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Evidence Snapshot

Interventions to reduce or prevent lifestyle risks for people with disability

An Evidence Snapshot brokered by the Sax Institute for the Australian Commission on Safety and Quality in Health Care.
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Disclaimer:

This Evidence Snapshot was produced using the Evidence Snapshot methodology in response to specific questions from the commissioning agency.

It is not necessarily a comprehensive review of all literature relating to the topic area. It was current at the time of production (but not necessarily at the time of publication). It is reproduced for general information and third parties rely upon it at their own risk.

Introduction

This Evidence Snapshot was commissioned by the Australian Commission on Safety and Quality in Health Care (the Commission) and prepared by the University of Newcastle. It identifies evaluated interventions targeting lifestyle risks and behaviours that reduce the likelihood of chronic diseases for people with disability. Note that it was completed within 10 working days, so while a rigorous process for searching was followed it is possible that some peer reviewed or grey literature may have been missed.

An Evidence Snapshot is a rapid review of existing evidence tailored to the needs of an agency. An Evidence Snapshot answers one specific policy or program question and is presented as a short brief of 3-4 pages summarising existing evidence. Evidence Snapshots review up to 20 peer reviewed and up to 20 websites or grey literature reports, focusing on literature published in last 5 years identified using limited search terms, databases, and table headings. A detailed analysis, synthesis and quality assessment of the included studies are not provided. Additional information is provided in Appendix 9.

The Commission was funded by the NDIS Quality and Safeguards Commission to undertake three rapid reviews regarding effective strategies to address comprehensive health assessment, oral health and lifestyle issues for people with disability. The Sax Institute brokered the three Evidence Snapshots, see also: *The effectiveness of oral health interventions for people with disability* and *The effectiveness of comprehensive health assessments for people with disability.*

Review question

What interventions have been shown to be effective in reducing lifestyle risks for adults with a disability?

Methods

A search of peer reviewed and grey literature was executed (Appendix 1). The peer reviewed search was conducted across three databases (Medline, PsycInfo, and Scopus) and limited to literature published in English from 01 January 2016–28 October 2020, returning 1,535 unique records. An extensive grey literature search was completed: a Google Scholar search retaining the first 200 extracts (01 January 2016–28 October 2020); a desktop search of Australian Policy online (01 October 2019–28 October 2020); and a desktop search of 34 websites of Australian government and non-government organisations (01 October 2019–28 October 2020), returning 334 records.

Records were screened against eligibility criteria (Appendix 2) to identify publications eligible for inclusion. As per the specified Evidence Check parameters, a maximum of 20 studies from the peer reviewed search and 20 studies from the grey literature search could be included; with final included studies selected based on rigour (i.e. study designs constituting the highest level of evidence according to the NHMRC levels of evidence),[1] diversity across disabilities, and relevance (see Appendix 3 for detailed explanation). We report the search results in Appendix 3, list of included studies in Appendix 4, peer-reviewed literature in Table 1 and Appendix 5 (Table 5.1), and we summarise the grey literature in Appendix 5 (Table 5.2).

Quantitative studies were classed as effective where they demonstrated a positive effect (statistically or descriptively) in 50% or more of outcomes within an outcome type (consumer physical health, consumer knowledge/perceptions, provision/receipt of physical health support, and staff knowledge/ perceptions); and qualitative studies where improvement in an outcome was identified as a key theme.

Summary of findings

Findings

- Included in this review are **20 studies from the peer reviewed literature** and **13 studies from the grey literature** search**.** Of the studies evaluating an intervention, **26 of 28 interventions were effective** in improving at least one outcome type: consumer physical health[2-21], consumer knowledge and perceptions[3,17,20,22-24], staff knowledge and perceptions[3,17,25,26], and receipt or provision of physical health care.[5,15,17,27]
- Included were 2 systematic reviews,[4,14] 5 randomised controlled trials,[2,5,9,11,28] 2 controlled pre-post studies,[27,29] 1 longitudinal cohort study,[10] 1 case series,[13] 9 pre-post studies,[3,6-8,12,18,20,25,26] 8 qualitative evaluations,[15-17,19,21-23,30] and 5 qualitative studies (without an evaluation).[31-35] Most were conducted in the US (*n*=11), Australia (n=8), and the UK (*n*=3).
- Studies were of mixed quality, with 2 NHMRC level I (systematic reviews) and 5 level II studies (RCTs). The remaining studies were either level III (*n*=3; controlled pre-post and cohort) or IV (*n*=10; pre-post, post-only and case series) (*n*=13 NA, qualitative studies). The body of evidence was rated as 'excellent' for 1/5 areas (applicability) and 'good' for 4/5 areas (evidence base, consistency, clinical impact, and generalisability).[1] The overall level of evidence was NHMRC evidence grade B which means the body of evidence included in this review can be trusted to guide decision making in most situations (Appendix 6).
- Lifestyle interventions were trialled mostly among persons with an intellectual disability (*n*=8), various or mixed diagnoses (*n*=5), intellectual and/or developmental disabilities (*n*=3), multiple sclerosis (*n*=3), and mental health conditions (*n*=3).
- Most interventions targeted physical activity (*n*=26), followed by nutrition (*n*=13), smoking (*n*=2), and alcohol (*n*=1). Twelve studies addressed multiple behaviours, most commonly physical activity and nutrition (*n*=9).
- Lifestyle interventions included the following strategies: screening and assessment, consumer education and/or resources, individualised goals, practical support and demonstrations, family/unpaid carer involvement, peer-led support, e-health strategies, staff training and/or resources, tailoring of existing programs, and referrals (see Table 1).

Key messages

Peer reviewed literature

Overall summary of interventions

- Consumer **education** and/or provision of **resources** was included as an intervention strategy in 16 studies. Education was predominantly delivered face-to-face (*n*=13) and could be on an individual basis (*n*=8), in a group (*n*=4), or combination of both (*n*=4). Length of education ranged from one session[13] to 18 months.[4] Examples of resources include recipe cards and menus,[3,12] exercise booklets and DVDs,[2] visual aids (e.g. a calendar),[7] and Fitbits.[13] All 16 studies were effective in improving at least one outcome type.
- Nine studies tested interventions that included **individualised programmes**, where lifestyle interventions were tailored based on an individual's needs or goals.[5,11-13,15,16,25,36,37] All 9 were effective in improving at least one outcome type.
- **Practical support** or demonstrations were included in 9 studies, such as exercise sessions and cooking classes.[2-4,7,8,12,14,16,17] All 9 were effective in improving at least one outcome type.
- Eight studies tested interventions that included **staff training**, such as education workshops and practical cooking classes. Eight of 9 were effective in improving at least one outcome type.[3,7,15,17,25-27]
- Involvement of unpaid or family **carers** was mentioned in four studies and varied: participants were able to attend activities with a carer or support person[2,6], providing carers with information leaflets[6,9,12] or personalised reports,[12] and active involvement of family in the intervention.[12] All four were effective in improving consumer physical health.
- Five studies involved **tailoring** or adapting an existing intervention for the general population to address the specific needs of people with disability.[2,3,6,7,9] Elements of tailoring included simplifying instructions,[3,7] providing visual aids,[3] ensuring activities are appropriate for individual abilities,[2] providing resources in multiple formats (audio, DVD, large text booklets),[2] and extending the length of individual sessions and overall intervention length.[9] All five studies were effective in improving consumer physical health. One also impacted measures of staff knowledge and consumer knowledge.[3]
- Four studies tested **e-health** interventions, either as the sole intervention (engagement with a website[10]) or as an additional element to supplement delivery of face-to-face support (websites and telephone applications;[6] social media to increase motivation and peer support;[14] and a tablet application to facilitate care delivery[15]). All four improved consumer health outcomes, and one of two examining provision of physical health support impacted such outcomes.[15]
- Few studies included peer-led strategies (*n*=3), screening and assessment (*n*=3) or referrals (*n*=1).[5]
- Appendix 7 contains a list of the peer reviewed publications that mentioned social isolation, loneliness or psychosocial risk factors.

Interventions targeting consumer physical health outcomes

- Sixteen of the 17 studies reporting **consumer physical health** outcomes reported effective interventions, demonstrating improvements in: diet,[3,10,15,17] physical activity,[2,7,10,11,13,16] weight,[4,6,7,12,14] smoking cessation,[5] alcohol use,[9] blood pressure,[12] and quality of life.[8]
- Six of 8 studies examining outcomes relating to physical activity reported positive improvements, 4 of 5 for nutrition, 1 of 2 for smoking, and 1 of 1 for alcohol.
- Fifteen of the 16 effective interventions included consumer education or provision of resources e.g. recipe cards; daily record diaries.
- Practical support was also included in 9 effective interventions e.g. cooking classes; physical activity sessions.
- Other strategies in effective interventions were: customised goals or plans (n=8), staff training (n=4), carer involvement (n=4), e-health support (n=4), and screening (n=3).

Interventions targeting consumer knowledge or perceptions

- Three of the four studies examining **consumer knowledge or perceptions,** identified interventions effective in improving such outcomes.
- Two effective interventions involved practical support; the first being a 6-week cooking programme provided to dyads of persons with a developmental disability and their support workers, increasing consumer knowledge and reducing perceived barriers to healthy cooking.[3] The second was a health promotion intervention with staff training, as well as education and supervised physical activity sessions for residents of a group home; demonstrating increases in consumer knowledge and awareness of lifestyle behaviours.[17]
- The third was a brief alcohol intervention which impacted readiness to change alcohol.[9]

Interventions targeting receipt or provision of physical health support

- Four of the five studies examining **receipt or provision of physical health support** were effective in improving: health promotion activities,[27] access to smoking cessation preparation sessions[5], increasing conversations between staff and consumers around lifestyle factors,[15,17] and inclusion of lifestyle factors in care plans.[15]
- The four studies were heterogeneous in their intervention strategies used, involving training/education for staff,[27] consumers,[5] or both.[17]
- One study involved a tablet application (‘APPetitus’) to facilitate conversations between staff and residents with an intellectual disability around nutrition.[15]

Interventions targeting staff knowledge or perceptions

- All four studies reporting outcomes relating to **staff knowledge or perceptions** were effective in improving: lifestyle risks,[3,17,25,26], the need to provide individualised support,[17] and available supports for nutrition.[26]
- All four interventions involved staff training. Training was provided in staff workshops[17,25] and a practical cooking class program.[3]

- One intervention involved a peer-led program, where peer health coaches with an intellectual and/or developmental disability were paired with a mentor (support worker within the organisation), and provided webinar training and resources (e.g. booklets, posters and teaching props) to support their delivery of lifestyle interventions to consumers with intellectual and developmental disabilities.[26]

Grey literature

- Seven of the eight grey literature studies that involved an evaluation were effective, reporting improvements in: physical activity[18,19,21], nutrition[20], consumer satisfaction with physical health support[22,24], consumer health knowledge[20,23], and consumer health communication.[23]
- Effective interventions were heterogeneous, and included: sporting/recreational activities provided online[19] or in community-based organisations[21]; resources (accelerometer);[18] online education and resources[24]; health communication tools to aid consumers in identifying health concerns[23]; and consumer education around healthy food choices and physical activity using visual cues.[20]
- Five additional studies were qualitative (without an evaluation), and highlighted the importance of the following factors: offer a range of choices and develop individualised goals/programs[31,33,35], increase collaboration between support organisations[32], raise consumer and staff awareness of health benefits[33], enhance consumer intrinsic motivation[33], increase the visibility of possible activities and supports[33], and provide tools and training to support workers.[34,35]
- Some grey literature sources were identified that reported available resources (such as staff training courses and consumer communication tools). While these were not included in this review as they had not been evaluated, they may be of interest and are included in Appendix 8.

Conclusion

While there was large heterogeneity in the intervention strategies tested and outcomes measured, there is good evidence to support the following strategies to address lifestyle risks: consumer education and resources, individualised goals and activities, practical support, involvement of family/unpaid carers, and staff training. However, the quantity of existing research to guide alcohol and tobacco smoking interventions is particularly limited, with more high quality research needed overall. Future research is needed to explore the potential role of peer-workers and e-health interventions.

Table 1—Summary overview of included interventions and results (peer reviewed literature)

Author, year, country, study design	Disability included	Mode of delivery	Focus			Intervention strategies											Outcomes			
			Tobacco smoking	Nutrition	Alcohol	Physical activity	Screening/assessment	Consumer education and/or resources[1]	Individualised goals/plans	Practical support /demonstrations	Family/unpaid carer involvement[2]	Peer-led	e-health	Staff training and/or resources	Tailoring/adapting an existing program[3]	Referrals[4]	Consumer physical health	Staff knowledge/perceptions	Consumer knowledge/perceptions	Physical health support
Adams, 2018[36], UK, RCT	Visual impairment	Group; face to face				✓	✓	✓	✓	✓	✓				✓		✓			
Barnhart, 2019[3], US, Pre-post	Developmental disabilities	Group; face to face		✓				✓		✓				✓	✓		✓	✓	✓	
Brown, 2018[4], international, systematic review	Serious mental illness	Group or group & individual		✓		✓		✓		✓							✓			
Christiansen, 2018[5], US, RCT	Serious mental illness	Individual, face to face	✓					✓	✓			✓				✓	✓			✓
Croot, 2018[6], UK, pre-post	Intellectual disability	Group, face to face		✓		✓		✓			✓		✓		✓		✓			
Dixon-Ibarra 2018[7], US, pre-post	Intellectual disability	Individual, face to face				✓		✓	✓	✓				✓	✓		✓		X	

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Donnelly, 2019[8], US, pre-post	Traumatic brain injury	Group, face to face				✓		✓		✓							✓			
Elinder, 2018[27], Sweden , controlled pre-post	Intellectual disabilities	Group, face to face		✓		✓								✓						✓
Jackson, 2020[16], Canada, qualitative evaluation	Physical disabilities	Group, face to face				✓			✓	✓							✓			
Janson[15], 2020, Norway, qualitative evaluation	Intellectual disability	Individual, application		✓				✓	✓				✓	✓			✓			✓
Kouimtsidis 2017[9], UK, RCT	Intellectual disabilities	Individual, face to face			✓			✓			✓				✓		✓		✓	

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Lin, 2020[10], Australia, longitudinal observational cohort	Multiple sclerosis	Individual or group; online, application or face to face	✓	✓		✓		✓					✓				✓			
Malagoni, 2016[11], Italy, RCT	Stroke	Individual, face to face and self-directed				✓	✓	✓	✓								✓			
Marks, 2019a[26], US, pre-post ('healthmessages')	Intellectual and developmental disability	Individual, face to face (consumers), online (staff)		✓		✓						✓		✓				✓		
Marks, 2019b[25], US, pre-post ('healthmatters')	Intellectual and developmental disability	Group, face to face		✓		✓		✓	✓					✓				✓		

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Author, year, country, study design	Disability included	Mode of delivery	Focus			Intervention strategies											Outcomes			
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Martinez-Zarogoza, 2016[12], Spain, pre-post	Intellectual disability	Individual, face to face		✓		✓	✓	✓	✓	✓	✓						✓			
Mcluskey, 2016[28], Australia, cluster RCT	Stroke	Group, face to face				✓								✓			X			
Natassi, 2020[13], US, case series	Developmental and mental illness	Individual, face to face				✓		✓	✓								✓			
Stubbs, 2016[14], international, systematic review	Serious mental illness	Group or individual, face to face		✓		✓		✓		✓		✓	✓				✓			X
Umb Carlsson, 2019[17], Sweden, qualitative evaluation	Intellectual disabilities	Group, face to face		✓		✓		✓		✓				✓			✓	✓	✓	✓

✓=strategy was included in study; For quantitative evaluations: ✓=50% or more of outcome type significantly or descriptively improved, X=less than 50% of outcome type significantly or descriptively improved; for qualitative evaluations: ✓=identified as a key theme.

[1]**Resources**: recipe cards including pictures of food and measurement (Barnhart); exercises in a booklet (large text), DVD and/or audio format (Adams); written materials and a magazine (Croot); visual calendar and post it activity pictures (Dixon-Ibarra); book (Lin); daily training record to capture exercise completed and any associated symptoms (Malgoni); weekly menu was given to families for breakfast, lunch, afternoon snack and dinner with several choices for each meal of the day (Martinez-Zarogoza); fitbit provided to measure daily step counts (Natassi), token economy redeemed with items/activities of participant choice (e.g. arts and crafts materials, puzzle books, outings with preferred staff) (Martinez-Zarogoza; Natassi).
[2]**Involvement of family or unpaid carers**: able to attend with a carer/support person (Adams; Croot); letter sent to carers encouraging them to attend groups and highlighting their role (Croot); information leaflet provided to carers (Kouimtsidis); family involvement throughout intervention, especially in the preparation of the diet (Martinez-Zarogoza).
[3]**Tailoring**: cooking instructions simplified, visual aids, recipes chosen in collaboration with participants (Barnhart); instructors adapted delivery to needs of each participant, exercises appropriate to individual abilities, resources provided in audio/DVD/large text (Adams); simplified information, easy read materials, and engagement of carers (Croot); simplified reading materials and choosing physical activities appropriate for individual abilities (Dixon-Ibarra); longer sessions and length of intervention (Kouimtsidis).
[4]**Referrals**: quitline (Christiansen).

Appendices

Appendix 1: Search strategy

Published Literature search strategy sources

1. Databases: MEDLINE, Psycinfo, and scopus (executed 28/10/2020)

Search strategy executed in MEDLINE and adapted for PsycInfo

Concept 1: disability		
1	Disabled Persons/ or Stroke/ or disab*.mp.	442064
2	((physical* or mental* or psychiatric or neurological or learning or speech or cognitiv* or intellectual* or developmental* or psychosocial or hearing or visual* or vision) adj2 (handicap* or retard* or difficult* or impair* or delay* or disorder* or condition*)).mp.	566249
3	Intellectual Disability/	54981
4	Learning Disabilities/	14208
5	Brain Injuries/ or brain injur*.mp.	94831
6	(autism or autistic).mp. or Autistic Disorder/	53203
7	Cerebral Palsy/ or cerebral palsy.mp.	27872
8	Hearing Loss/ or hearing loss.mp.	68358
9	Developmental Disabilities/	20330
10	Down Syndrome/ or ((fragile or down$) adj2 syndrome).mp.	36979
11	Multiple Sclerosis/ or Multiple Sclerosis.mp.	84643
12	Mental retardation/	54981
13	Spinal Cord Injuries/ or spinal cord injur*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol	50848

	supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
14	Stroke/ or stroke.mp.	298904
15	Visually Impaired Persons/ or Blindness/ or blind*.mp. or Vision Disorders/ [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	396172
16	Mental disorders/ or ((psychiatric or mental*) adj2 (illness* or ill or condition* or diagnoses or diagnosis or disorder* or impair*)).mp. or (psychiatric condition or mental health condition).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	276421
17	(((comorbid* or dual diagnos*) adj5 disab*) or complex need*).mp.	4013
18	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16	1780639
Concept 2: setting		
19	(National Disability Insurance Scheme or national disability insurance agency or NDIA or NDIS).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	294
20	((disab* or housing or accommodation or community or employment) adj3 (organi?ation* or service* or support* or agen* or access* or centre* or center* or clinic*)).mp.	120970
21	health services for persons with disabilities/ or Psychosocial support systems/ or psychosocial service*.tw. or (social and community service*).tw. or recovery service*.tw. or recovery-oriented service*.tw. or community mental health centers/ or residential facilities/ or group home*.tw. or independent living.tw. or group home*.tw. or community living.tw. or supported accomodation.tw.	16759
22	(non government organi?ation* or nongovernment organi?ation* or NGO or NGOs).mp.	4213
23	((disab* adj2 (worker* or provider* or staff or support* or coordinator* or mentor*)) or support worker* or residential care worker*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating	2472

	sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
24	("not for profit?" or non-profit* or nonprofit).mp.	11394
25	(Third sector organi?ation* or third sector or third-sector or TSO or TSOs).mp.	661
26	(community managed* or community organi?ation* or community based organi?ation*).mp.	4371
27	(social enterprise* or civic sector or civil sector or social sector or civil society).mp.	2225
28	19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27	150491
Concept 3: lifestyle factors		
29	"tobacco use cessation"/ or smoking cessation/	30014
30	Smoking/ or smok*.tw.	321028
31	nutrition*.mp. or fruit/ or vegetables/ or diet/	550965
32	Obesity/ or overweight/ or body weight/	361807
33	(fruit* or vegetables* or diet* or obes* or overweight).tw.	918944
34	physical fitness/	27492
35	(physical activit* or exercis* or physical fitness or physical inactivit* or sedentary).tw.	402987
36	(alcohol adj2 (drink* or consum* or dependenc* or misuse* or abuse*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	121961
37	(lifestyle* adj3 (factor* or behavior* or behaviour* or change* or risk* or intervention)).tw. or behaviour change.mp. or behavior change.mp.	52136
38	29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37	2055106
Concept 4: interventions		
39	(implement* or adopt* or organis?ational change* or (system* adj2 change*) or quality improvement* or translat* or integrat* or intervention or program* or	18053593

	training* or educat* or innovat* or polic* or feedback or prompt* or reminder* or tool* or effectiveness or incentive* or audit* or support* or therap* or treatment*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
40	(Screen* or assess* or detect* or monitor* or manage* or assist* or refer* or followup* or prevent*).mp.	10057026
41	39 or 40	20780414
Concept 5: study design		
42	quality improvement.tw.	35930
43	Randomi*ed controlled trial.pt. or rct.tw. or random*.tw.	1295005
44	controlled clinical trial.pt.	93898
45	(trial or intervention).tw.	1120886
46	experiment*.tw.	2076881
47	(pre post or prepost).tw.	12119
48	(posttest or post test).tw.	21958
49	before after.tw.	5369
50	Stepped wedge.tw.	944
51	natural experiment.tw.	1740
52	nonrandom*.tw.	19783
53	time series.tw.	31850
54	(evaluat* or implement* or qualitative*).tw. or evaluation studies/	4288456
55	42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54	7343828
56	18 and 28 and 38 and 41 and 55	1538
57	**limit 56 to (english and yr="2016-Current")**	**631**

Scopus search strategy

(disab* OR impair* OR ((physical* OR mental* OR neuro* OR learning OR speech OR cognitiv* OR intellectual* OR developmental* OR psychosocial* OR hearing or visual*) W/2 (handicap* OR retard* OR difficult* OR impair* or delay* OR disorder* OR condition*)))

AND

(((disab* OR hous* or accomodation OR community OR employment) W/3 (organi?ation* OR service* OR supprot* OR agen* OR access* OR centre* OR center* OR clinic*)) OR "support worker" OR ((disab*) W/2 (provider* OR worker* OR staff OR support OR coordinat*)))

AND

smoking OR smok* OR nutrition* OR diet* OR fruit* OR vegetable* OR obes* OR weight OR "physical activit*" OR exercis* OR "physical inactivit*" OR sedentary OR alcohol OR ((lifestyle*) W/3 (factor* OR behavior* OR behaviour* OR change* OR risk*))

AND

implement* OR adopt* OR "organis?ational change*" OR (system* W/2 change*) OR "quality improve*" OR translat* OR integrat* OR interven* OR program* OR training* OR educat* OR innovat* OR polic* OR effectiveness OR prompt* OR reminder* OR tool* OR prevent*

AND

"quality improvement" OR RCT OR "randomi?sed controlled trial" OR trial* OR intervention OR "pre post" OR prepost OR posttest OR "post test" OR "before after" OR "stepped wedge" OR nonrandom* OR "time series" OR evaluat* OR implement* OR qualitative*

Limit to English and 2016-2020

Grey literature search strategy sources

1. Google scholar search (executed 28/10/2020)

((disability OR impairment OR NDIS OR National Disability Insurance OR NDIA) AND (smoking OR nutrition OR alcohol OR physical activity OR exercise OR lifestyle) AND (intervention OR program OR support OR service OR mentor))

Limit to ‘since 2016’

Note. The google scholar search was expanded from ‘in the last year’ (outlined in the original proposal) to ‘since 2016’ in order to maximise included studies.

2. Analysis & Policy Observatory (APO) database search (executed 28/10/2020)

“disability”
Limit to 2020

3. Hand-searching of websites of peak bodies and organisations (executed between 28/10/2020 and 02/11/2020)

#	Organisation name	URL/location
1	Australian Federation of Disability Organisations	https://www.afdo.org.au/
2	Autism Aspergers Advocacy Australia	https://a4.org.au/
3	Blind Citizens Australia	https://www.bca.org.au/
4	Brain Injury Australia	https://www.braininjuryaustralia.org.au/
5	Deaf Australia	https://deafaustralia.org.au/
6	Deafblind Australia	https://www.deafblind.org.au/
7	Deafness Forum of Australia	https://www.deafnessforum.org.au/
8	Disability Advocacy Network Australia	https://www.dana.org.au/
9	Down Syndrome Australia	https://www.downsyndrome.org.au
10	Inclusion Australia	https://www.inclusionaustralia.org.au/
11	Physical Disability Australia	http://www.pda.org.au/
12	First Peoples Disability Network Australia	https://fpdn.org.au/
13	National Ethnic Disability Alliance	http://www.neda.org.au/
14	People with Disability Australia	https://pwd.org.au/
15	Women with Disabilities Australia	https://wwda.org.au/
16	Mental Health Australia	https://mhaustralia.org/
17	National Disability Services	

3. Hand-searching of websites of peak bodies and organisations (executed between 28/10/2020 and 02/11/2020)

#	Organisation name	URL/location
18	Children and Young People with Disability Australia	https://www.cyda.org.au/
19	Agency for Clinical Innovation	https://www.aci.health.nsw.gov.au/
20	NGO learning	http://ngolearning.com.au/
21	Disability and inclusion	https://www.facs.nsw.gov.au/inclusion/disability
22	Good to great framework	https://www.facs.nsw.gov.au/inclusion/disability/good-to-great-framework/_recache
23	Sydney University Disability Research and Policy	https://www.sydney.edu.au/medicine-health/our-research/research-centres/centre-for-disability-research-and-policy.html
24	Queensland Health	https://www.health.qld.gov.au/
25	Public Advocate Queensland	https://www.justice.qld.gov.au/public-advocate
26	Public Guardian NSW	https://www.publicguardian.justice.nsw.gov.au/
27	Public Advocate Victoria	https://www.publicadvocate.vic.gov.au/
28	Office of the Senior Practitioner Victoria	https://www.dhhs.vic.gov.au/victorian-senior-practitioner
29	NDS (national disability services)	https://www.nds.org.au/
30	Queensland Centre for Intellectual Disability	https://qcidd.centre.uq.edu.au/

3. Hand-searching of websites of peak bodies and organisations (executed between 28/10/2020 and 02/11/2020)

#	Organisation name	URL/location
31	Cerebral Palsy Alliance	https://cerebralpalsy.org.au/
32	Inclusion Melbourne	https://inclusionmelbourne.org.au/
33	Endeavour Foundation Qld	https://www.endeavour.com.au/
34	Flourish	https://www.flourishaustralia.org.au/

Timeframe

This review includes literature published between:

- Published literature search: 01 January 2016 and 28 October 2020;
- Google scholar search: 01 January 2016 and 28 October 2020; and
- APO database and website hand searching: 01 October 2019 and 28 October 2020.

Appendix 2: Inclusion and exclusion criteria

We **included** studies of interventions to improve the lifestyle risk factors (tobacco smoking, poor nutrition, harmful alcohol consumption, and lack of physical activity) of adults (18 and over) with a disability. Relevant disabilities included: serious and permanent disability including physical disability, learning and intellectual disability, psychosocial, mental illness or psychiatric condition such as: brain injury, autism, cerebral palsy, hearing impairment, intellectual disability, developmental delay, global development delay, down syndrome, MS, psychosocial disability, spinal cord injury, stroke, or vision impairment as well as mental illness or psychiatric conditions.

We included systematic reviews, evaluated interventions (any design with a comparison group or time point), and qualitative studies (if relevant to a lifestyle intervention for people with a disability e.g. a qualitative evaluation of an intervention; barriers/facilitators to behaviour change; recommendations for lifestyle interventions). We included both interventions aiming to improve the lifestyle risk factors of people with disability and interventions aiming to improve the provision of support for such risk factors by disability services. All relevant outcomes were included, e.g. increased knowledge/skills/awareness of staff/consumers, improved lifestyle factors/physical health/quality of life, access to or provision of physical health care, etc. All outcomes were extracted and categorised into four outcome types: (1) consumer physical health, (2) consumer knowledge/perceptions, (3) staff knowledge/perceptions, and (4) consumer receipt or staff provision of physical health support. Where studies reported multiple follow-up time points, the final follow-up was extracted.

To ensure included literature evaluated approaches directly applicable to the NSW setting or scalable across NSW; Australian literature and literature conducted in countries with disability health care settings comparable to Australia were included (i.e. the United Kingdom, Canada, New Zealand, Western Europe, Scandinavia, and the United States).

Included studies were categorised according to the NHMRC levels of evidence and grading recommendations.

We **excluded** studies without a comparison group or time point (i.e. post-only evaluations) and cross-sectional descriptive studies. We excluded protocols, commentaries, correspondence, news, letters and editorials. We excluded studies where disability was described as the result of ageing (e.g. frailty in older age), disabilities not covered by the NDIS and populations who were classed as at risk of developing a disability (but did not have a disability currently). We excluded studies where the primary aim of the intervention was prescribing or allocating individuals to a lifestyle behaviour to examine the impact on other outcomes e.g. physical activity to improve mental health

Appendix 3: Search results

A Database/ source	B Results	C Remove duplicates	D Excluded after title & abstract screening	E Full text review	F Excluded after full text review	G Studies meeting inclusion criteria	H FINAL INCLUDED
Peer-reviewed literature search							
1 Medline	631	440	1293	242	168	74[1]	22 publications; 20 studies
2 PsycINFO	613						
3 Scopus	731						
Grey literature search							
1 Google scholar	200	0	254	78	65	13	13 publications; 13 studies
2 APO database	98						
3 Hand searching of 34 websites	34						
TOTAL	***2307***	***440***	***1547***	***320***	***233***	***87***	***35 publications (22 peer review; 13 grey); 33 studies (20 peer review; 13 grey)***

[1]As per the parameters of this evidence Snapshot to identify up to 20 studies in the peer-reviewed literature, *n*=52 relevant studies were excluded on the following basis:

- Study protocols (*n*=9)
- Qualitative papers without an evaluation component (*n*=17)
- Duplicate from grey literature search (*n*=1)
- Qualitative evaluations involving perspectives of only one group i.e. consumers or staff only (*n*=3)
- Select studies where the population was people with a mental health condition (n=22). Given the large number of relevant studies targeting people with a mental health condition, *n*=22 were removed to limit such studies to the highest levels of evidence: systematic reviews and RCTs; and to remove studies trialling a ‘peer-led’ intervention as this approach was synthesised in an included systematic review.

Appendix 4: Included publications

Published literature

Adams N, et al. Feasibility of trial procedures for a randomised controlled trial of a community based group exercise intervention for falls prevention for visually impaired older people: the VIOLET study. *BMC Geriatrics.* 2018;18(1):307.

Associated paper: Adams N, et al. Visually Impaired OLder people's Exercise programme for falls prevenTion (VIOLET): a feasibility study. In: Southampton (UK): NIHR Journals Library; 2019.

Barnhart WR, et al. Better Together: A Pilot Study on Cooking Matters for Adults With Developmental Disabilities and Direct Support Professionals. *Nutrition & Metabolic Insights.* 2019;12:1178638819840036.

Brown C, et al. Effectiveness of interventions for weight loss for people with serious mental illness: A systematic review and meta-analysis. *American Journal of Occupational Therapy.* 2018;72(5):1-9.

Christiansen BA, et al. Helping Smokers with Severe Mental Illness Who Do Not Want to Quit. *Substance Use & Misuse.* 2018;53(6):949-962.

Croot L, et al. Adjusting a mainstream weight management intervention for people with intellectual disabilities: a user centred approach. *International Journal for Equity in Health.* 2018;17(1):159.

Dixon-Ibarra A, et al. Qualitative evaluation of a physical activity health promotion programme for people with intellectual disabilities in a group home setting. *Journal of Applied Research in Intellectual Disabilities.* 2018;31 Suppl 1:97-109.

Associated paper: Dixon-Ibarra A, et al. Formative evaluation on a physical activity health promotion program for the group home setting. *Evaluation and program planning.* 2017;60:81-90.

Donnelly KZ, et al. A retrospective study on the acceptability, feasibility, and effectiveness of LoveYourBrain Yoga for people with traumatic brain injury and caregivers. *Disability & Rehabilitation.* 2019:1-12.

Elinder LS, et al. Effect and process evaluation of a structural health intervention in community residences for adults with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities.* 2018;15(4):319-328.

Jackson J, et al. Fostering quality experiences: Qualitative perspectives from program members and providers in a community-based exercise program for adults with physical disabilities. *Disability and Health Journal.* 2019;12(2):296-301.

Janson AL, et al. Introducing a nutritional app in supervised residences for independent living: Experiences of individuals with intellectual disabilities and their caregivers. *Journal of Applied Research in Intellectual Disabilities.* 2020:e12784.

Kouimtsidis C, et al. A feasibility randomised controlled trial of extended brief intervention for alcohol misuse in adults with mild to moderate intellectual disabilities living in the community; The EBI-LD study. *Trials [Electronic Resource].* 2017;18(1).

Lin X, et al. Greater Engagement with Health Information Is Associated with Adoption and Maintenance of Healthy Lifestyle Behaviours in People with MS. *International Journal of Environmental Research & Public Health [Electronic Resource].* 2020;17(16):15.

Malagoni AM, et al. Effects of a "test in-train out" walking program versus supervised standard rehabilitation in chronic stroke patients: A feasibility and pilot randomized study. *European Journal of Physical and Rehabilitation Medicine.* 2016;52(3):279-287.

Marks B, et al. Impact of the HealthMatters Train-the-Trainer Program on the Health and Health Behaviors of Staff Supporting Adults With Intellectual and Developmental Disabilities. *Workplace Health & Safety.* 2019;67(8):423-435.

Marks B, et al. Effectiveness of a HealthMessages Peer-to-Peer Program for People With Intellectual and Developmental Disabilities. *Intellectual & Developmental Disabilities.* 2019;57(3):242-258.

Martinez-Zaragoza F, et al. Effects on Physical Health of a Multicomponent Programme for Overweight and Obesity for Adults with Intellectual Disabilities. *Journal of Applied Research in Intellectual Disabilities.* 2016;29(3):250-265.

McCluskey A, et al. A behavior change program to increase outings delivered during therapy to stroke survivors by community rehabilitation teams: The Out-and-About trial. *International Journal of Stroke.* 2016;11(4):425-437.

Nastasi JA, et al. Token-economy-based contingency management increases daily steps in adults with developmental disabilities. *Behavioral Interventions.* 2020;35(2):315-324.

Stubbs B, et al. Peer support interventions seeking to improve physical health and lifestyle behaviours among people with serious mental illness: A systematic review. *International Journal of Mental Health Nursing.* 2016;25(6):484-495.

Umb Carlsson O. Health-promotion intervention in a group home: Perspectives of residents, staff and rehabilitation professionals. *Journal of Intellectual Disabilities.* 2019:1744629519874970.

Grey literature

Block VJ, et al. Association of continuous assessment of step count by remote monitoring with disability progression among adults with multiple sclerosis. JAMA network open. 2019;2(3):e190570-e190570.

Clanchy KM, et al. Evaluation of a Physical Activity Intervention for Adults With Brain Impairment: A Controlled Clinical Trial. Neurorehabil Neural Repair. 2016;30(9):854-865.

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Giunti G, et al. Exploring the Specific Needs of Persons with Multiple Sclerosis for mHealth Solutions for Physical Activity: Mixed-Methods Study. JMIR Mhealth Uhealth. 2018;6(2):e37.

Kallio M. Gold Coast Recreation & Sport Inc. clients experiences of National Disability Insurance Scheme-program. 2020. Available from: https://www.theseus.fi/bitstream/handle/10024/344057/kallio_milla.pdf?sequence=2&isAllowed=y.

Krops LA, et al. Target population's requirements on a community-based intervention for stimulating physical activity in hard-to-reach physically disabled people: an interview study. Disability and rehabilitation. 2019;41(19):2272-2279.

Krops LA, et al. Requirements on a community-based intervention for stimulating physical activity in physically disabled people: a focus group study amongst experts. Disabil Rehabil. 2018;40(20):2400-2407.

Lyons A. Cue cards for improving health communication. https://www1.racgp.org.au/newsgp/clinical/cue-cards-for-improving-health-communication. Published 2019. Accessed 16/11/2020.

McGhee S. Qualitative Health Needs Assessment of the Intellectual and/or Developmental Disability Clients of a Social Service Agency in Central Texas. 2018. Available at: https://digitalcommons.library.tmc.edu/dissertations/AAI10790132/.

Nary D, et al. Development and Evaluation of the Stoplight Healthy Living Program. Inclusion. 2020;7(3).

Regan EW, et al. Yoga for everyone: a qualitative study of a community yoga class for people with disability. Physiother Theory Pract. 2020:1-11.

Wheeler AJ, et al. Codesigned recommendations for increasing engagement in structured physical activity for people with serious mental health problems in Australia. Health Soc Care Community. 2018;26(6):860-870.

Women with disabilities Australia. The our site project: co-designing a website by and for women and girls with disability. WWDA: Hobart, Tasmania. 2020.

Appendix 5: Data extraction tables

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
Adams 2019[36]; Adams 2018[2], UK, RCT (II), non-government organisations	Visual Impairment Consumers: Community-living visually impaired older persons (n=64)	Pilot test of the adaptation, and feasibility of, the Falls Management Exercise (FaME) programme for visually impaired older people	Focus= physical activity Mode=face to face, group Description= one-hour weekly sessions over 12 weeks, held in community venues with a maximum capacity of ten participants per group. The intervention was an existing exercise intervention for falls prevention among older adults (FaME), adapted for people with visual impairment, and was	At a 24-week follow-up: ● 6 of 6 **consumer physical health outcomes** were positively impacted: duration of household physical activity (median minutes: 28.5 int vs 23.0 control), recreational physical activity (17.0 vs 10.0), total physical activity minutes (52.1 vs 43.0), household physical activity intensity (29.5 vs 23.0), recreational physical activity intensity (17.0 vs 10.0), and total physical activity intensity (54.1 v	*"It was possible to adapt successfully an existing widely used exercise intervention for falls prevention (FaME) for people with visual impairment. Adherence to the intervention was high with very low attrition rates"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			delivered by third sector organisations Control= care as usual (no exercise intervention)	49.0) (significance testing not conducted) **Key qualitative findings** ● Identified barriers/facilitators to exercise: relevance to health, social interaction, self-perception and practical assistance ● Instructors reported the need for an additional provider to assist in intervention delivery Other outcomes: ● 76% attended 9 or more exercise classes	
Barnhart 2019[3], US, pre-post	Developmental disability	Pilot test of the effectiveness, satisfaction	Focus: nutrition Mode: face-to-face, group.	At a 6-month follow-up:	*"This pilot study demonstrates the feasibility and acceptability of offering*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
(IV), developmental disability provider	Consumers: adults with developmental disabilities (n=8), living in a supported living setting or group home Staff: direct support professionals (n=7)	and acceptability of the 'cooking matters' program provided to dyads of persons with a developmental disability and their support professionals	Description: 6-weeks of weekly classes to teach food preparation skills and increase nutrition knowledge; aiming to inform healthy food and beverage choices while also learning how to do so on a limited budget. Persons with a developmental disability were involved in decisions regarding recipes. Delivered by a nutrition chef and nutrition educator	• 2 of 2 **consumer behaviour change** outcomes demonstrated a positive effect: eating a balanced diet (+29%) and making healthy food choices (+14%) (significance testing NR) • 2 of 3 **consumer knowledge and perceptions** outcomes demonstrated a positive effect: healthy food preparation (+9%) and cooking barriers (34% reduction in barriers). No positive effect on cooking confidence (-14%) (significance testing NR) • 2 of 2 **staff behaviour change** outcomes demonstrated a positive effect: eating a balanced diet (+56%) and making healthy	*a health education program, Cooking Matters, to inclusive groups of adults with DD and their DSPs. This study contributes to the body of evidence on the importance of the relationship between adults with DD and DSPs* *Health behaviours of DSPs could serve as key barriers or facilitators of meaningful healthy choices made by adults with DD. Our approach of offering Cooking Matters to dyads of adults with DD and their DSPs has implications for inclusive health education*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
				food choices (+22%) (significance testing NR) ● 2 of 3 **staff knowledge and perceptions** outcomes demonstrated a positive effect: healthy food preparation (+23%) and cooking confidence (+3%). No positive impact on cooking barriers (28% increase in barriers) (significance testing NR) **Key qualitative findings** ● Increased confidence and knowledge, high ratings of acceptability **Other outcomes:** ● 100% of participants liked the program	*programming in environments where DSPs support adults with DD such as residential or vocational settings"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
Brown 2018[4], Systematic review and meta-analysis of RCTs (I), community-based settings	Serious mental illness Consumers: Adults with a diagnosis of serious mental illness (n=1,874)	Investigate the effectiveness of interventions to improve the physical health and wellness and the integration of care for people with serious mental illness	Focus= nutrition and/or physical activity (and other lifestyle factors that may impact weight loss) Mode= group sessions or a combined approach of group and individual sessions Description= various lifestyle interventions focused on weight loss, which included a range of components such as exercise, educational sessions, motivational interviewing, mentor programs, behaviour therapy, and diet changes. The length of the interventions was	● 1 of 1 **consumer physical health outcomes** demonstrated a positive effect: weight loss (p<.001)	*"On the basis of the evidence contained in this systematic review, the following recommendations are made for implementation of community-based interventions targeting weight loss for people with SMI: •Approach the process of weight loss realistically with participants, acknowledging the variability in amount of weight loss that will occur among individuals. •Include content that addresses behavioral changes related*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			between 12 weeks and 18 months Control= various comparators including care as usual and very brief lifestyle interventions		*to both nutrition and physical activity* *•Focus content on a few key goals of behavioral change, including specific dietary recommendations. •Modify instruction on dietary recommendations and physical activity to account for common cognitive impairments seen in people with SMI* *•Include a combined approach of group and individual sessions that occur at least weekly and for at least 12 months"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
Christiansen 2018[5], US, RCT (II), community-managed support organisations for people with mental illness	Serious mental illness Consumers: Adult smokers with serious mental illness (n=222), who were not interested in quitting smoking Staff: State-Certified peer specialists (n=4)	Investigate the effectiveness of an intervention to increase engagement in smoking cessation treatment, quit attempts, and quitting in smokers who were not interested in quitting in the next 30 days	Focus= smoking Mode=face to face, individual Description= four weekly sessions, each consisting of a motivational activity followed by a behavioural activity designed to prepare for a quit attempt. Psychoeducation on and recommendation to, contact Quitline was also provided Peer specialists (and two research assistants) delivered the intervention Control= attentional control (to control for exposure to peer workers) with	At a 3-month follow-up (primary outcomes): ● 1 of 1 **consumer behaviour change outcomes** significantly improved: 7-day abstinence (p=0.01) ● 1 of 2 **consumer access to physical health care** outcomes significantly improved: acceptance of four additional quitting preparation sessions (p<.001). No significant effect on accessing a telephone Quitline (p=0.45)	*"Next steps to help this population might be to develop intervention programs that, in addition to support for quitting, consist of multiple ways to motivate smokers with severe mental illness to quit. Such programs should be tailored to the individual smoker and be sustained over an extended period of time"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			psychoeducation on and recommendation to, contact Quitline		
Croot 2018[6], UK, pre-post (IV), disability provider organisations	Intellectual disability Focus group participants: Adults with intellectual disabilities (n=54), Carers of people with intellectual disabilities (n=12), Current members of Slimming World with an	Adapt the 'Slimming World' intervention for people with intellectual disabilities; then assess the feasibility and accessibility of adjustments made to the program	Focus=nutrition and physical activity Mode=face to face, group Description=multicomponent weight management intervention. 8 sessions delivered weekly Based on qualitative findings, the intervention was adapted for people with an intellectual disability in the following ways: (1) addition of the	At program completion: ● 2 of 2 **consumer physical health outcomes** were positively impacted: weight loss (6/9 participants lost weight; between 1.4-6.6kg) and BMI (0.5-1.7kg/m2 loss) (significance testing NR) **Key qualitative findings** ● Recommendations to adjust the program were: simplify the information, provide materials in an easy to read format, provide additional training to providers, develop content to engage	*"This user-centred approach identified reasonable adjustments that were feasible to implement. In a small uncontrolled feasibility study, people with ID were positive about the adjustments and lost weight. However, issues in the wider context of people's lives, such as obesogenic environments and concerns about joining mainstream groups, limited the acceptability of*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	intellectual disability (n=8), Slimming World group leaders (n=11) Pre-post participants: Adults with intellectual disabilities (n=9), carers (n=7), Slimming World group leasers (n=4)		Easy Read members' handbook (which included a simplified description of the eating plan) and (2) provision of a letter encouraging carers to attend weekly groups with the member and highlighting the important role carers play in supporting someone to lose weight Control= N/A	carers/supports (e.g. a letter for carers) ● At program completion, participants reported eating less ready meals, reducing fat in meals, planning and preparing meals in advance and reducing calories. Participants reported that the materials were inclusive and welcoming for people with an intellectual disability. Carers liked the letter, though some did not read it or the materials due to time constraints ● Barriers to attending were fears about stereotyping **Other outcomes**	*Slimming World even with these adjustments"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
				● Six of nine participants completed the program (all those who completed attended with a carer or a friend; whereas the 2 non-completers attended alone)	
Dixon-Ibarra 2018[7]; Dixon-Ibarra 2017[37], US, Pre-post (IV), residential group home setting	Intellectual disability Consumers: Adults with an intellectual or developmental disability (N=18), residing in a group home Staff: Group home program coordinators	Conduct a process evaluation to describe the preliminary outcomes and feasibility of using the 'Menu-Choice Physical Activity Program'	Focus= physical activity Mode=face to face, individual Description= the intervention assists staff in including physical activity goals within the group home schedule Staff received training in program delivery prior to implementation. Then, across the 10-week intervention period, staff and	At 1-month follow-up: ● 2 of 3 **consumer behaviour change outcomes** were positively impacted: days of physical activity (mean pre: 2.30 vs mean post 2.58) and BMI (M 25.67 vs 23.67). Mean steps per day (2,375 baseline vs 2,150) was not impacted (significance testing NR) ● 0 of 1 **consumer knowledge and perceptions** outcomes were	*".. staff and residents need additional supports in order to implement the program more sufficiently... the lack of program use and previous literature would allude to contributing organizational and attitudinal barriers"* *"Changes in programme training and simplified*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	(n=14), and professional support staff (n=22)		residents worked together to develop weekly goals for residents' activity. The program included a resource binder, weekly scheduling sheets, visual calendar and post it activity pictures for the residents Intervention content was adapted for people with an intellectual disability (e.g., reduced reading level) Control= N/A	positively impacted: knowledge about physical activity (mean: 8.14 vs 8.57) (significance testing NR) **Key qualitative findings** ● coordinators reported that the training helped them learn how to implement the program, how to find ways to motivate residents, how to make physical activity fun, and about different types of physical activities ● More training was requested around realistic goal setting, increasing activity goals and individualised exercise and nutrition option	*programme materials are needed to accommodate identified barriers for implementation. The importance of obtaining increased agency support and policy change is highlighted"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
				● the variety of physical activities was minimal ● Staff reported inconsistent use of the program materials ● Barriers to implementation: unclear staff responsibilities, consumer motivation, insufficient time, limited staff and limited program understanding (among staff and consumers) ● Facilitators: including the programme in the daily schedule, relationship with consumers, staff encouragement, making activity fun, providing consumers with choices, and providing consumers with their own materials	

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
				Other outcomes ● 86% of coordinators agreed and 14% strongly agreed that they knew enough to help their staff use 'Menu-Choice' following the training ● 93% stated the training activities met their learning needs ● The most used element of the program was activity schedules (25% to 40% 'consistently used', across group homes). ● 66% of consumers had their physical activity readiness assessed.	

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
				● Only one group home completed physical activity goals sheets, and for only 4 consumers	
Donnelly 2019[8], Canada & US, pre-post (IV), non-government organisation provided program delivered in community-based settings	Traumatic Brain Injury Consumers: Adults with traumatic brain injury or their caregiver (n=1,563)	Evaluate the acceptability, feasibility, and effectiveness of the 'LoveYourBrain Yoga' program	Focus= physical activity Mode=face to face, group Description= LoveYourBrain Yoga is a six session, manualised curriculum that includes breathing exercises, gentle yoga, guided meditation, and psychoeducation with group discussion. The curriculum was developed for people with a TBI, and includes gentle and flexible options for engagement in all exercises	At program completion: ● 1 of 1 **consumer health outcomes** significantly improved: quality of life (p<.001) **Key qualitative findings** ● Caregivers perceived improvements in physical and mental health ● Barriers to accessing the program including: class scheduled during work hours, peak traffic, early morning; and if	*"The significant improvements in quality of life.... suggest that it may be an effective mode of, or adjunct to, community-based rehabilitation. By facilitating greater compassion, self-awareness, community connection, and skills in regulating emotions, LoveYourBrain Yoga also appears to enhance coping skills, which has implications on improving*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			Control= N/A	the location was a commute (triggering TBI symptoms) ● Recommendations to increase program to 8 weeks, extend class duration, and modify environmental factors (e.g. Heat, light, etc. Which may trigger symptoms) **Other outcomes** ● 82% of participants participated in at least 1 class. Mean satisfaction was 9.3/10	*quality of life for both TBI survivors and caregivers"*
Elinder 2018[27], Sweden, quasi-experimental comparison (III-3), community	Intellectual disabilities Participants: Community	Evaluate the effectiveness of a structural intervention on staff health	Focus= nutrition and physical activity Mode=face to face, group	At program completion: ● 3 of 4 **staff provision of care** outcomes significantly increased: general health promotion activities	*"a structural intervention like the study circle "Focus Health" can improve general health promoting work routines and physical*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
residences with supported living	residences (n=84) for people with intellectual disability to receive supported living by professional carers	promotion work routines in residences for adults with intellectual disabilities; and to explore barriers and facilitators in the implementation process of the intervention	Description= a study circle for paid carers ('staff') in community residences. The aim of the study circle was twofold: (1) to increase knowledge about health-related behaviours and health promotion among carers; and (2) to discuss and decide on role modelling and work routines to support healthy behaviour including opportunities for physical activity and healthy eating The study circle included 10 sessions each of approximately 90 minutes duration, which were carried out during a period of 12	(p=.05), physical activity care (p=.02), and total score for health promoting work routines (p=.002). No significant change for: food and meals (p=.11) **Key qualitative findings** ● Barriers and facilitators: need a supportive structure and key persons with a mandate to act, staff capacity, organisational capacity, external support, and characteristics of the 'study circle' (e.g. involving carers, positive discussions) **Other outcomes** ● 67/70 residences completed all 10 sessions of the study circle	*activity work routines in community residences for people with ID, while food and meal routines appear to be more resistant to change... it appears crucial to establish supportive structures and to appoint key persons with a mandate to act...This process could probably be further stimulated through adoption of local policies and well-planned information meetings ahead of the start of the intervention to clarify the roles of all involved"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			months. Themes discussed across the sessions included: (1) Health and quality of life; (2) Autonomy and ethics; (3) Diet and health in media and society; (4) Healthy dietary habits; (5) Physical activity; (6) Availability and accessibility of healthy foods and activities; (7) Habits and attitudes; (8) Motivation and support for behavioural change; (9) Cooperation; and (10) How to sustain good work Intervention coordinators were appointed from within respective services to		

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			facilitate implementation of changes. Control= waitlist control		
Jackson 2019[16], Canada, qualitative evaluation (NA), community-based exercise setting	Physical disabilities Consumers: Adults with a variety of mobility impairments (n=13) Staff: Service providers (coordinators, trainers, and	Explore the experiences of adults with physical disabilities, and service providers, regarding a community-based exercise program; and establish if their experiences	Focus= physical activity Mode=face to face, group Description= community-based exercise program for adults with various physical disabilities. Consumers attend two 60-minute exercise sessions per week. The exercise sessions are individualised to each program member's needs and ability and include both strength and aerobic training. Staff with relevant training	**Key qualitative findings** ● Six interrelated themes important for experiencing quality participation were identified and were in line with Martin Ginis and colleagues'(2017) framework and include: ○autonomy (sense of control over their participation) ○belongingness (social structure facilitated participation)	"*Opportunities to be physically active within one's community need to be available and accessible to individuals with physical disabilities in order to increase participation; however, what constitutes quality participation within these opportunities and how exercise programs can foster quality experiences for this population have yet to be explored.....*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	supervisors) (n=10)	could be understood through a quality participation framework	developed session content and oversaw delivery Control= N/A	○challenge (level of difficulty appropriate) ○engagement (from various program aspects) ○mastery (sense of accomplishment) ○meaning (personal level)	*Practitioners and researchers can use the findings as a starting point for designing, implementing and evaluating programs with the goal of optimizing quality participation"*
Janson 2020[15], Norway, qualitative evaluation (NA), Community-based independent residences with supported living	Intellectual disability Consumers: Adults with intellectual disability (n=5), residing in supervised,	Explore the feasibility of the nutrition tablet app 'APPetitus' among people with intellectual disability and	Focus= nutrition Mode=app. Description= The APPetitus app focuses on eating regularly and varied and stimulate to sufficient energy, fluid and protein consumption, grounded in healthy diet	**Key qualitative findings** ● The findings were mapped into three themes: ○APPetitus mediating nutritional conversations (use of APPetitus prompted a novel nutritional conversation	*"Dietary challenges are common among individuals with intellectual dis-ability residing in supervised living in Norway, and this is a major risk factor for health problems..... The study demonstrates that a nutritional app can contribute to and normalize*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	independent residences. Staff: Full-time professional caregivers (n=4)	their caregivers	recommendations for the general population in Norway. The app visualizes how food and beverages the user records as consumed, reflects the users need for energy, protein and fluid. The APPetitus application contains two panels, a main surface and a back panel. The main surface includes a visualisation of a meal plan, 147 meal suggestions with recipes in three levels of complexity, possibilities to record food and drinks, and a gradually filling figure visualising energy and fluids. The back panel shows a list	between caregivers and residents) ○Residents' strategies to control the conversation (different strategies were used by residents to control the nutritional conversation, as caregivers ascribed to ensuring no breach of trust based on the dietary agreements) ○Caregiver support as a required prerequisite for overall user comprehension (caregivers had a crucial role to foster the residents' understanding	*nutritional conversations, and empower residents to participate"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			of recorded meals, daily and weekly graphs of registered calories, proteins and fluids, and functionality for meal planning through generating a shopping list. Individuals used the app for 8 weeks. Control= N/A	of the potentials and functionality in using the app) ○ The application was included in care plans, providing an easy way to start conversations about nutrition and food choices daily	
Kouimtsidis 2017[9], UK, RCT (II) with qualitative component, community-based disability service providers	Intellectual disability RCT participants: Adults with mild to moderate intellectual	Development of an adapted manualised brief intervention to reduce harmful drinking for	Focus= alcohol Mode= face-to-face, individual Description= the overall duration of the intervention was 8 weeks, comprising 5	At 3-month follow up: ● 2 of 2 **consumer behaviour change outcomes** were positively impacted: proportion of participants exceeding the lower threshold for 'harmful drinking' (intervention 66.7% decrease vs	*"Extended brief interventions (EBIs) are effective in targeting alcohol misuse in the general population. However, little is known of the effects of EBI in adults*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	disability identified as having problematic alcohol consumption (n=30) Focus group participants: Adults with mild to moderate intellectual disability identified as having problematic alcohol consumption (n=7)	adults with intellectual disability; and, evaluate the feasibility, acceptability, and, usefulness of the intervention	weekly 30-minute sessions and a 1-hour follow-up session 3 weeks later. Motivational enhancement therapy was used in the first three sessions. The content of sessions 4 and 5 was adapted from a published CBT manual. An information leaflet on the intervention manual was given to Carers. A greater number of sessions of slightly longer duration than typically offered in an extended brief intervention were delivered to tailor to unique needs of group. Intervention groups	control 46.7% decrease) and AUDIT-C total score (intervention group: pre 9.13 - post 6.42; control group: pre 8.87 - post 8.93) (significance testing NR) ● 1 of 1 **consumer knowledge or perceptions** outcomes were positively impacted: readiness to change ('contemplation' scores: intervention group: pre 3.07 - post 8.00; control group pre 5.13 - post 3.00) (significance testing NR) **Other outcomes** ● 13 out of 15 participants attended a mean of 5 sessions, 9 participants attended all 6 sessions	*with intellectual (also known as learning) disabilities.....* *Recruitment to this trial has been proven challenging as prevalence of alcohol misuse in the targeted population was lower than anticipated. EBI may provide an effective low-intensity treatment for this population. Participants' and carers' feedback on their experience was overall positive. Further work needs to be undertaken to ascertain the group of participants that*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			participants also received usual care (see below) Control= usual care (comprising various therapeutic interventions [e.g., talking therapy for generic coping skills, pharmacotherapy for comorbid mental disorders, nursing, psychology, and social care], with simple advice to modify their drinking)	● Survey completed by 6 carers (4 paid carers and 2 family carers) and 1 health professional	*should be participating in a future definitive trial"*
Lin 2020[10], Australia, longitudinal observational cohort (III-3), online	Multiple sclerosis. Participants: Adults with a	Assess whether people with multiple sclerosis who	Focus= smoking, nutrition, physical activity	At 5-year follow up: ● 2 of 4 **consumer behaviour change outcomes** were significantly associated with	*"Health communication offers an important means for patients to make informed decisions for*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
delivery and recruitment from online platforms relating to multiple sclerosis	diagnosis of multiple sclerosis (n=952)	engaged with health information resources changed lifestyle behaviours differently from participants who did not engage	Mode=face to face/online/app/etc. and one-on-one or group Description= Engagement in the following health communication platforms: (1) the website http://www.overcomingms.org, (2) the book "Overcoming Multiple Sclerosis", and attendance at a live-in workshop based on these resources Hierarchical categorisation was used to characterise engagement with resources: 1. None—participants responding "no" to all of website visits, book and	lifestyle and resource engagement and consuming dairy ($p<0.05$), consuming meat ($p<0.05$), and engagement in vigorous physical activity ($p<0.05$). No significant association with being a current smoker ($p>0.05$)	*illness self-management.....* *Health communication that includes face-to-face information delivery and practical tools for implementation in daily living may be optimal for adopting and maintaining lifestyle behaviours in people with MS"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			workshop; 2. Medium—participants visiting the website and/or reading book; and 3. High—attendance at a live-in workshop and satisfying medium participant criteria Control=N/A		
Malagoni 2016[11], Italy, feasibility and pilot RCT (II), rehabilitation inpatient and community-based settings	Stroke Consumers: Community-living adults with chronic hemiplegic stroke (n=12)	Examine the feasibility, safety, and efficacy of a novel home-based rehabilitation model compared to a standard	Focus= physical activity Mode=individual, combination of face-to-face and self-directed Description= the novel rehabilitation program consisted of a hospital-based phase and a structured home-based phase	At a 10-week follow-up: ● 2 out 3 **consumer behaviour change outcomes** improved: 6-minute walk test and physical activity domain for both groups (p=0.03), Timed-up-and-go for home-based group (p=0.03). No improvement for stair climb ascending/descending (P>0.05)	*"The loss of normal ambulatory function after stroke, besides causing disability, leads to progressive deconditioning and exposes patients to increased risk of cardiovascular diseases and recurrent stroke...*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
		supervised program in chronic hemiplegic stroke survivors	performed alternately. The hospital-based phase included an initial evaluation and monthly follow-up exams during the rehabilitation period (at weeks 3, 6 and 10). The home-based phase included the performance of exercise at home. The intervention was based on 210-minute sessions/day (6 days/week) of intermittent walking, consisting of bouts of walking alternated by rest while seated, at a prescribed speed converted into a walking cadence and followed at home using a metro-nome	**Other outcomes** ● Adherence was 91% in the home-based exercise group and 92% in the standardised supervised group ● Retention rate was 100% with no adverse events reported and high satisfaction scores for both interventions	*In a sample of hemiplegic chronic stroke patients, a structured home-based exercise program was feasible, safe and capable of inducing improvements in functional capacity and Quality-of-life comparable to a conventional supervised rehabilitation program. A future larger randomised controlled trial will be needed to confirm such results"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			Control= the standard rehabilitation program was conducted in a group setting for 1 hour 3 times/week under the supervision of two experienced physiotherapists. Each session was composed of 20 minutes of endurance exercises and 40 minutes of targeted exercises for balance, muscle strength and flexibility		
Marks 2019a (HealthMessages) [26], USA, pre-post (IV), community	Intellectual and developmental disability Consumers: Peer health	Examine the effectiveness of a peer-led health promotion program for	Focus= nutrition and physical activity	At a 12-week follow-up: ● 6 of 6 **staff knowledge and perceptions** outcomes significantly improved in social/environmental supports for	*"The health status and health behaviours among support staff providing daily support for people with intellectual and developmental disabilities*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
managed organisations	coaches (adults with intellectual and developmental disabilities) (n=33); Peer participants (adults with intellectual and developmental disabilities) (n=311) Staff: Staff of community-managed organisations (n=35)	people with intellectual and developmental disabilities	Mode= online webinar (staff); face-to-face, individual (consumers) Description= *Phase 1: HealthMessages Program Train the-Trainer Webinar for PHCs and mentors*. Instructed by the research team, 75 minutes duration. Each dyad team included a PHC with IDD and a mentor who was a staff member from multiple CMOs. Prior to the webinar, HealthMessages Kits were mailed to each dyad team. Each kit included a Peer Health Coach Coaching Manual, a packet with (1)	nutrition (p=0.032), exercise outcome expectations (p=0.014), nutrition outcome expectations (p=0.005), fruit and vegetable intake (p=0.001), knowledge of fruit and vegetable intake recommendations (p=0.002), and stages of change for eating fruits and vegetables (p=0.012)	*(IDD-SS) in community-based organizations (CBOs) have not been systematically studied..... Results demonstrated that IDD-SS benefited from the health education programming. Findings support the need to develop programs and organizational policies for health promotion activities for direct care staff"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			weekly health message booklets and wristbands for peer participants; (2) posters; (3) weekly sign-in sheets to keep a record of peer participant attendance; (4) peer self-review cards to ask participants if they met their weekly goal; and (5) teaching props. The research team reviewed the contents of the HealthMessages Kit, along with instructional strategies for teaching the HealthMessages Program to peers during the webinar. Dyads were instructed to implement the HealthMessages Program over 12 consecutive weeks		

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			immediately following the webinar in convenient settings where people were receiving day program services. Each of the ten lessons required about 30 minutes to share the weekly health message and participate in related activity (see below) *Phase 2: HealthMessages Program: Health promotion program for peers with IDD.* Topics for lessons (delivered weekly) included content and activities on physical activity, hydration, and nutrition. Each topic within the peer booklet was divided into three parts:		

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			(1) assessment; (2) goal setting (take charge); and (3) action (‘‘passing on’’ the health message) Control=N/A		
Marks 2019b (Healthmatters)[25], USA, pre-post (IV), community-based organisations	Intellectual and developmental disability Staff: Professional support staff (n=48)	Examine the impact of ‘HealthMatters Program’ on the psychosocial health status of support staff.	Focus= nutrition and physical activity Mode=face to face, group Description= Staff attended an 8-hour, small group (7–10 staff) workshop, entitled: The HealthMatters Program: Train-the Trainer Workshop. Objectives of the workshop included: (a) reviewing the importance of physical activity, exercise, and	At a 12-week follow-up: ● 1 of 1 **staff knowledge and perceptions** outcomes significantly improved: knowledge of fruit and vegetable intake recommendations (p=.002)	*“Results provide evidence supporting the benefits of health promotion education for [support staff] to improve health status and health behaviors using a train-the-trainer model. While the HealthMatters Program aimed to provide [support staff] with knowledge, resources, and skills to teach and support service recipients with IDD*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			nutrition for people with IDD; (b) identifying barriers and social and environmental supports for motivating and engaging people with IDD in physical activity and health education; (c) discussing teaching strategies to convey core concepts of physical activity, exercise, and nutrition to people with IDD; (d) implementing customised physical activity, exercise, and nutrition activities tailored to the needs of adults with IDD; and (e) supporting people with IDD to sustain a health promotion		*to improve their health status, [support staff] were able to transfer this information to make improvements within their own social and environmental networks and make health behavior changes. The significant improvement related to [support staff] expectations toward eating more fruits and vegetables and being more physically active is an outcome that can have a positive impact on themselves and the people they support"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			program in their day/worksite programs Staff attended the workshop immediately before they implemented the 12-week HealthMatters Program for people with IDD, which comprised an hour of physical activity and an hour of health education (using Health Matters resources) 3 days a week for 12 weeks Control=N/A		
Martinez-Zaragoza 2016[12], Spain, pre-post (IV), community-based	Intellectual disability Consumers: Adults with a	Examine the effectiveness of a multicompone	Focus= nutrition, physical activity	At a 6-month follow-up: ● 3 of 4 **consumer behaviour change/physical health** outcomes significantly improved:	*"The multicomponent programme used for the reduction of obesity, based on PA, diet and motivation*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
disability service provider	mild to moderate intellectual disability (n=64), accessing a community occupational day centre Staff: professional support staff (n=6)	nt program (physical activity, diet and motivation) for overweight and obesity in adults with intellectual disabilities	Mode=face to face, individual Description= the intervention comprised two phases: the education phase (1 month) and treatment phase (17 weeks). The education phase comprises 2 sessions: in the first, the results of a health check were reviewed, as were negative impacts of overweight and obesity; in the second, eating habits and diet were discussed The treatment phase comprised simultaneous execution of the three components:	weight (p=0.028), diastolic blood pressure (p=0.006), systolic blood pressure (p=0.038). Heart rate did not significantly improve.	*has been effective in reducing overweight and obesity, and in improving the cardiopulmonary capacity of a group of people with intellectual disabilities from a non-residential institution"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			1. Physical activity: five sessions per week (Monday to Friday) for one continuous hour, always supervised by the instructors 2. Food and calorie restriction (diet): a nutritionist drew up a daily 1800 calorie diet. A weekly menu was given to families for breakfast, lunch, afternoon snack and dinner with several choices for each meal of the day 3. Motivation: a token economy system was implemented with the		

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			intention of rewarding weight loss and PA performance Control= non-equivalent control (made up of people from the centre who had normal weight, were not interested in the programme, had serious mental or behavioural disorders or who would have suffered side effects from taking part in the program)		
McCluskey 2016[28], Australia, cluster-RCT (II), community-based	Stroke Participating teams: Outpatient, day	Investigate the efficacy of the 'Out-and-About' program on	Focus= physical activity Mode=face-to-face, group Description= teams received a behaviour change program,	At a 12-month follow-up: ● 0 of 3 **consumer behaviour change** outcomes were significantly impacted: received	*"The Out-and-About program did not change team or stroke survivor behavior. Most stroke survivors were already*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
rehabilitation settings	therapy, or home-based rehabilitation services with at least one occupational therapy and one physiotherapist on staff (n=22) Consumers: Adult survivors of stroke (n=100)	both staff delivery of and consumer uptake of outings during therapy	comprising a 2-hour training workshop, which: ○ identified and addressed barriers to implementation ○ provided results and feedback from an audit of recently discharged patient files, and ○ provision of printed educational materials (including evidence-based protocols and guidelines for progressing walking distance and approaches to access various forms of transportation). A	four or more outings during therapy (experimental = 9%, control = 5%, p = 0.54); did not receive any outings (experimental = 60%, control = 73%; p = 0.25) and outings during therapy (experimental = 1.1 (SD 0.9), control = 0.6 (SD 1.0); p = 0.26)	*getting Out-and-About as often as people of the same age without stroke, therefore time consuming outings cannot be recommended as routine practice for that population. However, it may be useful to screen community-dwelling stroke survivors for frequency of outings in order to identify those who do, and do not need, to be escorted on outings during therapy."*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
			booster session (1 hour) was provided 12 months post initial workshop Control= teams received printed clinical guidelines only		
Nastasi 2020[13], USA, changing criterion case series (IV), residential group home setting	Developmental disability and mental illness Consumers: Adults with developmental disability and mental illness (n=4), living in a residential group	Evaluate the feasibility and effectiveness of a token-economy-based contingency management intervention to increase physical activity in	Focus= physical activity Mode=face to face, individual Description= using a changing criterion design, participants (N = 4) were given tokens contingent on meeting increasing step goals over 8 weeks, tracked via a Fitbit Flex™. The rules for earning tokens were	At 2-month follow up: ● 1 of 1 **consumer behaviour change outcomes** were positively impacted: three of four participants in the current study displayed an increase in daily steps taken when comparing the base-line number of steps to the final criterion (significance testing NR)	*"The present study supports the use of a token-based contingency management intervention to increase daily steps by sedentary adults diagnosed with developmental disabilities living in a residential setting. The token economy was viewed favorably by staff and participants, suggesting*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	home with supported living	sedentary adults with developmental disabilities living in a residential group home.	explained to participants before the study commenced, with weekly reminders. Participants had choice of how 'spend' tokens. Control=N/A		*that individuals in comparable settings may be willing to adopt similar interventions in the future"*
Stubbs 2016[14], USA, systematic review of pilot RCTs and pre-post-test studies (I), inpatient and outpatient settings	Serious mental illness Consumers: Adults with serious mental illness (n=220), across seven studies Staff: Peer support workers	Investigate if peer support interventions can improve the physical health, lifestyle factors, and physical health appointment attendance among people	Focus= nutrition and physical activity Mode=face to face, group or individual Description=peer support interventions seeking to improve any physical health, lifestyle factor, or physical health-care appointment attendance.	● 1 of 2 **consumer behaviour change outcomes** were positively impacted: 3 of 3 studies reported reductions in weight, though these were not significant. 1 was not impacted: 1 of 3 studies demonstrated improvements in physical activity and diet outcomes	*"The small sample sizes, heterogeneity of interventions, outcome measures, and lack of clarity about the unique contribution of [peer-led interventions] means no definitive conclusions can be made about the benefits of [peer-led interventions]*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	(n=12), with a lived experience of mental illness; across the seven included studies	with serious mental illness	Intervention duration ranged from 6 to 24 weeks, with interventions containing one or more of the following: psychoeducation regarding health, diet and physical activity; goal setting; individual and group exercise sessions; objective physical activity monitoring and feedback; mHealth and social media engagement to build motivation; and training for effective communication with health care professionals Control= treatment as usual or waiting list (where applicable).	● 0 of 1 **consumer service use outcomes** were impacted. Unclear evidence across 3 studies regarding consumer physical health appointment attendance	*and physical health in [serious mental illness]"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
Umb Carlsson 2019[17], Sweden, qualitative evaluation (NA), community-based group residences	Intellectual disability Consumers: Adults with intellectual disability (n=5) residing in a group home with supported living Staff: permanently employed professional support workers (n=6), rehabilitation professionals (occupational therapists,	Explore residents', staff members', and rehabilitation professionals' experiences of how a health-promotion intervention affected the habits of people living in a group home regarding diet, physical activity, and staff working habits	Focus= nutrition and physical activity Mode=face to face, group and individual Description= The intervention consisted of four parts, of which two were aimed at residents (parts 1 and 2) and two were aimed at staff in the group home (parts 3 and 4). Part 1: A health licence (10 psychoeducation sessions to increase awareness of healthy food and physical activities). Part 2: Trial physical activity (opportunity to try 5 new activities; supervised). Part 3: Health ambassadors (appointed to	**Key qualitative findings** ● Consumers gained knowledge and awareness regarding health-promotion lifestyle (e.g. healthy meals) ● Consumers emphasised the importance of making their own choices e.g. What food to eat and physical activities to engage in; such choice was perceived as limited ● Staff reported increased competence in health and improved conversations with consumers. Increased awareness regarding the importance of providing tailored support. However, staff noted that	*".. including people with intellectual disabilities as active parties throughout the process would facilitate implementation of a health-promotion profile in community residences"*

Table 5.1—Peer reviewed literature

Author, year, Country, Study design (level of evidence), Setting	Disability included; Study participants (n)	Research aim	Intervention description	Study findings	Author conclusion
	physiotherapists) (n=5)		provide motivation and keep the discussion on health issues on agenda among other staff members). Part 4: Psychoeducation on healthy lifestyle (10 sessions) Control=N/A	increased knowledge among consumers was not alone sufficient for change ● The local manager prioritised the project which was crucial to its successful implementation ● Provision of clear, structured activities is necessary	

● 50% or more of outcome type significant

● Less than half of outcome type significant

● Positive change reported descriptively only in 50% or more of outcomes (significance testing not conducted)

● No change reported descriptively (significance testing not conducted)

● 'Process outcomes' or qualitative findings

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
Block (2019)[18], US, pre-post (IV), University of California, San Francisco Multiple Sclerosis Center Relapsing or progressive MS	*Aim:* To show that continuous year-long remote activity monitoring using an accelerometer in a prospective cohort of individuals with MS is feasible, that change in the average daily step count is associated with validated disability outcomes, and that the average daily step count is a valid and useful outcome measurement tool *Focus:* physical activity *Mode:* remote activity monitoring of step count using a wrist-worn accelerometer. So online/app? *Description:* people with MS asked to wear an accelerometer	*Yes* *At a 12-month follow-up:* ● 2 out 3 **consumer behaviour change outcomes** improved: Timed-up-and-go (mean minutes 11.94 vs 10.91) and average daily step count (4766.2 vs 4989.6) (significance testing not conducted). No improvement for Timed 25-foot walk (mean minutes 7.31 vs 7.51) (significant testing not reported) **Other outcomes** ● Continuous remote activity monitoring of patients with MS using a wrist-worn accelerometer during a 1-year period is feasible and reveals clinically relevant ambulatory disability not captured by standard metrics
Clanchy (2016)[29], Australia, controlled pre-post (III-1), participants' homes and community Individuals with brain impairments (n=43)	*Aim:* To evaluate the efficacy of a PA intervention for community-dwelling adults with brain impairment *Focus:* physical activity *Mode:* face-to-face one-on-one *Description:* standardised assessment followed by individual tailored program. A mixture of structured, graduated exercise prescription as well as sports, outdoor activities, practical activities, or cultural activities. The control intervention aimed to promote oral health, sun safety, and healthy sleep	*Yes, but need strategies to foster maintenance of physical activity* *At a 6-month follow-up:* ● 0 out 1 **consumer behaviour change outcomes** significantly improved: moderate to vigorous physical activity (p=.28)

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
Down Syndrome Australia (2020)[19], qualitative evaluation (NA), disability support service Persons with down syndrome	*Focus*: physical activity *Mode*: online *Description*: daily online activities for persons with down syndrome, including a range of activities such as exercise classes (e.g. yoga, Zumba), as well as other social activities (bingo, trivia, karaoke)	*Yes* **Key qualitative findings** ● Families noted improved fitness of participants; and were inspired to exercise themselves **Other outcomes** ● 55 online activities ran through April and May 2020; with 17-20 participants at each class
Giunti (2018)[31], Switzerland, qualitative (NA), specialist neurological rehabilitation service Persons with multiple sclerosis (N=12)	*Aim*: Explore MS-specific needs for MS mHealth solutions for PA, detect perceived obstacles and facilitators for mHealth solutions from persons with MS and health care professionals, and understand the motivational aspects behind adoption of mHealth solutions for MS *Focus:* physical activity Mode: face-to-face focus groups and interviews *Description:* exploratory study to explore MS-specific needs for MS mHealth solutions for PA, detect perceived obstacles and facilitators for such mHealth solutions from persons with MS and health care professionals, and understand motivational aspects that could facilitate development of mHealth solutions for MS	**Key qualitative findings** ● Desired mHealth features: activity tracking, incentives for completing tasks and objectives, customizable goal setting, optional sociability, and game-like attitude among others ● Potential barriers: rough on-boarding experiences, lack of clear use benefits, and disruption of the health care provider-patient relationship ● Potential facilitators: endorsements from experts, playfulness, and tailored to specific persons with MS needs **Other outcomes** ● 4 MS personas were developed to provide designers and computer scientists means to help in the creation of future mHealth solutions for MS

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
Kallio (2020)[22], Australia, qualitative evaluation (NA), Gold Coast Recreation & Sports Inc. Persons with down syndrome, intellectual disability, autism, cerebral palsy, and/or spina bifida	*Aim*: To investigate Gold Coast Recreation & Sports Inc (GCRS) clients' experience of the new NDIS-program, to highlight the impact that the NDIS program has had on the lives of clients, and to ask clients' opinions of the GCRS and their satisfaction with the operation and availability of the place *Focus:* physical activity *Mode:* face-to-face group *Description*: Gold Coast Recreation & Sport Inc. (GCRS) is a community-based organization which provides sporting and recreational opportunities for people with disabilities. Study was a semi-structured interview to investigate the NDIS program from Gold Coast Recreation & Sport Inc (GCRS) clients' point of view	*Yes* **Key qualitative findings** ● Clients and staff members who were part of the research *"were absolutely satisfied with this new NDIS-program"* ● Participants *"were super happy with the commitment of the staff and the leader of GCRS and their philosophy"*
Krops (2018)[32], The Netherlands, Qualitative (NA), National Sports Federation Various disabilities	*Aim:* To explore ideas that experts working in the field of physical activity for people with a disability pose on an intervention to stimulate all kinds of physical activity in this target population *Focus:* physical activity *Mode:* in person or via phone *Description*: qualitative interviews to explore ideas experts pose on a stimulating movement intervention for physically disabled people longer than one-year post rehabilitation or not familiar with rehabilitation	**Key qualitative findings** ● According to experts adapting an existing intervention, together with increased collaboration between organisations, will be effective in stimulating physical activity in the target population ● Methods for stimulating physical activity in physically disabled people could be the use of individual coaching, feedback, a trial period, and role models ● Potential participants should be personally approached via a network of intermediate organisations and via

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
		marketing, and the social environment
Krops (2019)[33] The Netherlands, Qualitative (NA), Center for Rehabilitation, University Medical Center Groningen Amputation, chronic pain, stroke, multiple sclerosis, neuromuscular disease, and spinal cord injury	*Aim*: To explore ideas of the target population about a community-based intervention to stimulate physical activity in hard-to-reach physically disabled people *Focus:* physical activity *Mode:* in person *Description*: qualitative interviews with physically disabled people to explore ideas of the target population about a community-based intervention to stimulate physical activity in hard-to-reach physically disabled people	**Key qualitative findings** ● According to the target population, an intervention should aim to raise awareness of the health effects of physical activity, stimulate intrinsic motivation, offer diverse activities, increase the visibility of the possible activities, and improve the image of physical activity for physically disabled people ● Interventions should include buddies, trial periods, individual conversations with a coach and apply appropriate marketing and promotion
Lyons (2019)[23], Australia, Qualitative evaluation (NA), Flourish Australia Mental health issues	*Aim:* To help people with mental health issues to be able to detect health risks early, and then respond to that by connecting with a GP *Focus:* physical health *Mode:* face-to-face *Description*: physical health cards for people with mental illness to identify health concerns	*Yes* **Key qualitative findings** ● Feedback received from the pilot trial proved users found this method to be a helpful and effective health communication tool. The users found the cards have expanded their health knowledge *"People said they felt comfortable using the cards and really in control of what they wanted to talk about, what they wanted to say and who they wanted to speak about it"*

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
McGhee (2018)[34], US, qualitative (NA), social service agency Individuals with intellectual and/or developmental disabilities (IDD)	*Aim*: To identify priority health needs and potential partners of the intellectual and/or developmental disability clients of a social service agency in Central Texas *Focus:* "priority health needs" *Mode:* face-to-face focus groups *Description:* qualitative interviews with case managers	**Key qualitative findings** ● Access to care, dental health, nutrition, and physical activity were cited by case managers as the priority health needs for IDD clients ● Most important factors which played into clients' health needs were where they live and if they have support ● Tools and training were the most requested support to make existing assets and activities inclusive for IDD clients
Nary (2020)[20], USA, pre-post (IV), Participants' residence & service providers Intellectual disability	*Aim*: To create a program that could be delivered by service providers to support adults with ID to adopt more nutritious diets and increase their physical activity levels *Focus:* nutrition *Mode*: face-to-face group *Description*: intervention used the Stoplight Diet, which uses a color-coded system to teach healthy food choices and physical activity. One to 1.25-hour sessions over 6 consecutive weeks, with specific and targeted content during each session. These included (a)using the Stoplight method of identifying healthier foods, (b) increasing physical activity in daily routines, (c) gaining social support for healthy living, (d) replacing sugary beverages with water, (e) learning and exercising portion control, (f) shopping for healthy foods,	*Yes* *At a 1.5 month follow-up:* ● 4 of 5 **consumer behaviour change** improved: ate fruit and vegetables in last day (43–64%), healthy food purchases on the last shopping trip (50–100%), drank soda on previous day (57–29%), average number of glasses of water drank on the previous day (2.35 [range of 0–8) to 3.31 glasses [range of 0–10]). No improvement in number reporting physical activity in addition to walking during the previous week (36% to 29%). (significance testing NR) ● 2 of 4 **consumer knowledge and perception** improved in knowledge of healthier food choices increased (57% to 79%), identification of a healthy balanced meal plate (71% to 79%). No improvement in knowledge identification of foods

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
	and (g) making healthier choices when eating out	high in fat and sugar (43% to 38%), and most healthy ‘‘green’’ group food (100% to 92%) (significance testing NR) **Other outcomes** ● Attendance was high and consistent with 85% and 90% of participants in group one and two, respectively attending all six sessions □ Focus of the first group was to ensure feasibility of materials and activities and overall feedback was highly positive necessitating few changes prior to initiating the second group
Regan (2020)[21], USA, Qualitative evaluation (NA), Yoga studio Spinal Cord Injury, Traumatic Brain Injury, Muscular Dystrophy, Multiple Sclerosis, Cerebral Palsy, Generalized Pain Disorder	*Aim:* To understand the lived experiences of individuals with disability who are regular participants in the Yoga for Everyone class to inform future research, intervention and community programs *Focus:* physical activity *Mode*: group face-to-face *Description*: yoga classes tailored for people with disabilities. Teacher plus trained volunteers to assist participants with poses	*Yes* **Key qualitative findings** ● Thematic analysis revealed themes on influential environmental and personal factors, a holistic-focused class environment, physical improvements, mental/emotional impact, and a sense of belonging to community
Wheeler (2018)[35], Australia, Qualitative (NA), Non-government organisations	*Aim:* To better understand the barriers and enablers for Australian mental health consumers to participate in physical activity or exercise programmes	**Key qualitative findings** ● Barriers that impacted on engagement in physical activity included: lack of social support, insufficient knowledge and

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
Serious mental health problems	from the perspectives of consumers and exercise practitioners *Focus:* Physical activity *Mode*: focus groups – no intervention *Description*: qualitative focus groups with consumers experiencing serious mental health problems and exercise practitioners	information, difficulties with work/life balance, impact of physical and mental health issues, fear and lack of confidence, and financial cost ● Enablers or motivators assisting engagement in community-based physical activity programmes included: social support, access to person-centred individualised exercise options, connection and a sense of belonging, and access to information and education **Other outcomes** ● Recommendations and a checklist were developed to assist services to increase the involvement of mental health consumers in community-based exercise and to ensure that exercise practitioners and their employing organisations are adequately equipped to work with this population
Women with Disabilities (2020)[24], Australia, Qualitative evaluation (NA), website Women with disabilities	*Aim*: To provide accessible information and practical resources that support women and girls with disability to learn about and stand up for their rights *Focus:* physical activity & nutrition *Mode:* online *Description:* site contains brief information highlighting the importance of exercise and a healthy diet, as well as suggestions for how to incorporate both in to everyday life. The site also links to the Australian Dietary Guidelines	*Yes* *At project completion:* **Other outcomes** ● Feedback on live website, March 2020: Within the first 2 weeks following website launch, 80% (n=16) of women and girls with disability who responded to the website survey rated the content as relevant to them. Just over half (55%; n=11) rated the content ‘useful’ or ‘very useful’ and

Table 5.2—Summary of grey literature

Author, Year	Summary	Authors recommend intervention (yes/no; if relevant) and results
		70% (n=14) said they were likely to recommend Our Site to others ● Google analytics, July 2020: As at 31 July 2020, Our Site had been accessed over 11,000 times from over 60 countries. The majority (86%) were visitors based in Australia *"That the website has been built by women with disability sends a really powerful message about empowerment and people's rights"*

● 50% or more of outcome type significant

● Less than half of outcome type significant

● Positive change reported descriptively only in 50% or more of outcomes (significant testing not conducted)

● No change reported descriptively (significance testing not conducted)

● 'Pfrocess outcomes' or qualitative findings

Appendix 6: Evidence and recommendation grading

Table 6.1— Summary of the evidence base quality rating assessed using the NHMRC levels of evidence and grades for recommendations[1]

Component	Evidence quality	Rating
Evidence base	B: Good	Several level I and level II studies, however, some level IV studies
Consistency	B: Good	Good consistency of findings across included publications
Clinical Impact	B: Good	Good potential benefits of interventions for staff and consumers; though long-term impact of interventions not assessed
Generalisability	B: Good	Evidence may not be representative of all NDIS participants e.g. small number of studies for some disabilities
Applicability	A: Excellent	Directly applicable to Australian context
Overall grade	B: Good	Body of evidence can be trusted to guide practice in most situations

Appendix 7: Peer reviewed studies mentioning social isolation, loneliness, and/or psycho-social risk factors

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
Adams 2019[36]; Adams 2018[2]	×	✔ Secondary outcome measure for intervention effect • There was little change in level of loneliness	✔ Psychosocial factors included as secondary outcomes: effect of intervention • Little or no evidence of difference between control and intervention groups for psychosocial factors: activity avoidance, anxiety and depression, work and social adjustment, quality of life and economic costs
Barnhart 2019[3]	×	×	×
Brown 2018[4]			✔ Psychosocial factor included as secondary outcome: effect of intervention and intervention content

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
	×	×	• Systematic review of weight loss interventions in community-based settings for people with serious mental illness; 1 of 17 included study measured the outcome of depression, finding a significant positive effect of intervention • Intervention content: Authors note a need to adapt instructional components of interventions due to cognitive concerns of the population (e.g., break topics into shorter components and repeat key points)
Christiansen 2018[5]	×	×	×
Croot 2018[6]	×	×	✔ Psychosocial factors identified during mixed methods assessment of intervention feasibility and acceptability • Qualitative interviews with participants found participant concerns about obesogenic

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
			environment (related to opportunity for dietary changes) and accessing mainstream services
Dixon-Ibarra 2018[7]; Dixon-Ibarra 2017[37]	✔ Related variable identified during qualitative analysis of programme use, implementation and feedback on program materials • Qualitative interviews with staff and residents identified social engagement as a program facilitator	✔ Related variables identified during qualitative analysis of programme use, implementation and feedback on program materials • Qualitative interviews with staff and residents identified spending time with staff and social engagement as program facilitators.	✔ Psychosocial factors identified during qualitative analysis of programme use, implementation and feedback on programme materials Qualitative interviews with staff and residents identified psychosocial factors as program: • facilitators (e.g. positive attitudes, familiarity with residents, fun, having choice, residents having own materials, independence, self-determined, self-efficacy, organisational factors such as schedules, time, staffing) and/or • barriers (e.g., resident motivation, dependence on staff, lack of staff and/or resident support, lack of equipment and negative attitudes, organisational factors such as schedules, time, staffing)

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
Donnelly 2019[8]	×	×	✔ Psychosocial factors included as outcomes of effect of intervention • Significant positive intervention effect (quantitative analysis) on the psychosocial factors of: quality of life; cognition; positive affect and well-being; resilience for participants with traumatic brain injuries • No significant quantitative intervention effect on the psychosocial factor of emotional and behavioural regulation • However qualitative content analysis; program improved: patient ability to regulate stress, anxiety, anger and impulsivity • Improvements in caregiver physical and psychological health
Elinder 2018[27]			✔

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
	×	×	Psychosocial factors identified through qualitative analysis to barriers and facilitators of programme implementation Qualitative interviews with program implementers identified psychosocial factors as program: • facilitators (e.g. supportive infrastructure and personnel such as local policies and resources that enable implementation; and organisational capacity such as positive work climate, organisation of time) and/or • barriers (e.g., organisational capacity such as high staff turnover)
Jackson 2019[16]	✔ Related variable identified during qualitative analysis of quality programme participation • Positive social structure and sense of	×	✔ Psychosocial factors identified through qualitative analysis of quality program participation. • Qualitative focus groups identified the following psychosocial factors as important for quality program participation: participant autonomy or

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
	belongingness for providers and participants (including peer support and co-participation, encouragement, & enjoyment) identified during qualitative focus groups as important for quality program participation		perceived control over participation, a sense of physical challenge, engagement, mastery and meaningful (e.g. improvements in quality of life and mental health; sense of responsibility to others)
Janson 2020[15]	×	×	✔ Psychosocial factor identified during qualitative analysis of the evaluated nutrition tablet app • Carer support identified as important for user comprehension of the evaluated app
Kouimtsidis 2017[9]	×	×	✔

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
			Psychosocial factors included as secondary outcomes of effect of intervention. • Significant improvement in psychological distress for intervention participants, however improvement for controls too. • No effect on quality of life.
Lin 2020[10]	×	×	✔ Psychosocial factor included as study outcome • Engagement with health information was associated with the psychosocial factor of education status: higher engagement associated with higher education.
Malagoni 2016[11]	×	×	✔ Psychosocial factor included as study outcome

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
			• Significant improvement in the psychosocial factor of quality of life for intervention participants
Marks 2019a[26] (HealthMessages)	×	×	✔ Psychosocial factors included as outcomes of effect of intervention • Significant positive changes in provider self-efficacy, and participant social support
Marks 2019b[25] (Healthmatters)	×	×	✔ Psychosocial factors included as outcomes of effect of intervention • Significant improvement in the psychosocial factor of social/environmental support for nutrition • Positive, but not significant increases in psychosocial factors of: wellbeing and

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
			social/environmental supports for exercise, self-efficacy for exercise and nutrition
Martinez-Zaragoza 2016[12]	×	×	×
McCluskey 2016[28]	×	×	×
Nastasi 2020[13]	×	×	×
Stubbs 2016[14]	×	×	×
Umb Carlsson 2019[17]	✔ Related variables identified through qualitative analysis evaluating experiences of health promotion interventions in community-based settings.	×	✔ Psychosocial factors identified through qualitative analysis evaluating experiences of health promotion interventions in community-based settings. • Related psychosocial factor identified by residents as facilitators: increased knowledge of health promotion lifestyles

Table 7.1—Summary of peer reviewed studies mentioning social isolation, loneliness or psychosocial risk factors

Publication	Social isolation	Loneliness	Psychosocial risk factors*
	• Identified by staff: shared activities promoted social interactions and belonging in residents, and meetings with rehabilitation professionals increased social relations for staff		• Barriers: desire for greater autonomy and power over lifestyle choices and lack of motivation to sustain change. • Facilitators identified by staff: organisational factors (e.g. increased staff competence, staff-led client behaviour change, improvements to care structure

X=not mentioned; ✔=mentioned.

***Psychosocial factors considered included [38-41]:** stress; psychological distress or psychological traits or mental health problems or psychosomatic disorders and symptoms; coping strategies; Self-esteem or self-care or self-management; quality of relationships or marital status; recent stressful life events (e.g. bereavement, loss, job uncertainty, illness, hostility, trauma, bullying and/or harassment etc.); housing; employment or job security or control or stress, or occupational or workplace factors e.g. loss of productivity, organisational culture; education status or education stress; socioeconomic status, or social or economic disadvantage or stress; and aspects of social environment and social support.

Appendix 8: relevant resources identified in the grey literature search

Information, resources or training for health professionals

Nutrition Support Action Plan for case managers/key workers - assessing a consumer's diet, NEMO, https://www.health.qld.gov.au/__data/assets/pdf_file/0024/152484/mh_nsapassessdiet.pdf
Resource for case managers/key workers to assess nutrition and discuss action for consumers.

Well and Able - " Improving the Physical Health of People with Intellectual Disability, Queensland Centre for Intellectual and Developmental Disability, https://www.edx.org/course/well-and-able-improving-the-physical-health-of-peo
Training course available for health professionals to examine the specific physical health issues that affect people with an intellectual disability.

Good to Great Framework: E-learning content, NSW Government, https://www.facs.nsw.gov.au/providers/deliver-disability-services/good-to-great-e-learning-elmo-portal
Resources for workers to support provision of person-centred care to people with a disability e.g. lifestyle planning, health promotion, chronic disease.

Community & Sporting Toolkit, Down Syndrome Australia, https://www.downsyndrome.org.au/resources/toolkits/community-sporting-toolkit/
Information and advice on considerations and adjustments that can be made to support participation in the community for persons with Down syndrome.

For coaches and clubs: supporting inclusion of people with disability, QLD Government, https://www.qld.gov.au/disability/out-and-about/sport-recreation/coaches-clubs
List of resources for sports and recreation clubs to tailor their activities to be inclusive of people with a disability.

Health Toolkit, Down Syndrome Australia, https://www.downsyndrome.org.au/resources/toolkits/health-toolkit/
Resources for health professionals and persons with a disability to better understand hospital stays, building relationships with GPs, decision making and support within the health system.

Information or resources for people with disability

Being healthy and living well, ARC Disability services and Centacare, https://docplayer.net/190778281-Being-healthy-and-living-well.html
Booklet to promote understanding of healthy eating for people in the community who have disabilities and/or limited literacy skills

My Health Matters folder, CID, https://cid.org.au/resource/my-health-matters-folder/
Tool to improve communication between persons with disabilities and their healthcare providers.

Planner, Cerebral Palsy Alliance, https://www.cerebralpalsy.org.au/wp-content/uploads/2012/11/Life_Tools_Adult.pdf
Planning tool for people with cerebral palsy, carers, families to think about the future.

Physical health services/activities available in the community for people with disability

At-home health and wellness programs, Blind Sports and Recreation Victoria, https://www.blindsports.org.au/news-article/at-home-health-and-wellness-programs
Online health and wellness program delivered via zoom for people who are blind or visually impaired.

New South Wales Toolkit, Blind Citizens Australia, https://www.bca.org.au/toolkits/
List of services and support available for visually impaired persons across Australia.

Appendix 9

An Evidence Snapshot is a rapid review of existing evidence tailored to the needs of an agency. An Evidence Snapshot answers one specific policy or program question and is presented as a short brief of 3-4 pages summarising existing evidence. Evidence Snapshots may review up to 20 peer reviewed and up to 20 websites or grey literature reports, focusing on literature published in last 12 months identified using limited databases and search terms. A detailed synthesis and analysis are not provided.

Evidence Snapshots include review of the summary by a content expert. In this instance, the Australian Commission on Safety and Quality in Health Care elected to provide content expertise.

Included

Proposal

A project brief is provided to the agency following a one-off knowledge brokering session. Once the brief ('proposal') is agreed with the agency, additional changes to the project brief incur a fee. Evidence Snapshots allow for one round of questions for clarification.

Report

Evidence Snapshots are written in the Sax Institute template and include the report (approximately 3-4 pages); the appendices; and the reference list.

Appendices

The appendices include the search strategy and method; the data extraction table for peer-reviewed studies (8-9 columns); grey literature and peer reviewed commentaries (3 columns).

Exclusions

Snapshot Reviews exclude: a synthesis of the findings of the peer reviewed and grey literature; summaries of individual included papers; a detailed analysis; quality assessment of included studies; additional comments by the agency (following an initial review and questions of clarification); presentation of findings to the agency or stakeholders.

Publication

Evidence Snapshots are uploaded to the Sax Institute website with the consent of the agency.

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