



**THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH**

**NATIONAL PHYSICAL ACTIVITY GUIDELINES FOR
THE PREVENTION AND CONTROL OF NON-
COMMUNICABLE DISEASES**

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LIST OF ACRONYMS/ ABBREVIATIONS

CVD: Cardiovascular Disease

MOH: Ministry of Health

NCD: Non communicable diseases

RECAP

PA: Physical Activity

UHI: Uganda Heart Institute

UCI: Uganda Cancer Institute

WHO: World Health Organization

FOREWORD

Uganda, like other developing countries, is faced with a fast-increasing burden of non-communicable diseases (NCDs). As of 2020, 35% of all deaths were due NCDs (diabetes, cardiovascular diseases, chronic respiratory diseases, cancers, and others). The Ministry of Health has prioritized prevention and control of NCDs focusing on tackling modifiable risk factors; harmful use of alcohol, tobacco and substance abuse, unhealthy diets and physical inactivity. Of all preventive interventions for the management of NCDs, physical activity is the cheapest and easiest intervention to implement across all age groups and classes of people. There are multitude proven benefits of physical activity such as prolonged life, reduced incidence of NCDs, improved mental and cognitive health, and improved physical function among others.

Despite very high levels of physical activity (96.7%) in adult Ugandans, the physical activity space is increasingly constrained by urbanization, population pressures, work pressures that has resulted into less play grounds walkways and limited time. Development has resulted into improved fast means of transport and environmental pollution that creates an unsafe space for physical activity either through danger of accidents or chemical toxic environments. There is also massive lack of awareness about the importance, amount, frequency, type of physical activity suitable for the age group and condition.

To improve the quality, quantity of physical activity in Uganda, These National Guidelines have been developed and tailored to the WHO guidelines but contextualized to our needs for use by all sectors, partners, organizations and individuals. It is my sincere hope that all sectors,

all agencies will make use of them because we all need

them as part of the needs to prevent and control NCDs. We ready to work will all other sectors and Partners in the physical activity space to provide any technical guidance and support to ensure physical activity is massively and qualitatively applied as a preventive and a wellbeing measure.

We shall be happy to be part of efforts to implement, mobilize and sensitize schools and communities for quality Physical activity.

I wish to profoundly acknowledge all stakeholders, partners and individuals who technically and financially contributed to the development of these guidelines. In particular, I wish to appreciate the World Health Organization, Global RECAP project, and MOH-NCD technical committee for their efforts.

It is my sincere hope that these guidelines will be very resourceful to all users in rapidly accelerating uptake of physical activity as a critical preventive intervention for NCDs in Uganda.



Dr. Diana Atwine
Permanent Secretary, Ministry of Health

PREFACE

The Uganda PA Guidelines have been aligned to WHO Physical activity (PA) and sedentary behavior guidelines of 2020. These guidelines were updated to reflect Uganda's context. The process of adaptation was participatory and consultative starting way back in December 2017 to November 2021. These guidelines were reviewed by WHO technical team in July 2021, presented to NCD stakeholders, reviewed by MOH TWG and presented to MOH senior management.

This guide has been specifically designed to address to promote physical activity in all age categories and reduce sedentary behavior among of Ugandan for better health by providing the recommendations on the amount (frequency and duration), type and intensity of physical activity required to maintain a healthy lifestyle.

All stakeholders (both public and private sectors) are urged to use these guidelines for proper promotion, uptake and practice of recommended physical activity in their areas of jurisdiction.



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ACKNOWLEDGMENTS

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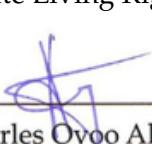
Technical guidance: The WHO Geneva team (Dr. Willumsen Juana, Sako Binta and Kate Robertson) and Country Office in accordance with the WHO PA activity guidelines and sedentary guidelines of 2020.

This guide was presented to the NCD physical activity stakeholders, NCD technical working group, and MOH Senior Management before its final approval. All these structures and all individuals who personally participated are highly appreciated for their invaluable input leading to their finalization.

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CHAPTER ONE

INTRODUCTION

Physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure (1). Types of physical activity include occupational, recreational / leisure, household and transportation activities. Examples of physical activities include walking, cycling, engaging in sports, household activities and other exercises. Engaging in physical activities has significant health benefits and contributes to the prevention and delay in progression of Non-Communicable Diseases (NCDs) such as cardiovascular diseases, diabetes, colon and breast cancer, and depression. Regular and appropriate physical activities can contribute to the management of body weight (1). Furthermore, physical activity has socio economic benefits for example increased work productivity and output and reduced absenteeism, sick leave, reduced mortality rates and health care costs on top of the above health benefits (optimal health).

Globally, one in three adults is inactive yet lack of physical activity is the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths globally. According to the Uganda STEPS survey 2023, the prevalence of physical inactivity was 3.0% in adults aged 18-69 years. Despite the low prevalence of physical inactivity, the incidence of NCDs in Uganda has gradually increased over the years as well as an increase in proportional mortality due to NCDs.

Therefore, taking into consideration the socio-economic implications of the NCDs on individual, community and national socio-economic development, it is important to reduce the incidence of NCDs and mitigate the impacts of NCDs on Uganda's population. There is a need to provide practical guidance on appropriate and adequate physical activity practices effective for the prevention and management of NCDs which underlies the rationale for the development of these guidelines. These guidelines hence provide practical information for all stakeholders, institutions including health providers, wellness and fitness professionals, academics among others to promote adequate and appropriate physical activities for each age category to improve population health.

BURDEN OF NCD RISK FACTORS

Physical inactivity is a modifiable risk factor to NCDs including cardiovascular diseases, diabetes, cancers, as well as chronic obstructive pulmonary diseases which have increasingly become causes of morbidity and mortality in the Ugandan population. According to Uganda's STEPS survey 2023, the Prevalence of physical inactivity in persons aged 18 years and above reduced from 4.3% in 2014 to 3.0%. Furthermore, 33.2% of Ugandan adults were either overweight or obese, 23.5% had high blood pressure (93.5% of whom were not on medication), 3.3 % had type 2 diabetes (which is an increase from 1.4% in 2014) and 9.8% had three or more risk factors for CVD (2). The survey also found that mortality due to NCDs was 34% of all deaths while according to WHO, the risk of premature death (under 70

years) due to NCDs is still between 20% to 22% in Uganda (3). Unfortunately, the physical activity space remains constrained by increased urbanization that has resulted in less playgrounds, walkways, and leisure parks. Consequently, urbanization has resulted into improved motorized transportation and environmental pollution especially from industries that create an unsafe space for physical activity either through danger of accidents or chemical toxic environments which also leads to NCDs. Although prevalence of physical inactivity is low compared with global figures, given the increasing trend in Uganda's rate of urbanization coupled with rapid lifestyle changes (4). It is important to retain and promote physical activity.

GOAL AND OBJECTIVES OF THE GUIDELINES

Goal

The overall goal of these guidelines is to provide guidance on the amount and types of physical activity needed for healthy living, and in particular prevention and control of NCDs.

Objectives

1. To emphasize the significance of Physical activity for a healthy and productive lifestyle.
2. To provide recommendations on the amount (frequency and duration) of physical activity required to maintain a healthy lifestyle.
3. To provide recommendations on the type and intensity of physical activity required to achieve health benefits in the prevention and control of NCDs.
4. To promote physical activity in all age categories among all Ugandans for better health.

PUBLIC HEALTH SIGNIFICANCE OF PHYSICAL ACTIVITY

Physical inactivity is the fourth leading risk factor for global mortality contributing 6% of deaths globally. Levels of physical inactivity are rising in many countries with major implications for the general health of people worldwide and for the prevalence of NCDs such as cardiovascular disease, diabetes and cancer and their risk factors such as raised blood pressure, raised blood sugar and overweight (5).

Global health is being influenced by three trends: population-aging, rapid unplanned urbanization, and globalization, all of which result in unhealthy environments and behaviors. Urbanization, in particular, has been linked to have negative impacts on levels of physical activity due to insecurity (violence and crimes), increased environmental pollution and lack of adequate physical activity space. Uganda has experienced an increase in urbanization from 19.38% to 24.95% from 2010 to 2020 and is suspected to rapidly increase over the next few years(6). As of 2023, Uganda had a low prevalence of physical inactivity. Much as this is good, there is a need to maintain this, taking into account the increasing urbanization and population growth. To that effect, there is a need to provide practical guidelines that promote adequate

and appropriate physical activity at all levels in Uganda. Furthermore, multi-sectoral collaboration is needed to implement urban and environmental policies that encourage physical activity such as ensuring security: roads have safe and accessible walking/ cycling lanes, sports and recreation facilities that encourage everyone to be physically active at work, schools and in communities and public places (7).

Evidence shows that participation in regular physical activity significantly reduces the risk of NCDs including coronary heart disease and stroke, diabetes, hypertension, cancers (colon, breast, esophageal, bladder, endometrial and gastric among others). Additionally, physical activity has been shown to improve sleep and mental health by reducing symptoms of depression and anxiety as well as improving cognitive health especially in elderly persons, post stroke and accident victims.

At all ages, the benefits of being physically active outweigh potential harm. Regular participation in Moderate-Vigorous Physical Activity (MVPA) such as walking, cycling, or doing sports has significant benefits for health. Some physical activity is better than doing none at all. By becoming more active throughout the day in relatively simple ways, people can quite easily achieve the recommended activity levels lowering their risk of NCDs.

JUSTIFICATION FOR PROMOTING PHYSICAL ACTIVITY FOR HEALTH

Regular physical activity is beneficial to everyone irrespective of health condition. In case of NCDs it helps in the prevention and treatment. It also helps prevent hypertension, overweight and obesity and can improve mental health, quality of life and general well-being of an individual. As countries develop economically, levels of physical inactivity increase. Failure to act to increase levels of physical activity will see related costs continue to rise, with negative impacts on health systems, the environment, economic development, community well-being and quality of life(7). In 2018, the WHO endorsed the new global action plan to promote physical activity by providing updated guidance, and a framework of effective and feasible policy actions to increase physical activity at all levels(8). This new global action plan aimed to reduce physical inactivity by 10% as of 2020 and further by 15% by 2030 through a multi- systems approach. Uganda, as a member state of the United Nations & WHO was recommended to develop national physical activity action plans and policies based on the new action plan. More importantly, national physical activity plans, laws and regulations are needed in Uganda due to the ever-growing rate of NCDs and urbanization as observed from recent trends.

National physical activity action plans, laws, regulations and policies in Uganda will enable:

- 1) Creation of active societies by improving social norms & attitudes of Ugandans,
- 2) Creation of active environments by providing safe spaces and places for communities to engage in physical activity,
- 3) Creation of active Ugandans through availing physical activity guidelines across multiple settings to help people of all ages and abilities to engage in PA, and

4) Creation of active systems through strengthening multi-sectoral coordination and excellent resource mobilization among sectors to increase PA and reduce sedentary behaviour among Ugandans.

IMPORTANCE OF NATIONAL PHYSICAL ACTIVITY GUIDELINES

The public health significance of physical activity and the global mandates for promoting physical activity for health commits Uganda to develop national guidelines that address the links between the frequency, duration, intensity, type and total amount of physical activity needed for healthy living and prevention of NCDs. Evidence based- guidelines are key information for policy makers and implementers wanting to address physical activity issues in our country and in the population.

The National Physical Activity guidelines will:

- Inform physical activity policies and other public health interventions
- Foster inter-sector collaboration and a framework for joint action to set up goals and objectives regarding physical activity promotion
- Provide a foundation for physical activity promotion initiatives such as mass physical activity events
- Justify the allocation and commitment of resources to physical activity promotion
- interventions at all levels
- Provide an evidence-based document that enables all relevant stakeholders to transfer policy into action with the allocation of the appropriate resources
- Facilitate national surveillance and monitoring mechanisms to monitor population levels of physical activity.
- Act as a tool for formulation of Acts and statutory instruments that regulate physical activity (enhancing a strong legal framework)
-

TARGET AUDIENCE

The national physical activity guidelines aim to provide overall guidance to the government and private sector organizations, leaders, all health professionals, health care providers, all formal and informal workers, patients and patient groups, physical activity service providers, Training institutions, policy makers, other organized groups of people such as associations of young and old people, households, individuals and the population at large. All of these form a primary target audience of these guidelines.

CHAPTER TWO

GUIDELINES AND RECOMMENDATIONS FOR PHYSICAL ACTIVITY AND HEALTH

Introduction

This chapter presents the recommended levels of physical activity for all age groups under 5 years 5-17 years, 18-35 years, 36-45 years, 46-55 years, 56-64 years and 65 years old and above.

Please beware of Myths and beliefs which are not physical activity such as; *steaming in Sauna, consuming hard alcohol, over sitting on the computer, car and getting mentally fatigued and any other activity which does not involve spending physical energy and muscular movement are not physical activity.*

Types of Physical Activities

The types of physical activities are similar for the different age groups, sexes and health status, however the level of health state, age will determine the intensity of the activity and the type preferred for you. At different health states, different recommendations may be made. In case of any ill health or disability it is important to seek health advice before engaging in any intense physical activity by yourself or in a workout area (gyms, swimming pool, football pitch etc.)

These guidelines focus on three types of physical activities: aerobic, muscle-strengthening, and bone-strengthening. Each type has important health benefits.

- **Aerobic activities** are those activities in which people move their bodies continuously for longer periods of time at a low intensity. These include among others brisk walking, running, hopping, skipping, jumping rope, swimming, football games, aerobics, and bicycling. Aerobic activities mainly increase cardiorespiratory fitness. Children often do activities in short bursts, which may not technically be aerobic activities. However, this document will also use the term aerobic to refer to these brief activities.
- **Muscle-strengthening activities** make muscles do more work than usual during activities of daily life. This is called “overload,” and it strengthens the muscles. Muscle-strengthening activities can be unstructured and part of play, such as digging, slashing, sit ups, press ups, lunges, playing on playground equipment, climbing (stairs, hills, mountains) and tug-of-war. On the other hand, these activities can be structured, such as lifting weights or working with resistance bands. However, children don’t usually need formal muscle strengthening programs like weight lifting although they may start structured weight training (can be own body weight or lifting weights) alongside their other activities at a later stage.
- **Bone-strengthening activities** produce a force on the bones that promote bone growth and strength. This force is commonly produced by impact with the ground. Jumping up and down Running, skipping, basketball, football, tennis, and hopscotch (“sonko”)

are all examples of bone strengthening activities. As these examples illustrate, bone-strengthening activities can also be aerobic and muscle-strengthening. As these examples illustrate, bone-strengthening activities can also be aerobic and muscle-strengthening.

PHYSICAL ACTIVITY RECOMMENDATIONS FOR CHILDREN UNDER 5 YEARS OF AGE

Daily physical activity is important for the healthy growth and development of infants, toddlers and pre-scholars.

1. Ensure physical activity such as supervised floor-based play in safe environments for infants ranging from birth to one year.

- Before infants begin to crawl, allow them to be physically active by reaching and grasping, gently pulling and pushing, moving their head, body and limbs during daily routines, and during supervised floor play, including 30 minutes in prone position (tummy time).
- Once infants are mobile, encourage them to be as active as possible in a safe, supervised and interactive floor-based play environments.
Infants less than 1 year old may not be restrained for more than 1 hour at a time (in strollers, high chairs or strapped on a caretaker's back). Screen (televisions, phones, tablets, laptops) time is not recommended. When physically inactive, engaging in singing and storytelling by the caregiver is encouraged.

2. Toddlers (1 to 3 years) & Pre-scholars (3 to 5 years) should be physically active every day for at least three hours (180 minutes), spread throughout the day.

- The three hours of physical activity may be spread throughout the day. The physical activity can range from light to moderate to vigorous- intense such as standing up to moving around/playing to more vigorous activity like running and jumping to keep the children physically active throughout the day. In addition, children 3-5 years should at least spend 60 minutes in moderate to vigorous-intensity physical activity.

Children 1-2 years of age may not be restrained for more than 1 hour at a time (e.g., in prams/strollers, high chairs, or strapped on a caregiver's back) or sit for extended periods of time. For 1-year olds, sedentary screen time (such as watching TV or videos, playing computer games) is not recommended. For those aged 2 years, sedentary screen time should be no more than 1 hour; less is better. When physically inactive, engaging in singing and storytelling by the caregiver is encouraged.

Children 3-4 years of age may not be restrained for more than 1 hour at a time (e.g., in prams/strollers) or sit for extended periods of time. Screen (televisions, phones, tablets, laptops) time should not be more than 1 hour; less is better. When physically inactive, engaging in reading and storytelling with a caregiver is encouraged.

Children aged 5-17 years

Regular physical activity during a person's formative years (childhood and adolescence) is widely acknowledged as essential for healthy growth and development. In particular, physical activity confers benefits for the following health outcomes: improved physical fitness (cardiorespiratory and muscular fitness), cardio-metabolic health (blood pressure, high cholesterol, glucose, and insulin resistance), bone health, cognitive outcomes (academic performance, executive function), mental health (reduced symptoms of depression); and reduced body fat.

Despite assessment difficulties, evidence suggests that many children and adolescents are less active than is recommended. The evidence suggests that obese youngsters are less physically active than those with a healthy body composition and spend more time in sedentary activities, such as watching television and using other electronic media. Potential outcomes of reduced activity levels are suboptimal development of motor skills and a lack of motivation to participate wholeheartedly in physical activity. There is also some evidence that physical activity levels decline from childhood through the adolescent years.

Physical Activity Recommendations for 5-17 years old

1. Children aged 5-17 may do at least an average of 60 minutes a day of moderate to vigorous intensity, mostly aerobic physical activity, across the week.
 - Moderate activities (activities that will raise your heart rate and make you breathe faster and feel warmer, *in this one is able to engage in a conversation*) that are fun and engaging like brisk walking, a bike ride or any sort of active play. More vigorous activities (activities that make you breathe much faster and harder, *in this one may not be able to engage in a conversation*) that will make children pant ("huff and puff".) include organized sports such as football and netball, as well as activities such as ballet, running and swimming laps, fast running. Children typically accumulate activity in intermittent bursts from a few seconds to several minutes, so any sort of active play will usually include some vigorous activity. To increase physical activity in sedentary children and adolescents, small amounts of physical activity should be introduced, and gradually increase the frequency, intensity and duration over time. For example, children can walk, and replace short car trips with a walk or bicycle ride.
2. Vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone, should be incorporated at least 2-3 days a week.
3. Children and adolescents are encouraged to participate in a variety of activities that are fun and suit their interests, skills and abilities. Variety of activities will offer children and adolescents a wide range of health benefits, experiences and challenges while keeping them engaged, involved and motivated.
4. In addition to physical education activities done at school, children and adolescents should

engage in physical activity consistently throughout the day children and adolescents should limit the amount of time spent being sedentary, particularly leisure screen time/ or use of electronic media for entertainment (e.g. computer games, TV, internet).

Good Practice Statements

- Doing some physical activity is better than doing none.
- If children and adolescents are not meeting the recommendations, doing some physical activity will benefit their health.
- Children and adolescents should start by doing small amounts of physical activity, and gradually increase the frequency, intensity and duration over time.
- It is important to provide all children and adolescents with safe and equitable opportunities, and encouragement, to participate in physical activities that are enjoyable, offer variety, and are appropriate for their age and ability

STAYING ACTIVE-REAL LIFE EXAMPLES

Children and adolescents can meet the Physical Activity Guidelines and become regularly physically active in many ways. Here are just two examples showing how a child and an adolescent can be physically active for at least 60 minutes each day over the course of a week.

These examples illustrate that even though the activity patterns are different, each young person is meeting the Guidelines by getting the equivalent of at least 60 minutes or more of aerobic activity each day that is at least moderate intensity. Both are also doing vigorous-intensity, muscle- strengthening, and bone strengthening activities on at least 3 days a week.

[Manzi: A 7-Year-Old Child](#)

Manzi participates in many types of physical activities in many places. For example, walking to school, fetching water, skipping, tree climbing. During break time, he plays on the swings and in the evening, he plays soccer before walking back home after school.

Manzi gets 60 minutes of physical activity each day that is at least moderate intensity. He participates in the following activities each day:

Monday: Walks to and from the well/bore hall (20 minutes), walks to and from school (30mins) plays during break time (10mins). He plays around the house when he gets back home. Tuesday: Walks to and from school (20 minutes), plays on the playground (25 minutes), fetching firewood (15 minutes).

Wednesday: Walks to and from school (20 minutes), plays actively with friends and skips around (25 minutes), runs (5 minutes), climbing hills (15 minutes).

Thursday: Walks to and from school while playing with friends (30mins), plays soccer (30 minutes).

Friday: Walks to and from school (20 minutes), plays actively with friends (25 minutes), and bicycles (15 minutes).

Saturday: do household chores such as rain water harvesting, car washing, cattle keeping, washing (30 minutes), climbs on playground equipment (15 minutes), and bicycles (15 minutes). Sunday: walks to and from church (10mins), shooting birds and running around (40mins),

plays tag with family (10 minutes).

Manzi meets the Guidelines by doing vigorous-intensity aerobic activities, bone-strengthening activities, and muscle-strengthening activities on at least 3 days of the week:

- **Vigorous-intensity** aerobic activities like skipping, running, soccer,
- **Bone-strengthening** activities like skipping, running and soccer.
- **Muscle-strengthening** activities like Carrying water jerrycans, playing on monkey bars, sit ups, tag and climbing.







Aerobics



Maria: A 16-Year-Old Adolescent

Maria participates in many types of physical activities in many places. For example, during physical education class, she plays tennis and does sit-ups and push-ups. She also likes to play basketball at the YMCA, do yoga, and go dancing with friends. Maria likes to take her dog on walks and hikes.

Maria gets 60 or more minutes of daily physical activity that is at least moderate intensity. She participates in the following activities each day:

Monday: Does housework including slashing, sweeping, washing and mopping (10 minutes), plays volleyball/netball at the school court after class (50 minutes).

Tuesday: Does housework (10 minutes), plays tennis (30 minutes), does sit-ups and push-ups (5 minutes), walks briskly with friends (15 minutes).

Wednesday: Does housework (10 minutes), plays volleyball at school court (50 minutes).

Thursday: Does housework (10 minutes), plays tennis (30 minutes), does sit-ups and push-ups (5 minutes), plays with children in the compound while babysitting (15 minutes).

Friday: Takes a brisk walk (45 minutes), washing dishes (30 minutes).

Saturday: Goes jogging (60 minutes), does yoga (30 minutes).

Sunday: football at home (60 minutes).

Maria meets the Guidelines by doing vigorous-intensity aerobic activities, bone-strengthening activities, and muscle-strengthening activities on at least 3 days of the week:

- **Vigorous-intensity** aerobic activities 4 times during the week: netball (Monday and Wednesday), jogging (Saturday and Sunday)
- **Bone-strengthening** activities 4 times during the week: netball (Monday and Wednesday), jogging (Saturday), playing basketball (Sunday)
- **Muscle-strengthening** activities 3 times during the week: sit-ups and push-ups (Tuesday and Thursday), yoga (Saturday).

NB: For students beyond the age 17 years but still in secondary school will undertake the school-based PA programs

Note: Physical Activity alone may not deliver your intended goal whether you are a child or an adult, whether you have an NCD or not. Other lifestyle modifications such as healthy diet, avoidance of tobacco and alcohol use, keeping a clean environment and proper health seeking behaviour will have to be applied concurrently with regular physical activity.

PHYSICAL ACTIVITY RECOMMENDATIONS FOR ADULTS

All adults should undertake regular physical activity. Physical activity can be undertaken as part of recreation and leisure (play, games, sports or planned exercise), transportation (wheeling, walking and cycling), work or household chores, in the context of daily occupational, educational, home and community sedentary practices. In adults, physical activity provides benefits for the following health outcomes: improved all-cause mortality, cardiovascular disease mortality, incident hypertension, incident site-specific cancers (bladder, breast, colon, endometrial, esophageal adenocarcinoma, gastric, and renal), incident type-2 diabetes, mental health (reduced symptoms of anxiety and depression); cognitive health, and sleep; measures of body fat may also improve. In order to reduce the risk of these NCDs the following are recommended for adults;

PHYSICAL ACTIVITY RECOMMENDATIONS FOR ADULTS 18–35 YEARS OLD

1. At least 150 -300 minutes (30-60 minutes daily for five days) of moderate-intensity aerobic physical activity throughout the week or at least 75-150 minutes (15-30 minutes daily for five days a week) of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity is recommended. (walking, brisk walking (walking fast), jogging, running, swimming, playing games e.g. soccer, tennis, volleyball, basketball, squash etc.)
2. Do muscle-strengthening activities at moderate or greater intensity that involves all major muscle groups on 2 or more days a week. (e.g. free body weights (push-ups, squats, sit-ups, stair climbing, lunges, jumping jacks, rope skipping, climbing (stairs, mountain, hill), planks etc.)
3. For additional health benefits, this age group being physically abled, very active and energetic they may increase their moderate-intensity aerobic physical activity to more than 300 minutes per week, or more than 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity (variation of load) throughout the week.

PHYSICAL ACTIVITY RECOMMENDATIONS FOR ADULTS 36-45 YEARS OLD

1. At least 150 -300 minutes (30-60 minutes daily for five days) of moderate-intensity aerobic physical activity throughout the week or at least 50-75 minutes (10-15 minutes daily for five days a week) of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity is recommended. (inclined walking, brisk walking (walking fast), jogging, running, swimming, playing games e.g. soccer, tennis, volleyball, basketball, squash etc.)
2. Do muscle-strengthening activities at moderate or greater intensity that involves all major muscle groups (back, leg, shoulder, abdominal, hip) on 2 or more days a week. (e.g. free body weights (pushups, squats, sit-ups, inclined walking, lunges, jumping jacks, rope skipping, planks etc.)

3. Incorporate balance and flexibility/stretching (dynamic, static and passive) exercises into your daily exercise routine. (single leg standing with either eyes open or closed, tandem standing, calf Achillies stretch, quadricep standing stretch, hamstring stretch, pigeon stretch, straddle stretch) **PHYSICAL ACTIVITY RECOMMENDATIONS FOR ADULTS 46-54 YEARS OLD**

1. At least 150 -300 minutes (30-60 minutes daily for five days) of moderate-intensity aerobic physical activity throughout the week or 50-75 minutes (10-15 minutes daily for five days a week) of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity is recommended. (inclined walking, brisk walking (walking fast), jogging, running, swimming, playing games e.g. soccer, tennis, volleyball, basketball, squash etc.)

2. Incorporate more muscle-strengthening activities at moderate intensity (in terms of sets and repetitions) that involves all major muscle groups (back, leg, shoulder, abdominal, hip) on 2 or more days a week. This is based on your ability. (e.g. free body weights (pushups, squats, sit-ups, stair climbing, lunges, jumping jacks, rope skipping, planks etc.)

3. Continue balancing and stretching (dynamic, static and passive) exercises to specific muscle groups into your daily exercise routine. These include back exercises (planks, deadlifts, leg bends, seated leg touch etc.), lower body exercises (squats, sit and stand, lunges in variation, leg extension, leg press) and balance exercise (single leg standing with either eyes open or closed, tandem standing, calf Achillies stretch, quadricep standing stretch, hamstring stretch, pigeon stretch, straddle stretch).

PHYSICAL ACTIVITY RECOMMENDATIONS FOR ADULTS 55-64 YEARS OLD

1. At least 150 -300 minutes (30-60 minutes daily for five days) of light-moderate aerobic physical activity throughout the week. (inclined walking, light jogging, recreational swimming, recreational games e.g. soccer, tennis, volleyball, basketball, squash etc.)

2. Continue muscle-strengthening activities at light -moderate intensity (in terms of sets and

repetitions) that involves all major muscle groups (back, leg, shoulder, abdominal, hip) on 2 or more days a week. This is based on your ability. (e.g. free body weights (pushups, squats, sit-ups, stair climbing, lunges, jumping jacks, rope skipping, planks etc.)

3. Do light and modified balancing and stretching (dynamic, static and passive) exercises to specific muscle groups in your daily exercise routine. These include back exercises (planks, deadlifts, leg bends, seated leg touch etc.), lower body exercises (squats, sit and stand, lunges in variation, leg extension, leg press), breathing exercises (meditation, yoga, massage) and balance exercise (single leg standing with either eyes open or closed, tandem standing, calf Achillies stretch, quadricep standing stretch, hamstring stretch, pigeon stretch, straddle stretch).

Sedentary Behaviour Recommendation

In adults, higher amounts of sedentary behaviour are associated with all-cause mortality, cardiovascular disease mortality, cancer mortality and incidence of cardiovascular disease,

cancer and type-2 diabetes. It is recommended that: Adults should limit the amount of time spent being sedentary and replace this time with physical activity of any intensity (including light intensity) provides health benefits. To help reduce the detrimental effects of high levels of sedentary behaviour on health, adults should aim to do more than the recommended levels of moderate- to vigorous intensity physical activity.

Good practice statements.

- Doing some physical activity is better than doing none.
- If adults are not meeting these recommendations, doing some physical activity will benefit their health.
- Adults should start by doing small amounts of physical activity, and gradually increase the frequency, intensity and duration over time.

GETTING AND STAYING ACTIVE: REAL - LIFE EXAMPLES

~~Adults are of every age with activity guidelines~~

physical activity. The choices of types and amounts of physical activity depend on personal health and fitness goals. Here are three examples.

[Mrs Kakooza: An Inactive Middle-Aged Woman \(55 Years\)](#)

Her goals: Mrs. Kakooza has been experiencing some muscle pains and weakness for the past 4 months and she is now unable to stand for more than 30 minutes without feeling immense pain. On her visit to the doctor, she is advised to go for weekly massages as well as do bone and muscle strengthening exercises. She sets her goal of doing 1 hour a day of moderate-intensity bone and muscle activity 5 days a week (a total of 300 minutes a week).

Starting out: Mrs Kakooza starts by incorporating stretching exercises 10 minutes morning and evening as well as rope skipping of up to 20 counts. Although physical activity tables show this to be light-intensity activity, it is appropriate moderate-intensity activity considering the already existing muscle fatigue and sedentary life.

Making good progress: Two months later, Mrs. Kakooza is now able to skip up to 200 counts, do 3 sets of 20 sit ups a day. She has recently started jogging non-stop for 15 minutes a day as well as using elastic bands while doing squats and leg raises twice each week for 10 minutes each activity.

Reaching her goal: Eventually, Mrs. Kakooza works up to 300 minutes a week of moderate-intensity bone and muscle strengthening activities. She no longer experiences muscle pain and

fatigue and overall feels healthier, stronger and less anxious about failing to do simple things such as sitting down or standing.

[Mr. Musoke: An Active Middle-Aged Man \(48 years\)](#)

His goal and current activity pattern: was a soccer player in his youth. His goal is to get back into shape by becoming a regular recreational runner. In addition to his job operating heavy equipment, he walks 30 to 40 minutes a day on 5 days each week. He also lifts weights 1 day a week.

Starting out: Mr. Musoke starts a walk/jog program with a co-worker and plans to gradually replace walking with jogging and then running. The first week he goes out for 5 days, walking for 25 minutes and jogging for 5 minutes. **Making good progress:** Each week, Mr.

Musoke gradually increases the time spent jogging (vigorous-intensity activity) and reduces the time spent walking (moderate-intensity activity). He also continues his weight-lifting program. **Reaching his goal:** Eventually, Mr. Musoke is running 15 minutes non-stop and jogging 20 minutes 4 days a week and lifting weights 2 days a week. He goes for a 30 minutes bicycle ride every Saturday and rests on Sunday. [Kyalimpa: A Very Active College-Aged Adult](#)

Key goals and current activity pattern: Kyalimpa (vigorous-intensity activity) 4 days each week for 90 minutes each day. She wants to reduce her risk of injury from doing too much of one kind of activity (this is called an overuse injury).

Starting out: Kyalimpa starts out by cutting back her basketball playing to 3 days each week. She begins to ride a bicycle to and from campus (30 minutes each way) instead of driving her car. She also joins a yoga class that meets twice each week.

Reaching her goal: Eventually, Kyalimpa is cycling 3 days a week to and from campus in addition to playing basketball. Her yoga class helps her to build and maintain strength and flexibility.

[Achieving Target Levels of Physical Activity: The Possibilities Are Endless](#)

These examples show how it's possible to meet the Guidelines by doing moderate-intensity or vigorous-intensity activity or a combination of both. Physical activity at this level provides substantial health benefits.

Ways to get the equivalent of 150 minutes (2 hours and 30 minutes) of moderate-intensity aerobic physical activity a week plus muscle-strengthening activities:

- Thirty minutes of brisk walking (moderate intensity) on 5 days, exercising with resistance bands (muscle strengthening) on 2 days;

- Twenty-five minutes of running (vigorous intensity) on 3 days, lifting weights on 2 days (muscle strengthening);
- Thirty minutes of brisk walking on 2 days, 60 minutes (1 hour) of social dancing (moderate intensity) on 1 evening, 30 minutes of mowing the lawn (moderate intensity) on 1 afternoon, heavy gardening (muscle strengthening) on 2 days;
- Thirty minutes of an aerobic dance class on 1 morning (vigorous intensity), 30 minutes of running on 1 day (vigorous intensity), 30 minutes of brisk walking on 1 day (moderate intensity), calisthenics (such as sit-ups, push-ups) on 3 days (muscle strengthening);
- Thirty minutes of biking to and from work on 3 days (moderate intensity), playing softball for 60 minutes on 1 day (moderate intensity), using weight machines on 2 days (muscle-strengthening on 2 days); and Forty-five minutes of doubles tennis on 2 days (moderate intensity), lifting weights after work on 1 day (muscle strengthening), hiking vigorously for 30 minutes and rock climbing (muscle strengthening) on 1 day.

WAYS TO BE EVEN MORE ACTIVE

For adults who are already doing at least 150 minutes of moderate-intensity physical activity, here are a few ways to do even more. Physical activity at this level has even greater health benefits.

- Forty-five minutes of brisk walking every day, exercising with resistance bands on 2 or 3 days;
- Forty-five minutes of running on 3 or 4 days, circuit weight training in a gym on 2 or 3 days;
- Thirty minutes of running on 2 days, 45 minutes of brisk walking on 1 day, 45 minutes of an aerobics and weights class on 1 day, 90 minutes (1 hour and 30 minutes) of social dancing on 1 evening, 30 minutes of mowing the lawn, plus some heavy garden work on 1 day;
- Ninety minutes of playing soccer on 1-day, brisk walking for 15 minutes on 3 days, lifting weights on 2 days; and
- Forty-five minutes of stationary bicycling on 2 days, 60 minutes of basketball on 2 days, calisthenics on 3 days.

ADULTS 65 YEARS AND OLDER (ELDERLY)

It's never too late to start becoming physically active, and to feel the associated benefits. "Too old" or "too frail" are not reasons for an older person not to undertake physical activity. Most physical activities can be adjusted to accommodate older people with a range of abilities and health problems, including those living in residential care facilities.

For adults of this age group, physical activity includes recreational or leisure-time physical activity, transportation (e.g. walking or cycling), occupational (if the person is still engaged in work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

In order to improve cardio-respiratory and muscular fitness, bone and functional health, and reduce the risk of NCDs, depression and cognitive decline, the following are recommended

Physical Activity Recommendations for Older Ugandans (65 years and above)

1. Older persons should undertake regular physical activity, no matter their age, weight, health problems or abilities.
2. Older persons should do at least 150 -300 minutes weekly (30-60 minutes daily) of light moderate intensity aerobic physical activity for substantial health benefits.
3. Older persons should continue doing light and modified muscle-strengthening activities at moderate intensity that involve all major muscle groups (back, leg, shoulder, abdominal, hip) on 2 or more days a week, as these provide additional health benefits.
4. Older persons may increase light intensity aerobic physical activity to more than 300 minutes; or do more than 150 minutes of moderate-intensity aerobic physical activity; or an equivalent combination of light- and moderate-intensity activity throughout the week, for additional health benefits.
5. As part of their weekly physical activity, older persons should do varied multicomponent physical activity that emphasizes functional balance and strength training at light or moderate intensity, on 3 or more days a week, to enhance functional capacity and to prevent falls.
6. Older persons may increase light to moderate-intensity aerobic physical activity to more than 300 minutes per week depending on their level of fitness for additional health benefits.

RECOMMENDATION FOR PHYSICALLY INACTIVE OLDER PERSONS

We recommend that:

- Older persons should limit the amount of time spent being physically inactive and replace it with physical activity of any intensity (including light intensity) provides health benefits. To help reduce the detrimental effects of high levels of physical inactive behaviour
- on health, older adults should aim to do more than the recommended levels of light to moderate physical activity. This category may benefit from professional therapists like physiotherapist, occupational therapist, skilled health worker and others.

Good Practice Statements

- Doing some physical activity is better than doing none.
- If older persons are not meeting the recommendations, doing some physical activity will bring benefits to health.
- Older persons should start by doing small amounts of physical activity, and gradually increase the frequency, intensity and duration over time.
- Older persons should be as physically active as their functional ability allows, and
- adjust their level of effort for physical activity relative to their level of fitness.

GETTING AND STAYING ACTIVE:REAL- LIFE EXAMPLES

The following examples show how different people with different living circumstances and levels of fitness can meet the Guidelines for older adults.

Akello: A 75-Year-Old Woman Living Independently in Her Own Home

Akello gets the equivalent of 180 minutes (3 hours) of moderate-intensity aerobic activity each week plus muscle-strengthening activity 3 days a week.

- She participates regularly in an exercise class at her local senior center. The class meets Mondays, Wednesdays, and Fridays. It includes 30 minutes of aerobic dance, which she can do at moderate intensity, as well as 20 minutes of **strength training**, a 5-minute warm-up, a 5-minute cool-down, and some stretching exercises.
- On most Sundays, she visits her favorite park and walks a loop trail with several friends, which takes them about 45 minutes. The trail is hilly, so about 30 minutes of the walk is moderate-intensity walking for her, and about 15 minutes is vigorous intensity (the 15 minutes of vigorous intensity counts as 30 minutes of moderate-intensity walking).

- She adds at least an additional 30 minutes of walking each week in different ways. For example, she walks her grandson to school, she walks to her friends' homes, or she walks at the mall during shopping trips.

Nandyose: a 75-year-old lady,

She has problems in her right limb, stretching from the lower back to the leg. She also has lower back problems.

1. Runs and jogs on a treadmill or walks for 30-45 minutes per day
2. Takes care of her chicken like feeding them, carrying their food (5-10kgs x3 in a container), and water (4 liters x 5) twice every day.
3. Helps in preparing meals and a little bit of household chores.
4. Once in a while, she goes for physiotherapy once in a fort night because of her limb and back.

Bosco: A 65-Year-Old Man

Bosco has been active and fit all his life. He does 180 minutes of relatively vigorous-intensity activity each week, plus muscle-strengthening activities on 3 days.

- Six days a week, Anthony gets up early and runs 3 miles, which takes about 30 minutes.
- With help from staff at his community's fitness facility, Anthony designed a weight-lifting program using weight machines. He does this program 3 days a week.

PREGNANT AND POSTPARTUM WOMEN

In pregnant and postpartum women, physical activity provides the following health benefits: decreased risk of pre-eclampsia, gestational hypertension, gestational diabetes, excessive gestational weight gain, delivery complications and postpartum depression, and reduced newborn complications, adverse effects on birth weight and risk of stillbirth.

These guidelines address physical activity and maternal and fetal health outcomes during pregnancy and the postpartum period. They are for all pregnant and postpartum women, irrespective of age, cultural background, or socioeconomic status. Pregnant and postpartum women should be under the care of a health-care provider for antenatal and postnatal care who can advise on special considerations given their medical history and any contraindications to participating in physical activity during pregnancy or in the postpartum period. Women with complications associated with pregnancy or delivery should seek advice from skilled health workers. Pregnant and postpartum women should try to meet these

The recommendations where possible, as able, and without contraindication. recommendations include:

1. All pregnant and postpartum women should engage in regular physical activity.

2. All pregnant and postpartum women should at least engage in 150 minutes per week (30 minutes per day for five days) of light to moderate intensity aerobic physical activity (walking, swimming, pelvic stretching exercises) for substantial health benefits.
3. All pregnant and postpartum women should engage in a variety of aerobic and muscle-strengthening activities. Adding gentle stretching may also be beneficial.
4. Those who habitually engaged in vigorous-intensity aerobic activity, or who were physically active, can continue these activities during pregnancy and the postpartum period. Due to the vulnerability and critical conditions of pregnant and postpartum women, extra care and consideration should be taken into consideration to improve safety when undertaking physical activity. Some of the safety considerations are:

- Avoid physical activity during excessive heat, especially those in hot environments.
- Stay hydrated by drinking water before, during, and after physical activity. Avoid
- participating in activities which involve physical contact; pose a high risk of falling; or might limit oxygenation (such as activities at high altitude, when not normally living at high altitude) Avoid physical activities that require lying on the back after the first trimester
- of pregnancy
When considering athletic competition, or exercising significantly above the recommended
- guidelines, pregnant women should seek guidance from a skilled health worker.

- Pregnant women should be informed by their health-care provider of the danger signs alerting them as to when to stop; or to limit physical activity and consult a skilled health worker immediately in case of any danger signs
- Return to physical activity gradually after delivery, and in consultation with a skilled health worker especially in the case of delivery by Caesarean section.

Note: The following physical activities are not recommended for pregnant women especially in the second and third trimester; running, skipping, biking, contact games like football, netball, wrestling, boxing, rugby and extreme balance exercises.

Good practice statement

- Doing some physical activity is better than doing none. Where pregnant and postpartum women are unable to meet the recommendations, doing some physical activity is still beneficial to their health.
- Pregnant and postpartum women should start by doing small amounts of physical activity, and gradually increase frequency, intensity and duration over time.
- Pelvic floor muscle training may be performed on a daily basis to reduce the risk of urinary incontinence.
- Pregnant and postpartum women should limit the amount of time spent being physically inactive and replace this time with physical activity of any intensity (including light intensity) provides health benefits.

CHAPTER THREE

PHYSICAL ACTIVITY FOR PEOPLE LIVING WITH NON-COMMUNICABLE DISEASES

Individuals with NCDs should engage in regular physical activity because it improves treatment outcomes, reduces the risk of developing associated complications and quality of life. The type and amount of physical activity should be individualized according to the condition and age group. Individuals with NCDs may regularly consult healthcare providers about the types and amounts of activity appropriate for them.

Children, adolescents, adults and older persons living with disability and the following conditions can achieve important health benefits from physical activity and should try to meet these recommendations where possible and as able. **For cancer survivors** - physical activity improves all-cause mortality, cancer-specific mortality, and risk of cancer recurrence or second primary cancer;

For people living with hypertension- physical activity improves cardiovascular disease mortality, disease progression, physical function, health-related quality of life;

For people living with type-2 diabetes -physical activity reduces rates of mortality, prevent and delay development of type 2 diabetes and complications, control of blood glucose levels and lowers of heart disease and nerve damage. **For people living with HIV** -physical activity can improve physical fitness and mental health (reduced symptoms of anxiety and depression).

For people who have had stroke- physical activity helps to improve the mobility of the affected body parts, improve body coordination, muscle rebuilding and blood circulation, which will limit the adverse effects of stroke. **For people who have had accidents**- physical activity helps to improve the mobility of the affected body parts, improve body coordination, muscle rebuilding and blood circulation, which will limit the adverse effects of the accident.

Note: The Physical activity for stroke and accident cases should be individualized hence need for skilled health worker support.

RECOMMENDATIONS:

a) CHILDREN, ADOLESCENTS AND ADULTS WITH NCDs:

Depending on the one's illness, they are also entitled to benefit from physical activity as this will be beneficial to their physical, physiological, social, mental and health wellbeing. The types of Physical activity they will engage in will be guided by a qualified health worker or fitness therapist. Physical activity remains part of care and prevention (this means stopping the disease from being acquired or advancement of the disease)

PHYSICAL ACTIVITY FOR CHILDREN AND ADOLESCENTS (5-17 YEARS) AND ADULTS (18 YEARS AND ABOVE) LIVING WITH DISABILITIES

Many of the health benefits of physical activity for children, adolescents and adults without disability also relate to those living with disability.

Recommendations:

b) For children and adolescents with disability:

1. *Should do at least an average of 60 minutes per day of moderate-to vigorous-intensity, mostly aerobic, physical activity, across the week.*
2. *Vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone should be incorporated at least 3 days a week.*
3. *For physically impaired children they can engage in activities of light to moderate intensity because of varying abilities. They can also do functional gymnastic activities.*
4. *Children with mild intellectual disabilities can engage in vigorous intensity exercises and those with severe intellectual disabilities can engage in mild activities.*
5. *Children with hearing impairment can engage in vigorous and moderate intensity exercises using sign language to communicate.*
6. *Children with visual impairment can participate in moderate and light intensity activities.*

Note: Children with disabilities play modified games that suit their disabilities.

C) For adults with disability:

1. All adults living with disability should engage in regular physical activity.
2. These physical activities should be individualized depending on the type of disability and physical ability of the individual.
3. Physically impaired adults can engage in activities of light to moderate intensity because of varying abilities. They can also do functional gymnastic activities.
4. Adults with mild intellectual disabilities can engage in vigorous intensity exercises and those with severe intellectual disabilities can engage in mild activities.
5. Adults with hearing impairment can engage in vigorous and moderate intensity exercises using sign language to communicate.
6. Adults with visual impairment can participate in moderate and light intensity activities.

How exercise contributes to weight loss

In the first 20-30 minutes of aerobic exercises the body uses stored glucose to provide energy to the tasks at hand. After which the body sends signals to start using stored fats as a source of energy hence burning excess fats leading to weight loss.

To maintain weight an individual should maintain the duration, frequency and intensity of a particular aerobic and strengthening exercise. E.g. incorporating just 15 minutes of moderate exercise such as walking for 1.5km on a daily basis may burn up to 100 extra calories, if no extra calories are consumed afterwards. Burning 700 calories a week may equal to 5kgs of weight loss over one year.

Disclaimer: *Physical activity alone may have no impact on weight loss. Other factors such as healthy diets, adequate sleep, regulated stress levels, good health status can contribute a lot towards weight loss even in absence of physical activity. Good practice statements*

- Doing some physical activity is better than doing none. If children, adolescents and adults living with disability are not meeting these recommendations, doing some physical activity will bring benefits to health.
- Children, adolescents, adults and older adults living with disability and chronic conditions should start by doing small amounts of physical activity and gradually increase the frequency, intensity and duration over time.
- There are no major risks for children, adolescents and adults living with disability engaging in physical activity when it is appropriate to an individual's current activity level, health status and physical function; and the health benefits accrued outweigh the risks.
- Children, adolescents and adults living with disability may need to consult a health-care professional or other physical activity and disability specialist to help determine the type and amount of activity appropriate for them.

CHAPTER FOUR

TAKING ACTION: INCREASING PHYSICAL ACTIVITY LEVELS OF UGANDANS

Physical inactivity is a risk factor to NCDs including cardiovascular diseases, diabetes, cancers, chronic obstructive pulmonary diseases as well as mental health illnesses which have increasingly become causes of morbidity and mortality in the Ugandan population.

Given the increasing trend in Uganda's rate of urbanization, rapid lifestyle changes and emergence of artificial intelligence associated with urbanization¹, it is important to retain and promote physical activity. To accomplish this goal, public health research suggests the use of a

“socio-ecologic”

approach. This comprehensive approach involves action at all levels of society: individual, interpersonal, environmental and public policy. Example actions include:

- Individual level: Personal goal setting such as weight management, fitness, sports and others
- Interpersonal level: Social support and encouragement to be active
- Organizational: Promotion of physical activity as part of worksite health promotion
- programs
- Environmental: Good access to parks and recreational facilities in neighborhoods (community), road networks
- Promotion of policies that support individuals, families and communities that want to
- promote physical activity.

WHAT CAN ADULTS DO TO GET ENOUGH PHYSICAL EXERCISE Adults can find advice on how to be active from many sources, including fitness professionals, health-care providers, books, peers and the Internet. Here are three commonly cited steps adults can take to help meet the Guidelines.

1. Personalize the Benefits of Regular Physical Activity

Adults need to identify personal values and benefits of regular physical activity. Different reasons are key motivators to be active,

- Provides opportunities to enjoy recreational activities, often in a social setting
- Improves personal appearance
- Physical activity is a non-medicinal method of treating NCDs as part of life style modification
- Physical activity helps one maintain desired body weight. Improves the quality of sleep

¹ <https://www.statista.com/statistics/447899/urbanization-in-ugan>

- Improves the quality of sleep
- Reduces feelings of low energy
- Gives older adults a greater opportunity to physically live more independently in the community
- Gives one a chance to live a healthy lifestyle hence being productive

2. Set Personal Goals for Physical Activity

Individuals should set goals for activity that allow them to achieve benefits they value. Simple goals are fine. For example, a brisk walk for 50 minutes or more 3 days a week may be just the right approach for someone who wants to increase both physical activity and social opportunities.

In setting goals, people can consider doing a variety of activities and try both indoor and ~~and~~ outdoor activities. In particular, community playgrounds, compounds homes/workplaces and recreation areas in Uganda offer opportunities to experience nature and be physically active at the same time.

The best physical activity is the one that is enjoyable enough to do regularly.

3. Develop Knowledge to Attain Goals

It is important to learn about the types and amount of activity needed to attain personal goals.

This can be attained through use of technology, websites and personal fitness trainers. For example, if weight loss is a goal, it's useful to know that vigorous-intensity activity can be much more time-efficient in burning calories than moderate-intensity activity. If running is a goal, it's important to learn how to reduce risk of injuries by selecting an appropriate training program (time, frequency, distance, speed, techniques) and proper shoes. If regular walking is a goal, learning about neighborhood walking trails and paths can help a person attain the goal.

HOW CAN WE HELP CHILDREN AND ADOLESCENTS GET ENOUGH PHYSICAL ACTIVITY? Many children and adolescents are naturally physically active and they need opportunities to be active and to learn skills. They benefit when they are encouraged by parents, peers, teachers, guardians, coaches and other adults. Adults can promote age-appropriate activity in youth through these steps:

- Provide time for both structured and unstructured physical activity during school and outside of school. Provide children and adolescents with positive feedback and good role models. It is very important to practice what you teach in order to model and encourage an active lifestyle among children and adolescents. Encourage children and adolescents with Praise, rewards, and encouragement Than using physical activity as punishment which does not help children to be active.

- Help young people learn skills required to do physical activity with safety precautions. They need to understand how to regulate the intensity of activity, increase physical activity gradually over time, set goals, use protective gear and proper equipment use, safe environment, follow rules, and avoid injuries.
- Promote activities that set the basis for a lifetime of activity. Children and adolescents should be exposed to a variety of activities, including active recreation, team sports, and individual sports. In this way, they can find activities they can do well and enjoy. Include exposure to activities that adults commonly do, such as walking, jogging, bicycling, hiking, and swimming that might be enjoyable for both the adults and children.

School-Based Approach:

Schools are a key setting to focus on given the significant amount of time children spend there. Schools can undertake a combination of strategies and approaches to help children be more active, including:

- Creating infrastructure (e.g. playgrounds) and policies (mandatory exercise periods) to encourage physical activity for all children depending on their health conditions
- Collecting valid reliable data and using analytical tools and systems to understand children physical activity needs and fitness levels, and promoting approaches that are effective in changing physical activity behaviors and, ultimately health outcomes; More emphasis on exercise/physical activity-related activities in the overall assessment of learners;
- Maintaining strong physical activity programs that engage children in moderate- to vigorous- intensity physical activity for at least 60% of quality physical education class time; Providing a variety of activities and specific skills so that learners can be physically active not just during class, but throughout the day and across the school year; and
- Providing qualified professionals who are trained in teaching methods to engage learners in physical education.

WHAT CAN THE WORKPLACE DO TO PROMOTE PHYSICAL ACTIVITIES

1. Encouraging use of stairs instead of lifts for those that can walk
2. The work place can motivate employees to participate in physical exercises through cost sharing of session fees so that employees can easily afford their share.
3. Encourage departmental, organizational sports teams for competition, wellness and fitness for example by hiring experts who can encourage and support staff to do physical activity
4. Encourage departmental, organizational sports teams for competition, wellness and fitness

for example by hiring experts who can encourage and support staff to do physical activity

What can communities and government do to help people be active

Actions by communities and government can influence whether regular physical activity is an easy choice these include;

- Communities can provide many opportunities for physical activity, such as walking trails, bicycle lanes on roads, sidewalks, and sports fields.
- Organizations in the community have a role to play as well. Schools, places of worship, worksites, and community centers can provide opportunities and encouragement for physical activity. Enactment and strict implementation of Acts of parliament and regulations that encourage
- and support physical activity for example the regulation of fitness centers and gyms. All government MDAs should develop and implement workplace physical activity
- policies for example weekly physical exercises, gyms and workout areas. Participation in the commemoration of national physical activity day every year.
- Increased and widespread awareness about the importance of physical activity through the media, local government authorities among others.
- Organize community physical activity competitions

Use Evidence-Based Approaches and Tailor Them to the Needs of Individual Communities

To be effective, physical activity promotion efforts should use an “evidence-based” approach. The CDC’s *Guide to Community Preventive Services*¹ has reviewed many community-level approaches to promote physical activity, including these five strongly recommended strategies:

- Community-wide campaigns that combine physical activity messaging (distributed through television, newspapers, radio, social media, and other avenues such as use of community Village Health Teams and leaders with activities such as physical activity counseling, community health fairs, and the development of walking trails).
- Point-of-decision prompts to encourage stair use. These are signs placed at points where people make the decision either to use the stairs or to use an elevator or escalator. The signs encourage the active option of stair use. Physical education classes to increase activity.
- Physical education classes should use a curriculum that increases the amount of time learners spend physically active during class. (physical activity classes should be more practical than theoretical)
- Approaches that increase the reach of individual-level interventions. For example, evidence-based, individual-level interventions can reach more people when they are delivered in group settings or over the telephone.

- Approaches that increase the reach of individual-level interventions. For example, evidence-based, individual-level interventions can reach more people when they are delivered in group settings or over the telephone.
- Interventions that increase social support for physical activity. These interventions start or enhance social-support networks, and include efforts such as organizing a buddy system (two or more people who set regular times to do physical activity together), walking groups, and community dances.

Programs to create or enhance access to places to be physically active. This can include building walking trails and providing public access to school gymnasiums, playgrounds, or community centers. This also includes worksite activity programs that provide access to onsite or offsite fitness rooms, walking breaks, or other opportunities to engage in physical activity. Interventions to improve access should also include outreach that increases awareness of the opportunity to be physically active.

- *Government and all government MDAs are supposed to develop workplace physical activity policies for instance the minister of public service recently wrote a circular promoting weekly physical exercises in all government ministries as a measure of good health among civil servants. Government has promoted physical activity through commemoration of national physical activity day every year.*

Implementing community-level approaches to physical activity requires collaboration across sectors.

MULTISECTORAL INVOLVEMENT IN PROMOTING PHYSICAL ACTIVITY

Physical activity interventions require multisectoral involvement. It involves collaboration and coordination between various sectors to create environment and policies that support and encourage regular physical activity. Below are key roles of different MDAs and private sector in promoting physical activity.

- Office of the Prime minister: can promote physical activity coordination of all government agencies.
- Office of the President: Can issue a presidential initiative on physical activity and also officiate events encouraging physical activity.
- Ministry of Public service: Promote physical activity in all MDAs through directing that all should carryout weekly physical activity.
- **Ministry of Health (MoH)/ Public Health entities:** Public health departments can monitor community progress in providing places and opportunities to be physically active and can track changes in the proportion of the population meeting the *Physical Activity Guidelines*. Before physical activity is done, there is a need for a pre- physical activity fitness test/screening. They can also take the lead in setting objectives and coordinating activities among sectors. Public health departments and organizations can

disseminate appropriate messages and information to the public about physical activity, surveillance and research. Health-care providers can assess, counsel, and advise patients on physical activity and how to do it safely. Health-care providers can model healthy behaviors by being physically active themselves.

- **Ministry of Education and Sports.** The education sector takes a lead role in providing physical education, after-school sports, and public access to school facilities during after-school hours. **Ministry of Local Government:** can direct all local governments to start
 - weekly physical activity for employees. Can also encourage local governments to include physical activity in their planning.
 - Ministry of Finance can provide enough funding for physical activity activities.
- **Ministry of Tourism.** Can ensure all tourism sites and hotels have designated areas for physical activity. Can also regulate the use of gyms.
 - . Ministry of Gender can promote equal P.A for all.
- **Ministry of Information Communication.** Can advocate for physical activity through the media and other online platforms
- **Ministry of Justice, Law and order sector.** Concern about crime can deter people from outdoors recreation. Law enforcement can promote a safe environment that facilitates outdoor activity.
- **Ministry of Lands, Housing and Urban development.** Urban planning. The Guide to Community Preventive Services recommends both street-scale and community-scale design principles to promote physical activity. Urban planners have a lead role in implementing design principles to promote physical activity providing access to places for active recreation, such as playgrounds, hiking, biking trails, basketball courts, sports fields, and swimming pools. Architects and builders can design and construct buildings with active options, such as access to stairs. Campuses should allow pedestrians pleasant and efficient methods of walking within and between buildings.
Ministry of Works and Transport. The transportation sector has a lead role in designing and implementing options that provide areas for safe walking and bicycling. Mass transit systems also promote walking, as people typically walk to and from transit stops. Programs that support safe walking and bicycling to school help children be more physically active.
- **Ministry of Agriculture:** Can encourage Ugandans to stay physically active through agricultural activities or planned workouts.
- **Government Agencies** (UNBS, URA, NDA, UBC, UCC, UNRA, NWSC, NPA etc.) can promote P.A among employees in Uganda.

- **Private sector.** Employers and private organizations can encourage workers to be physically active, facilitate active transportation by supplying showers and secure bicycle storage, and provide other incentives to be active. Health and fitness facilities and community programs can provide access to exercise programs and equipment for a broad range of people, including older adults and people with disabilities. Local sports organizations can organise road races and events for the public. Senior centers can provide exercise programs for older adults.

Academia: The academia through research and surveillance can bridge many gaps in

- promotion and implementation of physical activity guidelines and projects.

Civil Society Organizations: Civil society organization can implement projects that

- promote physical activity in the community and encourage their employees to live a physically active life. **Religious and cultural sectors:** faith-based organizations and culturally based
- organizations can support community physical activity initiatives financially or by providing space for programs.

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