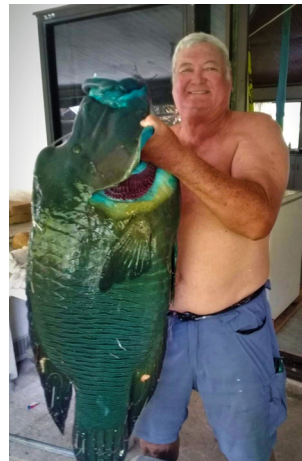


Cook Islands Physical Activity & Sedentary Behavior Guidelines for Everyone 2023



TE MARAE ORA
COOK ISLANDS Ministry of Health



Pacific Community
Communauté du Pacifique



EUROPEAN UNION



PACIFIC RESEARCH CENTRE FOR THE PREVENTION OF OBESITY AND NON-COMMUNICABLE DISEASE



World Health Organization

Representative Office for the South Pacific

Cook Islands Physical Activity & Sedentary Behavior Guidelines for Everyone

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Contributors

This document builds on the Pacific Guidelines for Physical Activity for Adults, 2010, and has been adapted primarily from WHO Guidelines on Physical Activity and Sedentary Behavior 2020 (1) and the WHO Guidelines on physical activity, sedentary behaviors, and sleep for children under 5 (2).

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No conflicts of interest were declared.

The document has been reviewed by XXX for input on cultural and regional adaptations and appropriateness XXXX.

The document has been reviewed by **Juana Willumsen**, *WHO*, to ensure that adaptation did not lose fidelity to the evidence.

Background

Physical activity is critical to human health. Regular physical activity helps to prevent and manage a variety of health conditions, improves mood and sleep, boosts energy, and supports healthy aging. Adopting a healthy lifestyle that includes regular physical activity is one of the most important things that people can do to improve health and wellbeing.

Globally, one in four adults and three in four adolescents do not meet the global recommendations for physical activity (1). Physical inactivity is one of the four leading risk factors for the growing global burden of obesity and Non-Communicable Diseases (NCDs). Four to five million deaths each year could be averted if these recommendations were met globally.

The world continues to change and modernize in ways that reduce both the need and opportunity to be physically active. Modernization and mechanization made lives easier for the production of goods and getting places. Now electronics make work and learning easier and more accessible. These advancements have benefits. However, they also create challenges to achieving adequate physical activity and often promote inactivity.

In the Pacific, the NCD crisis is well-known. Pacific Island countries and areas have been working hard to tackle the burden of NCDs and their risk factors, especially since the adoption of the NCD Roadmap by the Joint Forum Economic and Pacific Health Ministers in 2014 (4) and [Te Papa Tutara A Te Marae Ora: Cook Islands National Health Roadmap 2017–2036](#).(9)

Still, NCD rates are increasing and physical activity targets are not yet met. It is worrisome that children and adolescents are less active than adults, as many lifelong lifestyle habits are developed early in life.

Global targets are to reduce levels of physical inactivity, those not meeting recommendations, by 15% by 2030.

Conversely, excessive sedentary behavior, including sitting and use of screen time, is a risk factor for poor health. The diagrams below demonstrate that increasing activity and reducing sedentary behavior improve health outcomes. While the guidelines state that more is better for health, this is not meant to be extreme and unlimited. There are health benefits to be gained by exceeding 300 minutes per week of activity, however, too much intensity or duration of physical activity can result in injury. For those who choose to participate in high levels of activity, there is a greater need for awareness of preventing injury. It is also impractical for physical activity to create imbalance in life and take up time that is needed for other things.

These guidelines include recommendations to limit sedentary behavior to improve health and reduce the risk of a variety of noncommunicable disease and other health challenges. The best levels of physical activity for good health is a range. These guidelines report the minimum levels needed for good health and note that more is better. That doesn't mean there is not an upper limit. Extreme amounts of physical activity can increase risk of injury and harm.

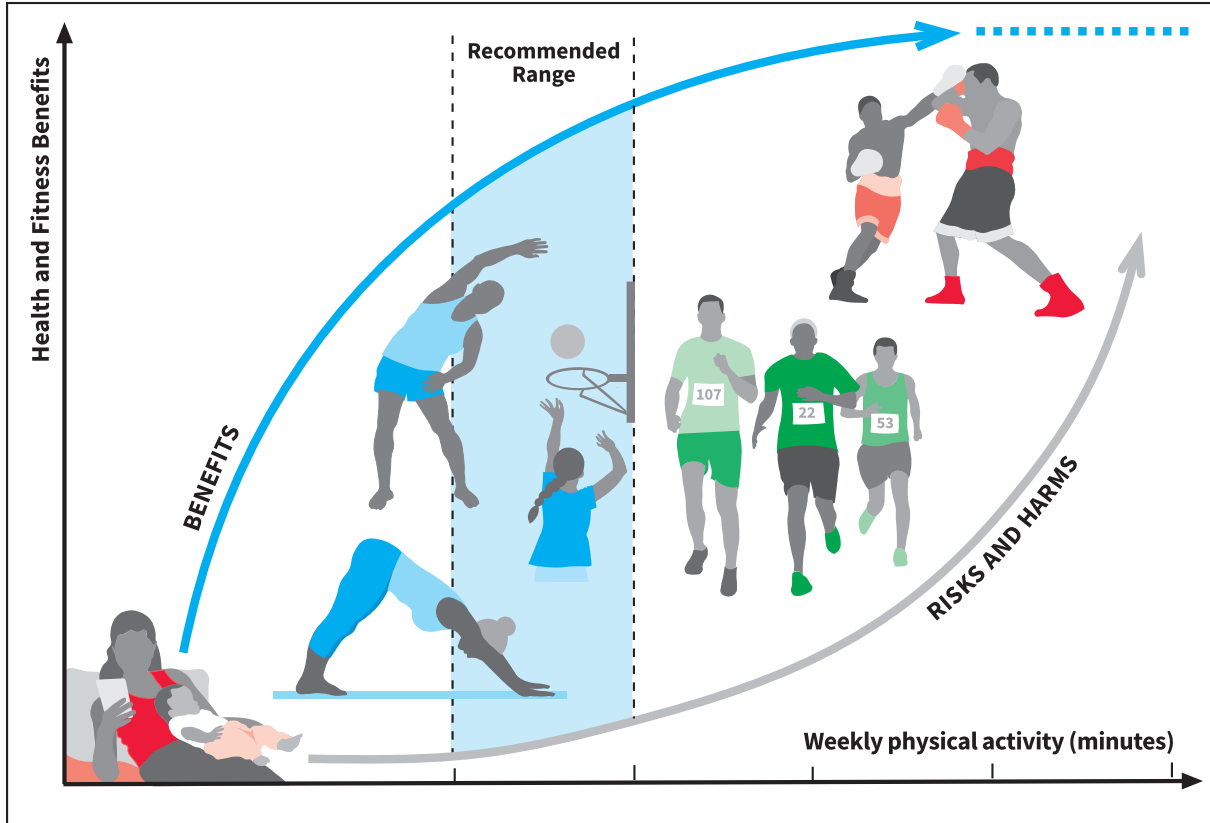


Figure 1. Dose-response relationship of physical activity and health.

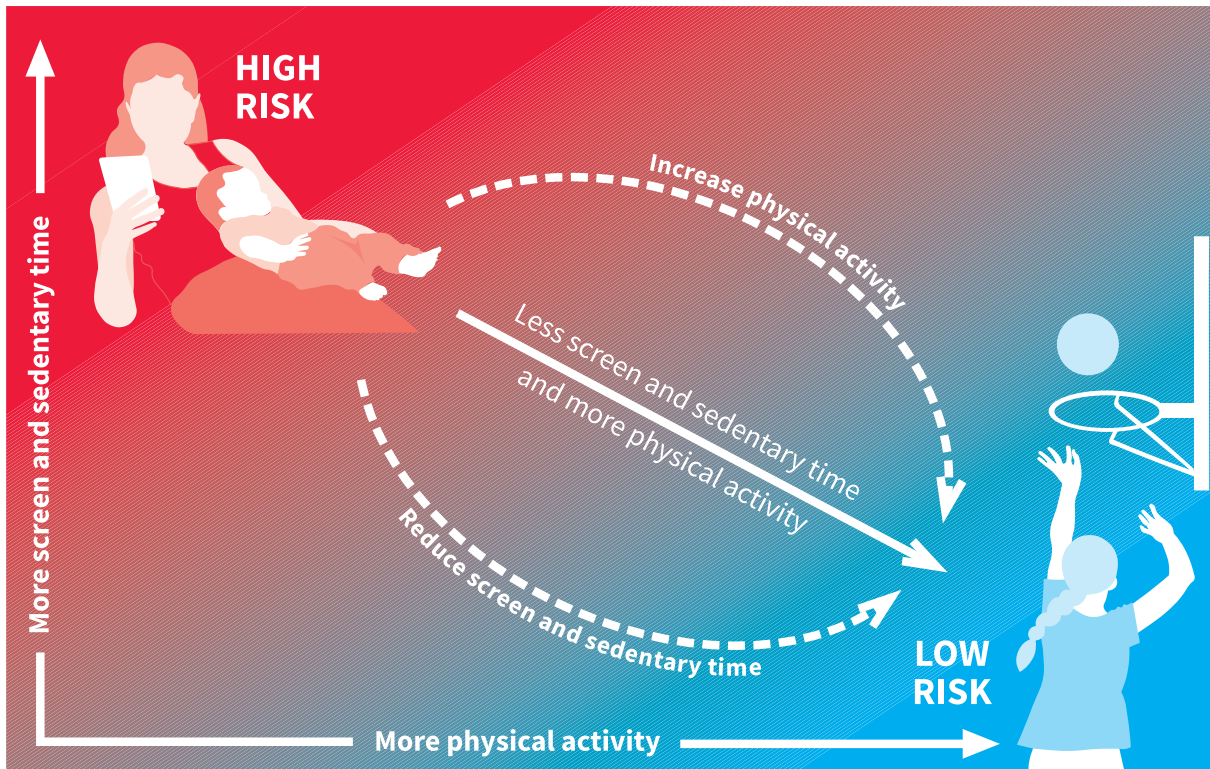


Figure 2. Move more, sit less for lower health risk.

In Pacific Island countries, like the rest of the world, many people are meeting the minimum levels of physical activity required for good health.

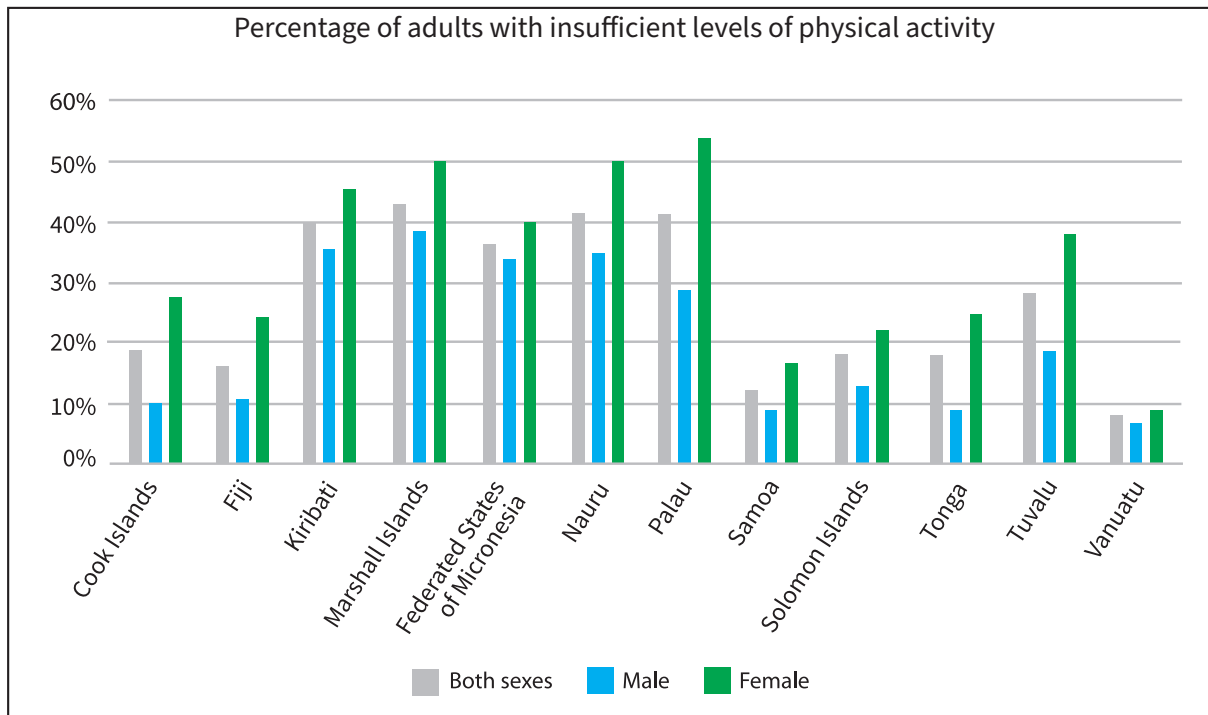


Table 1. Percentage of adults not meeting physical activity guidelines in Pacific Island Countries and areas¹

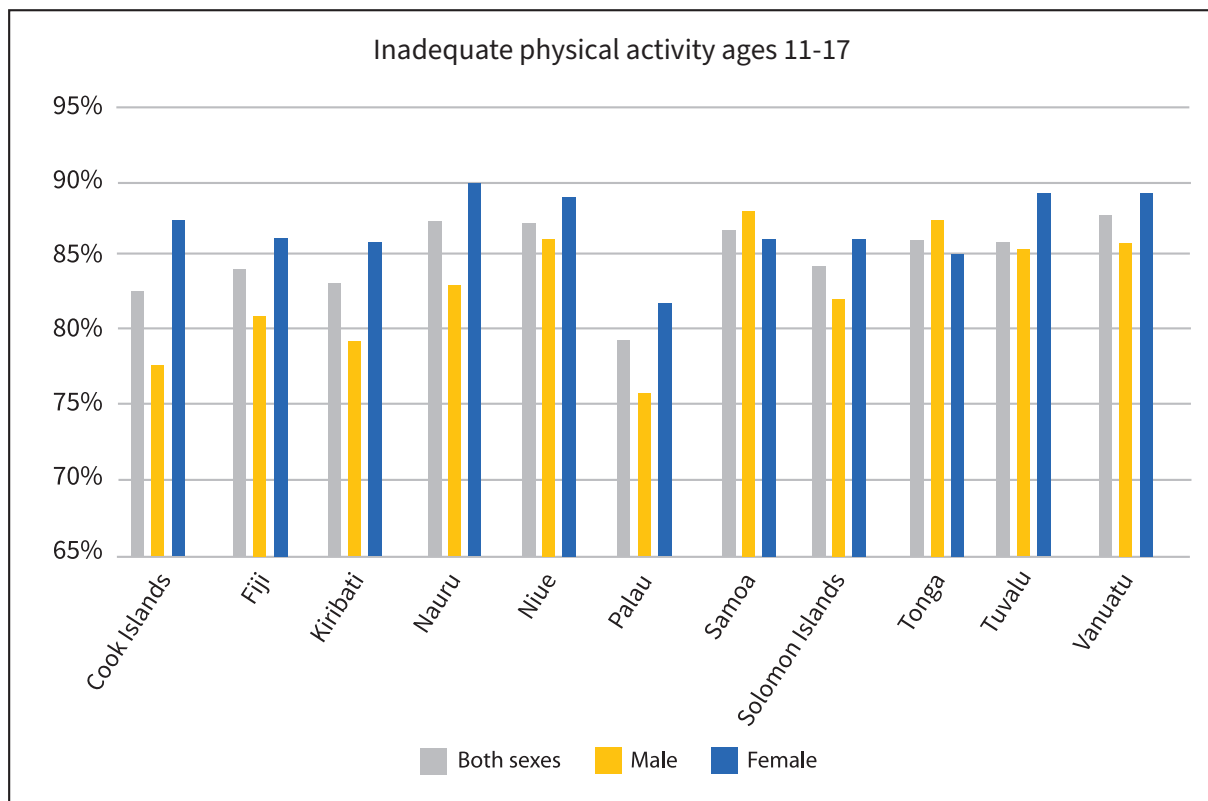


Table 2. Percentage of adolescents not meeting physical activity recommendations in Pacific Island Countries and areas¹

1. WHO Global Health Observatory GHO | By indicator (who.int) 2016

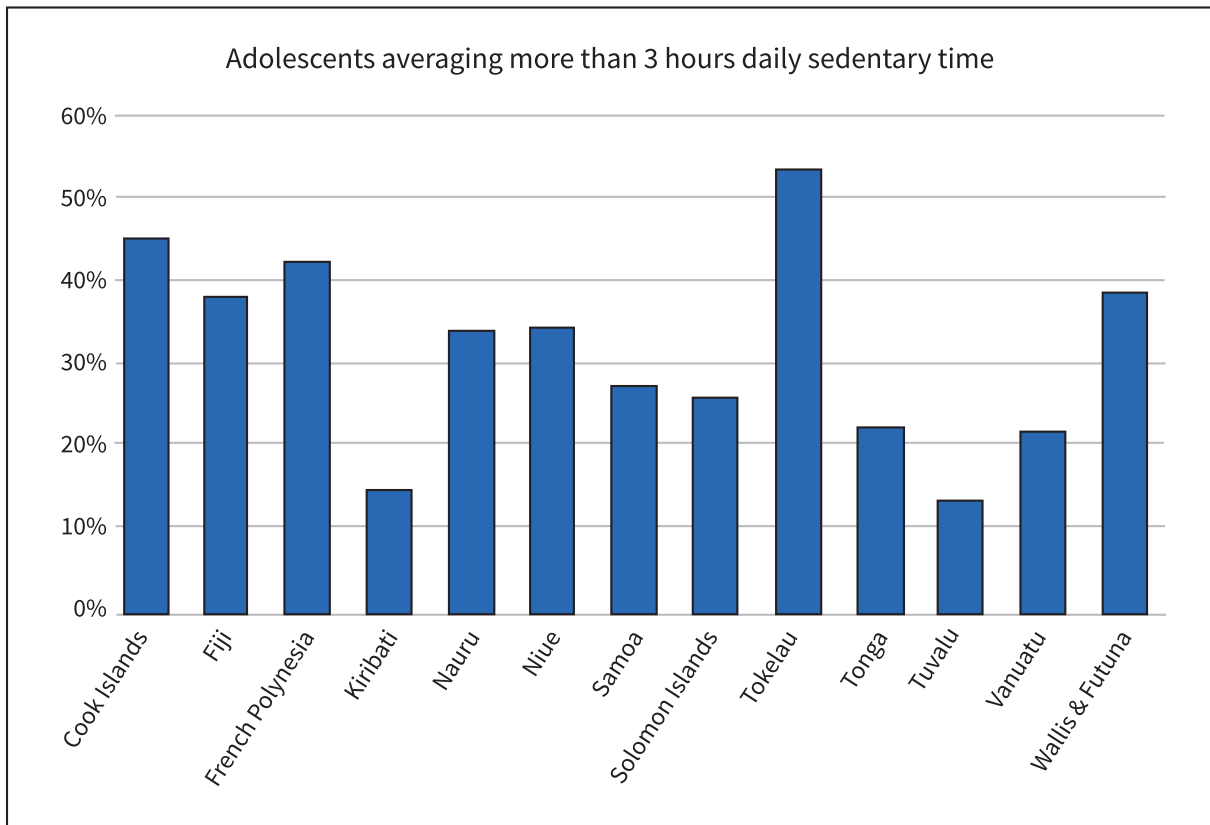


Table 3. Percentage of adolescents exceeding recommendations for sedentary time²

The Pacific Physical Activity Guidelines are updated on evolving evidence across all age groups, abilities, and conditions.

The process to update these included:

- A Pacific technical workgroup;
- Field testing in Pacific Island countries and areas;
- Focus group discussions; and
- Verification by global experts that this Pacific adaptation continued to maintain fidelity to the evidence.

2. Per latest GSHS Survey. COK 2015, FJI 2016, PYF 2015, KIR 2011, NRU 2011, NIU 2010, WSM 2017, SLB 2011, TOK, 2014, TON 2017, TUV 2013, VUT 2016, WAF 2015.



Purpose

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This document is an adaptation of global WHO guidelines developed for the Pacific Island countries and areas. It is for the following target audiences:

- For individuals and the general public, this document provides recommendations for individuals to optimize health by understanding and implementing the guidelines in their daily lives.
- For healthcare providers and workers to support public health; and
- For policy makers, a guidance document to inform programs and policy that support population health and reduce NCDs.

The guidelines are based on the recently updated global guidelines published by WHO at the end of 2020. The WHO completed a robust review of the scientific evidence and global consultations to provide these updates (1). The adaptation process has considered the importance of fidelity to the global guidelines, and adaptations made are considered to be consistent with the global guidance. The WHO global guidelines are very similar to both New Zealand's (6) and Australia's (7) physical activity guidelines. In developing these new guidelines, the previous Pacific Guidelines for Physical Activity for Adults, developed in 2010 (8) have been considered.

Pacific Island Countries and areas are encouraged to adopt or adapt these guidelines as is best suited to promote physical activity and reduce sedentary behavior in the context of that country.

Glossary of Terms

Aerobic physical activity	Activity in which the body's large muscles move in a rhythmic manner for a sustained period of time. Aerobic activity is also called endurance activity and improves cardiorespiratory fitness. Examples are walking, swimming, running, and biking.
Anaerobic physical activity	Activity that consists of brief, intense bursts of exercise where oxygen demand surpasses oxygen supply. Examples are weightlifting and sprints.
Balance training	Static and dynamic exercises that are designed to improve an individual's ability to withstand challenges from postural sway or destabilizing stimuli caused by self-motion, the environment, or other objectives. Examples include mountain pose, tree pose, and Warrior III in yoga practice.
Bone-strengthening activity	Bone-strengthening activities produce an impact or tension force on the bone that promotes bone growth and strength. Examples include running, jumping rope, and lifting weights.
Cardiometabolic health	The relationship between blood pressure, blood lipids, blood sugar, and insulin and the effect on health.
Cardiorespiratory fitness (endurance)	A health-related component of physical fitness. The ability of the circulatory and respiratory systems to supply oxygen during sustained physical activity.
Cognitive function	Cerebral activities such as reasoning, memory, attention and language that leads to gaining information and knowledge—this includes learning.
Disability	An umbrella term for impairments, activity limitations, and participation restrictions.
Exercise	Subcategory of physical activity that is planned, structured, repetitive, and purposive with the aim of improving physical fitness. Exercise often performed at a greater intensity.
Fitness	A measure of the body's ability to function efficiently and effectively in work and leisure activities, and includes for example, physical fitness and cardiorespiratory fitness.
Flexibility	A health and performance-related component of physical fitness that is the range of motion possible at a joint.
Functional exercises	Exercises that can be imbedded into everyday tasks to improve lower-body strength, balance and motor performance. Examples include tandem and one-leg stands, squatting, chair stands, toes raises, and stepping over obstacles.
Household physical activity	Physical activity undertaken in the home for domestic duties such as cleaning, gardening, and caring for children.
Leisure physical activity	Activity performed at the discretion of the individual and is not an essential activity of daily living. Examples includes games, sports, traditional dancing, and recreational walking.

Light intensity physical activity	Incidental activities that do not result in a substantial increase in heart rate or breathing rate such as slow walking.
Major muscle groups	Includes the legs, back, abdomen, chest, shoulders, and arms.
Moderate-intensity physical activity	Moderate-intensity physical activity occurs when an individual experience some increase in breathing or heart rate during physical activity. However, it should still be possible to carry on a normal conversation (but not singing). Examples include walking briskly, gardening, dancing, swimming, bicycling, and scrubbing floors.
Muscle-strengthening activity	Physical activity and exercise that increase skeletal muscle strength, power, endurance, and mass such as resistance training or weight training.
Multi-component physical activity	Multi-component physical activity is important for older adults to improve physical function and decrease the risks of falls. Generally, these would combine all types of exercise including aerobic, muscle strengthening and balance strengthening.
Occupational/work	Physical activity performed for work such as cleaning houses, doing yardwork, or carrying boxes.
Physical activity	Any bodily movement produced by skeletal muscles that requires energy expenditure.
Physical inactivity	An insufficient amount of physical activity to meet recommendations to maintain health.
Recreational screen time	Time spent watching screens including TV, computers, and mobile devices that is not related to education or work.
Sedentary screen time	Time spent watching screens including TV, computers, and mobile devices. Does not include active screen-based games.
Sedentary behaviour	Any waking behavior that requires less than 1.5 MET of energy such as sitting, reclining, or lying. Most desk-based work or driving is sedentary. Any low-movement behaviors such as sitting and watching TV.
Sport	A wide range of activities performed within a set of rules and undertaken as a leisure or competitive activity.
Transport physical activity	Physical activity performed for the purposes of getting to and from places such as walking, cycling or use of non-motorized locomotion.
Vigorous (or high) intensity physical activity	When an individual experiences a substantial increase in breathing or heart rate while doing a physical activity. It should not be possible to carry on a normal conversation. Examples include jogging and running, rowing and canoeing, shoveling dirt or gravel, and bicycling uphill.



Key Messages

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Physical activity is good for hearts, bodies, and minds. Regular physical activity can prevent and help manage NCDs. Physical activity can also reduce symptoms of depression and anxiety, and enhance thinking, learning, and overall well-being.

Any amount of physical activity is better than none, and more is better. For health and wellbeing, get at least 30-60 minutes of moderate aerobic physical activity on at least five days of the week for all adults, and an average of 60 minutes of moderate aerobic physical activity per day for children and adolescents.

It is not too late to start now! If you are not physically active (moving much), start small and gradually increase until you can meet the recommendations.

All physical activity counts. Physical activity can be done as part of work, sport, and leisure or transport and household tasks. Be active every day in as many ways as you can, your way!

Muscle-strengthening benefits everyone. Older adults must add physical activities which emphasize balance and coordination, as well as muscle strengthening, to help prevent falls and improve health.

Too much sedentary behaviour can be unhealthy. Even low-intensity activity is better than sitting still.

Everyone can benefit from moving more and sitting less.

Physical activity guidelines

Physical activity is moving your body whether for recreation, work, activities of daily living, or getting places. Sedentary behavior is lack of movement or minimal movement.

These guidelines provide recommendations on the amounts and types of physical activity for people based on stage of life and/or health conditions to achieve health and fitness. Maintaining fitness as we age is important to be able to continue activities of daily living.

ACTIVITY TYPE	DESCRIPTIONS	EXAMPLES
Low intensity aerobic activity.	You can talk or sing.	A slow walk, washing dishes, sitting and fishing, or playing an instrument.
Moderate intensity aerobic activity	You can carry on a conversation.	Walking briskly, jogging, pushing a wheelbarrow, playing sports, leisurely cycling, heavy cleaning such as washing windows or floors, playing badminton, playing tennis.
High intensity aerobic activity	You may have difficulty talking.	Hiking, jogging, shoveling, carrying heavy items, fast cycling, fast swimming, dancing, playing basketball, soccer or singles tennis.
Bone-strengthening	Any weight-bearing activity is bone-strengthening.	Examples include walking, hiking, traditional dancing, tennis, gardening, and yoga
Muscle strengthening	Weight training or resistance.	Resistance bands, push-ups, pull-ups, sit-ups, walking, taking the stairs, swimming, carrying heavy loads to the market. Remember to use all your muscle groups.
Stretching	Stretching is when muscles are intentionally stretched to improve the muscles elasticity.	Stretching exercises.
Multi-component	Doing a variety of these activities to maintain function, balance, agility, and flexibility in order to prevent falls and injuries; and maintain quality of life.	Doing a variety of activities to improve all areas of fitness. For example, walking, lifting weights, and yoga.

INTENSITY: ■ Low ■ Moderate ■ Vigorous ■ Bone ■ Muscle ■ Stretching ■ Multi-Component



1

Guidelines for children under 5.

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Physical activity is critical to health and development. Young children should have opportunities to participate in a range of developmentally appropriate, safe and enjoyable play-based activities each day.

GOALS



Under 1 year

At least **30 mins** throughout the day of floor-based play (tummy-time). Less than one hour restrained in a swing or car seat.

Age 1-2 years

Variety of active play including moderate to vigorous activity.

At least **180 mins** spread throughout the day. **More is Better.**

Age 3-4 years

A variety of active play including moderate to vigorous activity.

At least **180 mins** spread throughout the day with at least **60 mins** being moderate to vigorous. **More is Better.**



INTENSITY: ■ Low ■ Moderate ■ Vigorous ■ Bone ■ Muscle ■ Stretching ■ Multi-Component



RECOMMENDATIONS

SLEEP TIME - DURING A 24-HOUR PERIOD

- **Infants (less than 1 year)** should have 14–17 hours (0–3 months of age) or 12–16 hours (4–11 months of age) of good quality sleep, including naps;
- **Children 1–2 years of age** should have 11–14 hours of good quality sleep, including naps, with regular sleep and wake-up times;
- **Children 3–4 years of age** should have 10–13 hours of good quality sleep, which may include a nap, with regular sleep and wake-up times.

Screen time not recommended for children under one; less than 60 minutes for children 1-4.

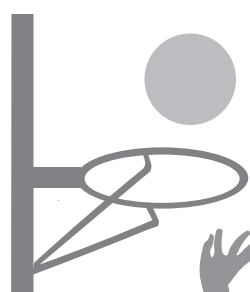


2 Guidelines

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for children & adolescents ages 5-17, including children with disabilities.

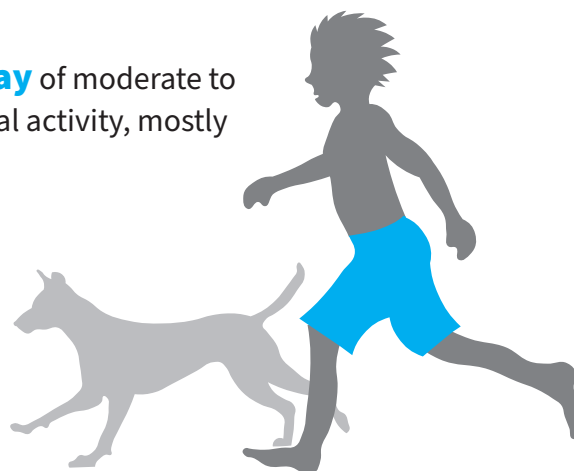
Physical activity for children and adolescents improves physical fitness, cardiometabolic health, bone health, ability to do well in school, and reduces the risk for depression and obesity. Children will benefit from regularly being active and meeting the recommended goals.



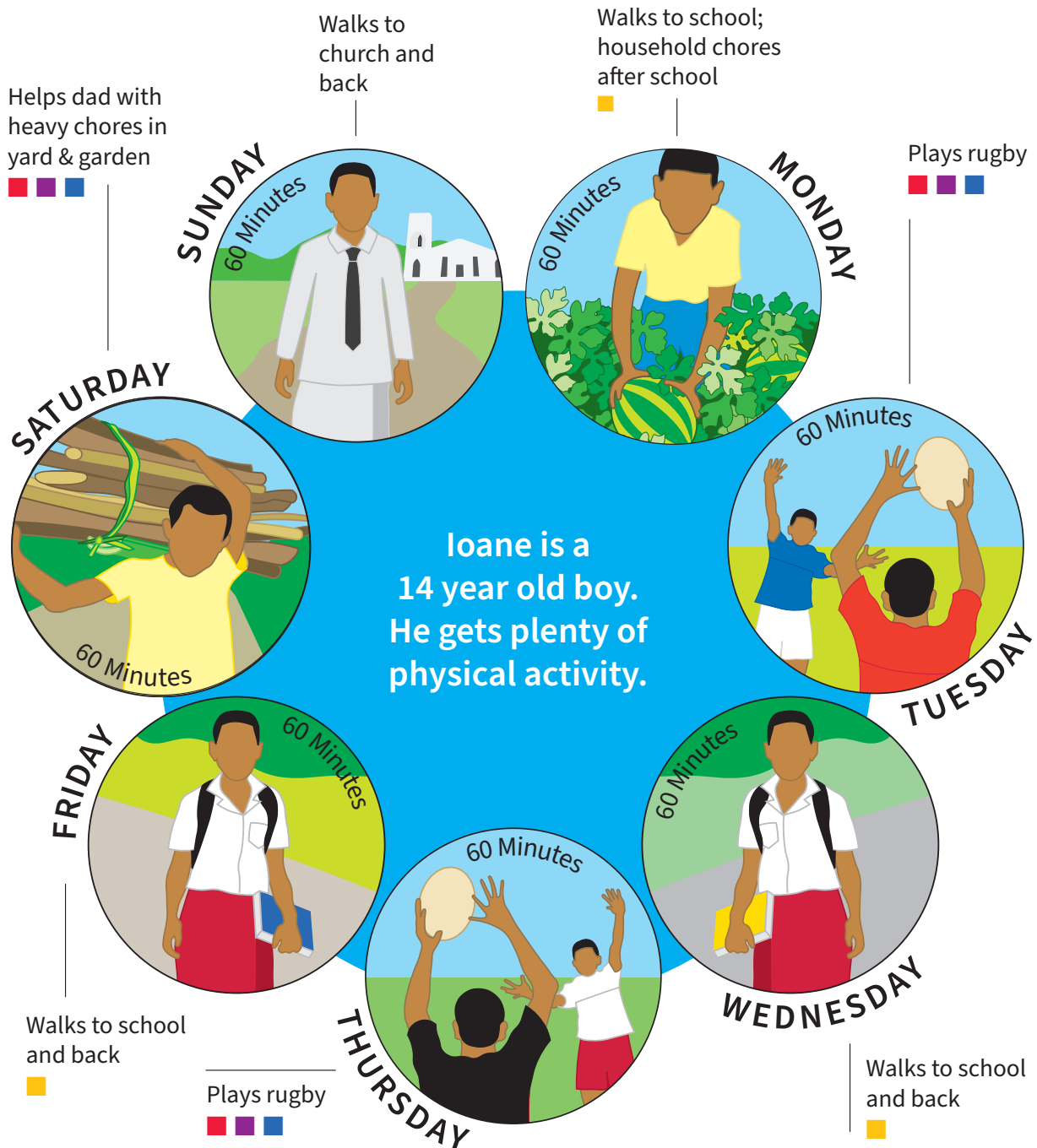
GOALS

At least **60 mins per day** of moderate to vigorous intensity physical activity, mostly aerobic.

On at least **3 days** a week vigorous intensity aerobic activities as well as those that strengthen muscle and bone.



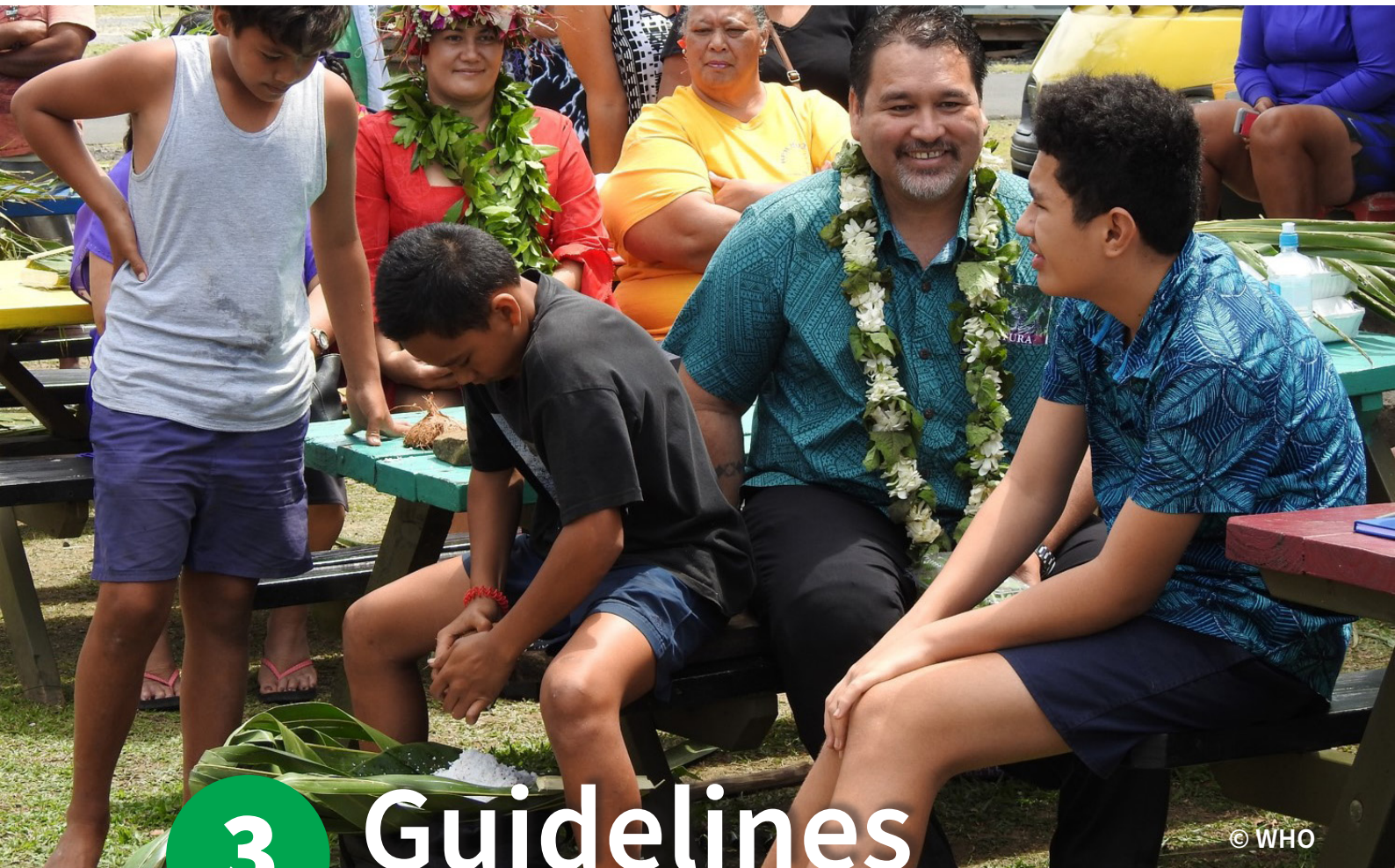
INTENSITY: ■ Low ■ Moderate ■ Vigorous ■ Bone ■ Muscle ■ Stretching ■ Multi-Component



RECOMMENDATIONS

- If you can't do that much, do something!
- If you aren't doing any, start small and gradually increase until you can meet the recommendations.
- Meeting the guidelines may require adaptations or additional equipment or support for children living with disabilities.

More is better.



3

Guidelines

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for adults ages 18-64, including those with disabilities and chronic diseases.

For healthy adults, and those living with chronic diseases or disabilities, physical activity can lengthen life, prevent or improve heart disease, high blood pressure, diabetes, and some cancers. It also improves mental health, cognitive health, sleep, and weight management.

All adults should be active regularly (unless there is a medical reason not to) for substantial health benefits.

GOALS

At least **30 mins** of moderate intensity

OR

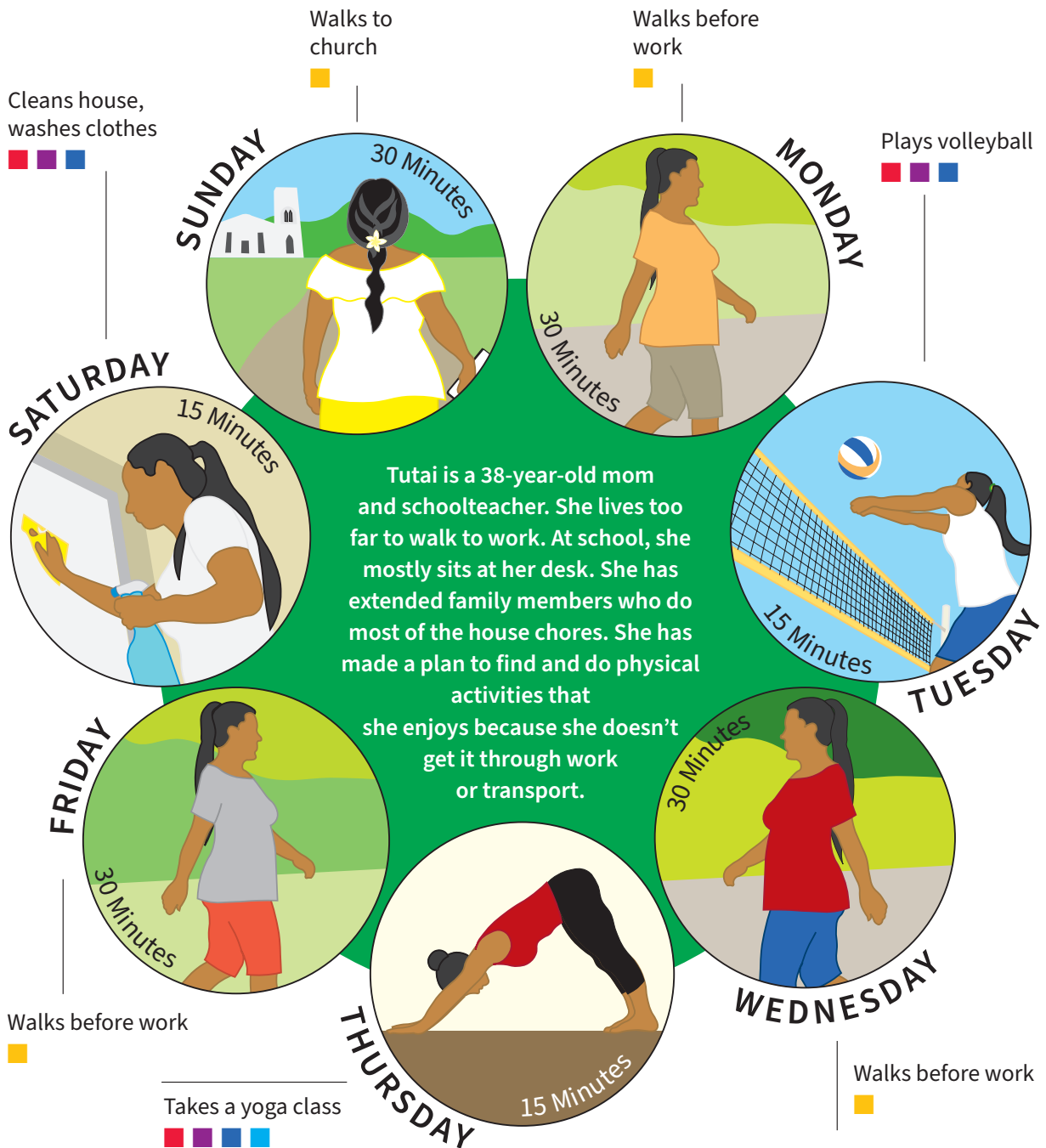
15 mins of high intensity physical activity **at least 5 days per week.**



For additional health benefits, adults should also do muscle-strengthening activities at a moderate or greater intensity that involves all major muscle groups on **2 or more days** per week.



INTENSITY: ■ Low ■ Moderate ■ Vigorous ■ Bone ■ Muscle ■ Stretching ■ Multi-Component



RECOMMENDATIONS

- If you can't do that much, do something!
- If you aren't doing any, start small and gradually increase.
- No matter age, weight, or health conditions it is important to be regularly active.
- Adults with chronic diseases and disabilities may need to consult with a physical activity specialist or health-care professional for advice on the types and amounts of activity appropriate for them. Additional equipment or support may be required for people with disabilities.



4

Guidelines

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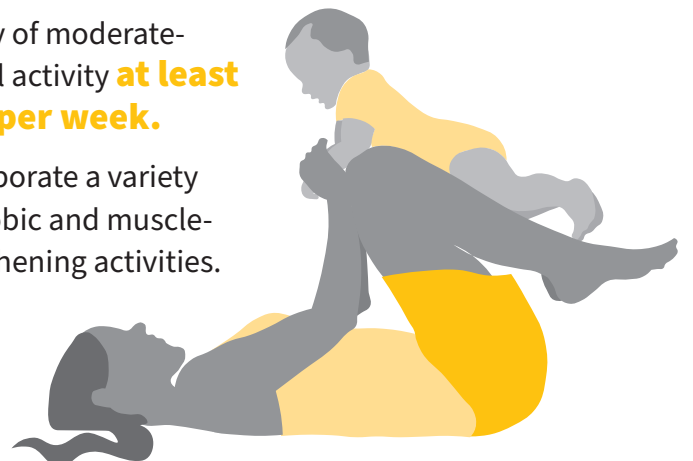
for pregnant and postpartum women.

Regular physical activity during pregnancy and postpartum provides benefits for both the mother and the baby including reduced risk of pre-eclampsia, gestational hypertension, gestational diabetes, excessive weight gain, delivery complications, postpartum depression, and fewer newborn complications. Unless there is a medical reason to limit physical activity, it is recommended that pregnant and postpartum women regularly participate in physical activity according to the types and times below.

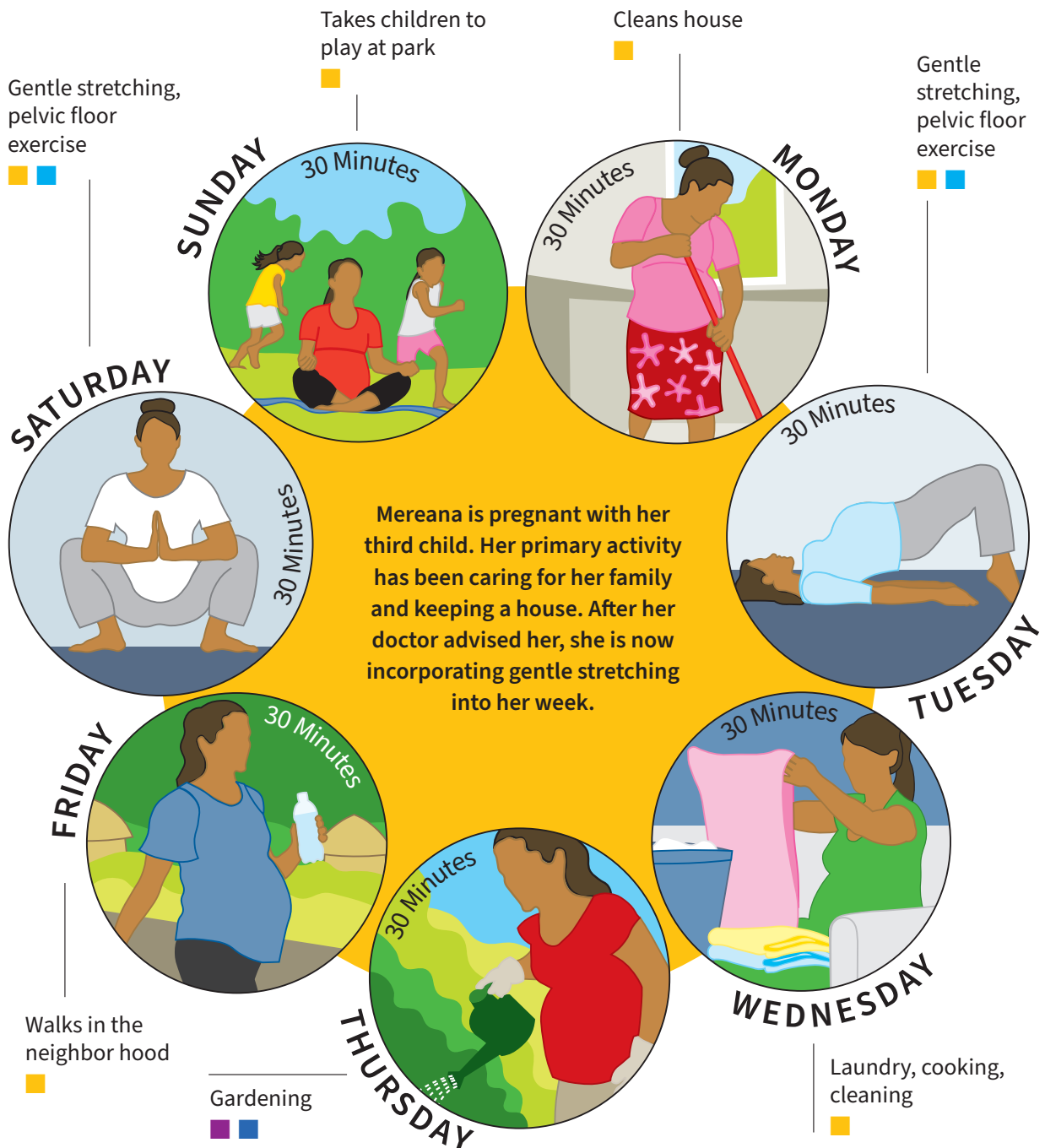
GOALS

At least **30 mins** per day of moderate-intensity aerobic physical activity **at least 5 days per week.**

Incorporate a variety of aerobic and muscle-strengthening activities.



INTENSITY: ■ Low ■ Moderate ■ Vigorous ■ Bone ■ Muscle ■ Stretching ■ Multi-Component



RECOMMENDATIONS

- If you can't do that much, do something!
- If you aren't doing any, start small and gradually increase until you can meet the recommendations.
- The amount and intensity of exercise that is appropriate is higher for those who were very active before pregnancy.
- Pelvic floor exercises maintain muscle tone, opens the pelvis, help with flexibility in the lower back and aids in recovery after delivery. This may prevent urinary incontinence due to stretching of the pelvic floor muscles in pregnancy and delivery.



5 Guidelines

for older adults age 65 and above, including those with disabilities and chronic diseases.

Physical activity for older adults can lengthen life, prevent or improve heart disease, high blood pressure, diabetes, and some cancers. It also improves mental health, cognitive health, sleep, and weight management. Physical activity can also help prevent falls and injuries and help maintain functional abilities. All older adults should be active regularly when not contraindicated and as their functional ability allows.



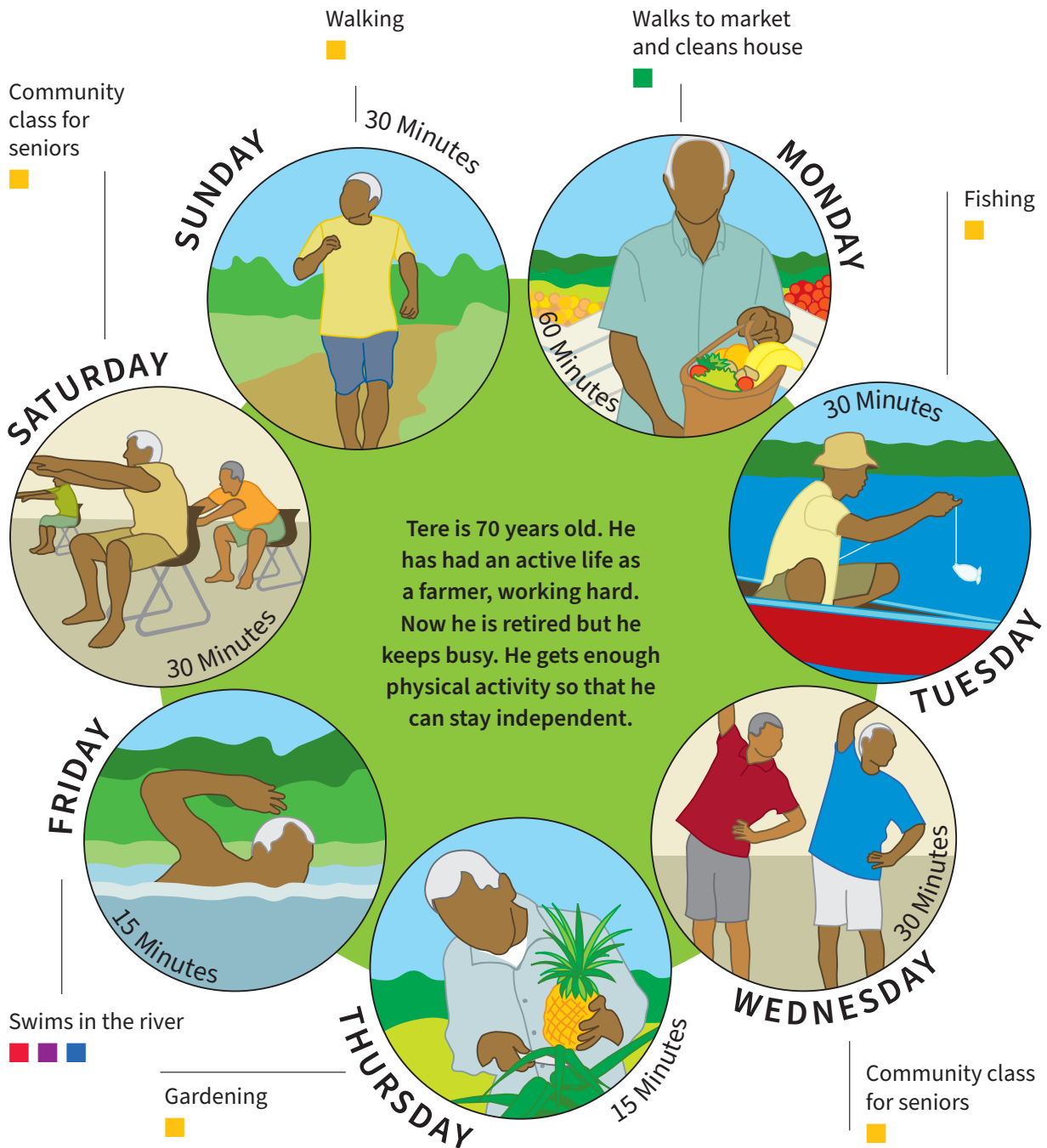
GOALS

At least **30 mins** of moderate intensity physical activity **OR 15 mins** of vigorous Intensity aerobic exercise **at least 5 days per week.**

Older adults should include multi component activity for balance and strength (all major muscle groups) at least **3 days** per week.

For additional health benefits, older adults should also do muscle-strengthening activities at a moderate or greater intensity that involves all major muscle groups on **2 or more days** per week.

INTENSITY: ■ Low ■ Moderate ■ Vigorous ■ Bone ■ Muscle ■ Stretching ■ Multi-Component



RECOMMENDATIONS

- If you can't do that much, do something!
- If you aren't doing any, start small and gradually increase.
- No matter age, weight, or health conditions it is important to be regularly active.
- Adults with chronic diseases and disabilities may need to consult with a physical activity specialist or health-care professional for advice on the types and amounts of activity appropriate for them. Additional equipment or support may be required for people with disabilities.

EVERY MOVE COUNTS

Being active has significant health benefits for hearts, bodies and minds.



LIMIT SCREENTIME AND SEDENTARY BEHAVIOUR

REDUCE LONG PERIODS OF SITTING



Children & adolescents ages 5-17

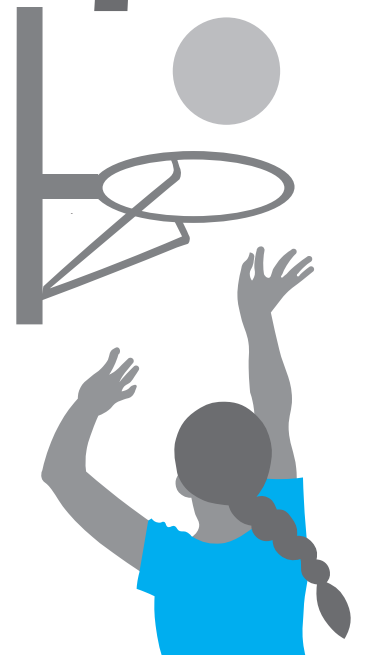
AT LEAST

60

MINUTES PER DAY

7

DAYS PER WEEK



Moderate to vigorous intensity physical activity. Include high-intensity and muscle strengthening

3 TIMES A WEEK

Children under 5



UNDER 1 YEAR

30

AT LEAST MINUTES PER DAY

Floor based tummy time

AGE 1-4 YEARS **180** **AT LEAST MINUTES PER DAY**

Moderate to vigorous intensity physical activity

CHILDREN BENEFIT FROM LOTS OF ACTIVE PLAY

**Adults
ages
18-64**



30

**MINUTES AT
LEAST 5 DAYS
PER WEEK**

Moderate to high intensity physical activity. Include strength training

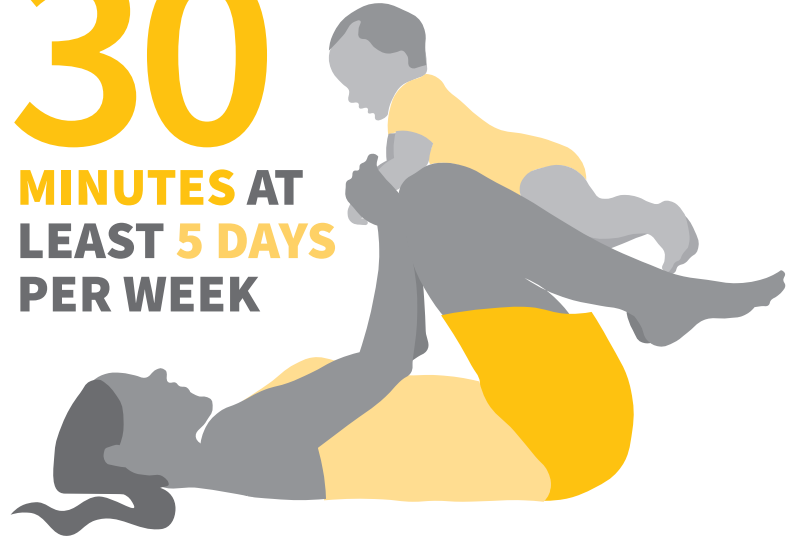
2 TIMES A WEEK

Pregnant & Postpartum Women

Moderate intensity physical activity. Include muscle strengthening and gentle stretching.

30

**MINUTES AT
LEAST 5 DAYS
PER WEEK**



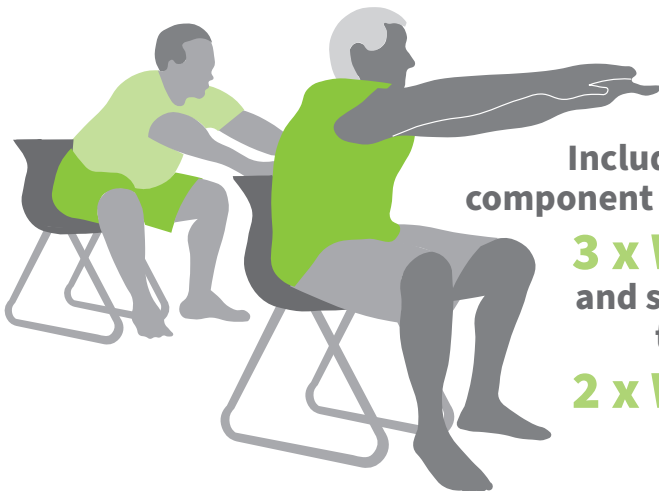
MORE TIME AND/OR INTENSITY HAS MORE HEALTH BENEFITS

Older adults age 65 and above

30

**MINUTES AT LEAST
5 DAYS PER WEEK**

Moderate to high intensity physical activity.

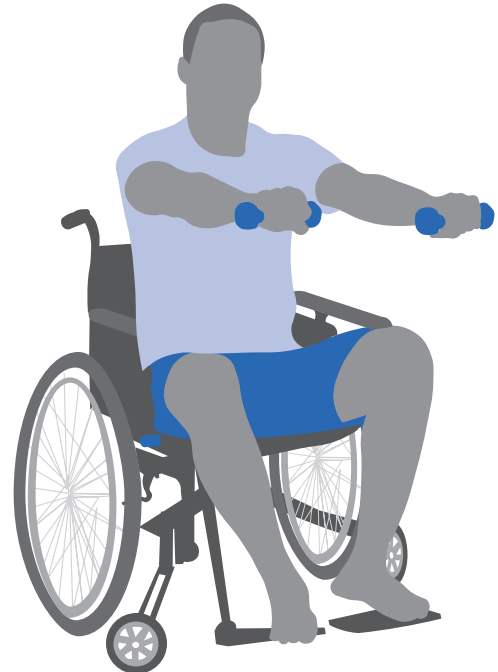


Include multi component activity

3 x WEEK
and strength training

2 x WEEK

Everyone who can



START SLOW AND ADAPT AS NEEDED



Sedentary behavior

Sedentary behavior is a lack of activity or movement. In our society, sedentary behavior is increasingly common. Increased use of screen time—watching tv, playing video games, and using smartphones all contribute. Lots of jobs involve sitting—at a desk, in a driver’s seat, or at a security station, for example. Sedentary behavior is a health risk.

These risks can be reduced by breaking up the time of inactivity. For example, if you work at a computer at a desk all day, stand up every hour and move. If you are hanging out with your family after dinner, play games, or read a book instead of watching a movie.

Recommendations for reducing sedentary activity—Move more and sit less.

Under one

- No screen time.
- Limit restrained times to less than 1 hour each.

Age 1-4

- No more than 60 minutes of sedentary screen time.

Age 5-17

- Limit sedentary time, especially recreational screen time.

All Adults

- Limit time being sedentary.
- Replace with any activity, even light intensity.

**Note: All adults include people age over 18, including people with chronic diseases, disabilities, and pregnant and postpartum women.*

Safety Considerations

Physical activity is important to health. However, there are times when it's important to be cautious and even limit physical activity.

Avoiding injury

- Start slow and build up the time and intensity of activity.
- Warm-up. If you are doing a moderate to vigorous-intensity workout, begin at a light to moderate intensity for the first few minutes. After the activity, cool down by returning to light-intensity activity for the last few minutes of activity.
- Don't stretch muscles until they are warm.
- Avoid over-stretching, especially bouncing.
- Wear reflective clothing when walking at night.
- Dress appropriately for the weather; hats, insect repellent, and sunscreen.
- Participate in vigorous activity in the morning or evening instead of the mid-day sun.
- Stay hydrated. Drink water.
- Find a safe environment to do physical activity.

Medical issues

Certain medical conditions or risks can be increased by physical activity, especially an abrupt start to vigorous-intensity physical activity. Most of the time increasing physical activity is beneficial and advised.

If you are older, have not been exercising, have cardiovascular disease (heart problems), pulmonary disease (lung problems), or a metabolic disease like diabetes you should seek medical advice before taking on physical activity.

Smokers who have high blood pressure, high blood lipids (cholesterol), impaired fasting blood glucose, obesity or a family history of heart attack are encouraged to seek medical advice before initiating an exercise regime.

If you are increasing your physical activity and you feel dizzy or short of breath, you may need to slow down and build up more gradually.



Traditional Activities

Traditional sports, games, dances, and other activities can be culturally important ways to promote and participate in physical activity.

UNESCO states that “Safeguarding and promoting Traditional Sports and Games as sports practices and intangible cultural heritage is a key challenge for the future development of sport and societies. TSG also enhance intercultural dialogue and peace, reinforce youth empowerment, and promote ethical sports practices.”

An example in the Cook Islands, ‘Peu Tupuna’ is recognized as part of the Cook Islands games which is held biannually. It includes Rore (stilts racing), Tiporo (lime juggling), Amo Manga (carrying coconuts) Ko Akari (coconut husking) and Rangaranga (weaving).

Peu Tupuna contributed to the livelihood of our ancestors. These games had multiple purposes. Primarily, they were to develop skills, agility, concentration and strength for survival and subsistence activities.

Peu Tupuna also brought people together. In the far north in Cook Islands waters sits Pukapuka and Nassau, who still practice a unique peu Maori (peu Tupuna) called Popoko (Pukapuka wrestling).

Popoko is for all ages both young and old. The objective of the sport is to get your opponent to the ground. This is an opportunity for the male warriors in the village to showcase their strength and power.

‘Peu Tupuna’ is well alive in the Pa Enea (islands outside of Rarotonga) but is a practice that is slowly losing interest with the youth of today.

Thankfully our ‘Peu Tupuna’ has always been a part of the Cook Islands games, Manea Games and Purapura games.

Meitaki maata

COOK ISLANDS TRADITIONAL GAMES TE AU TAREKAREKA TUPUNA O TE KUKI AIRANI



Juggling - Pepei Tuitui



Weaving - Rangaranga



Coconut Husking - Ko Akari



Stilts Fight - Ta Rore

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