ISRCTN14025343 https://doi.org/10.1186/ISRCTN14025343

# Lifestyle modification of adolescents from different countries during confinement by Covid-19

**Submission date**
29/05/2020

**Recruitment status**
No longer recruiting

**Registration date**
02/07/2020

**Overall study status**
Completed

**Last Edited**
04/08/2020

**Condition category**
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

## Plain English summary of protocol

Background and study aims
Due to the confinement (due to COVID-19), it is likely that families have more time to cook and could improve their eating habits. Although it should be kept in mind that this would not necessarily increase the quality of the diet. Indeed, families could also consume a higher caloric intake because they spend more time at home. On the other hand, confinement would worsen physical activity habits in adolescents. Based on this, our hypothesis is that confinement may change the lifestyle of adolescents. These new habits could be fixed and have an impact on their health at adult life. For this reason, it is important to generate studies that analyse their eating and physical activity behaviors. We aimed to describe the lifestyle of adolescents in Spain, Brazil, Chile, Colombia and Italy during confinement by COVID-19, and the possible changes in their dietary and physical activity habits due to this situation compared to those observed before confinement.

Aim: Understanding lifestyle habits of adolescents during social confinement will help public health authorities to reshape their reactions to future, unavoidable confinements.

Who can participate?
The study population comprised adolescents residing in Brazil, Chile, Colombia, Spain and Italy, who filled out an online questionnaire. To be included in the research, the adolescent had to be aged between 10 and 19 years old and 11 months; present no food restrictions and provide an authorization to participate in the study.

What does the study involve?
The study involve filling a self-administered online survey questionnaire that is divided into modules: sociodemographic characteristics, dietary practices before and during confinement, and lifestyle before and during confinement.

What are the possible benefits and risks of participating?
The main benefit of understanding the adolescents' nutrition and physical activity behavior during COVID-19 lockdown is the possible development of future policies. Indeed, this

information will help public health authorities reshape future policies on adolescents' s nutritional and physical activity recommendations, in preparation for future pandemics. No risk for participants are envisioned as the study only involve filling an online survey.

Where is the study run from?
Madrid Institute for Advanced Studies (IMDEA) - Food (Spain)

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

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Dr Alberto Davalos, alberto.davalos@imdea.org
Dr María B. Ruiz-Roso, belen.ruizroso@imdea.org

# Contact information

### Type(s)
Scientific

### Contact name
Dr Alberto Davalos

### ORCID ID
https://orcid.org/0000-0001-5709-6443

### Contact details
Laboratory of Epigenetics of Lipid Metabolism, IMDEA Food Institute
Ctra. de Canto Blanco, 8
Madrid
Spain
28049
+34 912796985
alberto.davalos@imdea.org

### Type(s)
Scientific

### Contact name
Dr María B. Ruiz-Roso

### Contact details
Laboratory of Epigenetics of Lipid Metabolism, IMDEA Food Institute
Ctra. de Canto Blanco, 8
Madrid
Spain
28049
+34 917 27 81 00
belen.ruizroso@imdea.org

# Additional identifiers

### Protocol serial number
IMD PI-043

# Study information

### Scientific Title
Observational study of lifestyle modification of adolescents from different countries during confinement by Covid-19

### Acronym
NutriCoronaTeen

### Study objectives
Due to the confinement (Covid-19), it is likely that families have more time to cook and could improve their eating habits. Although it should be kept in mind that this would not necessarily increase the quality of the diet. Indeed, families could also consume a higher caloric intake because they spend more time at home. On the other hand, confinement would worsen physical activity habits in adolescents. Based on this, our hypothesis is that confinement may change the lifestyle of adolescents. These new habits could be fixed and have an impact on their health at adult life. For this reason, it is important to generate studies that analyses their eating and physical activity behaviors.

### Ethics approval required
Old ethics approval format

### Ethics approval(s)
1. Approved 06/05/2020, Comité Ética de Investigación, Fundación IMDEA Alimentación (Ctra. de Canto Blanco, 8. 28049 - Madrid, Spain; +34 917278100; cei.alimentacion@imdea.org), ref: IMD PI-043
2. Approved 16/04/2020, URFJ – Instituto de Puericultura e Pediatria Martagão Gesteira da Universidade Federal do Rio de Janeiro (Rua Bruno Lobo 50 - Ilha do Fundão . Rio de Janeiro-RJ; Brazil; +55 (21)2590-3842; pesquisa@ippmg.ufrj.br), ref: CAAE 30783320.7.0000.5264
3. Approved 15/04/2020, Comité de Ética, Bioética y Bioseguridad de la Dirección de Investigación y Creación Artística de la Vicerrectoría de Investigación y Desarrollo de la Universidad de Concepción (4070386 Concepción, Chile, presidenta, Dra. María Andrea Rodríguez Tastets, +56 (41)2204302; secrevrid@udec.cl), ref: CEBB 646-2020
4. Approved 21/04/2020, Comité de Ética en Investigaciones de la Universidad de Cartagena (Centro - Cra. 4 No. 38-40, Claustro de la Merced, Cartagena de Indias, D.T. y C. - Colombia; +576642663; comítedeetica@unicartagena.edu.co), ref: Acta nº 134
5. Università Degli Studi di Padova (HIT Ethical Committee, Human Inspired Technology Research Centre, Via Luzzatti, 4 - 35121 Padova, Italy; +39 049 827 5796; ethical.hit@unipd.it), ref: 33035 22 04 2020

### Primary study design
Observational

### Study design

Quantitative cross-sectional study with convenience sampling

### Study type(s)
Quality of life

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

### Interventions
The study population comprises adolescents residing in Brazil, Chile, Colombia, Spain and Italy.

Data collection will be carried out through a structured questionnaire (e-survey). The questionnaire will be self-administered, and categorized into modules by subject: sociodemographic characteristics, dietary and lifestyle practices. The invitation to participate in the survey will be made by social media (Facebook, Instagram and Whatsapp).

### Intervention Type
Other

### Primary outcome(s)
1. Lifestyle of adolescents during confinement by COVID-19 measured using novel online survey at a single timepoint
2. Changes in dietary and physical activity habits measured using novel online survey at a single timepoint

### Key secondary outcome(s)
Measured using novel online survey at a single timepoint:
1. Sociodemographic profile of adolescents (income, sex, age, number of people in the family and schooling).
2. Food consumption
3. Lifestyle habits (screen time, mobile phone use, and computer use) and physical activity

### Completion date
19/06/2020

## Eligibility

### Key inclusion criteria
1. Adolescents residing in Brazil, Chile, Colombia, Spain and Italy aged between 10 years and 19 years 11 months
2. No food restrictions
3. Provide an authorization to participate in the study

### Participant type(s)
Healthy volunteer

### Healthy volunteers allowed
No

### Age group

Mixed

**Sex**
All

**Total final enrolment**
820

**Key exclusion criteria**
Does not meet inclusion criteria

**Date of first enrolment**
16/04/2020

**Date of final enrolment**
19/06/2020

# Locations

**Countries of recruitment**
Brazil

Chile

Colombia

Italy

Spain

**Study participating centre**
**Madrid Institute for Advanced Studies (IMDEA) - Food**
Laboratory of Epigenetics of Lipid Metabolism
Ctra. de Canto Blanco, 8.
Madrid
Spain
28049

**Study participating centre**
**Universidad de Concepción**
Centro Vida Saludable
Victoria 580
Barrio Universitario
Concepción
Chile
4070386

**Study participating centre**
**Universidade Federal do Rio de Janeiro.**
Instituto de Nutrição Josué de Castro
Av. Carlos Chagas Filho, 373
bloco J 2 andar
Cidade Universitária da Universidade Federal do Rio de Janeiro
Rio de Janeiro
Brazil
21941-902

**Study participating centre**
**University of Cartagena**
Research Group in Innovation and Agricultural and Agroindustrial Development
Avenida del Consulado, calle 30 No. 39 B - 192
Cartagena
Colombia
48-152

**Study participating centre**
**University of Padova.**
Department of Molecular Medicine
Via Gabelli, 63
Padua
Italy
35121

# Sponsor information

**Organisation**
IMDEA Food

**ROR**
https://ror.org/04g4ezh90

# Funder(s)

**Funder type**
Other

**Funder Name**
Investigator initiated and funded

# Results and Publications

### Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request. Dra. Belen Ruiz-Roso (belen.ruizroso@imdea.org), raw data of the survey (Excel file) available from August 2020 and for 12 months. Sharing will be based on scientific collaboration and consent from the PI of each research group (country) will be obtained prior sharing. Data is completely anonymized as no personal information was recorded. Restrictions may apply.

### IPD sharing plan summary
Available on request

### Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|---|---|---|---|---|
| Results article | results | 17/06/2020 | 04/07/2020 | Yes | No |
| Results article | results | 30/07/2020 | 04/08/2020 | Yes | No |