

The UK Chief Medical Officers Physical Activity Guidelines 2019

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CMO Physical activity guidelines

- Rationale and process for CMO guidelines
- Updates and changes from 2011
- Infographics
- Next steps



UK Chief Medical Officers' Physical Activity Guidelines

Published 6 September 2019



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Collection

Physical activity guidelines

Guidance from the Chief Medical Officers in the UK on the amount and type of physical activity people should be doing to improve their health.

Published 7 September 2019

From: [Department of Health and Social Care](#)

UK Chief Medical Officers' report

Guidance to help health professionals, policymakers and others working to promote physical activity, sport and exercise for health benefits.




[Physical activity guidelines: UK Chief Medical Officers' report](#)

7 September 2019 Guidance

Infographics

- <https://www.gov.uk/government/collections/physical-activity-guidelines>

Moderate or strong evidence for health benefit

Children	Adults	Older Adults
<p>Bone Health</p> <p>Cognitive function</p> <p>CV fitness</p> <p>Muscle fitness</p> <p>Weight status</p> <p>Depression</p> 	<p>All-cause mortality</p> <p>Stroke and heart disease</p> <p>Hypertension</p> <p>Type 2 diabetes</p> <p>8 cancers</p> <p>Depression</p> <p>Cognitive function</p> <p>Dementia</p> <p>Quality of life</p> <p>Sleep</p> <p>Anxiety/depression</p> <p>Weight status</p> 	<p>Falls</p> <p>Frailty</p> <p>Physical function</p> 

How active are people in England?

- For adults:
 - 66% of men and 58% of women of adults met the guidelines for moderate-to-vigorous physical activity
 - Only 31% of men and 23% of women aged 16 and over met both the aerobics and muscle strengthening guidelines

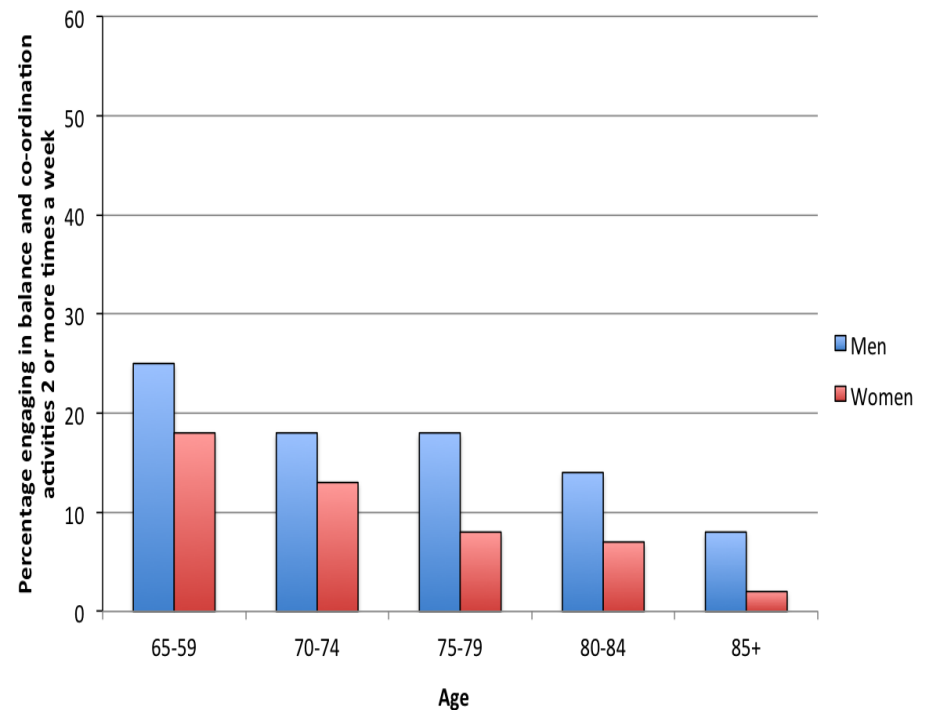
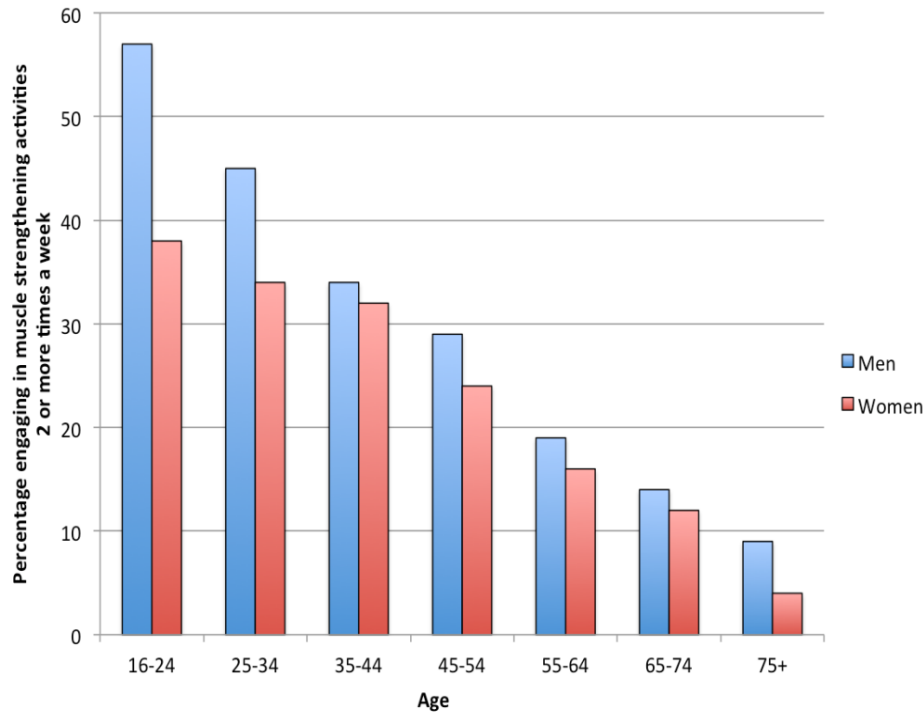
(source: Health Survey England 2016)

How active are people in England?

For children:

- Fewer than one in ten (9%) of children aged 2 to 4 were met the current guidelines for children under-5 of at least three hours of physical activity per day
- 23% of boys and 20% of girls aged 5 to 15 achieved the guidelines of at least one hour of moderately intensive physical activity every day.
- (source: Health Survey England 2015)

Achievement of strength and balance / coordination guidelines with age

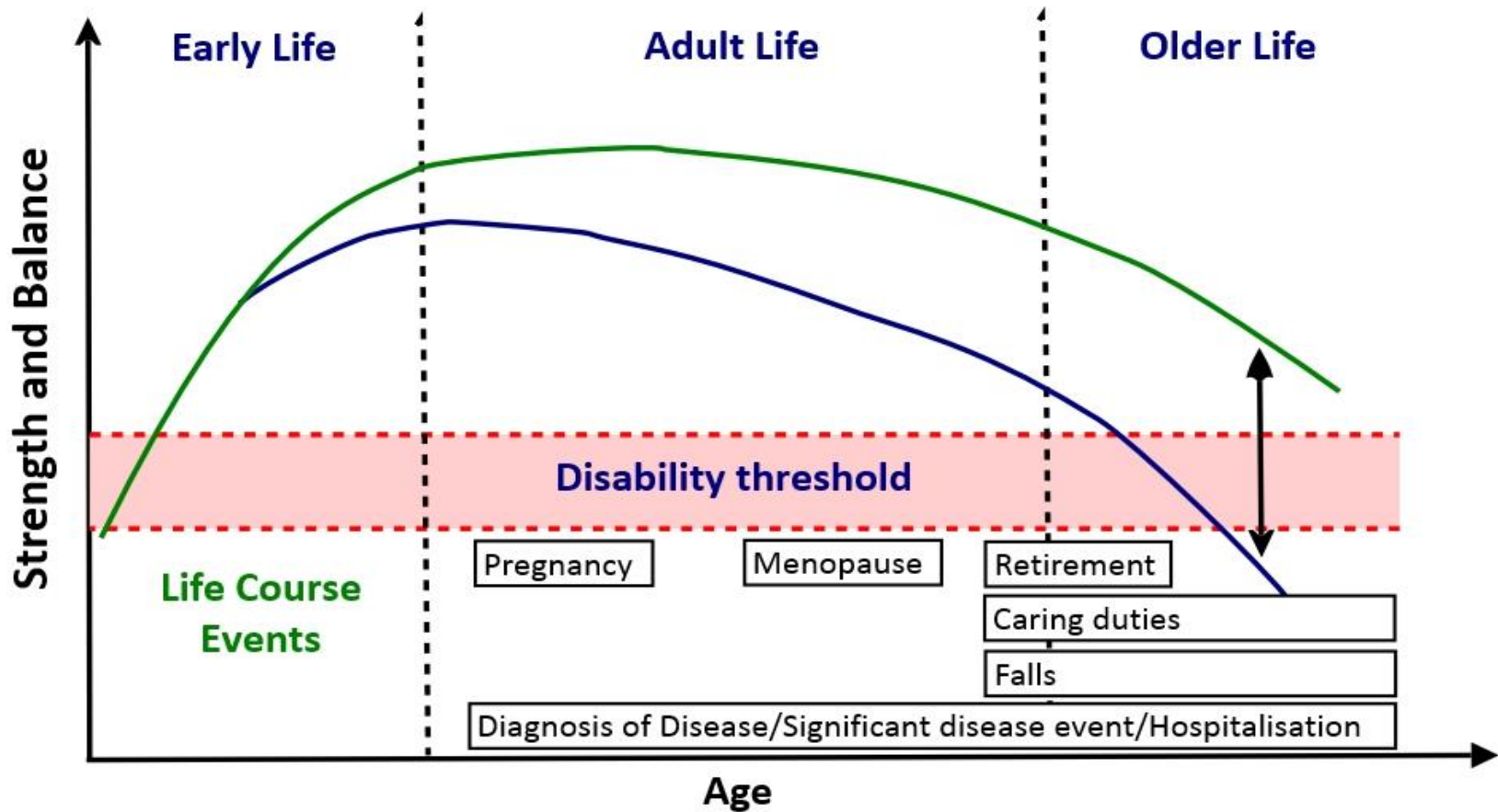


Skelton DA, Mavroedi A (2018) How do muscle and bone strengthening and balance activities (MBSBA) vary across the life course, and are there particular ages where MBSBA are most important? *JFSF* 3(2):74-84

What are national physical activity guidelines?

- They are statements of levels of physical activity based on epidemiological thresholds where optimal behaviour is associated with a significantly reduced risk of a range of conditions, diseases and mortality
- They reflect a life course approach

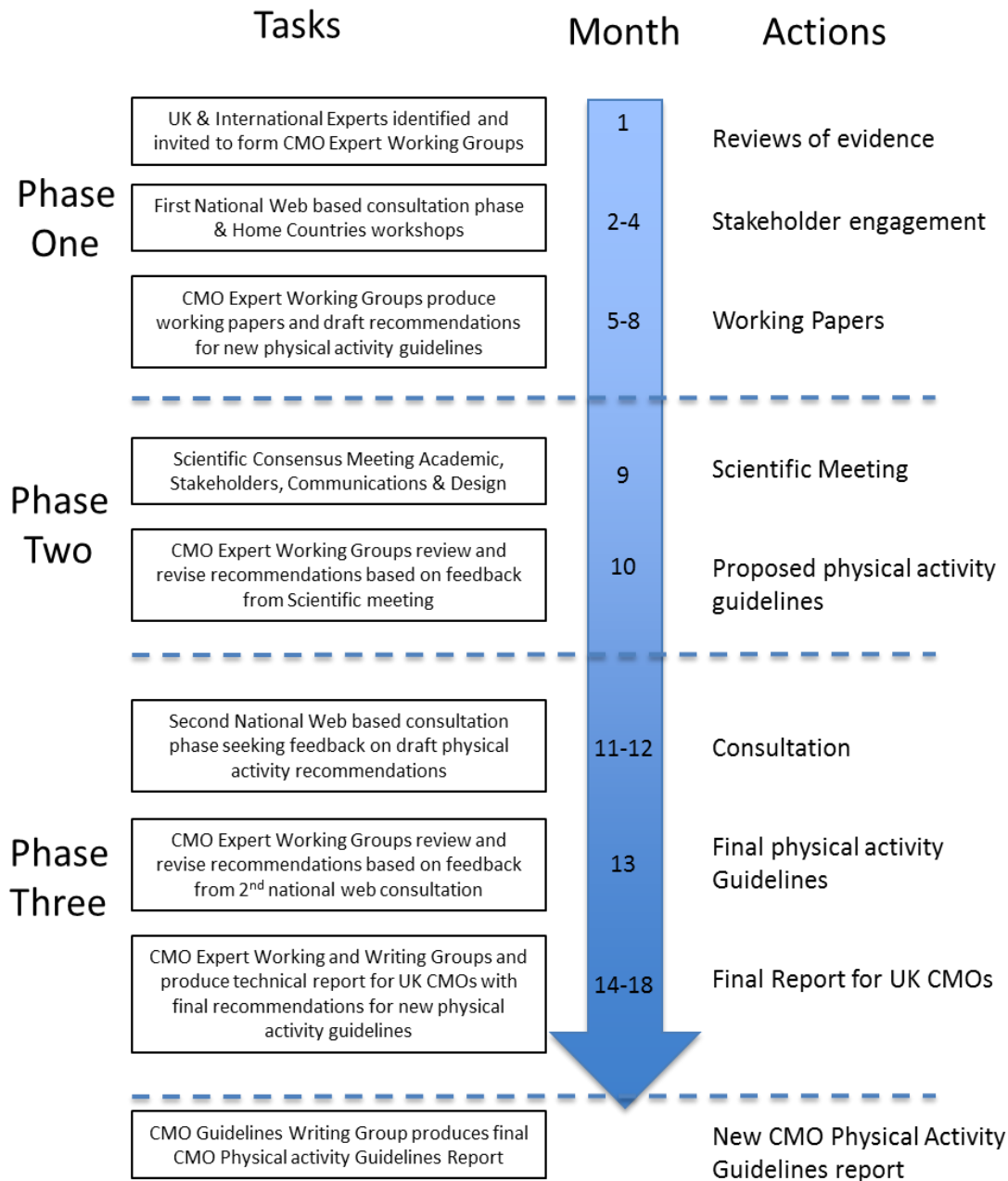
Strength and balance ability over life course and factors impacting on decline with age



Skelton DA, Mavroedi A (2018) How do muscle and bone strengthening and balance activities (MBSBA) vary across the life course, and are there particular ages where MBSBA are most important? *JFSF* 3(2):74-84

Development of UK Physical Activity Guidelines

	1996	2004	2011	2019
Under 5			✓	✓
Children & Young People	1998	✓	✓	✓
Adults	✓	✓	✓	✓
Older Adults			✓	✓
Pregnancy				✓
Disability				✓ Adults Only
Communication & Surveillance	✓		✓ ✓	✓ ✓



Under 5s

Professor John Reilly, School for Psychological Sciences and Health, University of Strathclyde Glasgow, Scotland

Children & Young People

Professor Russell Jago, Centre for Exercise, Nutrition & Health Sciences, School for Policy Studies, University of Bristol, England

Adults

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Older Adults

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Sedentary Behaviour

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Disability

Professor Brett Smith, School of Sport and Exercise Sciences, Durham University, England

Communications & Surveillance

Professor Nanette Mutrie, Physical Activity for Health Research Centre (PAHRC), Institute for Sport, Physical Education and Health Sciences (ISPEHS), The University of Edinburgh, Scotland

MSB Health

Pregnancy & Post Partum

Dr Charlie Foster, Centre for Exercise, Nutrition & Health Sciences, School for Policy Studies, University of Bristol, England

- To identify if there was *any new evidence* that suggested a change should be made to the existing 2011 Guidelines
- UK physical activity guidelines are constructed to advise **the general population** about the recommended frequency, intensity, time and types of physical activity required to prevent major chronic disease and to maintain health.

- EWGs were asked to examine
 - the most recent pooled analyses, meta-analyses and systematic reviews from prospective and randomised controlled trials (RCT) research
 - recent national evidence reviews used to construct or update physical activity guidelines
 - any additional relevant papers identified by each EWG.
 - Present results using key questions in Technical Reports
 - Draft Recs for PA Recs, research
-

UK physical activity guidelines review 

[Introduction](#)

[Process](#)

[People](#)

[Expert Working Groups](#)

[National consultation](#)

[Scientific Consensus Meeting](#)

[Contact](#)

UK physical activity guidelines review



In 2018, the UK guidelines on physical activity across the life course will be reviewed and revised in line with the latest scientific evidence.

Get involved

Find out about our [upcoming events](#) or read our [feedback](#) from the first National Consultation














MSB Review Background

- Regular strengthening and balance activities are ‘forgotten guidelines’ of UK Chief Medical Officers’ guidance for physical activity
- PHE and Centre for Ageing Better commissioned UK CMOs’ expert group to undertake a review of muscle and bone strengthening and balance activities (MBSBA) for health benefits

Aims:

- Review evidence base for MSB to improve and protect health and wellbeing.
 - Practical recommendations for how MSB can be incorporated into an individual’s life and barriers and enablers
-

Impact of activities on strength, bone health and balance

Type of sport, physical activity or exercise	 Improvement in muscle function	 Improvement in bone health	 Improvement in balance
 Running	★	★★	★
 Resistance Training	★★★	★★★	★★
 Aerobics, circuit training	★★★	★★★	★★
 Ball Games	★★	★★★	★★★
 Racquet Sports	★★	★★★	★★★
 Yoga, Tai Chi	★	★	★
 Dance	★	★★	★
 Walking	★	★	☆
 Nordic Walking	★★	①	★★
 Cycling	★	★	★

★★★ Strong effect ★★ Medium effect ★ Low effect ☆ No effect ① Not known

What's changed since 2011?

- These new guidelines are broadly consistent with previous ones in terms of recommended activity levels.
- For the first time, the Physical Activity Guidelines now presents additional guidance on being active during pregnancy, and after giving birth, and for disabled adults.
- The new guidelines place greater emphasis on the importance of regular muscle strengthening activities for all age groups, and to the additional benefits of balance and flexibility exercises particularly for older adults. These were part of the previous guidelines, alongside the recommended levels of moderate-to-vigorous physical activity but have not received the level of attention we believe they deserve.

What's changed since 2011?

- Changes include removing details that were not specifically supported by the evidence, for example, no longer requiring that physical activity should be in bouts of at least 10 minutes.
- We now also know that even relatively small increases in physical activity can contribute to improved health and quality of life. Although we recommend that all individuals work towards achieving the levels of activity set out in the guidelines, we recognise the benefits that can be achieved at levels both above and below the thresholds. The new guidelines therefore emphasise the benefits of all physical activity, summed up by the phrase 'Some is good, more is better'.

Guidelines for under-5s

Infants (less than 1 year)

- Infants should be physically active several times every day in a variety of ways, including interactive floor-based activity, e.g. crawling.
- For infants not yet mobile, this includes at least 30 minutes of tummy time spread throughout the day while awake (and other movements such as reaching and grasping, pushing and pulling themselves independently, or rolling over); more is better.

Toddlers (1-2 years)

- Toddlers should spend at least 180 minutes (3 hours) per day in a variety of physical activities at any intensity, including active and outdoor play, spread throughout the day; more is better.

Pre-schoolers (3-4 years)

- Pre-schoolers should spend at least 180 minutes (3 hours) per day in a variety of physical activities spread throughout the day, including active and outdoor play. More is better; the 180 minutes should include at least 60 minutes of moderate-to-vigorous intensity physical activity.

- Children and young people should engage in moderate-to-vigorous intensity physical activity for an average of at least 60 minutes per day across the week. This can include all forms of activity such as physical education, active travel, after-school activities, play and sports.
- Children and young people should engage in a variety of types and intensities of physical activity across the week to develop movement skills, muscular fitness, and bone strength.
- Children and young people should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of not moving with at least light physical activity.

Guidelines for Adults (19-64 years)

- Adults should do activities to develop or maintain strength in the major muscle groups. These could include heavy gardening, carrying heavy shopping, or resistance exercise. Muscle strengthening activities should be done at least two days a week, but any strengthening activity is better than none.
 - Each week, adults should accumulate at least 150 minutes (2 1/2 hours) of moderate intensity activity (such as brisk walking or cycling); or 75 minutes of vigorous intensity activity (such as running); or even shorter durations of very vigorous intensity activity (such as sprinting or stair climbing); or a combination of moderate, vigorous and very vigorous intensity activity.
 - Adults should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of inactivity with at least light physical activity.
-

Guidelines for Older Adults (65 years+)

- Older adults should maintain or improve their physical function by undertaking activities aimed at improving or maintaining muscle strength, balance and flexibility on at least two days a week. These could be combined with sessions involving moderate aerobic activity or could be additional sessions aimed specifically at these components of fitness.
- Each week older adults should aim to accumulate 150 minutes of moderate intensity aerobic activity, building up gradually from current levels. Those who are already regularly active can achieve these benefits through 75 minutes of vigorous intensity activity, or a combination of moderate and vigorous activity, to achieve greater benefits. Weight-bearing activities which create an impact through the body help to maintain bone health.
- Older adults should break up prolonged periods of being sedentary with light activity when physically possible, or at least with standing, as this has distinct health benefits for older people.

Title

Benefits

Landing point

Types of Exercise

Positive
Message/tag line

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,
school ready and sleep better



BUILDS
RELATIONSHIPS
& SOCIAL SKILLS



MAINTAINS
HEALTH &
WEIGHT



CONTRIBUTES TO
BRAIN DEVELOPMENT
& LEARNING



IMPROVES
SLEEP



DEVELOPS
MUSCLES
& BONES



ENCOURAGES
MOVEMENT
& CO-ORDINATION

Every movement counts

Aim for at least
180
Minutes
per day
for children 1-5 years



PLAYGROUND



JUMP



CLIMB



MESSY PLAY



THROW/CATCH



SKIP

Under-1s
at least
30 minutes
across the day



OBJECT PLAY



DANCE



GAMES



PLAY



TUMMY TIME



SWIM



WALK



SCOOT



BIKE

Get Strong. Move More. Break up inactivity

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,
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SCOOT



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UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,



Physical activity for children and young people (5 – 18 Years)

BUILDS CONFIDENCE & SOCIAL SKILLS	MAINTAINS HEALTHY WEIGHT
DEVELOPS CO-ORDINATION	IMPROVES SLEEP
IMPROVES CONCENTRATION & LEARNING	IMPROVES HEALTH & FITNESS
	MAKES YOU FEEL GOOD

Be physically active

Spread activity throughout the day

Aim for an average of at least 60 minutes per day across week

All activities should make you breathe faster & feel warmer

PLAY	RUN/WALK	BIKE	ACTIVE TRAVEL
SWIM	SKATE	SPORT	PE
SKIP	CLIMB	WORKOUT	DANCE

Include muscle and bone strengthening activities

3 TIMES PER WEEK

Get strong Move more

Find ways to help all children and young people accumulate an average of at least 60 minutes physical activity per day across the week

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,



Physical activity for children and young people (5–18 Years)

- BUILDS CONFIDENCE & SOCIAL SKILLS
- DEVELOPS CO-ORDINATION
- IMPROVES CONCENTRATION & LEARNING

Physical activity for pregnant women

- Helps to control weight gain
- Helps reduce high blood pressure problems
- Helps to prevent diabetes of pregnancy
- Improves fitness
- Improves sleep
- Improves mood

Not active?
Start gradually

Already active?
Keep going



Do muscle strengthening activities twice a week

Every activity counts, every minute counts, more is better

No evidence of harm

Listen to your body and adapt



Don't bump the bump

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,



Physical activity for children and young people (5–18 Years)

- BUILDS CONFIDENCE & SOCIAL SKILLS
- DEVELOPS CO-ORDINATION
- IMPROVES CONCENTRATION & LEARNING

Physical activity for pregnant women

- Helps to control weight gain
- Improves fitness

Physical activity for women after childbirth (birth to 12 months)

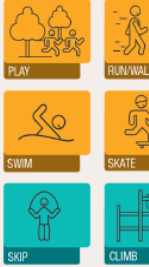
- Time for yourself - reduces worries and depression
- Helps to control weight and return to pre-pregnancy weight
- Improves tummy muscle tone and strength
- Improves fitness
- Improves mood
- Improves sleep

Aim for 1 hour for children

Under-1s at least 30 minutes across the day

Get Stronger

Spread activity throughout the day



Not active? Start gradually

Not active? Start gradually

Active before? Restart gradually



Do muscle strengthening activities twice a week

Start pelvic floor exercises as soon as you can and continue daily

Build back up to muscle strengthening activities twice a week

No evidence of harm

It's safe to be active. No evidence of harm for post partum women

Depending on your delivery listen to your body and start gently

You can be active while breastfeeding

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,



Physical activity for children and young people (5–18 Years)

- BUILDS CONFIDENCE & SOCIAL SKILLS
- DEVELOPS CO-ORDINATION
- IMPROVES CONCENTRATION & LEARNING

Physical activity for pregnant women

- Helps to control weight gain
- Improves fitness

Not active?
Start gradually

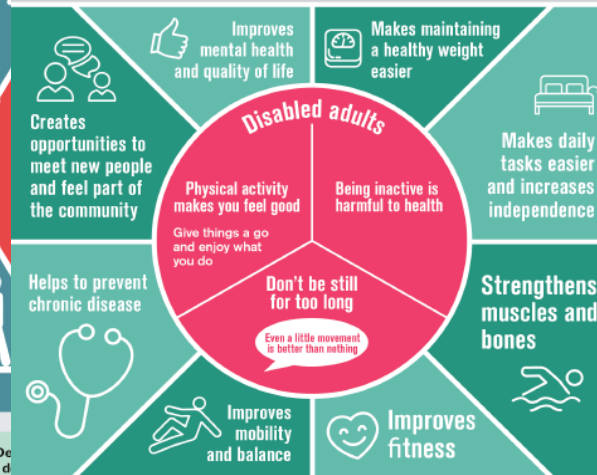
Physical activity for women after childbirth (birth to 12 months)

- Time for yourself - reduces worries and depression
- Improves fitness

Not active?
Start gradually

Physical Activity for Disabled Adults

Make it a daily habit



Do strength and balance activities on at least two days per week

For substantial health gains aim for at least 150 minutes each week of moderate intensity activity

Remember the talk test:

- Can talk, but not sing = moderate intensity activity
- Difficulty talking without pausing = vigorous intensity activity

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for early years (birth – 5 years)

Active children are healthy, happy,



Physical activity for children and young people (5–18 Years)

- BUILDS CONFIDENCE & SOCIAL SKILLS
- DEVELOPS CO-ORDINATION
- IMPROVES CONCENTRATION & LEARNING

Physical activity for pregnant women

- Helps to control weight gain
- Improves fitness

Physical activity for women after childbirth (birth to 12 months)

Not active?
Start gradually

- Time for yourself - reduces worries and depression
- Improves fitness

Not active?
Start gradually

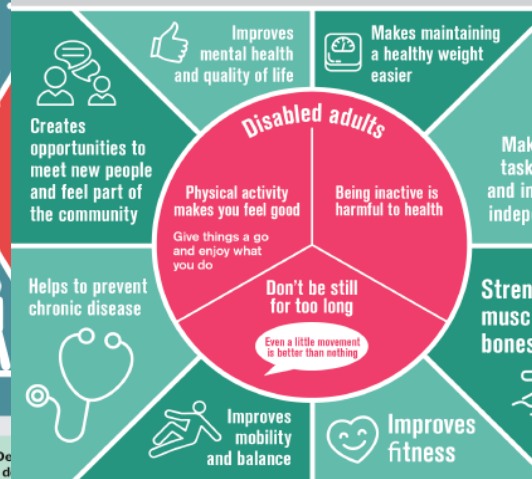


Start pelvic floor exercises as soon as you can and continue daily

It's safe to be active. No evidence of harm for postpartum women

Physical Activity for Disabled Adults

Make it a daily habit



Do strength and balance activities on at least two days per week

For substantial health gains aim for at least minutes each week of moderate intensity activity

Remember the talk test:



Physical activity for adults and older adults

- Benefits health
 - Improves sleep
 - Maintains healthy weight
 - Manages stress
 - Improves quality of life
- Reduces your chance of:
- Type II Diabetes -40%
 - Cardiovascular disease -35%
 - Falls, depression etc. -30%
 - Joint and back pain -25%
 - Cancers (colon and breast) -20%

Some is good, more is better | Make a start today: it's never too late | Every minute counts

Be active



Build strength
to keep muscles, bones and joints strong

on at least **2** days a week



Minimise sedentary time

Break up periods of inactivity



For older adults, to reduce the chance of frailty and falls

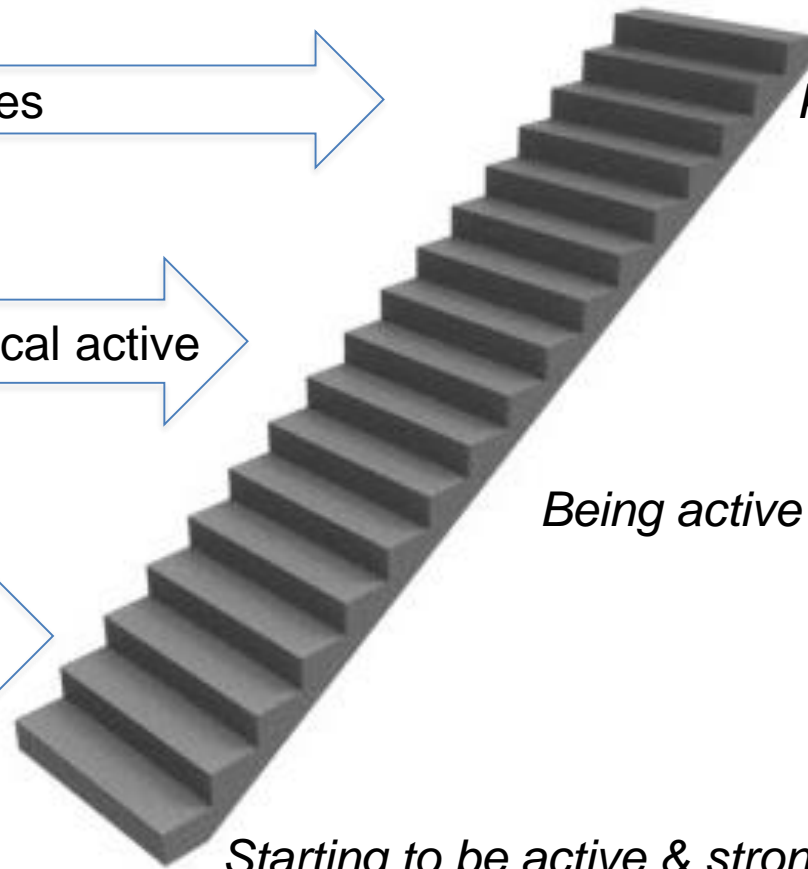
Improve balance
2 days a week

Ladder of physical activity messaging

CMO Guidelines

Value of being physical active

Value of starting physical activity



Keep active & strong

Being active & stronger

Starting to be active & stronger

Scientific report



2018 Physical Activity
Guidelines Advisory
Committee
Scientific Report

To the Secretary of Health and Human
Services

Summary Report



Communication Public Campaign



Expert Working Group Working Papers



UK Chief Medical Officers' Physical
Activity Guidelines

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Communication



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Thanks

To all EWG Chairs & Members x70
To all participants in process x500+

MSc in Nutrition, Physical Activity and Public Health
bit.ly/bristoluniEHNS

PhD in Exercise, Nutrition and Health
<http://www.bristol.ac.uk/sps/study/postgraduate/exercise-nutrition-health/>

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- Prof. Stuart Fairclough - Edge Hill University
- Dr. Simon Sebire - University of Bristol
- Dr. Lauren Sherar - Loughborough University
- Prof. Craig Williams - University of Exeter
- Dr. Paul McCrorie - MRC/CSO Social and Public Health Sciences Unit, University of Glasgow
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