# Study of the level of physical activity, inactivity, and sleep patterns in children and adolescents in the Autonomous Community of the Basque Country (6–17 years old)

Recruitment status  No longer recruiting	<ul><li>Prospectively registered</li></ul>		
	[X] Protocol		
Overall study status Completed	Statistical analysis plan		
	[X] Results		
Condition category	[] Individual participant data		
	No longer recruiting  Overall study status  Completed		

#### Plain English summary of protocol

Background and study aims

Physical inactivity and increased sedentary behavior are increasingly common problems and can lead to overweight, obesity, diabetes, heart disease, and decreased motor and cognitive capacity among children and adolescents. Establishing some healthy habits in childhood is essential for proper physical, motor, and cognitive development. The aim of this study is to describe the level of physical activity, sedentary behavior and sleep of children and adolescents in the Autonomous Community of the Basque Country.

#### Who can participate?

All children aged 6-17 enrolled in a school in the Basque Autonomous Community

#### What does the study involve?

Participants will be selected randomly based on gender, age, school, school location and socioeconomic status. They will have to wear an accelerometer for 7 full days and fill in a health habits diary.

#### What are the possible benefits and risks of participating?

The main benefit is to find out whether children and adolescents are sufficiently physically active on a daily basis, and assess their sedentary behavior and the relationship between these behaviors and sleep. This study has no risks as the participants will only have to wear an accelerometer and fill in a diary.

#### Where is the study run from?

The study is conducted from the Basque Autonomous Community and is carried out by the Basque Government, the University of Deusto and Mondragon Unibertzitatea, Mugikon and Athlon (Spain)

When is the study starting and how long is it expected to run for? September 2020 to April 2022

Who is funding the study?
The Basque Government (Spain)

Who is the main contact? Dr Aitor Coca Nuñez aitor.coca@euneiz.com

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Aitor Coca Nuñez

#### Contact details

Unibertsitate Etorb., 24 Bibao Spain 48007 +34 (0)688749145 aitor.coca@euneiz.com

# Additional identifiers

# EudraCT/CTIS number

Nil known

IRAS number

# ClinicalTrials.gov number

Nil known

# Secondary identifying numbers

PI2020011

# Study information

#### Scientific Title

Study protocol on the level of physical activity, sedentary behavior, and sleep in the child and adolescent population in the Autonomous Community of the Basque Country (6–17 years old)

#### Acronym

**MUGIKERTU** 

# **Study objectives**

To describe the level of physical activity, sedentary behavior, or sleep of the child and adolescent population from 6 to 17 years old in the Basque Autonomous Country.

#### Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 14/10/2020, Euskadi Drug Research Ethics Committee (Basque Government Department of Health, CEIm-Departamento de Salud del Gobierno Vasco, C/ Donostia-San Sebastián, nº 1. Vitoria-Gasteiz 01010, Spain; +34 (0)945 01 92 96; +34 (0)945 01 56 34; +34 (0) 945 01 64 59; ceic.eeaa@euskadi.eus), ref: PI2020011

#### Study design

Observational cohort study

#### Primary study design

Observational

## Secondary study design

Cohort study

## Study setting(s)

School

#### Study type(s)

Quality of life

#### Participant information sheet

See additional files

# Health condition(s) or problem(s) studied

Physical activity, sedentary behavior, sleep

#### **Interventions**

This study aims to recruit 1,111 representative random samples of children and adolescents from 6 to 17 years old from the Basque Autonomous Country. Participants must wear the ActiGraph WGT3X-BT accelerometer for a full 7 days and fill out a habit log of physical activity, sedentary behavior, and sleep routine. Participants will be randomly selected.

#### Intervention Type

Behavioural

#### Primary outcome measure

The level of physical activity, sedentary behavior, and sleep routine measured by ActiGraph WGT3X-BT accelerometers for 7 days.

#### Secondary outcome measures

There are no secondary outcome measures

# Overall study start date

# Completion date

15/04/2022

# **Eligibility**

# Key inclusion criteria

- 1. Belong to the student body of a participating school or institute
- 2. Have authorization to participate through a signed informed consent by the parents or legal guardians of the child or adolescent

#### Participant type(s)

Other

#### Age group

Child

#### Sex

Both

# Target number of participants

1111

#### Total final enrolment

1150

#### Key exclusion criteria

Non-consent or refusal by the child or adolescent to complete the physical activity diary or to use the accelerometer, even with a signed informed consent by their parents or legal guardians

#### Date of first enrolment

01/11/2020

#### Date of final enrolment

30/10/2021

# Locations

#### Countries of recruitment

Spain

#### Study participating centre Universidad de Deusto

Unibertsitate Etorb., 24 Bilbao Spain 48007

# Study participating centre Universidad de Mondrgon

Loramendi Kalea, 4, Edificio 6, Arrasate, Gipuzkoa Mondragón Spain 20500

# Sponsor information

#### Organisation

Basque Government

# Sponsor details

Donostia-San Sebastián kalea, 1 Vitoria-Gasteiz Spain 01010 +34 (0)945018000 comisionjuridica@euskadi.eus

## Sponsor type

Government

#### Website

https://www.euskadi.net

#### ROR

https://ror.org/00pz2fp31

# Funder(s)

# Funder type

Government

#### **Funder Name**

Eusko Jaurlaritza

# Alternative Name(s)

Gobierno Vasco, Basque Government

## **Funding Body Type**

#### Government organisation

# **Funding Body Subtype**

Local government

#### Location

Spain

# **Results and Publications**

# Publication and dissemination plan

- 1. Planned publication of the protocol
- 2. Planned publication of the results in a high-impact peer-reviewed journal

# Intention to publish date

01/10/2022

## Individual participant data (IPD) sharing plan

The datasets are stored in a private server that only researchers approved by the ethics committee have access to.

# IPD sharing plan summary

Stored in repository

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			09/06/2021	No	Yes
Protocol article	Protocol	11/03/2022	17/03/2023	Yes	No
Results article	outcome results	15/03/2023			No
Results article	results with and without sports	06/01/2023	17/03/2023	Yes	No