Introduction

Three of the most recently published academic literature reviews focusing on health literacy among children and adolescents agree that we don’t know enough about health literacy among children and adolescents (Perry, 2014; Okan et al, 2015, 2018; Bröder et al, 2017). While the appeal of ‘more research is needed’ is overly common among academic publications, in this case, it seems entirely justified.

Given the dearth of formal research on health literacy in youth and adolescents, in this chapter we first identify effective strategies for youth and adolescents in the context of a single health issue, overweight and obesity. Then, we focus on findings that are compatible with the evidence-based best practices and conceptual models of health literacy. Our overarching goal is to expand the knowledge base about testable approaches that align with health literacy and have evidence of effectiveness and feasibility among youth and adolescents.

In 2012 we completed a literature review on childhood obesity interventions. Many of the best practices that review identified are aligned with the best practices of health literacy, whether that was explicit or not in the original article. Articles in that review included 14 randomised or cohort interventions, 5 cross-sectional and 1 longitudinal assessment, along with 12 literature reviews. Reviewer reliability was evaluated on 10 per cent of the total articles, with a 99 per cent reliability rate.

Based largely on that review, we offer a brief discussion of programme design and evaluation considerations relevant to overweight and obese youth and adolescents. Thus, this chapter does not focus on summarising and reporting universal truths about the role and structure of health literacy in children and adolescents. Instead, we summarise potential best practices and lessons learned from our own practical application of health literacy programmes that were designed for children and their families.
Approaches to health literacy programmes for youth: the role for parents and adults

One primary issue in designing and conducting interventions with a focus on children and adolescents is what role their extended family (especially parents/caregivers) should play in any effort to improve health and wellbeing. Many interventions focus on the youth alone; many more are designed only for adults. We found only a minority of interventions engaged both children and their caregivers at the same time in an intervention.

Our review found programmes targeting childhood obesity were predominantly school-based and interacted primarily with children (Blom-Hoffman et al, 2008; Bellows et al, 2010). We did find one review comparing parent-only versus parent-child and child-only programmes that found programmes involving only parents were the most effective for children’s weight management (Branscum and Sharma, 2011).

Further, whether the adult(s) are primarily interested in addressing their own health concerns or solely concerned about the children’s health is a consideration that emerged from the literature review and our experience. In general, our review concluded that if adult family members are included in the effort, messages about parental health should be integrated into the intervention without deviating too far from the central messages about children’s health. One review article observed that while the focus on parents/caregivers in interventions is usually on their influence over children, children’s behaviour changes can affect parental behaviour as well (Dalton and Kitzmann, 2008). While results for parent biometric outcomes in child-targeted programmes are mixed, parents may benefit from involvement even though the primary focus is on children’s health and behaviour changes (Davis et al, 2003; Rodearmel et al, 2007; Cronk et al, 2011).

We are confident that bringing a focus of health literacy to programmes tailored for youth and adolescents (whether or not they include adult parents and caregivers) will be effective. Studies of parents’ perceptions of their children’s health and their own abilities to help their children make changes found that parents are concerned about their children’s health issues but can be misinformed about risk factors or burdened by their own low self-efficacy and social barriers (Garrett-Wright, 2011; Glassman et al, 2011). While only one of these studies explicitly addressed health literacy, any analysis of parental perceptions of health in effect describes their health literacy regarding their own children’s realities, futures and needs (Garrett-Wright, 2011).

Specific design elements when addressing health literacy among youth

Overall, we suggest that younger children constitute a promising population for promoting sustainable lifestyle change, because younger age provides more time and opportunity for prevention, early intervention and establishing healthy
patterns and norms. Because children of different ages process and respond to lifestyle change efforts differently, it may be advisable to restrict the age range of participants’ children to within five years of one another, or even less, so that materials and parenting strategies can be most effectively tailored to youth in a similar stage of the life course with similar cognitive levels.

Further, following a best practice of health literacy, we suggest programme designers build in a process to help participants tailor small, personalised goals per child or family. This approach has proven effective and well received in other studies, and does not demand extensive resources (Dreimane et al, 2007; Rodearmel et al, 2007). We also recommend that programme design focuses on messages that are encouraging rather than critiquing.

When determining what will indicate success of an effort targeting the health and wellbeing of children and adolescents, we suggest working with participants to define and tailor realistic and health-promoting goals. Especially with children and adolescents, when physical, mental, behavioural and spiritual health indicators are experiencing nearly constant change due simply to normal growth, placing too much emphasis on – for example – weight loss or decrease in BMI (body mass index) could create unhealthy and unwarranted outcomes including stigma. Focusing equally on qualitative improvements in healthy behaviours, perceptions and levels of self-efficacy could help programmes and participants to successfully define and reach meaningful and sustainable goals (American Dietetic Association, 2006; Wickins-Drazilova and Williams, 2011).

We have discussed extensively elsewhere the important potential of combining the best practices of health literacy with an integrative approach to health (mind, body, spirit, emotion) in order to help participants of health programmes improve their health and prevent chronic disease. Another best practice of health literacy, as we have already recommended, is to engage participants early and often in the programme design and implementation. When that early and deep engagement is combined with a truly integrative approach to health, it is unavoidable that the programme begins addressing a person’s whole life and the determinants of health that person or family is facing. As a result, the intervention and goal setting inherently shifts toward prevention rather than treatment of poor health.

When we turned our attention to the design and use of materials (for example, handouts) we often found that materials taken home by children to families were mixed or moderate in effectiveness. Thus, we do not strongly recommend sending materials home as a common practice, as take-home material can present barriers regarding relevance and time commitment outside of the classroom environment (O’Connor et al, 2009). When this practice is part of a programme design, we strongly recommend the materials be practical, easy-to-use, fun and relevant.

We also see merit in engaging the entire family in practical, collaborative and cooperative goal-setting activities that may serve to encourage opportunities for children to assist parents in cooking or shopping and to promote outreach, social engagement and self-reflection among the entire family. Activities like those in studies that involve family and community traditions and stories are excellent
examples of invoking a sense of purpose in ways that are meaningful and fun for children (Davis et al, 2003; Cronk et al, 2011; Savoye et al, 2011). There is evidence that searching for and achieving a sense of purpose during adolescence is a developmental asset; however, that search may create stress and have a negative impact on self-esteem (Blattner et al, 2013).

Our review of the literature on childhood and adolescent overweight and obesity interventions identified effective elements that should be, and often are, grounded in the best practices of health literacy. These practices include promotion of small changes and the setting of personalised, manageable goals; acknowledging and addressing perceived barriers; the reduction of sedentary behaviours in addition to (that is, as distinct from) increased physical activity; the integration of social engagement; healthy adaptation of traditional recipes as a way of invoking sense of purpose; and at least some, if not all, adult-only sessions to help the children/adolescents lead healthier lives (Davis et al, 2003; Rodearmel et al, 2007; Tyler and Horner, 2008; Epstein and Wrotniak, 2010; Glassman et al, 2011; Savoye et al, 2011).

Another critically important area for consideration when designing health literacy programmes for children and adolescents is mental health literacy. A recent systematic review of research on attitudes toward mental health found that mental health literacy was the most common focus of research, followed by stigma (Angermeyer, 2017). For example, a study in Australia of people aged between 15 and 25 found that:

patterns of stigmatising attitudes differed according to disorder, with notable differences between psychosis/schizophrenia and social phobia. Anti-stigma interventions should focus on individual disorders rather than on “mental illness” in general and may need to address beliefs about unpredictability, social phobia as due to weakness of character and dangerousness in those with more severe disorders. Interventions should also focus on bringing beliefs about public perceptions in line with personal beliefs, as the latter are much less stigmatising. (Reavley and Jorm, 2011, p 1033)

Such findings are not only found in Australia, but also in the US, Canada, and other nations. Canadian researchers found that young male adults expressed a preference to manage problems on their own, and indicated they were more likely to seek out informal sources of help (Marcus and Westra, 2012). Among youth, the relationships between mental health literacy, stigma, care-seeking and perceptions of others who may have mental health challenges is clearly an area worthy of further exploration (Burns and Rapee, 2016).

**Approaches to programme evaluation**

While many programmes reviewed did not include substantial evaluation, we suggest complete and thorough evaluation of programmes as a best practice. Some
programmes, for example, limited participant burden by omitting requirements for keeping personal wellness journals or participating in evaluations; this can come at the cost of tracking progress, identifying effects of the intervention and learning to improve programme design and effectiveness (Epstein and Wrotniak, 2010; Hollar, 2011; Savoye et al, 2011).

While participant burden is a valid concern, there is evidence that the very act of self-monitoring and/or being enrolled in a study contributes to healthy gains (Ruiz et al, 2011). No health literacy intervention should overburden participants, but designers should also not underestimate the motivation of participants, which will already be evidenced to an extent by their willingness to enrol in the programme. An evaluation plan described from the outset may be very beneficial to the sustainability and adaptability of efforts to help children and adolescents – not to mention the parents and caregivers – live healthier and happier lives through increased health literacy.

To our awareness, financial cost and benefit analyses are absent from nearly all health literacy studies. A strong awareness of costs and benefits is critical both for programme efficiency and future planning. Costs – and paybacks through improved health status – are a central concern for funders, and could provide an entry point for public interest and support. The topic of cost analyses should include the long-term economic savings potentially gained by improving health literacy which, in turn, should improve objective health status. For children, the potential for cost savings through improved health literacy and health is a long-term possibility. We highly recommend the evaluation of all health literacy interventions incorporate the necessary indicators of both objective health markers as well as financial costs and benefits.

An additional contextualising factor for health literacy interventions is research that associates children and adolescent health with school performance. At least one review concluded that student engagement and school performance are higher in students with better overall health status (Basch, 2011). Again, the long-term potential benefits from such gains resulting from improved health literacy begs for further analysis in health literacy programme evaluation for children and adolescents.

**Examples of youth and adolescent health literacy interventions**

We now turn our focus to providing a brief description of three programmes grounded in the best practices of health literacy that address youth and adolescents. All three are explicitly based on the theoretical construct of health literacy described in the Calgary Charter on health literacy (Coleman et al, 2009):

Health literacy allows the public and personnel working in all health-related contexts to find, understand, evaluate, communicate, and use information. Health literacy is the use of a wide range of skills that improve the ability of people to act on information in order to
live healthier lives. These skills include reading, writing, listening, speaking, numeracy, and critical analysis, as well as communication and interaction skills. (Coleman et al, 2009, p 1; see also Pleasant, 2011, 2013a, b)

**Healthy Community Program**

We designed the Healthy Community Program to target youth and their parents together. Fundamentally, the philosophical basis is that children who grow up in safe and supportive families and neighbourhoods, free from abuse, neglect and other negative influences, are more likely to live healthier and more productive lives.

The Healthy Community Program is an integrative health community-based intervention based on the best practices of health literacy that aims to improve health outcomes for youth and their families. We piloted this programme in partnership with a middle school serving a predominantly Hispanic/Latino population living in an under-served, low-income neighbourhood on the south side of Tucson, AZ in the US.

The initial pilot included a pre/post evaluation of participants. The Program initially consisted of four sessions held on consecutive Saturday mornings for four hours. Participants rotated through interactive sessions focused on:

- exercise/body movement
- stress management
- healthy cooking
- gardening.

Participants were recruited through a partnership with a local medical practice, a nearby federally qualified community health centre and the school. A total of 82 adults and youth experienced the initial pilot. On average, people attended three of the four sessions. Adults were a mix of parents, grandparents and other caregivers; youth were aged between 6 and 14. Eighty per cent of participants reported being Hispanic/Latino, reflecting the surrounding community. Program sessions were held in English. See Table 20.1 for selected outcomes.

For youth participants – who also said their favourite aspects of the Program were the cooking, gardening and exercise sessions – other reported outcomes from participating included eating fruit and vegetables more often, helping prepare dinner at home more often and eating snacks in front of the television less often.

What we learned from this experience of developing and piloting the Healthy Community Program was significant. We have redesigned the Program based on this initial experience so that it is now six sessions versus the original four, we added goal setting/sense of purpose discussion sessions, and modified and expanded our training of core team members who facilitate the Program. We are continuing our efforts to identify dose and response relationships from varying the intensity and scope (and thus the cost) of health literacy interventions.
Health literacy interventions for children or adolescents

Another intervention we designed for youth and adolescents is an adaptation of our Life Enhancement Program (LEP) that has been successfully offered to adults for the past decade. We adapted the LEP in two different ways: (1) the LEP for families was designed to include children aged between 5 to 10; and (2) the LEP for teens was designed to address youth aged 13 to 18. In practice, we recommend that partners offering the LEP, based on our formative research findings, recruit participants for each group in tighter age ranges, for example, 5–7 or 8–10. However, the reality of family dynamics necessarily must balance with that recommendation.

During the initial pilots, we deliberately included parents and caregivers along with the youth, but in both versions some sessions were explicitly designed so that the youth and parents would be separated. For example, a session on human sexuality in the teen version of the LEP is conducted with teens alone, in parallel with another for the parents/caregivers alone. Then, the two groups come together for a moderated discussion.

The LEP for teens focuses on improving health literacy across a range of topics, including integrative health, sense of purpose, nutrition, oral health, physical activity, stress management, healthy relationships and dating, and healthy home and community. Social support is emphasised, and some sessions are ‘hands-on’ – such as cooking, grocery shopping and exercise.

The LEP for families aims to help adult and youth participants make a lasting and personal connection to a life of disease prevention and optimal wellness. It is designed to help individuals and families to:

- embrace a starting point and outline a change process to improve their own health and wellbeing;

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Table 20.1: Selected outcomes for adults and youth in the Healthy Community Program

<table>
<thead>
<tr>
<th>Selected outcomes reported by adults</th>
<th>Selected outcomes reported by youth</th>
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<tbody>
<tr>
<td>• One adult lost 35 pounds</td>
<td>• Blood pressure 8.8/4.3 points lower</td>
</tr>
<tr>
<td>• Lower blood pressure</td>
<td>• 1.5 less unhealthy days per month</td>
</tr>
<tr>
<td>• Blood glucose 40.3 points lower on average</td>
<td>• See their family and themselves as happier</td>
</tr>
<tr>
<td>• PHQ-9 depression scores 21.2% lower</td>
<td>• 63.8% increase in frequency of exercise</td>
</tr>
<tr>
<td>• Stress 25.9% lower</td>
<td>• Increased ability to identify the food groups</td>
</tr>
<tr>
<td>• 12.5% increase in health knowledge</td>
<td>• 75% decrease in watching TV/playing video games (ie, screen time)</td>
</tr>
<tr>
<td>• 22% increase in health literacy</td>
<td>• Decrease in the number of times their family eats at drive-thru restaurants</td>
</tr>
<tr>
<td>• Increase of two self-reported mentally/physically healthy days per month</td>
<td>• Increase in eating meals with their entire family</td>
</tr>
<tr>
<td>• Increase in the amount of exercise for 28.6% of adult participants</td>
<td>• Increase in eating meals with their entire family</td>
</tr>
<tr>
<td>• Eating as a family 2.8 more times per week</td>
<td>• Decrease in soda consumption</td>
</tr>
<tr>
<td>• Decrease in running out of food in the household</td>
<td>• Increase in water consumption</td>
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**Life Enhancement Program for families and for teens**

Another intervention we designed for youth and adolescents is an adaptation of our Life Enhancement Program (LEP) that has been successfully offered to adults for the past decade. We adapted the LEP in two different ways: (1) the LEP for families was designed to include children aged between 5 to 10; and (2) the LEP for teens was designed to address youth aged 13 to 18. In practice, we recommend that partners offering the LEP, based on our formative research findings, recruit participants for each group in tighter age ranges, for example, 5–7 or 8–10. However, the reality of family dynamics necessarily must balance with that recommendation.

During the initial pilots, we deliberately included parents and caregivers along with the youth, but in both versions some sessions were explicitly designed so that the youth and parents would be separated. For example, a session on human sexuality in the teen version of the LEP is conducted with teens alone, in parallel with another for the parents/caregivers alone. Then, the two groups come together for a moderated discussion.

The LEP for teens focuses on improving health literacy across a range of topics, including integrative health, sense of purpose, nutrition, oral health, physical activity, stress management, healthy relationships and dating, and healthy home and community. Social support is emphasised, and some sessions are ‘hands-on’ – such as cooking, grocery shopping and exercise.

The LEP for families aims to help adult and youth participants make a lasting and personal connection to a life of disease prevention and optimal wellness. It is designed to help individuals and families to:

- embrace a starting point and outline a change process to improve their own health and wellbeing;
• share their histories and discuss lifestyle habits;
• make a personal connection to their health and wellness.

As with the core LEP methodology, the LEP for teens and for families are tailored to each community and individual so that the messages resonate in a culturally competent and health-literate manner. That tailoring is based on formative research conducted in each community before a programme is launched.

Development of the LEP for families began with the earlier discussed review of existing research. Key findings were incorporated into the LEP for families curriculum. For a programme to be successful in improving the health and wellness of families’ lives, it should strongly consider:

• including parents, guardians and other caregivers as change agents;
• including lessons and practice on parenting skills and creating a supportive family environment;
• a focus on health, wellness and fun – not weight loss;
• including a robust mix of group practice and support, plus individual counselling;
• avoiding over-reliance on traditional take-home education through inclusion of significant in-person activities for participants;
• promoting health literacy through integrative methods.

Focus groups and key informant interviews were conducted with community members, health centre professional staff, youth education experts and youth aged 5-9 in Tucson, AZ. We also obtained input from a Curriculum Advisory Group of experts in health literacy, integrative health, public health, family theory, parenting, youth and family nutrition, youth and family fitness, youth and family wellness, youth and adult education and youth mindfulness. Key recommendations included:

• ensure the cultural appropriateness of the programme’s curricular materials, implementation professionals and location;
• ensure the credibility and motivational abilities of speakers/session facilitators;
• capitalise on the influence that children have on their parents/guardians, not just the other way around;
• develop both youth and adult capacity for personal and community advocacy;
• focus on behaviour changes via ‘small steps’;
• celebrate small successes with participants;
• employ the best practices of health literacy in materials design and programme implementation;
• ensure that families are provided meals or snacks, as appropriate;
• help individuals and families set achievable short-term and long-term goals;
• consider barriers to participation, such as parents/guardian work schedules, youth school and extracurricular schedules, family transportation and childcare needs.
We conducted a very similar process to create the LEP for teens. Key outcomes of that effort included an expansion of the core elements of the LEP with new sessions on healthy relationships and dating and workforce development. The LEP for teens includes:

- integrative health
- behaviour change
- sense of purpose
- social support
- nutrition
- stress management
- physical activity
- oral health
- healthy home and society
- healthy relationships and dating
- workforce development.

Overall, the LEP for families consists of 14 group sessions and 6 one-hour-long one-on-one consultations with participants. The team that provides the LEP consists of specialists in integrative health (a paediatrician), behaviour change, nutrition, fitness, spirituality, sense of purpose, pharmacology and child development.

Overall, the LEP for teens consists of 16 group sessions and 6 one-hour long one-on-one consultations with participants. The team includes experts in teen development, integrative health (a paediatrician), behaviour change, nutrition, fitness, spirituality, sense of purpose, pharmacology and oral health.

Highlights of what we learned from the initial pilots of the LEP for families include the following:

- Children teach parents. Parents teach children. Engaging both magnifies the effects of a complex social intervention like the LEP for families.
- Parents and children find support from one another to enhance their healthy lifestyle changes. This social connection encourages sustainable, positive behaviour changes.
- Children can learn about and use complex ideas of health, nutrition, exercise and sense of purpose.
- Families at risk may need referral to additional treatments or therapies before, during or after joining a group programme focusing on prevention of poor health.
- A best practice is to recruit and group families by the age and development of their children, as families with similar-aged children saw increased social bonding.

What we learned from a small initial pilot of the LEP for teens was that at this stage of development we now disagree with our initial decision to include both parents/
caregivers and teens in the programme simultaneously. We do see advantages in parents/caregivers experiencing the original LEP designed for adults – but not to go through the experience along with their teens. The relationships between teens and parent/caregiver are often tenuous, and for the teens to improve their own health and wellbeing they need to be able to be entirely candid in their participation. We do believe parents should remain aware of and actively support their teens’ participation in the programme; future efforts will devise a smaller series of parallel sessions for parents to ensure that support and engagement.

Further, while we traditionally only offered the LEP for adults in partnership with a healthcare provider organisation of some sort – for example, a hospital system or a federally qualified healthcare centre – patient protection and privacy restrictions in the US make it challenging to recruit both teens and their adult parents/caregivers from patient populations. For example, healthcare organisations may provide specialised care for teens (for example, a ‘teen clinic’) from which teens can receive care without their parent’s knowledge or permission. Recruiting from that population would potentially reveal that relationship to parents and, in the initial pilot, avoiding that possibility certainly hampered our recruitment of participants. Thus, in the future we look to offer the programme in a way that incorporates healthcare professionals on the core team providing the programme, but without the direct participation of a healthcare organisation. Instead, we can look to schools or other community-based organisations to offer the programme.

The sample size from this initial pilot is too small to conduct analysis of statistical significance. Overall, however, the participants in the initial pilot did experience health gains. See Table 20.2 for selected outcomes.

**Theater for Health**

Our Theater for Health programme was not specifically designed only for youth or adolescents. This is a community-wide intervention using theatre as the means to improve health literacy and to create informed decision-making and healthy behaviour change.

The Theater for Health methodology integrates practices from the *Theatre of the oppressed* family of methods with the best practices of health literacy. The *Theatre of the oppressed* was largely developed by practitioner Augusto Boal (Boal, 1985) who based his work on Paulo Freire’s (1970) *Pedagogy of the oppressed*. The *Theatre of the oppressed* family of methods aims to empower communities to develop their own truths based on their lived experiences and interactions (Boal, 1985; Freire, 1970).

Distinct from the *Theatre of the oppressed*, in Theater for Health there is a defined role for evidence-based information to be introduced into the dialogue between the performance and the community. However, the power to reshape the narrative remains within the community as is appropriate, and effective, from health literacy, *Theatre of the oppressed*, and Freirean perspectives. Participating community members are engaged in devising and modifying the narrative as
‘spect-actors,’ but in Theater for Health they do so from a more fully informed position than in *Theatre of the oppressed* methodologies (Pleasant et al, 2014).

The first pilot of Theater for Health was held in a small community in the surrounding hills of Lima, Peru, and consisted of 12 episodes structured and performed as a telenovela (drama or soap opera) over 11 weeks. Overall, the strategies used to encourage participation were street parades, printed materials, mototaxi/megaphone announcements, community–based radio announcements, community meetings, bring-a-neighbour and get a reward incentive, direct incentives to attendees, empowerment workshops, arts workshops, knowledge contests, games and a talent show. The overall attendance at the performances went well beyond initial expectations, as average attendance across episodes was 172 adults and 59 children. The youth played a key role, as it turned out, in our recruiting methods.

For example, the street parade consisted of actors, musicians, jugglers and clowns marching through the community (a shantytown) in order to draw attention and attract an audience. Invariably, it was the youth of the community who would hear the commotion and begin to follow and participate in the parade. Parents and caregivers would follow.

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**Table 20.2: Selected outcomes reported by adult and youth participating in the LEP for teens**

<table>
<thead>
<tr>
<th>Selected outcome for adult participants</th>
<th>Selected outcomes for teen participants</th>
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<tbody>
<tr>
<td>• 85.7% gain in healthy days per month (mentally and physically)</td>
<td>• 33.3% increase in self-reported health status</td>
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<tr>
<td>• 92.9% decrease in days health limits usual activities per month</td>
<td>• 100% (to zero) days when health limits them from conducting their usual activities</td>
</tr>
<tr>
<td>• 75% gain in self-reported health status</td>
<td>• 100% improvement in sleep</td>
</tr>
<tr>
<td>• 87.5% increase in exercise self-efficacy</td>
<td>• 100% decrease in feeling scared or nervous</td>
</tr>
<tr>
<td>• 100% increase in family eating meals together</td>
<td>• 60% improvement in self-reported mental health</td>
</tr>
<tr>
<td>• 66.7% decrease in fried food consumption</td>
<td>• 100% increase in playing/exercise per day</td>
</tr>
<tr>
<td>• 60% decrease in soda consumption</td>
<td>• 50% increase in frequency brushing teeth</td>
</tr>
<tr>
<td>• 100% increase in using nutrition facts label</td>
<td>• 75% decrease in eating fried foods</td>
</tr>
<tr>
<td>• 200% increase in using ingredient lists</td>
<td>• 100% increase in eating fruit</td>
</tr>
<tr>
<td>• 66.7% increase in eating breakfast</td>
<td>• 100% increase in helping prepare meals with family</td>
</tr>
<tr>
<td>• 300% increase in drinking water</td>
<td>• 300% decrease in eating snacks in front of TV</td>
</tr>
<tr>
<td>• 6% increase in health literacy</td>
<td>• 200% increase in fruit being available at home</td>
</tr>
<tr>
<td>• 43.8% increase in self-reported health knowledge</td>
<td>• 75% decrease in eating at restaurants with a drive-thru window</td>
</tr>
<tr>
<td>• 116.7% increase in civic engagement</td>
<td>• 50% decrease in frequency feeling sad or depressed</td>
</tr>
<tr>
<td>• 27.6% increase in time on treadmill with increasing resistance</td>
<td>• 400% increase in number of books read in the past month</td>
</tr>
</tbody>
</table>
The methodology of Theater for Health explicitly embraces audience participation. Community members expressed interest in having a talent show. Therefore, we wrote a talent show into the ongoing narrative of the theatrical performances – which was entirely community members performing and demonstrating their artistic talents. Youth played a great role in the performances – attracting their friends and extended family members to come and watch our theatrical performances as well.

What we urge readers to take from this very brief discussion of the Theater for Health programme is that it would be inappropriate to consider youth as agents with little or no power. A youth’s participation has the ability to induce participation of parents and caregivers. In fact, we have found in all our health literacy programming for youth that they can be very powerful actors in a family dynamic.

**Conclusion**

We began this chapter by asserting that not enough is known about health literacy interventions for youth and adolescents. We maintain that position. We need more evidence-based and rigorous research to advance our understanding of how to improve health literacy among youth and the short- and long-term implications of those interventions (see Table 20.3). Ideally, we urge researchers to design and conduct long-term longitudinal cohort studies with intervention and comparison groups.

We also urge inclusion of health literacy in educational curricula in schools and development of a standardised approach to testing so we can track the development of health literacy across the development phases of youth. Interventions like the ones described above are also needed, but to expose youth to health literacy early

<table>
<thead>
<tr>
<th>Table 20.3: Key points for consideration when building health literacy interventions for youth and adolescents</th>
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<tbody>
<tr>
<td>• More rigorous research is needed</td>
</tr>
<tr>
<td>• Give careful consideration to who is included in the intervention – youth alone, adults alone focusing on the youth, or adults and youth together</td>
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<tr>
<td>• Help participants actively engage in personalising their own health and health literacy goals</td>
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<tr>
<td>• Encourage, don’t criticise. Don’t focus on the negative outcomes of low health literacy. Do focus on what people can do with the health literacy skills they have. Avoid creating stigma</td>
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<tr>
<td>• Focus on the whole person, not just the conditions of any health conditions they may have</td>
</tr>
<tr>
<td>• When sending informational materials – in any form – home with youth, focus on making them practical, easy-to-use, fun and relevant</td>
</tr>
<tr>
<td>• Rigorously evaluate your efforts. Try to establish a long-term methodology (at least one year, ideally longer) to determine the sustainability of any changes</td>
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and often through formal education would be a powerful approach to education and development in our opinion.

To reach those goals, funders need to prioritise complexity, not only short-term studies and brief interventions. A truly longitudinal study of youth would take decades, not the normal three- to four-year funding period that seems to dominate research. Further, we encourage researchers and practitioners to prioritise collaboration. Collaborate with other researchers and practitioners. Collaborate with funders. Collaborate with community-based organisations, and most of all, collaborate with your participants. Empower youth through their direct engagement with your health literacy work – the rewards will last a lifetime.

References


