Effect of blue light from electronic devices on melatonin and sleep/wake rhythms in high school children

No registrations found.

Ethical review Positive opinion

Status Recruitment stopped

Health condition type -

Study type Interventional

Summary

ID

NL-OMON27272

Source

Nationaal Trial Register

Health condition

Late sleep phase

Sponsors and support

Primary sponsor: Dr. P.H.L.T Bisschop

Academic Medical Center

University of Amsterdam

Source(s) of monetary or material Support: Rijkinstituut voor Volksgezondheid en Milieu

(RIVM)

Intervention

Outcome measures

Primary outcome

- o Sleep onset time
- o Wake-up time
 - 1 Effect of blue light from electronic devices on melatonin and sleep/wake rhythms ... 17-06-2025

- o Mid-sleep time
- o Sleep duration
- o Melatonin onset

Secondary outcome

- o Total energy intake
- o Snacking frequency

Study description

Background summary

-

Study objective

-

Study design

o Sleep onset time: daily

o Wake-up time: daily

o Mid-sleep time: daily

o Sleep duration: daily

o Melatonin onset: day 7 of every measurement period

o Total energy intake: daily

o Snacking frequency: daily

Intervention

30 frequent users will be assessed in 3 conditions: 1) habitual screen use; 2) habitual screen

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use with blue-light blockers; and 3) abstinence of screen use. We will assess sleep wake behavior, light exposure, screen use, and melatonin onset.

Contacts

Public

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Scientific

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Eligibility criteria

Inclusion criteria

- Age 11-17
- Going to high school
- Fluent Dutch speaking
- Frequent screen use

Exclusion criteria

- Ocular pathology / color deficiency
- The necessity to wear glasses (and no opportunity to wear contact lenses)
 - 3 Effect of blue light from electronic devices on melatonin and sleep/wake rhythms ... 17-06-2025

- Use of medication known to affect sleep or the central nervous system
- Alcohol use >1 glass per day
- Caffeine use > 2 cups per day
- Other substance use
- Psychiatric, neurological or physical disorder affecting sleep-wake behavior

Study design

Design

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 03-10-2017

Enrollment: 30

Type: Actual

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date: 21-09-2017

Application type: First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

NTR-new NL6524 NTR-old NTR6712

Other NL59018.018.16 : METC_2016_327

Study results