Appendix 18:

Guidelines:

- Canadian 24-Hour Movement Guidelines for the Early Years (1-4 years)
- Canadian 24-Hour Movement Guidelines for Children and Youth (5-17 years)
- Canadian 24-Hour Movement Guidelines for Adults (18-64 years)
- Canadian 24-Hour Movement Guidelines for Older Adults (65+ years)
- Canadian Guideline for Physical Activity throughout Pregnancy

Resources:

- Make your whole day matter- Movement Guidelines Infographic
- Movement Counselling Tool for Adults aged 18-64 years
- Get Active Questionnaire

CANADIAN 24-HOUR MOVEMENT GUIDELINES FOR THE EARLY YEARS (0-4 YEARS):

An Integration of Physical Activity, Sedentary Behaviour, and Sleep

PREAMBLE

These Guidelines are relevant to all apparently healthy infants (less than 1 year), toddlers (1-2 years), and preschoolers (3-4 years), irrespective of gender, cultural background, or the socio-economic status of the family. These Guidelines may be appropriate for young children with a disability or medical condition; however, a health professional should be consulted for additional guidance.

To encourage healthy growth and development, young children should receive support from their parents and caregivers that allows for an active lifestyle with a daily balance of physical activities, sedentary behaviours, and sleep. Young children should participate in a range of developmentally appropriate, enjoyable, and safe play-based and organized physical activities in a variety of environments (e.g., home/child care/school/community; indoors/outdoors; land/water; summer/winter), both independently as well as together with adults and other children. For infants, supervised activities could include tummy time, reaching and grasping, pushing and pulling, and crawling. The quality of sedentary behaviour matters; for example, interactive non-screen-based behaviours (e.g., reading, storytelling, singing, puzzles) are encouraged. Developing healthy sleep hygiene in the early years is important; this includes having a calming bedtime routine with consistent bedtimes and wake-up times, avoiding screen time before sleep, and keeping screens out of the bedroom.

Following these Guidelines through the early years is associated with better growth, cardiorespiratory and musculoskeletal fitness, cognitive development, psychosocial health/emotional regulation, motor development, body composition, quality of life/well-being, as well as reduced injuries. The benefits of following these Guidelines exceed potential harms.

For those not currently meeting these 24-Hour Movement Guidelines, a progressive adjustment toward them is recommended. Adhering to these Guidelines may be challenging at times; resources are available for assistance at www.BuildYourBestDay.com/EarlyYears.

These Guidelines were informed by the best available evidence, expert consensus, stakeholder consultation, and consideration of values and preferences, applicability, feasibility, and equity. The specific Guidelines and more details on the background research, their interpretation, guidance on how to achieve them, and recommendations for further research and surveillance are available at www.csep.ca/guidelines.







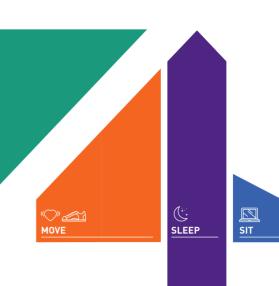




Canadian 24-Hour Movement Guidelines for the Early Years (0-4 years)

For healthy growth and development, infants, toddlers, and preschoolers should achieve the recommended balance of physical activity, high-quality sedentary behaviour, and sufficient sleep.

A healthy 24 hours includes:



MOVE

SLEEP

SIT

INFANTS (LESS THAN 1 YEAR)

Being physically active several times in a variety of ways, particularly through interactive floor-based play—more is better. For those not yet mobile, this includes at least 30 minutes of tummy time spread throughout the day while awake. 14 to 17 hours (for those aged 0-3 months) or 12 to 16 hours (for those aged 4-11 months) of good-quality sleep, including naps.

Not being restrained for more than 1 hour at a time (e.g., in a stroller or high chair). Screen time is not recommended. When sedentary, engaging in pursuits such as reading and storytelling with a caregiver is encouraged.

TODDLERS (1-2 YEARS)

At least 180 minutes spent in a variety of physical activities at any intensity, including energetic play, spread throughout the day—more is better.

11 to 14 hours of good-quality sleep, including naps, with consistent bedtimes and wake-up times.

than 1 hour at a time (e.g., in a stroller or high chair) or sitting for extended periods. For those younger than 2 years, sedentary screen time is not recommended. For those aged 2 years, sedentary screen time should be no more than 1 hour—less is better. When sedentary, engaging in pursuits such as reading and storytelling with a caregiver is encouraged.

Not being restrained for more

PRESCHOOLERS (3-4 YEARS)

At least 180 minutes spent in a variety of physical activities spread throughout the day, of which at least 60 minutes is energetic play—more is better.

10 to 13 hours of good-quality sleep, which may include a nap, with consistent bedtimes and wake-up times. Not being restrained for more than 1 hour at a time (e.g., in a stroller or car seat) or sitting for extended periods. Sedentary screen time should be no more than 1 hour—less is better. When sedentary, engaging in pursuits such as reading and storytelling with a caregiver is encouraged.

Replacing time restrained or sedentary screen time with additional energetic play, and trading indoor for outdoor time, while preserving sufficient sleep, can provide greater health benefits.











CANADIAN 24-HOUR MOVEMENT GUIDELINES FOR CHILDREN AND YOUTH:

An Integration of Physical Activity, Sedentary Behaviour, and Sleep

PREAMBLE

These guidelines are relevant to apparently healthy children and youth (aged 5–17 years) irrespective of gender, race, ethnicity, or the socio-economic status of the family. Children and youth are encouraged to live an active lifestyle with a daily balance of sleep, sedentary behaviours, and physical activities that supports their healthy development.

Children and youth should practice healthy sleep hygiene (habits and practices that are conducive to sleeping well), limit sedentary behaviours (especially screen time), and participate in a range of physical activities in a variety of environments (e.g., home/school/community; indoors/outdoors; land/water; summer/winter) and contexts (e.g., play, recreation, sport, active transportation, hobbies, and chores).

For those not currently meeting these 24-hour movement guidelines, a progressive adjustment toward them is recommended. Following these guidelines is associated with better body composition, cardiorespiratory and musculoskeletal fitness, academic achievement and cognition, emotional regulation, pro-social behaviours, cardiovascular and metabolic health, and overall quality of life. The benefits of following these guidelines far exceed potential risks.

These guidelines may be appropriate for children and youth with a disability or medical condition; however, a health professional should be consulted for additional guidance.

The specific guidelines and more details on the background research informing them, their interpretation, guidance on how to achieve them, and recommendations for research and surveillance are available at www.csep.ca/guidelines.









GUIDELINES

For optimal health benefits, children and youth (aged 5–17 years) should achieve high levels of physical activity, low levels of sedentary behaviour, and sufficient sleep each day.

A healthy 24 hours includes:



SLEEP



SWEAT

MODERATE TO VIGOROUS PHYSICAL ACTIVITY

An accumulation of at least 60 minutes per day of moderate to vigorous physical activity involving a variety of aerobic activities. Vigorous physical activities, and muscle and bone strengthening activities should each be incorporated at least 3 days per week;

STEP

LIGHT PHYSICAL ACTIVITY

Several hours of a variety of structured and unstructured light physical activities;

SLEEP

SLEEP

Uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 years and 8 to 10 hours per night for those aged 14–17 years, with consistent bed and wake-up times;

SIT

SEDENTARY BEHAVIOUR

No more than 2 hours per day of recreational screen time; Limited sitting for extended periods.

Preserving sufficient sleep, trading indoor time for outdoor time, and replacing sedentary behaviours and light physical activity with additional moderate to vigorous physical activity can provide greater health benefits.

CANADIAN 24-HOUR MOVEMENT GUIDELINES FOR ADULTS AGED 18-64 YEARS:

An Integration of Physical Activity, Sedentary Behaviour, and Sleep

PREAMBLE

This document is intended for use by policy makers, health professionals, and researchers, and it may be useful to interested members of the public.

These 24-Hour Movement Guidelines are relevant to adults (aged 18-64 years), irrespective of gender, cultural background, or socio-economic status. These Guidelines may not be appropriate for adults aged 18-64 years who are pregnant or persons living with a disability or a medical condition; these individuals should consider consulting the *Get Active Questionnaire*, disability/condition-specific recommendations, or a health professional for guidance.

Adults aged 18-64 years should participate in a range of physical activities (e.g., weight bearing/non-weight bearing, sport and recreation) in a variety of environments (e.g., home/work/community; indoors/outdoors; land/water) and contexts (e.g., leisure, transportation, occupation, household) across all seasons. Adults aged 18-64 years should limit long periods of sedentary behaviours and should practice healthy sleep hygiene (routines, behaviours, and environments conducive to sleeping well).

Following the 24-Hour Movement Guidelines is associated with these health benefits:

- a lower risk of mortality, cardiovascular disease, hypertension, type 2 diabetes, several cancers, anxiety, depression, dementia, weight gain, adverse blood lipid profile; and
- improved bone health, cognition, quality of life and physical function.

The benefits of following these Guidelines far exceed potential harms. Following these Guidelines may be challenging at times; progressing towards any of the Guideline targets will result in some health benefits.

These 24-Hour Movement Guidelines were informed by the best available evidence, expert consensus, stakeholder consultation, and consideration of values and preferences, applicability, feasibility, and equity. A glossary and more details on the Guidelines, the background research, their interpretation, guidance on how to achieve them, and recommendations for further research and surveillance are available at https://csep.ca/guidelines.





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For health benefits, adults aged 18-64 years should be physically active each day, minimize sedentary behaviour, and achieve sufficient sleep.

A healthy 24 hours includes:

PHYSICAL ACTIVITY SLEEP SEDENTARY BEHAVIOUR Performing a variety of types and Getting 7 to 9 hours of Limiting sedentary intensities of physical activity, good-quality sleep on time to 8 hours or which includes: a regular basis, with less, which includes: consistent bed and No more than 3 hours of wake-up times recreational screen time Moderate to vigorous aerobic physical activities such that Breaking up long periods of there is an accumulation of at sitting as often as possible least 150 minutes per week Muscle strengthening activities using major muscle groups at least twice a week Several hours of light physical activities, including standing Ċ

Replacing sedentary behaviour with additional physical activity and trading light physical activity for more moderate to vigorous physical activity, while preserving sufficient sleep, can provide greater health benefits.



Progressing towards any of these targets will result in some health benefits.





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CANADIAN 24-HOUR MOVEMENT GUIDELINES

FOR ADULTS 65 YEARS OR OLDER:

An Integration of Physical Activity, Sedentary Behaviour, and Sleep

PREAMBLE

This document is intended for use by policy makers, health professionals, and researchers, and it may be useful to interested members of the public.

These 24-Hour Movement Guidelines are relevant to adults aged 65 years or older, irrespective of gender, cultural background, or socio-economic status. These Guidelines may not be appropriate for adults aged 65 years or older living with a disability or a medical condition; these individuals should consider consulting the *Get Active Questionnaire*, disability/condition-specific recommendations, or a health professional for guidance.

Adults aged 65 years or older should participate in a range of physical activities (e.g., weight bearing/non-weight bearing, sport and recreation) in a variety of environments (e.g., home/work/community; indoors/outdoors; land/ water) and contexts (e.g., leisure, transportation, occupation, household) across all seasons. Adults aged 65 years or older should limit long periods sedentary behaviours and should practice healthy sleep hygiene (routines, behaviours, and environments conducive to sleeping well).

Following the 24-Hour Movement Guidelines is associated with these health benefits:

- a lower risk of mortality, cardiovascular disease, hypertension, type 2 diabetes, several cancers, anxiety, depression, dementia, weight gain, adverse blood lipid profile, falls and fall-related injuries; and
- improved bone health, cognition, quality of life and physical function.

The benefits of following these Guidelines far exceed potential harms. Following these Guidelines may be challenging at times; progressing towards any of the Guideline targets will result in some health benefits.

These 24-Hour Movement Guidelines were informed by the best available evidence, expert consensus, stakeholder consultation, and consideration of values and preferences, applicability, feasibility, and equity. A glossary and more details on the Guidelines, the background research, their interpretation, guidance on how to achieve them, and recommendations for further research and surveillance are available at https://csep.ca/guidelines.





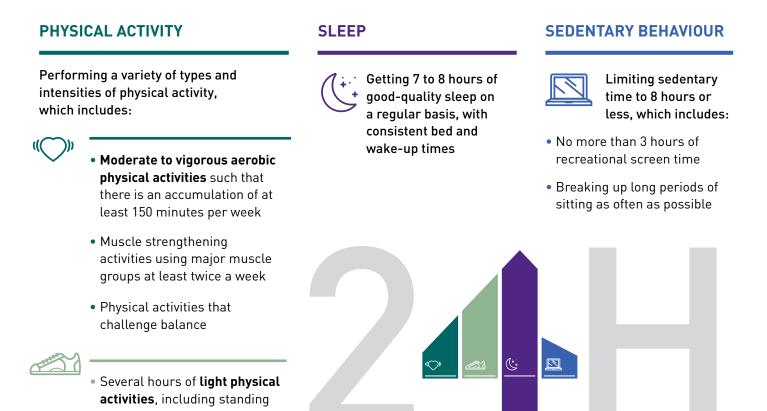
Agence de la santé a publique du Canada





For health benefits, adults aged 65 years or older should be physically active each day, minimize sedentary behaviour, and achieve sufficient sleep.

A healthy 24 hours includes:



Replacing sedentary behaviour with additional physical activity and trading light physical activity for more moderate to vigorous physical activity, while preserving sufficient sleep, can provide greater health benefits.

Progressing towards any of these targets will result in some health benefits.









2019 Canadian Guideline for Physical Activity throughout Pregnancy

Preamble:

These *Guidelines* provide evidence-based recommendations regarding physical activity throughout pregnancy in the promotion of maternal, fetal and neonatal health. In the absence of contraindications (see next page for a detailed list), following these *Guidelines* is associated with: 1) fewer newborn complications (i.e., large for gestational age); and 2) maternal health benefits (i.e., decreased risk of preeclampsia, gestational hypertension, gestational diabetes, caesarean section, instrumental delivery, urinary incontinence, excessive gestational weight gain, and depression; improved blood glucose; decreased total gestational weight gain; and decreased severity of depressive symptoms and lumbopelvic pain).

Physical activity is not associated with miscarriage, stillbirth, neonatal death, preterm birth, preterm/prelabour rupture of membranes, neonatal hypoglycemia, low birth weight, birth defects, induction of labour, or birth complications. In general, more physical activity (frequency, duration and/or volume) is associated with greater benefits. However, evidence was not identified regarding the safety or additional benefit of exercising at levels significantly above the recommendations. Prenatal physical activity should be considered a front-line therapy for reducing the risk of pregnancy complications, and enhancing maternal physical and mental health.

For pregnant women not currently meeting these Guidelines, a progressive adjustment toward them is recommended. Previously active women may continue physical activity throughout pregnancy. Women may need to modify physical activity as pregnancy progresses. There may be periods when following the guidelines are not possible due to fatigue and/or discomforts of pregnancy; women are encouraged to do what they can and to return to following the recommendations when they are able.

These Guidelines were informed by an extensive systematic review of the literature, expert opinion, end-user consultation and considerations of feasibility, acceptability, costs and equity.











Recommendations:

The specific recommendations in the 2019 Canadian Guideline for Physical Activity throughout Pregnancy are provided below.

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All women without contraindication should be physically active throughout pregnancy. Specific subgroups were examined:

- Women who were previously inactive.
- Women diagnosed with gestational diabetes mellitus.
- Women categorized as overweight or obese (pre-pregnancy body mass index ≥25 kg/m²).





Pregnant women should accumulate at least 150 minutes of moderate-intensity physical activity each week to achieve clinically meaningful health benefits and reductions in pregnancy complications. Physical activity should be accumulated over a minimum of three days per week; however, being active every day is encouraged.

Pregnant women should incorporate a variety of aerobic and resistance training activities to achieve greater benefits. Adding yoga and/or gentle stretching may also be beneficial.



Pelvic floor muscle training (e.g., Kegel exercises) may be performed on a daily basis to reduce the risk of urinary incontinence. Instruction in proper technique is recommended to obtain optimal benefits.



Pregnant women who experience lightheadedness, nausea or feel unwell when they exercise flat on their back should modify their exercise position to avoid the supine position.

Contraindications:

All pregnant women can participate in physical activity throughout pregnancy with the exception of those who have contraindications (listed below). Women with absolute contraindications may continue their usual activities of daily living but should not participate in more strenuous activities. Women with relative contraindications should discuss the advantages and disadvantages of moderate-to-vigorous intensity physical activity with their obstetric care provider prior to participation.

Absolute contraindications to exercise are the following:

- ruptured membranes,
- premature labour,
- unexplained persistent vaginal bleeding,
- placenta previa after 28 weeks gestation,
- preeclampsia,
- incompetent cervix,
- intrauterine growth restriction,
- high-order multiple pregnancy (e.g., triplets),
- uncontrolled Type I diabetes,
- uncontrolled hypertension
- uncontrolled thyroid disease,
- other serious cardiovascular, respiratory or systemic disorder.

Relative contraindications to exercise are the following:

- recurrent pregnancy loss,
- gestational hypertension,
- a history of spontaneous preterm birth,
- mild/moderate cardiovascular or respiratory disease,
- symptomatic anemia,
- malnutrition,
- eating disorder,
- twin pregnancy after the 28th week,
- other significant medical conditions.













CSEP-PATH: MOVEMENT COUNSELLING TOOL

FOR ADULTS AGED 18-64 YEARS

The Canadian 24-Hour Movement Guidelines for adults integrate three core movement behaviour recommendations for optimal health benefits:

MOVE MORE

REDUCE SEDENTARY TIME

SLEEP WELL

Use this tool to guide your conversation with clients that express an interest in changing a movement behaviour.

STEP 1: ASK client for permission to discuss their movement behaviours (i.e., physical activity, sedentary time, sleep).

- "May I discuss Canada's daily movement recommendations with you?"
- Discuss the Canadian 24-Hour Movement Guidelines with your client.

STEP 2: ASSESS client's physical activity, sedentary time, and sleep.

- Ask open-ended questions such as *"Tell me about your current physical activity levels?"* or *"How would you describe your sleep schedule?"*
- Use the information gathered and the movement recommendations below to help guide goal setting and action planning (STEP 4).

A HEALTHY 24 HOURS INCLUDES:

PHYSICAL ACTIVITY



150 minutes per week of moderate to vigorous aerobic physical activities



Muscle strengthening activities at least twice a week



Several hours of light physical activities including standing

SEDENTARY TIME



No more than 3 hours of recreational screen time



 Break up long periods of sitting as often as possible

SLEEP



Get 7 to 9 hours of goodquality sleep on a regular basis



Consistent bed and wake-up times

Replacing sedentary behaviour with additional physical activity and trading light physical activity for more moderate to vigorous physical activity, while preserving sufficient sleep, can provide greater health benefits.



STEP 3: ADVISE client on their current movement behaviours.

• Discuss the health benefits and/or risks of their current status if necessary.

STEP 4: AGREE on a realistic goal with your client.

- Ask client which movement behaviour(s) they would like to focus on. Create a SMART goal with your client that helps them move towards the guideline recommendations (see Goal Setting Work-sheet). Offer practical strategies when needed. (examples of strategies for each target are below)
- **Remind** client that progressing towards **any** of the movement behaviour targets will result in some health benefits.

PHYSICAL ACTIVITY



Discuss ways to increase the types and intensities of aerobic activity they perform each day.



Develop an appropriate resistance training program for your client.





Discuss how they could replace sedentary periods of their day with light activities such as standing.

SEDENTARY TIME

Identify periods of the day where they are sedentary and discuss how to replace them with other movement behaviours (e.g., standing).



Encourage them to keep screens away from bedrooms and eating areas.



Encourage them to get up and get a glass water during the day, or use technology to remind them to take breaks.

SLEEP



Have them develop relaxing bedtime routine, avoid caffeine consumption in afternoon, no screens 30-60 mins before bedtime.

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Encourage them to go bedat the same time every day.



SMART Goal:

STEP 5: ASSIST client to increase self-confidence and overcome barriers.

• Consider using tools such as the **Decision Balance Worksheet** or the **Barriers to Physical Activity Tool**, to help facilitate the discussion.

STEP 6: ARRANGE a follow-up with your client (e.g., 2 weeks).

Follow-up date and time:



YES

NO

CANADIAN SOCIETY FOR EXERCISE PHYSIOLOGY – PHYSICAL ACTIVITY TRAINING FOR HEALTH (CSEP-PATH®)

Physical activity improves your physical and mental health. Even small amounts of physical activity are good, and more is better.

For almost everyone, the benefits of physical activity far outweigh any risks. For some individuals, specific advice from a Qualified Exercise Professional (QEP – has post-secondary education in exercise sciences and an advanced certification in the area – see csep.ca/certifications) or health care provider is advisable. This questionnaire is intended for all ages – to help move you along the path to becoming more physically active.

I am completing this questionnaire for myself.

I am completing this questionnaire for my child/dependent as parent/guardian.

PREPARE	ТО	BECOME	MORE	ACTIVE

The following questions will help to ensure that you have a safe physical activity experience. Please answer **YES** or **NO** to each question <u>before</u> you become more physically active. If you are unsure about any question, answer **YES**.

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		1 Have you experienced <u>ANY</u> of the following (A to F) within the past six months?
•	•	A diagnosis of/treatment for heart disease or stroke, or pain/discomfort/pressure in your chest during activities of daily living or during physical activity?
		B A diagnosis of/treatment for high blood pressure (BP), or a resting BP of 160/90 mmHg or higher?
		C Dizziness or lightheadedness during physical activity?
		D Shortness of breath at rest?
		E Loss of consciousness/fainting for any reason?
		F Concussion?
		2 Do you currently have pain or swelling in any part of your body (such as from an injury, acute flare-up of arthritis, or back pain) that affects your ability to be physically active?
		3 Has a health care provider told you that you should avoid or modify certain types of physical activity?
•		4 Do you have any other medical or physical condition (such as diabetes, cancer, osteoporosis, asthma, spinal cord injury) that may affect your ability to be physically active?
÷	••••	•• NO to all questions: go to Page 2 – ASSESS YOUR CURRENT PHYSICAL ACTIVITY ••••••
YES	to any qu	



ASSESS YOUR CURRENT PHYSICAL ACTIVITY

Answer the following questions to assess how active you are now.

- 1 During a typical week, on how many days do you do moderate- to vigorous-intensity aerobic physical activity (such as brisk walking, cycling or jogging)?
- **2** On days that you do at least moderate-intensity aerobic physical activity (e.g., brisk walking), for how many minutes do you do this activity?

For adults, please multiply your average number of days/week by the average number of minutes/day:

Canadian 24-Hour Movement Guidelines recommend that adults accumulate at least 150 minutes of moderate- to vigorousintensity physical activity per week. For children and youth, at least 60 minutes daily is recommended. Strengthening muscles and bones at least two times per week for adults, and three times per week for children and youth, is also recommended (see csep.ca/guidelines).

GENERAL ADVICE FOR BECOMING MORE ACTIVE

Increase your physical activity gradually so that you have a positive experience. Build physical activities that you enjoy into your day (e.g., take a walk with a friend, ride your bike to school or work) and reduce your sedentary behaviour (e.g., prolonged sitting).

If you want to do **vigorous-intensity physical activity** (i.e., physical activity at an intensity that makes it hard to carry on a conversation), and you do not meet minimum physical activity recommendations noted above, consult a Qualified Exercise Professional (QEP) beforehand. This can help ensure that your physical activity is safe and suitable for your circumstances.

Physical activity is also an important part of a healthy pregnancy.

Delay becoming more active if you are not feeling well because of a temporary illness.

DECLARATION

To the best of my knowledge, all of the information I have supplied on this questionnaire is correct. If my health changes, I will complete this questionnaire again.

l answered <u>NO</u> to all questions on Page 1	l answered <u>YES</u> to any question on Page 1
Sign and date the Declaration below	 Check the box below that applies to you: I have consulted a health care provider or Qualified Exercise Professional (QEP) who has recommended that I become more physically active. I am comfortable with becoming more physically active on my own without consulting a health care provider or QEP.
Name (+ Name of Parent/Guardian if applicable) [Please print] Date Email (optional)	Signature (or Signature of Parent/Guardian if applicable) Date of Birth

With planning and support you can enjoy the benefits of becoming more physically active. A QEP can help.

Check this box if you would like to consult a QEP about becoming more physically active. (This completed questionnaire will help the QEP get to know you and understand your needs.) DAYS/

WEEK

DAY

MINUTES/

MINUTES/

WFFK