# Frequent intense training in schools for teenagers

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
04/06/2024	No longer recruiting	Protocol
Registration date	Overall study status	<ul><li>Statistical analysis plan</li></ul>
04/07/2024	Completed	Results
Last Edited	Condition category	Individual participant data
10/09/2024	Other	[X] Record updated in last year

## Plain English summary of protocol

Background and study aims

This study plans to evaluate the effects of a 10-week FIT FIRST Teen (FFT) intervention on blood pressure, physical fitness and body composition of Danish adolescents aged 12-15 years old. The 10-week FFT training is expected to have beneficial effects on resting heart rate for Danish 12-15-year-olds, calling for further development and long-term evaluation of the program.

Who can participate?

Danish pupils aged 12 to 17 years old in 6th to 9th grade from 15 municipal schools

What does the study involve?

Participants will be randomly allocated to an intervention group or a usual practice control group. The FFT group will complete three weekly 40-minute FFT sessions with modified, motivating, involving, high-intensity sports-based activities. Before and after the 10-week intervention, resting heart rate and blood pressure, body composition (InBody270), postural balance, standing long jump and performance on the Yo-Yo intermittent recovery level 1 children's test (YYIR1C) will be measured.

What are the possible benefits and risks of participating? The possible benefits are a better health profile and there are no risks of participating.

Where is the study run from? University of Southern Denmark

When is the study starting and how long is it expected to run for? August 2021 to December 2022

Who is funding the study?

- 1. Ole Kirk's Foundation
- 2. Novo Nordisk Foundation

Who is the main contact?

Dr Malte Larsen, mnlarsen@health.sdu.dk

## Contact information

## Type(s)

Public, Scientific, Principal Investigator

#### Contact name

Dr Malte Larsen

#### Contact details

University of Southern Denmark, Campusvej 55 Odense Denmark 5231 +45 40304689 mnlarsen@health.sdu.dk

## Additional identifiers

#### **EudraCT/CTIS** number

Nil Known

#### **IRAS** number

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

Nil known

# Study information

#### Scientific Title

The physical health effects of frequent intense training in schools for teenagers

## **Acronym**

**FIT FIRST TEEN** 

#### **Study objectives**

Frequent intense training in schools for teenagers will improve their physical health status

## Ethics approval required

Ethics approval not required

## Ethics approval(s)

17/08/2021: The Scientific Ethics Committee 2 for Region Southern Denmark confirmed that the project is not subject to notification to the committee system, as the project does not fall within the definition of a health science research project; ref: 21/43086

## Study design

#### Cluster randomized controlled trial

#### Primary study design

Interventional

#### Secondary study design

Cluster randomised trial

#### Study setting(s)

School

#### Study type(s)

Prevention

#### Participant information sheet

Not available in web format, please use the contact details to request a participant information sheet

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

Prevention of lifestyle diseases

#### **Interventions**

Randomization will be performed on a school level by picking notes with school names from a bowl. Pupils will be randomly allocated to either the intervention group or a usual practice control group. The intervention uses a specific sports training concept (FIT FIRST), which the teachers in the school deliver 3 x 40 minutes per week for 10 weeks.

#### **Intervention Type**

Behavioural

#### Primary outcome measure

Cardiorespiratory fitness measured using the Yoyo test at baseline and after 10 weeks

## Secondary outcome measures

The following secondary outcome measures will be assessed at baseline and after 10 weeks:

- 1. Body composition measured using bioimpedance (InBody 270)
- 2. Resting heart rate and blood pressure measured using the Oscillometric method
- 3. Balance measured using the stork balance test
- 4. Muscle strength measured using the standing long jump test

## Overall study start date

01/08/2021

#### Completion date

30/12/2022

## **Eligibility**

#### Key inclusion criteria

Pupils at the recruited schools in 6th to 9th grade

## Participant type(s)

Learner/student

## Age group

Child

## Lower age limit

12 Years

## Upper age limit

17 Years

#### Sex

Both

## Target number of participants

1200

#### Total final enrolment

1355

## Key exclusion criteria

Not meeting the participant inclusion criteria

#### Date of first enrolment

01/08/2022

## Date of final enrolment

20/12/2022

## Locations

#### Countries of recruitment

Denmark

## Study participating centre University of Southern Denmark

Campusvej 55 Odense Denmark 5231

# Sponsor information

#### University of Southern Denmark

## Sponsor details

Campusvej 55 Odense Denmark 5231 +45 65001000 contracts@sdu.dk

#### Sponsor type

University/education

#### Website

https://www.sdu.dk/en

#### **ROR**

https://ror.org/03yrrjy16

# Funder(s)

## Funder type

Charity

#### **Funder Name**

Ole Kirk's Fond

#### Alternative Name(s)

Ole Kirks Fond, Ole Kirk's Foundation

## **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

Denmark

#### **Funder Name**

Novo Nordisk Fonden

#### Alternative Name(s)

Novo Nordisk Foundation, Novo Nordic Foundation, NNF

## **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

Denmark

## **Results and Publications**

## Publication and dissemination plan

Planned publication in a peer-reviewed journal

## Intention to publish date

01/08/2024

## Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

## IPD sharing plan summary

Data sharing statement to be made available at a later date