

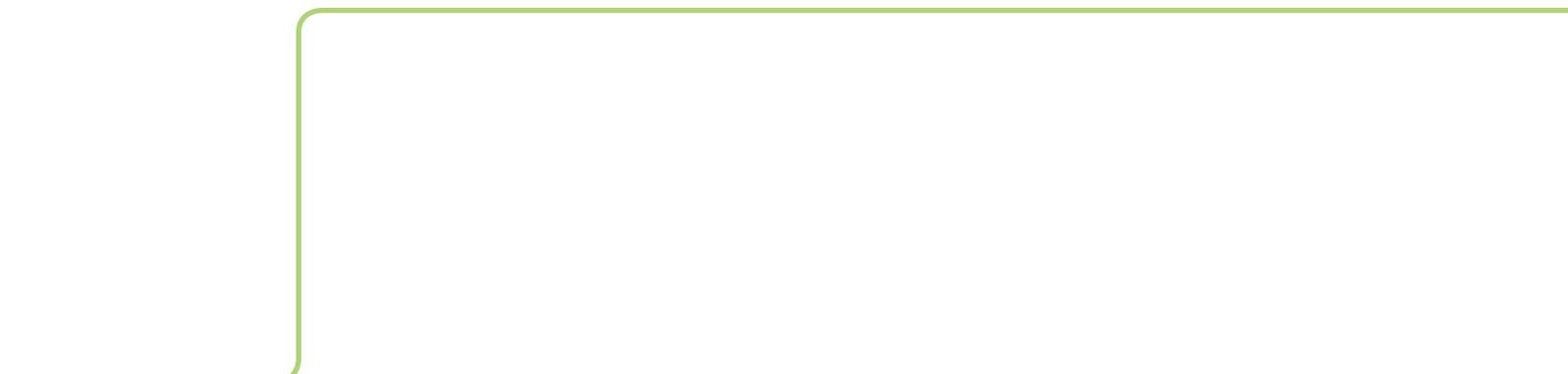


# Promoting equity in physical activity

An evidence summary

FAIR FOUNDATIONS HEALTH EQUITY SERIES



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# Introduction

## Background

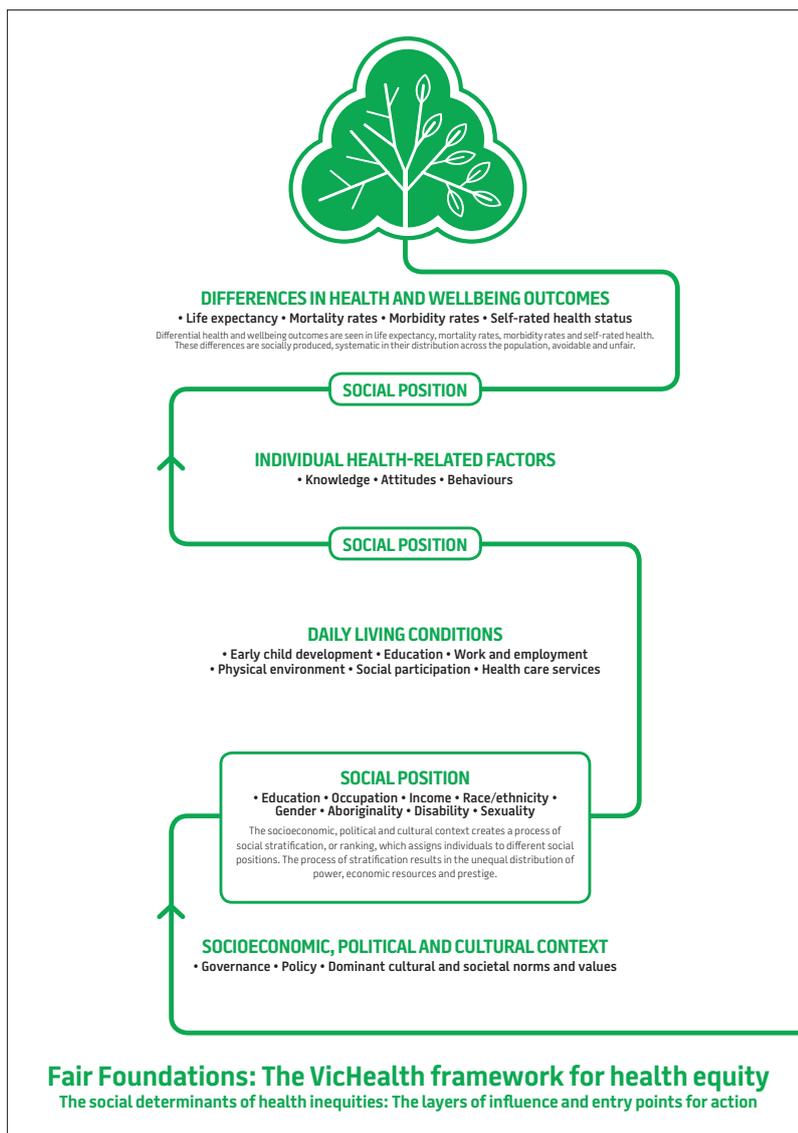
Regular activity is widely recognised as a means to protect against a range of poor health outcomes, including cardiovascular disease, hypertension, type 2 diabetes, osteoporosis, musculoskeletal impairments, obesity, some cancers and poor mental health. Despite the known benefits, however, the majority of Australian adults do not meet physical activity and sedentary behaviour guidelines (Australian Bureau of Statistics, 2013).

Rates of physical inactivity and sedentary lifestyles are not evenly distributed across the population, with particularly strong evidence of a social gradient in leisure time physical activity. At least from early adulthood onwards, Australians with lower levels of education, on lower incomes or living in socioeconomically disadvantaged neighbourhoods are less likely than better-educated and more advantaged Australians to participate in physical activity and more likely to live sedentary lifestyles. Indigenous Australians are significantly less likely to be physically active than non-Indigenous Australians, and women are less active than men throughout the lifespan. Although physical activity is a relatively new field of investigation, there is also emerging evidence of a social gradient in certain sedentary behaviours, including screen time.

Health equity is the notion that all people should have a fair opportunity to attain their full health potential, and that no one should be disadvantaged from achieving this potential if it can be avoided.

Health inequities are differences in health status between population groups that are socially produced, systematic in their unequal distribution across the population, avoidable and unfair.

The social determinants of health inequities are the social determinants of health – or the health-influencing social conditions in which people are born, grow, live, work, play and age – and the social processes that distribute these conditions unequally in society.



[www.vichealth.vic.gov.au/fairfoundations](http://www.vichealth.vic.gov.au/fairfoundations)

## Using this document

This evidence summary is intended to provide policy makers and practitioners in Victoria and across Australia with practical, evidence-based guidance on promoting equity in physical activity. It is designed to be used alongside ‘Fair Foundations: The VicHealth framework for health equity’ [www.vichealth.vic.gov.au/fairfoundations](http://www.vichealth.vic.gov.au/fairfoundations) – a planning tool developed and published by VicHealth in 2013 to stimulate and guide action on the social determinants of health inequities.

Common underlying drivers and determinants of health inequities are outlined in the Fair Foundations framework. This evidence summary is one of eight that use the framework to examine a specific health issue and its determinants (mental wellbeing, healthy eating, physical activity, alcohol, and tobacco use), or specific opportunities for action (through social innovation, settings-based approaches, or a focus on early childhood intervention as an upstream solution to health inequities over the life course). In many cases, the key social determinants of health inequities (such as education or employment) are also discussed as settings for action (e.g. schools, workplaces) within each summary.

This summary focuses on approaches that have successfully impacted on, or that have significant potential to address, physical activity and sedentary behaviour-related inequities if designed and targeted appropriately. It focuses on actions to address physical activity and sedentary behaviours through people’s leisure time and travel behaviours. Physical activity can also be accumulated incidentally (during everyday living activities), in the workplace and in the home; however, these domains are not covered in detail in the following discussion.

This summary highlights best practice and priorities for action that cut across all three layers of the Fair Foundations framework – Socioeconomic, political and cultural context; Daily living conditions; and Individual health-related factors – in order to support coordinated, multisectoral approaches.

# What can be done to reduce physical activity and sedentary behaviour-related inequities?

## Socioeconomic, political and cultural context

### Governance

Physical activity opportunities are shaped by governance systems that determine the framework for policies, legislation, services and interventions in relation to sport and physical activity promotion, as well as the level of priority and funding that they receive. Governance systems also determine the extent to which various groups in society are able to participate in decision-making processes, and the extent to which they can influence the conditions that affect their daily lives, including opportunities for physical activity.

Collaborative governance, or partnership models, involving coordinated actions from both health and non-health sectors of federal, state and local governments, as well as the engagement of civil society and the private sector, have shown promise for facilitating physical activity in the population. Examples of collaborative statewide approaches to physical activity promotion in Australia include the 1996–2002 New South Wales whole-of-government approach, Be Active WA, the South Australian Premier's Be Active Challenge, Get Moving Tasmania, and the Premier's Active Families Challenge/Active April in Victoria.

Unfortunately, these strategies have not been comprehensively evaluated for their impacts on behaviours. While direct evaluations are challenging – due to their scale and multiple components, and the complexities of assessing against appropriate control sites – the potential effects of these approaches can be indirectly examined via regular physical activity monitoring or surveillance surveys. These should include explicit attention to distributional impacts across a wide range of social groups.

### Policy

A broad mix of policies influences physical activity opportunities among different social groups. This mix includes policies governing land use, urban design and neighbourhood development. Mixed residential/commercial neighbourhoods that are safe, aesthetically pleasant and walkable are associated with greater utilitarian walking (e.g. to commute to work or to run errands). Car travel, on the other hand, is more prevalent in areas where there are distinct residential and commercial zones.

Other key policy areas with the potential to impact directly on physical activity participation include transport, education, and sport and recreation. A broad range of social-policy areas, including housing, employment and social welfare, shapes people's everyday living conditions over the life course, and plays an indirect role in providing opportunities for physical activity.

### Economic instruments

A range of economic instruments have the potential to address socioeconomic (particularly income-related) inequities in physical activity, including taxes (such as road/congestion taxes), tax exemptions or deductions, subsidised or low-cost council-run facilities, and incentives for private facilities or clubs to offer programs and services that target a broader range of people from different social groups. However, there is a dearth of evidence on the effectiveness and cost-effectiveness of these approaches at the population level, let alone on differential impacts across social groups. This is an area that warrants further research.

### Transportation policy

Transportation policies and practices have potential to address inequities in both active transport and leisure time physical activity by preferentially targeting infrastructure improvements, incentives to encourage walking or cycling, or public transport improvements aimed at vulnerable groups. Potentially, this approach could also shift perceived norms about the environment and travel behaviour. Promising approaches in this category include traffic-calming methods; the creation of multi-use trails (walking and cycling); road closures or restrictions on use; road-user charges; cycling infrastructure; and the creation of safe routes to school. However, again, there is a dearth of evidence based on the differential effects of transport policy interventions on physical activity across social groups.

## Facility sharing

Policy to support the sharing of government, school and community facilities may enhance opportunities for physical activity in the wider community, and in socioeconomically disadvantaged communities in particular. Opportunities include simplifying the process for facility sharing (e.g. by providing shared-use agreement templates, best-practice models and a standardised costing scheme) and through committed funding to support sport-facility development and upgrades within schools. Evidence is needed on the effectiveness and cost-effectiveness of such initiatives.

## Social and cultural norms and values

Australia is strongly identified as a sporting nation, with sport having long been a defining and dominant feature of Australian culture. However, national prevalence rates of inactivity indicate that these norms and values do not translate into physically active lifestyles for many Australians.

In addition, certain social groups may hold different norms relating to physical activity than others. Indigenous Australians, for example, experience unique social, cultural and economic barriers to participation, including negative community norms/perceptions of exercising alone. People living with disabilities can also face social and attitudinal barriers to physical activity, while cultural norms and values are likely to be influencing gender differences in sports participation and physical activity.

Physical activity behaviour may also be linked to social norms at more localised levels, such as simply knowing of, or observing, others being active in the local neighbourhood. However, there is limited empirical evidence on how such variations in norms across social groups might translate into variations in physical activity or sedentary behaviours.

Little is known about the most effective ways to challenge social norms in order to promote more active lifestyles. Community-wide and mass media campaigns, as well as wide-scale transportation policy changes, may help to shift social norms, given their high visibility and potential to involve large proportions of the population. These strategies are also likely to reflect and influence the other two layers of the Fair Foundations framework, through making changes to daily conditions where physical activity can occur, and through increasing knowledge, awareness and attitudes related to physical activity.

Strategies to incentivise the increased representation of women on sporting boards, having more women in policy-making positions in sporting and media organisations, and using media promotion of influential role models to increase opportunities for women may also offer potential for challenging gender norms relating to physical activity and female participation in sport. However, there is a dearth of empirical evidence available on the effectiveness or cost-effectiveness of such approaches, nor have their differential impacts across social groups been subject to detailed research.

On the whole, mass media campaigns delivered alone are unlikely to be effective in promoting increased physical activity. They may, however, play a role in promoting increased self-efficacy and/or knowledge/attitudes related to physical activity, as well as helping to shift social norms, and such influences do not seem overly to favour more advantaged groups.

Community-wide campaigns tend to be resource-intensive and expensive, but appear to be effective in increasing the proportion of people who are physically active. Community-wide campaigns are typically large-scale, highly visible multicomponent campaigns involving multiple sectors and partnerships that deliver messages via television, radio, newspapers and other media. Unlike mass media campaigns, these campaigns also include other components, such as community events; support groups; physical activity counselling; and risk-factor screening and education at worksites, schools and community health centres. They can also include policy and environmental changes, such as the creation of new walking paths or the opening of school facilities for public use. Campaign messages can be tailored to fit the needs of specific populations such as disadvantaged social groups. They can also be targeted specifically at challenging and shifting gender-related norms and stereotypes around sport and physical activity. However, their effectiveness in increasing physical activity among disadvantaged groups is much less well studied, and evidence for impacts among these groups is less consistent.

## Daily living conditions

Key determinants within the daily living environment that can influence participation in physical activity and sedentary behaviours include access to physical activity opportunities within schools, workplaces and other key settings, and availability of social support for activity from family, friends, peers or health professionals.

No published physical activity-related evaluations have explicitly sought to redress the social determinants of health inequities at this level. However, a number of interventions have focused on early childhood and education settings, workplaces, community and other settings at this layer in order to promote physical activity and/or reduce sedentary behaviours. The majority of these settings-based initiatives have been multicomponent approaches, typically combining environmental and social support with individually targeted education and health promotion strategies. While these have shown promise, it is difficult to determine exactly which component(s) lead(s) to any reported behaviour changes.

### Early childhood and education

Physical education or sport is mandated in Australian schools and funded by the government. Hence, all children attending school, regardless of social position or characteristics, are exposed to at least some level of physical activity. However, social differences in physical activity and sports participation begin to emerge by adolescence – a time when many Australian young people leave the only structured forms of physical activity and sport in which they participate. At this point, other intrinsic or extrinsic factors, including social factors and their determinants, may become more important predictors of participation.

#### Early childhood settings

Centre-based early childhood settings, such as preschools and childcare centres, represent a promising setting for physical activity promotion because they provide access to a large proportion of preschool-aged children (3–5 years). However, to date there is little evidence of the effectiveness of interventions in these settings. Parental involvement appears to be important, and perhaps vital, for bringing about lasting changes in physical activity or sedentary behaviours in young children.

#### School settings

Again, given their broad reach to students across all social groups, schools are a promising setting for addressing social inequities in physical activity participation. School-based physical education (PE) interventions aimed at increasing the amount of time children are active at school have been shown to be effective for increasing physical activity and fitness among children across a range of social groups and in diverse settings.

These interventions may involve policy or curriculum changes, additional PE classes or longer class time allocated for PE, and/or enhanced teacher training. School environment strategies, including use of travel coordinators to develop travel plans and safe routes to school, walking school buses and one-off events such as ‘Walk Safely to School’ may also increase active transport to school. School-based interventions tend to be more effective if they are targeted at specific barriers to physical activity, including active transport, and are multisetting in scope (involving parents, schools and local communities).

Schools can also potentially play a role in addressing gender gaps in physical activity by encouraging girls to participate in physical activity while at school, improving the physical and cultural safety of spaces for physical activity, and working with disadvantaged girls and women to remove barriers to their physical activity.

## Employment and working conditions

Occupation-related physical activity can have a significant impact on daily activity levels due to the large amounts of time many individuals spend at work. Physical activity levels vary significantly by occupation, and there is a well-established link between occupation and socioeconomic status (SES). In general, individuals with a lower SES are more likely to hold jobs that involve a relatively high level of occupational activity. However, high levels of occupational activity are also associated with lower levels of leisure time physical activity and higher levels of sedentary behaviours.

Overall, occupational physical activity levels have declined over recent decades, largely as a result of advances in manufacturing, robotics and heavy equipment, and the rise of computer-based work. This has led to increasingly more automated workplaces in a number of previously high-activity occupations, including warehousing, transport and distribution, and the trades. Sedentary behaviours, particularly sitting for prolonged periods, are a particularly important concern in office environments and desk-based jobs.

The extent to which workplaces act as enablers for, or barriers to, physical activity can also vary by occupational group. Inequities in the availability of workplace cultures, policies and facilities conducive to physical activity, in access to workplace wellness programs and in levels of organisational- and management-level support for such programs across occupational groups are likely to contribute to inequities in physical activity levels.

Workplaces offer a potential setting for promoting active lifestyles and for reducing sedentary behaviours, particularly sitting. Four key approaches have shown promise in reducing workplace sitting: increasing the number of breaks from sitting time; implementing strategies around postural change; focusing on ergonomic changes to individual workspaces; and altering the built design of the broader workplace. However, all studies to date have focused on office workers. Few studies, moreover, have used valid measures of physical activity/sedentary outcomes, and there is no evidence for the effectiveness of these strategies across social groups. Particular caution is required to ensure that workplace interventions do not exacerbate inequities.

## Physical environment

A large body of observational evidence attests to correlations between physical activity and features of the neighbourhood environment. Urban-design quality, transportation patterns, proximity of facilities, neighbourhood density, street connectivity, perceived safety, and availability of cyclist- and pedestrian-friendly amenities (including sidewalks and pedestrian crossings), as well as many other aspects of the physical environment, can all affect leisure time and transport-related physical activity levels.

Inequalities in urban design may contribute to disparities in physical activity by SES, as well as by ethnicity. However, urban-design quality appears to be associated in complex ways with neighbourhood-level socioeconomic disadvantage, attesting to the importance both of context-specific research and of not generalising and applying to the Victorian context findings from other countries or even from other states and localities.

There appears to be little variation in the number of playgrounds or leisure facilities according to neighbourhood-level SES in Australia. However, clear disparities exist in the quality of sports and recreational facilities, including public open spaces. Public open spaces in high SES neighbourhoods tend to be of higher quality than those in low SES neighbourhoods in terms of amenities and aesthetics (such as picnic areas, availability of shade, water features, and walking and cycling paths). In addition, low SES areas are less likely than high SES areas to have well-maintained sports facilities or to have a volunteer base to run or support sports programs or clubs.

Despite the body of observational evidence attesting to the importance of the built environment for activity, interventions aimed at effecting environmental change are relatively sparse. It is logistically, financially and politically challenging to bring about large-scale environmental change. Political and public support, along with a substantial investment in public infrastructure, are required. Public health gains may not emerge for many years, and it is difficult rigorously to evaluate the impact of specific strategies.

The majority of evidence in this area is derived from observational studies and natural experiments. This evidence shows that more active lifestyles can be supported by policies and programs to increase or enhance public open space/green space, to establish or improve footpaths or lighting, to create or refurbish playgrounds, to encourage mixed land use, to improve public transport, pedestrian and cycling infrastructure in communities, and to build and/or enhance access to existing exercise facilities. These approaches can be applied in settings or communities with a high proportion of socially disadvantaged individuals, and can be combined with informational outreach activities aimed at changing individual behaviours (such as education and training, risk-factor screening, and support or buddy systems). However, there is little evidence of cost-effectiveness and little empirical evidence regarding the differential effects of various strategies across social groups.

## Social participation

Lack of support or encouragement for active lifestyles, particularly from friends and family, is known to be a key barrier to physical activity participation, while lack of civic and social engagement is associated with a range of health-related behaviours, including physical activity and sedentary behaviours.

Peer-based interventions, such as social-support groups, can increase physical activity, and constitute a relatively simple intervention approach – requiring minimal resources – that can be implemented in a range of settings (including schools, workplaces and communities). This approach shows particular promise and salience among disadvantaged groups, providing that the approach is appropriately tailored to local needs.

Promising strategies include fostering new, or strengthening existing, social networks to provide supportive relationships for physical activity behaviour change; setting up a ‘buddy’ system; making ‘contracts’ with others to be active; engaging in peer or professional coaching; participating in walking or other groups that provide companionship and support while being physically active; and establishing discussion groups to share support and help address barriers to participation. Participants can be connected with other participants and program staff members to monitor progress and receive encouragement.

## Health care services

Health care services have an important role to play in promoting and supporting active lifestyles due to the wide cross-section of the population with which they have contact. However, inequities in physical and economic access to these services, and perceived barriers to their use (including fear of stigma or discrimination) can act as impediments to service utilisation. Of critical importance is the capacity of health care personnel to understand and address the social determinants of physical inactivity and sedentary behaviours in different social groups.

Potentially promising strategies in health care settings include provision of education, lifestyle counselling, individually tailored activity programs, goal setting and follow-up support. Primary-care patients can also be linked to community-based activity programs and facilities. Minimal contact interventions, such as health checks or single-visit counselling, have typically not been effective, but more intensive approaches supported by targeted information, follow-up support, and coordination with other stakeholders such as community sports organisations or ongoing mass media campaigns, have shown positive effects on physical activity participation. However, the effectiveness of interventions conducted through health care settings among different social groups is not well established.

## Individual health-related factors

Individual-level factors shaping physical activity and sedentary behaviour levels include motivation, self-efficacy, perceived barriers (such as cost or lack of time), and physical activity history and skills. Social and attitudinal barriers – that is, norms relating to the abilities of people to participate in activity – often prove the most difficult to overcome.

When conducted alone, individually focused interventions may maintain or even exacerbate social inequities in physical activity participation. However, when implemented as part of a multilevel approach, and complemented by broader social and environmental supports, individual-level strategies can help to address the intrapersonal determinants of physical activity among socially disadvantaged individuals, at least in the short term.

### Motivation-based interventions

Motivational interviewing/counselling has been suggested as an effective approach for increasing physical activity and improving its psychosocial determinants among participants of low SES. However, there is mixed evidence for its effectiveness in disadvantaged groups. Counselling and motivational support can be delivered by health care workers or other trained personnel in a range of settings, or via telephone, text messaging or the internet, and can be combined with the provision of pedometers to increase motivation for physical activity. Pedometers are an affordable and accessible technology that may offer potential to increase motivation, particularly among socially disadvantaged groups; however, this is yet to be assessed.

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### **Cognitive behavioural approaches**

Cognitive behavioural interventions typically involve behaviour-change strategies such as intention formation, goal setting, self-monitoring of behaviour or outcomes (e.g. body weight), addressing barriers and relapse prevention. They can be delivered face-to-face in a range of settings (including homes; sports clubs, health and fitness settings, faith-based organisations, or other community settings; workplaces; and schools) or via various media (such as print, telephone, mass media or web-based/novel technologies). Cognitive behavioural approaches have shown some success in improving self-efficacy and/or knowledge and attitudes relating to physical activity, and, in some cases, increasing physical activity levels among socially disadvantaged groups. These approaches are more likely to be successful if they are theoretically grounded, and tailored to an individual's specific physical activity preferences, barriers, social contexts and readiness for change.

### **Point-of-decision prompts**

Informational prompts can be introduced in a range of settings, including shopping malls, train and bus stations, airports, office buildings and health care settings; signs posted to encourage people to choose to use stairs instead of escalators or lifts, and to encourage physical activity in general. Point-of-decision prompts appear equally effective for promoting physical activity among men and women, across ethnic minority groups (as long as they are appropriately tailored) and in a range of different settings. However, these approaches may not be effective for people with a disability that precludes or restricts stair use.

# Priorities for action

## Priorities for all actions seeking to address health inequities:

- Coordinate a blend of measures across all three layers of the Fair Foundations framework, with particular emphasis on, and investment in, the lower two layers to rebalance the current emphasis on individual-level health factors.
- Seek to address both inequities in health outcomes and the wider social determinants of these inequities.
- Incorporate explicit equity objectives.
- Apply principles of proportionate universalism: interventions should be universal, but the level of support should be proportionate to need.
- Ensure that targeted supports do not stigmatise particular groups.
- Promote active and meaningful engagement of a wide range of stakeholders, and increase the diversity of representation at all stages of development and implementation.
- Conduct a thorough assessment of the needs, assets, preferences and priorities of target communities.
- Allocate adequate, dedicated capacity and resources to ensure sufficient intensity and sustainability.
- Monitor and evaluate differential impacts across a range of social indicators to ensure that they achieve their objectives without doing any harm, as well as to strengthen the evidence base for future interventions.
- Invest in equity-focused training and capacity building in both health and non-health sectors, from front-line staff to policy and program decision-makers.
- Make strategies flexible and adaptable at the local level.

## Priorities for action within each layer of the Fair Foundations framework:

### Socioeconomic, political and cultural context

- Provide support and incentives for local and state governments, as well as community organisations, to develop policies and practices to promote physical activity programs in socioeconomically disadvantaged communities using existing infrastructure (e.g. active parks programs and walking groups) and reaching individuals across the life course.
- Continue to invest in physical education to ensure that all schools, including those with a high proportion of disadvantaged students, engage students in at least mandated levels of quality physical education.

### Daily living conditions

- Create or enhance access to places for physical activity, including walking paths, parks, recreational facilities and shared-use facilities among all community members, with a focus on disadvantaged neighbourhoods.
- Combine changes to the physical environment with informational outreach activities (such as education, and support or buddy systems), and ensure that they are available and physically, economically and socially accessible to disadvantaged groups, including people living with disabilities.
- Consider peer- or group-based physical activity and/or social-support programs that address barriers to physical activity among disadvantaged groups.
- Consider delivering intensive, individually tailored approaches in primary health care settings, supported by targeted information, follow-up support, and coordination with other stakeholders such as community sports organisations or ongoing mass media campaigns.

### Individual health-related factors

- Implement tailored motivational, cognitive-behavioural and/or mediated individual-level approaches for promoting physical activity as part of a multilevel approach, complemented by broader social and environmental supports.
- Consider using internet and mobile technologies to create tailored, flexible, interactive physical activity programs that meet the specific requirements of the individual user.

# Priority evidence gaps

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- The nature and magnitude of social inequities in physical activity and sedentary behaviours related to disability, ethnicity and Aboriginality.
- The nature and magnitude of social inequalities in transport-related physical activity.
- When and why socioeconomic inequities in physical activity and sedentary behaviours emerge during childhood/adolescence.
- How social norms contribute to variations in physical activity or sedentary behaviours across social groups, and the most effective ways to challenge these norms.
- Differential impact of physical activity and sedentary behaviour interventions across social groups.
- The impact of economic approaches to reducing social inequities in physical activity and sedentary behaviours (such as road and congestion taxes, tax deductions, and incentives for retailers and recreation facilities).
- The impact of new urban-planning or transport policies, or changes to the physical environment, on physical activity levels across social groups.
- Best practice for equitable physical activity promotion that is inclusive of people with disabilities.
- Effective approaches to reducing screen time and other sedentary behaviours equitably in the general population and across social groups.
- The nature of public perceptions and support for physical activity-related environmental or policy change in Australia.
- The effectiveness of interventions conducted through Health care settings among different social groups.
- The effectiveness of individually focused web- and mobile-based interventions for influencing physical activity in different social groups.
- Cost-effectiveness of intervention approaches.

# Bibliography

- Aadahl, M., Huth Smith, L., Toft, U., Pisinger, C., & Jørgensen, T. (2011). Does a population-based multifactorial lifestyle intervention increase social inequality in physical activity? The Inter99 study. *British Journal of Sports Medicine*, 45(3), 209–215. <http://onlinelibrary.wiley.com/doi/10.1136/bjsm.2009.064840>.
- Agardh, E., Allebeck, P., Hallqvist, J., Moradi, T., & Sidorchuk, A. (2011). Type 2 diabetes incidence and socio-economic position: a systematic review and meta-analysis. *International Journal of Epidemiology*, 40(3), 804–818. doi: 10.1093/ije/dyr029.
- Alkhajah, T. A., Reeves, M. M., Eakin, E. G., Winkler, E. A., Owen, N., & Healy, G. N. (2012). Sit-stand workstations: a pilot intervention to reduce office sitting time. *American Journal of Preventive Medicine*, 42(3), 298–303.
- Andersen, R. E., Franckowiak, S. C., Zuzak, K. B., Cummings, E. S., Bartlett, S. J., & Crespo, C. J. (2006). Effects of a culturally sensitive sign on the use of stairs in African American commuters. *Sozial- und Präventivmedizin*, 51(6), 373–380.
- Arbel, J., Wood, L. J., Howat, P., & Giles-Corti, B. (2009). 'The Class is Always Cheaper on the Other Side': socioeconomic discrepancies in the cost of using recreational facilities. *Annals of Leisure Research*, 12(1), 83–88.
- Australian Bureau of Statistics. (2008). *National Aboriginal and Torres Strait Islander Social Survey*, Catalogue Number: 4714.0. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2009a). *Childhood Education and Care June 2008 (Reissue)*, Catalogue Number: 4402.0. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2009b). *National Aboriginal and Torres Strait Islander Social Survey 2008*, Catalogue Number: 4714.0. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2010a). *Participation in sport and Physical Recreation, 2009–10*, Catalogue Number: 4117.0. Commonwealth of Australia, Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2010b). *Spectator Attendance at Sporting Events, 2009–10*, Catalogue Number: 4174.0. Canberra: Commonwealth of Australia.
- Australian Bureau of Statistics. (2011a). *Australian Social Trends, June 2011*, Catalogue Number: 4102.0. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2011b). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, Oct 2010*. Canberra: Australia Bureau of Statistics.
- Australian Bureau of Statistics. (2012). *Perspectives on Sport*, Catalogue Number: 4156.0.55.001. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2013a). *Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012–13*. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2013b). *Australian Health Survey: Physical Activity, 2011–12*. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2013c). *Perspectives on Sport, Nov 2013*. Canberra: Australian Bureau of Statistics.
- Australian Government Department of Health. (2014). *Make your move – Sit less – Be active for life!* Canberra: Department of Health.
- Australian Institute of Health and Welfare. (2010). *Health of Australians with disability: health status and risk factors*. Canberra: Australian Institute of Health and Welfare.
- Australian Institute of Health and Welfare. (2011a). *Aboriginal and Torres Strait Islander health performance framework 2010: detailed analyses*. Canberra: Australian Institute of Health and Welfare.
- Australian Institute of Health and Welfare. (2011b). *A snapshot of osteoporosis in Australia 2011: Arthritis Series Number 15*, Catalogue Number: PHE 137. Canberra: Australian Institute of Health and Welfare.
- Australian Sports Commission and University of Queensland. (2012). *The Impact of Indigenous Community Sports Programs: The Case of Surfing. Report on Findings*. Retrieved 21 April, 2014, from <http://www.ausport.gov.au/participating/indigenous/resources/research>.
- Azar, D., Naughton, G. A., & Joseph, C. W. (2009). Physical activity and social connectedness in single-parent families. *Leisure Studies*, 28(3), 349–358.

- Ball, K., & Crawford, D. (2005). Socioeconomic status and weight change in adults: a review. *Social Science & Medicine*, 60(9), 1987–2010.
- Ball, K., Jeffery, R., Abbott, G., McNaughton, S., & Crawford, D. (2010). Is healthy behavior contagious? Associations of social norms with physical activity and healthy eating. *International Journal of Behavioral Nutrition and Physical Activity*, 7, 86.
- Ball, K., Salmon, J., Giles-Corti, B., & Crawford, D. (2006). How can socioeconomic differences in physical activity among women be explained? A qualitative study. *Women & Health*, 41(1), 93–113.
- Ball, K., Salmon, J., Leslie, E., Owen, N., & King, A. C. (2005). Piloting the feasibility and effectiveness of print- and telephone-mediated interventions for promoting the adoption of physical activity in Australian adults. *Journal of Science and Medicine in Sport*, 8(2), 134–142.
- Ball, K., Timperio, A., Salmon, J., Giles-Corti, B., Roberts, R., & Crawford, D. (2007). Personal, social and environmental determinants of educational inequalities in walking: a multilevel study. *Journal of Epidemiology and Community Health*, 61, 108–114.
- Bauman, A. (2004). Updating the evidence that physical activity is good for health: an epidemiological review 2000–2003. *Journal of Science and Medicine in Sport*, 7(1), 6–19.
- Beauchamp, A., Backholer, K., Magliano, D., & Peeters, A. (2014). The effect of obesity prevention interventions according to socioeconomic position: a systematic review. *Obesity Reviews*, n/a-n/a. doi: 10.1111/obr.12161.
- Beenackers, M. A., Kamphuis, C. B. M., Giskes, K., Brug, J., Kunst, A. E., Burdorf, A., & van Lenthe, F. J. (2012). Socioeconomic inequalities in occupational, leisure-time, and transport related physical activity among European adults: a systematic review. *The International Journal of Behavioral Nutrition and Physical Activity*, 9. doi: 10.1186/1479-5868-9-116.
- Bennett, J. A., Young, H. M., Nail, L. M., Winters-Stone, K., & Hanson, G. (2008). A telephone-only motivational intervention to increase physical activity in rural adults: a randomized controlled trial. *Nursing research*, 57(1), 24–32. <http://onlinelibrary.wiley.com/doi/10.1097/01.NNR.0000280661.34502.c1>.
- Bergman, P., Grijbovski, A. M., Hagströmer, M., Patterson, E., & Sjöström, M. (2010). Congestion road tax and physical activity. *American Journal of Preventive Medicine*, 38(2), 171–177.
- Better Health Channel. (2014). *Aboriginal health – barriers to physical activity*. Retrieved 23 April 2014, from [http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Aboriginal\\_health\\_physical\\_activity](http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Aboriginal_health_physical_activity).
- Biddle, S. J. H., Atkin, A. J., Cavill, N., & Foster, C. (2011). Correlates of physical activity in youth: a review of quantitative systematic reviews. *International Review of Sport & Exercise Psychology*, 4(1), 25–49.
- Blackman, K., Zoellner, J., Berrey, L., Alexander, R., Fanning, J., Hill, J., & Estabrooks, P. (2013). Assessing the internal and external validity of mobile health physical activity promotion interventions: a systematic literature review using the RE-AIM Framework. *Journal of Medical Internet Research*, 15(10), e224.
- Bock, C., Jarczok, M., & Litaker, D. (2014). Community-based efforts to promote physical activity: a systematic review of interventions considering mode of delivery, study quality and population subgroups. *Journal of Science and Medicine in Sport*, 17(3), 276–282.
- Bodde, A. E., & Seo, D. C. (2009). A review of social and environmental barriers to physical activity for adults with intellectual disabilities. *Disability and Health Journal*, 2(2), 57–66.
- Bopp, M., Wilcox, S., Laken, M., Hooker, S. P., Parra-Medina, D., Saunders, R., . . . McClorin, L. (2009). 8 Steps to Fitness: a faith-based, behavior change physical activity intervention for African Americans. *Journal of Physical Activity & Health*, 6(5), 568–577.
- Brodersen, N., Steptoe, A., Boniface, D. R., & Wardle, J. (2007). Trends in physical activity and sedentary behaviour in adolescence: ethnic and socioeconomic differences. *British Journal of Sports Medicine*, 41(3), 140–144.
- Brownson, R., Baker, E., Housemann, R., Brennan, L., & Bacak, S. (2001). Environmental and policy determinants of physical activity in the United States. *American Journal of Public Health*, 91(12), 1995–2003.
- Buchholz, S., Wilbur, J., Ingram, D., & Fogg, L. (2013). Physical activity text messaging interventions in adults: a systematic review. *Worldviews Evidence Based Nursing*, 10(3), 163–173.
- Burke, L., Lee, A. H., Jancey, J., Xiang, L., Kerr, D. A., Howat, P. A., . . . Anderson, A. S. (2013). Physical activity and nutrition behavioural outcomes of a home-based intervention program for seniors: a randomized controlled trial. *The International Journal of Behavioral Nutrition and Physical Activity*, 10. doi: 10.1186/1479-5868-10-14.
- Burton, N. W., Turrell, G., & Oldenburg, B. (2003). Participation in recreational physical activity: why do socioeconomic groups differ? *Health Education & Behavior*, 30(2), 225–244.
- California Department of Health Services/Tobacco Control Section. (1998). *A Model for Change: The California experience in tobacco control*.
- Cameron, A., Ball, K., Hesketh, K., McNaughton, S., Crawford, D., Lioret, S., & Campbell, K. (2013). Variation in outcomes of the Melbourne Infant, Feeding, Activity and Nutrition Trial (InFANT) Program according to maternal education and age. *Preventive Medicine*, 58, 58–63.
- Campbell, K. L., S; McNaughton, S; Crawford, D; Salmon, J; Ball, K; McCallum, Z; Gerner, B; Spence, A; Cameron, A; Hnatiuk, J; Ukoumunne, O; Gold, L; Abbott, G; Hesketh, K. (2013). A parent-focussed intervention to reduce infant obesity risk factors: a randomised trial. *Pediatrics*, 131, 652. doi: 10.1542/peds.2012-2576.

- Carlson, J., Mignano, A., Norman, G., McKenzie, T., Kerr, J., Arredondo, E., . . . Sallis, J. (2014). Socioeconomic disparities in elementary school practices and children's physical activity during school. *American Journal of Health Promotion*, 28(Supplement 3), S47–S53.
- Carron, A. V., Hausenblaus, H. A., & Mack, D. (1996). Social influence and exercise: a meta-analysis. *Journal of Sport and Exercise Psychology*, 18, 1–16.
- CDC. (2010). *CDC Recommendations for Improving Health through Transportation Policy*. Atlanta, GA.
- Centers for Disease Control and Prevention – Division of Community Health. (2013). *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease*. Atlanta, GA: US Department of Health and Human Services.
- Centers for Disease Control and Prevention. (2001). Increasing physical activity: a report on recommendations of the Task Force on Community Preventive Services. *MMWR Recommendation and Report* (Vol. 50, pp. 1–14).
- Centers for Disease Control and Prevention. (2005). Physical activity among adults with a disability – United States. *Morbidity Mortality Weekly Report (MMWR)*, 56, 1021–1024.
- Centers for Disease Control and Prevention. (2011). *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Increase Physical Activity in the Community*. Atlanta, US: Centers for Disease Control and Prevention, Department of Health and Human Services.
- Cerin, E., Leslie, E., Toit, L., Owen, N., & Frank, L. D. (2007). Destinations that matter: associations with walking for transport. *Health & Place*, 13(3), 713–724. doi: <http://dx.doi.org/10.1016/j.healthplace.2006.11.002>.
- Chau, J., van der Ploeg, H. P., van Uffelen, J. G. Z., Wong, J., Riphagen, I., Healy, G. N., . . . Brown, W. J. (2010). Are workplace interventions to reduce sitting effective? A systematic review. *Preventive Medicine*, 51(5), 352–356.
- Chillon, P., Evenson, K., Vaughn, A., & Ward, D. (2011). A systematic review of interventions for promoting active transportation to school. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 10.
- Clark, D. O., Stump, T. E., & Damush, T. M. (2003). Outcomes of an exercise program for older women recruited through primary care. *Journal of Aging & Health*, 15(3), 567–585.
- Cleland, C. L., Tully, M. A., Kee, F., & Cupples, M. E. (2012). The effectiveness of physical activity interventions in socio-economically disadvantaged communities: a systematic review. *Preventive Medicine*, 54(6), 371–380.
- Cleland, V., & Ball, K. (2013). What might work? Exploring the perceived feasibility of strategies to promote physical activity among women living in socioeconomically disadvantaged neighbourhoods. *Health Education Research*, 28(2), 205–219.
- Collins, D. C. A., & Kearns, R. A. (2005). Geographies of inequality: child pedestrian injury and walking school buses in Auckland, New Zealand. *Social Science & Medicine*, 60(1), 61–69.
- Crawford, D., Timperio, A., Giles-Corti, B., Ball, K., Hume, C., Roberts, R., . . . Salmon, J. (2008). Do features of public open spaces vary according to neighbourhood socio-economic status? *Health & Place*, 14, 889–893.
- Dahlgren, G., & Whitehead, M. (2006). *Levelling up (part 2): a discussion paper on European strategies for tackling social inequities in health*. WHO Collaborating Centre for Policy Research on Social Determinants of Health, University of Liverpool.
- De Bourdeaudhuij, I., Simon, C., De Meester, F., Van Lenthe, F., Spittaels, H., Lien, N., . . . Haerens, L. (2011). Are physical activity interventions equally effective in adolescents of low and high socio-economic status (SES): results from the European Teenage project. *Health Education Research*, 26(1), 119–130. doi: [10.1093/her/cyq080](https://doi.org/10.1093/her/cyq080).
- De Coen, V., Bourdeaudhuij, I., Vereecken, C., Verbestel, V., Haerens, L., Huybrechts, I., . . . Maes, L. (2012). Effects of a 2-year healthy eating and physical activity intervention for 3–6-year-olds in communities of high and low socio-economic status: the POP (Prevention of Overweight among Pre-school and school children) project. *Public Health Nutrition*, 15(9), 1737–1745.
- Delbosc, A., & Currie, G. (2011). The spatial context of transport disadvantage, social exclusion and well-being. *Journal of Transport Geography*, 19(6), 1130–1137. doi: <http://dx.doi.org/10.1016/j.jtrangeo.2011.04.005>.
- Deloitte Access Economics. (2012). *The Fitness Industry Workforce Report 2010–2020*. Retrieved 21 April, 2014, from <https://fitness.org.au/workforcereport.html>.
- Dennis, J., Ramsay, T., Turgeon, A. F., & Zarychanski, R. (2013). Helmet legislation and admissions to hospital for cycling related head injuries in Canadian provinces and territories: interrupted time series analysis. *British Medical Journal*, 346, f2674. doi: [10.1136/bmj.f2674](https://doi.org/10.1136/bmj.f2674).
- Department for Education. (2013). *Evidence on physical education and sport in schools*. UK: Department of Education UK.
- Díaz del Castillo, A., Sarmiento, O. L., Reis, R. S., & Brownson, R. C. (2011). Translating evidence to policy: urban interventions and physical activity promotion in Bogotá, Colombia and Curitiba, Brazil. *Translational Behavioral Medicine*, 1(2), 350–360.
- Ding, D., Sallis, J. F., Kerr, J., Lee, S., & Rosenberg, D. E. (2011). Neighborhood environment and physical activity among youth a review. *American Journal of Preventive Medicine*, 41(4), 442–455.
- Doubeni, C. A., Laiyemo, A. O., Major, J. M., Schootman, M., Lian, M., Park, Y., . . . Sinha, R. (2012). Socioeconomic status and the risk of colorectal cancer: an analysis of more than a half million adults in the National Institutes of Health-AARP Diet and Health Study. *Cancer*, 118(14), 3636–3644.

- Doyle, J., Firebrace, B., Reilly, R., Crumpen, T., & Rowley, K. (2013). What makes us different? The role of Rumbalara Football and Netball Club in promoting Indigenous wellbeing. *The Australian Community Psychologist*, 25(2), 7–21.
- Drum, C. E., Peterson, J. J., Culley, C. et al. (2009). Guidelines and criteria for the implementation of community-based health promotion programs for individuals with disabilities. *American Journal of Health Promotion*, 24(2), 91–101.
- Duch, H., Fisher, E. M., Ensari, I., & Harrington, A. (2013). Screen time use in children under 3 years old: a systematic review of correlates. *The International Journal of Behavioral Nutrition and Physical Activity*, 10, 102. doi: 10.1186/1479-5868-10-102.
- Dunn, A. L., Trivedi, M. H., & O'Neal, H. A. (2001). Physical activity dose–response effects on outcomes of depression and anxiety. *Medicine & Science in Sports & Exercise*, 33 (6 Supplement), S587–S597.
- Dunton, G. F., & Robertson, T. P. (2008). A tailored Internet-plus-email intervention for increasing physical activity among ethnically-diverse women. *Preventive Medicine*, 47(6), 605–611.
- Fanning, J., Mullen, S., & McAuley, E. (2012). Increasing physical activity with mobile devices: a meta-analysis. *Journal of Medical Internet Research*, 14(6), e161.
- Finch, M., Wolfenden, L., Falkiner, M., Edenden, D., Pond, N., Hardy, L., . . . Wiggers, J. (2012). Impact of a population based intervention to increase the adoption of multiple physical activity practices in centre based childcare services: a quasi experimental, effectiveness study. *International Journal of Behavioral Nutrition and Physical Activity*, 9, 101.
- Fishman, E., Washington, S., & Haworth, N. (2012). Barriers and facilitators to public bicycle scheme use: a qualitative approach. *Transportation Research Part F: Traffic Psychology and Behaviour*, 15(6), 686–698. doi: 10.1016/j.trf.2012.08.002.
- Foley, J. T., & McCubbin, J. A. (2009). An exploratory study of after-school sedentary behaviour in elementary school-age children with intellectual disability. *Journal of Intellectual and Developmental Disability*, 34(1), 3–9. doi: 10.1080/13668250802688314.
- Frank, L. D., Sallis, J., Conway, T. L., Chapman, J. E., Saelens, B. E., & Bachman, W. (2006). Many pathways from land use to health: associations between neighborhood walkability and active transportation, Body Mass Index, and air quality. *Journal of the American Planning Association*, 72(1), 75–87.
- Frenn, M., Malin, S., Bansal, N., Delgado, M., Greer, Y., Havice, M., . . . Schweizer, H. (2003). Addressing health disparities in middle school students' nutrition and exercise. *Journal of Community Health Nursing*, 20(1), 1–14.
- Frey, G. C., Stanish, H. I., & Temple, V. A. (2008). Physical activity of youth with intellectual disability: review and research agenda. *Adapted Physical Activity Quarterly*, 25(2), 95–117.
- Fyhri, A., Bjørnskau, T., & Backer-Grøndahl, A. (2012). Bicycle helmets – a case of risk compensation? *Transportation Research Part F: Traffic Psychology and Behaviour*, 15(5), 612–624. doi: 10.1016/j.trf.2012.06.003.
- Gidlow, C., Johnston, L. H., Crone, D., Ellis, N., & James, D. (2006). A systematic review of the relationship between socio-economic position and physical activity. *Health Education Journal*, 65(4), 338–367. doi: 10.1177/0017896906069378.
- Gomez, L., Mateus, J., & Cabrera, G. (2004). Leisure-time physical activity among women in a neighbourhood in Bogota, Colombia: prevalence and socio-demographic correlates. *Cadernos de Saúde Pública*, 20(4), 1103–1109.
- Goodman, A., Sahlqvist, S., & Ogilvie, D. (2013). Who uses new walking and cycling infrastructure and how? Longitudinal results from the UK iConnect study. *Preventive Medicine*, 57(5), 518–524. doi: http://dx.doi.org/10.1016/j.ypmed.2013.07.007.
- Gordon-Larsen, P., Nelson, M. C., Page, P., & Popkin, B. M. (2006). Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics*, 117(2), 417–424.
- Gorely, T., Marshall, S. J., & Biddle, S. J. (2004). Couch kids: correlates of television viewing among youth. *International Journal of Behavioral Medicine*, 11(3), 152–163. doi: 10.1207/s15327558ijbm1103\_4.
- Hardcastle, S., Blake, N., & Hagger, M. (2012). The effectiveness of a motivational interviewing primary-care based intervention on physical activity and predictors of change in a disadvantaged community. *Journal of Behavioral Medicine*, 35(3), 318–333. doi: 10.1007/s10865-012-9417-1.
- Harrison, M., Burns, C. F., McGuinness, M., Heslin, J., & Murphy, N. M. (2006). Influence of a health education intervention on physical activity and screen time in primary school children: 'Switch Off–Get Active'. *Journal of Science and Medicine in Sport*, 9, 388–394.
- Healy, G. N., Eakin, E. G., Lamontagne, A. D., Owen, N., Winkler, E. A., Wiesner, G., . . . Dunstan, D. W. (2013). Reducing sitting time in office workers: short-term efficacy of a multicomponent intervention. *Preventive Medicine*, 57(1), 43–48.
- Healy, G. N., Lawler, S. P., Thorp, A., Neuhaus, M., Robson, E. L., Owen, N., & Dunstan, D. W. (2012). *Reducing prolonged sitting in the workplace* (an evidence review: full report). Melbourne, Australia: Victorian Health Promotion Foundation.
- Healy, G. N., Wijndaele, K., Dunstan, D. W., Shaw, J. E., Salmon, J., Zimmet, P. Z., & Owen, N. (2008). Objectively measured sedentary time, physical activity, and metabolic risk: the Australian Diabetes, Obesity and Lifestyle Study (AusDiab). *Diabetes Care*, 31(2), 369–371. doi: 10.2337/dc07-1795.

- Heath, G. W., Brownson, R. C., Kruger, J., Miles, R., Powell, K. E., Ramsey, L. T., & The Task Force on Community Preventive Services. (2006). The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review. *Journal of Physical Activity and Health*, 3(Supplement 1), S55–S76.
- Hede, C., Russell, R., & Weatherby, R. (2011). Socio-cultural norms around sport in Australia: from cultural influences on equity and sports participation. In K. R. C Hede, R Weatherby (Ed.), *Senior physical education for Queensland* (pp. 306–331). Melbourne: Oxford University Press.
- Hesketh, K., & Campbell, K. (2010). Interventions to prevent obesity in 0–5 year olds : an updated systematic review of the literature. *Obesity*, 18(Supplement 1), S27–35.
- Hillman, M. (2006). Children’s rights and adults’ wrongs. *Children’s Geographies*, 4(1), 61–67.
- Hinkley, T., Salmon, J., Okely, A. D., & Trost, S. G. (2010). Correlates of sedentary behaviours in preschool children: a review. *The International Journal of Behavioral Nutrition and Physical Activity*, 7, 66. doi: 10.1186/1479-5868-7-66.
- Hooker, S. P., Seavey, W., Weidmer, C. E., Harvey, D. J., Stewart, A. L., Gillis, D. E., . . . King, A. C. (2005). The California Active Aging Community Grant Program: translating science into practice to promote physical activity in older adults. *Annals of Behavioral Medicine*, 29(3), 155–165. doi: 10.1207/s15324796abm2903\_1.
- Humbert, M. L., Chad, K. E., Spink, K. S., Muhajarine, N., Anderson, K. D., Bruner, M. W., . . . Gryba, C. R. (2006). Factors that influence physical activity participation among high- and low-SES youth. *Qualitative Health Research*, 16(4), 467–483.
- Hume, C., Timperio, A., Salmon, J., Carver, A., Giles-Corti, B., & Crawford, D. (2009). Walking and cycling to school: predictors of increases among children and adolescents. *American Journal of Preventive Medicine*, 36(3), 195–200.
- Jeon, C. Y., Lokken, R. P., Hu, F. B., & Van Dam, R. M. (2007). Physical activity of moderate intensity and risk of type 2 diabetes: a systematic review. *Diabetes Care*, 30, 744–752.
- Jørgensen, K. T., Pedersen, B. V., Nielsen, N. M., Hansen, A. V., Jacobsen, S., & Frisch, M. (2011). Socio-demographic factors, reproductive history and risk of osteoarthritis in a cohort of 4.6 million Danish women and men. *Osteoarthritis Cartilage*, 19(10), 1176–1182.
- Jurg, M., Kremers, S., Candel, M., Van der Wal, M., & De Meij, J. (2006). A controlled trial of a school-based environmental intervention to improve physical activity in Dutch children: JUMP-in, kids in motion. *Health Promotion International*, 21(4), 320–330.
- Kahn, E. B., Ramsey, L. T., Brownson, R. C., Heath, G. W., Howze, E. H., Powell, K. E., . . . Corso, P. (2002). The effectiveness of interventions to increase physical activity: a systematic review. *American Journal of Preventive Medicine*, 22(Supplement 4), 73–106. doi: 10.1016/S0749-3797(02)00434-8.
- Kaiser Permanente. (2005). Photovoice. *Healthy Eating Active Living (HEAL) Grants and Partnerships*. Retrieved 1 April, 2014, from <http://share.kaiserpermanente.org/article/photovoice-3/>.
- King, A. C., Carl, F., Birkel, L., & Haskell, W. L. (1988). Increasing exercise among blue-collar employees: the tailoring of worksite programs to meet specific needs. *Preventive Medicine*, 17(3), 357–365.
- Kohl, H. W. (2001). Physical activity and cardiovascular disease: evidence for a dose response. *Medicine & Science in Sports & Exercise*, 33(Supplement 6), S472–S483.
- Lachapelle, U., & Frank, L. D. (2009). Transit and health: mode of transport, employer-sponsored public transit pass programs, and physical activity. *Journal of Public Health Policy*, 30(Supplement 1), S73–S94.
- Laflamme, L., & Diderichsen, F. (2000). Social differences in traffic injury risks in childhood and youth – a literature review and research agenda. *Injury Prevention*, 6, 293–298.
- Lambert, E. V., & Kolbe-Alexander, T. L. (2013). Innovative strategies targeting obesity and non-communicable diseases in South Africa: what can we learn from the private healthcare sector. *Obesity Reviews*, 14(Supplement 2), S141–S149.
- Lee, I.-M., Shiroma, E. J., Lobelo, F., Puska, P., Blair, S. N., & Katzmarzyk, P. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *The Lancet*, 380, 219–229.
- Lee, R. E., & Cubbin, C. (2002). Neighborhood context and youth cardiovascular health behaviors. *American Journal of Public Health*, 92(3), 428–436.
- Lennox, A., & Pienaar, A. E. (2013). Effects of an after-school physical activity programme on aerobic fitness and physical activity levels of adolescents from a disadvantaged community: PLAY Study. *African Journal for Physical, Health Education, Recreation & Dance*, 19(1), 154–168.
- Lewis, C. E., Raczynski, J. M., Heath, G. W., Levinson, R., Hilyer, J. C. J., & Cutter, G. R. (1993). Promoting physical activity in low-income African-American communities: the PARR project. *Ethnicity & Disease*, 6(5), 106–118.
- Lorant, V., Deliège, D., Eaton, W., Robert, A., Philippot, P., & Ansseau, A. (2003). Socioeconomic inequalities in depression: a meta-analysis. *American Journal of Epidemiology*, 157(2), 98–112.
- Loring, B., & Robertson, A. (2014). *Obesity and inequities. Guidance for addressing inequities in overweight and obesity*. World Health Organization.
- Lubans, D. R., Morgan, P. J., Aguiar, E. J., & Callister, R. (2011). Randomized controlled trial of the Physical Activity Leaders (PALs) program for adolescent boys from disadvantaged secondary schools. *Preventive Medicine*, 52(3–4), 239–246.

- Magnée, T., Burdorf, A., Brug, J., Kremers, S. P. M., Oenema, A., van Assema, P., . . . van Lenthe, F. J. (2013). Equity-Specific Effects of 26 Dutch Obesity-Related Lifestyle Interventions. *American Journal of Preventive Medicine*, 44(6), e61–e70. doi: <http://dx.doi.org/10.1016/j.amepre.2012.11.041>.
- Marcus, B., Williams, D., Dubbert, P., Sallis, J., King, A., Yancey, A., . . . Claytor, R. (2006). Physical Activity Intervention Studies – What We Know and What We Need to Know: A Scientific Statement From the American Heart Association Council on Nutrition, Physical Activity, and Metabolism (Subcommittee on Physical Activity); Council on Cardiovascular Disease in the Young; and the Interdisciplinary Working Group on Quality of Care and Outcomes Research. *Circulation*, 114, 2739–2752.
- Marmot, M. (2010). *The Marmot Review: Fair Society, Healthy Lives*. London: University College.
- McCormack, G. R., & Shiell, A. (2011). In search of causality: a systematic review of the relationship between the built environment and physical activity among adults. *The International Society of Behavioral Nutrition and Physical Activity*, 13(8), 125.
- McMillan, T. E. (2005). Urban form and a child's trip to school: the current literature and a framework for future research. *Journal of Planning Literature*, 19(4), 440–456.
- Medibank. (2007). What is the lack of participation in physical activity costing Australia. Retrieved 21 April, 2014, from [https://www.google.com.au/search?q=medibank+costs+inactivity&source=ie7&rls=com.microsoft:en-AU:IE-Address&ie=&oe=&gfe\\_rd=cr&ei=t1dU80JG6uN8Qfv-YGYBQ#](https://www.google.com.au/search?q=medibank+costs+inactivity&source=ie7&rls=com.microsoft:en-AU:IE-Address&ie=&oe=&gfe_rd=cr&ei=t1dU80JG6uN8Qfv-YGYBQ#).
- Medibank. (2008). *The cost of physical inactivity*. Sydney, Australia: Medibank Private.
- Mendoza, J. A., Levinger, D. D., & Johnston, B. D. (2009). Pilot evaluation of a walking school bus program in a low-income, urban community. *BMC Public Health*, 9, 122. <http://onlinelibrary.wiley.com/doi/10.1186/1471-2325-9-122>.
- Mier, N., Tanguma, J., Millard, A. V., Villarreal, E. K., Alen, M., & Ory, M. G. (2011). A pilot walking program for Mexican-American women living in colonias at the border. *American Journal of Health Promotion*, 25(3), 172–175.
- Mitra, R. (2013). Independent Mobility and mode choice for school transportation: a review and framework for future research. *Transport Reviews*, 33(1), 21–43. doi: 10.1080/01441647.2012.743490.
- Montes, F., Sarmiento, O., Zarama, R., Pratt, M., Wang, G., Jacoby, E., . . . Kahlmeier, S. (2012). Do health benefits outweigh the costs of mass recreational programs? An economic analysis of four Ciclovía programs. *Journal of Urban Health*, 89(1), 153–170.
- Morgan, P. J., Saunders, K. L., & Lubans, D. R. (2012). Improving physical self-perception in adolescent boys from disadvantaged schools: psychological outcomes from the Physical Activity Leaders randomized controlled trial. *Pediatric Obesity*, 7(3), e27–e32. doi: 10.1111/j.2047-6310.2012.00050.x.
- Mustard, C., & Etches, J. (2003). Gender differences in socioeconomic inequality in mortality. *Journal of Epidemiology and Community Health*, 58, 974–980.
- National Heart Foundation of Australia. (2009). *Blueprint for an Active Australia*. Victoria, Australia: National Heart Foundation.
- National People with Disabilities and Carer Council. (2009). *SHUT OUT: The experience of people with disabilities and their families in Australia*. Canberra.
- NICE Public Health Collaborating Centre – Physical Activity. (2006). *Physical activity and the environment: review one: transport*. Leicestershire (UK): National Institute for Health and Clinical Excellence.
- Ogilvie, F., & Goodman, A. (2012). Inequalities in usage of a public bicycle sharing scheme: socio-demographic predictors of uptake and usage of the London (UK) cycle hire scheme. *Preventive Medicine*, 55(1), 40–45. doi: 10.1016/j.ypmed.2012.05.002.
- Orrow, G., Kinmonth, A., Sanderson, S., & Sutton, S. (2012). Effectiveness of physical activity promotion based in primary care: systematic review and meta-analysis of randomised controlled trials. *British Medical Journal*, Mar 26;344(e1389).
- Owen, N., Leslie, E., Salmon, J., & Fotheringham, M. (2000). Environmental determinants of physical activity and sedentary behaviour. *Exercise and Sport Sciences Reviews*, 28(4), 153–158.
- Pate, R. R., O'Neill, J. R., & Lobelo, F. (2008). The evolving definition of 'sedentary'. *Exercise and Sport Sciences Reviews*, 36(4), 173–178. doi: 10.1097/JES.0b013e3181877d1a.
- Pedestrian Council of Australia, P. (2014). *National Walk Safely to School Day*. Retrieved 2 April, 2014, from <http://www.walk.com.au/WSTSD/>.
- Pekmezi, D. W., Neighbors, C. J., Lee, C. S., Gans, K. M., Bock, B. C., Morrow, K. M., . . . Marcus, B. H. (2009). A culturally adapted physical activity intervention for Latinas: a randomized controlled trial. *American Journal of Preventive Medicine*, 37(6), 495–500. <http://onlinelibrary.wiley.com/doi/10.1016/j.amepre.2009.08.023>.
- Pekmezi, D. W., Williams, D., Dunsiger, S., Jennings, E., Lewis, B., Jakicic, J., & Marcus, B. (2010). Feasibility of using computer-tailored and Internet-based interventions to promote physical activity in underserved populations. *Telemedicine and e-Health*, 16(4), 498–503. doi: 10.1089/tmj.2009.0135.
- Pink, B., & Albon, P. (2008). *The health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008*, ABS Catalogue (Vol. No. 4704.0 AIHW Catalogue No. IHW 21). Canberra: Australian Bureau of Statistics and AIHW.

- Pollitt, R. A., Rose, K. M., & Kaufman, J. S. (2005). Evaluating the evidence for models of life course socioeconomic factors and cardiovascular outcomes: a systematic review. *BMC Public Health*, 5, 7. doi: 10.1186/1471-2458-5-7.
- Pratt, M., Macera, C., Sallis, J., O'Donnell, M., & Frank, L. (2004). Economic interventions to promote physical activity: Application of the SLOTH model. *American Journal of Preventive Medicine*, 27(Supplement 3), S136–S145.
- Premier's Council for Active Living NSW. (2012). *A summary of the activities and key achievement led by the NSW Premier's Council for Active Living (PCAL)*. NSW, Australia.
- Proper, K. I., Singh, A. S., van Mechelen, W., & Chinapaw, M. J. (2011). Sedentary behaviors and health outcomes among adults: a systematic review of prospective studies. *American Journal of Preventive Medicine*, 40(2), 174–182. doi: 10.1016/j.amepre.2010.10.015.
- Pucher, A., & Buehler, R. (2008). Making cycling irresistible: lessons from the Netherlands, Denmark and Germany. *Transport Reviews*, 28(4), 495–528.
- Pucher, J., Dill, J., & Handy, S. (2010). Infrastructure, programs, and policies to increase bicycling: an international review. *Preventive Medicine*, 50(Supplement 1), S106–S125.
- Resnick, B., Shaughnessy, M., Galik, E., Scheve, A., Fitten, R., Morrison, T., . . . Agness, C. (2009). Pilot testing of the PRAISED intervention among African American and low-income older adults ... People Reducing Risk and Improving Strength through Exercise, Diet and Drug Adherence. *Journal of Cardiovascular Nursing*, 24(5), 352–361. doi: 10.1097/JCN.0b013e3181ac0301.
- Rhodes, R. E., Mark, R. S., & Temmel, C. P. (2012). Adult sedentary behavior: a systematic review. *American Journal of Preventive Medicine*, 42(3), e3–e28. doi: http://dx.doi.org/10.1016/j.amepre.2011.10.020.
- Rimmer, J., & Rowland, J. (2008). Physical activity for youth with disabilities: a critical need in an underserved population. *Developmental Neurorehabilitation*, 11(2), 141–148.
- Rissel, C., Curac, N., Greenaway, M., & Bauman, A. (2012). Physical activity associated with public transport use – a review and modelling of potential benefits. *International Journal of Environmental Research and Public Health*, 9(7), 2454–2478.
- Sallis, J. F., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *The Future of Children*, 16(1), 89–108. doi: 10.1353/foc.2006.0009.
- Sallis, J. F., & Glanz, K. (2009). Physical activity and food environments: solutions to the obesity epidemic. *Milbank Quarterly*, 87(1), 123–154. doi: 10.1111/j.1468-0009.2009.00550.x.
- Salmon, J., Jorna, M., Hume, C., Arundell, L., Chahine, N., Tienstra, M., & Crawford, D. (2011). A translational research intervention to reduce screen behaviours and promote physical activity among children: Switch-2-Activity. *Health Promotion International*, 26(3), 311–321. http://onlinelibrary.wiley.com/doi/10.1093/heapro/daq078.
- Sarmiento, O., Torres, A., Jacoby, E., Pratt, M., Schmid, T. L., & Stierling, G. (2010). A mass-recreational program with public health potential. *Journal of Physical Activity and Health*, 7(Supplement 2), S163–S180.
- Schwartz, L., Sameuls, S., Capitman, J., Ruwe, M., Boyle, M., & Glores, G. (2010). The Central California Regional Obesity Prevention Program: changing nutrition and physical activity environments in California's heartland. *American Journal of Public Health Research*, 100(11), 2124–2128.
- Sharpe, P. A. (2003). Community-based physical activity intervention. *Arthritis Care and Research*, 49(3), 455–462.
- Shemilt, I., Hollands, G. J., Marteau, T. M., Nakamura, R., Jebb, S. A., Kelly, M. P., . . . Ogilvie, D. (2013). Economic instruments for population diet and physical activity behaviour change: a systematic scoping review. *PLoS ONE*, 8(9).
- Sherwood, N. E., & Jeffery, R. (2000). The behavioral determinants of exercise: implications for physical activity interventions. *Annual Review of Nutrition*, 20, 21–44.
- Soler, R. E., Leeks, K. D., Buchanan, L. R., Brownson, R. C., Heath, G. W., Hopkins, D. H., & Task Force on Community Preventive Services. (2010). Point-of-decision prompts to increase stair use. A systematic review update. *American Journal of Preventive Medicine*, 38(Supplement 2), S292–S300.
- Sport and Recreation New Zealand. (2011). *Territorial Authority/School Facilities Partnerships: A guide*. Sport and Recreation New Zealand.
- Story, M., Nannery, M. S., & Schwartz, M. B. (2009). Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. *Milbank Quarterly*, 87(1), 71–100. doi: 10.1111/j.1468-0009.2009.00548.x.
- Tester, J., & Baker, R. (2009). Making the playfields even: evaluating the impact of an environmental intervention on park use and physical activity. *Preventive Medicine*, 48(4), 316–320. doi: 10.1016/j.ypmed.2009.01.010.
- Teychenne, M., Ball, K., & Salmon, J. (2008). Physical activity and likelihood of depression in adults: a review. *Preventive Medicine*, 46(5), 397–411.
- Teychenne, M., Ball, K., & Salmon, J. (2010). Physical activity, sedentary behavior and depression among disadvantaged women. *Health Education Research*, 25(4), 632–644.

- The Smith Family. (2013). Sport, culture and the internet: are Australian children participating? Viewed 13 August, 2013, [www.thsmithfamily.com.au/goto/childrens\\_participation\\_report](http://www.thsmithfamily.com.au/goto/childrens_participation_report).
- Thomas, M. (2012). Physical activity mass media campaigns: impacts on different socio-economic groups. *Journal of Science and Medicine in Sport*, 15, S208.
- Timperio, A., Ball, K., Salmon, J., Roberts, R., Giles-Corti, B., Simmons, D., . . . Crawford, D. (2006). Personal, family, social, and environmental correlates of active commuting to school. *American Journal of Preventive Medicine*, 30(1), 45–51.
- Tranter, P., & Pawson, E. (2001). Children's access to local environments: a case-study of Christchurch, New Zealand. *Local Environment*, 6(1), 27–48.
- Trost, S. G., Owen, N., Bauman, A., Sallis, J., & Brown, W. (2002). Correlates of adults' participation in physical activity: review and update. *Medicine & Science in Sports & Exercise*, 34(12), 1996–2001.
- Trudeau, F., & Shephard, R. J. (2008). Physical education, school physical activity, school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity*, 5(10).
- Tudor-Locke, C., Ainsworth, B. E., & Popkin, B. M. (2001). Active commuting to school: an overlooked source of children's physical activity? *Sports Medicine*, 31(5), 309–313.
- Tudor-Locke, C., & Lutes, L. (2009). Why do pedometers work? A reflection upon the factors related to successfully increasing physical activity. *Sports Medicine*, 39(12), 981–993.
- Turrell, G., Haynes, M., Wilson, L. A., & Giles-Corti, B. (2013). Can the built environment reduce health inequalities? A study of neighbourhood socioeconomic disadvantage and walking for transport. *Health Place*, Jan(19), 89–98.
- U.S. Department of Health and Human Services. (1996). *Physical Activity and Health: A report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
- van den Berg, M., Schoones, J., & Vliet Vlieland, T. (2007). Internet-based physical activity interventions: a systematic review of the literature. *Journal of Medical Internet Research*, 9(3), e26.
- Van Der Horst, K., Chin, M. J., Paw, A., Twisk, J. W. R., Van Mechelen, W. (2007). Review on correlates of physical activity and sedentariness in youth. *Medicine & Science in Sports & Exercise*, 39(8), 1241–1250.
- van Sluijs, E. M. F., McMinn, A. M., & Griffin, S. J. (2007). Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. *British Medical Journal*, 335, 703.
- van Stralen, M. M., de Meij, J., te Velde, S. J., van der Wal, M. F., van Mechelen, W., Knol, D. L., & Chinapaw, M. J. M. (2012). Mediators of the effect of the JUMP-in intervention on physical activity and sedentary behavior in Dutch primary schoolchildren from disadvantaged neighborhoods. *The International Journal of Behavioral Nutrition and Physical Activity*, 9. doi: 10.1186/1479-5868-9-131.
- Vander Ploeg, K. A., McGavock, J., Maximova, K., & Veugelers, P. J. (2014). School-based health promotion and physical activity during and after school hours. *Pediatrics*, 133(2), e371–e378.
- Vandongen, R., Jenner, D. A., Thompson, C., Taggart, A. C., Spickett, E. E., Burke, V., . . . Dunbar, D. L. (1995). A controlled evaluation of a fitness and nutrition intervention program on cardiovascular health in 10-year-old to 12-year-old children. *Preventive Medicine*, 24(1), 9–22.
- Veitch, J., Ball, K., Crawford, D., Abbott, G. R., & Salmon, J. (2012). Park improvements and park activity: a natural experiment. *American Journal of Preventive Medicine*, 42(6), 616–619. doi: 10.1016/j.amepre.2012.02.015.
- VicHealth. (2007). *Walking School Bus*. Retrieved 28 April, 2014, from <http://www.vichealth.vic.gov.au/wsb>.
- VicHealth. (2011). *Streets Ahead 2008–2011. Program evaluation report*. Melbourne, Australia: Victorian Health Promotion Foundation.
- VicHealth. (2013). *More than just sport: PICSAR State and Regional Grants (2007 to 2011) – program evaluation and outcomes report*. Melbourne, Australia: Victorian Health Promotion Foundation.
- VicSport. (2009). *Submission to the Victorian Competition & Efficiency Commission Inquiry into increased sharing of government and community facilities*. Victoria, Australia.
- Vodopivec-Jamsek, V., de Jongh, T., Gurol-Urganci, I., Atun, R., & Car, J. (2012). Mobile phone messaging for preventive health care. *Cochrane Database of Systematic Reviews*, 12, CD007457.
- von Tigerstrom, B., Larre, T., & Sauder, J. (2011). Using the tax system to promote physical activity: critical analysis of Canadian initiatives. *American Journal of Public Health*, 101(8), e10–e16. doi: 10.2105/ajph.2011.300201.
- Vuori, I. M. (2001). Dose-response of physical activity and low back pain, osteoarthritis, and osteoporosis. *Medicine & Science in Sports & Exercise*, 33(Supplement 6), S551–S586.
- Wang, Y., & Beydoun, M. A. (2007). The obesity epidemic in the United States – gender, age, socioeconomic, racial/ethnic, and geographic characteristics: a systematic review and meta-regression analysis. *Epidemiologic Reviews*, 29(1), 6–28. doi: 10.1093/epirev/mxm007.

- Ware, L. J., Hurling, R., Bataveljic, O., Fairley, B. W., Hurst, T. L., Murray, P., . . . Foreyt, J. P. (2008). Rates and determinants of uptake and use of an internet physical activity and weight management program in office and manufacturing work sites in England: cohort study. *Journal of Medical Internet Research*, 10(4), e56–e56.
- Webel, A. R., Okonsky, J., Trompeta, J., & Holzemer, W. L. (2010). A systematic review of the effectiveness of peer-based interventions on health-related behaviors in adults. *American Journal of Public Health*, 100(2), 247–253.
- Wen, L. M., Baur, L. A., Simpson, J. M., Rissel, C., Wardle, K., & Flood, V. (2012). Effectiveness of home based early intervention on children's BMI at age 2: randomised controlled trial. *British Medical Journal*, 344(e3732), 17.
- Whitehead, M. (1990). *The Concepts and Principles of Equity and Health*. World Health Organization, Copenhagen.
- Whitehead, M., Povall, S., & Loring, B. (2014). Whitehead M, Povall S, Loring B. *The equity action spectrum: taking a comprehensive approach*. World Health Organization.
- Wilcox, S., Laken, M., Anderson, T., Bopp, M., Bryant, D., Carter, R., Gethers, O., Jordan, J., McClorin, L., O'Rourke, K., Parrott, A.W., Swinton, R., Yancey, A. (2007). The Health-e-AME Faith-Based Physical Activity Initiative: description and baseline findings. *Health Promotion Practice*, 8, 69–78. doi: 10.1177/1524839905278902.
- Wolfenden, L., Neve, M., Farrel, L., Lecantheleinis, C., Bell, C., Milat, A., . . . Sutherland, R. (2010). Physical activity policies and practices of childcare centers in Australia. *Journal of Paediatrics and Child Health*, 47(3), 73–76.
- Wolin, K. Y., Yan, Y., Colditz, G. A., Lee, I.M. (2009). Physical activity and colon cancer prevention: a meta-analysis. *Journal of Cancer*, 100, 611–616.
- Woodfield, L., Duncan, M., Al-Nakeeb, Y., Nevill, A., & Jenkins, C. (2002). Sex, ethnic and socio-economic differences in children's physical activity. *Pediatric Exercise Science*, 14(3), 277–285.
- World Health Organization. (2009). *Interventions on Diet and Physical Activity: What Works. Summary Report*. Geneva.
- Wright, K., Giger, J., Norris, K., & Suro, Z. (2013). Impact of a nurse-directed, coordinated school health program to enhance physical activity behaviors and reduce body mass index among minority children: a parallel-group, randomized control trial. *International Journal of Nursing Studies*, 50(6), 727–737. doi: 10.1016/j.ijnurstu.2012.09.004.
- Yancey, A. K., Cole, B. L., & McCarthy, W. J. (2010). A graphical, computer-based decision-support tool to help decision makers evaluate policy options relating to physical activity. *American Journal of Preventive Medicine*, 39(3), 273–279. doi: 10.1016/j.amepre.2010.05.013.
- Yanek, L. R., Becker, D.M., Moy, T.F., Gittelsohn, J., Koffman D. (2001). Project joy: faith based cardiovascular health promotion for African American women. *Public Health Reports*(Supplement 1), S68–S81.
- Zaza, S., P.A., B., & Harris, K. W. E. (2005). Chapter 2: Promoting physical activity. *Task Force on Community Preventive Services 2005. Guide to community preventive services*.
- Ziviani, J., Wadley, D., Ward, H., Macdonald, D., Jenkins, D., & Rodger, S. (2008). A place to play: socioeconomic and spatial factors in children's physical activity. *Australian Occupational Therapy Journal*, 55(1), 2–11.





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