

# Národní pohybové doporučení

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INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ



# Národní pohybové doporučení

- Řekneme si základní informace o PA a proč je důležitá
- Jaký se současný stav
- Co děláme pro to, abychom situaci změnili (zlepšili)



# Přístup k pohybové aktivitě




# Podpora pohybové aktivity

Důkazy  
o pohybové aktivitě

Podpora  
pohybové aktivity

Česká  
Společnost

United Nations



**General Assembly**

Distr.: Limited  
16 September 2011

Original: English

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Sixty-sixth session  
Agenda item 117  
Follow-up to the outcome of the Millennium Summit

Draft resolution submitted by the President of the General Assembly

**Political declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases**

*The General Assembly,*

Adopts the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases annexed to the present resolution.

**Annex**

**Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases**

We, Heads of State and Government and representatives of States and Governments, assembled at the United Nations from 19 to 20 September 2011, to address the prevention and control of non-communicable diseases worldwide, with

OCED

strana 1

**iDNES.cz / Zprávy**

Domácí | Zprávy | Kraje | Sport | Kultura | Ekonomika | Finance | Bydlení | Cestování | Auto | Hobby | Mobil

Zahrančí | Černá kronika | Očima čtenářů | Kavárna | Kemeř | MF DNES | Počasí

- Sedavý životní styl
- Nízká úroveň pohybové aktivity

**Jídelníček obézního dítěte: nesnídá a večerí uzzeniny**

Dotazník ukázal, že více než třetina dětí ve věku 9 až 13 let má problémy s nadváhou, přičemž nadměrnou tlamotnost má 9 procent školáků a obézních je 5 procent dětí. Obézní děti přitom většinou pocházejí z rodin s nezdravým životním stylem, jak ukázal aktuální průzkum.



Obézní děti si své špatné návyky vštěpou hlavně od svých rodičů (ilustrace: animes) | foto: Profimedia.cz

Znovu se ukazuje, jak důležité je pro zdravý vývoj člověka prostředí, v němž vyrůstá, a vzory, kterými je obklopen.

Na stolech u obézních dětí se například objevují uzzeniny až o polovinu častěji než v rodinách dětí s normální váhou. Smažené hranolky mělo k večeru **deset** před výzkumem spojeným s osvětovou akcí s názvem **Obezita** není náhoda více než 19 procent obézních.

V rodinách tloušťků také nebyvá zvykem sportovat, což se ovšem týká většiny rodin dnešních školáků - jen 15 procent dětí odpovědělo, že jejich rodiče si

**Třetina dětí má problémy**

Loni se poprvé podíl obézních **žen** ustálil a podíl obézních mužů mímě klesl. Muže

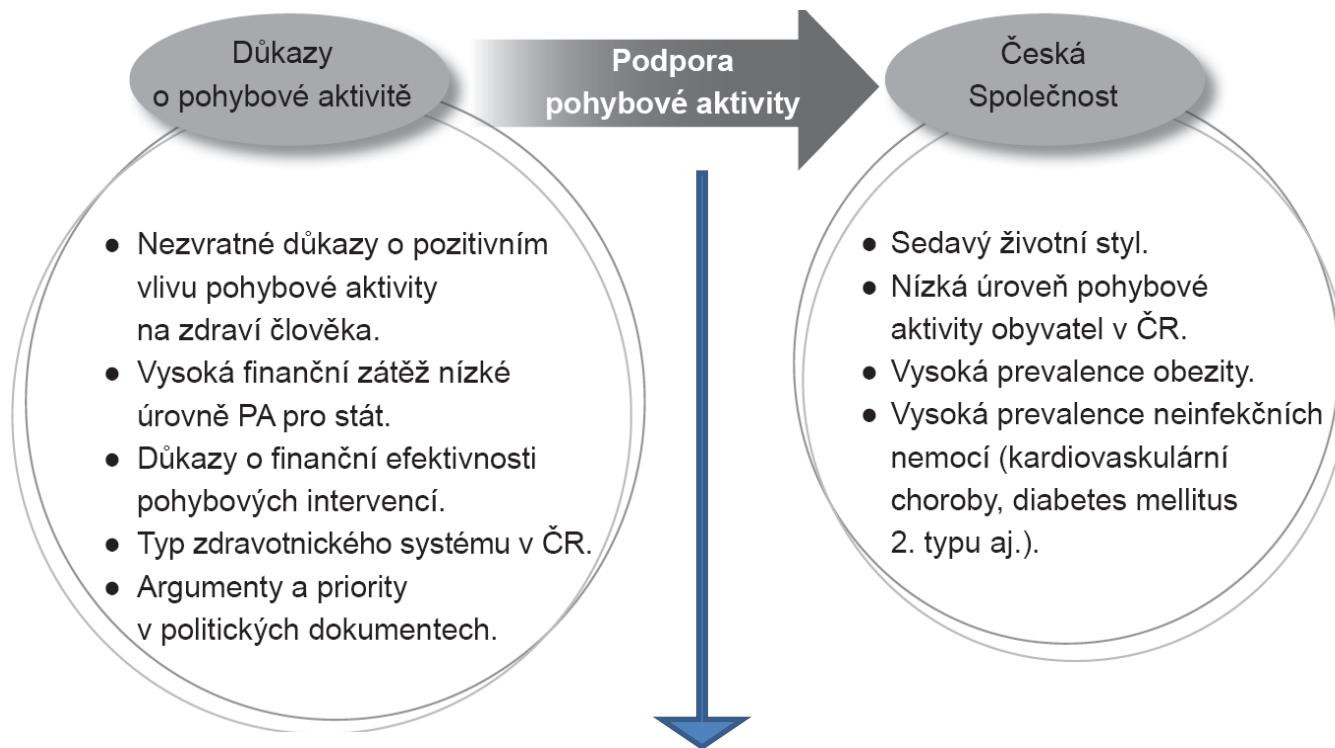
**55 procent Čechů, silnější**

55 procent lidí. Potvrdil to nejnovější průzkum, jímž především lidé z venkova. Většina mužů

cent lidí, **obezitou trpí** 21 procent české m tělesné **hmotnosti** (BMI) nad 30 stoupy za



# Podpora pohybové aktivity



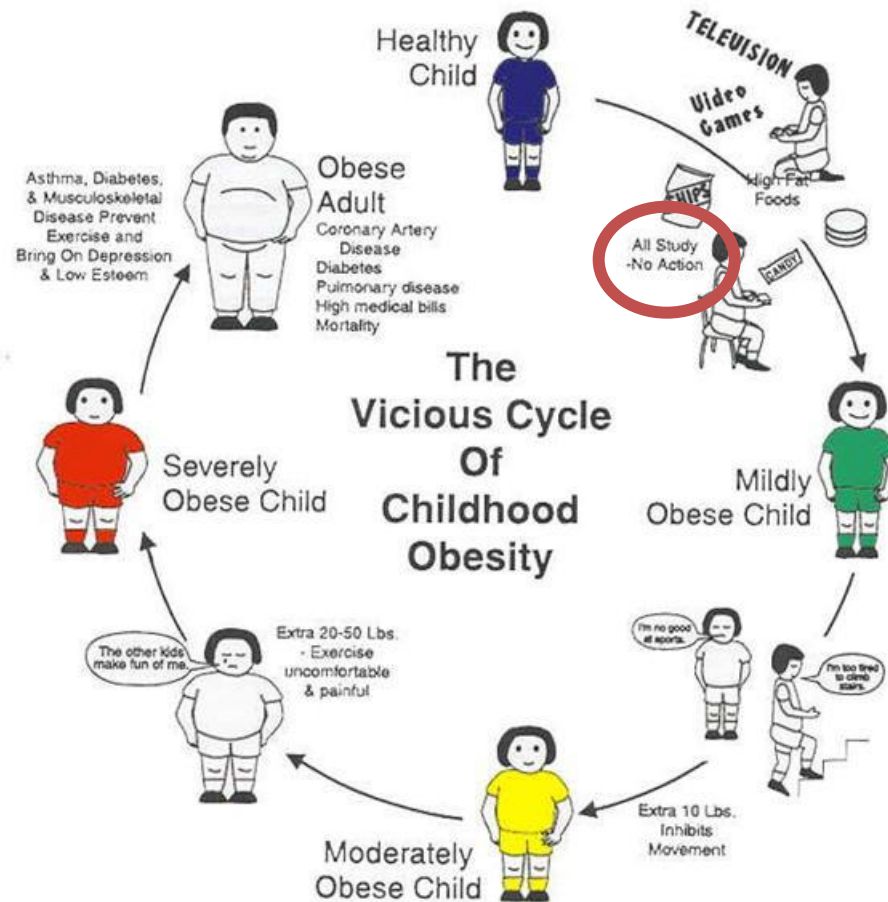
## Národní pohybové doručení

# Národní pohybové doporučení

- Jedná se o efektivní intervenci
- Je to nízkonákladová intervenci
- Cílem je zvýšit povědomí o zdravém životním stylu a důležitosti PA



# Začarovaný kruh dětské obezity a pohybové inaktivity



	Variable	BOYS						GIRLS					
		2002	2006	2010	2010 vs. 2002		Trend	2002	2006	2010	2010 vs. 2002		Trend
		% <sup>a</sup>	% <sup>a</sup>	% <sup>a</sup>	OR	95% CI		% <sup>a</sup>	%	%	OR	95% CI	
1	Austria	27.4	23.2	30.5	1.258**	1.097-1.442	+	15.8	15.8	17.5	1.155	0.980-1.361	o
2	Belgium	14.8	23.3	20.9	1.489***	1.302-1.703	+	7.5	16.7	12.3	1.700***	1.437-2.012	+
3	Canada	26.9	30.5	28.0	1.050	0.936-1.178	o	17.5	17.0	17.2	1.012	0.893-1.148	o
4	Croatia	27.8	29.2	27.5	1.171*	1.026-1.336	+	14.4	16.9	13.6	0.876	0.729-1.051	o
5	Czech Republic	31.1	26.6	27.4	0.745***	0.650-0.854	-	22.3	17.0	18.6	0.724***	0.623-0.841	-
6	Denmark	20.9	25.1	14.2	0.667***	0.560-0.795	-	14.9	20.2	9.4	0.654***	0.474-0.909	-
7	England	28.9	22.7	28.6	0.944	0.810-1.099	o	15.6	13.8	14.6	0.876	0.737-1.042	o
8	Estonia	13.6	21.3	16.6	1.149	0.958-1.378	o	9.5	14.4	12.3	1.208	0.983-1.485	o
9	Finland	17.8	28.9	29.7	1.897***	1.661-2.166	+	12.0	20.1	17.7	1.496***	1.282-1.745	+
10	France	13.2	19.4	17.5	1.328***	1.157-1.524	+	4.5	7.6	6.8	1.503***	1.215-1.860	+
11	Germany	15.1	19.9	20.0	1.444***	1.239-1.682	+	8.5	13.9	14.0	1.754***	1.465-2.100	+
12	Greenland	32.1	33.6	28.8	0.836	0.616-1.136	o	27.4	24.5	22.0	0.705*	0.522-0.951	-
13	Hungary	22.0	25.5	25.1	1.186*	1.018-1.382	+	10.8	14.1	13.5	1.200*	1.001-1.438	+
14	Ireland	35.4	37.6	34.3	1.033	0.889-1.201	o	21.7	24.3	20.3	0.922	0.779-1.091	o
15	Israel	21.2	23.9	23.6	1.179*	1.014-1.371	+	10.1	12.4	10.0	0.982	0.812-1.188	o
16	Italy	13.0	20.5	10.7	0.763**	0.632-0.922	-	8.3	9.8	5.4	0.567***	0.446-0.722	-
17	Latvia	18.9	27.6	24.5	1.275**	1.076-1.512	+	10.8	18.6	16.0	1.602***	1.312-1.955	+
18	Lithuania	30.8	22.7	19.7	0.502***	0.441-0.573	-	20.5	15.6	13.3	0.552***	0.472-0.645	-
19	Macedonia	19.6	26.7	26.6	1.446***	1.240-1.685	+	14.3	18.3	18.0	1.302**	1.093-1.550	+
20	Netherlands	18.0	24.2	22.3	1.204*	1.031-1.407	+	15.8	18.3	15.7	0.931	1.019-1.773	o
21	Norway	14.2	18.0	19.5	1.409***	1.201-1.654	+	8.5	12.5	11.2	1.213	0.990-1.487	o
22	Poland	20.8	22.2	25.3	1.224**	1.068-1.404	+	13.2	13.0	15.4	1.049	0.891-1.234	o
23	Portugal	16.0	22.0	18.4	1.228*	1.008-1.496	+	8.4	8.2	8.5	1.047	0.814-1.347	o
24	Russia	18.3	16.6	16.1	0.774***	0.671-0.892	-	11.4	9.6	9.1	0.656***	0.550-0.781	-
25	Scotland	25.2	28.5	18.3	0.710***	0.618-0.814	-	13.6	15.7	11.0	0.796*	0.668-0.949	-
26	Slovenia	29.0	21.9	25.5	0.772***	0.674-0.886	-	16.4	13.3	14.9	0.873	0.737-1.032	o
27	Spain	22.3	25.1	29.9	1.489***	1.310-1.694	+	11.7	17.4	15.1	1.376***	1.168-1.620	+
28	Sweden	16.0	18.2	15.6	0.971	0.826-1.142	o	9.8	14.7	12.2	1.228*	1.014-1.488	+
29	Switzerland	18.0	16.0	15.5	0.830*	0.717-0.962	-	12.1	10.0	8.5	0.660***	0.551-0.790	-
30	Ukraine	20.9	28.5	29.4	1.438***	1.243-1.664	+	12.4	16.0	16.9	1.194*	1.009-1.414	+
31	USA	35.2	34.1	31.6	0.869*	0.774-0.975	-	21.0	20.1	20.1	0.927	0.814-1.057	o
32	Wales	21.8	27.9	21.2	1.100	0.948-1.277	o	11.9	14.2	13.8	1.186	0.978-1.440	o
	All countries	21.4	24.3	23.4	1.105***	1.154-1.213	+	12.9	15.1	13.9	1.049**	1.018-1.080	+

Zdroj: Kalman, M., Inchley, J., Sigmundová, D., Iannotti, R., Tymjala, J., Hamrik, Z., Sigmund, E, Bucksch, J. (2014). Secular trends in moderate to-vigorous physical activity from 2002 to 2010: a cross-national perspective. European Journal of Public Health

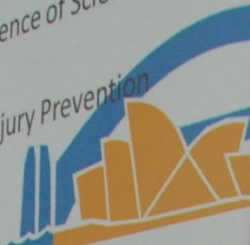


# Časový harmonogram tvorby doporučení



BE ACTIVE 2012  
10-12 SEPTEMBER 2012

- 4<sup>th</sup> International Congress Physical Activity and Public Health
- 2012 Australian Conference of Science and Medicine in Sport
- 2012 National Sports Injury Prevention Conference



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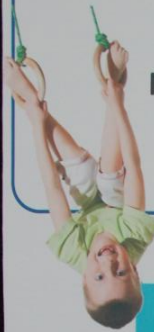
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# Development and Launch of the Canadian Physical Activity Guidelines for the Early Years.

MS Tremblay<sup>1,2</sup>, AG LeBlanc<sup>1</sup>, V Carson<sup>3</sup>, S Connor Gorber<sup>4</sup>,  
M Duggan<sup>5</sup>, I Janssen<sup>3,6</sup>, ME Kho<sup>7</sup>, K Murumets<sup>8</sup>, JC  
Spence<sup>9</sup>, BW Timmons<sup>10</sup>



## Canadian Physical Activity Guidelines

FOR THE EARLY YEARS - 0 - 4 YEARS

### Guidelines:

For healthy growth and development:

- Infants (aged less than 1 year) should be physically active several times daily – particularly through interactive floor-based play.
- Toddlers (aged 1-2 years) and preschoolers (aged 3-4 years) should accumulate at least 180 minutes of physical activity at any intensity spread throughout the day, including:
  - A variety of activities in different environments.
  - Activities that develop movement skills.
- Progression toward at least 60 minutes of energetic play by 3 years of age.
- More daily physical activity provides greater benefits.

### Being active as an infant means:

- Tummy time
- Reaching for or grasping balls or other toys
- Playing or rolling on the floor
- Crawling around the house

### Being active as a toddler or preschooler means:

- Any activity that gets kids moving
  - Climbing stairs and moving around the house
  - Playing outside and exploring their environment
  - Doing simple activities, running or skipping
- The older children get the more energy they need such as playing, learning, resting and taking naps.

### All activity counts. Try these tips to get young kids moving:

- ☑ Create safe spaces for play
- ☑ The more and longer active times together
- ☑ Check for the weather and explore the outdoors
- ☑ Take time for play with other kids
- ☑ Get where you're going for walking or biking

Any way, every day.  
Get active together!



### Introduction

In 2012, in response to calls from the child care, health care and public health sectors, the Canadian Society for Exercise Physiology, with assistance from multiple partners, stakeholders and researchers, developed the first evidence-informed Canadian Physical Activity Guidelines for the Early Years (aged 0-4 years).

### Methods

A rigorous and transparent guideline development process was followed and included: establishing a leadership team; instituting process assessment procedures; forming a guideline development committee; international and inter-jurisdictional guideline harmonization; systematic literature review; interpretation of findings; identification of research gaps; consensus and stakeholder engagement; knowledge translation strategy (including language translation, messaging, communication strategy, dissemination strategy); evaluation; and update and revision planning. The guideline development process was informed by the Appraisal of Guidelines for Research Evaluation (AGREE II) instrument and the evidence assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. The final guideline recommendations were informed by evidence from a systematic review capturing 22 papers representing 18 unique studies examining the relationships between physical activity and health indicators (adiposity, bone and skeletal health, motor skill development, psychosocial health, cognitive development and cardio-metabolic health indicators) for three age groups (infants less than 1 year; toddlers 1-2 years; preschoolers 3-4 years). A public relations and media strategy supported the release of the guidelines to the Canadian public.

### Results

The guidelines reflect input from nearly 1000 domestic and international stakeholders and end-users and include a preamble to provide context, followed by the specific recommendations. Information sheets also provide examples of appropriate activities and text to help clarify important terms.

### Discussion

With the addition of the physical activity guidelines for the early years, there are now current physical activity guidelines for all ages in Canada. The comprehensive, inclusive and transparent process used to develop and release these guidelines in Canada resulted in extensive media coverage facilitating dissemination, awareness and uptake by stakeholders.

### References

- Timmons BW, LeBlanc AG, Carson V, Connor Gorber S, Dillman C, Janssen I, Kho ME, Stearns J, Spence JC, Tremblay MS. Systematic review of the relationship between physical activity and health indicators in the early years (aged 0-4 years). *Applied Physiology Nutrition and Metabolism*. 2012; 37(7):793-2012.
- Tremblay MS, LeBlanc AG, Carson V, Choquet L, Connor Gorber S, Dillman C, Duggan M, Gordon M, Hicks A, Janssen I, Kho ME, Latimer-Chung AE, LeBlanc C, Murumets K, O'Leary AD, Reilly JJ, Stearns JA, Spence JC, and Timmons BW. Canadian physical activity guidelines for the early years (aged 0-4 years). *Applied Physiology Nutrition and Metabolism*. 2012; 37(2):345-355.

### Authors' affiliations

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### Canadian Physical Activity Guidelines for the Early Years (aged 0-4 years)

#### TIMELINE

- NOVEMBER 2006:** CSEP think tank, Halifax, Nova Scotia
- DECEMBER 2006:** CSEP Physical Activity guidelines steering committee established
- MARCH 2007:** Working research retreat, Kananaskis, Alberta  
Twelve reviews (including one focused on early years), introduction and conclusion papers discussed
- NOVEMBER 2007:** Launch of foundation papers in Applied Physiology, Nutrition and Metabolism (APNM) (32: S2), CSEP Annual General Meeting 2007. Including review on early years activity levels (Timmons et al. Physical activity for preschool children – how much and how?)
- JANUARY 2009:** International consensus meeting, Kananaskis, Alberta  
Early Years age group (i.e. 0-4 years) identified as gap area
- SEPTEMBER 2010:** Early Years age group identified as gap area by the Public Health Agency of Canada and CSEP online and in-person stakeholder consultation
- OCTOBER 2010:** Early Years guideline working group established
- FEBRUARY 2011:** Healthy Active Living and Obesity Research Group (HALO) awarded Canadian Institutes of Health Research knowledge synthesis grant to complete a systematic review on physical activity and health indicators in the early years
- MARCH 2011:** Systematic review questions established, Toronto, Ontario Concurrently, HALO/CSEP begin work to inform Physical Activity Guidelines for the Early Years
- DECEMBER 2011:** International consensus meeting, Toronto, Ontario Results of systematic review discussed, early years physical activity guidelines drafted; on-line stakeholder consultation on wording of draft guidelines
- JANUARY 2012:** Post-stakeholder consultation and messaging meeting, Ottawa, Ontario Wording of physical activity guidelines finalized, information sheets and messaging material drafted
- FEBRUARY 2012:** Guidelines, information sheets and process paper translated to French
- MARCH 2012:** Guidelines launched to Canadians  
Process paper published in APNM in both English and French; systematic review submitted for publication; AGREE II report published by CSEP



# Development and Launch of the Canadian Sedentary Behaviour Guidelines for the Early Years.

MS Tremblay<sup>1,2</sup>, AG LeBlanc<sup>1</sup>, V Carson<sup>3</sup>, S Connor Gorber<sup>4</sup>,  
M Duggan<sup>5</sup>, I Janssen<sup>3,6</sup>, ME Kho<sup>7</sup>, K Murumets<sup>8</sup>, BW  
Timmons<sup>9</sup>, JC Spence<sup>10</sup>



## Introduction

In response to calls from the child care, health care and public health sectors, the Canadian Society for Exercise Physiology, with assistance from multiple partners, stakeholders and researchers, developed the first evidence-informed Canadian Sedentary Behaviour Guidelines for the Early Years (aged 0-4 years).

## Methods

A rigorous and transparent guideline development process was followed and included: establishing a leadership team; instituting process assessment procedures; forming a guideline development committee; international and inter-jurisdictional guideline harmonization; systematic literature review; interpretation of findings; identification of research gaps; consensus and stakeholder engagement; knowledge translation strategy (including language translation, messaging, communication strategy, dissemination strategy); evaluation; and update and revision planning. The guideline development process was informed by the Appraisal of Guidelines for Research Evaluation (AGREE) II instrument and the evidence assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. The final guideline recommendations were informed by evidence from a systematic review capturing 23 papers representing 21 unique studies examining the relationships between sedentary behaviour and health indicators (adiposity, bone health, motor skill development, psychosocial health, cognitive development and cardio-metabolic health indicators) for three age groups (infants less than 1 year; toddlers 1-2 years; preschoolers 3-4 years). A public relations and media strategy supported the release of the guidelines to the Canadian public.

## Results

The guidelines reflect input from nearly 1000 domestic and international stakeholders and end-users and include a preamble to provide context, followed by the specific recommendations. Information sheets also provide examples of appropriate activities and text to help clarify important terms.

## Discussion

To our knowledge, these are the world's first sedentary behaviour guidelines for the early years that are separate and distinct from physical activity guidelines. The comprehensive, inclusive and transparent process used to develop and release these guidelines in Canada resulted in extensive media coverage facilitating dissemination, awareness and uptake by stakeholders.

### Canadian Sedentary Behaviour Guidelines for the Early Years (aged 0-4 years)

#### TIMELINE

- NOVEMBER 2006:** CSEP think tank, Halifax, Nova Scotia
- DECEMBER 2006:** CSEP Physical Activity guidelines steering committee established
- MARCH 2007:** Working research retreat, Kananaskis, Alberta. 12 reviews (including one focused on early years), introduction and conclusion papers discussed
- NOVEMBER 2007:** Launch of foundation papers in Applied Physiology, Nutrition and Metabolism (APNM) (32: 52). CSEP Annual General Meeting 2007. Including review on early years activity levels (Timmons et al. Physical activity for preschool children – how much and how?)
- JANUARY 2009:** International consensus meeting, Kananaskis, Alberta. Early Years age group (i.e., 0-4 years) identified as gap area
- SEPTEMBER 2010:** Early Years age group identified as gap area by the Public Health Agency of Canada and CSEP online and in-person stakeholder consultation
- OCTOBER 2010:** Early Years guideline working group established
- MARCH 2011:** Systematic review questions established, Toronto, Ontario. Healthy Active Living and Obesity Research Group (HALO) / CSEP led systematic review of sedentary behaviours and health indicators begins concurrent with systematic review on physical activity and health in the early years
- DECEMBER 2011:** International consensus meeting, Toronto, Ontario. Results of systematic review discussed, early years sedentary behaviour guidelines drafted, on-line stakeholder consultation on wording of draft guidelines
- JANUARY 2012:** Post-stakeholder consultation and messaging meeting, Ottawa, Ontario. Wording of sedentary behaviour guidelines finalized, information sheets and messaging material drafted
- FEBRUARY 2012:** Guidelines, information sheets and process papers translated to French
- MARCH 2012:** Guidelines launched to Canadians. Process paper published in APNM in both English and French. Systematic review submitted for publication, AGREE II report published by CSEP

### Canadian Sedentary Behaviour Guidelines

FOR THE EARLY YEARS - 0-4 YEARS

#### Guidelines:

For healthy growth and development, caregivers should restrict the time infants (aged less than 1 year), toddlers (aged 1-2 years) and preschoolers (aged 3-4 years) spend being sedentary during waking hours. This includes prolonged sitting or being restrained (e.g., stroller, high chair) for more than one hour at a time.

For those under 2 years, screen time (e.g., TV, computer, electronic games) is not recommended.

For children 3-4 years, screen time should be limited to under one hour per day, less is better.

#### The Limitation on the Stroller

##### What Counts as Being Sedentary?

Being sedentary means you have the energy and the physical resources to do what you want, but you are not doing it.

It is a state of being that is not:

• sleeping

• being held or carried

• being restrained (e.g., in a stroller, high chair, car seat, crib, or bed)

• being sedentary for more than one hour at a time.

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There's no time like right now to get up and get moving!



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# Swiss recommendations for physical activity and health in an international comparison: State of affairs in 2011 and options for updating

Sonja Kahlmeier<sup>1</sup>, Patrick Alpiger<sup>1</sup>, Brian W. Martin<sup>1</sup>

<sup>1</sup> Physical Activity and Health Unit, Institute of Social and Preventive Medicine, University of Zurich



## Introduction

- National recommendations are an important element of a comprehensive physical activity promotion strategy
- Switzerland has recommendations for adults since 1999 (activity pyramid) and for young people since 2006 (activity disk)



- New global and international recommendations exist
- Countries in Europe should review their national recommendations

## Methods

- Analysis of five important international and illustrative national examples with regard to implications for Swiss situation:
  - Global Recommendations on Physical Activity for Health World Health Organization: Geneva: WHO; 2010.
  - Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association Haskell WL et al. Med Sci Sports Exerc 2007, 39(8):1423-1434.
  - Physical Activity Guidelines for Americans. Be Active, Healthy, and Happy! U.S. Department of Health and Human Services: Washington: U.S. Department of Health and Human Services; 2008.
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## Results

Country	Minimum recommendations			Frequency	Further recommendations	Benefits	Additional health benefits	Strength, balance etc.	Inactivity	Overweight
	Modest intensity	Vigorous intensity	Combination							
Switzerland	30 min			Daily for at least 5 days of the week	At least 30 min	Additional health effects with more activity. Targeted endurance training at least 3 days/week	Strength training at least 2 days/week (8-15 repetitions)	Flexibility, gymnastics and stretching exercises	Particularly important for >50 year olds	
WHO	150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week			
USA	30 min on 3 days/week	20 min on 3 days/week	yes	On 7 or 3 days/week	At least 30 min	Additional health effects with more activity	Muscle-strengthening and endurance training on 2 or more days/week	Lead lifting activities	To prevent weight gain, some need to move more and watch their diet.	
Canada	150 min/week	75 min/week	yes	On most days	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week			
Canada	150 min/week	75 min/week	yes	On most days	At least 30 min	Additional health effects with more activity	Muscle-strengthening activities on 2 or more days/week			
USA	Same activity as for adults, but with additional benefits: 150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		Avoid inactivity	Minimum recommendation use first step to keep a healthy weight. Many will need more than that to maintain their weight

Table 1: Part of the strength chapter, rest of the main recommendations.

### Analysis of recommendations for adults

Country	Minimum recommendations			Frequency	Further recommendations	Benefits	Additional health benefits	Strength, balance etc.	Inactivity	Overweight
	Modest intensity	Vigorous intensity	Combination							
Switzerland	150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week			
WHO	150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week			
USA	150 min/week	75 min/week	yes	On most days	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week			
Canada	150 min/week	75 min/week	yes	On most days	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week			
USA	Same activity as for adults, but with additional benefits: 150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		Avoid inactivity	Minimum recommendation use first step to keep a healthy weight. Many will need more than that to maintain their weight

Table 2: Part of the strength chapter, rest of the main recommendations.

Country	Minimum recommendations			Frequency	Further recommendations	Benefits	Additional health benefits	Inactivity	Overweight
	Modest intensity	Vigorous intensity	Combination						
Switzerland	150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		
WHO	150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		
USA	150 min/week	75 min/week	yes	On most days	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		
Canada	150 min/week	75 min/week	yes	On most days	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		
USA	Same activity as for adults, but with additional benefits: 150 min/week	75 min/week	yes	Through out the week	At least 30 min	300 min moderate intensity/week, 150 min vigorous intensity/week, or combination	Muscle-strengthening activities on 2 or more days/week		Avoid inactivity

Table 3: Part of the strength chapter, rest of the main recommendations.

### Analysis of recommendations for children and adolescents

## Conclusions

- Overall, Swiss recommendations are in line with recent evidence
- Some specific differences were identified
- No recommendations for pre-school children exist in Switzerland
- No recommendations for or older adults exist in Switzerland
- Options for updates and further developments were developed
- National process currently underway, wide consultation of stakeholders

## Acknowledgement

Project funded by the Swiss Federal Offices of Sport and of Public Health. Input and comments by Urs Mäder and Nadja Mahler, Swiss Federal Office of Sport.

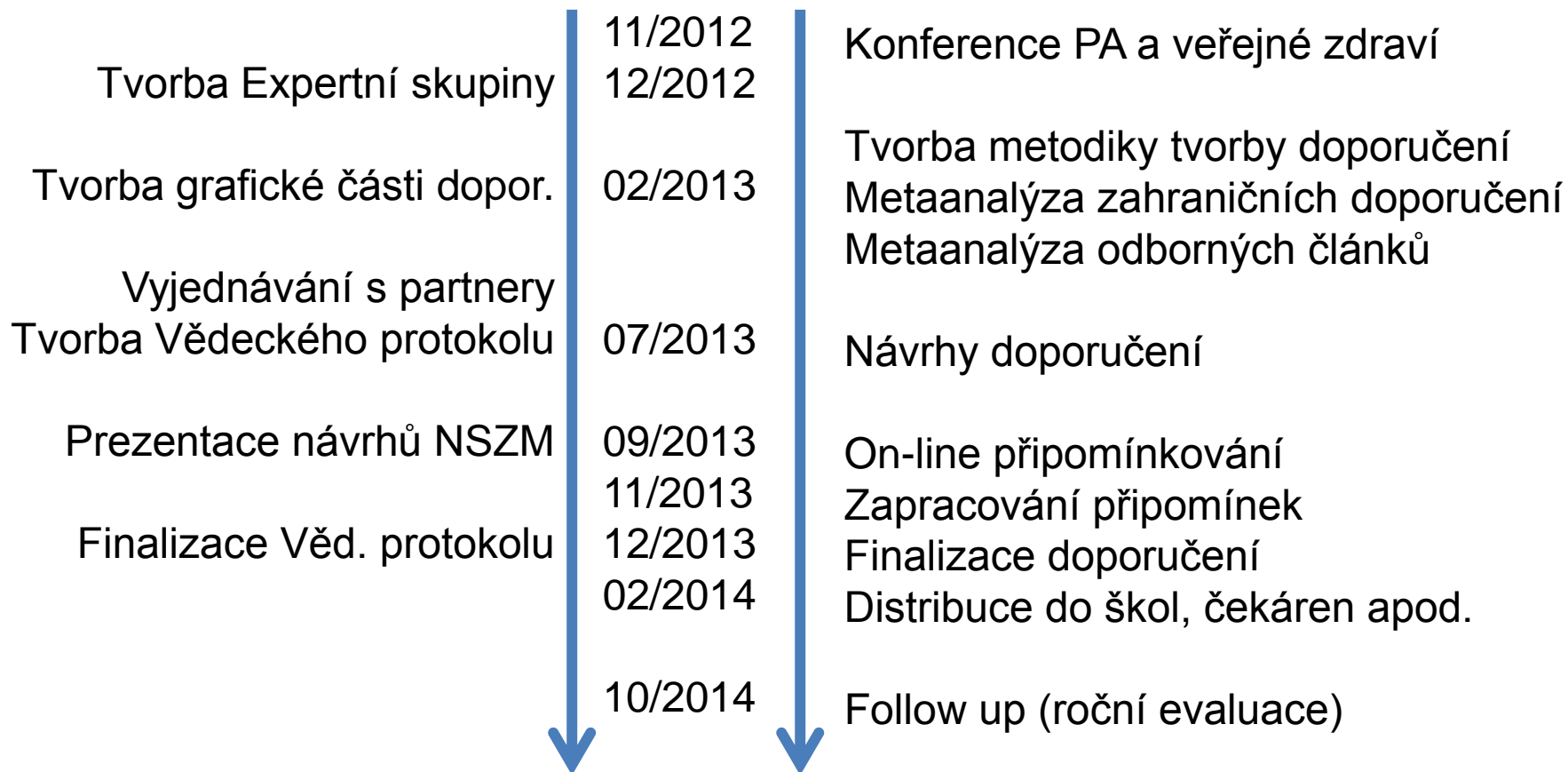
## Publication

Kahlmeier S, Alpiger P, Martin B. National recommendations for health-enhancing physical activity: the situation for Switzerland in 2011 and options for further developments. Schweiz Zeitschrift Sportmed Sporttraumat 60 (3), 96–101, 2012.

## Handout and article

www.pah.ch/icpah12

# Časový harmonogram tvorby doporučení

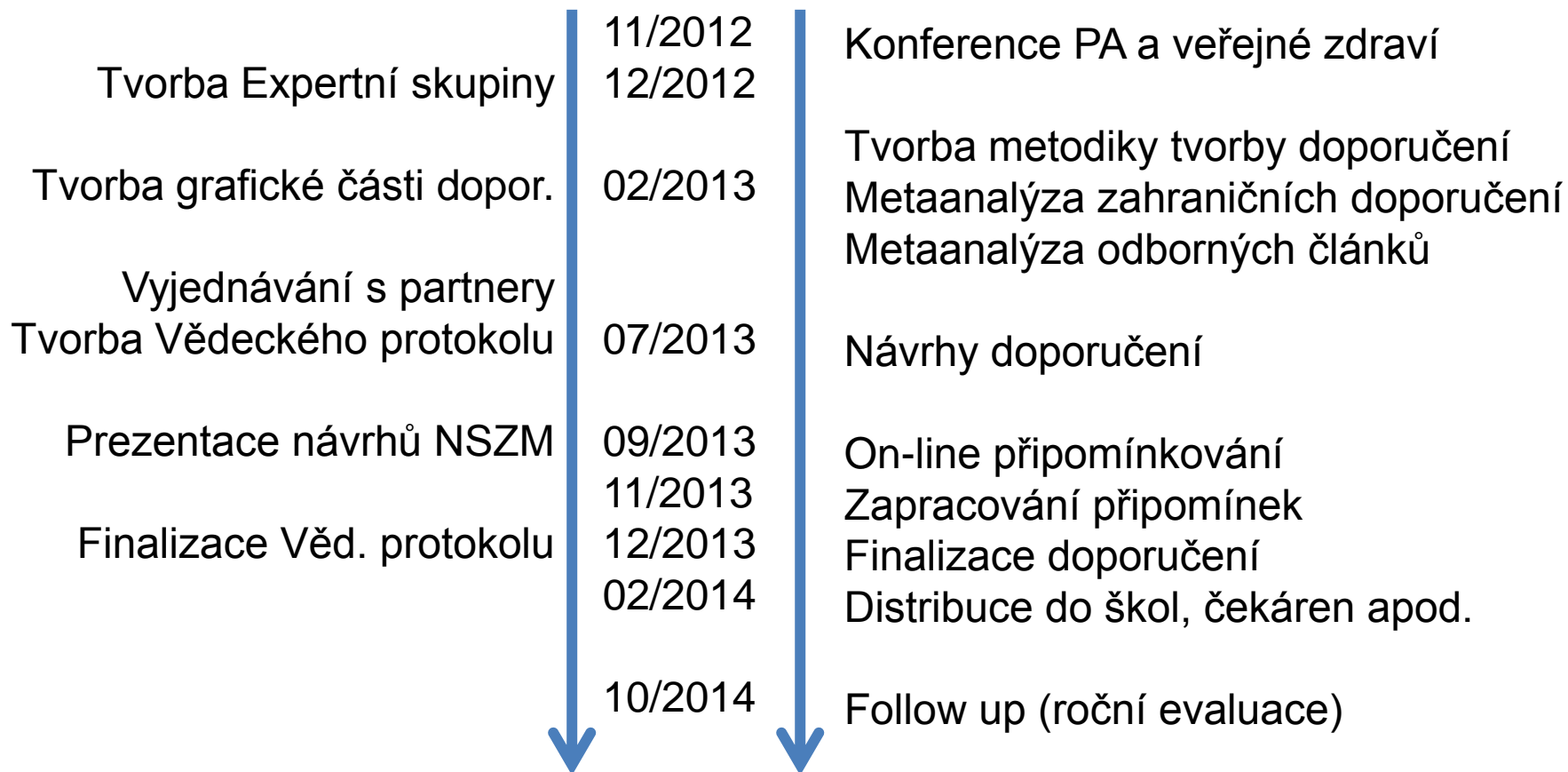


# Tvorba expertní skupiny

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- **Tomáš Hollein (student Mgr.)**
  
- **Petra Šigutová (grafik)**



# Časový harmonogram tvorby doporučení





### Summary of recommendations for adults

Individuals who are physically inactive, any step towards regular physical activity is important and also has direct immediate health benefits. Extended periods of sitting down need to be punctuated more frequently by periods of physical activity.

It is recommended that working-age men and women engage in at least 150 minutes per week of physical activity in the form of moderate-intensity sport. This basic recommended regime can also be achieved through one and a quarter hours per week of high-intensity sport or physical activity, or a combination of moderate and high-intensity physical activity.

Adherence to these basic recommendations has a significant and positive impact on health and quality of life.

Regularly, physical activity should be spread over a number of days during the week. Every period of physical activity lasting at least 10 minutes can be added up over the course of the day.

Interval training, endurance, power and flexibility training can help individuals who are already physically active to enhance their health, performance and fitness even further.

Additional sporting activities provide extra health benefits, albeit to progressively smaller degrees (see dose-response curve).

### Dose-response curve



to levels of fitness and physical development in the case of youth elite sports practitioners. Adequate recovery time also needs to be scheduled accordingly and nutrition adapted to the individual's needs. This is where qualified youth coaches and effective sports medicine play a key role.

Children and adolescents with health problems or disabilities also benefit from regular physical activity. Medical assessments and individual adjustments to physical activity recommendations regarding the type and intensity of activity, in consultation with experts, may be advisable in this regard.

### Implementing the recommendations

Recommendations and opportunities in relation to physical activity and sport which are geared directly to individuals or to specific groups of children/adolescents should be based on the recommendations defined in this document, but their content and form may be adapted to the relevant target group. They should be structured in an age-appropriate fashion and in accordance with educational principles, and should take into account the importance of a safe environment conducive to physical activity.

Numerically, accidents represent the greatest risk in connection with physical activity and sport. In relation to sport, road traffic or leisure activities such as swimming, proper instruction, age-appropriate supervision and the correct material and equipment act as key safeguards.

### Summary of recommendations for children and adolescents

- Regular physical activity is a basic requirement for healthy living. Based on current findings, children and adolescent of school age should engage daily in at least one hour of moderate to high-intensity physical activity in addition to their routine activities. Many physical activities and sporting pastimes are suitable in this regard.
- A varied range of physical activities and sports is necessary for children and adolescents to grow up in the best possible health. As part of or in addition to the one-hour minimum, time should be devoted several times a week to activities that build strong bones, stimulate the cardiovascular system, strengthen muscles, improve agility and maintain flexibility.
- Children at primary school level should engage in considerably more physical activity. Additional activities offer health benefits to all age groups.
- Individuals should avoid long periods of physical inertia as much as possible or punctuate such periods with short active stints of physical activity.



### CHILDREN AND ADOLESCENTS



Several times a week:

- BUILDS STRONG BONES
- STIMULATES THE CARDIOVASCULAR SYSTEM
- STRENGTHENS MUSCLES
- IMPROVES AGILITY
- MAINTAINS FLEXIBILITY



### OLDER ADULTS



IDEALLY SPREAD OVER A NUMBER OF DAYS DURING THE WEEK



Additional benefits through further training in relation to:

- POWER
- BALANCE
- FLEXIBILITY
- ENDURANCE



# 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 ...



# Youth Physical Activity:

## The Role of Families



Being physically active is one of the most important steps to being healthy. Families play an important role in helping youth learn to be active and stay active throughout their lives.

### How Does Physical Activity Help?

- Builds strong bones and muscles.<sup>1</sup>
- Decreases the likelihood of developing obesity and risk factors for diseases like type 2 diabetes and heart disease.<sup>1</sup>
- May reduce anxiety and depression and promote positive mental health.<sup>1</sup>

### How Much Physical Activity Do Youth Need?

- Children and adolescents should do 60 minutes (1 hour) or more of physical activity daily.<sup>2</sup>
  - **Aerobic Activities:** Most of the 60 or more minutes per day should be either moderate- or vigorous-intensity aerobic physical activity. Vigorous-intensity physical activity should be included at least 3 days per week.
    - Examples of aerobic activities include bike riding, brisk walking, running, dancing, and playing active games like tag, soccer, and basketball.
  - **Muscle-strengthening Activities:** Include muscle-strengthening physical activity on at least 3 days of the week as part of the 60 or more minutes.
    - Examples of muscle-strengthening activities for younger children include: gymnastics, playing on a jungle gym, and climbing a tree.
    - Examples of muscle-strengthening activities for adolescents include push-ups, pull-ups, and weightlifting exercises.
  - **Bone-strengthening Activities:** Include bone-strengthening physical activity on at least 3 days of the week as part of the 60 or more minutes.
    - Examples of bone-strengthening activities include hopping, skipping, jumping, running, and sports like gymnastics, basketball, and tennis.
- Some activities may address more than one category at a time. For example, gymnastics is both muscle-strengthening and bone-strengthening. Running is aerobic and bone-strengthening.
- Activities should be age-appropriate, enjoyable, and offer variety.<sup>2</sup>

### How Physically Active Are Youth?

- Among 9<sup>th</sup>–12<sup>th</sup> grade students, only 11% of girls and 24% of boys said they were physically active at least 60 minutes per day.<sup>3</sup>
- Among 9–13 year olds, only 39% said they participated in organized physical activity.<sup>4</sup>
- In 2007, only 30% of 9<sup>th</sup>–12<sup>th</sup> grade students said they attended physical education classes every day.<sup>5</sup>
- In 1969, 41% of students walked or biked to school. By 2001, only 13% of students walked or biked to school.<sup>5</sup>
- Among 9<sup>th</sup>–12<sup>th</sup> grade students, 35% reported watching 3 or more hours of television per day.<sup>5</sup>

### Is My Child's Aerobic Activity Moderate or Vigorous?

- When your child does moderate-intensity activity, his heart will beat faster than normal and he will breathe harder than normal. On a scale of 0 to 10, where sitting is a 0 and 10 is the highest level of effort possible, moderate-intensity activity is a 5 or 6.
  - Examples of moderate-intensity activities include brisk walking, hiking, rollerblading, skateboarding, bicycle riding, baseball and softball.



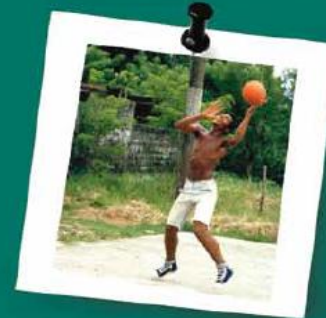
Brussels, 10 October 2008

## **EU Physical Activity Guidelines**

### **Recommended Policy Actions in Support of Health-Enhancing Physical Activity**

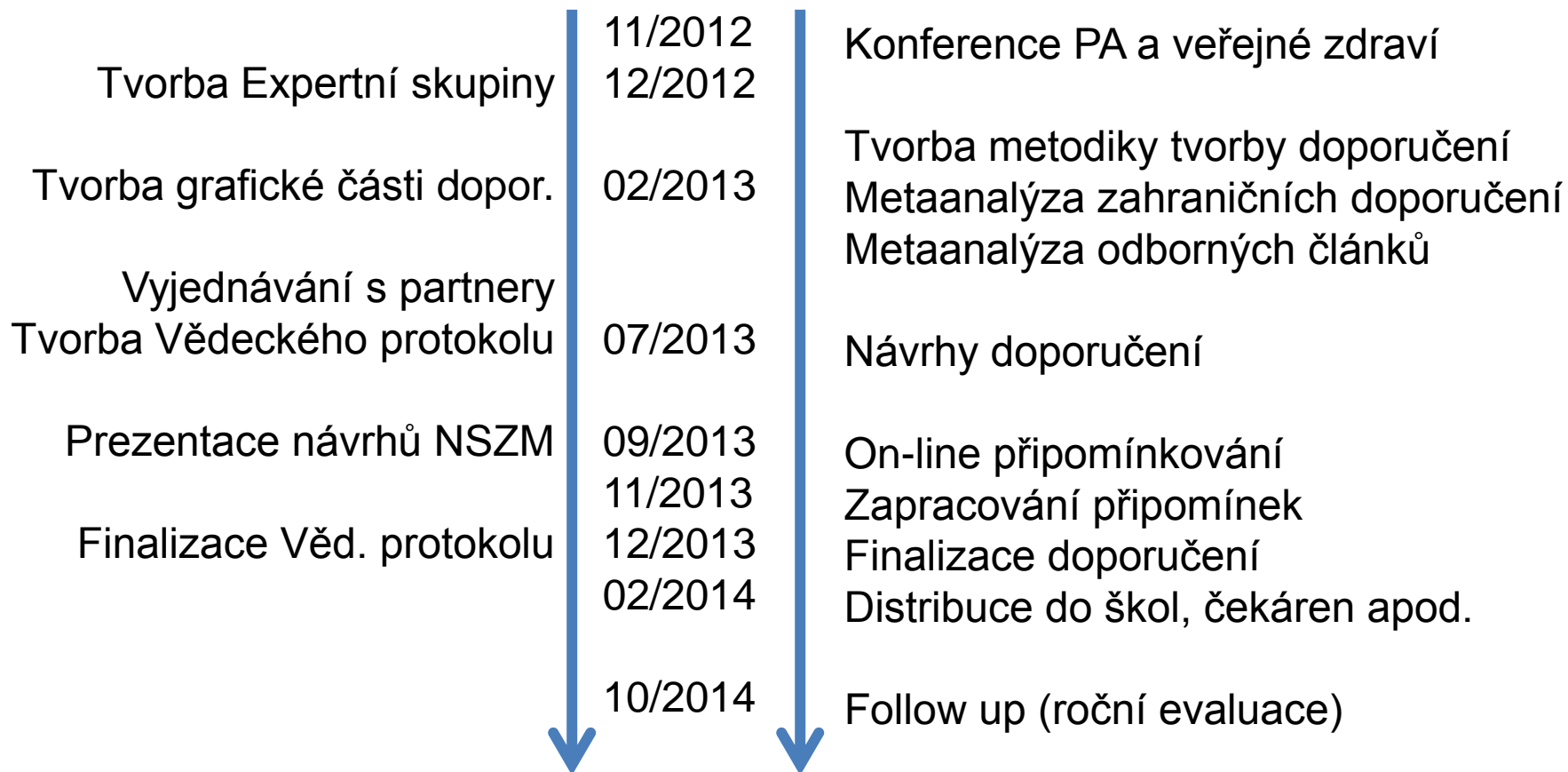
Approved by the EU Working Group "Sport & Health"  
at its meeting on 25 September 2008

Confirmed by EU Member State Sport Ministers  
at their meeting in Biarritz on 27-28 November 2008



# **GLOBAL RECOMMENDATIONS ON PHYSICAL ACTIVITY FOR HEALTH**

# Časový harmonogram tvorby doporučení



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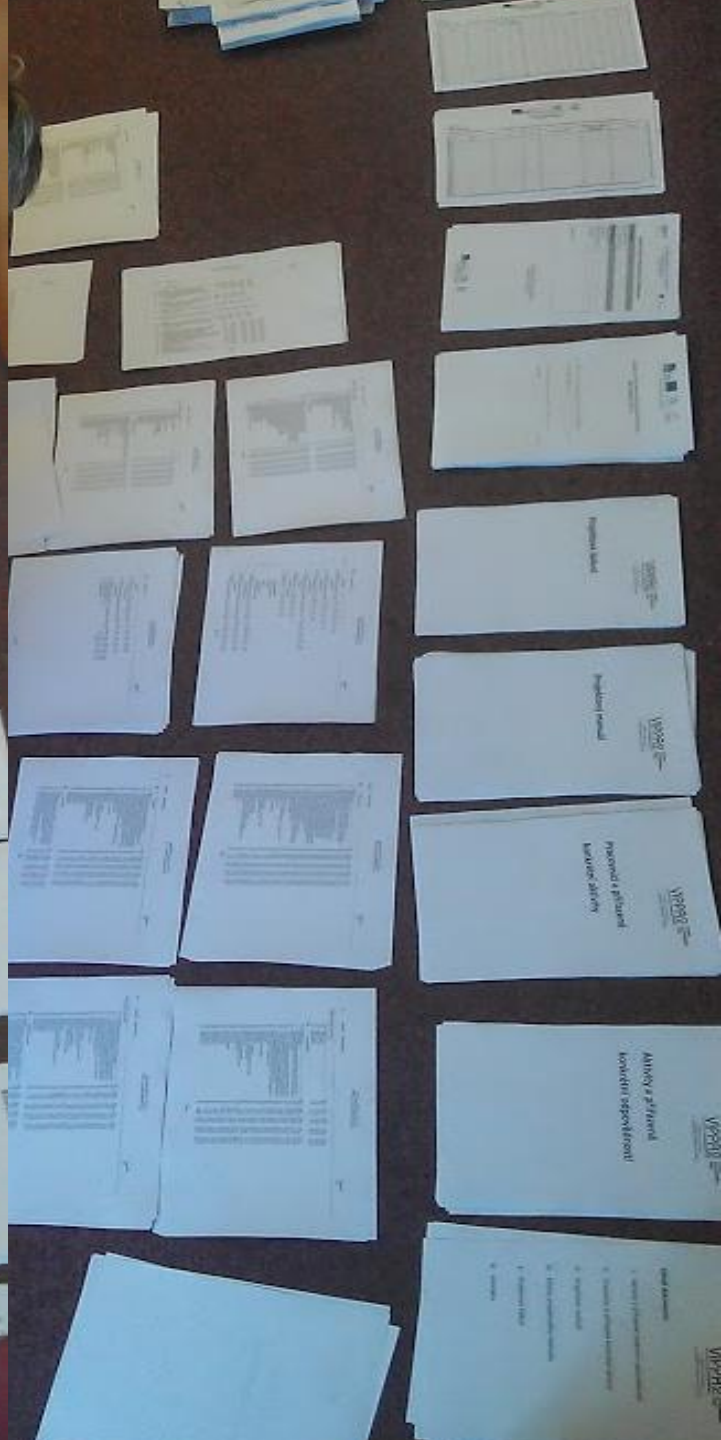
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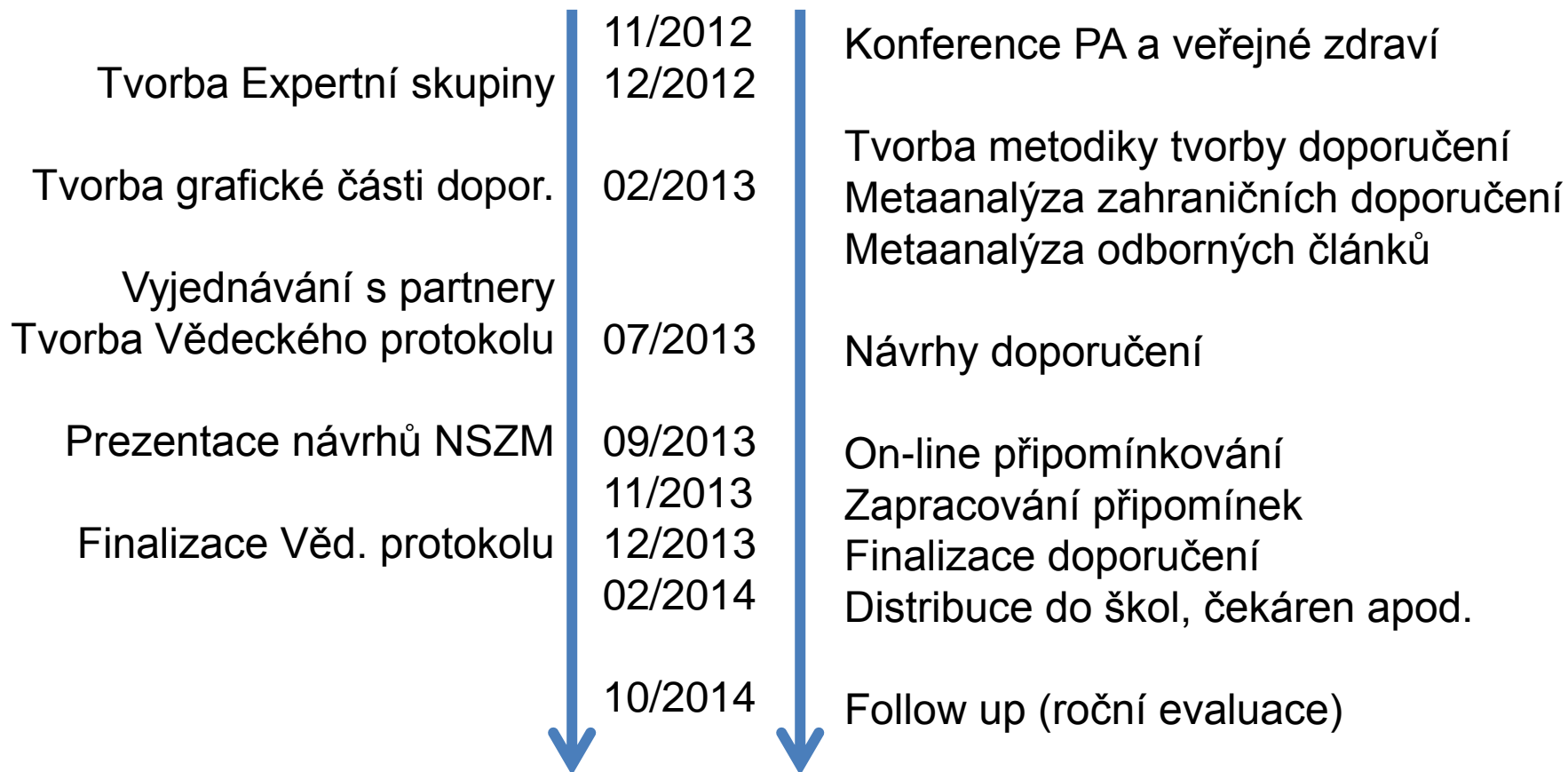


# Časový harmonogram tvorby doporučení





# Časový harmonogram tvorby doporučení



# DĚTI A ADOLESCENTI (6-17 let)

Informace a rady pro rodiče a učitele

## NÁRODNÍ DOPORUČENÍ PRO POHYBOVOU AKTIVITU

Každé dítě a adolescent by měl být pohybově aktivní alespoň 60 a více minut každý den.

V České republice toto pohybové doporučení (60 min pohybové aktivity denně) nesplňuje 70 % chlapců a 85 % dívek.

### AEROBNÍ AKTIVITA

- Aerobní aktivita by měla tvořit podstatnou část z 60 a více minut pohybové aktivity každý den, přičemž většina vykonávané aktivity by měla být střední intenzity. Minimálně však tři dny v týdnu by dítě a adolescent měl vykonávat pohybovou aktivitu vysoké intenzity.

### POSILOVACÍ CVIČENÍ

- Alespoň tři krát týdně by dítě mělo provádět posilovací cvičení jako například sedy lehy, dřepy, poskoky a jiná základní gymnastická a atletická cvičení jako součást 60 a více minut pohybové aktivity.

### DŮVODY

- Napomáhá zabraňovat vzniku OBEZITY A JINÝCH ONEMOCNĚNÍ (cukrovka) nebo zmírňuje jejich prohlubování a negativní zdravotní následky
- Podporuje ZDRAVĚJŠÍ A VÝKONNĚJŠÍ SRDCE, silnější a pružnější svaly a pevnější kosti
- Zmírňuje POCITY OSAMĚNÍ, ŠPATNÉ NÁLADY A DEPRESI
  - Podporuje SOCIÁLNÍ ZAČLENĚNÍ
- Zlepšuje SOUSTŘEDĚNÍ A STUDIJNÍ VÝSLEDKY

### TIPY

- CHŮZE NEBO JÍZDA NA KOLE do a ze školy
- POHYBOVÉ HRY (frisbee, hákí sak, street basketbal) A SPORTOVNÍ AKTIVITY (skateboard, inline bruslení)

Nahradit SLEDOVÁNÍ TELEVIZE A HRÁNÍ NA OBRAZOVKÁCH, POČÍTAČE, TABLETŮ

- A TELEFONŮ deskovými a karetními hrami nebo povídkám s kamarády
- PRAVIDELNÁ ÚČAST NA SPORTOVNÍCH mimoškolních aktivitách – fotbal, volejbal, plavání
- AKTIVNÍ TRÁVENÍ VOLENÉHO ČASU – procházky s kamarády, se psem
  - Podpora ÚČASTI V TĚLESNÉ VÝCHOVĚ

# DĚTI A ADOLESCENTI (6-17 let)

Informace a rady pro rodiče a učitele

## NÁRODNÍ DOPORUČENÍ NA OMEZENÍ SEDAVÉHO CHOVÁNÍ

Žádné dítě ani adolescent by neměl sedět u televize, počítače, telefonu, tabletu nebo jiného zařízení déle než 4 hodiny denně.

Více než 75 % chlapců a 65 % dívek v České republice v roce 2010 trávilo 4 a více hodin denně sezením u počítače, sledováním televize nebo videa.

### DŮSLEDKY SEDAVÉHO CHOVÁNÍ

- Zvyšuje vznik OBEZITY A JINÝCH ONEMOCNĚNÍ (cukrovka, ischemická choroba srdeční) a prohlubuje jejich negativní následky
- Zvyšuje AGRESIVITU A NETOLERANTNÍ CHOVÁNÍ
- Zvýrazňuje pocity OSAMĚNÍ, ŠPATNOU NÁLADU A DEPRESI
- Podporuje zvýšenou KONZUMACI ALKOHOLU A KOUŘENÍ
- Podporuje KONZUMACI SLAZENÝCH NÁPOJŮ (kol, limonád) a tučných jídel (čipsy)



Voláme!



Jedeme pěšky do školy!



Jsem ve škole!



Trávíme si!



Sportujeme!



Spíme!

Nejvýznamnější zdroje (podrobněji viz vědecký protokol národních doporučení pro pohybovou aktivitu):

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Autoři: M. Kalman, E. Sigmund, J. Pavelka, D. Sigmundová, J. Vašíčková, J. Vokáčová, T. Hollein, Z. Hamřík

# DOSPĚLÍ (18–64 let)

## NÁRODNÍ DOPORUČENÍ PRO POHYBOVOU AKTIVITU

Každý dospělý člověk by měl být pohybově aktivní alespoň 30 minut 5dní v týdnu.

*V České republice toto doporučení nesplňuje třetina dospělé populace!*

### DOPORUČENÍ

30 MINUT pohybové aktivity střední intenzity 5X TÝDNĚ.

NEBO

25 MINUT POHYBOVÉ AKTIVITY VYSOKÉ INTENZITY 3X TÝDNĚ



Posilovací a protahovací cvičení 2X TÝDNĚ

*Pohybová aktivita střední intenzity se projevuje začínajícím pocením, prohloubeným dýcháním, subjektivním pocitem zahřátí organismu a zvýšenou srdeční frekvencí.*

*Příkladem aktivity je: rychlá chůze, jízda na kole.*

*Pohybová aktivita vysoké intenzity se projevuje intenzivním pocením, zrychleným dýcháním a značným zvýšením srdeční frekvence.*

*Příkladem aktivity je: běh, fotbal, aerobik.*

### PROČ

- Snižuje riziko vzniku:
  - KARDIOVASKULÁRNÍCH ONEMOCNĚNÍ (ischemická choroba srdeční, cévní mozková příhoda), cukrovky II. stupně, rakoviny prsu, prostaty a tlustého střeva, vysokého krevního tlaku a osteoporózy
- Napomáhá zabraňovat VZNIKU NADVÁHY A OBEZITY nebo zmírňuje jejich prohlubování a negativní zdravotní následky
- ZMÍRŇUJE STRES A ZVYŠUJE KVALITU SPÁNKU
  - Snižuje příznaky DEPRESY A ÚZKOSTI

*Pohyb by se měl chápat jako příležitost, a ne jako nepříjemnost.*

# DOSPĚLÍ (18–64 let)

## NÁRODNÍ DOPORUČENÍ NA OMEZENÍ SEDAVÉ CHOVÁNÍ

Jak dlouho jste dnes seděli?

*Více než 60 % dospělé populace vykazuje nadměrné sedavé chování a pro přibližně 75% dospělé populace je sledování televize nejčastější aktivitou trávení volného času.*

*Sedavé chování zahrnuje čas strávený činností jako: sezení v práci, jízda autem, autobusem, sezení u televize, počítače, tabletů - aktivity, kterými nyní trávíme velké procento času v průběhu den.*

### TIPY

- Buďte **AKTIVNÍ KAŽDÝ DEN**, různými způsoby, jak jen můžete!
- Jeďte do práce **NA KOLE**, nebo **JDĚTE PĚŠKY**
- Dělejte si pravidelné **AKTIVNÍ PŘESTÁVKY V PRÁCI** (protažení na židli, krátká procházka nebo chůze do schodů)
- **VYSTUPE O ZASTÁVKU DŘÍVE** a do cíle dojděte pěšky
  - Neodpočívejte ve výtahu a na eskalátoru, **JDĚTE PO SCHODECH!**
- **HRAJTE SI POHYBOVĚ** se svými dětmi
- **BĚŽTE NA PROCHÁZKU SE PSEM**
  - **PRACUJTE NA ZAHRADĚ**
- Omezte sledování **TELEVIZE, PC, TABLETŮ A TELEFONŮ**
  - Účastněte se pravidelně s rodinou, přáteli či kolegy **SPORTOVNÍCH AKTIVIT**
  - Ujděte denně **10 000 KROKŮ** (cca 7km), počet kroků si měřte krokoměrem

Nejvýznamnější zdroje (podrobněji viz: Vědecký protokol národních doporučení pro pohybovou aktivitu):

Blüddle, S., Cavill, N., Ekelund, U., Gorely, T., Griffiths, M. D., & Jago, R. (2010). *Sedentary behaviour and obesity: review of the current scientific evidence*. London: Department of Health/Department For Children, Schools and Families.

Bull, F., & Expert Working Groups. (2010). *Physical Activity Guidelines in the UK: Review and Recommendations*. Loughborough: Loughborough University, School of Sport, Exercise and Health Sciences.

Department of Health and Ageing. (2005). *National Physical Activity Guidelines for Australians*. Canberra.

Hamrik, Z., Sigmundová, D., Kalman, M., Pavelka, J., & Sigmund, E. (2013). *Physical activity and sedentary behaviour in Czech adults: Results from the GPAQ study*. *European Journal of Sport Science*, DOI: 10.1080/17461391.2013.822565

Šafr, J., & Patočková, V. (2010). *Trávení volného času v ČR ve srovnání s evropskými zeměmi*. *Male společnost*, 8(2), 21–27.

Autoři: M. Kalman, E. Sigmund, J. Pavelka, D. Sigmundová, J. Vašičková, J. Vokáčová, T. Hollein, Z. Hamřík

# SENIOŘI (65 a více)

## NÁRODNÍ DOPORUČENÍ PRO POHYBOVOU AKTIVITU

Každý senior starší 65 let by měl být aktivní alespoň 30 minut 5 dní v týdnu.

*V České republice toto pohybové doporučení nespĺňuje více než 50 % dospělé populace starší 65 let!*

### DOPORUČENÍ

30 MIN pohybové aktivity střední intenzity 5X TÝDNĚ V 10 MINUTOVÝCH a delších intervalech.

NEBO

25 MIN POHYBOVÉ AKTIVITY VYSOKÉ INTENZITY 3X TÝDNĚ

+

POSILOVACÍ A PROTAHOVACÍ CVIČENÍ zaměřené na hlavní svalové skupiny (stehna, boky, záda, břicho, hrudník, ramena a paže) alespoň 2x týdně

+

V případě zhoršené koordinace pohybů  
BALANČNÍ CVIČENÍ PRO POSÍLENÍ STABILITY

*Pohybová aktivita střední intenzity způsobí, že dospělý člověk se začne potit, trochu hůře se mu dýchá a zvýší se mu srdeční tep. Příkladem aktivity je: rychlá chůze, jízda na kole.*

*Pohybová aktivita vysoké intenzity způsobí, že dospělý člověk se potí a je udýchaný. Příkladem aktivity je: běh, fotbal, aerobik.*

### PROČ

Snižuje riziko vzniku:

- KARDIOVASKULÁRNÍCH onemocnění, CUKROVKY II. typu, RAKOVINY prsu, prostaty a tlustého střeva, VYSOKÉHO KREVŇNÍHO TLAKU a OSTEOPORÓZY
- Působí jako prevence PROTI NADVÁZE A OBEZITĚ
- ZMÍŘŇUJE STRES a zvyšuje KVALITU SPÁNKU
- Sníží příznaky DEPRESÉ A ÚZKOSTI
- Sníží riziko ÚRAZŮ A PÁDŮ

*Pohyb by se měl chápat jako příležitost, a ne jako nepříjemnost.*

# SENIOŘI (65 a více)

## NÁRODNÍ DOPORUČENÍ NA OMEZENÍ SEDAVÉHO CHOVÁNÍ

Jakákoliv pohybová aktivita je vítaná!  
Více pohybové aktivity znamená pozitivnější vliv na vaše zdraví!

### TIPY

- Buďte **AKTIVNÍ KAŽDÝ DEN**, různými způsoby, jak jen můžete!
- Zapojte se do **ORGANIZOVANÝCH POHYBOVÝCH AKTIVIT** ve vašem okolí (turistika, tanec, jóga)
- **VYSTUPE O ZASTÁVKU DŘÍVE** a do cíle dojděte pěšky
  - Neodpočívejte ve výtahu a na eskalátoru,
    - **JDĚTE PO SCHODECH!**
  - **JDĚTE NA PROCHÁZKU** s rodinou, se psem
  - **PRACUJTE NA ZAHRADĚ**
  - **PROTAHUJTE SE** každý den,
  - Posilujte váhou vlastního těla
  - Omezte **SLEDOVÁNÍ TELEVIZE, PC, TABLETŮ A TELEFONŮ**

Nejvýznamnější zdroje (podrobněji viz Vědecký protokol národních doporučení pro pohybovou aktivitu):

Bull, F., & Expert Working Groups. (2010). *Physical Activity Guidelines in the UK: Review and Recommendations*. Loughborough: Loughborough University, School of Sport, Exercise and Health Sciences.

CSEP. (2011). *Canadian Physical Activity Guidelines for Older Adults 65 years and older*. Ottawa: Canadian Society for Exercise Physiology.

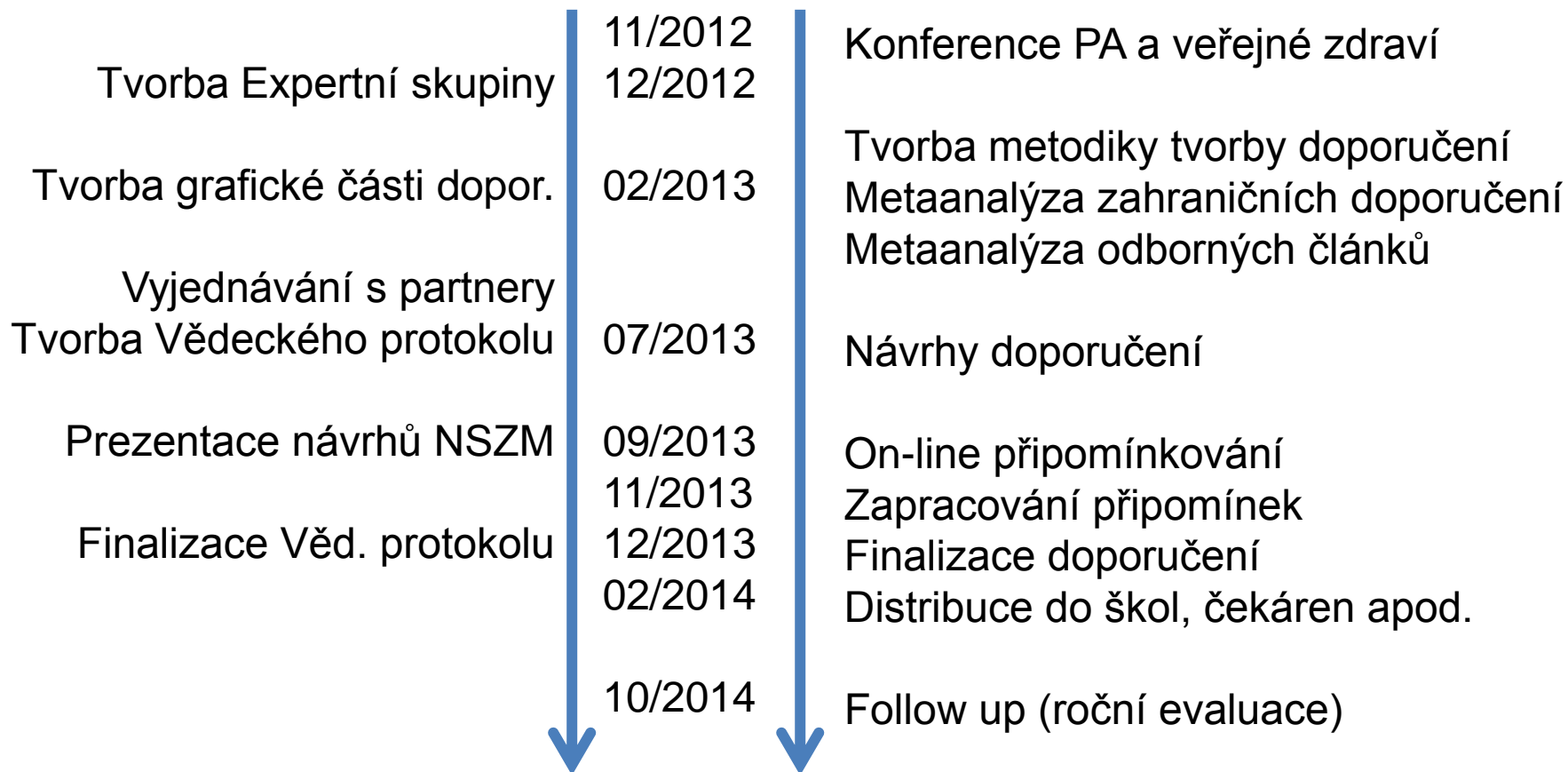
Paterson, D. H., & Warburton, D. E. R. (2010). Physical activity and functional limitations in older adults: a systematic review related to Canada's Physical Activity Guidelines. *International Journal of Behavioral Nutrition and Physical Activity*, 7. doi: 10.1186/1479-2868-7-38

Sun, F., Norman, L. J., & White, A. E. (2013). Physical activity in older people: a systematic review. *BMC Public Health*, 13. doi: 10.1186/1471-2458-13-449

Tudor-Locke, C., Craig, C. L., Aoyagi, Y., Bell, R. C., Croteau, K. A., De Bourdeaudhuij, I., Ewald, B., Gardiner, A. W., Hatano, Y., Lutes, L. D., Matsuda, S. M., Ramirez-Marrero, F. A., Rogers, L. Q., Rowe, D. A., Schmidt, M. D., Tully, M. A., & Blair, S. N. (2011). How many steps/day are enough? For older adults and special populations. *International Journal of Behavioral Nutrition and Physical Activity*, 8. doi: 10.1186/1479-2868-8-80

Autoři: M. Kalman, E. Sigmund, J. Pavelka, D. Sigmundová, J. Vašíčková, J. Vokáčová, T. Holleín, Z. Hamřík

# Časový harmonogram tvorby doporučení



# Vědecký protokol národních doporučení pro pohybovou aktivitu

Michal Kalman, Erik Sigmund, Jan Pavelka, Dagmar Sigmundová,  
Zdeněk Hamřík, Jana Vašíčková, Jana Vokáčová, Tomáš Hollein





# Časový harmonogram tvorby doporučení



# Veřejné připomínkování národních doporučení pro pohybovou aktivitu

Vítejte na stránkách, na kterých probíhá on-line připomínkování národních doporučení pro pohybovou aktivitu. V případě, že Vám tato forma nevyhovuje, můžete připomínkovat přímo PDF dokument a následně zaslat na [tomas.hollein@upol.cz](mailto:tomas.hollein@upol.cz).

Na tvorbě pohybových doporučení pracuje expertní skupina z Univerzity Palackého v Olomouci, která dále spolupracuje s Ministerstvem zdravotnictví ČR, Kanceláří Světové zdravotnické organizace v České republice a mezinárodní výzkumnou sítí HBSC (The Health Behavior in School-aged Children).

V případě zájmu o více informací o procesu tvorby národních doporučení či v případě jakýchkoliv nejasností, prosím kontaktuje Tomáše Holleina ([tomas.hollein@upol.cz](mailto:tomas.hollein@upol.cz))

**Jméno**

(nepovinné)

**Příjmení**

(nepovinné)

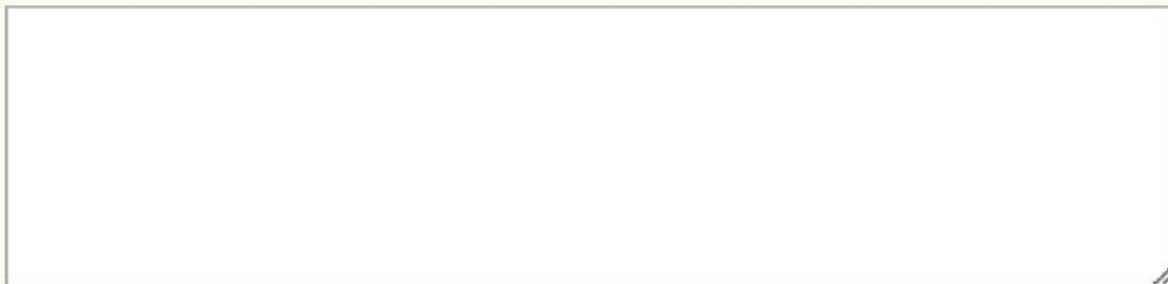
**Instituce**

(nepovinné)

**Děti a adolescenti - připomínky k odborné části (textu)**



**Děti a adolescenti - připomínky ke grafickému zpracování**

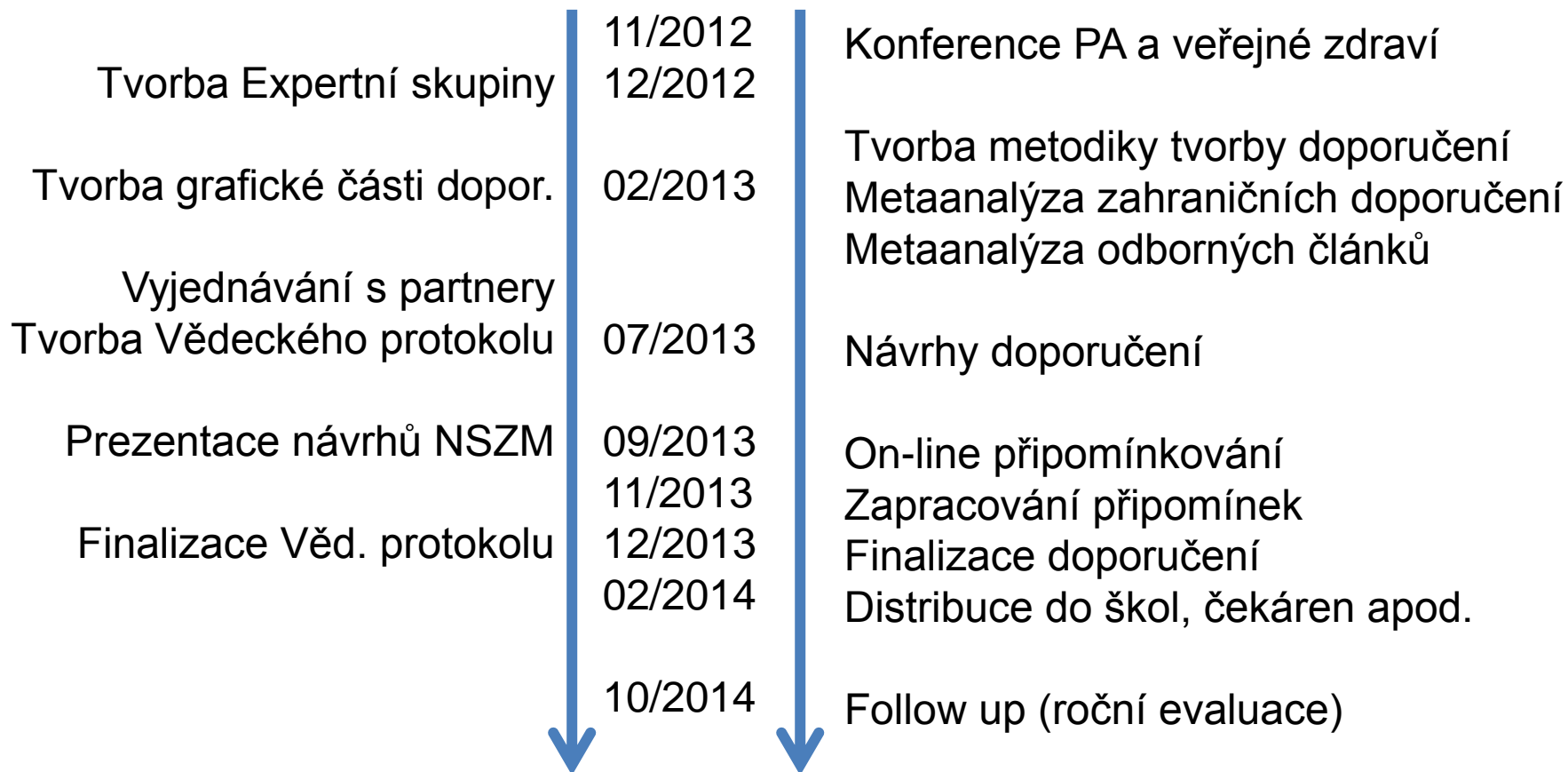


**Dospělí - připomínky k odborné části (textu)**



**Dospělí - připomínky ke grafickému zpracování**

# Časový harmonogram tvorby doporučení



# Postery do čekáren a lékáren



**DĚTI A ADOLESCENTI (6-17 let)**  
*Informace a rady pro rodiče a učitele*

**NÁRODNÍ DOPORUČENÍ NA OMEZENÍ SEDAVÉHO CHOVÁNÍ**

**Žádné dítě ani adolescent by neměl sedět u televize, počítače, telefonu, tabletu nebo jiného zařízení déle než 4 hodiny denně.**

*Více než 75 % chlapců a 65 % dívek v České republice v roce 2010 trávilo 4 a více hodin denně sezením u počítače, sledováním televize nebo videa.*

**DŮSLEDKY SEDAVÉHO CHOVÁNÍ**

- Zvyšuje vznik **OBEZITY A JINÝCH ONEMOCNĚNÍ** (cukrovka, ischemická choroba srdeční) a prohlubuje jejich negativní následky
- Zvyšuje **AGRESIVITU A NETOLERANTNÍ CHOVÁNÍ**
- Zvýrazňuje pocity **OSAMĚNÍ, ŠPATNOU NÁLADU A DEPRESI**
- Podporuje zvýšenou **KONZUMACI ALKOHOLU A KOUŘENÍ**
- Podporuje **KONZUMACI SLAZENÝCH NÁPOJŮ** (kol, limonád) a tučných jídel (čipsy)

 *Uvolníme!*  *Jítme pěšky do školy!*  *Jeme ve škole!*  *Nejeme si!*  *Spoluhráme!*  *Spíme!*

Nejvýznamnější zdroje (podrobněji viz Vědecký protokol národních doporučení pro pohybovou aktivitu):

Bull, F., & Expert Working Group. (2010). *Physical Activity Guidelines in the UK: Review and Recommendations*. Loughborough: Loughborough University, School of Sport, Exercise and Health Sciences.

European Commission. (2008). *EU Physical Activity Guidelines*. Brussels: European Commission.

Kalman, M., Sigmund, E., Sigmundová, D., Hamřák, Z., Benčík, L., Benešová, D., & Čermák, L. (2013). *Národní zpráva o stavu a změnách zdraví dětí a adolescentů ve věku 6-17 let v České republice v roce 2010 v rámci mezinárodního projektu "Health Behaviour in School-aged Children: WHO Collaborative Cross-National Study (HEBC)"*. Olomouc: Univerzita Palackého v Olomouci.

Lee, S. M. (2013). *School health guidelines to promote healthy eating and physical activity*. Washington: US Department of Health and Human Services, Centers for Disease Control and Prevention.

Tremblay, M. S., Warburton, D. E. R., Janssen, L., Paterson, D. H., Latimer, A. E., Rhodes, R. E., Kho, M. E., Hicks, A., Laflamme, A. G., Zehr, L., Monma, K., & Duggan, M. (2011). *New Canadian Physical Activity Guidelines: Applied Physiology Nutrition and Metabolism: Physiology Applied Nutrition Et Metabolisme*, 39(1), 38-48. doi: 10.1139/H11-009

Sigmundová, D., Sigmund, E., Hamřák, Z., & Kalman, M. (2013). *Trends of overweight and obesity, sedentary behaviour and physical activity in Czech schoolchildren: HEBC comparative study between the years 2003, 2006 and 2010*. *European Journal of Public Health*, doi:10.1093/ejpub/ckd028

Autoři: M. Kalman, E. Sigmund, J. Pavelka, D. Sigmundová, J. Vašíčková, J. Vokáčková, T. Hollein, Z. Hamřák

        **MINISTERSTVO ZDRAVOTNICTVÍ ČESKÉ REPUBLIKY**





# Děkuji za pozornost

**Michal Kalman**  
Hlavní řešitel HBSC studie  
Institut aktivního životního stylu  
FTK Univerzita Palackého v Olomouci

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Tel: +420 777 752 822



# Podpora aktivní dopravy

space required to transport 60 people



car



bus



bicycle

(Poster in city of Muenster Planning Office, August 2001) Credit: PressOffice City of Munster, Germany

# Příklady efektivních intervencí PPA



Nízko rozpočtové intervence podpory pohybové aktivity



## Honza



- Celkem: **4-5 hodiny** aktivního pohybu denně!

## Zdeněk



45

min.

- Celkem: **45 min** aktivního pohybu denně!

# Další akce

- Analyzujeme 27 zahraničních národních strategií aktivního životního stylu
- Provádíme rozhovory se zahraničními odborníky, kteří se podíleli na tvorbě strategií
- Závěry analýz – červen 2012
  - **Použitá metodika – Policy Analysis**



**Andiamo  
a scuola a "piedi"**



**linea 3**



**PIEDIBUS**

**Voi siete qui**

**H 8.20**

**PIERRO VA ORO  
VIA ROCCIA NUOVA**

**3-D**







