Results from the Danish 2016 Report Card on Physical Activity for Children and Youth

Larsen LR1, Troelsen J2, Kirkegaard KL3, Riskær S4, Krølner R5, Østergaard L6, Kristensen PL7, Møller NC8, Christensen B9, Jensen J-O10, Østergård C11, Skovgaard T11.

Background
The first Danish 2016 Report Card on physical activity for Children and Youth describes Denmark’s efforts in promoting and facilitating physical activity and physical activity opportunities for children and youth. The report card is designed to gather, evaluate and translate the research on physical activity to guide future practice and interventions, as well as policy and program development.

Methods
The Report Card relies primarily on a synthesis of the best available research and policy strategies identified by the Report Card Research Committee. The Report Card Research Committee consisted of a diverse selection of researchers and professional experts working within the area of physical activity, health behaviors and policy development - representing different scientific perspectives and methodological backgrounds. The Danish Health Authority participated as observer in the committee and helped identifying relevant data. Nine physical activity indicators were graded using the Active Healthy Kids Canada Report Card development process. Grades vary from A (highest) to F (lowest).

Results
Grades of the nine indicators vary in Denmark as shown in Table 1. The key findings are:

- Depending on the method for measuring physical activity, 13 to 41% of the 11 to 15-year-olds meet the recommendations for physical activity10,2.
- 83% of 7 to 15-year-olds in Denmark exercise or participate in organized sports or/and physical activity programs on a regular basis1.
- Approx. seven out of ten children and adolescents attending public schools actively commute (walking, cycling, skateboard, child scooter or rollerskates) to/from school.
- During waking hours school-aged children accumulate an average of 8.2 hours per day being sedentary.
- 64% of Danish 11 to 15-year-olds accumulate more than 2 hours of screen time per day on weekdays and 81% on weekends.
- Physical education lessons are compulsory from 1st to 9th grade (approx. 7 to approx. 15 year olds).
- The Education Act, updated in 2014, makes it compulsory for public schools to offer an average of 45 minutes of physical activity per school day.
- 81% of teachers who teach in physical education are specialists within the field.
- Among the 7 to 15-year-olds, 88% list their local community as one with suitable sport facilities, and 91% assess the local community as a good setting to be active.
- Physical exercise lessons are mandatory in the majority of secondary schools.
- Almost all municipalities have adopted a separate policy on sport related issues.
- Municipalities are in charge of about 85% of public expenditure with regards to sport and leisure time.

Table 1
Summary of the grades assigned to each indicator in the 2016 Danish Report Card on Physical Activity for Children and Youth.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Physical Activity Levels</td>
<td>D+</td>
</tr>
<tr>
<td>Organized Sport Participation</td>
<td>A</td>
</tr>
<tr>
<td>Active Play</td>
<td>INC</td>
</tr>
<tr>
<td>Active Transportation</td>
<td>B</td>
</tr>
<tr>
<td>Sedentary Behaviors</td>
<td>INC</td>
</tr>
<tr>
<td>Family and Peers</td>
<td>INC</td>
</tr>
<tr>
<td>School</td>
<td>B</td>
</tr>
<tr>
<td>Community and the Built Environment</td>
<td>B+</td>
</tr>
<tr>
<td>Government strategies and investments</td>
<td>A-</td>
</tr>
</tbody>
</table>

Note. The grade for each indicator is based on the percentage of children and youth meeting a defined benchmark: A is 81% to 100%; B is 61% to 80%; C is 41% to 60%, D is 21% to 40%; F is 0% to 20%; INC is incomplete data.

Conclusion
The first Danish Report Card shows that Denmark performs very well on the strategic and political level, but that the impact on individual level is still sparse. This indicates an implementation gap between the governmental level and the individual level that need to be bridged to increase physical activity and decrease sedentary behavior in children. Furthermore, to monitor childhood physical activity levels, measurement and quantification of physical activity needs standardization.

Author Affiliations

1. Center for Human Movement and Learning, Research and Development, University College Lillebaelt, Lucernemarken 1, 5260 Odense S, Denmark
2. Research Unit for Active Living, Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Campusvej 55, 5230 Odense M, Denmark
3. Sports Confederation of Denmark, Brænding Stove 23, 2800 Brænding, Denmark
4. VIA University College, Faculty of Education and Social Studies, Ceresbyen 24, 8000 Aarhus C, Denmark
5. National Institute of Public Health, Øster Farigmagsgade 5A, 1353 Copenhagen K, Denmark
6. Research and Innovation, Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Campusvej 55, 5230 Odense M, Denmark
7. Region of Southern Denmark, International Collaboration, Danhavnen 12, 7300 Vejle, Denmark
8. Danish School Sport, Vejlby Skolevej 15, 8900 Hjørring, Denmark
9. VIA University College, Faculty of Education and Social Studies, Ceresbyen 24, 8000 Aarhus C, Denmark
10. Department of Growth and Learning, Metropolitan University College, Nydamvej 35, 8900 Frederikssund, Denmark
11. Center for Human Movement and Learning, Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Campusvej 55, 5230 Odense M, Denmark