potential Referral Pathways/partnerships				
Activity	Commence	Conclude/Due	Responsibility	Completed
A brief scoping review of nutrition and physical activity programs available for young people	November	December 2021	Team	<input type="checkbox"/>
Brief local mapping of accessible health care providers/programs for young people	November	February 2021	Team, WF	<input type="checkbox"/>
Identification of barriers and enablers to nutrition and exercise service/program access for young people	January 2021	February 2021	Team, WF	<input type="checkbox"/>
Stage 6: Governance/Reporting				

Activity	Commence	Conclude/Due	Responsibility	Completed
Fortnightly Team meetings	July	March 2021	Team	<input type="checkbox"/>
Fortnightly meeting minutes sent to CYS	July	March 2021	RA, HB	<input type="checkbox"/>
Monthly attendance at project team meeting	July	March 2021	WF, Team	<input type="checkbox"/>
Progress Report		September 30th	HB	<input type="checkbox"/>
Draft Report submitted for feedback from CYS		March 1st 2021	HB, RA, WF	<input type="checkbox"/>
Feedback on Draft Report from CYS		March 15 th 2021		
Final Report submitted		March 30 th 2021	HB, RA	<input type="checkbox"/>

Appendix 3. Equally Well Consensus:

<https://www.equallywell.org.au/wp-content/uploads/2018/12/Equally-Well-National-Consensus-Booklet-47537.pdf>

Appendix 4. A Blueprint for Protecting Physical Health in People with Mental Illness

Directions for Health Promotion, Clinical Services and Future Research – The Lancet Psychiatry Commission:

https://www.researchgate.net/publication/334500694_The_Lancet_Psychiatry_Commission_a_blueprint_for_protecting_physical_health_in_people_with_mental_illness

Appendix 5. Keeping Body and Mind Together

Improving the physical health and life expectancy of people with serious mental illness - The Royal Australian and New Zealand College of Psychiatrists:

<https://www.ranzcp.org/files/resources/reports/keeping-body-and-mind-together.aspx>

Appendix 6. Joint Position Statement

The Dietitians Association of Australia, Exercise & Sports Science Australia and the Australian Psychological Society joint position statement:

<https://dietitiansaustralia.org.au/wp-content/uploads/2016/05/addressing-physical-health-mental-illness.pdf>

Appendix 7. Staff focus group on training needs - Summary

Question	Staff Comments	Training content
<p>Q1. Do you often talk to YP about physical activity/healthy eating? If so, how often?</p>	<p>Yes</p> <ul style="list-style-type: none"> - Dietitians not trained in the community or in community. -Self-care, sleep and socialising also look at food intake , what kind and what sort of PE are they doing. It's really important to do these things for self-care. -Interests-team sports etc -Appetite, what is like in context of depression and anxiety-eating disorder/disordered eating -Reducing people vulnerability to help them socialise e.g. might get a flag, can they cook etc. 	<ul style="list-style-type: none"> -Link between anxiety and not eating-energy drinks exasperates anxiety and what small changes can you make e.g. eat regularly to help. -info on how to manage blood sugar and how it links to mood would be a good resources to hand out.
<p>Q2. What/who initiates this conversation? Context?</p>	<ul style="list-style-type: none"> -YP initiates-who leads. If it's a presenting issues-concern about eating increase weight or underweight they will bring it up. Food sensitivity-gluten on and off. But not very often. Comfort eating and behaviours around that. -Social anxiety-skipping lunch at high school very common, skipping breakfast is very common. -Very little is known about nutrition and PE. Are they aware of what they should be doing? Yes, but they don't understand what that looks like e.g. walking to school and home. What does exercise actually mean? They don't identify with it. They think they have to do gym. Sleep and general wellbeing may be covered at high school classes but they haven't applied it. YP know they should be doing PE but they may not have the motivation to choose options within their reach. They don't understand the mind body connection. <p>HE choices</p>	<ul style="list-style-type: none"> -Linking Nutrition and PE. -Food sensitivity- gluten on and off. -Actual meaning of exercise not just going to the gym. -Connection between the mind and body.

	<p>Level of HE and nutrition: can be varied and modelling varies. Parents, if they don't have a good education or the means to buy healthy food that is passed on. -That is relative to the parents.</p> <p>Older cohort-is it different-there is a lack of cooking skills, basic pasta and sauce is considered a meal. Been a shift with gym and nutrition and get fixated on the macros and micros and we don't know anything about that. Fads-keto dieting, gluten, macros</p>	<p>-macros and micros -Fads-keto dieting, gluten, macros -HE and eating disorders-understand the difference between carbs, proteins, portion sizes, what's healthy? Very different between cultures. How much meat is a serve for this age group?</p>
<p>Q3. What are some of the questions or topics that YP talk/ask about regarding physical activity/healthy eating?</p>	<p>HE-Cognition affected by nutrition. Already too much to do during a session. Cheat sheets would be good around HE.</p>	<p>Healthy Eating-what is HE, resources, cheat sheets</p>
<p>Q4. Where do you think/know YP currently go for physical activity/healthy eating information?</p>	<p>Social media, celebrities, YouTube, parents and family situation, school.</p>	
<p>Q5. What knowledge level do you think the YP who come to <i>Headspace</i> have around physical activity/healthy eating? How important is it to them when</p>	<p>Not usually. Is there an awareness of PE with clients to make them feel better-yes some awareness in the older clients but not the younger one. Depends on client as to whether there is not a priority. -They think that a pill can fix it, not enough personal responsibility -quick fix.</p>	<p>Awareness around PA and HE-missing in most age groups.</p>

<p>attending headspace?</p>	<p>-Clients-don't have time fit in PE or meal plans, alter budget time to cook.</p>	
<p>Q6. Do you think YP relate physical activity/healthy eating to mental health? If so, please give an example.</p>	<p>-Some young people who come in and want a label and what treatment should look like, openness to that whole body openness.</p>	
<p>Q7. Would you feel comfortable talking about physical activity/healthy eating with YP during a consultation? Where are you more/less confident?</p>	<p>How comfortable are you talking about HE? -Inside out training and feel better. -Young people fast and now I can be a bit more directed. -I think I lack a lot around HE and eating disorders-need to understand the difference carbs, proteins, portion sizes, what's healthy? Very different between cultures. How much meat is a serve for this age group. -Scope of practice-how much do you need to know. What are the current guidelines and the evidence based norms and portion. What needs to be referred on. -Benefits of certain foods-coming off medications and using food as a way to help their mood. Evidence based food options. -Vulnerable people and we have to be careful about what information they receive.</p>	<p>-Scope of practice. -Food and Mood</p>
<p>Q8. Do you ever refer any YP to a dietitian or exercise professional? If so, who and for what reason?</p>	<p>-Pre COVID-pcyc programs. Up and about-EP's group programs on Thursdays-funded through Sports Australia-project worker and they employ an EP-specifically for those with mental health issues. Structured program and leads into redlink. -Community sporting groups suggestions? Not really, refer to YMCA or PCYC and Up and About.</p>	

	<ul style="list-style-type: none"> -motivation to join a club would need a lot of support. -Less options for Diet and Nutrition. Finances are a huge barrier. GP's aren't trained in Nutrition. I'd go straight to a nutritionist rather than a GP. -Dietitian, via a GP but a financial problem. 	
<p>Q9. Do you give them any resources to read or sites to visit? If so, which ones and do you get any feedback?</p>	<ul style="list-style-type: none"> -Apps-no -YouTube Psychonutrition doctors -YouTube yoga, couch to 5km -Would like some more resources to direct YP to are needed. 	<p>- Would like some more resources to direct YP to are needed.</p>
<p>Q10. What areas of physical activity/healthy eating in relation to mental health or communication about this to YP would you like to know more about?</p>	<ul style="list-style-type: none"> -Literature around inflammation-leaky gut and depression. Gut Health-evidence based. Latest theories -Latest theories now around wholefoods-foods good for gut health. -Deficiencies-causing problems-micronutrients and variety of foods. -Prebiotics, reduce leaky gut and how to eat to improve your gut health. 	

***headspace* Staff Training Evaluation: Healthy Eating and Physical Activity Interventions for Youth Clients**

PARTICIPANT INFORMATION SHEET

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Als: *Sandra Murray, Andrew Williams, Sibella Hardcastle, Marie-Louise Bird, Courtney McGowan and Tamieka Mawer (School of Health Sciences, UTAS) and Katherine Kent (School of Health Sciences, Western Sydney University)*

1. Invitation

You are invited to participate in an evaluation of training you recently attended that focused on healthy eating and physical activity for *headspace* clients.

2. What is the purpose of this study?

This evaluation aims to investigate the suitability and effectiveness of the training sessions, suitability of the training pack, mode of delivery, timing and frequency and impact on normal service delivery.

3. How is the study being funded?

The study is being funded by *headspace* Launceston through a Healthy Tasmania Grant. The research team declare that there are no conflicts of interest in being involved in the study.

4. Why have I been invited to participate?

You are eligible to take part in this study because you are an employee of *headspace* Launceston and recently attended at least one training session on nutrition and physical activity.

Your participation is voluntary and anonymous, and your choice to take part or not take part will not affect your current employment at *headspace*.

5. What will I be asked to do?

You will be asked to complete a short telephone interview with a member of the research team (who did not attend the training sessions) about your perspective on the usefulness of the training sessions and your future training needs. You will also receive a prompt sheet with session topics that were covered in the training to refer to during the interview. The interview will take 10-15 minutes.

Your interview will be recorded and you will receive a copy of your transcript to review for one week and make changes if you wish (or not).

If you are unable to participate in a phone interview you have the option to respond to the interview questions in written form via email.

All information collected will be anonymous. This means that only the research team will know that you have participated in the study. *headspace* management won't know if you've participated or not.

6. Are there any possible benefits from participation in this study?

We do not expect direct benefits for participants in this study. However, this study may help to improve nutrition and physical activity training and service delivery to the youth who attend *headspace*.

7. Are there any possible risks from participation in this study?

We do not expect any possible risks from participating in this study. Your participation is voluntary, you may stop at any time and your confidentiality will be maintained throughout.

8. What if I change my mind during or after the study?

You are free to withdraw without consequence. You can withdraw from the study up until once week after you've reviewed your transcript. After this time all data will be de-identified and combined and therefore we will be unable to remove your data from the study.

9. What will happen to the data when this study is over?

Data will be stored in a locked place and/or password-protected server and only accessible to the researchers of this study. Data will be destroyed at the end of five years.

10. How will the results of the study be published?

The researchers will write journal articles and present the results at conferences, *headspace* and community groups. *headspace* Launceston management will receive a summary of the findings in a report and to distribute to all staff.

11. What if I have questions about this study?

If you have any queries, concerns or issues with this study, please feel free to contact Heather Bridgman on (03) 6324 4048 or Heather.Bridgman@utas.edu.au

12. How can I agree to be involved?

You can participate in this study by returning a signed consent from to:

Andrew.Williams@utas.edu.au. By returning this form the participant is agreeing to be contacted by a member of the research team to complete the interview.

This study has been approved by the Tasmania Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, you can contact the Executive Officer of the HREC (Tasmania) Network on human.ethics@utas.edu.au or (03) 6226 6254. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote H0023475.

headspace Staff Training Evaluation: Healthy Eating and Physical Activity Interventions for youth clients

PARTICIPANT CONSENT FORM

Research team

Chief Investigator: Heather Bridgman (*Centre of Rural Health, School of Health Science, UTAS*)
Email: Heather.Bridgman@utas.edu.au
Phone: 63244048

AI: Sandra Murray, Andrew Williams, Sibella Hardcastle, Marie-Louise Bird, Courtney McGowan and Tamieka Mawer (*School of Health Sciences, UTAS*) and Katherine Kent (*School of Health Sciences, Western Sydney University*)

By signing below, I confirm that I have read and understood the information sheet and in particular:

- I understand that my involvement in this research will include a telephone interview or a written response to the interview questions.
- Any questions that I have asked have been answered to my satisfaction
- I understand that all study data will be securely stored at the *University of Tasmania* premises for *duration of five years* from the publication of the study results and will then be destroyed
- I agree that my study data can be used for this specific project
- I understand that the results of the study will be published so that I cannot be identified as a participant
- I understand that my participation in this research is voluntary and that *headspace* management will not know if I have participated or not.
- I understand that I am free to withdraw at any time, without explanation or penalty
- If I wish, I may request that any data I have supplied be withdrawn from the research up to a week after I review my transcript and that after this time I can no longer withdraw my data from the study
- I agree to participate in the study

Name	
Signature	
Date	

Statement by Researcher

- I have explained the project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.
- If the researcher has not had an opportunity to talk to participants prior to them participating, the following must be ticked.
- The participant has received the Information Sheet where my details have been provided so participants have had the opportunity to contact me prior to consenting to participate in this project.

Name	
Signature	
Date	

Appendix 9. Staff interview guide

headspace Staff Training Evaluation: Healthy Eating and Physical Activity Interventions for Youth Clients.

Interview topic guide

- 1) Which training session/s did you attend?
- 2) Session 1 Physical Activity
 - What were the most/least helpful components of the PA session? (refer to topic prompt sheet), were the practical tips useful?
 - Is there anything you've used from the training in your day to day practice? Can you give an example
 - Have you referred/recommended referral on for PA interventions to clients? How many? Give example
- 3) Session 2 Nutrition
 - What were the most/least helpful components of the nutrition session? (refer to topic prompt sheet), were the practical tips useful?
 - Is there anything you've used from the training in your day to day practice? Can you give an example
 - Have you referred/recommended referral on for nutrition interventions to clients? How many? Give examples
- 4) Session 3
 - 5) What were the most/least helpful components of the nutrition/co-design session? (refer to topic prompt sheet), were the practical tips useful?
 - 6) Is there anything you've used from the training in your day to day practice? Can you give an example
- 7) Presenters
 - Did you find the presenters knowledgeable and presented the information well? Why/why not?
- 8) The Resource Pack
 - How helpful was the resource pack? Have you read/used any of the resources? What was most helpful? Is there another way of accessing resources that you would prefer?

9) Mode of delivery

- Was the face to face mode of delivery helpful/unhelpful? Was the zoom in session in session helpful? Is there another mode that you would find helpful?
- Was the mix of presentation and group activities useful/not useful?
- What did you think about the length of training session (half day) ? Would you have preferred a different length of time?
- Was the venue/food suitable?

10) Ongoing training needs

- Are there any other training needs that would be helpful to you in future?

***headspace* Staff Training Evaluation: Healthy Eating and Physical Activity
Interventions for Youth Clients.
Training Topics Prompt Sheet for Interview**

Session 1

- National Physical Activity Guidelines
- Checking for Understanding
- Physical Activity and Mental Health
- Intervention Strategies
- Exercise professional and Referral – Exercise physiologist, physiotherapist, personal trainer
- Homework – try out a Physical Activity app

Session 2

- Review of Physical Activity app
- Dietary guidelines
- Portion Sizes
- Behaviour Change Techniques for Obesity/Diet
- Mental Health and Nutrition
- Scope of Practice and referring On – dietitian, nutritionist, naturopath
- Homework try a nutrition App

Session 3

- Review a nutrition App
- Label Reading
- Social media myth busting
- Program/intervention possibilities for *headspace* Launceston

Appendix 10. Ethics Approvals



Ethics Approval Letter

23/02/2021

To: Dr Bridgman

Project ID: 23475

Project Title: headspace Staff Training Evaluation: Healthy Eating and Physical Activity Interventions for Youth Clients.

The above named project has been approved by the Tasmania Health and Medical Human Research Ethics Committee on the 23.02.2021.

Approval has been granted for the following documentation:

Submission Document Name	Submission Document File Name	Submission Document Type	Submission Document Date	Submission Document Version
Attachment 1 Participant Information Sheet and Consent Form s	Attachment 1 Participant Information Sheet and Consent Form s.docx	PARTICIPANT INFORMATION AND CONSENT FORM	04/02/2021	1
Attachment 2 headspace staff interview guide and prompt sheet	Attachment 2 headspace staff interview guide and prompt sheet.docx	QUESTIONNAIRE	04/02/2021	1
Attachment 4 Recruitment Emails	Attachment 4 Recruitment Emails.docx	OTHER PROJECT-RELATED DOCUMENTATION	04/02/2021	1
Attachment 3 Final Protocol CYS Staff Training Low Risk Ethics V2	Attachment 3 Final Protocol CYS Staff Training Low Risk Ethics V2.docx	PROTOCOL	19/02/2021	2
Attachment 1 Participant Information Sheet and Consent Forms V2	Attachment 1 Participant Information Sheet and Consent Forms V2.docx	PARTICIPANT INFORMATION AND CONSENT FORM	19/02/2021	2
Letter_Ethics Revision_Responses_19.2.21	Letter_Ethics Revision_Responses_19.2.21.docx	OTHER PROJECT-RELATED DOCUMENTATION	19/02/2021	2



Ethics Approval Letter

29/01/2021

To: Dr Bridgman

Project ID: 23743

Project Title: 23742 - Understanding Healthy Eating and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing headspace Launceston

The above named project has been approved by the Tasmania Social Sciences Human Research Ethics Committee on the 29th January 2021.

Please note that the ethics reference number needs to be populated in the public documents.

Approval has been granted for the following documentation:

Submission Document Name	Submission Document File Name	Submission Document Type	Submission Document Date	Submission Document Version
Attachment 6 Headspace HEPA FB Ad	Attachment 6 Headspace HEPA FB Ad.png	ADVERTISING MATERIAL	23/10/2020	1
Attachment 7 Headspace HEPA Poster	Attachment 7 Headspace HEPA Poster.pdf	ADVERTISING MATERIAL	23/10/2020	1
Attachment 8 Headspace HEPA Recruitment Video Blurb	Attachment 8 Headspace HEPA Recruitment Video Blurb .docx	ADVERTISING MATERIAL	23/10/2020	1
Attachment 9 Headspace HEPA Business card	Attachment 9 Headspace HEPA Business card.docx	ADVERTISING MATERIAL	23/10/2020	1
Attachment 10 Headspace HEPA Media Release	Attachment 10 Headspace HEPA Media Release.docx	ADVERTISING MATERIAL	23/10/2020	1
Attachment 1 Headspace HEPA Survey Participant Information Sheet	Attachment 1 Headspace HEPA Survey Participant Information Sheet.docx	PARTICIPANT INFORMATION AND CONSENT FORM	23/10/2020	1

Appendix 11. Survey and guide

Understanding Healthy Eating and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *Headspace* Launceston Survey

Hello thanks for doing our survey! If you would like someone to help you to fill the survey in please call Heather on 6324 4048. Just remember this survey is anonymous so no one will know your answers.

If at any time you want to stop the survey just close the page or if you feel upset in any way please contact *headspace* on 6335 3100.

First we would like to ask you some questions about food

- How many pieces of fruit do you USUALLY eat each day (including all fresh, dried, frozen, and tinned fruit)?
 - I don't eat fruit every day
 - 1 serve or less
 - 2 serves or more
- How many vegetables do you USUALLY eat each day (including fresh, frozen and tinned vegetables).
 - I don't eat vegetables every day
 - 1 serve or less
 - 2-3 serves
 - 4-5 serves or more
- How often do you USUALLY eat these foods and drinks (tick one option per line)?

	More than once a day	Daily	A couple of days a week	Weekly	Less than once a week	Never or rarely
Drinks with added sugar (such as energy drinks, soft drinks, cordials and sports drinks)						
Take-away foods (such as burgers, pizza, sausage rolls, or hot chips)						
Water (including tap and bottled water)						
Breakfast						

- Do you think you should eat more, the same amount or less of the following foods (tick one box per line)

	More	Same	Less	Not sure
Fruit				
Vegetables				
Drinks with added sugar				
Take-away foods				
Water				
Breakfast				

5. Which of these options can help **YOU** have a healthy weight? (tick one box per line)

	Yes	No	Not sure
Not eating while watching TV			
Reading food labels			
Taking nutritional supplements			
Monitoring how much you eat			
Snacking throughout the day			

6. How important is healthy food to you in managing your mental health? Please tick
Very Important 1 2 3 4 5 Not very important

7. Over the past year did you or your family ever run out of food and not have money to buy more? (remember this is an anonymous survey).

Yes

No

I don't know

8. What stops you from eating healthy food? (tick all that apply)

- unhealthy food is easier to get*
- I don't have time to cook/prepare healthy foods*
- healthy foods are expensive*
- I don't know how to cook healthy foods*
- I dislike the taste of healthy foods*
- My friends and family don't eat healthy food*
- I don't know which foods are healthy*
- nothing*
- other*

9. What motivates you to choose healthy foods? (tick all that apply)

- to improve my health and weight*
- to improve my body image*
- to have more energy*
- to improve my sporting performance,*
- to improve my mental health*

- to improve my sleep*
- because my friends and family eat healthy food*
- my family expects me to eat healthy food*
- nothing*
- other*

Now we would like to ask you some questions about physical activity and sports

10. what physical activity/sports do you usually do? (tick all that apply)

- Walking
- Running
- Swimming
- Gym
- Dancing
- Yoga
- PDHPE lessons
- Bike riding
- Organised sport e.g football, netball
- Other

11. How many times a week would you USUALLY do light physical activity such as (e.g casual walking, washing the dishes or yoga)?

- I don't do light physical activity
- Less once a week
- Weekly
- A couple of days a week
- Daily
- More than once a day

11a. How long would you USUALLY do light physical activity when you do it?

- Less than 15 minutes
- Between 15 and 30 minutes
- Between 30 and 60 minutes
- Longer than 60 minutes

12. How many times a week would you usually do moderate physical activity (e.g. brisk walking or dancing)?

- I don't do moderate physical activity
- Less once a week
- Weekly
- A couple of days a week
- Daily
- More than once a day

12a. How long would you USUALLY do moderate physical activity when you do it?

- Less than 15 minutes
- Between 15 and 30 minutes
- Between 30 and 60 minutes
- Longer than 60 minutes

13. How many times a week would you usually do hard physical activity (e.g. running, football or group exercise classes)?

- I don't do high intensity physical activity
- Less once a week
- Weekly
- A couple of days a week
- Daily
- More than once a day

13a. How long would you USUALLY do hard physical activity when you do it?

- Less than 15 minutes
- Between 15 and 30 minutes
- Between 30 and 60 minutes
- Longer than 60 minutes

14. Do you think you should do more, the same amount or less of the following activities (tick one box per line)

	More	Same	Less	Not sure
Light physical activity				
Moderate physical activity				
Hard physical activity				

15. How important is physical activity to you in managing your mental health? Please circle

Very Important 1 2 3 4 5 Not very important

16. What stops you from participating in physical activity and/or sports? (tick all that apply)

- I don't have time
- I don't have any way to get there (e.g no car/bus)
- The weather (cold, hot, wet weather)
- I have a disability or injury
- My family or I can't afford it
- I feel embarrassed about exercising in public
- I am not good at sports/don't know how to exercise
- I don't have anyone to exercise with
- I don't enjoy exercise/sports
- My mood/mental health
- I don't have anywhere safe to go
- My religion/culture
- nothing
- other

16. What motivates you to be physically active and/or play sports?

- My family encourage me

- My friends encourage me
- I have safe places to exercise in bad weather
- I can get vouchers to help me play organised sport e.g. "Ticket to Play"
- To be physically healthy
- To be mentally healthy
- To improve my body image
- To meet people
- I enjoy being physically active/playing sport
- Being good at sport is important to me
- To improve my sleep
- nothing
- other

17. WHO do you want to get information from about physical activity and healthy eating? Tick all that apply

- Psychologist/Counsellor at *headspace*
- Health professional (GP, nurse)
- Dietitian, exercise professional e.g physio
- School
- work
- Parents
- Friends
- Family (e.g brother, sisters, aunt etc)
- Other

18. HOW do you want get information about physical activity and healthy eating? Tick all that apply

- Socials e.g facebook
- Instagram e.g influencers/celebrities
- Apps
- Websites
- Email
- Talking (face to face/phone/online ie zoom skype)
- In person groups/programs e.g at PCYC
- TV
- Text messages
- Poster/flyers
- Books/magazines
- Other

Now we'd like to ask some questions about you, don't worry this is anonymous

19. What is your Age

20. What is your gender

21. What is your Living situation?

- Living with living at home with both parents/step-parents
- living at home with 1 parent

- Living out of home by myself or with others
- I'm in short term or unstable accommodation
- I'm homeless/sleeping rough

22. What suburb or town do you live in?

23 Tick how many apply to you:

- Go to School/TAFE/University/other education
- Go to work full time
- Go to work part time
- Don't go to school/TAFE/University or work
- Get Centrelink Payments
- other

24. I am Aboriginal and/or Torres Strait Islander

- Yes
- No

25. How many times have you been to or spoken to *headspace* in the past 12 months? ____

26. Have you been given a mental health diagnosis by a doctor, psychologist or counsellor?

- No
- Yes - what is your diagnosis?
 - Depression
 - Anxiety
 - Other _____

Thank you for your time.

Once you press submit you cannot withdraw from the study.

Remember no-one will know that you've done this study

Collect your coffee voucher here: *link TBC*

I would like go in the draw for a Fitbit Inspire or a \$50 gift card

- No
- Yes please leave your phone number and email for us to contact you. This will be kept separate from your survey

I would like to be contacted about taking part in a chat with the researchers about my thoughts about healthy eating and physical activity

- No
- Yes please leave your phone number and email for us to contact you. This will be kept separate from your survey

Understanding Healthy Food and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *headspace* Launceston.

PARTICIPANT INFORMATION SHEET Survey

Research team

Chief Investigator: Heather Bridgman (Centre for Rural Health, School of Health Sciences, UTAS)

AI: Katherine Kent (Centre for Rural Health), Sandra Murray, Andrew Williams, Sibella Hardcastle, Marie-Louise Bird, Courtney McGowen and Tamika Mawer (School of Health Sciences, UTAS)

1. Invitation

You are invited to join a study called: **Understanding Healthy Food and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *headspace* Launceston.** *headspace* Launceston and UTAS are working on this study together. If you need help with this form please contact Heather on (03) 6324 4048.

2. What is the purpose of this study?

We know that healthy eating and physical activity are good for our physical health and our mental health. We want to find out what young people going to *headspace* Launceston know about healthy eating and physical activity.

We want to hear your thoughts about what you know about the food you eat, how you move your body, how best you want to get information and how *headspace* can help you with this.

3. How is the study being funded?

The study is being funded by *headspace* Launceston through a Healthy Tasmania Grant. The research team declare that there are no conflicts of interest in being involved in the study.

4. Why have I been invited to participate?

You can take part in this study because you are aged between 15 and 25 years and you have attended at least one appointment in person/online/over the phone at *headspace* Launceston in the past year.

5. What will I be asked to do?

You will be asked to fill in an online survey. The survey will ask questions about the food you eat, what you think healthy food is, where and how you can get healthy food information, what you do for physical activity, what stops you and helps you being physically active and how you want to get information. We will also ask you how many times you've been to *headspace*, if you have a mental health diagnosis, a few questions about your living situation and if you're working or studying. This survey will take you about 15-20 mins to complete.

All information collected will be anonymous. This means that no one will know that you have participated. *headspace* won't know if you've participated or not.

At the end of the survey you will be offered a \$5 drink voucher and you will also be invited to go in a draw for a Fitbit Aspire or one of thirty \$50 gift cards. Your contact information will be kept separate from the survey answers you give us.

6. Are there any possible benefits from participation in this study?

There are no direct benefits to you. Telling us what you know about the food you eat and physical activity and how this may help your mental health will help *headspace* better support you and other young people. We hope this will help young people that go to *headspace* be healthier in mind and body.

7. Are there any possible risks from participation in this study?

We don't think there are many risks to doing this study, but sometimes being asked questions about healthy eating and physical activity can make you feel worried or stressed. If this happens you can stop at any time and close the survey. Stopping the study won't impact on you getting help from *headspace*.

If you feel worried or stressed you can contact *headspace* Launceston on 6335 3100.

8. What if I change my mind during or after the study?

You can stop the survey at any time but once you press 'submit' you can't withdraw that information.

9. What will happen to the data when this study is over?

When the study is over, any information will be stored in a locked place for five years then destroyed. No-one will be able to read your information except the researchers.

10. How will the results of the study be published?

All data in this study will be anonymous. The researchers will write journal articles and present the results at conferences, *headspace* and community groups. A summary of the results will be posted on the *headspace* Facebook page.

11. What if I have questions about this study?

Please feel free to contact: Heather Bridgman

Contact phone: 0411 922 723

Contact email: heather.bridgman@utas.edu.au

12. How can I join the study?

Click on this link: <https://surveys2.utas.edu.au/index.php/884437?lang=en>

By clicking 'submit' at the end of the survey we understand you have consented to do the survey.

This study has been approved by the Tasmania Health and Medical/Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, you can contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 2975 (SSHREC) or ss.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote H0023743.

Thank you for your time

Understanding Healthy Food and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *headspace* Launceston.

PARTICIPANT INFORMATION SHEET Interview

Research team

Chief Investigator: Heather Bridgman (Centre for Rural Health, School of Health Sciences UTAS)

AI: Katherine Kent (Centre for Rural Health), Sandra Murray, Andrew Williams, Sibella Hardcastle, Marie-Louise Bird, Courtney McGowen and Tamioka Mawer (School of Health Sciences, UTAS)

1. Invitation

You are invited to join a study called: **Understanding Healthy Food and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *headspace* Launceston.**

headspace Launceston and UTAS are working on this study together. If you need help with this form please contact heather on (03) 6324 4048.

2. What is the purpose of this study?

We know that healthy eating and physical activity are good for our physical health and our mental health. We want to find out what young people going to *headspace* Launceston know about healthy eating and physical activity.

We want to hear your thoughts about what you know about the food you eat, how you move your body, how best you want to get information and how *headspace* can help you with this.

3. How is the study being funded?

The study is being funded by *headspace* through a Healthy Tasmania Grant. The research team declare that there are no conflicts of interest in being involved in the study.

4. Why have I been invited to participate?

You can take part in this study because you are aged between 15 and 25 years and you have attended at least one appointment in person/online/over the phone at *headspace* Launceston in the past year.

5. What will I be asked to do?

Interview

You will be asked to chat with one of the researchers about your thoughts about healthy eating and physical activity, and how this may help your mental health. This chat can take place in person at *headspace* offices in Launceston, online (e.g zoom) or over the phone at a time that suits you. This will last about 15-30mins. You will be given a \$20 gift card as a thank you for your time. You can bring a friend with you if

you like. We will record the chat, then write it down on paper and send it to you to have a read. You can make any changes (or none) you want. You'll have up to 2 weeks to return your interview to the researchers.

6. Are there any possible benefits from doing this study?

There are no direct benefits to you. Telling us what you know about the food you eat and physical activity and how this may help your mental health will help *headspace* better support you and other young people. We hope this will help young people that go to *headspace* be healthier in mind and body.

7. Are there any possible risks from doing this study?

We don't think there are many risks to doing this study, but sometimes being asked questions may make you feel worried or stressed. If this happens you can stop at any time and leave the study and you don't even have to say why. Stopping the study won't impact on you getting help from *headspace*. *headspace* won't know if you have participated in the study or not. If you feel worried or stressed you can contact *headspace* Launceston on 6335 3100.

We will also keep you safe from COVID-19 and follow rules about screening, social distancing and hygiene. You can also choose to do the study online or by phone.

8. What if I change my mind during or after the study?

You can stop the study at any time during the Interview and not say why. If you change your mind about what you have said, that's ok. You will be able to view and change your own interview recording and ask that any data you have contributed be deleted up until two weeks after.

9. What will happen to the data when this study is over?

When the study is over, any information will be stored in a locked place for five years then destroyed. No-one will be able to read your information except the researchers.

10. How will the results of the study be published?

All information (data) in this study will be anonymous. This means that no one will know that you did the study or what you said and the data will be mixed together so your privacy is protected. The researchers will write journal articles and present the results at conferences, *headspace* and community groups. If you would like to get a summary of the results please leave your details on the consent form.

11. What if I have questions about this study?

If you want to know about the contact: Heather Bridgman

Contact phone: (03) 6324 4048

Contact email: heather.bridgman@utas.edu.au

12. How can I agree to be involved?

You can agree to participate by reading and signing the consent form attached returning it to heather.bridgman@utas.edu.au.

This study has been approved by the Tasmania Health and Medical/Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, you can contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 2975 (SSHREC) or

ss.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote H0023743.

Thank you for your time

**Understanding Healthy Food and Physical Activity Beliefs, Behaviours
and Needs Of Young People Accessing *Headspace* Launceston.**

**PARTICIPANT CONSENT SHEET
Interview**

By signing below, I confirm that I have read and understood the information sheet and in particular:

- I have gone through the information sheet and I understand what the study is about and my questions about the study have been answered.
- I understand that doing this study includes a chat (interview) about healthy eating and physical activity and how this may help my mental health.
- I understand that the research may include an *audio* recording of my words but the researchers will keep anything I say confidential, and use it only for the study.
- I understand that if, during the chat, I feel worried, stressed or uncomfortable, I can stop at any time and not say why.
- I understand that I can choose to take part in the study or not and I can stop at any time. This will not affect me going to *headspace*
- If I change my mind about what I've said, I can call the researcher up to 2 weeks after a get a copy of my interview. After that, it will be too late to change anything or to withdraw what I said.
- I understand that I will not be named or identified in any report from the study.
- I understand that the the project will be run with COVID safe guidelines, or I can do the study online/over the phone
- I understand that all study data will be securely stored at UTAS for *five years* from the publication of the study results and will then be destroyed
- I agree that my study data can be used for this specific project

- I understand that the interviewer is a psychologist and if I disclose a risk of harm to others or myself confidentiality may be broken.

Name	
Signature	
Date	

I would like to get a summary of the results:

- No
- Yes, please leave your email Address: _____

Statement by Researcher

I have explained the project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.

If the researcher has not had an opportunity to talk to participants prior to them participating, the following must be ticked.

The participant has received the Information Sheet where my details have been provided so participants have had the opportunity to contact me prior to consenting to participate in this project.

Name	
Signature	
Date	

Understanding Healthy Food and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *headspace* Launceston.

PARTICIPANT INFORMATION SHEET Focus Group

Research team

Chief Investigator: Heather Bridgman (Centre for Rural Health, School of Health Sciences UTAS)

AI: Katherine Kent (Centre for Rural Health), Sandra Murray, Andrew Williams, Sibella Hardcastle, Marie-Louise Bird, Courtney McGowen and Tamioka Mawer (School of Health Sciences, UTAS)

1. Invitation

You are invited to join a study called: **Understanding Healthy Food and Physical Activity Beliefs, Behaviours and Needs Of Young People Accessing *headspace* Launceston.**

headspace Launceston and UTAS are working on this study together. If you need help with this form please contact Heather on (03) 6324 4048.

2. What is the purpose of this study?

We know that healthy eating and physical activity are good for our physical health and our mental health. We want to find out what young people going to *headspace* Launceston know about healthy eating and physical activity. ,

We want to hear your thoughts about what you know about the food you eat, how you move your body, how best you want to get information and how *headspace* can help you with this.

3. How is the study being funded?

The study is being funded by *headspace* through a Healthy Tasmania Grant. The research team declare that there are no conflicts of interest in being involved in the study.

4. Why have I been invited to participate?

You can take part in this study because you are aged between 15 and 25 years and you have attended at least one appointment in person/online/over the phone at *headspace* Launceston in the past year, or you are a member of the *headspace* Advisory and Reference Team (*hART*)

5. What will I be asked to do?

Focus Group

You will be asked to chat about your thoughts about healthy eating and physical activity and how this may help your mental health with a small group of 4-6 people. This chat will take place in person at *headspace* offices in Launceston, and take about 30-45mins. You will be given a \$20 gift card as a thank you for your time.

We will record the chat then write it down on paper. We will summarise the main points from the focus group and send this back to everyone who did the focus group to look at. You can add any other thoughts and ideas if you want to. You'll have up to 1 week to return this to the researchers.

6. Are there any possible benefits from doing this study?

There are no direct benefits to you. Telling us what you know about the food you eat, your physical activity and how this may help your mental health will help *headspace* better support you and other young people. We hope this will help young people that go to *headspace* be healthier in mind and body.

7. Are there any possible risks from doing this study?

We don't think there are many risks to doing this study, but sometimes being asked questions can make you feel worried or stressed. If this happens you can stop at any time and leave the study and you don't even have to say why. Stopping the study won't impact on you getting help from *headspace*. *headspace* won't know if you've participated or not.

If you feel worried or stressed you can contact *headspace* Launceston on 6335 3100. We will also keep you safe from COVID-19 and follow rules about screening, social distancing and hygiene.

8. What if I change my mind during or after the study?

You can stop the study at any time during the Focus Group and not say why. If you change your mind about what you have said, that's ok. You will be able to ask that any data you have contributed be deleted up until one week after the focus group is finished.

9. What will happen to the data when this study is over?

When the study is over, any information will be stored in a locked place for five years then destroyed. No-one will be able to read your information except the researchers.

10. How will the results of the study be published?

All information (data) in this study will be anonymous. This means that no one will know that you did the study or what you said and the data will be mixed together so your privacy is protected. The researchers will write journal articles and present the results at conferences, *headspace* and community groups. If you would like to get a summary of the results please leave your details on the consent form.

11. What if I have questions about this study?

If you want to know about the contact: Heather Bridgman

Contact phone: (03) 6324 4048

Contact email: heather.bridgman@utas.edu.au

12. How can I agree to be involved?

You can agree to participate by reading and signing the consent form attached returning it to heather.bridgman@utas.edu.au.

This study has been approved by the Tasmania Health and Medical/Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study, you can contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 2975 (SSHREC) or ss.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote H0023743.

Thank you for your time

**Understanding Healthy Food and Physical Activity Beliefs, Behaviours
and Needs Of Young People Accessing *Headspace* Launceston.**

**PARTICIPANT CONSENT SHEET
Focus group**

By signing below, I confirm that I have read and understood the information sheet and in particular:

- I have gone through the information sheet and I understand what the study is about and my questions about the study have been answered.
- I understand that doing this study includes a focus group about healthy eating and physical activity and how this may help my mental health.
- I understand that the research may include an *audio* recording of my words but the researchers will keep anything I say confidential, and use it only for the study.
- I understand that if, during the chat, I feel worried, stressed or uncomfortable, I can stop at any time and not say why.
- I understand that I can choose to take part in the study or not and I can stop at any time. This will not affect me going to *headspace*.
- If I change my mind about what I've said, I can call the researcher up to a week after the focus group finishes. After that, it will be too late to change anything or to withdraw what I said.
- I understand that I will not be named or identified in any report from the study.
- I understand that the the project will be run with COVID safe guidelines.
- I understand that all study data will be securely stored at UTAS for *five years* from the publication of the study results and will then be destroyed

- I agree that my study data can be used for this specific project
- I understand that the interviewer is a psychologist and if I disclose a risk of harm to myself or others confidentiality may be broken.

Name	
Signature	
Date	

I would like to get a summary of the results:

- No
- Yes, please leave your email address: _____

Statement by Researcher

- I have explained the project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.
If the researcher has not had an opportunity to talk to participants prior to them participating, the following must be ticked.
- The participant has received the Information Sheet where my details have been provided so participants have had the opportunity to contact me prior to consenting to participate in this project.

Name	
Signature	
Date	

**Understanding Healthy Eating and Physical Activity Beliefs, Behaviours and Needs
Of Young People Accessing *Headspace* Launceston**
Focus group topic guide

Script

Hi my name is Heather, I'm a clinical and health psychologist.

Thank you for taking part in this focus group. Have you all read through the information sheet? Do you have any questions?

Today's focus group is confidential so whatever is said in this room needs to stay in this room. I'd ask that you all respect each others' privacy.

If at any time the questions that I'm asking make you feel stressed or uncomfortable just let me know or you can leave and you don't need to say anything or explain yourself. This focus group is completely voluntary and whether you participate or not will not impact on you your role with headspace or getting support from headspace. If I notice if anyone looks uncomfortable, I'll check with to see how you are going.

You also don't have to answer all the questions if you don't want to.

One more thing, because I'm a psychologist, I have a duty of care to report if anyone expresses a risk of harm to themselves or to some else during this focus group.

Does anyone have any questions? Is everyone happy to take part?

Is everyone ok with being recorded? Ok, let's get started:

Q1. When we use the words healthy food or good nutrition what does that mean to you?

Q2. when we use the words physical activity what does that mean to you?

Q3. How important are physical activity and healthy eating in managing mental health conditions?

Q3. How do YP currently access information about healthy eating and physical activity? (prompt online, apps, peers, family, counsellor)

Q4. How do you think YP want to access information about healthy eating and physical activity? (prompt online, apps, peers, family, counsellor)

Q5. what would it be like for YP to talk about healthy foods and physical activity during an appointment at *headspace*?

Q3. What gets in the way of YP accessing and eating healthy foods?

Q4. What helps YP to accessing and eating healthy foods?

Q5. What gets in the way of YP being physically active? (prompt time, confidence, motivation, cost, not knowing where to go)

Q6. What helps or would help YP participate in or increase physical activity?

Interview topic Guide

Thank you for taking part in this interview . Have you all read through the information sheet? Do you have any questions?

If at any time the questions that I'm asking make you feel stressed or uncomfortable just let me know or you can just stop and you don't need to say anything or explain yourself. This interview is completely voluntary and whether you participate or not will not impact on you getting support from headspace. If I notice you look uncomfortable I'll check with to see how you are going. You also don't have to answer all the questions if you don't want to.

One more thing, because I'm a psychologist I have a duty of care to report if anyone expresses a risk of harm to themselves or to some else during this focus group.

Do you have any questions? Are you happy to take part?

Are you ok being recorded? Ok let's get started:

Q1. What do the words healthy eating mean to you ?

Q2. What do the words physical activity what does that mean to you ?

Q3. How important are physical activity and healthy eating in managing mental health conditions?

Q3. How do you currently access information about healthy eating and physical activity? (prompt online, apps, peers, family, counsellor)

Q4. How would you like to access information about healthy eating and physical activity? (prompt online, apps, peers, family, counsellor)

Q5. What would it be like for you to talk about healthy foods and physical activity during an appointment at *headspace*?

Q3. What gets in the way of you accessing and eating healthy foods?

Q4. What helps you to accessing and eating healthy foods?

Q5. What gets in the way of you being physically active? (prompt time, confidence, motivation, cost, not knowing where to go)

Q6. What helps you or would help you to participate in physical activity?

Appendix 12. Dietetics Service Mapping Launceston

Dietetic Services	Adults	Children/Youths	Offers mental health service	Wait list	Medicare	Cost	Bulk billing	Programs or Services
Launceston Dietetics	Yes		No specific service offered	2-6 weeks	Medicare rebate available (\$54.60) with GP management plan or eating disorder management plan	Initial app. - \$130 Review - \$80 -\$130	No	
Nutrition Solutions	Yes	Yes		-	-	-	No	Cooking demonstrations Workshops
Erin Jackson	Yes		Eating disorder management	2-6 weeks	Medicare rebate available (\$54.60) with GP management plan	Initial app. - \$55 Review - \$75	No	
Sharon King	Yes	Yes	No specific service offered	2-6 weeks	Medicare rebate available (\$54.60) with GP management plan	Initial app. - \$110 Review - \$65 *Under 18 years app \$65	No	

Northern Nutrition and Dietetics	Yes		No specific service offered	2-6 weeks		Initial app. - \$120 Review - \$65	No	
Nutrition for life	Yes		No specific service offered	2-6 weeks	Medicare rebate available (\$54.60) with GP management plan	Initial app. - \$159 Review - \$99	No	
Pathway Nutrition	Yes		Eating disorder management	2-6 weeks	Medicare rebate available (\$54.60) with GP management plan	Initial app. - \$120 Review - \$65	No	Group sessions
Tas Performance Dietetics	Yes *Athletes		Eating disorder management	Not available	No	1 hour - \$130 30 minutes - \$80	No bulk billing	Supermarket tours Cooking sessions Offers group sessions: 1 hour group - \$300 ½ day - \$450 Full day - \$950
Mouth Works		Yes *CHILDREN	N/A	1 week	*NDIS or private	Not available		

Appendix 13. Exercise Physiology Services Mapping Launceston

Exercise Physiology Services	Adults	Children/ Youths	Offers mental health service	Wait list	Medicare	Gap fee		Cost			Group programs	
						Initial	Review	Initial	Review	One on One		Cost
Body Connect Exercise Physiology	Yes	Yes	NDIS / Medicare	No	Yes	\$25	\$0	\$90 (60 mins)	\$60 (45 mins)	\$70/hr	Yes - older adults	\$15/session
PhysioTas	Yes	Yes	NDIS / Medicare	No	Yes	\$44.40	\$14.40	\$99 (60 mins)	\$69 (45 mins)		Yes - all ages	\$20/session
In-Balance	Yes	Yes	Medicare	No	Yes	\$80		\$74 (30 mins) \$102 (45mins) - \$130 (60 mins)	\$68 (30 mins), \$89 (45 mins) \$120 (60 mins)		Yes - older adults	Program specific
Access Injury Management	Yes	Yes	Workers comp / Medicare	No	Yes	\$0	\$0	\$54.60	\$54.60	\$75/hr	No	
PhysioFit	Yes	Yes	Richmond fellowship (EP)	No	Yes	\$13.40	\$13.40	\$115 (60 mins)	\$65 (30 min)	\$40 for 30 min PT	Yes - primarily older adults	\$20/session
NJF Wellness	Yes	No	DVA services									
Invermay Allied Health	Yes	Yes	NDIS / Medicare	Books closed				Not currently accepting new clients				
SPR Conditioning	Yes	Yes		No	No			\$80.00	\$60.00	\$60.00	Yes - kids	\$15/session

Appendix 14. Nutrition services within other *headspace* centres

Headspace Centre	Discipline	Program	Scope	Length of service	Evaluations	Parameters for inclusion	How is the role funded	Referral pathway	Implementation issues
Headspace Tamworth	Dietetics	Outpatient clinic X2 dietitians 12hours per week	Individual	~7 years	Student evaluations only	Any mental health diagnosis including restrictive/binge eating and eating disorders	Role is funded through fundraising	Referral is made by <i>headspace</i> or YCC staff. Referrals are triaged and app are made	No implementation issues only issues with ongoing funding
Headspace Wollongong & Headspace Goulburn	Dietetics	Once/week And Fortnightly	Individual Provides resources to staff and a nutrition advocate	~3 years	No formal evaluations only patient and carer satisfaction surveys	Any mental health diagnosis including restrictive/binge eating and eating disorders	Lead agency fund the role	<i>Headspace</i> staff e.g. GP	Initially not getting enough referrals
Headspace Bankstown	Dietetics		Individual	1 year	No evaluations	Any mental health diagnosis including restrictive/binge eating and eating disorders	Medicare	<i>Headspace</i> staff e.g. GP	Young persons perceived perception of what a dietitian does and originally the Medicare system and how this works

Headspace Woolloongabba & Headspace Nundah	Dietetics	Fortnightly	Individual	~5 years	No evaluations	Any mental health diagnosis including restrictive/bin ge eating. Eating disorders are referred on to an external service in Brisbane for specialised care.	Medicare/Bulk bill	<i>Headspace</i> staff e.g. GP or external GP	GP's reluctance to put the mental health patients on chronic disease management plans
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***Happy to discuss
further with Caroline**

*Happy to discuss further with *headspace* Launceston

Appendix 15 Student Applications report

Written By J. Atherton & K. Caunter

Background

In Australia, most young people are not achieving the governments' recommendations for physical activity or healthy eating (ABS 2018) with a proportion of individuals also being affected by psychological distress (ABS 2007). Individuals within the 12-25 year category are the target population for the organisation, *Headspace*, that strives for early intervention to promote mental wellbeing. Several studies have looked at taking a holistic approach between health factors, seeking to increase youth's physical activity levels to enhance their self-perception and self-esteem (Biddle & Asare 2011; Lubans et al. 2016) or, have examined the influence of nutrition on mental disease burden (Owen & Corfe 2017). In accordance with the National Health Survey 2017-18 (ABS 2018), just under a quarter (24.9%) of youth (5-17 years) were reported as being overweight or obese while in young adults (18-25 years) this totalled at just under half (46.0%). Physical activity levels and eating habits are key factors influencing bodyweight, thus, young Australians not meeting the government's physical activity recommendations (98.1% 15-17 years, 85% 18-64 years) and/or nutritional recommendations (94% 2-17 years and 94.6% 18-64 years) is of concern within the community.

Headspace is a one stop shop to seeking to bridge the practitioner to client barrier for youths experiencing mental health issues, and supply the relevant resources to educate and assist them to improve their general health when they are experience various types of hardship. It has been shown that youths are receptive to interacting with health-related information via apps (Low & Manias 2019). Although presently there is insufficient research regarding the impact of application (apps) use on youth health outcomes (Brist, Porter & Stallard 2017). It is important for health professionals to remain up to date with research findings which can inform daily service delivery, though often these professionals are time poor. For instance, their ability to source suitable apps to recommend to their clients may be limited.

Aim

The aim of the project was to source, quality assess and provide recommendations for apps focusing on physical activity and/or healthy eating to support the mental health, suitable for youths aged 12-25 years accessing Launceston *Headspace* services.

Method

Search strategy

VicHealth's Healthy Living Apps Guide was the primary resource used for finding exercise and nutrition apps in this project. A search for both the 'physical activity and sport' and 'healthy eating' categories was conducted, using filters that only found apps that were free and aimed towards ages 12-25. Results were sorted by highest ratings, and apps were then selected until one category had exhausted its list. ReachOut's 'tools and apps' page was also searched, with the tags 'boost fitness', 'be

healthier' and 'manage eating disorders' selected. Results were then filtered into either physical activity or nutrition categories for review. Finally, android and iOS app stores were searched using terms 'physical activity' and 'nutrition' and the top 10 results for each were scanned for ages 12-25. All duplicate and irrelevant results were discarded.

- Exercise app searches found 17 results from VicHealth, 3 from ReachOut and 4 from the app stores.
- Nutrition app searches found 17 results from VicHealth, 0 from ReachOut and 5 from the app stores.

Quality Assessment

To assess the quality of the apps found, each app was used for around 20 minutes and graded using the Mobile App Rating Scale (MARS), which has been shown to be a reliable measure of health app quality (Stoyanov et al. 2015). This tool provides scoring for level of engagement & functionality, aesthetics and information as well as overall and subjective quality for an app. There is also an app-specific score which assesses the app's impact on the user's knowledge, attitudes, intentions to change and likelihood of actual change in physical activity or nutrition habits specifically.

Results

A total of 30 apps were reviewed, 16 being physical activity based and 14 being nutrition based. Exclusion from the initial search occurred if apps were no longer available or paid features were required for utilisation. The apps were rated per category of the MARS tool (engagement, functionality, aesthetics, information, app quality, app subjective and app specific) and were able to achieve a rating from 0-5 per category. Table 1 is representative of the scores achieved per category for the physical activity apps while Table 2 outlines the nutrition based apps scores. An app was identified as high scoring for its category if it was within the highest 4 scores, and marked with an asterisk (*). As shown in bold in Tables 1 & 2, the top 5 rated physical activity based apps were Workout Trainer: Home Fitness Coach, Nike Running, Nike Training Club, Fiton and Samsung Health, and the top 5 rated nutrition based apps were CARROT Hunger, MyFitnessPal, GetFit, Cronometer and Eat This Much, based on their cumulative MARS scores.

Table 1: Exercise based apps 1-5 rating per category from MARS tool

App Names	MARS category scores (1-5)						
	Engagement	Functionality	Aesthetics	Information	App Quality	App Subjective	App - Specific
Home workout no equipment	4.0	3.5	3.0	3.7*	3.6	2.0	2.8
Jillian Michaels: the fitness app	3.0	2.5	3.7	2.3	2.9	1.3	2.2
Sworkit fitness - workouts & exercise plans app	3.4	3.0	3.3	3.2	3.2	3.3	3.0
Workout Trainer home fitness coach	4.6*	3.5	3.7	3.7*	3.9	3.8*	3.5*
Strava tracker record running, cycling & swimming	3.2	2.5	2.7	2.7	2.8	2.3	2.8
BodBot personal trainer: workout & fitness coach	4.0	3.3	3.0	2.5	3.2	2.0	2.2
Nike running	4.2	5.0*	4.7*	3.8*	4.4*	3.8*	3.5*
Nike training club - home workouts and fitness plans	4.4*	4.5*	5.0*	3.2	4.3*	4.0*	3.2
Zombies, run!	3.8	3.0	3.3	3.2	3.3	1.8	3.0
Headspace: meditation & sleep	3.0	4.0	3.7	3.3	3.5	1.8	2.7
Instant heart rate: HR monitor & pulse checker	1.4	1.0	3.0	1.8	1.8	1.0	1.0
Kids fitness - exercises for kids & yoga for kids	3.4	4.8*	4.3	3.2	3.9	3.0	3.3*
Fiton - free fitness workouts & personalized plans	4.4*	4.0	5.0*	3.0	4.1*	3.5	3.3*
7 minute workout	3.3	5.0*	3.3	3.4*	3.8	2.5	3.0
Samsung health	4.6*	4.3	5.0*	3.3	4.3*	4.3*	3.0
5km run - couch to 5km walk/jog interval training	2.5	3.5	3.0	2.5	2.9	1.5	2.3

* highest 4 scores per category

Table 2: Nutrition based apps 1-5 rating per category from MARS tool

App Names	MARS category scores (1-5)						
	Engagement	Functionality	Aesthetics	Information	App Quality	App Subjective	App - Specific
CARROT Hunger	4.8*	5.0*	5.0*	3.5	4.6*	4.0*	3.5*
MyFitnessPal	4.6*	4.0	4.3*	4.3*	4.3*	4.3*	3.5*
My Diet Coach	3.6	3.8	4.0	2.8	3.5	3.3	2.7
8fit	2.2	3.2	3.3	1.7	2.6	1.0	1.0
Freeletics Nutrition	2.6	3.7	3.0	2.5	2.9	1.7	1.8
Lose it!	4.4	4.7*	4.3*	3.8	4.3*	4.0	3.0
GetFit	4.0	4.7*	4.3*	4.2*	4.3*	4.0	3.2
Cronometer	4.8*	4.8*	4.0	4.7*	4.6*	5.0*	3.7*
Gymster	2.8	3.7	3.7	1.7	2.8	1.2	1.7
HealthifyMe	4.0	4.0	4.3*	3.5	3.9	3.5	3.2
Eat This Much	4.8*	4.5	4.0	4.7*	4.5*	4.5*	3.5*
Lifesum	4.2	3.7	4.3*	3.2	3.9	2.2	2.5
Foodvisor	3.8	3.7	5.0*	3.0	3.9	2.2	1.7
Food Score Calculator	1.4	2.0	2.3	2.2	2.0	1.7	1.3

* highest 4 scores per category

Discussion

Apps with a higher quality of content and less inaccessible paid features tended to be supported by name brand businesses and scored higher in the aesthetics, app quality and subjective categories. The physical activity apps primarily focused on workout routines whilst the nutrition apps focused on energy intake and macronutrient distribution. Apps were generally based on an older audience, primarily young adults, although some apps like 'Zombies, Run!' and 'Kids Fitness' were designed to appeal to an adolescence audience.

During the review of the physical activity and nutrition apps, it was identified that many were designed as clear money-grabs, pitched towards individuals with low health literacy and the apps had little intentionally purpose to improve health of the user, with extremely limited free features or just overall poorly thought-out functionality. Many apps focused on changing an individual's appearance with 'booty', 'abs', 'skinny', 'weight loss' and 'visible changes' being common phrases mentioned in several lower quality apps and thus not necessarily promoting good health.

The physical activity apps primarily focused on increasing physical activity levels through undertaking goal setting, focused on alternating an individuals' weight or increasing their exercise duration. Several apps promised a lot although delivered minimal original content and provided limited or no health education. All apps provided basic exercises or programs to undertake which did not place the individual at any greater risk of injury than ordinary unsupervised exercise. All exercises encouraged the undertaking of physical activity that could likely only be beneficial for individuals that are currently sedentary or have low activity levels. Overall, app designers should seek to include more motivational and educational resources to potentially enhance greater adherence for the participant. Areas to focus on would be the importance of each exercise type throughout life that as well as information for key topics such as managing cardiovascular risk and maintaining bone density levels.

The majority of the nutrition apps reviewed focused on weight loss, energy intake and macronutrient distribution and also offered physical activity tracking or exercise plans. Energy and macronutrient monitoring are effective for fat loss which alone can improve mental health (Fabricatore et al. 2011) but reaching target energy and macronutrient intakes can be easily achieved without a healthy diet. Being aware of micronutrient intake and potential deficiencies is crucial for physical and mental health (Wang et al. 2018; Li et al. 2017; Bender et al. 2017) and this was reflected by the higher scoring apps also monitoring vitamin and mineral intake. While the effect of these apps has been shown to be largely dependent on the attitude of the user (Laing et al. 2014), at the very least just a single use of these apps can give users awareness of how nutritious their everyday diet is and can offer potential explanations for their current mental health. The top scoring apps were engaging and visually pleasing which is important to make the apps enjoyable for young people, and some apps focused more on fun and simplicity whereas others focused more on comprehensive and accurate information which offers variety for different goals.

Limitations

The small scale of the study and time restraints limited the types of reviewers assessing the apps to two individuals within their early twenties, and therefore the findings are an extrapolation of the personal thoughts of these individuals across the target age range. The results could be biased from these users' previous experiences and not truly representative of the targeted *Headspace* youth audience range. Due to time limitations and resources, a limited number of apps was able to be assessed and these only included free apps. In future, a larger number of reviewers, along with reviewers of the target population included, assessing apps could decrease the potential for bias in results or interpretation. The analysis of singular apps by several individuals could also enhance the strength of the findings.

Conclusion

Apps provide a general plan for participants to follow to achieve determined goals while remaining engaging and informative. The analysis of a total of 30 apps using the MARS tool resulted in the 5 highest scoring apps being selected for the physical activity field, and another 5 for the nutrition field. *Headspace* practitioners can recommend these apps to their youth clients as resources to utilise to improve their general health and wellbeing.

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