



# Kenya's 2016 Report Card on Physical Activity and Body Weight of Children and Youth

Prepared and produced by **Healthy Active Kids Kenya**  
[www.hakkenya.org](http://www.hakkenya.org)

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# INTRODUCTION

Children and youth need opportunities to be physically active in order to grow and be happy. Evidence shows that physically active children and youth are more likely to be attentive in class and hence do well academically. In many developing countries, a physical activity and nutritional transition, particularly among urban populations, has been reported (1). In addition, there has been a global increase in prevalence of non-communicable diseases (NCDs) such as coronary heart diseases, and type 2 diabetes, and several types of cancers, with studies demonstrating a strong association between overweight/obesity and such NCDs (2). The health burden of NCDs is increasingly prevalent in developing countries (3,4), owing to marked changes in patterns of consumption of food and alcohol, increased tobacco use, sedentary lifestyles, high levels of stress, and low levels of physical activity (5). Considering children and youth, the main concern is the potential for lifelong health consequences related to overweight/obesity and physical inactivity, such as increased risk of morbidity and premature mortality in their adulthood (6). Fortunately, children who maintain or attain a normal weight by adolescence have better cardiovascular disease risk factor profiles compared to those remaining overweight (7).

The World Health Organization (WHO) classifies physical inactivity and overweight/obesity as the fourth and fifth leading causes of global mortality respectively, and one of the greatest health challenges and determinants for various chronic diseases such as heart disease, hypertension, diabetes, and psychosocial problems in the 21st century (8). It is estimated that physical inactivity causes 9% of all-cause mortality worldwide and is responsible for 6% of the burden of disease from coronary heart disease, 7% of type 2 diabetes and 10% of breast and colon cancer (9). This growing population health threat has garnered much attention in view of the declaration and global campaign on the prevention and control of NCDs signed by the United Nations (UN) in 2011 (10) and the recently adopted UN Sustainable Development Goals (SDGs) (11).



Image source: [impunitywatch.com](http://impunitywatch.com)

Kenya's development blue print - Vision 2030, a marshal plan for the country's accelerated transformation into a globally competitive middle-income nation, has a main focus on providing quality healthcare for all Kenyan citizens by the year 2030 (12). In particular, Kenya Vision 2030 aims to improve the overall livelihood of Kenyans by providing an efficient, integrated, high quality, and affordable health care system with prioritization of preventative care at the community and household level. As such, in light of the UN-NCD declaration, the UN-SDGs, and in line with Kenya Vision 2030, there is a need to focus on promoting healthy active lifestyles for all Kenyan children and youth - the country's greatest resource in order to meet Kenya's long-term national planning strategy. This focus on active lifestyles in young people may be particularly crucial for Kenya, a country that prides itself for having dominated the middle and long distance running events globally for over 50 years, as it endeavours to preserve its athletic excellence and identity. It is recommended that children and youth 5-17 years of age accumulate at least 60 minutes per day of moderate-to-vigorous intensity physical activity (MVPA) to accrue positive health outcomes (8). It is also important that time spent in sedentary behaviours be reduced, since sedentary behaviours (low-energy expenditure activities done while sitting or reclining) are independently associated with adverse health outcomes (13).

In this report, data on overall physical activity levels, organized sport participation, active play, active transportation, sedentary behaviours, family and peers (infrastructure, support, parental/peer behaviours), school (infrastructure, policies and programs), community and the built environment (infrastructure, policies, programs, safety), governmental and non-governmental (strategies, policies, investments) and body composition were collected and analysed. Evidence regarding the promotion of healthy active lifestyles was considered to inform recommendation on initiatives and programmes at home, at school, and in the community, that may promote active and healthy lifestyles for Kenyan children and youth. This report card is a useful tool for advocacy and policy in improving participation in physical activity by highlighting areas where more research and action is needed to better understand and improve the physical activity profile of Kenyan children and youth.



# Healthy Active Kids Kenya (HAKK)

*Kenya's 2016 Report Card on Physical Activity and body weight of children and youth is the third report card published in Kenya, after the first in 2011 and the second in 2014. The aim of this report card is to present the best available evidence and increase awareness on factors associated with physical activity and body weights of children and youth in Kenya. The report card, therefore, highlights areas where Kenya is succeeding as a nation and puts emphasis on areas where more action is needed in order to realize healthy active living goals for children and youth. Healthy Active Kids Kenya (HAKK)( <http://www.hakkenya.org>) plans to produce the Report Card periodically as a means of monitoring healthy active living behaviours of Kenyan children and youth*

## The Target Audience for the Kenya Report Card

This publication is for researchers, practitioners, policy makers and organizations with an interest in child and youth health and wellness. It is particularly for:

- i- Those who are interested in childhood physical activity, overweight/obesity, and nutrition research;
- ii- Those who develop and implement policies, such as politicians, governmental departments, non-governmental organizations, regional education authorities, school boards, school directors, principals, head teachers, advisors, nurses, social workers, school health coordinators, public health officials and sporting organisations;
- iii- Those who are charged with the responsibility of ensuring the built environment is supportive of healthy active living, such as city planners, security agencies, designers, and contractors;
- iv- Teachers, parents, and children and youth, since effective promotion of health is an inclusive and participatory process;
- v- Those in a position to support or collaborate on future initiatives of the HAKK; and,
- vi. International colleagues in a position to learn from and work with HAKK.

## The Grading System and Data Sources

This report card was conceptualized, designed and developed by a multi-disciplinary team of experts drawn from different institutions of higher learning in Kenya and produced by the HAKK. The members of the report card working group played various roles and responsibilities in the development and production of Kenya's 2016 Report Card on the physical activity and body weight of children and youth. The team at various levels identified and synthesized key articles. Data sources included peer-reviewed journal publications, presentations at peer-attended forums, unpublished graduate student theses, and data from other organizations and agencies such as the Kenya National Bureau of Statistics and the Kenya Demographic Health Survey.

Data on overall physical activity levels, organized sport participation, active play, active transportation, sedentary behaviours, family and peers (infrastructure, support, parental/peer behaviours), school (infrastructure, policies and programs), community and the built environment (infrastructure, policies, programs, safety), Governmental and non-governmental (strategies, policies, investments) and overweight and obesity were collected and analysed. By consensus, the panel of experts assigned grades based on a set of specific criteria and a comprehensive analyses of available data sources on Kenyan children since 2010 (5 years). The experts were drawn from various fields including exercise and sports science, nutrition, environmental planning and management, public health, transport geography as well as physical and health education.



**TABLE I: Grading System**

Grade	Interpretation
<b>A</b>	Indicates that a majority ( $\geq 80\%$ ) of Kenyan children and youth engage in best-practice
<b>B</b>	Indicates that over 50% (60–79%) of Kenyan children and youth engage in sufficient best-practice activities.
<b>C</b>	Indicates that about 50% (40–59%) of Kenyan children and youth engage in healthy active practices.
<b>D</b>	Indicates that action or practice is insufficient to adequately promote health and prevent chronic disease due to unequal reach, adoption, or impact. It also reflects a higher potential risk for future disease.
<b>F</b>	Indicates that there were no existing interventions, infrastructure or practices, or that they have been shown to be ineffective. It also reflects the greatest potential risk for future disease.
<b>INC</b>	Denotes there is insufficient data for grading.

# The Core Indicators and benchmark

**TABLE II: Core indicators and benchmarks of the Kenya's 2016 on the Physical Activity and Body Weight of Children and Youth**

<b>Indicator</b>	<b>Benchmark</b>
<b>Overall Physical Activity</b>	<ul style="list-style-type: none"> <li>• % of children and youth who meet physical activity guidelines</li> </ul>
<b>Organized Sport Participation</b>	<ul style="list-style-type: none"> <li>• % of children and youth who participate in organized sport and/or physical activity programs</li> </ul>
<b>Active Play</b>	<ul style="list-style-type: none"> <li>• % of children and youth who engage in unstructured/unorganized active play for several hours a day</li> </ul>
<b>Active Transportation</b>	<ul style="list-style-type: none"> <li>• % of children and youth who use active transportation to get to and from places (school, park, mall, friend's place)</li> </ul>
<b>Sedentary Behavior</b>	<ul style="list-style-type: none"> <li>• % of children and youth who meet sedentary behavior or screen-time guidelines</li> </ul>
<b>Family and Peers</b>	<ul style="list-style-type: none"> <li>• % of parents who facilitate physical activity and sport opportunities for their children (eg, volunteering, coaching, driving, paying for membership fees and equipment)</li> <li>• % of parents who meet the physical activity guidelines for adults</li> <li>• % of parents who are physically active with their kids</li> <li>• % of children and youth with friends and peers who encourage and support them to be physically active</li> <li>• % of children and youth who encourage and support their friends and peers to be physically active</li> </ul>
<b>School</b>	<ul style="list-style-type: none"> <li>• % of schools with active school policies (eg, Daily Physical Activity, recess, "everyone plays" approach, bike racks at school, traffic calming on school property, outdoor time)</li> <li>• % of schools where the majority (<math>\geq 80\%</math>) of students are taught by a PE specialist</li> <li>• % of schools where the majority (<math>\geq 80\%</math>) of students are offered at least 150 minutes of PE per week</li> <li>• % of schools that offer physical activity opportunities (excluding PE) to the majority (<math>\geq 80\%</math>) of their students</li> <li>• % of parents with children and youth who have access to physical activity opportunities at school in addition to PE</li> <li>• % of schools with students who have regular access to facilities and equipment that support physical activity (eg, gymnasium, outdoor playgrounds, sporting fields, equipment in good condition)</li> </ul>

## **Community and the Built Environment**

- % of children or parents who perceive their community/municipality is doing a good job at promoting physical activity (eg, variety, location, cost, quality)
- % of communities/municipalities that report they have policies promoting physical activity
- % of communities/municipalities that report infrastructure (eg, sidewalks, trails, paths, bike lanes) specifically geared toward promoting physical activity
- % of children or parents with facilities, programs, parks, and playgrounds available to them in their community
- % of children or parents living in a safe neighborhood where they can be physically active
- % of children or parents reporting well-maintained facilities, parks/playgrounds in their community that are safe
- % of children and youth who report being outdoors for several hours a day

## **Government Strategies and Investments**

- Evidence of leadership and commitment in providing physical activity opportunities for all children and youth
- Allocated funds and resources for the implementation of physical activity promotion strategies and initiatives for all children and youth
- Demonstrated progress through the key stages of public policy making (ie, policy agenda, policy formation, policy implementation, policy evaluation, and decisions about the future)

## **Body composition**

- Body weight status

# Overall Physical Activity Levels - C

*Physical activity is defined as any bodily movement produced by skeletal muscle, and that requires energy expenditure. Walking, running, dancing, gardening, swimming are a few examples of physical activity. Physical inactivity has been identified as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths globally (14). Moderate to vigorous intensity physical activity there has significant benefits for health.*

Research shows that Kenyan children, particularly those from urban areas are becoming increasingly sedentary compared to their rural counterparts. Step-count data showed that rural children were more physically active than their urban counterparts ( $14,700 \pm 521$  versus  $11,717 \pm 561$  step counts) (15). Approximately 72% of these urban and rural children were classified as physically active as per the global guidelines for physical activity, which recommend that children and youth, 5 – 17 years of age, should accumulate at least 60 minutes of daily MVPA (15). In a different rural sample of children, the average daily step counts in boys were higher than those of girls ( $16,262 \pm 4698$  versus  $13,463 \pm 3051$ ), with the total average step counts for the sample at  $14,558 \pm 3993$  (15). Results from a recent study in urban Kenya found that the mean daily time spent in light physical activity was 463 minutes; mean daily time spent in moderate physical activity was 32 minutes; and mean daily time spent in vigorous physical activity was only 4 minutes. Only 12.8% of participating children met the recommendation of 60 minutes or more of daily MVPA (15). From self-report data, frequent leisure time physical activity on 5 days or more was attained by 16.0% of Kenyan children. In another study, the percentage of urban and rural Kenyan children reporting 60 or more minutes of physical activity on 3 or more days per week was 36% (16). Overall, there are few studies that have sought to determine the proportion of Kenyan children meeting global physical activity guidelines.

In light of the above findings, and expert consensus, it was estimated that we are only succeeding with about half of Kenyan children and youth. These findings show that Kenyan children are experiencing a physical activity transition marked by a decrease in levels of physical activity and increased sedentary behaviour. It will be interesting to see how devolution will impact on the overall physical active levels of Kenyan children and youth. Nationally representative data on physical activity is needed to accurately determine the overall activity patterns among Kenyan children and youth, and this must be prioritized by key stakeholders



Image source: [www.pinterest.com/](http://www.pinterest.com/)

# Organized Sport Participation - C

Kenya is a sporting nation having achieved considerable success in athletics and rugby. Participation in sports presents an opportunity to engage in physical activity, and there is a positive correlation between participation in sports and sports aptitude. Provision of sufficient sporting facilities, both in school and at the community level is therefore key. Children and youth who actively participate in sports perform better academically on average, better body image, leadership qualities, and an element of team spirit compared to children who do not participate in sports (17,18). Participation in sports also develops the ability to give and take, hence inculcating the spirit of fair play. Among the Nandi sub-tribe of the Kalenjin community in the Rift Valley, it was found that boys in urban areas spent  $12.8 \pm 11.8$  minutes/day in sport activities compared with rural boys, who spent  $32.0 \pm 17.3$  minutes/day (19).

A school-based study conducted in Nairobi found that a majority of the schools offered sporting activities and encouraged participation by pupils within the schools. More than half of participating schools offered football, volleyball, track and field, and swimming. Most of the sporting activities offered to school pupils gave them an opportunity to develop sport-related skills that are easily transferred to life situations (16).

In an earlier report discussing the key perceived barriers to participation in sports, lack of opportunities and/or time, overprotection by guardians/parents, fear, avoidance, and disabilities among Kenyan children were identified as major contributors (20). Socio-economic status (SES) was also identified as a compounding factor to the disparity in organized sports participation by children and youth in Kenya. A sample of youth in Kenya reported that those from higher SES frequently took part in types of organized sports that were viewed as more prestigious and demanding with respect to equipment cost, while those from lower and middle SES generally dominated in less expensive sporting activities like netball, hockey and soccer among others (21, 22). It is recommended that schools allocate adequate time and resources, over and above encouraging pupils to participate in organised sporting activities, as this will eradicate the SES disparity among them and particularly in the school environment.

Based on the existing data and expert consensus, it was estimated that about half of Kenyan children and youth participate in organized sports.



# Active play - B

Active play is any form of unstructured and unorganised physical activity that children and youth participate in, particularly with their peers. Access to active play in natural environment and outdoors is essential for a healthy growth and development of a child (23). It is recommended that parents /guardians increase children's opportunities for self-directed play outdoors in all settings including at home, school, and in the community. Time spent outdoors by younger children is strongly correlated with physical activity.

A study done in Kenya found that while there were significant sex-differences in children's preferred games, both boys and girls alike enjoyed cooperative and competitive play activities (24,25). In a different study conducted in urban Kenya, children reported spending 6.0 hours on average in outdoor play, either on weekend-days, or before and after school (26). The study found that, overall, on weekends, majority of children spent time outdoors, followed by after school, and finally the least time spent outdoors was before school. Time spent outdoors by the children on weekends was positively correlated with physical activity (26).

Based on the existing data and expert consensus, it was estimated that well over half of Kenyan children and youth participate in active play.



Image source: runteamwebb.wordpress.com/2013/07/12/running-to-learn/

# Active transportation - B

Active transportation refers to any form of non-motorized transportation such as walking, cycling, non-mechanized wheel chairing, running, or skateboarding among others. There are many ways to engage in active transportation, whether it is walking to the bus stop, or cycling to school/work. A study conducted among 9 - 12 year old school children in Nairobi established that 76% and 24% of the sampled school children, mainly in peri-urban areas of Nairobi, walk and use car/van modes of transport respectively. In the urban area of Nairobi, 60%, 21% and 19% of the school children walk, use car/van and use bus to school respectively (20, 21).

Self-reported data revealed that 87% (58% walking, 29% running) of children from a rural setting in Kenya used active means of transport to and from school while 42% (41% walking, 1% running) of urban children used the same. It was noted that over half of urban children (58%) used a car or bus to travel to or from school (20). A different study confirmed higher levels of active transport to and from school among rural children compared to their urban counterparts. Among rural males, 0% used cars, 19% walked and 81% ran to school, and 0% of the rural female children used cars, while 40% walked and 60% ran. Among urban males, 50% used cars, 39% walked and 12% ran to school while 51% of the urban female children used cars, 43% walked while 6% ran to school.

In the overall sample population, 26% of the children used cars while 75% walked or ran to or from school (20). Seventy percent and 34% of urban and rural parents respectively reported that they were more physically active during their childhood compared to their children, supporting the notion of generally lower use of active transport to and from school by school children (20)

Taken together, the results are indicative that well over half of Kenyan children and youth use active transport to/from school, with rural residing children faring on better compared to their urban residing peers. This is an encouraging finding active transport was positively correlated to meeting the global physical activity guidelines, and negatively correlated with being obese/overweight (21)..

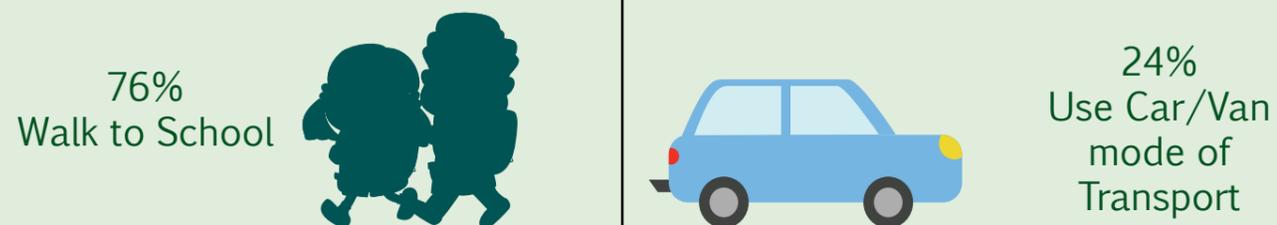


Image source: pinterest.com/pin/132011832797047663

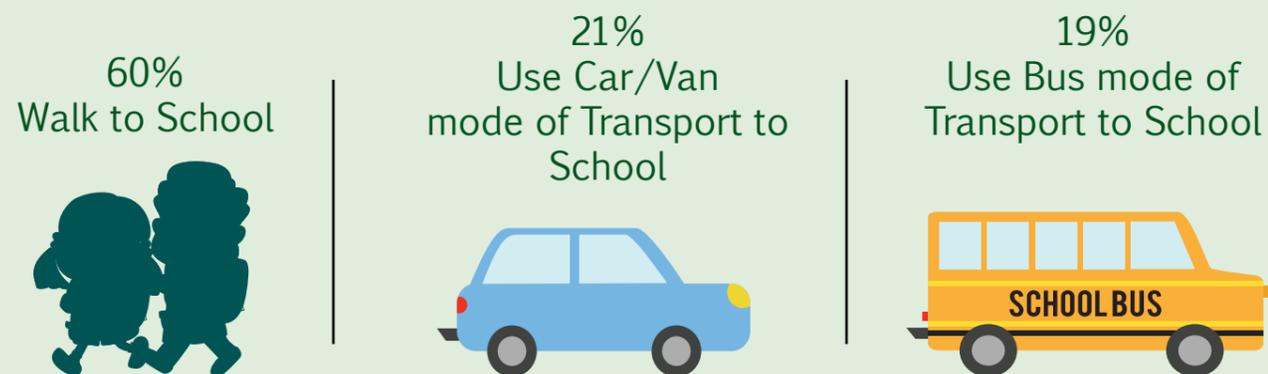
# Active transportation - B

Study conducted among 9 - 12 year old school children in Nairobi

## Peri-Urban areas of Nairobi



## Urban areas of Nairobi



Self-reported data revealed that:

**87%** of children from rural setting in Kenya used active means of transport to and from school

- 29% Running
- 58% Walking

**42%** of children from urban setting in Kenya used active means of transport to and from school

- 1% Running
- 41% Walking

**58%** of urban children used a car/van or school bus to travel to and from school

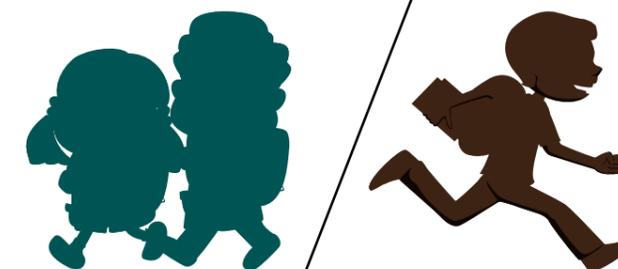
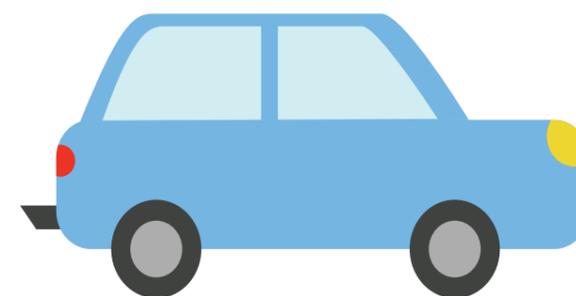
A different study confirmed higher levels of active transport to and from school among rural children compared to their urban counterparts.

			
Rural Males	0% used Cars	19% Walked	81% Ran
Urban Males	50% used Cars	39% Walked	12% Ran
Rural Females	0% used Cars	40% Walked	60% Ran
Urban Females	51% used Cars	43% Walked	6% Ran

In the overall sample population

**26% used Cars**

**75% Walked/Ran**



## Sedentary Behaviour - B

*Sedentary behaviour refers to any activity characterized by an energy expenditure  $\leq 1.5$  metabolic equivalents and a sitting or reclining posture. This includes sitting, lying down driving, reading, or “screen time” such as TV viewing, video game playing, or computer use.*

Although there is paucity of literature in this area in Kenya, a recent study of children in Nairobi found that directly assessed sedentary time was 398 minutes (6.6 hours) per day. This included time used in sedentary behaviours at school (21, 22). Seventy more minutes were spent by children in sedentary activities during the school week (420 minutes) compared to weekends (349 minutes). The difference could be accounted for by time the children were required to sit in classrooms during school week (21). The results established that children in urban areas spent more time on screen related behaviours on weekend days than recommended. Rural living children spent less time in sedentary activities ( $555 \pm 67$  minutes/day) compared to their urban counterparts ( $678 \pm 95$  minutes/day) (16, 19). Further, 50% of urban children spent more than two hours per week on screen-related activities, compared to only 30% of their rural peers (16). Given the limited data available to inform this indicator, expert consensus largely informed the conclusion that we were succeeding with well over half of Kenya children.

## Family and Peers (Infrastructure, Support, Parental/Peer Behaviours) - D

Family and peers play a significant role in the development of healthy behaviour among children and youth. Supportive family members, friends and peers are linked increased active transport and relatively higher levels of physical activity (27). Parents have a major responsibility to enhance a healthy active lifestyle among their children; however, they usually lack knowledge on basic requirements regarding healthy eating and physical activity and mostly are biased when reporting on their children's physical activity levels and body weights (28).

A recent found that higher maternal and paternal education levels, and household SES, were associated with a lower likelihood of children meeting the physical activity guidelines (20). Further, parental perception of positive neighbourhood social cohesion, positive environs and connectivity, and negative child safety concerns, were associated with higher child physical activity.

There was limited data available to inform this indicator; however, expert consensus concluded that this is an area that ought to have more emphasis, and that we were only succeeding with less than half of Kenya children and youth.

## School (Infrastructure, Policies, Programs) - C

Schools have been identified as a key setting for public health strategies to lower the prevalence of overweight, obesity, and physical inactivity. In Kenya, government policy requires that public schools allocate 40 minutes for physical education (PE), three times a week during school days (32). A recent study found that most children (86.8%) reported to have participated in PE lessons 1-3 days in a week (26). Only 13.8% of children from private schools and 13.2% of children from public schools indicated they did not take part in any PE classes during the past week (26). However, it is noteworthy that anecdotal reports indicate that in some cases, PE lessons may be scheduled, but used to teach examinable subjects due to pressure placed on these schools to perform well academically.

Interestingly, one study found that there was significant public support for PE to be taught in all public schools (20). It was also found that 69.0% of a sample of schools in Nairobi have policies or programs on physical activity, while 51.7% reported having committees in-charge of overseeing the drafting and implementation of healthy eating and physical activity policies. It is noted that Kenya, through the National School Health Strategy Implementation Plan (2011-2015), directed that the school environment must create an enabling atmosphere for social, cultural and emotional well-being that promotes a healthy child friendly school (29). More still needs to be done in this area to ensure compliance with government policies.

With respect to infrastructure, 65.5% of a sample of schools in Nairobi were found to have a sports field within their grounds that children could use to engage in physical activity; however, a majority of schools (93.1%) had no access to a gymnasium, a fitness room (86.2%), or an expansive indoor room (75.9%) for physical activity (e.g. auditorium or dance studio). Close to half of the sampled schools (48.3%) had no access to a swimming pool, and fewer still (20.7%) had access to a running track. Overall, private schools, mainly in middle to higher SES areas, offered a wide range of, and better quality facilities to enhance participation in physical activities compared to public schools (20, 26).

The findings and expert consensus arrived at the conclusion that we were only succeeding with about half of Kenyan children and youth for this indicator.

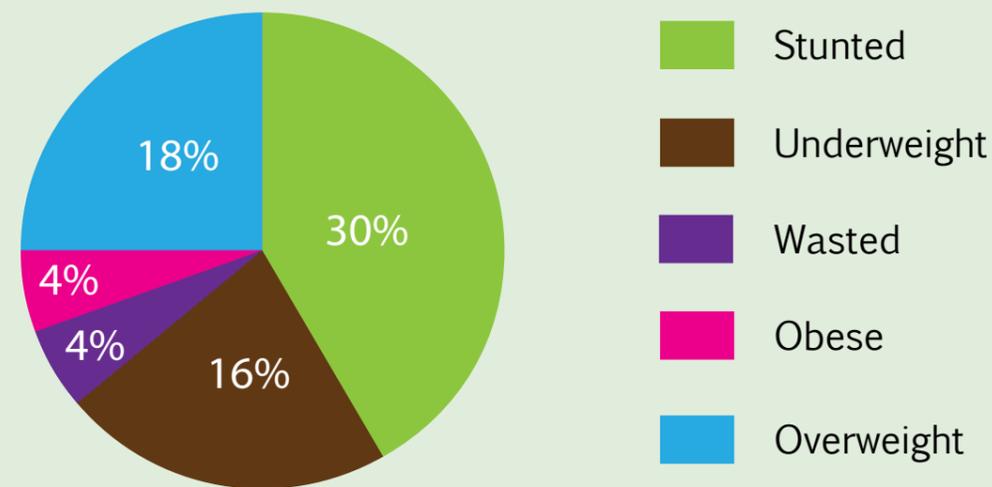
# Body Composition - B

Kenya is experiencing a double-burden of malnutrition, whereby overweight co-exists with stunting and underweight among children.

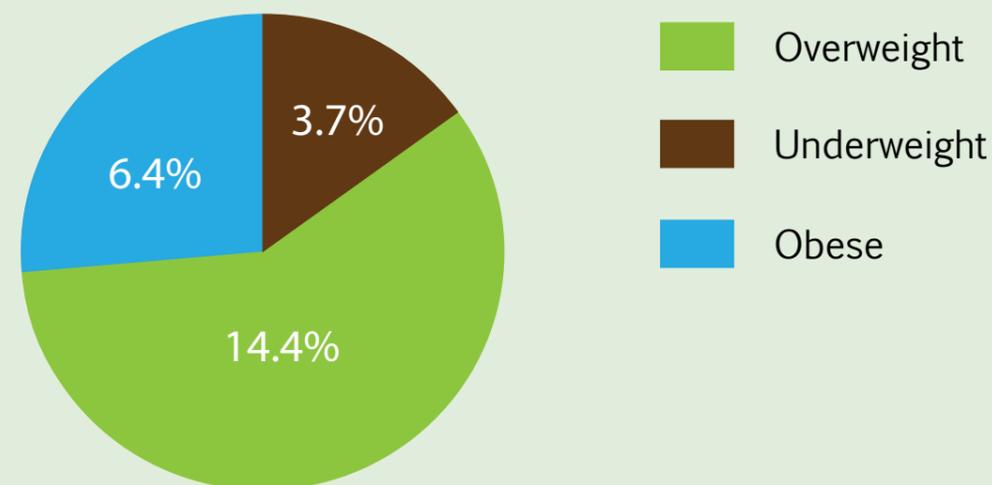
A study of 1,495 pre-school children aged 3 to 5 years from rural and urban areas of Kenya revealed that over 30% were stunted, 16% were underweight, 4% were wasted, 18% were overweight, and 4% were obese (31). A study conducted in Nairobi found that 3.7% of children were underweight, 14.4% were overweight, and 6.4% obese (20.8% overweight/obese) based on WHO cut-points (16). Overweight is associated with an energy imbalance, that is energy intake and expenditure, and being overweight has been found impact on self-esteem, and the possibility of developing juvenile diabetes.

While child under-nutrition remains one of Sub Saharan Africa's most fundamental challenges for improved human development, considering all the results, it is clear that overweight/obesity is slowly taking root in Kenya. This is exacerbated by the increased availability of packaged foods high in saturated fats and sugars, and increased sedentary behavior, all contributing to unhealthy lifestyles. These findings emphasize the need for generation of nationally representative estimates of the body weights of children and youth, since we are only succeeding with well over half of Kenyan children and youth, with large negative shifts in this indicator expected.

Rural and Urban Areas



Nairobi



# Community and the Built Environment (Infrastructure, Policies, Programs, Safety) - D

The built environment has been found to be significant determinant of physical activity, largely informed by studies in high income countries. In Kenya, there are stark differences between urban and rural settings in this respect, with a poorer built environment found in rural areas compared to urban cities. However, this seems to have little bearing on the accumulation of physical activity, active transportation, and active play among children in rural areas, who are found to be more active than their urban counterparts (15, 33). However, there are no known non-governmental or governmental approaches to tackle the built environment and its impact on children's physical activity (34,35). There is need for all stakeholders to address the bridging of this gap. Expert consensus suggested that less than half of Kenyan children and youth for this indicator, and mainly those of higher SES where the built environment support physical activity.

# Governmental and Non-Governmental (Strategies, Policies, Investments) - D

In 2015, Kenya through the National Council for Children's Services published a National Plan of Action for Children. The plan is anchored on the United Nations Convention on the Rights of the Child (UNCRC) which Kenya signed in 1990. This was a major milestone in the promotion and protection of children's rights and welfare in Kenya. The plan recognizes the right of all Kenyan children to leisure, play and recreation appropriate to the age of the child (30). This is a step in the right direction. Such policies will provide the necessary impetus for promotion of physical activity. Expert consensus suggested that we are succeeding with about half of Kenyan children and youth.



## Recommendations for Action

- i- Nationally representative data on physical activity patterns and body weights of Kenyan children and youth is needed to inform policy and practice.
- ii- Monitoring physical activity knowledge, attitudes and behaviours of Kenyans as well as factors which facilitate or impede access to physical activity opportunities is required.
- iii- There is need for continuous support both in cash and in kind to allow the production and dissemination of report cards to monitor the healthy active living behaviours of Kenyan children and youth.
- iv- Collaborative efforts among relevant Kenyan government ministries, county governments as well as non-governmental organizations are necessary to combat the increasing NCD prevalence.
- v- Kenyan children and youth need to be supported in making physical activity choices that are convenient, sustainable, and compatible with their needs and interests.
- vi- There is a need to enhance the built environment that supports the integration of physical activity into daily life.
- vii- Increasing knowledge and understanding of interventions, which are effective in changing physical activity knowledge, attitudes, and behaviours, is required.
- viii- Increasing knowledge and understanding of the relationships between physical activity, healthy eating and a range of other health determinants that contribute to or inhibit optimal health is recommended.
- ix- There is a need for continuous networking with African and other international experts to implement promising practices for research, surveillance and public health interventions.
- x- Preserving the health of children and youth through healthy active living needs to be as high a priority as treating sick children.

*We are interested in any assistance, particularly support from organizations and corporations who are interested in making significant and sustained contributions, as part of a purposeful corporate marketing strategy with the potential to have an impact on healthy active living needs of children and youth throughout Kenya.*

## Opportunities for Sponsorship and Collaboration

HAKK is continually looking for collaborators and partners to invest in our efforts to address the emerging threat of childhood physical inactivity and overweight and obesity. There are many possibilities for partnership investments with the HAKK including:

- Establishing scientific research chairs in this area of study
- Establishing graduate student scholarships for study in this area
- Research study donations
- Donations for equipment acquisition
- Support for staff and infrastructure for the enhancement of the activities of Healthy Active Kids Kenya (HAKK), an organization committed to the promotion of healthy active living for children and youth in Kenya;
- Support for the development and dissemination of periodic Report Cards on the Physical Activity and Body Weights of Kenyan Children and Youth
- Support for the development and implementation of Physical Activity Guidelines for Kenyan Children and Youth, building on the global physical activity guidelines by the WHO.

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