

---

# How Adolescents Perceive Nutrition and Food Security around the World

Rafael Pérez-Escamilla, PhD  
Professor of Public Health  
Yale School of Public Health



Twitter: @rperezescamilla

NICHD Global Health Conference  
Socio-ecological Factors and the Double Burden of Malnutrition  
Among Children and Adolescents in Low- and Middle-Income Countries  
October 19, 2022

# FOOD AND ME

How adolescents experience nutrition across the world.



WESTERN SYDNEY  
UNIVERSITY



for every child

Current  
Developments in  
Nutrition  
CDN

## Adolescent Voices and Perspectives on Food and Nutrition: Feasibility of an Innovative Participatory Methodology

Catharine Fleming, Juliano Diniz De Oliveira, Virginia Schmied, la Girish La, Deepika Sharma ...

*Current Developments in Nutrition*, Volume 5, Issue Supplement\_2, June 2021, Page 744,  
[https://doi.org/10.1093/cdn/nzab046\\_041](https://doi.org/10.1093/cdn/nzab046_041)

## Drivers of Food Choice, Barriers to Healthy Eating and a Call to Action From Adolescents to Improve Nutritional Intake Across 18 Countries

Catharine Fleming, Juliano Diniz De Oliveira, Deepika Sharma, Virginia Schmied, Girish La la, Peggy Koniz-Booher, Rafael Pérez-Escamilla, Amanda Third

*Current Developments in Nutrition*, Volume 5, Issue Supplement\_2, June 2021, Page 643,  
[https://doi.org/10.1093/cdn/nzab045\\_025](https://doi.org/10.1093/cdn/nzab045_025)

Catharine Fleming, Kaitlyn Hockey, Virginia Schmied  
Professor, Amanda Third, Juliano Diniz De Oliveira,  
Girish Lala, Georgina Theakstone

### Project Advisory

- Peggy Koniz-Booher (JSI Research)
- Rafael Pérez-Escamilla (School of Public Health, Yale University)
- Brian Keeley (UNICEF)
- Céline Little (UNICEF)
- France Begin (UNICEF)
- Aashima Garg (UNICEF)
- Roland Kupka (UNICEF)
- Deepika Sharma (UNICEF)
- Jessica White (UNICEF)
- Deborah Mitchison (Western Sydney University)

# Project Primary Aims

- Understand what adolescents eat and challenges they face in accessing nutritious, safe and affordable diets
- Identify food and nutrition security solutions proposed by adolescents

# Project Design

- Thirty-seven workshops were completed with 12-18 years old adolescents across 18 countries and 5 world regions
- Diverse sample of 656 adolescents in low-, middle- and high- income countries
  - 61% were females
  - included highly vulnerable groups such as displaced refugees in Sudan

# Project Design

- Data collected from adolescents on:
  - dietary intake
  - body image
  - influences on food choices
  - food environments
  - barriers to healthy eating
  - food and nutrition security solutions
- After each workshop, facilitators completed a short open-ended questionnaire to provide feedback on workshop activities

# Data analysis

- Workshop data were digitalized and uploaded to a secure online repository for analysis by researchers from Western Sydney University
- Qualitative thematic coding and quantitative dietary analyses based on the NOVA classification system were used for analysis

# Key Finding 1

## Adolescents understood nutrition-health link

Both male and female participants understood the importance of healthy eating and nutrition for their own health

*“We get power from nutritious food. It helps in development of the body. It ensures we do not have anemia. And we should always eat nutritious food, it helps in sharpening our eyesight. Eating bitter gourd helps in cleansing our blood”*

*(India, 13 y old female)*

*“[Good nutrition means] I won’t have nutrition[-related] problems like heart diseases, obesity”*

*(Mexico, 13 y old male)*

*“To have a healthy body it is important to eat healthy food, fruits and vegetable”*

*(Guatemala, 15 y old female)*

# Key Finding 2

## Adolescents ate unhealthy diets

- Adolescents in several countries reported most of the *foods* they had consumed in the previous 24 hours were ultra-processed
  - Especially in Australia, Guatemala, Mexico, Serbia and the USA

*“The ideal meals of most participants in the workshop included chicken biryani. A number of adolescents also listed pizzas and burgers in their ideal meals. [They] mention[ed] a number of Indian snacks such as...a fried or baked pastry with a savoury filling, a combination...spicy chickpeas and...a fried bread made of maida flour...Most adolescents also wrote junk and fast food as their ideal meal”*

*(Workshop facilitator, India rural)*



# Key Finding 3

## Sources of influence for food choices

- Family, social media and the internet
- Television and radio, friends
- Branding and advertising
- Body image
- Taste of foods

*“Interestingly many students have dinner alone at home”*

(Workshop facilitator, Indonesia rural)

*“Food is important because it makes me look attractive”*

(Nigeria, male, age not reported)

*“[I like] soft drink [for] its flavor and I consume them a lot”*

(Mexico, group activity)

*“Ice cream, chocolate and chips are delicious. So, these are my favorite foods”* (Bangladesh, 16 y old, female)

*“We are not able to eat healthy food because its taste is not good... [On] seeing healthy food, we do not feel like having it”* (India, 13 y old female)

# Key Finding 4

## Structural barriers for healthy eating

- Financial constraints
- Food environments at home, school and in the community

“When we [go out] with friends, we eat [junk] foods because of our budgets. We all do not go to work... so we will only have little money in our pockets”

(Zimbabwe, male, age not reported)

“Cheap food is not healthy, healthy food is not cheap”

(China, female, age 13)

“We can't get [healthy] foods in our local shops because shopkeepers are selling low quality foods and vegetables”

(Afghanistan, gender and age not reported)

“Unhealthy food is easier to come by” (USA, 17 y old male)

# Key Finding 5

## Solutions proposed by adolescents



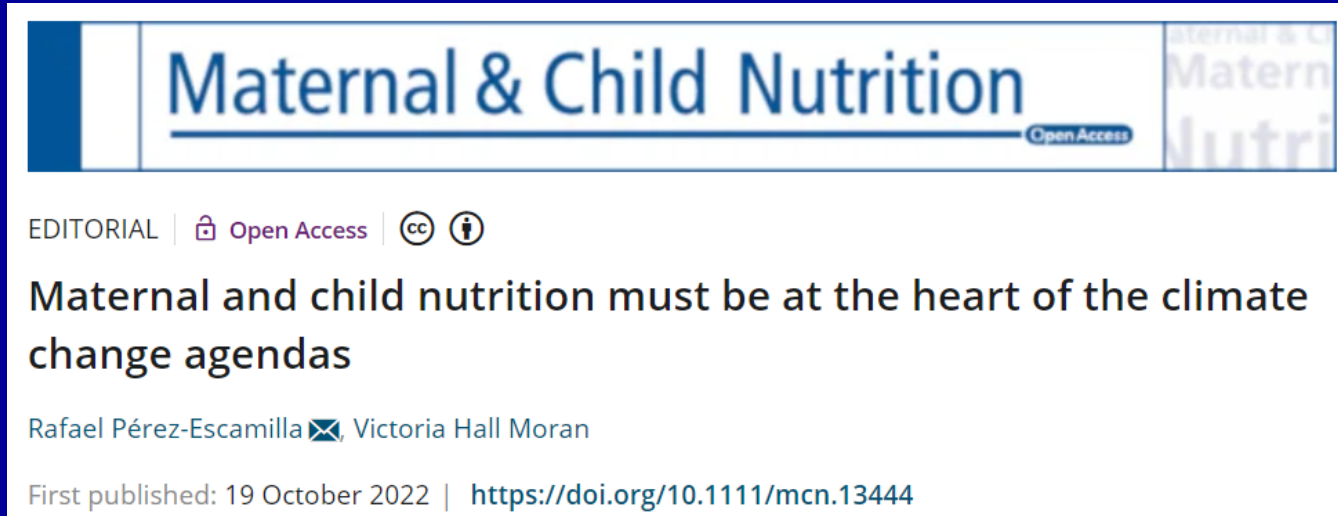
- Address food insecurity
- Address easy access to unhealthy foods
- Improve nutrition knowledge
- Develop action plans to improve food choices
  - bringing communities together
  - adolescents as key actors in designing the solutions

# Conclusions

- Adolescents around the world care about healthy eating and nutrition, yet they consume quite unhealthy diets
- Key structural barriers for healthy eating among adolescents
  - lack of economic and physical access to healthy foods, and aggressive food industry marketing in the context of food systems rich in ultra-processed foods and beverages
- Adolescent-centered solutions to unhealthy eating need to involve multilevel and multi sectoral whole of society efforts with strong input from adolescent themselves
  - Need to address
    - Transformation of unhealthy food systems
    - Healthier food environments at school and in other community settings
    - Marketing of ultra-processed food and sugar sweetened beverages
    - Healthy family meals
    - Body image and other peer pressure issues

# Thank you!




Twitter: @rperezescamilla




The image shows a screenshot of a journal article header. At the top, the journal title "Maternal & Child Nutrition" is displayed in a large, dark blue font. To the right of the title, the words "Maternal & Child Nutrition" are repeated in a smaller, lighter blue font. Below the title, the text "Open Access" is written in a small, dark blue font. The article type "EDITORIAL" is shown in a dark blue font, followed by a purple lock icon, the text "Open Access", and two circular icons: one with "CC" and another with a person icon. The article title "Maternal and child nutrition must be at the heart of the climate change agendas" is written in a bold, black font. Below the title, the authors "Rafael Pérez-Escamilla" and "Victoria Hall Moran" are listed, with a blue envelope icon between them. At the bottom, the publication date "First published: 19 October 2022" and the DOI link "https://doi.org/10.1111/mcn.13444" are provided.

Maternal & Child Nutrition

Open Access

EDITORIAL |  Open Access |  

**Maternal and child nutrition must be at the heart of the climate change agendas**

Rafael Pérez-Escamilla , Victoria Hall Moran

First published: 19 October 2022 | <https://doi.org/10.1111/mcn.13444>