



University of
Zurich^{UZH}

Institute of Social and Preventive Medicine

National physical activity recommendations: what are countries doing across Europe?

Sonja Kahlmeier, Patrick Alpiger, Brian Martin

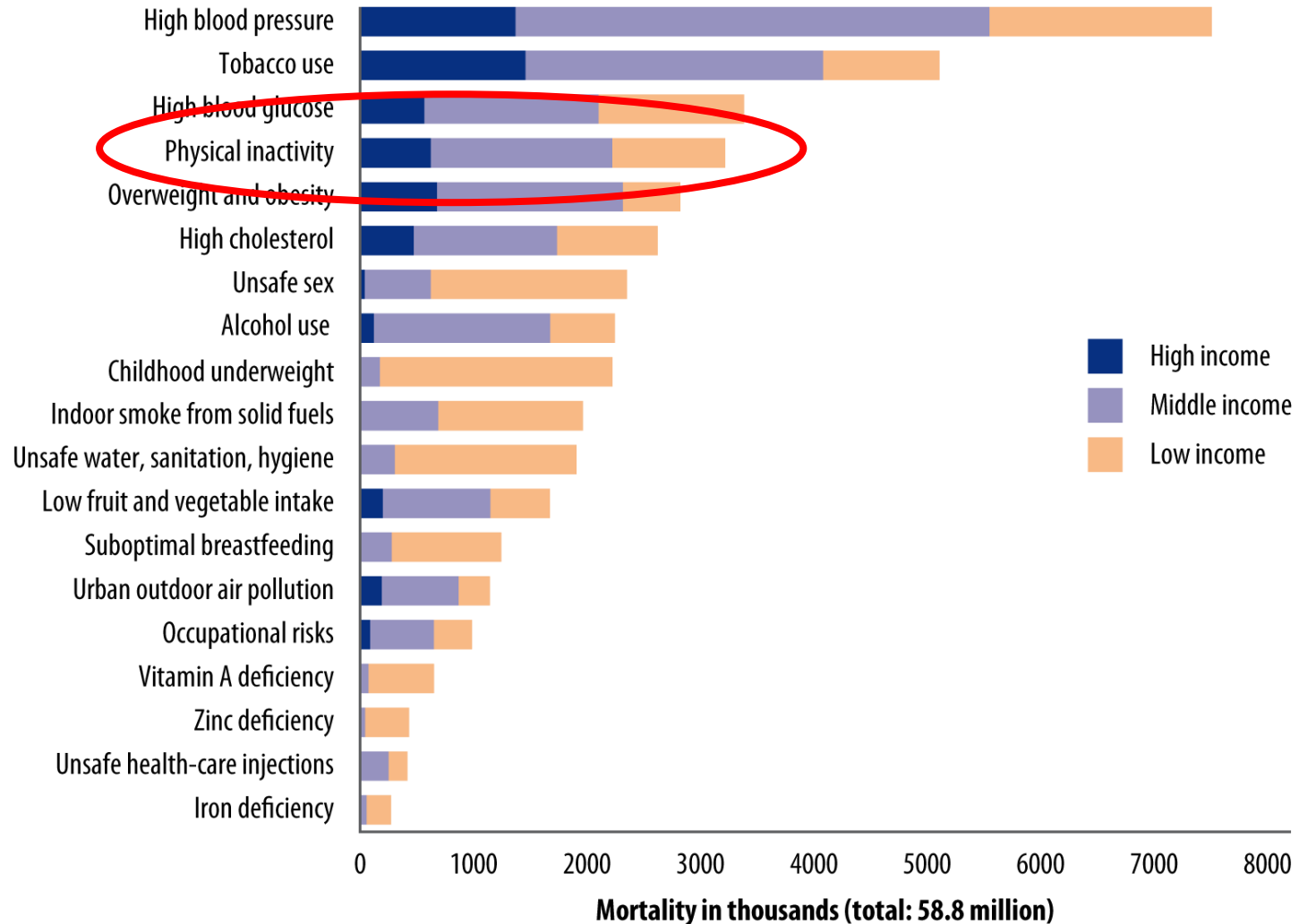
Physical Activity and Health Unit

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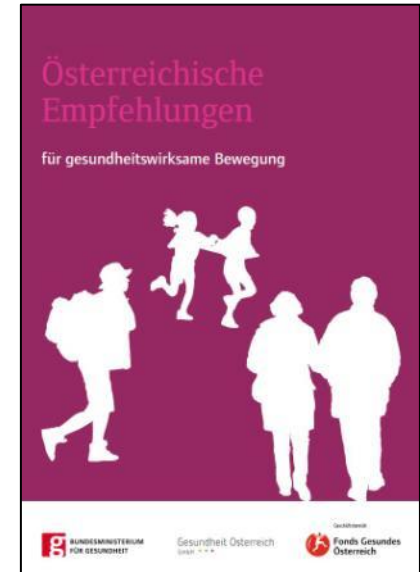
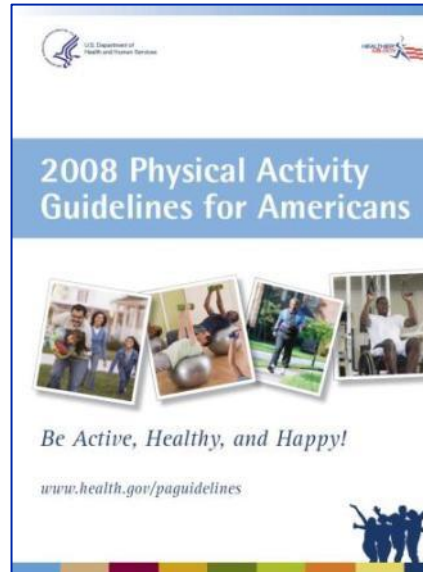
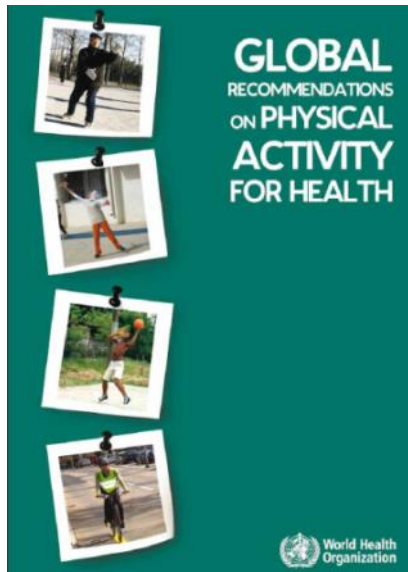
Deaths attributed to 19 leading factors, by country income level, 2004



Source: WHO (2009): Global Health Risks: Selected figures and tables (www.who.int/healthinfo/global_burden_disease/global_health_risks/en/index.html)

How much physical activity do we need?

New international recommendations



How much physical activity do we need? New international recommendations

| Source of evidence used by WHO members and guideline group | Rationale for selecting this review | Contributions by guideline group |
|--|--|---|
| The 2009 CDC Literature Review presented in the report to the USA Secretary of Health and Human Services (and Physical Activity Guidelines Advisory Committee Report) (12) | This publication was a result of the search of the Medline literature covering the period of January 1, 2007 to December 2007. 1,443 papers were reviewed. The review included 107 articles on sedentary behavior and 1,336 articles on physical activity. The review included 107 articles on sedentary behavior and 1,336 articles on physical activity. The review included 107 articles on sedentary behavior and 1,336 articles on physical activity. | Study design, limitations of the review, sample size, statistical power, prevalence of sedentary behavior, method, follow-up, adherence were considered to appraise the quality of the review. The review provided strong evidence for the development of the global recommendations. |
| The 2008 systematic review of the Institute of Medicine (IOM) Health and Human Services (and Physical Activity Guidelines Advisory Committee Report) (13) | This is a global review, focusing on peer-reviewed literature from low and middle income countries. It identifies research gaps and provides evidence on physical activity and health in developing countries and low-income populations. The review included 107 articles on sedentary behavior and 1,336 articles on physical activity. The review included 107 articles on sedentary behavior and 1,336 articles on physical activity. | The strength of this evidence relationship is assessed based on the volume of data available and the level of consistency between the various study findings. This was considered to provide strong evidence for the development of the global recommendations. |
| 2007 evidence reviews conducted as part of the process to update the Canadian physical activity guidelines (14, 15) | These reviews of the literature provide an analysis of the epidemiology related to physical activity, health and the strength of the relationship between physical activity and specific health outcomes to be reviewed, with particular emphasis on coronary heart disease, stroke, diabetes, obesity, hypertension and bone health. The reviews included 107 articles on sedentary behavior and 1,336 articles on physical activity. | The strength of these evidence relationships is assessed based on the volume of data available and the level of consistency between the various study findings. This was considered to provide strong evidence for the development of the global recommendations. |
| 2009 Evidence reviews conducted as part of the process to update the Canadian physical activity guidelines (16, 17) | For all 7 papers, the literature was obtained through searching across two databases. All articles included in these reviews were reviewed to ensure standardized quality and accuracy. The review included 107 articles on sedentary behavior and 1,336 articles on physical activity. | Study design, limitations of the review, sample size, statistical power, prevalence of health, measurement |

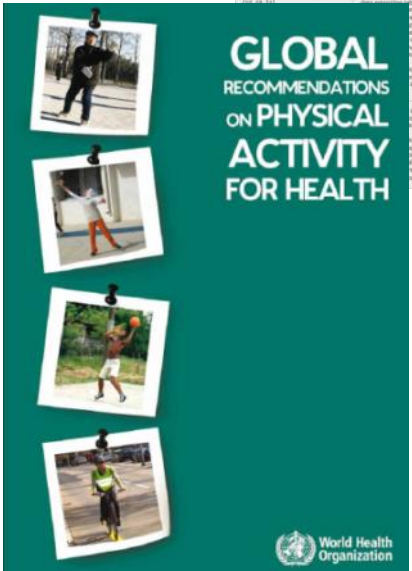
Physical Activity Guidelines Advisory Committee Report, 2008

To the Secretary of Health and Human Services

Evidence-informed physical activity guidelines for Canadian adults¹

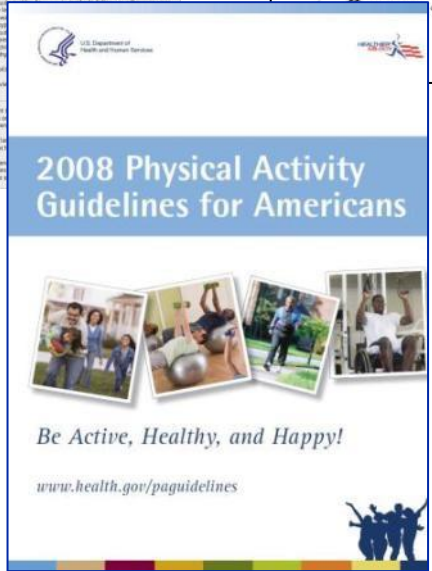
Dariusz E.B. Warburton, Peter T. Katzmarzyk, Ryan E. Rhodes, and Roy J. Shephard

The review of the literature provides an update on the scientific background and practical bases for the Canadian physical activity guidelines for adults from around the world. The review of the literature provides an update on the scientific background and practical bases for the Canadian physical activity guidelines for adults from around the world. The review of the literature provides an update on the scientific background and practical bases for the Canadian physical activity guidelines for adults from around the world.



GLOBAL RECOMMENDATIONS ON PHYSICAL ACTIVITY FOR HEALTH

World Health Organization



2008 Physical Activity Guidelines for Americans

Be Active, Healthy, and Happy!
www.health.gov/paguidelines

Canadian Sedentary Behaviour Guidelines

FOR CHILDREN - 5 - 11 YEARS

Guidelines

For health benefits, children aged 5-11 years should minimize the time they spend being sedentary each day. This may be achieved by:

- Limiting recreational screen time to no more than 2 hours per day; lower levels are associated with additional health benefits.
- Limiting sedentary (motorized) transport, extended sitting and time spent indoors throughout the day.

The slowdown on the slowdown: what counts as being sedentary?
Sedentary behaviour is time when children are doing very little physical movement. Some examples are:

- Sitting for long periods
- Using motorized transportation (just a bus or car)
- Watching television
- Playing passive video games
- Playing on the computer

Spending less time being sedentary can help children:

- Plan for a healthy body weight
- Do better in school
- Improve their self-confidence
- Have more fun with their friends
- Improve their fitness
- Have more time to learn new skills

Cutting down on sitting down. Help children swap sedentary time with active time!

Walk Up



Active Transportation
Walking, biking, roller skating, or any other active mode of transport

Play Up



Active Play
Unstructured play, active play, or any other active play

Stand Up



Active Break Time
Walking, running, or any other active break

There is no time like right now for children to get up and get moving!



Österreichische Empfehlungen für gesundheitswirksame Bewegung

für gesundheitswirksame Bewegung



BUNDESMINISTERIUM FÜR SONNENSCHUTZ
Gesundheit Österreich
Fonds Gesundes Österreich

What are the new WHO recommendations?

| Children / young people | Adults | Older adults |
|---|--------|--------------|
| At least 60 minutes | | |
| Daily | | |
| Moderate to vigorous intensity | | |
| Vigorous intensity should be incorporated 3x / week | | |
| No minimum bouts | | |
| | | |
| Strength/bone health training at least 3x/week | | |
| | | |

What are the new WHO recommendations?

| Children / young people | Adults | Older adults |
|---|--|--------------|
| At least 60 minutes | 150 mins MPA/wk or 75 mins VPA/wk or combination | |
| Daily | On most, preferably all days of the week | |
| Moderate to vigorous intensity | Moderate and vigorous | |
| Vigorous intensity should be incorporated 3x / week | | |
| No minimum bouts | Bouts: at least 10 Mins. | |
| | For additional health benefits, double the minimum recs. | |
| Strength/bone health training at least 3x/week | Strength training 2 or more x/wk | |
| | | |

What are the new WHO recommendations?

| Children / young people | Adults | Older adults |
|---|--|---|
| At least 60 minutes | 150 mins MPA/wk or 75 mins VPA/wk or combination | Same as adults, or as much as possible |
| Daily | On most, preferably all days of the week | “ |
| Moderate to vigorous intensity | Moderate and vigorous intensity | “ |
| Vigorous intensity should be incorporated 3x / week | | “ |
| No minimum bouts | Bouts: at least 10 Mins. | “ |
| | For additional health benefits, double the minimum recs. | “ |
| Strength/bone health training at least 3x/week | Strength training 2 or more x/wk | “ |
| | | Balance training in persons with poor mobility 3x/wk. |

| | | | | |
|-------------------------|--|-----------------|-------------|---------------------------------------|
| Top | Debate | Highly accessed | Open Access | BMC Public Health Volume 10 |
| Abstract | Physical activity recommendations for health: what should Europe do? | | | |
| Background | | | | |
| Discussion | Pekka Oja ¹ ✉, Fiona C Bull ² ✉, Mikael Fogelholm ³ ✉ and Brian W Martin ⁴ ✉ | | | |
| Summary | 1 UKK Institute, P.O.Box 30, 33501 Tampere, Finland | | | |
| Competing interests | 2 School of Sport, Exercise and Health Science, Loughborough University and School of Population Health, The University of Western Australia, Stirling Highway, Nedlands, Western Australia, 6009, Australia | | | |
| Authors' contributions | 3 Health Research Unit, Academy of Finland, Vilhovuorenkatu 6, POB 99, 00501 Helsinki, Finland | | | |
| Author's information | 4 Institute of Social and Preventive Medicine, University of Zurich, Hirschengraben 84, 8001 Zurich, Switzerland | | | |
| Acknowledgements | ✉ author email ✉ corresponding author email | | | |
| References | <i>BMC Public Health</i> 2010, 10 :10 doi:10.1186/1471-2458-10-10 | | | |
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| | Viewing options: <ul style="list-style-type: none"> Abstract Full text PDF (182KB) Associated material: <ul style="list-style-type: none"> Readers' comments Pre-publication history PubMed record Related literature: <ul style="list-style-type: none"> Articles citing this article on Google Scholar on PubMed Central Other articles by authors on Google Scholar on PubMed Related articles/pages on Google on Google Scholar on PubMed Tools: <ul style="list-style-type: none"> Download citation(s) Download XML | | | |

„... We believe that a review of the current national physical activity recommendations in each country within the European region should be undertaken in view of the most recent research evidence.“

Aim

- Systematic overview of national physical activity (PA) recommendations across countries of the WHO European Region (N=53)
- Analysis of the national documents, compared with the 1995 CDC/ACSM* and the 2010 WHO recommendations
- Conclusions

Aim

- Systematic overview of national physical activity (PA) recommendations across countries of the WHO European Region (N=53)
- Analysis of the national documents, compared with the 1995 CDC/ACSM* and the 2010 WHO recommendations
- Conclusions

** at least 5 x 30 minutes of moderate-intensity physical activity*

Methods

- Country reporting template from WHO European national information focal points (2009/2010)
- If information on source document was incomplete our outdated (fall 2011 - summer 2012):
 - online searches
 - national information focal points
 - other national experts
- Confirmation sought from countries who had reported that no recommendation existed
- Systematic analysis of national recommendations using analysis grid
- Comparison with WHO and CDC/ACSM recommendations

Inclusion criteria

- Written statement on the frequency, duration and intensity of physical activity needed to achieve health benefits
- Officially adopted by government body
- Source document retrievable
- Document available in German, French or English or analysis possible with support of national expert and verification through Google translator
(Iceland, the Netherlands and the Russian Federation)

Results – responses



n = 37 (69.8%)

| | | | | |
|-----------------------------|----------------|--------------------|---------------------|-----------------------|
| Austria | Georgia | Italy | Portugal | TFYR Macedonia |
| Albania | Germany | Latvia | Romania | Turkey |
| Andorra | Estonia | Lithuania | Russian Fed. | United Kingdom |
| Azerbaijan | Finland | Luxemburg | Serbia | Ukraine |
| Belgium | France | Malta | Slovenia | Uzbekistan |
| Bosnia & Herzeg. | Hungary | Netherlands | Spain | |
| Croatia | Iceland | Norway | Sweden | |
| Denmark | Ireland | Poland | Switzerland | |

Results – responses: national recommendations



<http://bighugelabs.com/map.php>

n = 21 (39.6%)

| | | | | |
|----------------|----------------|--------------------|---------------------|-----------------------|
| Austria | | | | |
| | | | Romania | Turkey |
| | Estonia | Lithuania | Russian Fed. | United Kingdom |
| | Finland | Luxemburg | | |
| Belgium | France | Malta | Slovenia | |
| | Hungary | Netherlands | | |
| | Iceland | Norway | Sweden | |
| Denmark | Ireland | | Switzerland | |

Results – responses: recommendations retrievable



n = 17 (32.1%)

| | | | | |
|----------------|-----------------|---------------------|----------------------|-----------------------|
| Austria | | | | |
| | | | Romania | Turkey |
| | Estonia | Lithuania | Russian Fed.* | United Kingdom |
| | Finland | Luxemburg | | |
| Belgium | France | Malta | Slovenia | |
| | Hungary | Netherlands* | | |
| | Iceland* | Norway | Sweden | |
| Denmark | Ireland | | Switzerland | |

* Only national language documents

Results – recommendations by year and age group

| Country | Children <5 | Children/ adolescents | Adults | Older adults |
|----------------|-------------|-----------------------|-----------|--------------|
| Austria | | 2010 | 2010 | 2010 |
| Belgium | | 2007 | 2007 | |
| Denmark | | n.s. | n.s. | n.s. |
| Finland | 2008 | 2005 | | |
| France | | 2001 | 2001 | |
| Iceland | | 2008 | 2008 | 2008 |
| Ireland | | 2009 | 2009 | 2009 |
| Luxemburg | | n.s. | n.s. | |
| Malta | | 2010 | 2009 | |
| Netherlands | | 2005 | 2005 | 2005 |
| Norway | | 2004 | 2004 | |
| Russian Fed. | | | 2011 | |
| Slovenia | | | 2007 | |
| Sweden | | 2004 | 2004 | |
| Switzerland | | 2006 | 1999 | |
| Turkey | | | 2010 | |
| United Kingdom | 2011 | 2011 | 2011 | 2011 |
| Total | 2 | 14 | 16 | 6 |

Results – recommendations by year and age group

| Country | Children <5 | Children/ adolescents | Adults | Older adults |
|----------------|-------------|-----------------------|-----------|--------------|
| Austria | | 2010 | 2010 | 2010 |
| Belgium | | 2007 | 2007 | |
| Denmark | | n.s. | n.s. | n.s. |
| Finland | 2008 | 2005 | | |
| France | | 2001 | 2001 | |
| Iceland | | 2008 | 2008 | 2008 |
| Ireland | | 2009 | 2009 | 2009 |
| Luxemburg | | n.s. | n.s. | |
| Malta | | 2010 | 2009 | |
| Netherlands | | 2005 | 2005 | 2005 |
| Norway | | 2004 | 2004 | |
| Russian Fed. | | | 2011 | |
| Slovenia | | | 2007 | |
| Sweden | | 2004 | 2004 | |
| Switzerland | | 2006 | 1999 | |
| Turkey | | | 2010 | |
| United Kingdom | 2011 | 2011 | 2011 | 2011 |
| Total | 2 | 14 | 16 | 6 |

Results– consistency with WHO - children / adol. (n=14)

* not in WHO recs.

| Country | Duration, intensity, frequency | Include vigorous intensity | No bouts | Strength / bone health training | Limit sitting* |
|--------------|--------------------------------|----------------------------|----------|---------------------------------|----------------|
| Austria | 2010 | | | | |
| Belgium | 2007 | | | | |
| Denmark | n.s. | | | | |
| Finland | 2005 | | | | |
| France | 2001 | | | | |
| Iceland | 2008 | | | | |
| Ireland | 2009 | | | | |
| Luxemburg | n.s. | | | | |
| Malta | 2010 | | | | |
| Netherlands | 2005 | | | | |
| Norway | 2004 | | | | |
| Russian Fed. | | | | | |
| Slovenia | | | | | |
| Sweden | 2004 | | | | |
| Switzerland | 2006 | | | | |
| Turkey | | | | | |
| Unt Kingdom | 2011 | | | | |
| Total | 6 (43%) | | | | |

Results– consistency with WHO - children / adol. (n=14)

* not in WHO recs.

| Country | Duration, intensity, frequency | Include vigorous intensity | No bouts | Strength / bone health training | Limit sitting* |
|--------------|--------------------------------|----------------------------|----------|---------------------------------|----------------|
| Austria | 2010 | 2010 | | | |
| Belgium | 2007 | 2007 | | | |
| Denmark | n.s. | n.s. | | | |
| Finland | 2005 | 2005 | | | |
| France | 2001 | 2001 | | | |
| Iceland | 2008 | 2008 | | | |
| Ireland | 2009 | 2009 | | | |
| Luxemburg | n.s. | n.s. | | | |
| Malta | 2010 | 2010 | | | |
| Netherlands | 2005 | 2005 | | | |
| Norway | 2004 | 2004 | | | |
| Russian Fed. | | | | | |
| Slovenia | | | | | |
| Sweden | 2004 | 2004 | | | |
| Switzerland | 2006 | 2006 | | | |
| Turkey | | | | | |
| Unt Kingdom | 2011 | 2011 | | | |
| Total | 6 (43%) | 5 (36%) | | | |

Results– consistency with WHO - children / adol. (n=14)

* not in WHO recs.

| Country | Duration, intensity, frequency | Include vigorous intensity | No bouts | Strength / bone health training | Limit sitting* |
|--------------|--------------------------------|----------------------------|-----------------|---------------------------------|----------------|
| Austria | 2010 | 2010 | 2010 | | |
| Belgium | 2007 | 2007 | 2007 | | |
| Denmark | n.s. | n.s. | n.s. | | |
| Finland | 2005 | 2005 | 2005 | | |
| France | 2001 | 2001 | 2001 | | |
| Iceland | 2008 | 2008 | 2008 | | |
| Ireland | 2009 | 2009 | 2009 | | |
| Luxemburg | n.s. | n.s. | n.s. | | |
| Malta | 2010 | 2010 | 2010 | | |
| Netherlands | 2005 | 2005 | 2005 | | |
| Norway | 2004 | 2004 | 2004 | | |
| Russian Fed. | | | | | |
| Slovenia | | | | | |
| Sweden | 2004 | 2004 | 2004 | | |
| Switzerland | 2006 | 2006 | 2006 | | |
| Turkey | | | | | |
| Unt Kingdom | 2011 | 2011 | 2011 | | |
| Total | 6 (43%) | 5 (36%) | 9 (64.3) | 6 (43%) | 6 (43%) |

Results– consistency with WHO - children / adol. (n=14)

* not in WHO recs.

| Country | Duration, intensity, frequency | Include vigorous intensity | No bouts | Strength / bone health training | Limit sitting* |
|--------------|--------------------------------|----------------------------|-----------------|---------------------------------|----------------|
| Austria | 2010 | 2010 | 2010 | 2010 | |
| Belgium | 2007 | 2007 | 2007 | 2007 | |
| Denmark | n.s. | n.s. | n.s. | n.s. | |
| Finland | 2005 | 2005 | 2005 | 2005 | |
| France | 2001 | 2001 | 2001 | 2001 | |
| Iceland | 2008 | 2008 | 2008 | 2008 | |
| Ireland | 2009 | 2009 | 2009 | 2009 | |
| Luxemburg | n.s. | n.s. | n.s. | n.s. | |
| Malta | 2010 | 2010 | 2010 | 2010 | |
| Netherlands | 2005 | 2005 | 2005 | 2005 | |
| Norway | 2004 | 2004 | 2004 | 2004 | |
| Russian Fed. | | | | | |
| Slovenia | | | | | |
| Sweden | 2004 | 2004 | 2004 | 2004 | |
| Switzerland | 2006 | 2006 | 2006 | 2006 | |
| Turkey | | | | | |
| Unt Kingdom | 2011 | 2011 | 2011 | 2011 | |
| Total | 6 (43%) | 5 (36%) | 9 (64.3) | 6 (43%) | |

Results– consistency with WHO - children / adol. (n=14)

* not in WHO recs.

| Country | Duration, intensity, frequency | Include vigorous intensity | No bouts | Strength / bone health training | Limit sitting* |
|--------------|--------------------------------|----------------------------|-----------------|---------------------------------|----------------|
| Austria | 2010 | 2010 | 2010 | 2010 | 2010 |
| Belgium | 2007 | 2007 | 2007 | 2007 | 2007 |
| Denmark | n.s. | n.s. | n.s. | n.s. | n.s. |
| Finland | 2005 | 2005 | 2005 | 2005 | 2005 |
| France | 2001 | 2001 | 2001 | 2001 | 2001 |
| Iceland | 2008 | 2008 | 2008 | 2008 | 2008 |
| Ireland | 2009 | 2009 | 2009 | 2009 | 2009 |
| Luxemburg | n.s. | n.s. | n.s. | n.s. | n.s. |
| Malta | 2010 | 2010 | 2010 | 2010 | 2010 |
| Netherlands | 2005 | 2005 | 2005 | 2005 | 2005 |
| Norway | 2004 | 2004 | 2004 | 2004 | 2004 |
| Russian Fed. | | | | | |
| Slovenia | | | | | |
| Sweden | 2004 | 2004 | 2004 | 2004 | 2004 |
| Switzerland | 2006 | 2006 | 2006 | 2006 | 2006 |
| Turkey | | | | | |
| Unt Kingdom | 2011 | 2011 | 2011 | 2011 | 2011 |
| Total | 6 (43%) | 5 (36%) | 9 (64.3) | 6 (43%) | 6 (43%) |

Results– consistency with WHO - adults (n=16)

* not in WHO recs.

| Country | Duration, intensity, frequency | Combination M/V PA | Bouts (at least 10 Min) | Strength training | Limit sitting* |
|--------------|--------------------------------|--------------------|-------------------------|-------------------|----------------|
| Austria | 2010 | | | | |
| Belgium | 2007 | | | | |
| Denmark | n.s. | | | | |
| Finland | | | | | |
| France | 2001 | | | | |
| Iceland | 2008 | | | | |
| Ireland | 2009 | | | | |
| Luxemburg | n.s. | | | | |
| Malta | 2009 | | | | |
| Netherlands | 2005 | | | | |
| Norway | 2004 | | | | |
| Russian Fed. | 2011 | | | | |
| Slovenia | 2007 | | | | |
| Sweden | 2004 | | | | |
| Switzerland | 1999 | | | | |
| Turkey | 2010 | | | | |
| Unt Kingdom | 2011 | | | | |
| Total | 4 (25%) | | | | |

Results– consistency with WHO - adults (n=16)

* not in WHO recs.

| Country | Duration, intensity, frequency | Combination M/V PA | Bouts (at least 10 Min) | Strength training | Limit sitting* |
|--------------|--------------------------------|--------------------|-------------------------|-------------------|----------------|
| Austria | 2010 | 2010 | | | |
| Belgium | 2007 | 2007 | | | |
| Denmark | n.s. | n.s. | | | |
| Finland | | | | | |
| France | 2001 | 2001 | | | |
| Iceland | 2008 | 2008 | | | |
| Ireland | 2009 | 2009 | | | |
| Luxemburg | n.s. | n.s. | | | |
| Malta | 2009 | 2009 | | | |
| Netherlands | 2005 | 2005 | | | |
| Norway | 2004 | 2004 | | | |
| Russian Fed. | 2011 | 2011 | | | |
| Slovenia | 2007 | 2007 | | | |
| Sweden | 2004 | 2004 | | | |
| Switzerland | 1999 | 1999 | | | |
| Turkey | 2010 | 2010 | | | |
| Unt Kingdom | 2011 | 2011 | | | |
| Total | 4 (25%) | 7 (44%) | | | |

Results– consistency with WHO - adults (n=16)

* not in WHO recs.

| Country | Duration, intensity, frequency | Combination M/V PA | Bouts (at least 10 Min) | Strength training | Limit sitting* |
|--------------|--------------------------------|--------------------|-------------------------|-------------------|----------------|
| Austria | 2010 | 2010 | 2010 | | |
| Belgium | 2007 | 2007 | 2007 | | |
| Denmark | n.s. | n.s. | n.s. | | |
| Finland | | | | | |
| France | 2001 | 2001 | 2001 | | |
| Iceland | 2008 | 2008 | 2008 | | |
| Ireland | 2009 | 2009 | 2009 | | |
| Luxemburg | n.s. | n.s. | n.s. | | |
| Malta | 2009 | 2009 | 2009 | | |
| Netherlands | 2005 | 2005 | 2005 | | |
| Norway | 2004 | 2004 | 2004 | | |
| Russian Fed. | 2011 | 2011 | 2011 | | |
| Slovenia | 2007 | 2007 | 2007 | | |
| Sweden | 2004 | 2004 | 2004 | | |
| Switzerland | 1999 | 1999 | 1999 | | |
| Turkey | 2010 | 2010 | 2010 | | |
| Unt Kingdom | 2011 | 2011 | 2011 | | |
| Total | 4 (25%) | 7 (44%) | 13 (81%) | | |

Results– consistency with WHO - adults (n=16)

* not in WHO recs.

| Country | Duration, intensity, frequency | Combination M/V PA | Bouts (at least 10 Min) | Strength training | Limit sitting* |
|--------------|--------------------------------|--------------------|-------------------------|-------------------|----------------|
| Austria | 2010 | 2010 | 2010 | 2010 | |
| Belgium | 2007 | 2007 | 2007 | 2007 | |
| Denmark | n.s. | n.s. | n.s. | n.s. | |
| Finland | | | | | |
| France | 2001 | 2001 | 2001 | 2001 | |
| Iceland | 2008 | 2008 | 2008 | 2008 | |
| Ireland | 2009 | 2009 | 2009 | 2009 | |
| Luxemburg | n.s. | n.s. | n.s. | n.s. | |
| Malta | 2009 | 2009 | 2009 | 2009 | |
| Netherlands | 2005 | 2005 | 2005 | 2005 | |
| Norway | 2004 | 2004 | 2004 | 2004 | |
| Russian Fed. | 2011 | 2011 | 2011 | 2011 | |
| Slovenia | 2007 | 2007 | 2007 | 2007 | |
| Sweden | 2004 | 2004 | 2004 | 2004 | |
| Switzerland | 1999 | 1999 | 1999 | 1999 | |
| Turkey | 2010 | 2010 | 2010 | 2010 | |
| Unt Kingdom | 2011 | 2011 | 2011 | 2011 | |
| Total | 4 (25%) | 7 (44%) | 13 (81%) | 8 (50%) | |

Results– consistency with WHO - adults (n=16)

* not in WHO recs.

| Country | Duration, intensity, frequency | Combination M/V PA | Bouts (at least 10 Min) | Strength training | Limit sitting* |
|--------------|--------------------------------|--------------------|-------------------------|-------------------|----------------|
| Austria | 2010 | 2010 | 2010 | 2010 | 2010 |
| Belgium | 2007 | 2007 | 2007 | 2007 | 2007 |
| Denmark | n.s. | n.s. | n.s. | n.s. | n.s. |
| Finland | | | | | |
| France | 2001 | 2001 | 2001 | 2001 | 2001 |
| Iceland | 2008 | 2008 | 2008 | 2008 | 2008 |
| Ireland | 2009 | 2009 | 2009 | 2009 | 2009 |
| Luxemburg | n.s. | n.s. | n.s. | n.s. | n.s. |
| Malta | 2009 | 2009 | 2009 | 2009 | 2009 |
| Netherlands | 2005 | 2005 | 2005 | 2005 | 2005 |
| Norway | 2004 | 2004 | 2004 | 2004 | 2004 |
| Russian Fed. | 2011 | 2011 | 2011 | 2011 | 2011 |
| Slovenia | 2007 | 2007 | 2007 | 2007 | 2007 |
| Sweden | 2004 | 2004 | 2004 | 2004 | 2004 |
| Switzerland | 1999 | 1999 | 1999 | 1999 | 1999 |
| Turkey | 2010 | 2010 | 2010 | 2010 | 2010 |
| Unt Kingdom | 2011 | 2011 | 2011 | 2011 | 2011 |
| Total | 4 (25%) | 7 (44%) | 13 (81%) | 8 (50%) | 3 (18%) |

Summary

- National recommendations found for:
 - about 55% of the countries for which information was available
 - about 40% of all 53 countries in the WHO European Region

Children

- Only 1 country fully in line with the WHO recommendations (United Kingdom - 5-18 yrs.)
- Most differences found with regard to intensity, minimum bouts and strength/bone health training
- About half mentioned inactivity/sitting

Adults

- 3 countries fully in line with WHO recommendations (Austria, the Russian Federation, United Kingdom)
- Most differences found with regard to frequency (weekly vs. 5x30 mins.), intensity and possibility to combine MPA/VPA
- Few countries mentioned inactivity/sitting

Conclusions

- Progress made in the development of national PA recommendations, in particular after 2005
- More than 50% of European countries did not report national recommendations
- Review of recommendations regarding consistency with new evidence and new recommendations still needed (Oja et al. 2010)
- New Swiss recommendations published in summer 2013

