

# Monitoring a diagnostika **PA**

**kvantitativní**

**kvalitativní**

# **kvantitativní**

množství

objem

počet

# **kvalitativní**

intenzita

struktura

fyziologické faktory

# **metody monitoringu PA**

# metody monitoringu PA

- subjektivní
- objektivní

pozorování

dotazování (interview, dotazníky)

přístrojové

- kalorimetrie
- krokoměry
- akcelerometry
- GPS
- TF
- kombinace
- ...

# POZOROVÁNÍ



# POZOROVÁNÍ

- malý počet respondentů
- časově náročné
- ovlivněno pozorovatelem
- nepřesné
  
- není třeba součinnost respondentů



# DOTAZOVÁNÍ, INTERVIEV





# DOTAZOVÁNÍ, INTERVIEV

- lze předem připravit
- náročné pro respondenta s ohledem na paměť
- obvykle pouze jeden respondent v daném čase





# DOTAZOVÁNÍ, DOTAZNÍK

množství PA

IPAQ 15 - 69 (International Physical Activity Questionnaire) – krátká a dlouhá verze

5. How much time did you usually spend on one of those days doing **moderate** physical activities as part of your work?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
6. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time **as part of your work**? Please do not count any walking you did to travel to or from work.
- \_\_\_\_ days per week
- No job-related walking → **Skip to PART 2: TRANSPORTATION**
7. How much time did you usually spend on one of those days **walking** as part of your work?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day

## PART 2: TRANSPORTATION PHYSICAL ACTIVITY

These questions are about how you traveled from place to place, including to places like work, stores, movies, and so on.

8. During the **last 7 days**, on how many days did you **travel in a motor vehicle** like a train, bus, car, or tram?
- \_\_\_\_ days per week
- No traveling in a motor vehicle → **Skip to question 10**
9. How much time did you usually spend on one of those days **traveling** in a train, bus, car, tram, or other kind of motor vehicle?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
- Now think only about the **bicycling** and **walking** you might have done to travel to and from work, to do errands, or to go from place to place.
10. During the **last 7 days**, on how many days did you **bicycle** for at least 10 minutes at a time to go **from place to place**?
- \_\_\_\_ days per week
- No bicycling from place to place → **Skip to question 12**

11. How much time did you usually spend on one of those days to **bicycle** from place to place?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
12. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time to go **from place to place**?
- \_\_\_\_ days per week
- No walking from place to place → **Skip to PART 3: HOUSEWORK, HOUSE MAINTENANCE, AND CARING FOR FAMILY**
13. How much time did you usually spend on one of those days **walking** from place to place?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day

## PART 3: HOUSEWORK, HOUSE MAINTENANCE, AND CARING FOR FAMILY

This section is about some of the physical activities you might have done in the **last 7 days** in and around your home, like housework, gardening, yard work, general maintenance work, and caring for your family.

14. Think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, chopping wood, shoveling snow, or digging **in the garden or yard**?
- \_\_\_\_ days per week
- No vigorous activity in garden or yard → **Skip to question 16**
15. How much time did you usually spend on one of those days doing **vigorous** physical activities in the garden or yard?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
16. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** activities like carrying light loads, sweeping, washing windows, and raking **in the garden or yard**?
- \_\_\_\_ days per week
- No moderate activity in garden or yard → **Skip to question 18**

17. How much time did you usually spend on one of those days doing **moderate** physical activities in the garden or yard?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
18. Once again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** activities like carrying light loads, washing windows, scrubbing floors and sweeping **inside your home**?
- \_\_\_\_ days per week
- No moderate activity inside home → **Skip to PART 4: RECREATION, SPORT AND LEISURE-TIME PHYSICAL ACTIVITY**
19. How much time did you usually spend on one of those days doing **moderate** physical activities inside your home?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day

## PART 4: RECREATION, SPORT, AND LEISURE-TIME PHYSICAL ACTIVITY

This section is about all the physical activities that you did in the **last 7 days** solely for recreation, sport, exercise or leisure. Please do not include any activities you have already mentioned.

20. Not counting any walking you have already mentioned, during the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time **in your leisure time**?
- \_\_\_\_ days per week
- No walking in leisure time → **Skip to question 22**
21. How much time did you usually spend on one of those days **walking** in your leisure time?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
22. Think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **vigorous** physical activities like aerobics, running, fast bicycling, or fast swimming **in your leisure time**?
- \_\_\_\_ days per week
- No vigorous activity in leisure time → **Skip to question 24**

23. How much time did you usually spend on one of those days doing **vigorous** physical activities in your leisure time?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
24. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** physical activities like bicycling at a regular pace, swimming at a regular pace, and doubles tennis **in your leisure time**?
- \_\_\_\_ days per week
- No moderate activity in leisure time → **Skip to PART 5: TIME SPENT SITTING**
25. How much time did you usually spend on one of those days doing **moderate** physical activities in your leisure time?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day

## PART 5: TIME SPENT SITTING

The last questions are about the time you spend sitting while at work, at home, while on course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television. Do not include any time spent in a motor vehicle that you have already told me about.

26. During the **last 7 days**, how much time did you usually spend **sitting** on a work day?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day
27. During the **last 7 days**, how much time did you usually spend **sitting** on a weekend day?
- \_\_\_\_ hours per day  
\_\_\_\_ minutes per day

This is the end of the questionnaire, thank you for participating!

# DOTAZOVÁNÍ, DOTAZNÍK

množství i intenzita PA

The screenshot shows the user interface of the INDARES.COM website. At the top, there is a navigation bar with the logo and the text "International Database for Research and Educational Support". Below the navigation bar, there are several icons representing different physical activities: a person running, a person swimming, a person playing basketball, and a person playing tennis. The main content area is titled "Pohybové aktivity" (Physical Activities). On the left, there is a sidebar with a user profile section labeled "Uživatel" and a "Logout" button. Below the profile, there is a "Linky" (Links) section with several links: "Pohybové aktivity", "Kroky", "Testování zdatnosti", "Tělesné parametry", "Dotazníky", "Zprávy", "Osobní údaje", and "Nastavení účtu". The main content area has a navigation bar with buttons for "Zápis dat", "Grafy", "Statistiky", "Nastavení", "Cíle", and "Info". Below this, there is a section for "Moje aktivity" (My Activities) for the year 2011, showing the month of October and week 43. A table below this section shows that no activities were recorded for the current day. To the right of the table, there is a form for adding a new activity, labeled "Přidat novou aktivitu". The form includes fields for "Typ" (Activity Type), "Délka" (Duration), "Intenzita" (Intensity), "Poznámka" (Note), and "kcal" (Calories). There is also a "Ulož" (Save) button.

## Druh a intenzita všech prováděných pohybových aktivit včetně organizovaných.

Zaznamenejte dobu (zaokrouhleně na pět minut) všech pohybových aktivit, které jste v průběhu dne prováděl/a **déle než 10 minut** (stejně aktivity sčítejte). Fyzicky náročnou pohybovou aktivitu s vyšší intenzitou (značná únava, zadýchání, zpotení, vysoká srdeční frekvence) označte u záznamu minut znakem I (intenzivní).

| Pohybová aktivita                    | 1. den | 2. den | 3. den | 4. den | 5. den | 6. den | 7. den | 8. den |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Chůze (i turistika)                  |        |        |        |        |        |        |        |        |
| Běh (jogging)                        |        |        |        |        |        |        |        |        |
| Cvičení s hůdkou (aerobic ap.)       |        |        |        |        |        |        |        |        |
| Tanec                                |        |        |        |        |        |        |        |        |
| Základní a sportovní gymnastika      |        |        |        |        |        |        |        |        |
| Kondiční cvičení, posilování         |        |        |        |        |        |        |        |        |
| "Zdravotní" cvičení (i ranní)        |        |        |        |        |        |        |        |        |
| Plavání                              |        |        |        |        |        |        |        |        |
| Lyžování sjezdové                    |        |        |        |        |        |        |        |        |
| Lyžování běh                         |        |        |        |        |        |        |        |        |
| Bruslení (i kolečkové)               |        |        |        |        |        |        |        |        |
| Jízda na kole (i turistika)          |        |        |        |        |        |        |        |        |
| Fotbal, nohejbal                     |        |        |        |        |        |        |        |        |
| Basketbal                            |        |        |        |        |        |        |        |        |
| Volejbal                             |        |        |        |        |        |        |        |        |
| Tenis, softtenis                     |        |        |        |        |        |        |        |        |
| Stolní tenis                         |        |        |        |        |        |        |        |        |
| Florbal, hokej                       |        |        |        |        |        |        |        |        |
| Úpoly (bojová umění, sebeobrana)     |        |        |        |        |        |        |        |        |
| Zahrádkaření                         |        |        |        |        |        |        |        |        |
| Pracovní (manuální práce)            |        |        |        |        |        |        |        |        |
| Domácí práce (uklizení, úpravy bytu) |        |        |        |        |        |        |        |        |
| Jiné.....                            |        |        |        |        |        |        |        |        |

## Druh a intenzita všech inaktivit.

Zaznamenejte dobu (zaokrouhleně na pět minut) všech inaktivit, které jste v průběhu dne prováděl/a **déle než 10 minut** (stejně inaktivity sčítejte).

| Pohybová inaktivita                           | 1. den | 2. den | 3. den | 4. den | 5. den | 6. den | 7. den | 8. den |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Sezení (ležení) u televize                    |        |        |        |        |        |        |        |        |
| Sezení (ležení) u počítače                    |        |        |        |        |        |        |        |        |
| Sezení ve škole                               |        |        |        |        |        |        |        |        |
| Sezení (ležení) při učení, hře, ...           |        |        |        |        |        |        |        |        |
| Sezení v parku, restauraci ap.                |        |        |        |        |        |        |        |        |
| Sezení (stání) při sport. a kulturních akcích |        |        |        |        |        |        |        |        |
| Sezení (stání) v dopravních prostředcích      |        |        |        |        |        |        |        |        |

# DOTAZOVÁNÍ, DOTAZNÍK

- plošné
- snadnější na hodnocení
- ? časová náročnost
- návratnost
- nadhodnocování nebo podhodnocování
- nemožnost zpětné vazby a problém s porozuměním
- nelze použít u mladší věkové skupiny

**PŘÍSTROJOVÉ**

# KALORIMETRIE

- přímá
- nepřímá



# KALORIMETRIE

- nepřímá





# TEPOVÁ FREKVENCE



# KROKOMĚRY



# KROKOMĚRY

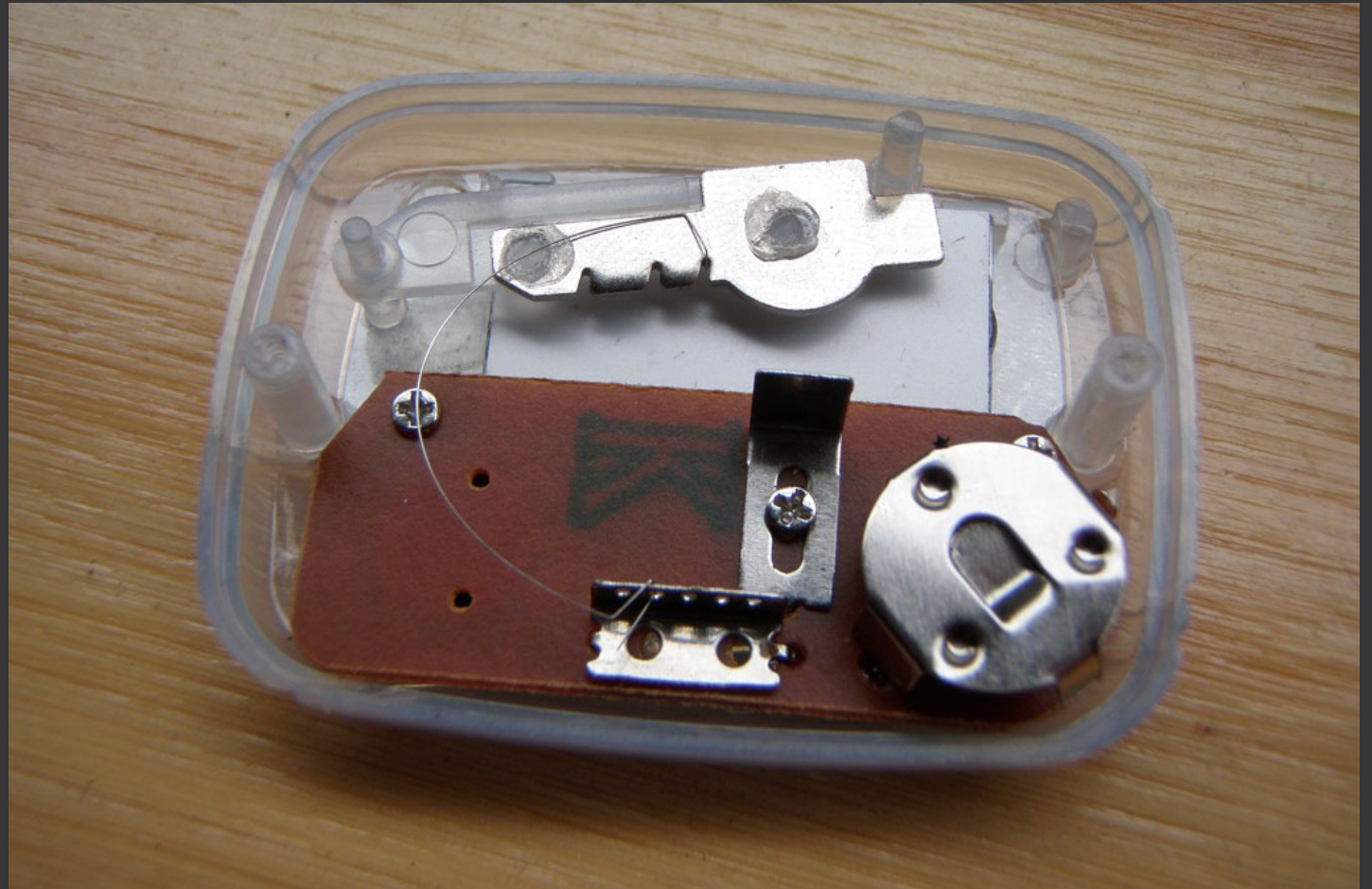
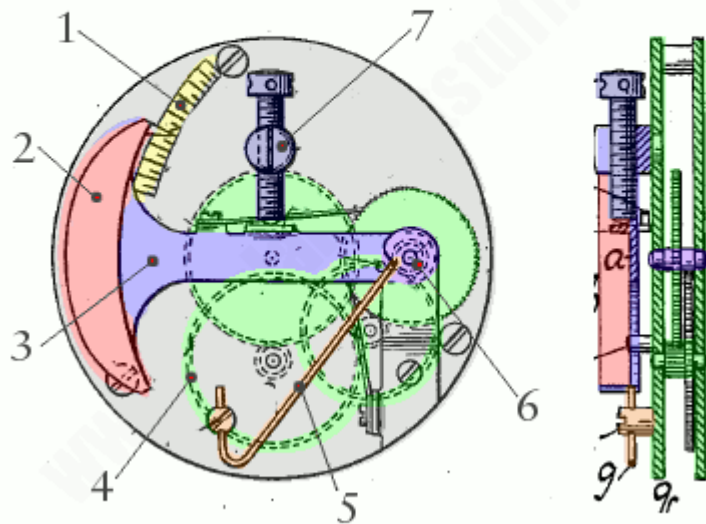
No. 758,405. PATENTED APR. 26, 1904.

O. BARTEL & E. KUHN.

PEDOMETER.

Front view

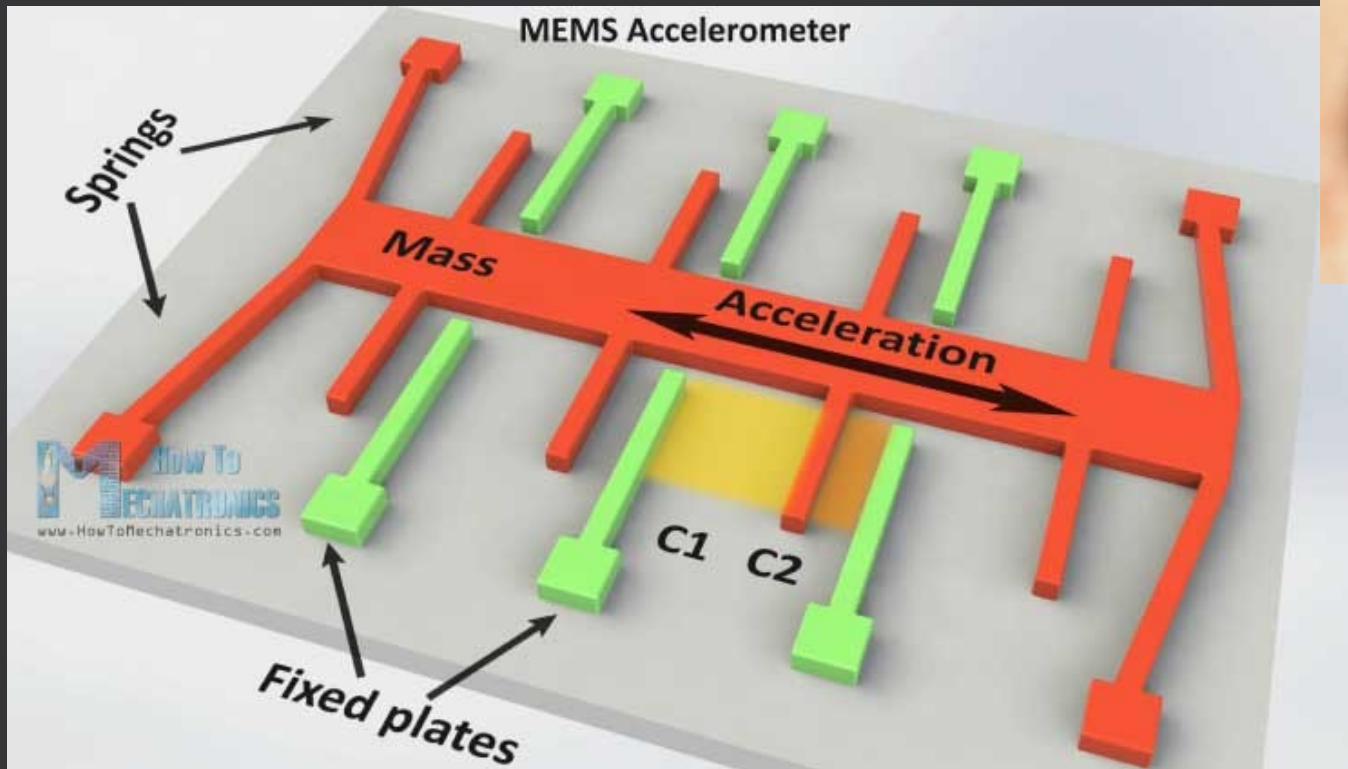
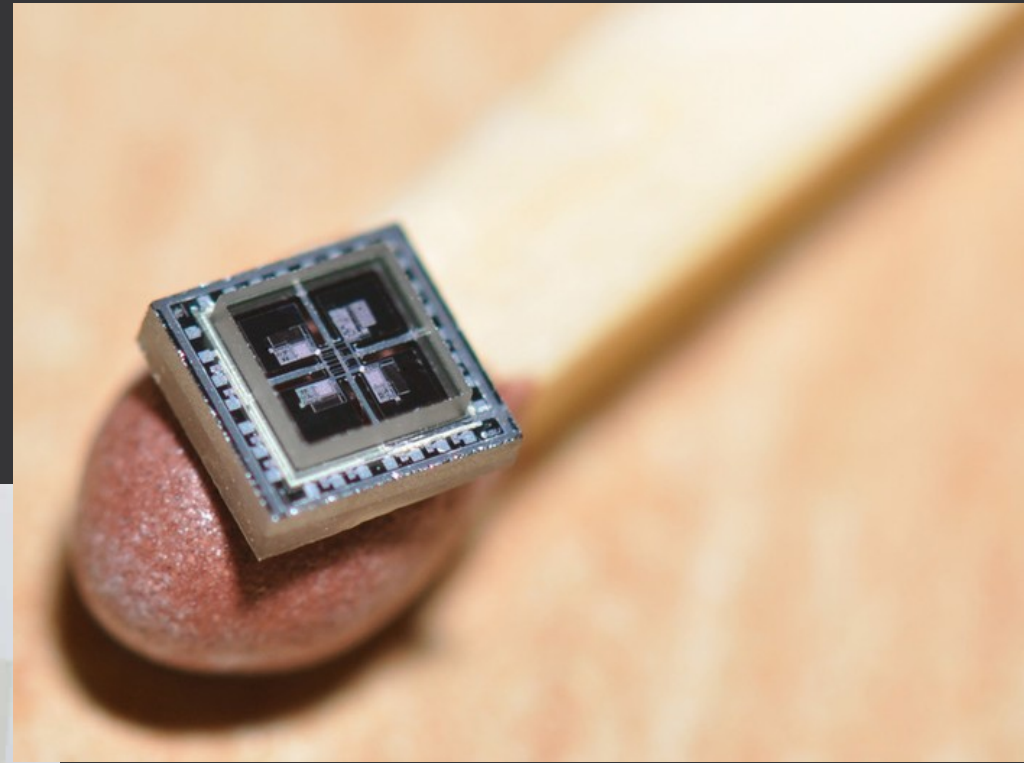
Side view



# AKCELEROMETRY



# AKCELEROMETRY



# AKCELEROMETRY - fitnessbelt

FITBIT



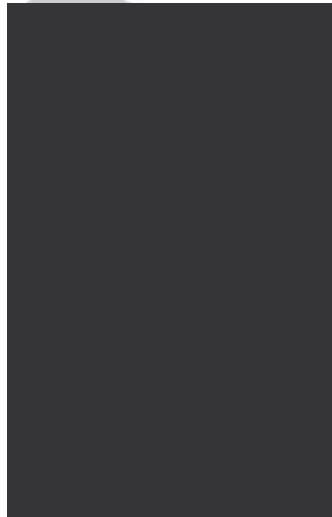
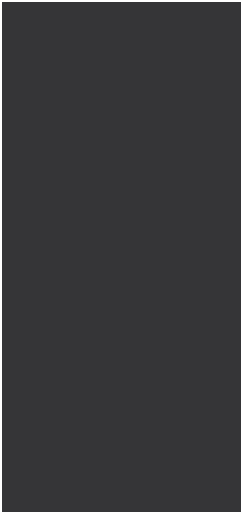
GARMIN VIVOFIT



JAWBONE NIKE FUEL BAND



POLAR LOOP



# AKCELEROMETRY – smartwatch

Xiaomi MOTO-G



SAMSUNG



Huawei



APPLE



KidyZoom



# AKCELEROMETRY – smartwatch-sporttester

Garmin

SUUNTO

TomTom

POLAR

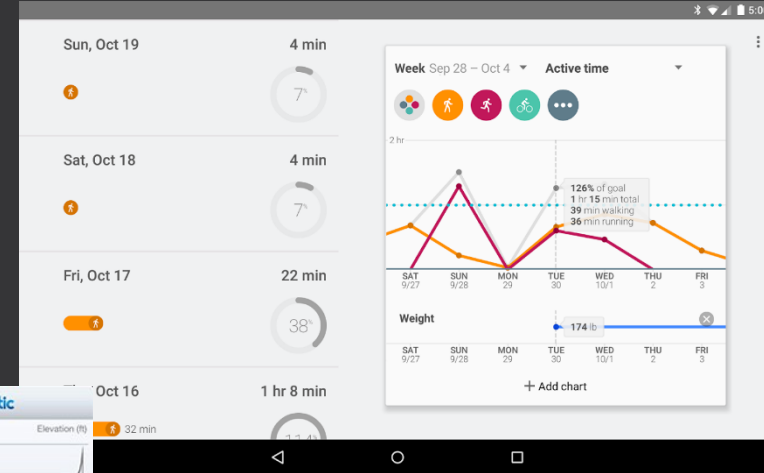




# SMARTPHONE (smartwatch) aplikace



SPORTS TRACKER  
GOOGLE FIT  
RUNKEEPER  
ENDOMONDO  
RUNSTATIC



# WEBové portály

**connect** powered by Garmin

CONNECTIONS

- tomvespa Daily Steps: 6,922 Steps | 61% of Goal
- tomvespa Daily Steps: 10,542 Steps | 90% of Goal
- tomvespa Daily Steps: 9,708 Steps | 82% of Goal

STEPS

Today Synced Today @ 15:54

6,922 Steps

61% of 11,297 Your Daily Goal

1,591 Calories 5.6 km 14,319 Daily Avg

REPORTS

Steps Nov 1 - Nov 7, 2014

79,365 Total 11,338 Daily Avg

SLEEP

Today Synced Today @ 15:54

DEVICES

vivofit

Track Your Calories

Use your free MyFitnessPal account and app to track your food throughout the day, and see it in Garmin Connect. With connected

RIYAD EMERAN

2,577,727

NIKE+ FUELBAND 2,336,704

98% Goal Hit %

449 Active Days

5,204 Avg Nike+ FuelDay

NIKE+ RUNNING 207,994

977km Total Distance

153 Total Runs

6.3km Avg Distance/Run

TROPHIES

Best Day Won 1 time

Best Week Won 1 time

Longest Streak Won 5 times

Best Month Won 1 time

Best Friday Won 1 time

NIKE+ SESSIONS

RUNNING 10x 27,651

CYCLING 3x 9535

SLEEPING 10x 570

37,756

eVito pro váš lepší život

Zdraví Výživa Pohyb Motivační

Tomas

Do dobrý den, jak se dnes máte?

Zdraví

Nálada

Spánek

Energie

Pitný režim

82.0 mm Hg

0 hod 30 min Dnes

0 kcal 2658 kcal

30 min Horská cyklistika

45 min Běh 4.5 min/km

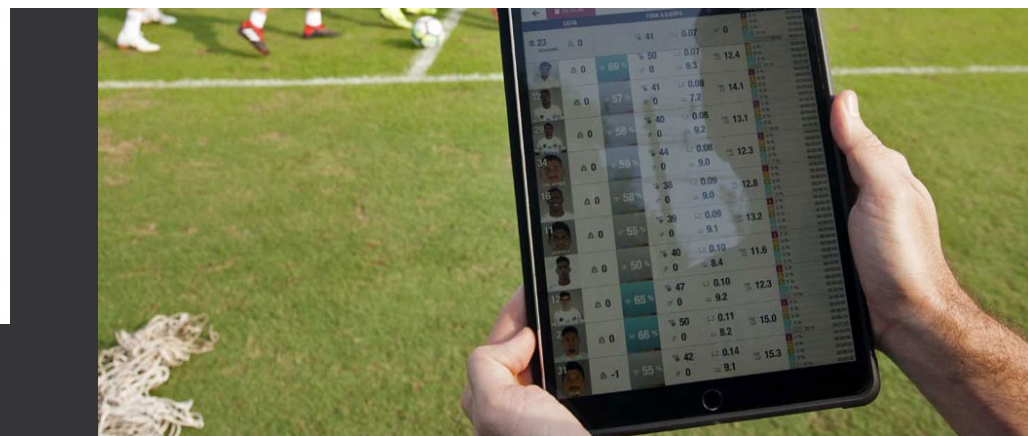
0,63 km Cyklistika

# GPS



# Teamové sporty

např. Polar Team



# **Normy a doporučení**

# Normy a doporučení

| Počet kroků za den | Stupeň aktivity   |
|--------------------|---|
| <5000              | sedavý způsob života - velmi málo aktivní   |
| 5000 - 7499        | málo aktivní - denní aktivita bez cvičení či sportu                                   |
| 7500 - 9999        | středně aktivní - zahrnuje nějakou pohybovou aktivitu nebo zvýšenou pracovní aktivitu |
| 10000 - 12499      | aktivní   |
| >12500             | vysoce aktivní  |

Tudor-Locke a Bassett (2004)

30 minut chůze denně alespoň pětkrát týdně

Healthy People 2010 (USDHHS, 2000)

10 000 kroků za den

(Hatano, 1993)

## CHŮZE - Počet kroků

| <i>FITT charakteristiky</i>   | <i>Denní počet kroků</i>   |
|---|--|
| <ul style="list-style-type: none"> <li>▶ <b>Pohybová aktivita alespoň střední intenzity po dobu nejméně 90 minut denně.</b></li> <li>▶ <b>Rozložení PA do kratších, alespoň 10minutových úseků s cílem souhrnné realizace nejméně 90 minut PA alespoň střední intenzity za den.</b></li> </ul>  | <ul style="list-style-type: none"> <li>▶ V převažujícím počtu dnů v týdnu by měl dosahovat <b>12 000 kroků u děvčat</b> a <b>14 000 kroků u chlapců</b></li> </ul> |
| <i>Další doporučení</i>   |  |
| <ul style="list-style-type: none"> <li>▶ <b>Podporovat pohybově aktivní (pěší a cyklistický) dopravu</b> dětí do školy a ze školy, zájmových organizací, klubů a dalších volnočasových aktivit.</li> <li>▶ <b>Upřednostňovat všestranný pohybový rozvoj</b> před jednostranným pohybovým (nebo sportovním) zaměřením.</li> <li>▶ <b>Upřednostňovat rychlostně-obratnostní PA</b> před aktivitami silového charakteru.</li> <li>▶ Zvýšit podíl dětí, které jsou <b>3–4× týdně</b> zapojeny do <b>organizované pohybové aktivity</b> (zahrnující vyučovací jednotky tělesné výchovy).</li> <li>▶ Děti by si měly osvojit základy mnoha druhů pohybových aktivit (bruslení, jízda na kole, lyžování, plavání, šplhání) a základní gymnastické prvky nejpozději do nástupu puberty.</li> <li>▶ <b>Nepřetržité sledování televize</b> či monitoru počítače by nemělo překročit <b>90 minut denně.</b></li> </ul> |  |

školní děti ve věku 6–11 let

(Sigmundová, Erik & Šnoblová, 2012)

# Normy a doporučení

jednotky MET

Provádět středně zatěžující pohybovou aktivitu (3–6 MET) alespoň **150** minut týdně nebo intenzivní pohybovou aktivitu alespoň **75** minut týdně

„2008 Physical activity guidelines for Americans“ (USDHHS, 2008), ACSM

Provádět středně zatěžující pohybovou aktivitu nejméně **30** minut **pětkrát** týdně nebo intenzivní pohybovou aktivitu nejméně **20** minut **tříkrát** týdně.

„EU physical activity guidelines“ (EU Sport Ministers, 2008)

Intenzitu zatížení lze rozdělit do tří pásem: (Pate et al., 1995)

- Nízké zatížení (**méně než 3,0 METs**)
- Střední zatížení (**3,0-6,0 METs**)
- Vysoké zatížení (**více než 6,0 METs**)

Frekvence: 3 – 4x týdně

Intenzita: 60 – 80% maximálního výkonu

Trvání: 30 - 45 min

oddělení tělovýchovného lékařství, LF UK



## The American Heart Association Recommendations for Physical Activity in Adults

At least **30** minutes of moderate-intensity aerobic activity  
At least **5** days per week for a total of **150** minutes

OR

At least **25** minutes of vigorous aerobic activity  
At least **3** days per week for a total of **75** minutes

or a combination of the two

AND

Moderate to **HIGH INTENSITY** muscle-strengthening activity  
At least **2** days per week for additional health benefits

USA

The experts recommend that you achieve the physical activity amount and intensity according to your age

### CHILDREN (Under 17)



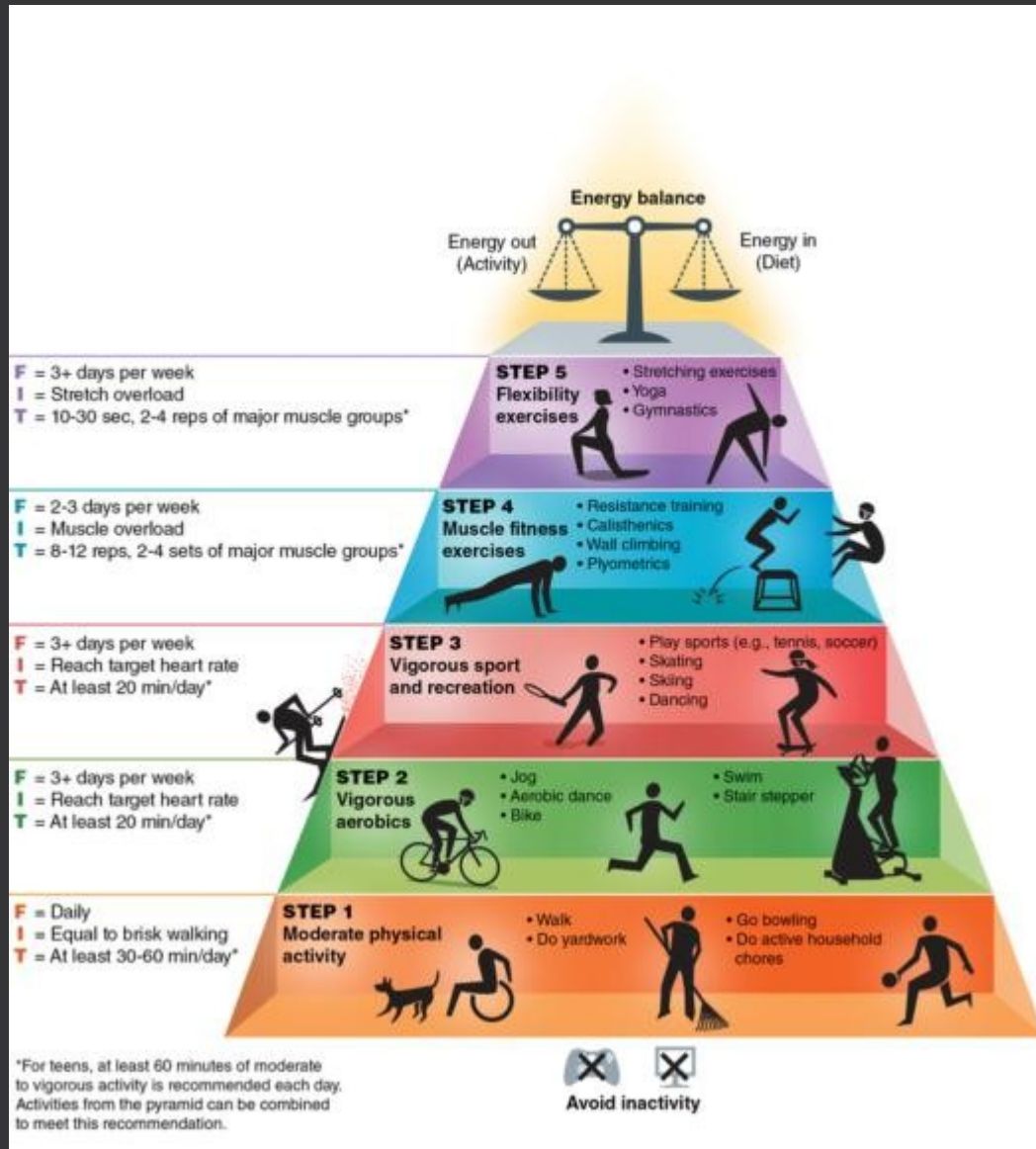
### ADULTS (18-64 years old):



### OLDER ADULTS (65 years old & older):







## Physical activity benefits for adults and older adults

- +** BENEFITS HEALTH
- Zzz** IMPROVES SLEEP
- ⚖️** MAINTAINS HEALTHY WEIGHT
- 🌿** MANAGES STRESS
- 😊** IMPROVES QUALITY OF LIFE

**REDUCES YOUR CHANCE OF**

|                                |      |
|--------------------------------|------|
| Type II Diabetes               | -40% |
| Cardiovascular Disease         | -35% |
| Falls, Depression and Dementia | -30% |
| Joint and Back Pain            | -25% |
| Cancers (Colon and Breast)     | -20% |

### What should you do?

**For a healthy heart and mind**      **To keep your muscles, bones and joints strong**      **To reduce your chance of falls**

**Be Active**      **Sit Less**      **Build Strength**      **Improve Balance**

|                        |                         |                 |                   |                |
|------------------------|-------------------------|-----------------|-------------------|----------------|
| <b>VIGOROUS</b><br>RUN | <b>MODERATE</b><br>WALK | <b>TV</b>       | <b>GYM</b>        | <b>DANCE</b>   |
| <b>SPORT</b>           | <b>CYCLE</b>            | <b>SOFA</b>     | <b>YOGA</b>       | <b>TAI CHI</b> |
| <b>STAIRS</b>          | <b>SWIM</b>             | <b>COMPUTER</b> | <b>CARRY BAGS</b> | <b>BOWLS</b>   |

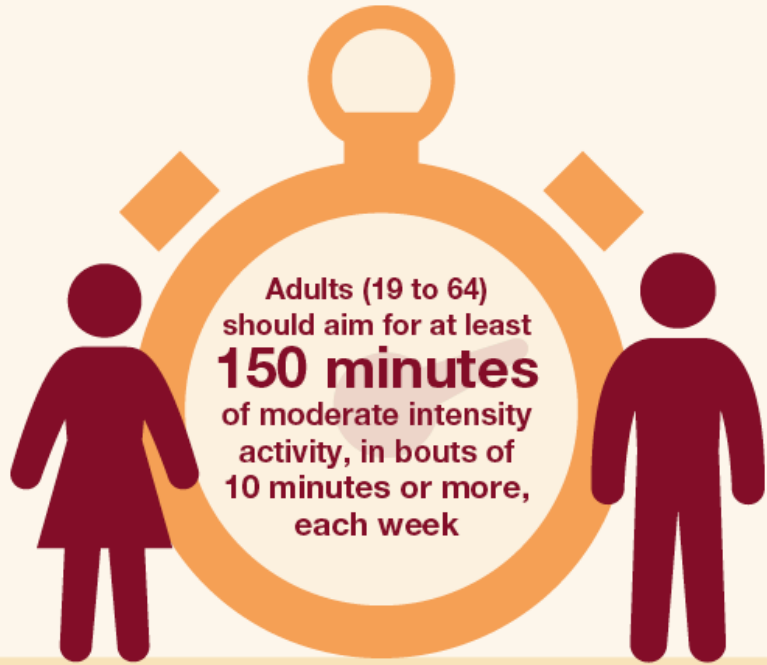
**MINUTES PER WEEK**  
**75 OR 150**  
VIGOROUS INTENSITY (BREATHING FAST, DIFFICULTY TALKING)      MODERATE INTENSITY (INCREASED BREATHING, ABLE TO TALK)  
**OR A COMBINATION OF BOTH**

**BREAK UP SITTING TIME**

**2 DAYS PER WEEK**

Something is better than nothing.  
Start small and build up gradually: just 10 minutes at a time provides benefit.  
**MAKE A START TODAY: it's never too late!**

# How much physical activity should you do?



This can also be achieved by 75 minutes of vigorous activity across the week or a mixture of moderate and vigorous.

All adults should undertake muscle strengthening activity, such as



exercising with weights



yoga



or carrying heavy shopping

at least 2 days a week

Minimise the amount of time spent sedentary (sitting) for extended periods



UK

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

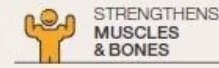


BUILDS CONFIDENCE & SOCIAL SKILLS

MAINTAINS HEALTHY WEIGHT



DEVELOPS CO-ORDINATION



STRENGTHENS MUSCLES & BONES



IMPROVES SLEEP



IMPROVES CONCENTRATION & LEARNING



IMPROVES HEALTH & FITNESS



MAKES YOU FEEL GOOD

## Be physically active



PLAY



RUN/WALK



BIKE



ACTIVETRAVEL



SWIM



SKATE



SPORT



PE



SKIP



CLIMB



WORKOUT



DANCE

Include muscle and bone strengthening activities  
**3 TIMES PER WEEK**

Sit less



LOUNGING

Move more

Find ways to help all children and young people accumulate at least 60 minutes of physical activity everyday

UK Chief Medical Officers' Guidelines 2011 Start Active, Stay Active: [www.bit.ly/startactive](http://www.bit.ly/startactive)

## SUMMARY OF THE

# Canadian Physical Activity Guidelines

## FOR ADULTS WITH MULTIPLE SCLEROSIS

### Guidelines

To achieve important fitness benefits, adults aged 18-65 years with multiple sclerosis who have mild to moderate disability need at least:



- 30 minutes of moderate intensity aerobic activity, 2 times per week, AND



- Strength training exercises for major muscle groups, 2 times per week.



Meeting these guidelines may also reduce fatigue, improve mobility and enhance elements of health related to quality of life.

### Let's talk intensity!

- Moderate-intensity physical activity is usually a 5 or 6 on a scale of 10 and causes your heart rate to go up
- Pick a resistance (free weights, cable pulleys, bands, etc.) heavy enough that you can barely, but safely, finish 10-15 repetitions of the last set
- Repetitions are the number of times you lift and lower a weight

### Important things to know

- Aerobic and strength training activities can be done on the same day
- Rest your muscles for at least one day between strength training sessions

### Aerobic Activity

#### How often?

- Two times per week
- Aerobic and strength training activities can be done on the same day

#### How much?

- Gradually increase your activity so that you are doing at least 30 minutes of aerobic activity during each workout session.

#### How hard?

- These activities should be performed at a moderate intensity.
- Moderate-intensity physical activity is usually a 5 or 6 on a scale of 10, and causes your heart rate to go up.
- As a general rule if you're doing moderate-intensity activity you can talk, but not sing a song, during the activity.

#### How to?

Some options for activity include:

- Upper Body Exercises: arm cycling
- Lower Body Exercises: walking, leg cycling
- Combined Upper and Lower body exercises: elliptical trainer

Other types of exercise that may bring benefits:

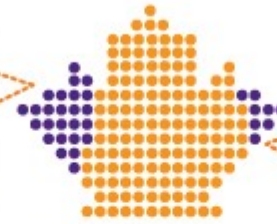
- Elastic resistance bands
- Aquatic exercise
- Calisthenics

For more information please go to ...



# HEY CANADA!

ONLY 15% OF ADULTS



AND 5% OF OUR CHILDREN

are getting the minimum recommended amount of **PHYSICAL ACTIVITY** needed for health benefits.

Adults need **150 MINUTES PER WEEK** of moderate-to-vigorous physical activity

Children need at least **60 MINUTES PER DAY** of moderate-to-vigorous physical activity

Source: Active Healthy Kids Canada (2013). Are We Driving our Kids to



95% of Canadian Kids DON'T GET ENOUGH PHYSICAL ACTIVITY.

5-17 year olds should get at least

**60 MINUTES OF MODERATE-TO-VIGOROUS**

**PHYSICAL ACTIVITY EVERYDAY!**

Encourage kids to:



Source: Active Healthy Kids Canada (2013). Are We Driving our Kids to Unhealthy Habits?

participACTION Let's get moving.

participACTION.com

ADULTS NEED **150 MINUTES OF HEART PUMPING PHYSICAL ACTIVITY PER WEEK.**



Research shows that even short, **10 minute bouts** of physical activity are associated with increased fitness.

Source: Canadian Society for Exercise Physiology; Canadian Physical Activity Guidelines for Adults

participACTION Let's get moving.

participACTION.com

MINISTRY of Health  
Shaping Fiji's Health

# PHYSICAL ACTIVITY

Guidelines for Healthy Children Age: 5 - 17

**Strength and Flexibility**  
Include muscle strengthening and flexibility activities on 3 or more days each week

**Aerobic Exercise or Recreational Play**  
Do at least 60 minutes of activity that will get your heart racing and breathing heavy on 5 or more days each week

**Sit LESS**  
SIT LESS! Cut down on sitting/screen time to less than 2 hours each day

**Move More... Play for 60 everyday**  
Increase PLAY time to 60 minutes or more EVERY day

FIJI

JAPAN

## Exercise and Physical Activity Guide for Health Promotion 2006

### 1. For people who want to increase physical activity for health promotion

#### Health promotion by physical activity

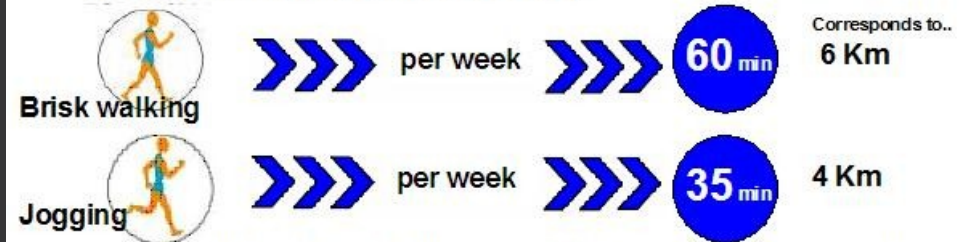
Let's walk to achieve the following goals in everyday life.



► When one uses a pedometer...  
The goal should be set as 10,000 steps per day (70,000 per week), including 2,000~4,000 steps unconsciously taken in everyday life.

#### Health promotion by exercises

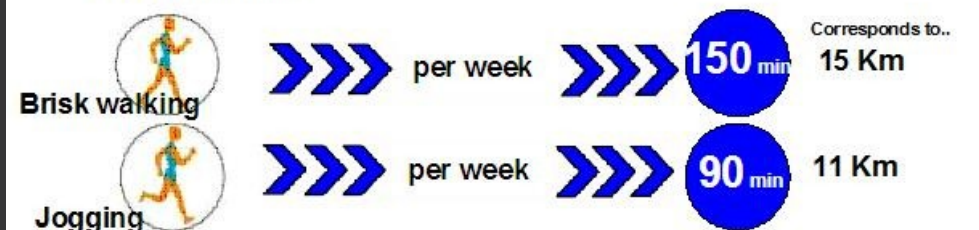
Let's practice more exercises, in addition to physical activity in everyday life, according to your lifestyle and physical fitness. For example, the following goals can be set (\*).



\*In this case, the goal of walking should be 50 minutes per day (350 minutes per week)

### 2. For people who are conscious about visceral fat

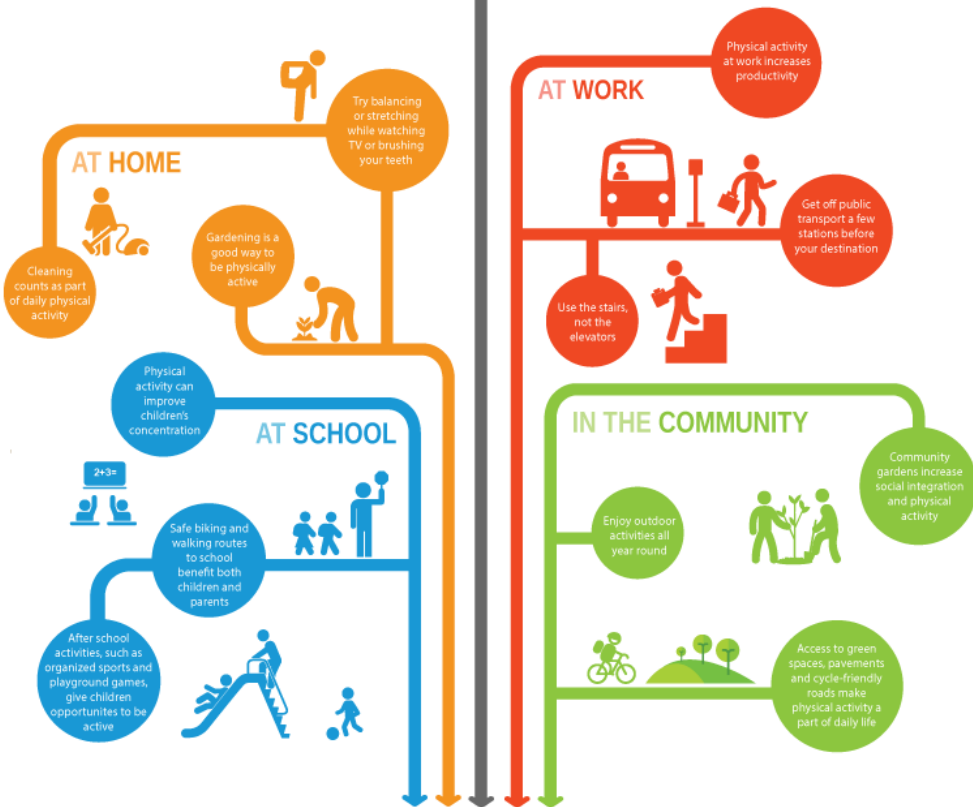
Let's try to achieve the following goals, so as to reduce visceral fat and improve the metabolic syndrome. People with no exercise habit could start with one fifth of these goals, and then increase the amount of exercise gradually.



# Make physical activity a part of daily life during all stages of life



|  |  |   |
|--|--|---|
| <p><b>6 OUT OF 10</b></p> <p>people in the European Union over the age of 15 never or seldom exercise or play sports</p> | <p>Every year in the WHO European Region, physical inactivity causes an estimated</p> <p><b>1 MILLION DEATHS</b></p> | <p>WHO recommendations for moderate- to vigorous-intensity physical activity:</p> <p><b>150</b> minutes per week (adults)</p> <p><b>60</b> minutes per day (children)</p> |
|--|--|---|



**REGULAR PHYSICAL ACTIVITY THROUGHOUT THE LIFE-COURSE ENABLES PEOPLE TO LIVE BETTER AND LONGER LIVES**

