

## DEDIPAC KH

Determinants of diet and physical activity Knowledge Hub

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### Deliverable 1.3.3

## Final report on amended toolbox

*Toolbox developed and feasibility tested within Work Package 1.3  
containing an integrated instrument for the assessment of sedentary behaviour and  
determinants suitable for surveillance purposes*

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***Abstract***

Standardised assessment methods for measuring sedentary behaviour and determinants in children and adolescents for pan-European surveillance are scarce. Therefore, our aim within DEDIPAC WP1.3 was to provide an integrated instrument for measuring sedentary behaviour and determinants in children and adolescents and supporting documents. The latter are a user's manual describing the development, content and applications of the integrated instrument and a Standard Operating Procedure for the objective measurement of sedentary behaviour with the activPAL<sup>3M</sup> device. Documents for obtaining Ethical Clearance and a Data Protection Concept are available upon request.

The integrated instrument itself consists of multiple parts, mainly self-administered questionnaires. The integrated instrument was developed by screening, selecting, adapting (if applicable) and integrating items from already existing questionnaires and by complementing these items with few newly developed items. The integrated instrument at hand was already tested in a feasibility study and amended according to the results obtained.

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**Integrated instrument for the assessment of  
sedentary behaviour and its determinants  
in children and adolescents  
suitable for surveillance purposes**

**Toolbox containing  
(1) User's Manual,  
(2) Integrated Instrument and  
(3) Standard Operating Procedure  
for use of activPAL<sup>3M</sup> device**



Integrated instrument for the assessment of  
**sedentary behaviour** and its **determinants**  
in children and adolescents  
suitable for surveillance purposes

# User's Manual

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## 1. Background and aim

The integrated instrument for the assessment of sedentary behaviour and its determinants in children and adolescents suitable for surveillance purposes was developed in the framework of the DEDIPAC KH (Determinants of Diet and Physical Activity Knowledge Hub, [www.dedipac.eu](http://www.dedipac.eu)), Work Package 1.3.

An inventory of 50 ongoing national and pan-European surveillance systems has shown that the majority of surveillance systems in Europe focus on dietary intake and physical activity, and much less information is collected on sedentary behaviour and dietary behaviour; regarding target groups children are underrepresented as compared to adults [1]. Therefore, our aims were (1) to develop an integrated instrument for the assessment of sedentary behaviour and its determinants in children and adolescents suitable for surveillance purposes, (2) to test the integrated instrument in a feasibility study, (3) to evaluate and amend/revise the instrument according to the results of the feasibility study and (4) to provide the amended integrated instrument together with supporting documents.

## 2. Development and testing of the integrated instrument

For the development of the instrument experts in the field of sedentary behaviour and its determinants inside and outside the DEDIPAC KH were consulted.

Our aim was to assess sedentary behaviour comprehensively, i.e. not just one single domain of sedentary behaviour (e.g. sitting while watching TV/using a computer). The selection of determinants was based on available evidence (preliminary version of a Systematic Literature Review conducted within DEDIPAC was taken as a basis [2]), expert's opinion and public health relevance, i.e. only those determinants that were modifiable through intervention programs were included.

In a first step, questionnaires of European initiatives measuring sedentary behaviour and/or its determinants in the respective age groups were identified and evaluated. The selection criteria for items were the following: measurement of domain-specific sedentary behaviour in children and adolescents, suitability of the original item or its adaptation for data collection in surveillance surveys (robust, easy and quick), no barriers of use with regard to access rights and suitability for pan-European implementation.

The single selected items from these existing questionnaires were adapted (if applicable), integrated and complemented with a few newly developed items to provide an integrated instrument in the form of a set of mainly self-administered questionnaires (English language).

The (previous version of the) integrated instrument has been tested in a feasibility study in 240 children and adolescents in three survey centres (Bremen and Berlin, Germany; Limerick/Dublin, Ireland) and amended according to the preliminary results of this study. Further information on

feasibility testing can be obtained from Deliverable 1.3.5 which is publicly available on the DEDIPAC Website (<https://www.dedipac.eu/deliverables>).

### 3. Number and type of questionnaires

The following components for the assessment of (1) sedentary behaviour and (2) its determinants were developed as paper-based questionnaires (see toolbox module “Integrated instrument/Questionnaires (English version)”):

- Questionnaire for Children (Parent/proxy-report version) (children below 12 years of age)
- Questionnaire for Adolescents (self-report version) (children/adolescents 12 years of age and older)
- Questionnaire for Parents of Adolescents
- Questionnaire for Schools (Head Teacher Report)

The “Questionnaire for Adolescents” combined with the “Questionnaire for Parents of Adolescents” contains the same items as the “Questionnaire for Children” (plus 1 additional item).

### 4. Translations

The questionnaires were developed in English. English questionnaires were translated to German and then back-translated to check for translation errors. The German version of the questionnaires is available upon request from Antje Hebestreit ([hebestreit@leibniz-bips.de](mailto:hebestreit@leibniz-bips.de)).

### 5. Content of the questionnaires

The following topics are covered by the questionnaires.

#### *5.1 Sedentary behaviour*

##### **Sedentary behaviour during school hours**

The questionnaire enquires about the number of compulsory and optional physical education classes per day during an ordinary school week (newly developed question). As a proxy for sedentary behaviour during school hours, the number of all other classes (e.g. maths, history) per day during an ordinary school week is assessed.

##### **Sedentary behaviour during leisure time**

Sedentary behaviour was assessed with a modified version of the “Adolescent Sedentary Activity Questionnaire (ASAQ)” [3]. Several items are included which assess time spent in a sitting or lying position during various activities (e.g. media use, transport, meals) in an ordinary school week.

#### *5.2 Determinants*

For a detailed overview of items including sources of questions and rationale for amendments see Table 1.

Table 1: Overview of instruments to assess determinants of sedentary behaviour

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for		Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
		SB	media use			
<b>Gender</b>		x	incon- sistent	I.Family Study [4], children's questionnaire/teen questionnaire (front page)	Reworded question without change of content <i>reason:</i> improvement of comprehensibility	Question is available upon request, can be used with proper citation [5, 6]
<b>Age (calculated from date of birth)</b>		x	x	I.Family Study [4], children's questionnaire/teens questionnaire (front page)	Only month and year of birth, not day <i>reason:</i> better data protection of participant	Question is available upon request, can be used with proper citation [5, 6]
<b>Ethnicity</b>		x	x	IDEFICS Study [7], parental questionnaire (Q64, Q65)	<ul style="list-style-type: none"> <li>- Country of birth: Reworded question and answer categories without change of content <i>reason:</i> improvement of comprehensibility; additional answer category "Prefer not so say" <i>reason:</i> ethical consideration</li> <li>- Language spoken at home: Reworded answer categories without change of content <i>reason:</i> improvement of comprehensibility; additional answer category "Prefer not so say" <i>reason:</i> ethical consideration</li> </ul>	Questions are available upon request, can be used with proper citation [8]
<b>Socioeconomic status (highest level of education of both parents/ employment status)</b>		x		<u>Highest level of education:</u> <ul style="list-style-type: none"> <li>- Germany: GEDA Study (2014)[9] , (Q143-146)</li> <li>- Ireland: Quarterly National Household Survey (QNHS)[10], (Q184)</li> </ul>	<u>Highest level of education:</u> Germany and Ireland: No modifications, however, highest level of education was requested from both the respondent as well as spouse/partner (if applicable) <i>reason:</i> highest educational level of household can be calculated with information from both parents	<u>Highest level of education:</u> <ul style="list-style-type: none"> <li>- Germany: Questions from the GEDA study are available upon request, can be used free of charge and without copyright infringement</li> <li>- Ireland: Questions are available upon request and online [10], no</li> </ul>

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for	Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
			<u>Employment status:</u> I.Family Study [4], family questionnaire (Q18)	<u>Employment status:</u> None	terms and conditions apply for their use  <u>Employment status:</u> Question is available upon request, can be used with proper citation [11]
	Access of the child to media devices	x	Self-developed		
	Enforced parental rules about mainly media consumption	x	GENERATION M2 Study [12]	<p>Reworded question and answer categories including change of content:</p> <ul style="list-style-type: none"> <li>- question wording: only rules which were agreed upon and which are enforced should be mentioned instead of existence of rules in general <i>reason:</i> rules which are not enforced are unlikely to have an effect on media use</li> <li>- fewer answer categories, i.e. only amount of time spend with watching TV and time spend on the computer <i>reason:</i> amount of time spent on media use in this context more relevant than content of TV programs/video games</li> <li>- time spend "Watching TV" was expanded to "Watching TV on a TV set (including DVDS, videos)" <i>reason:</i> same wording as in question asking about SB, main interest was time spent in front of TV set versus other media devices</li> <li>- time spend "on the computer" was expanded to "use a computer for fun" <i>reason:</i> same wording as in question asking about SB</li> <li>- three additional answer categories (time spend reading for fun, time spend listening to music/audio books, time spend</li> </ul>	Question is available online [12], can be used and adapted for research purposes with proper citation [12]

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for	Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
				using a tablet or smartphone for fun) <i>reason:</i> inclusion of other SBs, especially new media use	
	Encouragement from family and friends to do something else instead of being sedentary	x	Project EAT-I Survey [13-16], (Q52e, Q58e)	<p>Reworded question and answer categories including change of content:</p> <ul style="list-style-type: none"> <li>- original questions asked about encouragement by mother and father to be physically active <i>reason:</i> SB and not PA is of main interest</li> <li>- additional answer categories: encouragement by other family members; encouragement by friend <i>reason:</i> apart from parents also other persons might influence the participant's SB</li> <li>- wording of scale "never" to "very often (5 times of more per week)" instead of "not at all" to "very much" <i>reason:</i> more precise assessment, e.g. "very much" might be interpreted differently by each participant</li> </ul>	Question is available online [16], can be used with proper citation [13-15]
<b>Watching TV as a family</b>		x	Speedy Study, Speedy 1 [17], parent/guardian questionnaire (Q42)	<p>Reworded question and answer categories including change of content:</p> <ul style="list-style-type: none"> <li>- answer scale more detailed (number of days per weekday and weekend day plus average amount of time per day) instead of only number of times per week <i>reason:</i> same wording as in question asking about SB, more precise assessment</li> <li>- answer category "watch TV" was expanded to "watching TV on a TV set (including DVDs, videos)" <i>reason:</i> same wording as in question asking about SB, main interest was time spent in front of TV set versus other media devices</li> </ul>	Questions are available online [18], questions are protected by copyright but can be used for research purposes, citation of appropriate references is requested [19]
	Using the computer for fun or playing	x	Newly-developed on the basis about the question on	n.a.	n.a.

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for	Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
	sedentary games on a game console as a family		"Watching TV as a family"		
	Watching TV with friends (ONLY FOR ADOLESCENTS)	x	Newly developed on the basis about the question on "Watching TV as a family"	n.a.	n.a.
	Using the computer for fun or playing sedentary games on a game console with friends (ONLY FOR ADOLESCENTS)	x	Newly developed on the basis about the question on "Watching TV as a family"	n.a.	n.a.
	Media consumption of parents	x	Speedy Study, Speedy 1 [17], parent/guardian questionnaire (Q14a-b, Q18a- b)	Reworded question including change of content: - "watching TV or video" was expanded to "watching TV on a TV set (including DVDs, videos)" <i>reason:</i> same wording as in question asking about SB, main interest was time spent in front of TV set versus other media devices - "computer use" was expanded to "computer/game console/tablet/smartphone" <i>reason:</i> same wording as in question asking about SB, apart from computer use also other new media devices are of interest	Questions are available online [18], questions are protected by copyright but can be used for research purposes, citation of references is requested [19]

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for	Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
	Neighbourhood Environment	x	Trial of Activity for Adolescent Girls (TAAG)[20], student questionnaire (Section M)	<p>Reworded answer categories including change of content:</p> <ul style="list-style-type: none"> <li>- fewer answer categories <i>reason:</i> keep questionnaire short, include only key determinants</li> <li>- in general, answer categories were phrased “children in our neighbourhood” instead of using “I” (first person singular) <i>reason:</i> can be equally understood by parents who report for their children and adolescents who report on their own behalf</li> <li>- several single answer categories concerning safety with regard to traffic and crime were combined into one answer category <i>reason:</i> keep questionnaire short, include only key determinants</li> <li>- examples were mentioned (school, friends, sports club, etc.) instead of “places I like [are within easy walking distance]” <i>reason:</i> improvement of comprehensibility</li> <li>- additional answer category: “There are many parks or playgrounds in our neighbourhood” <i>reason:</i> existence of parks/playgrounds assumed to determine SB</li> </ul>	Questions are available online [20] can be used with proper citation [20]
	School: Duration and number of class periods per week	x	Newly developed	n.a.	n.a.
	School: Number of PA classes per week	x	Newly developed	n.a.	n.a.

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for	Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
School: Duration of breaks		x	Speedy Study, Speedy 1 [17], questionnaire for schools (Q4)	An additional three categories for “Other [breaks]” <i>reason:</i> pre-test revealed that some schools have more than 3 breaks	Questions are available online [21], questions are protected by copyright but can be used for research purposes, citation of appropriate references is requested [22]
	School: Rules for activities during breaks	x	Speedy Study, Speedy 1 [17], questionnaire for schools (Q15a-f)	Reworded answer categories including change of content: - fewer answer categories <i>reason:</i> keep questionnaire short, include only key determinants - examples were added to “Use the school’s sports equipment”; furthermore, the answer category was refined to “[...] on the school yard” <i>reason:</i> improve comprehensibility - two answer categories were combined into one (“play ball games (indoors and outdoors)”) <i>reason:</i> keep questionnaire short, include only key determinants - answer option “Yes, in bad weather” was changed to “Yes, sometimes” <i>reason:</i> “sometimes” covers also other occasions than only “bad weather”	Questions are available online [21], questions are protected by copyright but can be used for research purposes, citation of appropriate references is requested [22]
School: Extracurricular PA activity before/after school, during lunch breaks, at weekends		x	Speedy Study, Speedy 1 [17], questionnaire for schools (Q9)	Removal of detailed inquiry about target group of activities <i>reason:</i> keep questionnaire short, include only key determinants	Questions are available online [21], questions are protected by copyright but can be used for research purposes, citation of appropriate references is requested [22]

SLR evidence (inclusion of variable)	Experts opinion (inclusion of variable)	Determi- nant for	Source/ name of original study or instrument	Modifications from original and reason for modification	Access rights of original
School: Area around the school (traffic aspects)		x	Speedy Study, Speedy 1 [17], questionnaire for schools (Q30a-e, Q30g)	None	Questions are available online [21], questions are protected by copyright but can be used for research purposes; citation of appropriate references is requested [22]
School: Crossing guard		x	Speedy Study, Speedy 1 [17], questionnaire for schools (Q16h)	For Ireland use of term 'crossing guard' instead of 'lollypop person' <i>reason:</i> 'lollypop person' is a specific term used in the UK	Questions are available online [21], questions are protected by copyright but can be used for research purposes, citation of appropriate references is requested [22]

SB=sedentary behaviour

**Sociodemographic information**

The questionnaires assess age, sex and ethnicity/migration status (country of birth of the participating child and its parents; language spoken at home with the child). Furthermore, the socioeconomic status (highest level of education and employment status of both parents) is assessed.

**Life with family and friends**

Family rules for media consumption and other sedentary activities as well as availability of media devices in the home environment are included. Information on persons (family members, friends) who encouraged the participant to do something else instead of being sedentary is collected. Furthermore mutual family sedentary media use (TV, PC, videos) during week days and weekend days is recorded. In adolescents only, also mutual sedentary media use with friends is assessed. Parental media use (TV, PC, smartphone, etc.) is included as well.

**Neighbourhood environment**

Details of the built environment are requested, including availability, reachability and safety of parks, playgrounds, sports clubs and streets.

**School hours**

Time spent each day at school during an ordinary school week is assessed.

**School-related factors**

Information about the length of breaks, rules for activities during breaks, environment around the schools, etc. is collected.

**6. Psychometric properties**

Using data of the feasibility study, the questions assessing “Sedentary behaviour during school hours” and “Sedentary behaviour during leisure time” will be validated against activPAL<sup>3M</sup> data.

**7. Documents for Ethical Clearance**

An English version of the application for Ethical Clearance through the Ethical Clearance Committee of the University of Bremen and a Data Protection Concept can be obtained upon request.

**8. Recommended procedures****8.1 Data collection**

The following procedures were tested in the feasibility study and can be recommended for other surveys.

Collection of data of children: The “Questionnaire for Children” was provided to children in the school who handed them over to their parents. Parents then either gave the completed

questionnaires to their children to school where they were recollected by fieldwork staff or sent them back to the survey centres by post (stamped return envelope was provided).

Collection of data of adolescents (and their parents): The “Questionnaire for Adolescents” was filled in by the adolescents during class. The “Questionnaire for Parents” was distributed by post and either recollected via the adolescents in school or by post (stamped return envelope was provided).

Collection of data of head teachers: The “Questionnaire for Schools” was distributed to (head) teachers and recollected during one of several visits in the school.

## *8.2 Combination of questionnaires with objective assessment methods of sedentary behaviour*

The questionnaires can be implemented together with instruments for the objective assessment of sedentary behaviour. In this toolbox a “Standard Operating Procedure for use of activPAL<sup>3M</sup> device” is included.

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# **Integrated instrument/ Questionnaires (English version)**

**Disclaimer:**

The “Integrated instrument for the assessment of sedentary behaviour and its determinants in children and adolescents suitable for surveillance purposes”, corresponding Standard Operating Procedures and documents for submission to International Review Boards were developed within the framework of the “Determinants of Diet and Physical Activity Knowledge Hub (DEDIPAC)” (Work Package 1.3) and are licensed under a Creative Commons license (conditions: Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0);

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For the attribution we recommend the following citation:

- When utilising an entire instrument, the corresponding DEDIPAC publication is to be cited
- When utilising an altered form of an instrument, this must be clearly specified on the publication (“adapted from”) and the corresponding DEDIPAC publication is to be cited
- In case the instrument has not been published, nor registered, the following Deliverable shall be cited:  
Hebestreit A, Thumann B, Ahrens W. Determinants of Diet and Physical Activity Knowledge Hub (DEDIPAC) - Deliverable 1.3.3: Final report on amended toolbox. Toolbox developed and feasibility tested within Work Package 1.3 containing an integrated instrument for the assessment of sedentary behaviour and determinants suitable for surveillance purposes;  
<https://www.dedipac.eu/deliverables>

## **Questionnaires for the assessment of sedentary behaviour and its determinants**

- Questionnaire for Children (Parent/proxy-report version)
- Questionnaire for Adolescents (Self-report version)
- Questionnaire for Parents of Adolescents
- Questionnaire for Schools (Head Teacher Report)

Logo of national  
Funding Agency

Please stick the  
child's ID here.

Logo of  
national institution

# Questionnaire for Children

## Parent report

When do you complete this questionnaire?

Date:

Day

Month

Year

### GENERAL INFORMATION ABOUT YOUR CHILD

1

**What is the date of birth of your child?**

*Please note only the month and year.*

Month

Year

2

**Is your child...?**

*Please tick only one answer.*

...male

.....

☐

1

...female

.....

☐

2

**Dear parents,**

We are happy that you and your child decided to participate in <name of survey, study>. The aim of the study is assess sedentary behaviour and its determinants in children and adolescents <adapt aim if necessary>. The results will help to better understand health-related behaviour of children and adolescents.

We are very grateful that you and your family will take the time to participate in this study.

- ✓ You may fill in this questionnaire together with your child.
- ✓ Please answer all questions completely and do not leave any questions unanswered.
- ✓ Please answer the questions in the given sequence, if possible without interruptions.
- ✓ For every question, please tick only the answer that applies best to your child or yourself, respectively.
- ✓ Please answer each question honestly and without thinking too long about it.
- ✓ You know your child best. That's why your answers are very important to us!

Not all children live with their natural parents. You can indicate your relationship to your child in the questionnaire. Consequently, with "your child" we always mean the participating child.

For questions relating to the mother or father, or the parents, we mean the responsible legal guardians, not necessarily the biological parents. If you are the sole responsible parent, please ignore fields concerning the other parent.

You are welcome to contact us at any time should you have any questions, or require further explanation.

Contact person



Institute name

Address

Phone

E-Mail

## Instructions for filling in the questionnaire

The questionnaire contains answers and statements to be marked with a cross. Please give one answer, unless stated otherwise.	
If you are asked to write down text, please use the space provided.	<hr/>
For questions referring to a quantity or date, please fill in the required data in the provided boxes.	<div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px;"></div>
Skip a question only when the following applies:	 „Please go to question...”
If you want to correct a given answer, please cross out the written words and enter the corrected answer above the cancelled words.	<div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 10px;"> <del>1</del>  <del>1</del> </div> <div style="text-align: center; margin-right: 10px;"> <del>1</del>  <del>1</del> </div> <div>years old</div> </div>
If you would like to correct a marked answer, please completely cross out the wrong answer and mark the desired answer.	<div style="display: flex; align-items: center; justify-content: center; margin-bottom: 10px;"> <div style="text-align: center; margin-right: 10px;"> <del>1</del> </div> <div style="text-align: center; margin-right: 10px;"> <del>1</del> </div> <div>Breakfast</div> </div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 10px;"> <del>2</del> </div> <div style="text-align: center; margin-right: 10px;"> <del>2</del> </div> <div>Lunch</div> </div>

## INFORMATION ABOUT YOU

3

**What is your relationship to the child?**

*Please tick only one answer.*

- Biological mother ..... ☐ 1
- Biological father ..... ☐ 2
- Stepmother/adoptive mother/foster mother ..... ☐ 3
- Stepfather/adoptive father/foster father ..... ☐ 4
- Grandmother ..... ☐ 5
- Grandfather ..... ☐ 6
- Other (aunt, uncle, more distant relative, unrelated person) ..... ☐ 7

Please specify: \_\_\_\_\_

4

**Are you a single parent?**

- Yes ..... ☐ 1
- No ..... ☐ 2

5

**How old are you?**

I am   years old.

6

**Are you ...?**

- ...male ..... ☐ 1
- ...female ..... ☐ 2

## SEDENTARY BEHAVIOUR

### SCHOOL HOURS

- 7a** During an ordinary school week, at what time did school start and end (including after-school care, e.g. sports training) for your child?

	Example	Monday	Tuesday	Wednesday	Thursday	Friday
Time school started:	08:00	__: __	__: __	__: __	__: __	__: __
Time school ended:	13:00	__: __	__: __	__: __	__: __	__: __

- 7b** During an ordinary school week, how many physical education (PE) classes, optional PE classes (e.g. sports training) and all other classes (e.g. maths, history) do your child complete at school?

	Example	Monday	Tuesday	Wednesday	Thursday	Friday
Compulsory PE classes	2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Optional PE classes (e.g. sports training)	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
All other classes (e.g. maths, history)	4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

## LEISURE TIME

8

During an ordinary school week, on how many days (A) and for how much time on average on each day (B) does your child carry out the following activities in a **SITTING** or **LYING** position?

Please differentiate between weekdays and weekend days.

- For weekdays please consider only the time before and after school.
- If your child did two activities at the same time (e.g. 1 hour "Reading for fun" AND simultaneously listened to music), then only count the time for the main activity (e.g. write down 1 hour "Reading for fun", but nothing for "Listening to music").

	<u>Weekdays</u>		<u>Weekend days</u>	
	A Number of days	B Average time per day	A Number of days	B Average time per day
Watching TV on a TV set (including DVDs, videos)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a computer for fun (e.g. chatting, emailing, surfing the Internet, watching clips/movies) or playing sedentary games on a game console	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a tablet or smartphone for fun (e.g. chatting, emailing, surfing the Internet)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Doing homework/being tutored <u>using</u> a computer/tablet	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Doing homework/being tutored <u>without using</u> a computer/tablet	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Reading for fun	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Listening to music/audio books	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Travelling with modes of transportation like bus, car or train (e.g. to school)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Sitting during meals	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Doing crafts or sedentary hobbies (e.g. card/board games)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Hanging out/chatting with friends	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Playing a musical instrument (e.g. piano)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Other sedentary activities, please specify: _____	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min

## FAMILY LIFE AND FRIENDS

**9** How many of the following devices are available to your child (own devices or devices of family members if not otherwise specified)?

	Number
Television set in common rooms (e.g. living room, kitchen)	<input type="checkbox"/>
Television set in child's own bedroom	<input type="checkbox"/>
Computer/laptop in common rooms (e.g. living room, kitchen)	<input type="checkbox"/>
Computer/laptop in child's own bedroom	<input type="checkbox"/>
Child's own tablet	<input type="checkbox"/>
Tablet of family member(s)	<input type="checkbox"/>
Child's own smartphone	<input type="checkbox"/>
Smartphone of family member(s)	<input type="checkbox"/>
Landline phone	<input type="checkbox"/>
Game console for sedentary gaming	<input type="checkbox"/>
Game console for active gaming (e.g. Wii, Playstation Move)	<input type="checkbox"/>
E-Book reader	<input type="checkbox"/>

**10** Have you agreed upon rules with your child how much time he/she can spend on the following activities? Please only mention rules that you enforce.

*Please tick one answer per line.*

	Yes	No
Watching TV on a TV set (including DVDs, videos) .....	<input type="radio"/> 1	<input type="radio"/> 2
Using a computer for fun .....	<input type="radio"/> 1	<input type="radio"/> 2
Using a tablet or smartphone for fun .....	<input type="radio"/> 1	<input type="radio"/> 2
Reading for fun .....	<input type="radio"/> 1	<input type="radio"/> 2
Listening to music/audiobooks .....	<input type="radio"/> 1	<input type="radio"/> 2

**11** During an ordinary school week, how often was your child encouraged to do something else instead of being sedentary by the following persons?

Please tick one answer per line.

	Never	Rarely less than once a week	Sometimes 1-2 times per week	Often 3-4 times per week	Very often 5 times or more per week
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Other family members (e.g. sibling(s), grandparents etc.) .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Your child's friends .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

**12** During an ordinary school week, on how many days per week (A) and for how much time on average on each day (B) does your child carry out the following activities together with the family/single family members?

Please differentiate between weekdays and weekend days.

	<u>Weekdays</u>		<u>Weekend days</u>	
	A Number of days	B Average time per day	A Number of days	B Average time per day
Watching TV on a TV set (including DVDs, videos)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a computer for fun (e.g. surfing the Internet, watching clips/movies) or playing sedentary games on a game console	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min

13

During an ordinary week, how much leisure time did you and your partner spend watching TV on a TV set (including DVDs, videos) at home on average per day?

Please tick one answer per line.

	None	Less than 1 hour a day	1 to 2 hours a day	2 to 3 hours a day	3 to 4 hours a day	more than 4 hours a day
<b>Weekday</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
<b>Weekend day</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

14

During an ordinary week, how much leisure time did you and your partner spend on computer/game console/ tablet/smartphone use (e.g. emailing, surfing the Internet) at home on average per day?

	None	Less than 1 hour a day	1 to 2 hours a day	2 to 3 hours a day	3 to 4 hours a day	more than 4 hours a day
<b>Weekday</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
<b>Weekend day</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

## NEIGHBOURHOOD ENVIRONMENT

15

For the next set of questions we need you to think about the area around your home.

Please tick the box that best indicates your agreement or disagreement with each of the following statements.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
There are many parks or play-grounds in our neighborhood.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
The children in our neighborhood often play outdoors.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
The children in our neighborhood can reach, e.g. the school, friends or the sports club easily by foot or by bicycle.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
The streets, places, parks, etc. in our neighborhood are safe, e.g. with regard to traffic and crime.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

## SOCIO-DEMOGRAPHIC INFORMATION

### 16 In which country was your child born?

*Please tick only one answer.*

- ☐ 1 <country-specific, country where survey is conducted>
- ☐ 2 Other country, please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

### 17 In which country were you and your partner born?

*Please tick only one answer for you **and** only one answer for your partner.*

#### Yourself

- ☐ 1 <country-specific, country where survey is conducted>
- ☐ 2 Other country, please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

#### Your partner

- ☐ 1 <country-specific, country where survey is conducted>
- ☐ 2 Other country, please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

### 18 What language(s) do you usually speak with your child at home?

*Please tick only one answer.*

- ☐ 1 <country-specific, language spoken in the country where survey is conducted>
- ☐ 2 Other language(s), please specify: \_\_\_\_\_
- ☐ 3 <country-specific> and other language(s), please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

Next, add one or more country-specific questions for assessing the highest educational level of parents. It is preferable to use questions that are already used in the national surveys that form part of the European Health Interview Survey (mandatory for all European countries) (EHIS; [http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:European\\_health\\_interview\\_survey\\_\(EHIS\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:European_health_interview_survey_(EHIS))). These questions are required to allow assignment of internationally comparable ISCED levels (<http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>).

**EXAMPLE FOR IRELAND SEE BELOW (question 19)**

19

What is the highest level of education or training **you** and **your partner** have attained?

Please tick only one answer for you **and** only one answer for your partner.

	Yourself	Your partner
<b>No formal education or training</b> .....	<input type="radio"/> 1 .....	<input type="radio"/> 1
<b>Pre-primary education/Primary education</b> (or FETAC Certificate at NFQ level 1 or 2) .....	<input type="radio"/> 2 .....	<input type="radio"/> 2
<b>Secondary 1</b> (Junior/Inter/Group Certificate, NCVA foundation Certificate, FÁS Introductory Skills Certificate or FETAC Certificate at NFQ level 3, O-levels) .....	<input type="radio"/> 3 .....	<input type="radio"/> 3
<b>Transition year programme</b> .....	<input type="radio"/> 4 .....	<input type="radio"/> 4
<b>Secondary 2</b> (Leaving Certificate) .....	<input type="radio"/> 5 .....	<input type="radio"/> 5
<b>Technical or Vocational</b> (e.g. Secretarial courses, Certificate in Hotel Operations, PLCs, FÁS National Skills/Specific Skills Certificate or FETAC Certificate at NFQ level 4 or 5, A-Levels) .....	<input type="radio"/> 6 .....	<input type="radio"/> 6
<b>Advanced Certificate</b> (Completed apprenticeships, Teagasc Farming or Horticulture Certificate, National Craft Certificate or FETAC Advanced Certificate at NFQ level 6) .....	<input type="radio"/> 7 .....	<input type="radio"/> 7
<b>Higher Certificate</b> (e.g. National Certificate (NCEA/DIT/IOT), Cadetship, (army, air corps or naval service) or HETAC/DIT Higher Certificate at NFQ level 6) .....	<input type="radio"/> 8 .....	<input type="radio"/> 8
<b>Diploma</b> (e.g. National Diploma (HETAC/NCEA), Bachelor Degree (DIT), Diploma in Police Studies, 3 year Diploma or Ordinary Bachelor Degree at NFQ level 7) .....	<input type="radio"/> 9 .....	<input type="radio"/> 9
<b>Honours Bachelor Degree, Graduate Diploma or Higher Diploma at NFQ level 8</b> .....	<input type="radio"/> 10 .....	<input type="radio"/> 10
<b>Professional</b> (Honours Bachelor Degree equivalent or higher) .....	<input type="radio"/> 11 .....	<input type="radio"/> 11
<b>Post Graduate</b> (e.g. Post Graduate Diploma or Masters Degree at NFQ level 9) .....	<input type="radio"/> 12 .....	<input type="radio"/> 12
<b>Doctorate or higher</b> (e.g. Doctoral Degree/higher Doctorate at NFQ level 10) .....	<input type="radio"/> 13 .....	<input type="radio"/> 13
<b>Other</b> .....	<input type="radio"/> 14 .....	<input type="radio"/> 14

20

**Are you currently employed? Which of the following best describes your main employment status and that of your partner? Employment means any job which earns money.**

*Please tick only one answer for you **and** only one answer for your partner.*

	Yourself	Your partner
Full-time job – 30 hrs. or more a week (employed/self-employed/seasonal/temporary work)	<input type="radio"/> 1	<input type="radio"/> 1
Part-time job – 15-29 hrs. a week (employed/self-employed/seasonal/temporary work)	<input type="radio"/> 2	<input type="radio"/> 2
Part-time job – less than 15 hrs. a week (employed/self-employed/seasonal/temporary work)	<input type="radio"/> 3	<input type="radio"/> 3
Temporary company leave (e.g. maternity or paternity leave, long-term sick-leave)	<input type="radio"/> 4	<input type="radio"/> 4
Apprentice/retrainee	<input type="radio"/> 5	<input type="radio"/> 5
Currently not employed (including students not monetarily compensated, unemployment, internship or voluntary work without compensation, retirement, early retirement, etc.)	<input type="radio"/> 6	<input type="radio"/> 6

**Thank you very much for  
answering these questions!**

**Please check whether you have answered  
all questions completely.**

Logo of national  
Funding Agency

Please stick the  
child's ID here.

Logo of  
national institution

# Questionnaire for Adolescents

## Self-report

When do you complete this questionnaire?

Date:

Day

Month

Year

### GENERAL INFORMATION ABOUT YOU

1

What is your date of birth and in which country were you born?

**Date of birth**

(only month and year)

Month

Year

**Country of birth**

Please tick only one answer.

☐

1 <country-specific, country where survey is conducted>

☐

2 Other country, please specify: \_\_\_\_\_

☐

-7 Prefer not to say

2

**Are you ...?**

Please tick only one answer.

...male .....

☐ 1

...female .....

☐ 2

Hello,

We are happy that you decided to participate in <name of survey, study>. The aim of the study is assess sedentary behaviour and its determinants in children and adolescents <adapt aim if necessary>. The results will help to better understand health-related behaviour of children and adolescents.

We are very grateful that you will take the time to participate in this study.

- ☺ Please answer all questions completely and do not leave any questions unanswered.
- ☺ Please answer the questions in the given sequence, if possible without interruptions.
- ☺ For every question, please tick only the answer that applies best to you.
- ☺ Please answer each question honestly and without thinking too long about it.
- ☺ You know yourself best. That's why your opinion is very important for us!

Please note while you are answering this questionnaire:

When we are asking questions about your parents, or your mother or father, we only mean the adults who live in the same household with you. This could also be your mother's partner, your father's partner or another guardian.

The answers you give to these questions are totally private. We won't tell your parents or teachers what you say.

You can ask us at any time if you have any questions or need further explanation.

Contact person

Institute name

Address

Phone

E-Mail

## Instructions for filling in the questionnaire

The questionnaire contains answers and statements to be marked with a cross. Please give one answer, unless stated otherwise.	○
If you are asked to write down text, please use the space provided.	_____
For questions referring to a quantity or date, please fill in the required data in the provided boxes.	<div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px;"></div>
If you want to correct a given answer, please cross out the written words and enter the corrected answer above the cancelled words.	<div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 10px;"> <del>1</del> 12 <del>1</del> </div> <div style="border: 1px solid black; padding: 2px;"> <del>1</del> </div> <div style="margin-left: 10px;">years old</div> </div>
If you would like to correct a marked answer, please completely cross out the wrong answer and mark the desired answer.	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="text-align: center; margin-right: 10px;"> <del>1</del> </div> <div style="border-bottom: 3px double black; width: 150px;"></div> <div style="margin-left: 10px;">Breakfast</div> </div> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> <del>2</del> </div> <div style="margin-left: 10px;">Lunch</div> </div> </div>

## SEDENTARY BEHAVIOUR

### SCHOOL HOURS

3a

During an ordinary school week, at what time did school start and end (including after-school care, e.g. sports training) for you?

	Example	Monday	Tuesday	Wednesday	Thursday	Friday
Time school started:	08:00	__: __	__: __	__: __	__: __	__: __
Time school ended:	13:00	__: __	__: __	__: __	__: __	__: __

3b

During an ordinary school week, how many physical education (PE) classes, optional PE classes (e.g. sports training) and all other classes (e.g. maths, history) do you complete at school?

	Example	Monday	Tuesday	Wednesday	Thursday	Friday
Compulsory PE classes	2					
Optional PE classes (e.g. sports training)	0					
All other classes (e.g. maths, history)	4					

## LEISURE TIME

4

During an ordinary school week, on how many days (A) and for how much time on average on each day (B) do you carry out the following activities in a **SITTING** or **LYING** position?

Please differentiate between weekdays and weekend days.

1. For weekdays please consider only the time before and after school.
2. If you did two activities at the same time (e.g. 1 hour "Reading for fun" AND simultaneously listened to music), then only count the time for the main activity (e.g. write down 1 hour "Reading for fun", but nothing for "Listening to music").

	<u>Weekdays</u>		<u>Weekend days</u>	
	<b>A</b> Number of days	<b>B</b> Average time <u>per day</u>	<b>A</b> Number of days	<b>B</b> Average time <u>per day</u>
Watching TV on a TV set (including DVDs, videos)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a computer for fun (e.g. chatting, emailing, surfing the Internet, watching clips/movies) or playing sedentary games on a game console	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a tablet or smartphone for fun (e.g. chatting, emailing, surfing the Internet)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Doing homework/being tutored <u>using</u> a computer/tablet	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Doing homework/being tutored <u>without using</u> a computer/tablet	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Reading for fun	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Listening to music/audio books	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Travelling with modes of transportation like bus, car or train (e.g. to school)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Sitting during meals	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Doing crafts or sedentary hobbies (e.g. card/board games)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Hanging out/chatting with friends	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Playing a musical instrument (e.g. piano)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Other sedentary activities, please specify: _____	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min

## FAMILY LIFE AND FRIENDS

**5**

**How many of the following devices are available to you (own devices or devices of family members if not otherwise specified)?**

	Number
Television set in common rooms (e.g. living room, kitchen)	<input type="text"/>
Television set in your own bedroom	<input type="text"/>
Computer/laptop in common rooms (e.g. living room, kitchen)	<input type="text"/>
Computer/laptop in your own bedroom	<input type="text"/>
Own tablet	<input type="text"/>
Tablet of family member(s)	<input type="text"/>
Own smartphone	<input type="text"/>
Smartphone of family member(s)	<input type="text"/>
Landline phone	<input type="text"/>
Game console for sedentary gaming	<input type="text"/>
Game console for active gaming (e.g. Wii, Playstation Move)	<input type="text"/>
E-Book reader	<input type="text"/>

**6**

**Have your parents agreed upon rules with you how much time you can spend on the following activities? Please only mention rules that your parents enforce.**

*Please tick one answer per line.*

	Yes	No
Watching TV on a TV set (including DVDs, videos) .....	<input type="radio"/> 1.....	<input type="radio"/> 2
Using a computer for fun .....	<input type="radio"/> 1.....	<input type="radio"/> 2
Using a tablet or smartphone for fun .....	<input type="radio"/> 1.....	<input type="radio"/> 2
Reading for fun .....	<input type="radio"/> 1.....	<input type="radio"/> 2
Listening to music/audiobooks .....	<input type="radio"/> 1.....	<input type="radio"/> 2

7

During an ordinary school week, how often are you encouraged to do something else instead of being sedentary by the following persons?

Please tick one answer per line.

	Never	Rarely less than once a week	Sometimes 1-2 times per week	Often 3-4 times per week	Very often 5 times or more per week
Your mother .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Your father .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Other family members (e.g. sibling(s), grandparents etc.)	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Your boyfriend/girlfriend, other friends	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

8

During an ordinary school week, on how many days per week (A) and for how much time on average on each day (B) do you carry out the following activities together with the family/single family members?

Please differentiate between weekdays and weekend days.

	<u>Weekdays</u>		<u>Weekend days</u>	
	A Number of days	B Average time <u>per day</u>	A Number of days	B Average time <u>per day</u>
Watching TV on a TV set (including DVDs, videos)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a computer for fun (e.g. surfing the Internet, watching clips/movies) or playing sedentary games on a game console	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min

9

During an ordinary school week, on how many days per week (A) and for how much time on average on each day (B) do you carry out the following activities together with your friends?

Please differentiate between weekdays and weekend days.

	<u>Weekdays</u>		<u>Weekend days</u>	
	A Number of days	B Average time <u>per day</u>	A Number of days	B Average time <u>per day</u>
Watching TV on a TV set (including DVDs, videos)	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min
Using a computer for fun (e.g. surfing the Internet, watching clips/movies) or playing sedentary games on a game console	<input type="text"/>	___ hrs ___ min	<input type="text"/>	___ hrs ___ min

## NEIGHBOURHOOD ENVIRONMENT

10

For the next set of questions we need you to think about the **area around your home**.

Please tick the box that best indicates your agreement or disagreement with each of the following statements.

Strongly  
disagree

Disagree

Neither  
agree nor  
disagree

Agree

Strongly  
agree

There are many parks or play-  
grounds in our neighborhood.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

The children in our neighbor-  
hood often play outdoors.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

The children in our neighborhood can  
reach, e.g. the school, friends or the  
sports club easily by foot or by  
bicycle.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

The streets, places, parks, etc. in our  
neighborhood are safe, e.g. with  
regard to traffic and crime.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

**Thank you very much for  
answering these questions!**

**Please check whether you have answered  
all questions completely.**

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# Questionnaire for Parents of Adolescents

When do you complete this questionnaire?

Date:

Day

Month

Year

## GENERAL INFORMATION

1

How old are you?

I am

years old.

2

Are you ...?

...male .....

☐

1

...female .....

☐

2

**Dear parents,**

We are happy that you and your child decided to participate in the <name of the survey, study>. The aim of the study is to test new instruments for the assessment of sedentary behaviour and its determinants in children and adolescents <adapt aim if necessary>. The results will help to better understand health-related behaviour of children and adolescents.

We are very grateful that you and your family will take the time to participate in this study.

Not all children live with their natural parents. You can indicate your relationship to your child in the questionnaire. Consequently, with "your child" we always mean the participating child.

For questions relating to the mother or father, or the parents, we mean the responsible legal guardians, not necessarily the biological parents. If you are the sole responsible parent, please ignore fields concerning the other parent.

- ✓ Please answer all questions completely and do not leave any questions unanswered.
- ✓ For every question, please tick only the answer that applies best to you.
- ✓ Please answer each question honestly and without thinking too long about it.

You are welcome to contact us at any time should you have any questions, or require further explanation.

Contact person



Institute name

Address

Phone

E-Mail

## Instructions for filling in the questionnaire

The questionnaire contains answers and statements to be marked with a cross. Please give one answer, unless stated otherwise.	
If you are asked to write down text, please use the space provided.	<hr/>
For questions referring to a quantity or date, please fill in the required data in the provided boxes.	<div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px;"></div>
Skip a question only when the following applies:	 „Please go to question...”
If you want to correct a given answer, please cross out the written words and enter the corrected answer above the cancelled words.	<div style="text-align: center;">12 <div style="display: inline-block; border: 1px solid black; width: 20px; height: 20px; text-align: center; vertical-align: middle;"><del>1</del></div><div style="display: inline-block; border: 1px solid black; width: 20px; height: 20px; text-align: center; vertical-align: middle;"><del>1</del></div> years old</div>
If you would like to correct a marked answer, please completely cross out the wrong answer and mark the desired answer.	<div style="text-align: center;"><del>1</del> Breakfast <del>2</del> Lunch</div>

## INFORMATION ABOUT YOU

3

**What is your relationship to the child?**

*Please tick only one answer.*

- Biological mother ..... ☐ 1
- Biological father ..... ☐ 2
- Stepmother/adoptive mother/foster mother ..... ☐ 3
- Stepfather/adoptive father/foster father ..... ☐ 4
- Grandmother ..... ☐ 5
- Grandfather ..... ☐ 6
- Other (aunt, uncle, more distant relative, unrelated person) ..... ☐ 7

Please specify: \_\_\_\_\_

4

**Are you a single parent?**

- Yes ..... ☐ 1
- No ..... ☐ 2

## SOCIO-DEMOGRAPHIC INFORMATION

**5**

**In which country were you and your partner born?**

*Please tick only one answer for you **and** only one answer for your partner.*

### **Yourself**

- ☐ 1 <country-specific, country where survey is conducted>
- ☐ 2 Other country, please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

### **Your partner**

- ☐ 1 <country-specific, country where survey is conducted>
- ☐ 2 Other country, please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

**6**

**What language(s) do you usually speak with your child at home?**

*Please tick only one answer.*

- ☐ 1 <country-specific, language spoken in the country where survey is conducted>
- ☐ 2 Other language(s), please specify: \_\_\_\_\_
- ☐ 3 <country-specific> and other language(s), please specify: \_\_\_\_\_
- ☐ -7 Prefer not to say

Next, add one or more country-specific questions for assessing the highest educational level of parents. It is preferable to use questions that are already used in the national surveys that form part of the European Health Interview Survey (mandatory for all European countries) (EHIS; [http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:European\\_health\\_interview\\_survey\\_\(EHIS\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:European_health_interview_survey_(EHIS))). These questions are required to allow assignment of internationally comparable ISCED levels (<http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>).

**EXAMPLE FOR IRELAND SEE BELOW (question 7)**

7

**What is the highest level of education or training you and your partner have attained?***Please tick only one answer for you **and** only one answer for your partner.*

	Yourself	Your partner
<b>No formal education or training</b> .....	1. <input type="radio"/>	1. <input type="radio"/>
<b>Pre-primary education/Primary education</b> (or FETAC Certificate at NFQ level 1 or 2) .....	2. <input type="radio"/>	2. <input type="radio"/>
<b>Secondary 1</b> (Junior/Inter/Group Certificate, NCVA foundation Certificate, FÁS Introductory Skills Certificate or FETAC Certificate at NFQ level 3 O-levels) .....	3. <input type="radio"/>	3. <input type="radio"/>
<b>Transition year programme</b> .....	4. <input type="radio"/>	4. <input type="radio"/>
<b>Secondary 2</b> (Leaving Certificate) .....	5. <input type="radio"/>	5. <input type="radio"/>
<b>Technical or Vocational</b> (e.g. Secretarial courses, Certificate in Hotel Operations, PLCs, FÁS National Skills/Specific Skills Certificate or FETAC Certificate at NFQ level 4 or 5, A-Levels) .....	6. <input type="radio"/>	6. <input type="radio"/>
<b>Advanced Certificate</b> (Completed apprenticeships, Teagasc Farming or Horticulture Certificate, National Craft Certificate or FETAC Advanced Certificate at NFQ level 6) .....	7. <input type="radio"/>	7. <input type="radio"/>
<b>Higher Certificate</b> (e.g. National Certificate (NCEA/DIT/IOT), Cadetship, (army, air corps or naval service) or HETAC/DIT Higher Certificate at NFQ level 6) .....	8. <input type="radio"/>	8. <input type="radio"/>
<b>Diploma</b> (e.g. National Diploma (HETAC/NCEA), Bachelor Degree (DIT), Diploma in Police Studies, 3 year Diploma or Ordinary Bachelor Degree at NFQ level 7) .....	9. <input type="radio"/>	9. <input type="radio"/>
<b>Honours Bachelor Degree, Graduate Diploma or Higher Diploma at NFQ level 8</b> .....	10. <input type="radio"/>	10. <input type="radio"/>
<b>Professional</b> (Honours Bachelor Degree equivalent or higher) .....	11. <input type="radio"/>	11. <input type="radio"/>
<b>Post Graduate</b> (e.g. Post Graduate Diploma or Masters Degree at NFQ level 9) .....	12. <input type="radio"/>	12. <input type="radio"/>
<b>Doctorate or higher</b> (e.g. Doctoral Degree/higher Doctorate at NFQ level 10) .....	13. <input type="radio"/>	13. <input type="radio"/>
<b>Other</b> .....	14. <input type="radio"/>	14. <input type="radio"/>

8

**Are you currently employed? Which of the following best describes your main employment status and that of your partner? Employment means any job which earns money.**

*Please tick only one answer for you **and** only one answer for your partner.*

	Yourself	Your partner
Full-time job – 30 hrs. or more a week (employed/self-employed/seasonal/temporary work)	<input type="radio"/> 1	<input type="radio"/> 1
Part-time job – 15-29 hrs. a week (employed/self-employed/seasonal/temporary work)	<input type="radio"/> 2	<input type="radio"/> 2
Part-time job – less than 15 hrs. a week (employed/self-employed/seasonal/temporary work)	<input type="radio"/> 3	<input type="radio"/> 3
Temporary company leave (e.g. maternity or paternity leave, long-term sick-leave)	<input type="radio"/> 4	<input type="radio"/> 4
Apprentice/retrainee	<input type="radio"/> 5	<input type="radio"/> 5
Currently not employed (including students not monetarily compensated, unemployment, internship or voluntary work without compensation, retirement, early retirement, etc.)	<input type="radio"/> 6	<input type="radio"/> 6

## MEDIA USE

**9** During an ordinary week, how much leisure time did you and your partner spend watching TV on a TV set (including DVDs, videos) at home on average per day?

*Please tick one answer per line.*

	None	Less than 1 hour a day	1 to 2 hours a day	2 to 3 hours a day	3 to 4 hours a day	more than 4 hours a day
<b>Weekday</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
<b>Weekend day</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

**10** During an ordinary week, how much leisure time did you and your partner spend on computer/game console/ tablet/smartphone use (e.g. emailing, surfing the Internet) at home on average per day?

*Please tick one answer per line.*

	None	Less than 1 hour a day	1 to 2 hours a day	2 to 3 hours a day	3 to 4 hours a day	more than 4 hours a day
<b>Weekday</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
<b>Weekend day</b>						
Yourself .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
Your partner .....	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

**Thank you very much for  
answering these questions!**

**Please check whether you have answered  
all questions completely.**

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# Questionnaire for Schools

## Head Teacher report

When do you complete this questionnaire?

Date:

Day

Month

Year

### GENERAL INFORMATION

1

What is your position?

☐

1 (Deputy) Head Teacher

☐

2 Teacher

☐

3 Other, please specify: \_\_\_\_\_

**Dear Head Teacher,**

We are happy that you decided to participate in the <name of survey, study>. The aim of the study is to assess of sedentary behaviour and its determinants in children and adolescents <adapt aim if necessary>. The results will help to better understand health-related behaviour of children and adolescents.

We are very grateful that you and your school will take the time to participate in this study.

- ✓ Please answer all questions completely and do not leave any questions unanswered.
- ✓ For every question, please tick only the answer that applies best to your school.
- ✓ Please answer each question honestly and without thinking too long about it.

You are welcome to contact us at any time should you have any questions, or require further explanation.

Contact person


Institute name

Address

Phone

E-Mail

## Instructions for filling in the questionnaire

The questionnaire contains answers and statements to be marked with a cross. Please give one answer, unless stated otherwise.	
If you are asked to write down text, please use the space provided.	<hr/>
For questions referring to a quantity or date, please fill in the required data in the provided boxes.	<div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="display: inline-block; border: 1px solid black; width: 30px; height: 30px;"></div>
If you want to correct a given answer, please cross out the written words and enter the corrected answer above the cancelled words.	<div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 10px;"> <sup>12</sup>  <div style="border: 1px solid black; padding: 2px 5px;"><del>1</del></div> <div style="border: 1px solid black; padding: 2px 5px;"><del>1</del></div> </div> <div>years old</div> </div>
If you would like to correct a marked answer, please completely cross out the wrong answer and mark the desired answer.	<div style="display: flex; align-items: center; justify-content: center; margin-bottom: 10px;"> <div style="text-align: center; margin-right: 10px;"> <del>1</del> </div> <div><del>Breakfast</del></div> </div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 10px;"> <del>2</del> </div> <div>Lunch</div> </div>

## INFORMATION ABOUT YOUR SCHOOL

2

How many compulsory class periods of physical education (in hours/ minutes) are there usually for year <number of grade> students per week in total?

hour(s) and

minutes

3

How many compulsory class periods of all other classes (e.g. maths, history) are there usually for year <number of grade> students per week in total?

hour(s) and

minutes

4

At what time are regular breaks held, and how long do they last?

	Starting time				Duration (minutes)	
Morning break	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Lunch time	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Afternoon break	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other, please specify: _____	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other, please specify: _____	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other, please specify: _____	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>	<input type="text"/>

5

**Are the students in year <number of grade> allowed to engage in the following activities during breaks?**

*Please tick one answer per line.*

Yes, always

Yes, sometimes

No, never

Use a computer..... ☐ 1..... ☐ 2..... ☐ 3

Watch TV or videos..... ☐ 1..... ☐ 2..... ☐ 3

Use the school's sports equipment  
on the school yard (e.g. balls, skipping ropes)..... ☐ 1..... ☐ 2..... ☐ 3

Play ball games (indoors or outdoors)..... ☐ 1..... ☐ 2..... ☐ 3

6

**Does your school or any other organisation provide any extracurricular physical activity or sports programmes?**

*Please tick one answer per line.*

Yes

No

Before school..... ☐ 1..... ☐ 2

During lunch breaks..... ☐ 1..... ☐ 2

After school..... ☐ 1..... ☐ 2

At weekends..... ☐ 1..... ☐ 2

7

**For the next set of questions we need you to think about the area around your school.**

*Please tick the box that best indicates your agreement or disagreement with each of the following statements.*

**Strongly  
disagree**

**Disagree**

**Neither  
agree nor  
disagree**

**Agree**

**Strongly  
agree**

There is heavy traffic in the streets near the school. .... ☐ 1 ..... ☐ 2 ..... ☐ 3 ..... ☐ 4 ..... ☐ 5

There are pathways for the children to walk on near the school. .... ☐ 1 ..... ☐ 2 ..... ☐ 3 ..... ☐ 4 ..... ☐ 5

Cars drive slowly near the school. .... ☐ 1 ..... ☐ 2 ..... ☐ 3 ..... ☐ 4 ..... ☐ 5

Streets are safe to walk or ride on near the school. .... ☐ 1 ..... ☐ 2 ..... ☐ 3 ..... ☐ 4 ..... ☐ 5

There are safe places like traffic lights or zebra crossings to cross busy streets near the school. .... ☐ 1 ..... ☐ 2 ..... ☐ 3 ..... ☐ 4 ..... ☐ 5

It is easy to get to the school by foot. .... ☐ 1 ..... ☐ 2 ..... ☐ 3 ..... ☐ 4 ..... ☐ 5

8

**Does your school have a crossing guard?**

*Please tick only one answer.*

☐ 1 Yes

☐ 2 No

**Thank you very much for answering these questions!**

**Please check whether you have answered  
all questions completely.**

# **Standard Operating Procedure for use of activPAL<sup>3M</sup> device**

## Content

a) The Device .....	3
b) Prerequisite for study participation .....	3
c) Accelerometry – activPAL <sup>3M</sup> .....	3
d) activPAL <sup>3M</sup> : Getting Started .....	4
e) Handing out the activPAL <sup>3M</sup> activity monitors to Children and Adolescents .....	11
f) Wearing the activPAL <sup>3M</sup> .....	11
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### a) The Device

- activPAL<sup>3M</sup> Professional Physical Activity Monitor.



Figure 1: activPAL<sup>3M</sup> device

### b) Prerequisite for study participation

- Parental consent must be obtained.
- Only children that are clear of any conditions which may limit participation in physical activity can participate in this feasibility study.
- Children with physical disabilities or limited movement possibilities (e.g. broken leg) should be excluded from this feasibility study.

### c) Accelerometry – activPAL<sup>3M</sup>

- The device should be worn for a minimum of 8 full days
- The device should be worn at all times, even when sleeping, and playing sports
- The activPAL<sup>3M</sup> can be worn when showering. However, the device must be removed for swimming, when having a bath or for any other water based activities when the device is immersed in water for prolonged periods.
- The only other time the device should be removed is if it is necessary to change the dressings which attach it to the individual.
- If the device is obstructive during a sporting activity (e.g. Judo, Taekwondo), it can be removed, but efforts should be made to wear the device at all times.
- The device should be worn on the anterior aspect of the midline of the right thigh, halfway between the knee and the hip as shown (Figure 2).

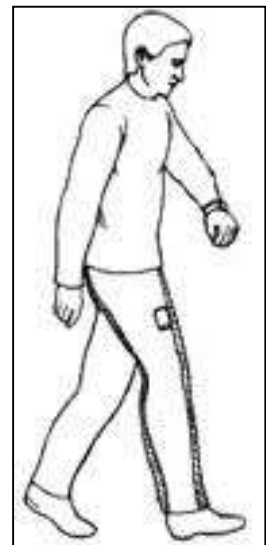


Figure 2

## d) activPAL<sup>3M</sup>: Getting Started

### Download the activPAL software

- Download the activPAL software from the link:  
<https://paltechnologies.sharefile.com/download.aspx?id=bedfefb7fec3402c>
- Click the Download button
- When alerted, click “Save as” and save the software somewhere on your PC.
- Double click on the saved file (activPAL3xsetup\_PC.....).
- Click “Next” to begin installation.
- Click “I accept the terms and conditions” button, and then click “Next”
- Click “Next”, allowing for a desktop icon to be installed.
- Click “Install”.
- Click “Finish”.

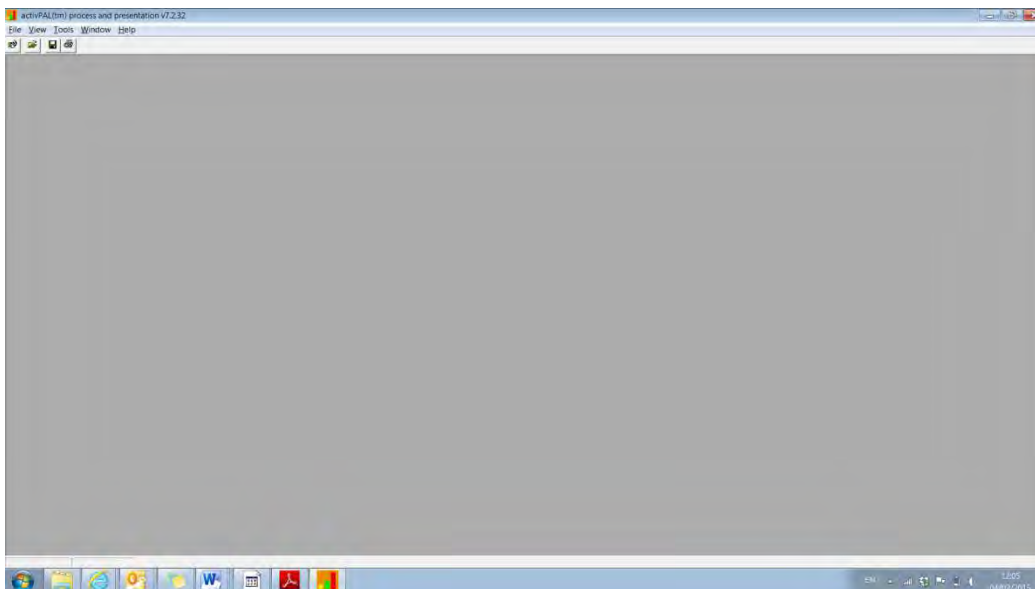
### Functional Test of the activPAL<sup>3M</sup> activity monitors (ALL)

- Launch the activPAL software from your desktop (Figure 3).



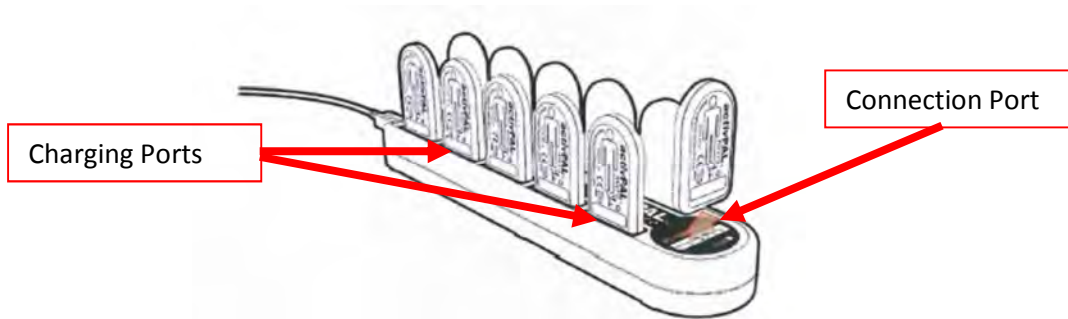
**Figure 3:** activPAL software icon

- The following front panel of the activPAL software appears.

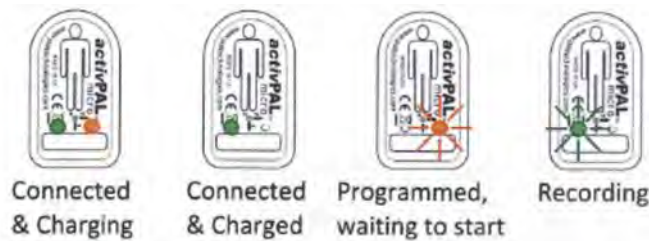


**Figure 4:** Front panel of activPAL software when opened.

- Connect an activPAL<sup>3M</sup> device to the USB interface (Figure 5). Please note, the 10 parallel ports are for charging the devices only. The front port is for connecting the devices to the PC. Please ensure the device is fully charged prior to insertion into connection port. A description of how you know whether the device is charged, and what all other lighting arrangements mean, is provided in Figure 6.



**Figure 5:** Diagram of USB interface for activPAL<sup>3M</sup> devices.



**Figure 6:** Description of lights on the front of the activPAL<sup>3M</sup>, and what they mean.

1. Green and Orange constant = Connected and Charging
2. Green constant = Connected and Charged
3. Orange Flashing = Programmed and waiting to start
4. Green Flashing = Programmed and Recording.

**N.B.** PLEASE USE THE SAME USB PORT ON YOUR PC/LAPTOP FOR THE activPAL SETUP AND DOWNLOAD AT ALL TIMES.

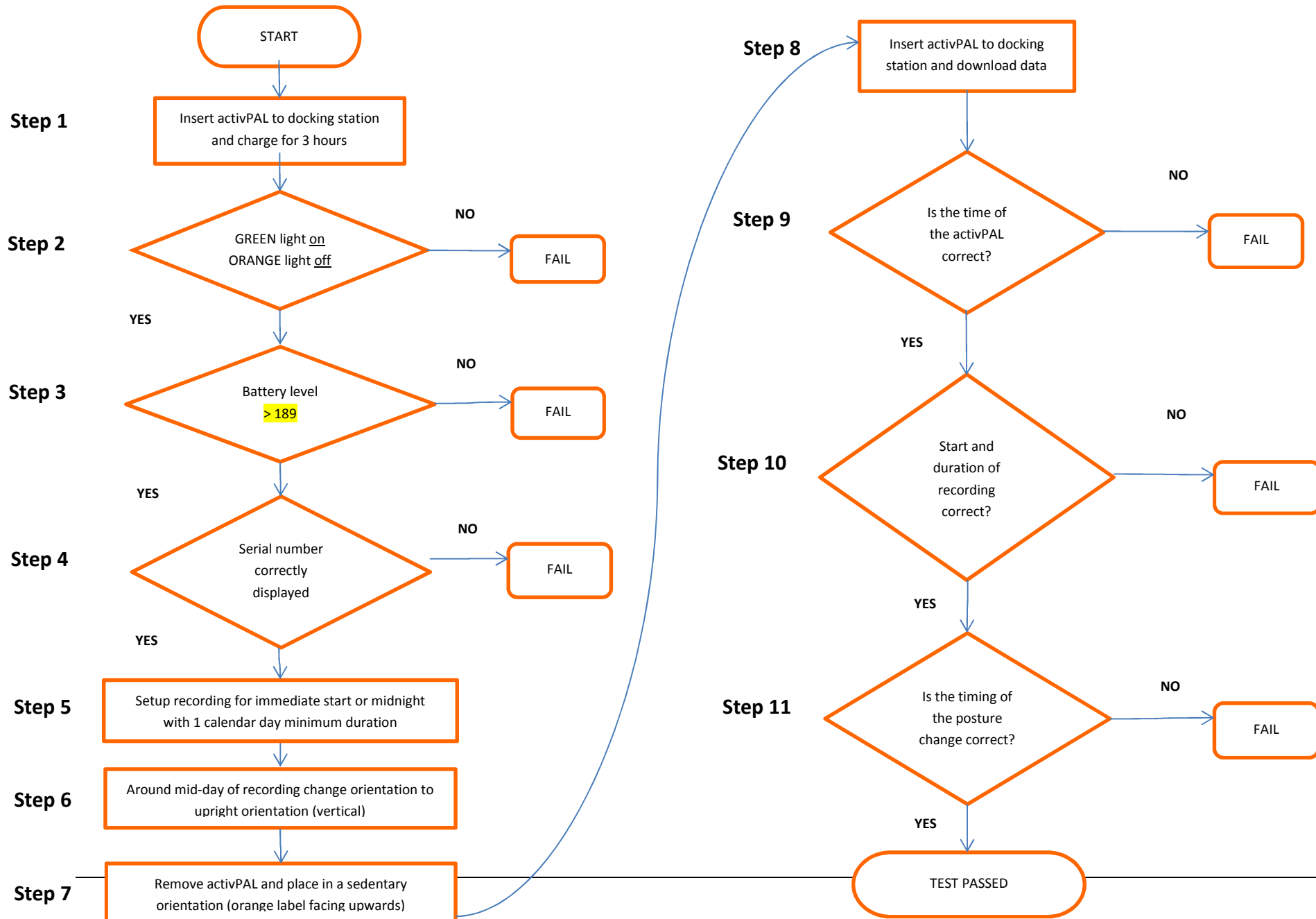
- Complete step 2 of the activPAL<sup>3M</sup> Functionality Test (Figure 7)

**Figure 7: Functional Test for activPAL<sup>3M</sup>**

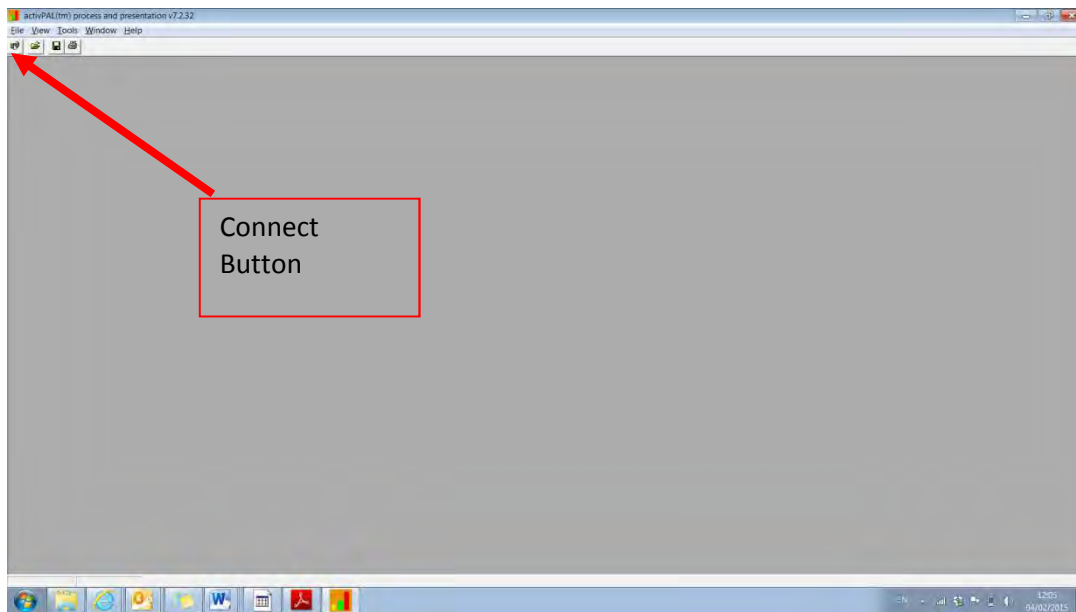
Stage 1: Setup recording

Stage 2: Check Data

SOP for use of activPAL3M device

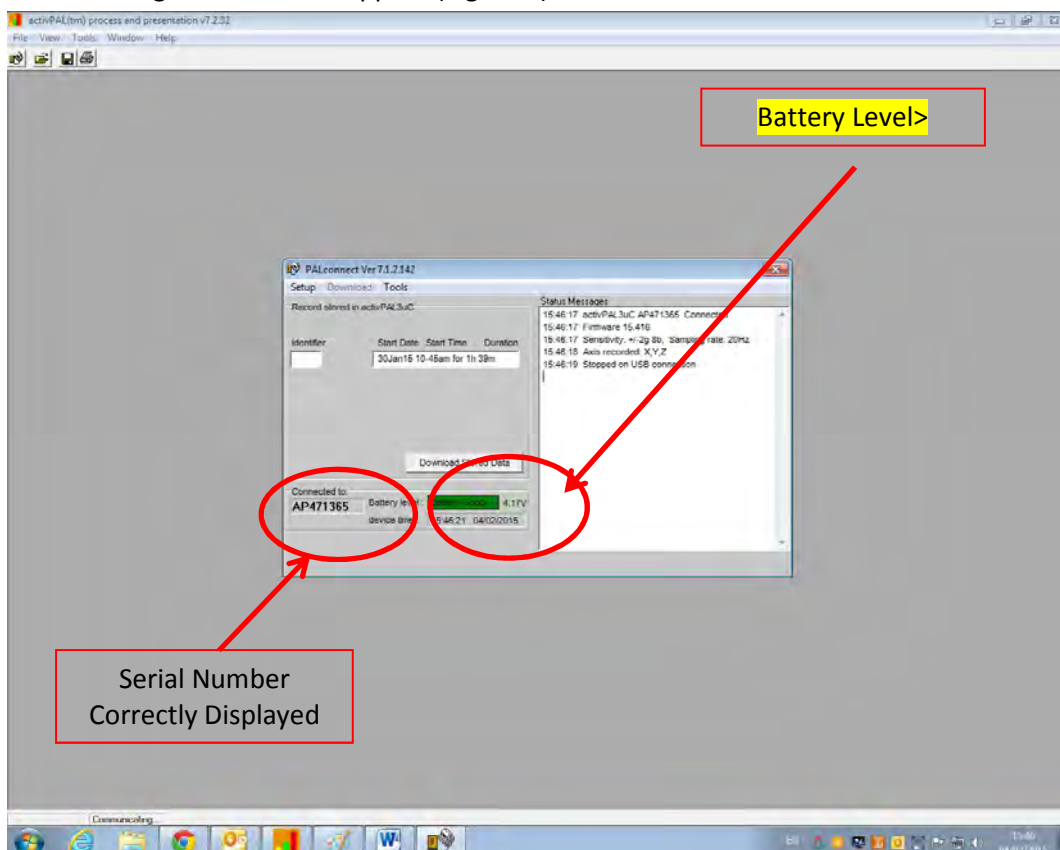


- To communicate with the connected device, click on the “Connect” button (Figure 8)



**Figure 8:** Connecting to the activPAL<sup>3M</sup> from front panel

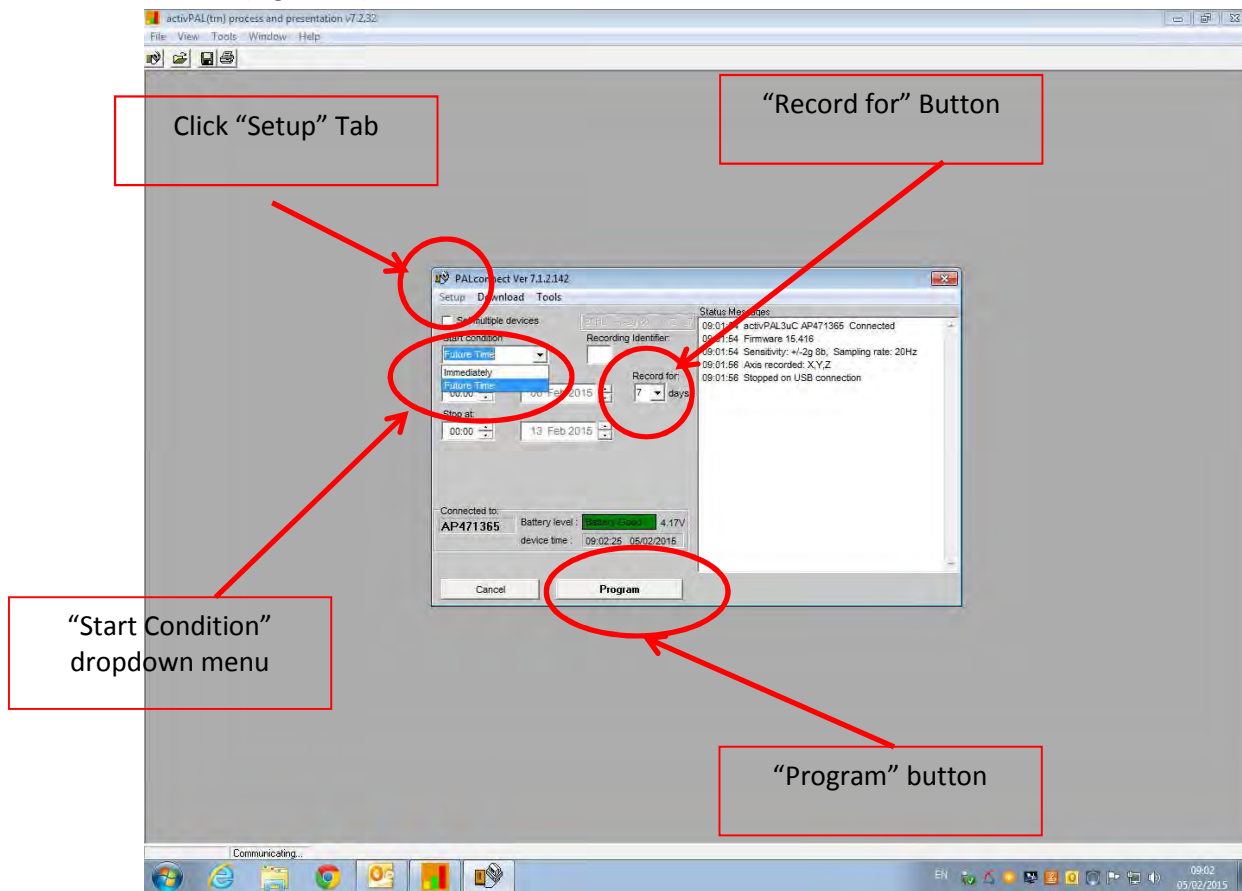
- The following screen should appear (Figure 9).



**Figure 9:** Connection pane of activPAL<sup>3M</sup>.

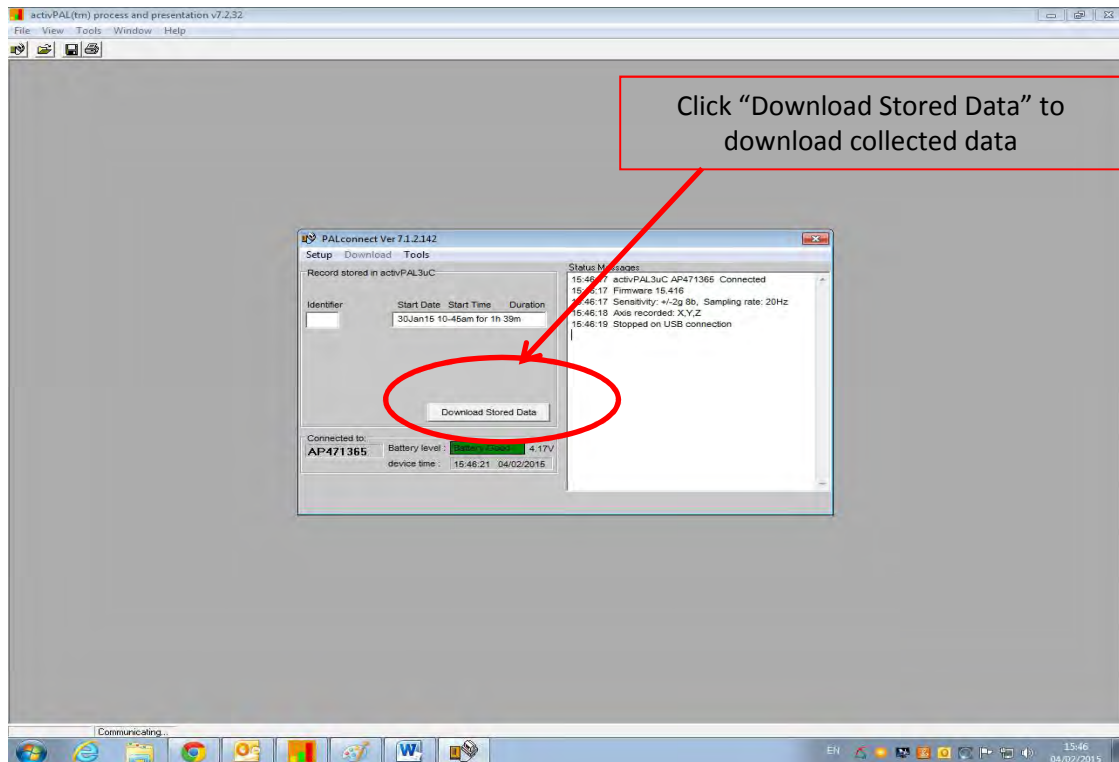
- Complete steps 3 and 4 of the functional test (Figure 7).

- Step 5: Setup recording:
  - Click “Setup” on top left corner of the open window. The window face should change to as below (Figure 10).



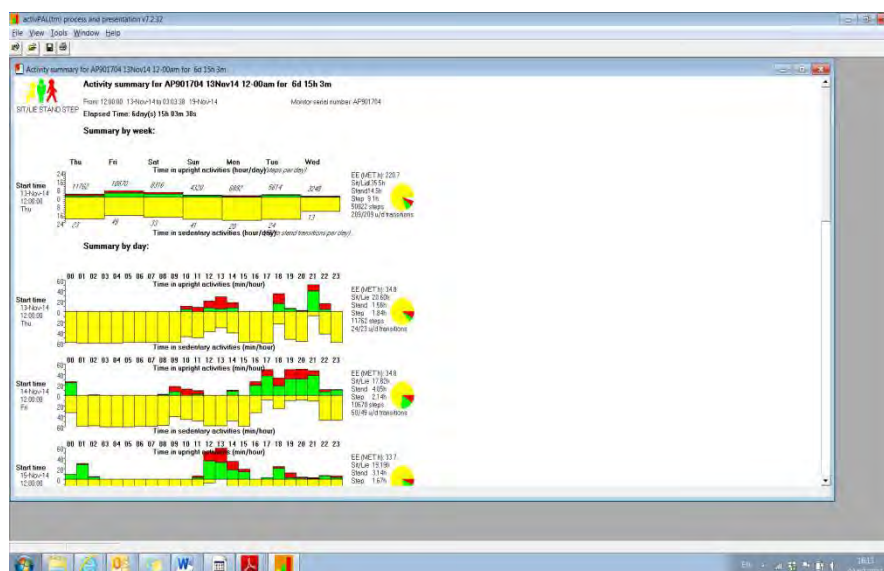
**Figure 10:** Setting up the activPAL<sup>3M</sup> for recording.

- Under the “Start Condition” dropdown menu, select “Future Time”. Set future time to Midnight **on that night** (Figure 10).
  - Set “Record for” button to 9 days (Figure 10).
  - Click the “Program” button, and allow the activPAL<sup>3M</sup> to setup for recording (Figure 10).
  - Once completed, record the time that the device was setup for recording (Figure 10).
  - Remove the device from the USB interface, and check that the green light is flashing every 5-7 seconds (Figure 6).
- Remove the activPAL<sup>3M</sup> device, and complete step 6 and 7 of the functional test (Figure 7).
  - When data collection for functional test is completed, complete step 8 of the functional test (Figure 7).
  - Again, click the “Connect” button to communicate with the activPAL<sup>3M</sup> device (Figure 8).
  - When the screen for the connected activPAL<sup>3M</sup> opens, click the download button (Figure 11).



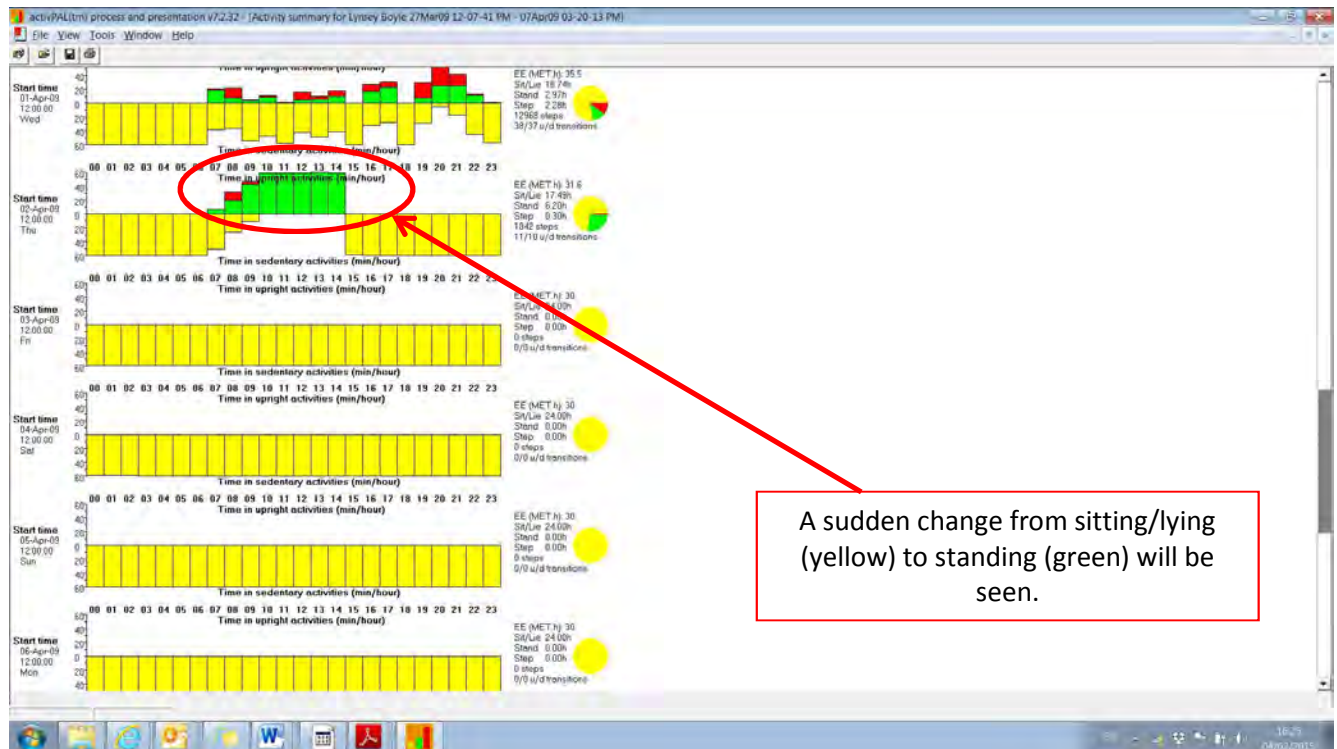
**Figure 11:** Downloading data from the activPAL<sup>3M</sup>.

- The activPAL<sup>3M</sup> data should now be downloaded. A screen (similar to Figure 12 and Figure 13) will appear, but it will only include yellow and green information (no red). Below is a sample of free-living activity information.



**Figure 12:** Example of downloaded activPAL<sup>3M</sup> data.

- Complete step 9 and step 10 by visually inspecting the data. The change in posture should be identified by a change from yellow (sitting/lying) to green (standing) on the software output.



**Figure 13:** Example of activPAL3M data.

- If all of the tests have passed successfully, the device has successfully passed the functional test.

#### Initialization of the activPAL<sup>3M</sup> activity monitors

- The initialization and download of data should only occur on the designated PC or laptop.
- When initializing the device, the following information should be recorded on a master sheet. This data should be recorded in the designated table found in the designated folder on your PC/Laptop.
  1. When initialized (date and time)
  2. Participant that will wear the device (ID number)
  3. School and Class of participant
  4. Device number (Model Number).
- Devices will be individually labelled with a white "sticker" that will have the participant ID indicated on it. Otherwise, there is a risk of swapping devices after removing the devices in the company of their classmates (e.g. swimming lessons for school).
- Once initialized, devices will be placed in a small sealable bag. Included in this bag should be:
  1. 3 nitrile sleeves,
  2. 3 sheets of Tegaderm dressing (approximately 10cm x 10 cm)
  3. A hard copy of the instructions for wearing the device (See I) activPAL<sup>3M</sup> Professional Physical Activity Monitor instructions)

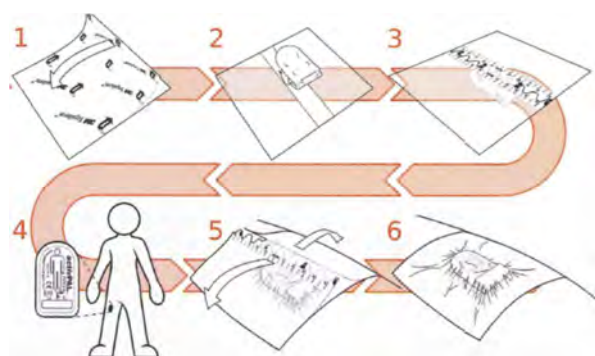
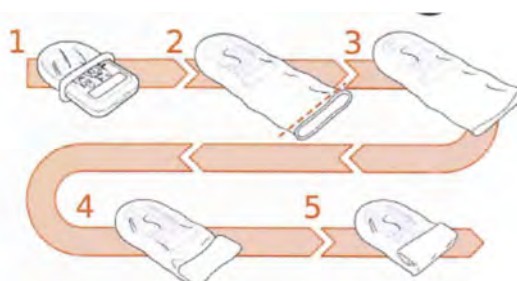
### e) Handing out the activPAL<sup>3M</sup> activity monitors to Children and Adolescents

- Handing out will take place during 1) physical education/physical activity lessons in class or 2) at the end of school with parents present. Option 2 would be preferable.
- The child/adolescent must be carefully instructed in the application of the device. It should be explicitly explained that the device is not waterproof and must be handled with care.
- A user manual (see I) ), which contains all the important information on proper use, should also be handed out.
- The device should be handed over only after both oral instruction and demonstration to ensure the concentration of children and adolescents. Each child **MUST** be wearing the device prior to leaving the school on day of administration.

### f) Wearing the activPAL<sup>3M</sup>

#### Step 1:

The activity monitor must first be waterproofed. The diagram on the right will help you. Place the sleeve (curved edge first) over the device, so that the activPAL is positioned at the very bottom of the sleeve. Then, roll the sleeve up, until it reaches the base of the device. Remember to make sure this is rolled up tight, to ensure that no water could get into it.



**Step 2:** To attach the activPAL to the thigh, first separate the Tegaderm dressing. Remove the backing sheet from the Tegaderm dressing. Once separated, you will be left with a clear piece of dressing. You will see/feel that there is a sticky side and a non-sticky side. Place the **non-sticky** side down on a flat surface. Place the activPAL **face down** in the middle of the sticky side of the Tegaderm dressing. Face down mean that the side with the green light flashing should be face down

on the sticky clear bandage. Position the device on the middle of the front of your thigh (halfway between your knee and your hip). **The curved part of the activPAL should be facing up.** Press the clear bandage down on your leg hard, to ensure that it is stuck in place. The picture on the left may help you put the device on.

### g) Returning the activPAL<sup>3M</sup> activity monitor

- The return will be done on the 9th day through the **<add your institution here>** team in class.
- Members of the **<add your institution here>** should also record whether the activPAL<sup>3M</sup> device and the questionnaire have been returned.

## h) Downloading of activPAL<sup>3M</sup> activity monitor information

- When the accelerometer is returned, open the activPAL software (Figure 3).
- Insert the device into the activPAL USB interface (Figure 5)
- Click the “Connect” button (Figure 8).
- Record the device ID number, to ensure this is the correct participant’s device.
- Click “Download Data” button, and allow the device to save the information.

## i) Saving the activPAL data

- Create a folder on the laptop/PC being used named “activPAL\_Data\_**Institution Name**”.
- Within this folder, create another folder for every participant’s data. Name each folder “**Institution Name**\_Participant ID”
- When downloading the data, a save option will appear on screen. Save the data for each participant to their respective folder within “activPAL\_Data\_**Institution Name**”
- A total of 6 files will appear for each individual:
  - Event Marker file
  - Events file
  - EventsXYZ file
  - DATX file
  - DEF file
  - PAL file

Each of these files should be renamed within the folder, inserting the participant ID number in front of the file name. See example below for ID number “1001”

Original file name: AP1132484 04Feb12 12-00am for 7d 0m

Rename: 1001\_AP1132484 04Feb12 12-00am for 7d 0m

- Once each file is renamed, the data has been saved successfully.

## j) Cleaning

- After use, please be sure to **clean the device** with an alcohol wipe. Ensure that the device is as clean as it was before it was handed out. **N.B.** Make sure that **no liquid** gets into the connection to the USB interface on the device, as this will result in malfunction of the device.

## k) Checklist Accelerometer

The following checklist includes all the important points that must be considered before the date of issue of the accelerometer:

- ✓ Class lists
- ✓ List with given informed consent per participant
- ✓ Participant list printed (for ID-codes)
- ✓ activPAL<sup>3M</sup> Functionality Test complete (once when devices arrive)
- ✓ activPAL<sup>3M</sup> fully charged and correctly initialized
- ✓ Adhesive labels with child's name/ID number for activPAL<sup>3M</sup>
- ✓ Plastic bag with activPAL<sup>3M</sup>, 2 nitrile sleeves, 3 sheets of Tegaderm dressing (10cm x 10cm) and a hard copy of the activPAL<sup>3M</sup> instructions included for every participant.
- ✓ Feasibility questionnaires
- ✓ Pens and writing pad for any notes
- ✓ Extra questionnaires (blank)

## l) activPAL<sup>3M</sup> Professional Physical Activity Monitor Instructions

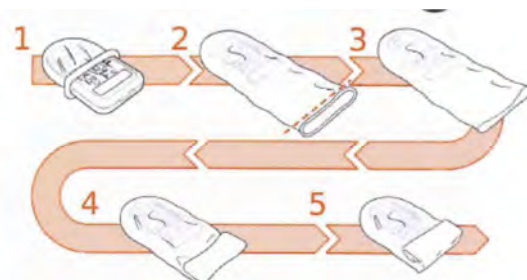
This is the **activPAL** accelerometer and it is a tiny, lightweight gadget that measures the activity that you do during your normal day. It can tell how long you spend sitting or lying, standing and walking. The accelerometer is worn on the mid part of the front of your **RIGHT** thigh and is held on by a piece of Tegaderm dressing.

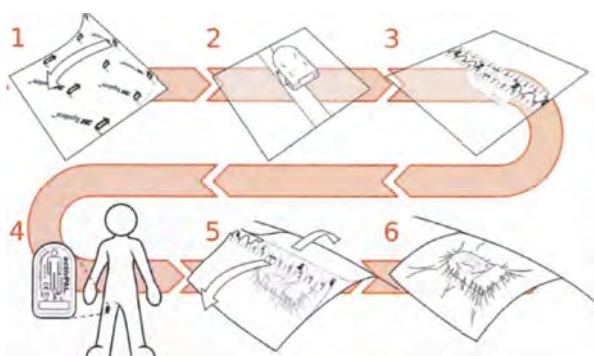


### Putting on the activPAL<sup>3M</sup>:

#### Step 1:

The activity monitor must first be waterproofed. The diagram on the right will help you. Place the sleeve (curved edge first) over the device, so that the activPAL is positioned at the very bottom of the sleeve. Then, roll the sleeve up, until it reaches the base of the device. Remember to make sure this is rolled up tight, to ensure that no water could get into it.





**Step 2:** To attach the activPAL to the thigh, first separate the Tegaderm dressing. Remove the backing sheet from the Tegaderm dressing. Once separated, you will be left with a clear piece of dressing. You will see/feel that there is a sticky side and a non-sticky side. Place the **non-sticky** side down on a flat surface. Place the activPAL **face down** in the middle of the sticky side of the Tegaderm dressing. Face down mean that the side with the green light flashing should be face down

on the sticky clear bandage. Position the device on the middle of the front of your thigh (halfway between your knee and your hip). **The curved part of the activPAL should be facing up.** Press the clear bandage down on your leg hard, to ensure that it is stuck in place. The picture on the left may help you put the device on.

Once you leave school we would ask you to leave the activPAL on your leg all day and all night, *except* when you are swimming or doing any other water-based activities. You can wear the activPAL when having a shower, but if you are taking a bath, please remove the activPAL.

You may have to replace the clear bandage every 3 – 4 days if it begins to get loose. There are two additional bandages included in your bag, along with 2 additional sleeves for waterproofing the activPAL, which should be enough for wearing the activPAL for a full week. However, if you run out and need more bandages or sleeves, please just call **\*NAME\***, and **s/he** will deliver more to you.

We will visit the school next week to collect the activPAL and any remaining contents of the bag from you.

## Frequently Asked Questions

### Where should I apply the activPAL<sup>3M</sup>?

It is most comfortable to wear the activPAL on the mid line of the right thigh, about half way down between the hip and the knee.

### What if the activPAL<sup>3M</sup> is not secure?

Ensure that you have the correct side of the bandage sticking to your leg. The sticky side of the bandage will not work well if your leg is wet, or if any lotions (moisturiser or fake tan for example) are on the leg. If the bandage comes loose, you may need to replace it.

**When should I remove the activPAL<sup>3M</sup>?**

The activPAL can be worn comfortably all day and all night and should not impede normal activities. It can be kept on while taking a shower. However, it **MUST** be removed before taking a bath and swimming or before any other activities which may mean the activPAL could come into contact with water for a prolonged period.

**How do I know the activPAL<sup>3M</sup> is working?**

The activPAL is a continuous recorder so will never stop recording. But you can be sure by checking the little light in the front panel. The light will flash green every six seconds. If it is not flashing green please ring **\*NAME\*** immediately!

**What if I lose the activPAL<sup>3M</sup>?**

Don't panic. If you lose or misplace the activPAL, please ring **\*NAME\*** **IMMEDIATELY**. **S/he** will then try to retrace your steps with you, and will help you look for (and hopefully find) the activPAL. activPAL's are not cheap, so it is very important that you contact **\*NAME\*** as soon as you have misplaced the device!

**What if I'm in trouble or have a question?**

At any stage, day or night, if you are having a problem with the device or have a question please give us a ring or text. No matter how small or silly you think the question is, it could turn out to be very important later on.

**\*NAME\*** Mobile Number: **Insert mobile number here**

*"Once again, thank you for all your help and co-operation!"*