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Executive summary

The Healthy Active Kids South Africa (HAKSA) 2022 Report Card presents the current and best available evidence on physical activity and nutrition of South African children and adolescents. The HAKSA 2022 Report Card builds on previous evidence from the 2007, 2010, 2014, 2016 and 2018 versions, focusing on research published in the last three years. However, the volume of included published data in the past three year may not be sufficient enough to make significant impact changes in the grades made in the previous report due to an almost two years of hard lockdown restrictions regulations in South Africa due of COVID-19.

This report card presents data on nutrition indicators for children and adolescents, and physical activity and nutrition indicators for early childhood. These additional indicators are presented in separate sections to align with the Global Matrix. Hence, the following three sections are presented:

1. Physical Activity indicators for children and adolescents aged 7-19 years
2. Nutrition indicators for children and adolescents aged 7-19 years
3. Physical Activity and Nutrition indicators for early childhood, ages 2-6 years
In terms of physical activity, the grades remain unchanged from the 2018 Report Card for Family and Peers (C-), School (D-) and Government (C). Active Play remains inconclusive (INC) given the lack of a national benchmark data to assess this indicator. There were modest changes in Organised Sport and Physical Activity Participation (D), to a D-; and Community and Built Environment (C-), to a D. There were modest improvements in the grades for Overall Physical Activity, now graded B- compared to a C grade in 2018; Active Transportation, graded B- compared to a C; Sedentary Behaviours graded a C- compared to a F; and Physical Fitness graded a B- compared to INC.

Most Nutrition indicator grades remained unchanged due to the absence of any new nationally representative data. Fruit and vegetable intake and Food Security indicators were INC as no data were available for the reporting period.

Early childhood physical activity changed to a B compared to the 2018 grade of a A-. A change from INC to a D in Early Childhood Sedentary Behaviour was found.

The lack of physical activity is a well-known risk factor for non-communicable diseases. It is well known that physical activity participation has numerous benefits, including social, physical fitness, motor skills, emotional and academic improvements. The lack of physical activity is a well-known risk factor for non-communicable diseases and it is thus a priority to measure and evaluate levels of physical activity.

An integrated approach is needed to help to improve South Africa’s indicator scores. The Re-ACTION (RE-Assess, Create, Train, Implement, Organise, Network) strategic plan is recommended.

The Process

In summary

- Published evidence from 2018-2021 containing data not earlier than 2015.
- Except for the grey literature, all studies were peer-reviewed.
- Studies and documents had to be published in English.
- Quality scoring of studies and documents was conducted using the Mixed Methods Appraisal Tool (V 2018, MMAT).
- Against each indicator, and for each document that met the set inclusion criteria, full-text extraction included the following information: Study population or target group, intervention or policy; the methods and key findings or outcomes were presented.
- In collaboration with team members, group leaders assigned provisional grades for each indicator, which were presented to project leaders.
Grades were verified, and the consensus was reached based on the study’s representation, sample size, and geographic distribution.

Justification for each grade was benchmarked according to the Global Matrix 4.0 indicators.

 Provisional grades were sent for auditing by the Active Healthy Kids Global Alliance (AHKGA), after which any final adjustments were made in collaboration with group and project leaders.

The Grading

Grades for the Report Card indicators were informed using data synthesised from national and provincial/state-based surveys and local studies.

After evaluating the synthesised data, the Report Card Development Team engaged in purposeful discussions based on each indicator and predetermined grade benchmarks to confirm the indicator grade as per the Global Matrix 4.0 grading rubric. The grades were determined by the percentage of children and adolescents meeting an evidence-based benchmark as per the grading rubric below:

- **A+** = 94%-100%
- **A** = We are succeeding with a large majority of children (87%-93%)
- **A-** = 80%-86%
- **B+** = 74%-79%
- **B** = We are succeeding with well over half of children (67%-73%)
- **B-** = 60%-66%
- **C+** = 54%-59%
- **C** = We are succeeding with about half of children (47%-53%)
- **C-** = 40%-46%
- **D+** = 34%-39%
- **D** = We are succeeding with less than half of children (27%-33%)
- **D-** = 20%-26%
- **F** = We are succeeding with very few of children (<20%)
- **INC** = Incomplete Grade, where data were not available or were insufficient/inadequate to assign a grade
Physical Activity Report Card

How is South Africa performing?

- **B-** Overall Physical Activity
- **D-** Organised Sport Participation
- **INC** Active Play
- **B-** Active Transportation
- **C-** Sedentary Behaviours
- **B-** Physical Fitness
- **C-** Family and Peer Support
- **D-** School
- **D** Community and Environment
- **C** Government

Healthy Active Kids

SOUTH AFRICA 2022

Physical Activity indicators for children & adolescents
**Overall Physical Activity**

In the absence of current nationally representative data, but recognising that in regionally based samples, between 60% and 73% of children were meeting guidelines, we have conservatively upgraded the Overall Physical Activity grade, from a C to a B-.

**Action Point** The need for regular PA surveillance of children and adolescents in South Africa is highlighted.

**Organised Sport and Physical Activity**

We have allocated a conservative grade of D-, as the sample is not nationally representative. As in previous years, participation was considerably lower in girls than boys. Regular monitoring and evaluation, in partnership with sporting codes, non-governmental organisations (NGOs) and government will provide a clearer picture of the status of sports participation in children and youth.

**Action Point** There is a need to address gender and economic inequality to increase opportunities for participation in organised school sport.

**Active Play**

There is insufficient evidence to allocate a grade for Active Play at this time. There is a need to re-define Active Play, so that it reflects the lived experiences of children in Low- or Middle-Income Countries and disadvantaged settings, including activities such as “street play” and making use of their immediate environment. There is a need for a unified data collection method to accurately measure active play within different contexts.

**Action Point** Observational studies are needed as well as safe community environments and facilities must be created and maintained.

**Active Transport**

While we are succeeding with between 60%–66% of children and youth using active transport to and from school and for other journeys, safety from traffic remains a concern. Pedestrian fatalities are the leading cause of death due to injury in children under the age of 15 years, and road traffic deaths in South African children are twice the world average.

**Action Point** Concerns over safety in active transport can only be solved through better transport infrastructure, greater enforcement of traffic regulations, mobilising communities, as well as, educating and supporting youth in action to increase their road safety awareness.

**Sedentary Behaviour**

While this sample is not nationally representative, it reflects the lived experience of a relatively large sample of youth. We have allocated a conservative grade of C-, as the sample is not nationally representative. We appear to be succeeding with adolescent boys. However, sedentary behaviour in adolescent girls remains a concern. More data are needed on screen time and objectively measured sedentary behaviour.

**Action Point** More research is needed on screen time and sedentary behaviour, including education on the harmful effects of sedentary behaviour in order to better understand the issues. However, there is a need to promote the co-creation of activity-supportive environments at home, school and cities and reduce sedentary activities.
Physical Fitness
Although nationally representative data remains sparse, a large regional study of children between the ages 9-14 years suggests that between 60-66% have a cardiorespiratory fitness level at, or above, the 50th percentile.

**Action Point** There is a clear need for a national youth fitness testing programme in South Africa.

Family and Peer Support
Less than 45% of South African adults are meeting physical activity recommendations. Moreover, in a recent provincial survey, 60% of parents were uncomfortable with their children walking to and from school. In another regional study, family and peer support in the form of transport to and from events, and positive encouragement, was linked to participation in sport, but was experienced by less than half of those surveyed.

**Action Point** Finding ways to increase the engagement of families and peers in promoting and supporting adolescent participation in physical activity and sport. The promotion of active cities is needed.

School
While recent data suggests that 70% of schools offer formal structured physical education (PE), which is embedded within the subject of Life Orientation (LO), less than 80% of children are taught by a physical education specialist. Furthermore, there is minimal evidence that PE is implemented as intended in the curriculum. Curricular and budgetary constraints, lack of content knowledge and competencies, as well as lack of facilities, have been cited as major challenges. Therefore, the grade remains unchanged from 2018, at a D-.

**Action Point** Educational authorities need to prioritise the training and upskilling of classroom teachers, and to implement quality PE classroom teachers’ training and upskilling, implement quality PE, and create activity-supportive environments in schools. Monitoring and evaluation is a key area to better understand implementation.

Community and Environment
There are some community initiatives, local government, NGOs and community partnerships. However, the perception of lack of safety remains concerning. Moreover, disaffected youth and local government officials reflect a lack of community engagement and the planning and upkeep of community recreational facilities. As such, we have allocated a grade of D, indicating that we are succeeding with less than one third of children and youth (27%-33%).

**Action Point** To co-create innovative strategies to promote community-based physical activity and, where proven successful, to provide adequate resources to embed these into existing structures and programmes.

Government
Various government departments have provided financial and infrastructure support to increase opportunities for children to engage in physical activity, including building outdoor gyms and cycle lanes, developing recreational facilities throughout the country and supporting school sports leagues. However, without ongoing monitoring and evaluation, the impact of these promising efforts remains unclear.

We have upgraded the score from a C- in 2018 to a C in the present report, as these budgetary allocations reflect government policies and strategies from 2020 onwards.

**Action Point** There is an urgent need for all levels of government to recognise the critical role of physical activity for sustainable development; not only for health and well-being but for social cohesion, mitigating the effects of climate change and addressing inequality. The importance of this cannot be overstated for youth and children in South Africa.
Nutrition Report Card

How is South Africa performing?

- **D** Overweight and Obesity
- **C** Undernutrition
- **C** Fruit and Vegetable Intake
- **D-** Advertising and Media
- **B+** Food Security
- **D-** School Nutrition and Environment

- **F** Snacking, Sugar-Sweetened Beverages (SSBs), Salt & Fast Food
- **C** National School Nutrition Programme

Nutrition indicators for children and adolescents aged 7-19 years
Overweight and Obesity

Since the last South Africa Demographic and Health Survey (SADHS) in 2016, no new national data has been reported, however, four large regional studies were conducted. When compared to SADHS, the prevalence of overweight and obesity was similar in boys but lower in girls. The third study reported a higher prevalence of overweight and obesity when compared with the national study. The high occurrence of overweight and obesity was strongly related to the consumption of unhealthy foods, higher socio-economic status and high sedentary behaviour. Considering that new national data is lacking and mixed results reported in the regional studies a D grade remains.

**Action Point** It is important to initiate national studies to determine overweight and obesity among adolescents between 7-18 years. Interventions to combat unhealthy eating and sedentary behaviour in higher socio-economic children and adolescents are warranted.

Undernutrition

Due to the lack of no new national studies, only the finding of four studies was considered. Although the studies reported mixed results with regard to undernutrition, some reported a decline in the occurrence of undernutrition although it is still evident that undernutrition remains a challenge in SA, especially among rural children and adolescents. Therefore, the C grade remains unchanged from 2018.

**Action Point** National research studies are encouraged to determine the level of undernutrition among children and adolescents in South Africa. Interventions are needed to mitigate undernutrition in rural children and adolescents.

Fruit and vegetable Intake

National data with regard to fruit and vegetable intake, indicate that approximately half of children and adolescents are consuming fruits and vegetables daily. Although none of these data are presented in terms of meeting the recommended amount of 400g or 5 fruit and vegetables per day this indicator is considered promising and upgraded to a C-.

**Action Point** Nutrition advocacy programs in schools are needed. National research with regards to the amounts of fruit and vegetables consumed is required and additional investigation with regards to the cost involved with vegetables and fruits intake should be conducted.

Snacking, Sugar-Sweetened Beverages (SSBs), Salt and Fast Food

National data indicates that approximately 20-50% of children and adolescents consume unhealthy foods daily such as SSBs, processed food, fast/fried food and salty snacks. Regional data found higher consumption of unhealthy food among girls compared to boys.

Since the implementation of the 10% sugar tax in 2018 on SSB as part of the Health Promotion Levy (HPL), a reduction in the consumption of SSB has been reported nationally and regionally. The consumption of unhealthy food remains prevalent, but the reduction of SSB consumption indicates some improvement and thus the F grade in 2018 has been upgraded to a D.

**Action Point** National studies should investigate more fully the effects of the Sugary Beverages Levy on the consumption of SSBs. Educational programs improving nutritional knowledge among children and adolescents needs to be developed and implemented. Furthermore, sustainable national policies like the Sugary Beverage Levy needs to be developed and implemented with regard to the consumption of unhealthy food.
School Nutrition Culture and Environment

National data a still limited, however regional data from low-income schools reported that most children brought money to school and purchased food and beverages from vendors inside/outside schools, which mostly included fast-foods; sweet and salty-snacks; fried foods and sugary beverages. The findings reflect similar findings to the 2018 report card, and in the absence of nationally representative data, this grade remains a D-.

**Action Point** National and provincial education departments and schools should be supported in sourcing, preparing and offering healthy food choices, and implementing school policies concerning vending and tuckshop services. National policies should be developed to provide guidelines for school nutrition considering the socio-economic environment for marginalized communities.

National School Nutrition Programme

In 2018 a C- grade was assigned primarily because of the National School Nutrition Programme (NSNP). Similar results from a new regional study show a promising application for meals served and fruits received, although vegetable inclusion is extremely low. It is important to note that a regional study indicated that children receiving breakfast and lunch had lower stunting and overweight/obesity prevalence compared to those receiving breakfast only. A conservative upgrade to a C is assigned.

**Action Point** Studies investigating the implementation of action points, as identified in a previous national study, are required. Additional encouragement and providing guidelines for growing vegetable gardens should be included in the school curriculum as this would make a substantial contribution to the nutritional status of children and adolescents. Ongoing monitoring of the implementation and impact of the NSNP is a health and developmental imperative.

Food Security

In 2017, food insecurity amongst South African children and adults was less than 20%. However, in 2021, the prevalence of household food insecurity was estimated to be as high as 35%. At the same time, the prevalence of childhood hunger is an estimated 15%. Despite the continued increase in food prices and unemployment rates in SA, 74-79% of South Africans are food secure, hence a B+ grade is assigned.

**Action Point** National data on food insecurity which consider socio-economic status in children is still needed. It is evident that programs such as NSNP have and may continue to increase food security among children and adolescents in South Africa.

Advertising and Media

Following the 2018 sugar tax implementation, promising voluntary measures were proposed by various stakeholders in the beverage industry that included limiting the supply and advertising of SSBs to primary schools. Currently, the only regulation of food marketing and advertising to children that exists is the South African marketing to children pledge, which involves self-regulation of the food industry.

Regional data from a large sample indicated non-compliance to the pledge, with high exposure to unhealthy foods and beverages to children on four national television channels. Due to the lack of mandatory regulation and non-compliance to voluntary pledges and self-regulation by the manufacturing industry, a grade of D- remains.

**Action Point** National studies that include investigating the exposure of children and adolescents to the advertising of unhealthy foods and beverages on social media are needed, which include television, Facebook, YouTube etc. Mandatory regulation is required to reduce this type of advertising to children and adolescents.
Physical Activity and Nutrition indicators for early childhood aged 2-6 years

Physical Activity & Nutrition Early Childhood (2-6 years) Report Card

How is South Africa performing?

B  Physical Activity
B  Motor Proficiency

D  Sedentary Behaviours
D- Overweight, Obesity and Underweight
Overall Physical Activity

Early Childhood Overall Physical Activity has been downgraded to a B from an A- in 2018. While there is evidence that children in this age group meet and exceed the guidelines of 180 minutes per week, the data are limited. One study found that one-third of preschoolers and less than 20% of Grade-R children were active during the school day. Rural children and boys were more likely to achieve the South African 24-hour movement guidelines (72% and 42% among boys and girls respectively).

**Action Point** National data is needed and there is a need to focus on increasing physical activity levels at all ages.

Motor Proficiency

Motor proficiency is an important aspect of gross motor skill development, and if this is developed early, it may have a positive impact on a child’s sports participation, academic skills and general well-being and quality of life. This is the first time that motor proficiency has been scored independently in South Africa’s report. In three recent regional studies, between 50% and 88% of preschoolers demonstrated average or above-average motor proficiency, except for one study where children scored below average for balance and kicking activities.

Despite limited evidence, it appears that we are succeeding with 67%-73% of South African preschoolers.

**Action Point** National data in the area of motor proficiency are needed to assure that we do improve our children’s motor proficiency. More ECD teachers need to be trained to improve their skills to help children that struggle with their motor proficiency at an early age. Also, generally more time for gross motor play and activity allowed for in their day, will help.

Sedentary Behaviours

Recent 24-hour movement guidelines for pre-school children in South Africa recommend less than 1 hour of screen time per day, and not more than 1 consecutive hour/s of sedentary behaviour. With the limited data available, less than 40% of urban-dwelling preschool children were meeting sedentary guidelines, 8% meeting screen time guidelines and only 5% meeting both. In a study conducted in Gauteng (Soweto), on preschool and Grade R children, it was evident that 69.9% of the time was spent doing sedentary activities. The picture is very different for rural preschoolers, only 17% of whom were not meeting sedentary behaviour guidelines. Based on these data, we assigned a D grade for this indicator.

**Action Point** The training and/or education of ECD teachers, caregivers and parents to promote physical activity and to create an activity-supportive environment in their respective settings is needed.

Overweight, Obesity and Undernutrition

With data from 4 regional studies, overweight and obesity prevalence has increased over the last few years. The prevalence of overweight for children under 6 years ranges between 8-15.7% and, for obesity, between 3.7%-12.7%, with children and urban girls, from urban (formal and informal) areas faring worse than others. In terms of early childhood malnutrition (that includes stunting, underweight, wasting/thinness) prevalence is increasing and, in some provinces, almost half (47.5%) of the children under 5 years are stunted. The problem appears worse in rural communities, especially among boys, and is mostly associated with food insecurity.

Therefore, a rise in prevalence in overweight, obesity and undernutrition are evident in recent years, and so it is recommended that the grade remains the same, at a D-.

**Action Point** National data are needed on overweight, obesity, and undernutrition prevalence. It is crucial to improve/reinforce nutrition education in the different settings where people work with preschoolers. ECD centers have a crucial role in shaping and improving children’s food preferences and dietary behaviour.
What next?

It is evident that there are improvements and limitations from the previous Report Card. The table below depicts the differences between 2018 and current Report Card grades.

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<tr>
<th>Physical Activity</th>
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<tr>
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<td>D-</td>
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<td>INC</td>
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<tr>
<td>School</td>
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<tr>
<td>Community and Environment</td>
<td>C-</td>
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<tr>
<td>Food Security</td>
<td>D-</td>
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<tr>
<td>Motor Proficiency</td>
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Based on the 2022 Report Card grades, an integrated approach is needed to help to improve South Africa’s indicator scores. The Re-ACTION strategic plan is recommended.

National data remains a challenge and we propose that a Re-ACTION is needed. Re-Assessment of children and adolescents is needed. National assessment tools need to be developed.

These tools need to be Co-created among key stakeholders. Researchers need to be trained to conduct the measurements using the new tool. However, prior to the national rolling out of the assessments, the tools must be tested. A pilot study is suggested.

Based on the findings, physical activity strategic plan may need to be adapted. New programmes may need to be implemented. Such programmes may differ per geographical region based on the context. This will help to ensure sustainable programmes on a larger scale.

For programmes to be successfully implemented and sustainable, the adequate resources, infrastructure and policy must be effectively organised.

All of this can only be achieved with the appropriate network.
Conclusion

The 2022 South African physical activity; nutrition; and physical activity and nutrition in early childhood report cards have identified several gaps in the literature that must be addressed in future national efforts to facilitate physical activity and nutritional behaviours. The low grades on several indicators supports the need for stakeholders to take immediate action.

Clear physical activity and nutritional policies need to be put into place to increase physical activity opportunities and to promote healthy nutritional choices, beginning with early childhood.

This then needs to be followed by its implementation and ongoing monitoring, to ensure that our children are afforded the opportunity of the many benefits offered by participating in physical activity and good dietary behaviours. This not only has immediate physical, mental and social benefits to children, schools and communities, but will also impact the health and well-being of South Africans, resulting in improved future report card grades.

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Acknowledgments

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