



Advancing community health worldwide.

Addressing Overweight and Obesity in LMICs: Roles and Recommendations for NGOs and Program Implementers

May 4, 2022

Co-hosted by CORE Group's Nutrition Working Group and NCD Interest Group

Addressing Obesity and Overweight in Low and Middle Income Countries



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NCD INTEREST GROUP

Overview and Approach

Arti Varanasi, PhD, MPH, CPH
President & CEO, Advancing Synergy
Co-Chair, NCD Interest Group
May 4, 2022

CORE Group's NCD Interest Group works to convene those working to treat and prevent NCDs at the community level, to share resources, events, and vital information to improve their work and impact.

Co-Chair: Annie Toro, What to Expect Project, President & Executive Director [what to expect project](#)

Co-Chair: Arti Varanasi, Advancing Synergy, President & CEO  ADVANCING SYNERGY

CORE Group Liasion: Lisa Hilmi, CORE Group, Executive Director 

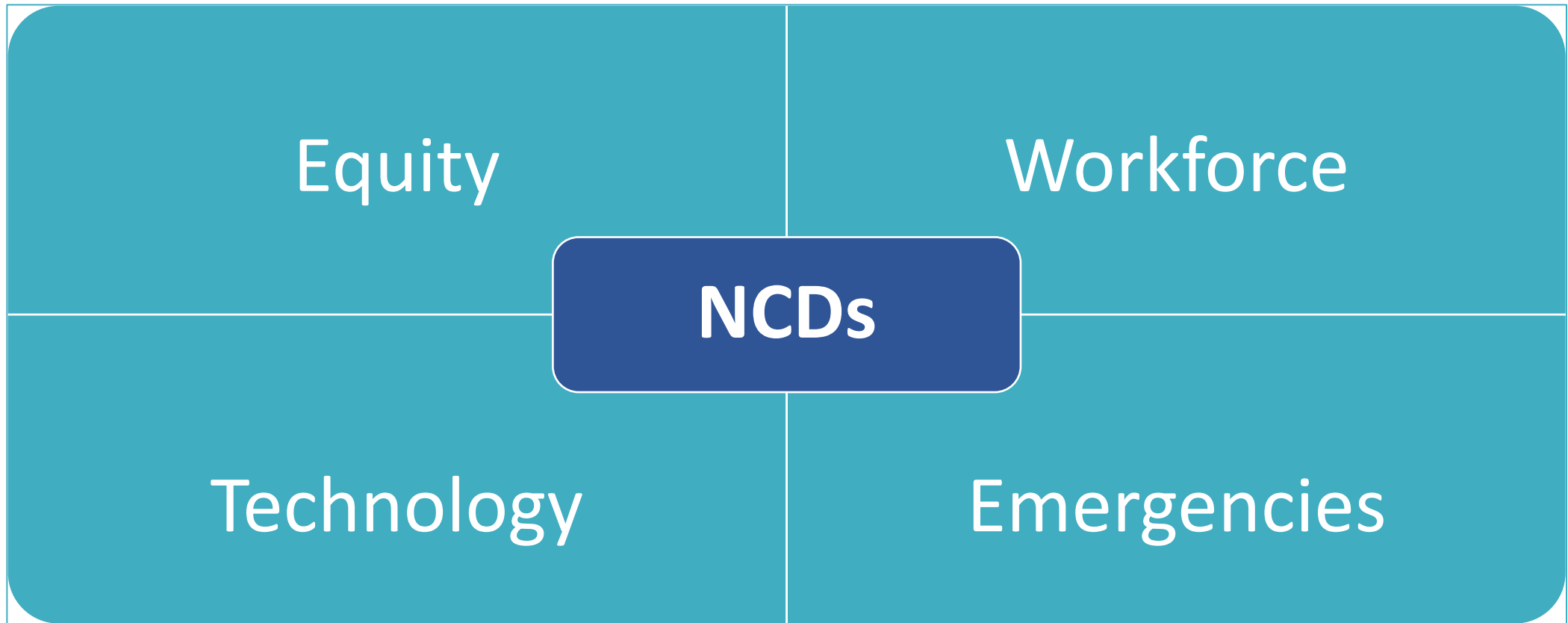
THEMATIC FOCUS: Elevate NCD Priorities

Integration of NCDs into Global Health Programs: A Roadmap to Achieving the Sustainable Development Goals in 2030

- NCDs responsible for 41 million deaths per year globally; 85% in LMICs
- 77% of ALL NCD deaths are in LMICs
- Understand progress since first UN HLM in 2011
- Identify sustainable opportunities and solutions for integrating NCD priorities into global health programs with long-term impact



OUR APPROACH: Collaborative and Purposeful



OUR HOPE: Leverage Collective Experiences





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THANK YOU & JOIN US

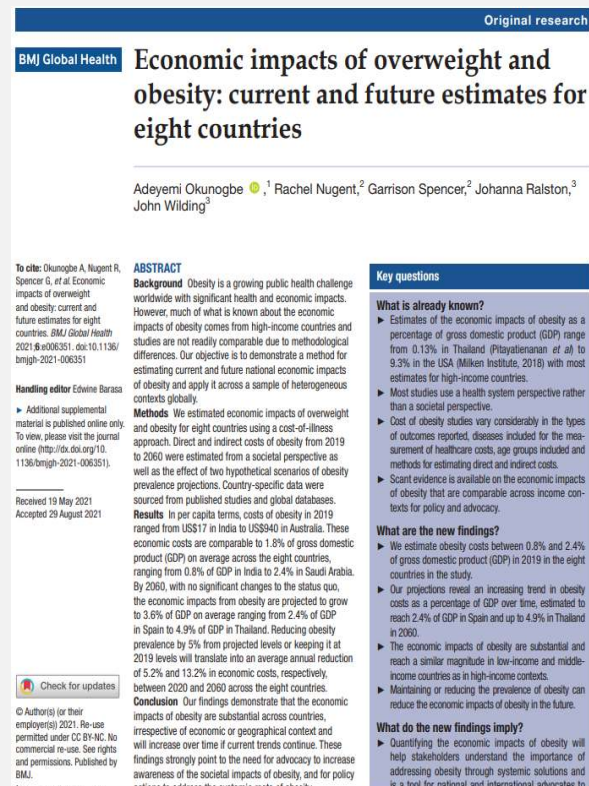
We invite you to join us for our Steering Committee meeting on the
2nd Tuesday of each month at 10 AM ET

Interested? Email NCD Interest Group Co-Chairs,

Annie Toro, What to Expect Project, atoro@whattoexpectproject.org
Arti Varanasi, Advancing Synergy, avaranasi@advancingsynergy.com

The economic impact of obesity

- Product of partnership between World Obesity and RTI International
- Born out of need for improved economic evidence on overweight and obesity
- A catalyst for change in the delivery of joined up policies which recognise and address the underlying root causes of obesity



Headlines and coverage

The Telegraph News Business Sport Opinion Politics World Money Life Style

UK news Coronavirus Royals Health Defence Science Education En

Obesity impact on GDP set to double globally by 2060 without action

The Express Tribune @etribune

A study has shown that obesity is costing Saudi Arabia \$19 billion annually and has speculated that the issue could scale up to \$78 billion by 2060



Economic Impact Of Obesity Set To Reach Average 3.6 Percent Of GDP By 2060

November 8, 2021 Eurasia Review 0 Comments

Obesity costs

A study has shown that obesity is costing Saudi Arabia \$19 billion

Obesity Coalition @OPCAustralia · Nov 5

New research by @WorldObesity & @RTI_Intl finds economic cost of obesity in Aus was almost US\$24B in 2019 & set to increase to US\$103B by 2060.

La obesidad le costó a México un 2,1 % del PIB en 2019, según un estudio



ABESO - Obesidade @_abeso · Nov 5

Saiu no BMJ Global Health o relatório de um estudo p Brasil, conduzido pela World Obesity Federation con Ele mostra o impacto fenomenal da obesidade na eco gh.bmj.com/content/6/10/e...



is no longer just a 'rich world problem

SANIDAD OBESIDAD

El impacto económico de la obesidad en España aumentará un 211 % hasta 2060

El impacto económico de la obesidad en España se incrementará un 211 % hasta el año 2060 cuando se estime que supondrá el 3,4 % del PIB anual, según un estudio piloto de la revista científica BMJ Global Health que involucra a ocho países del mundo.

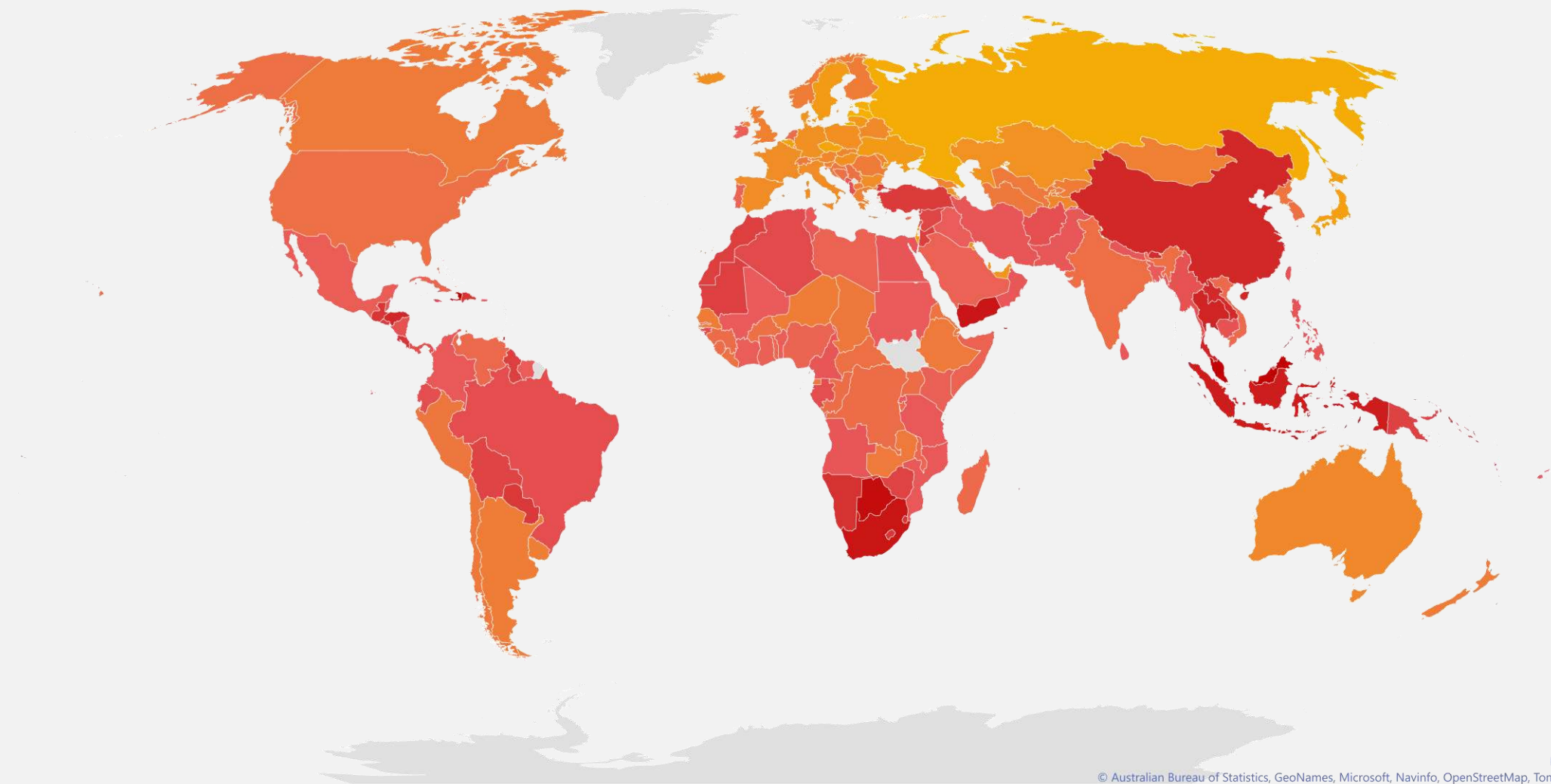
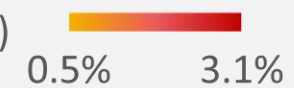
ARAB NEWS

MEDIA LIFESTYLE

f 2021

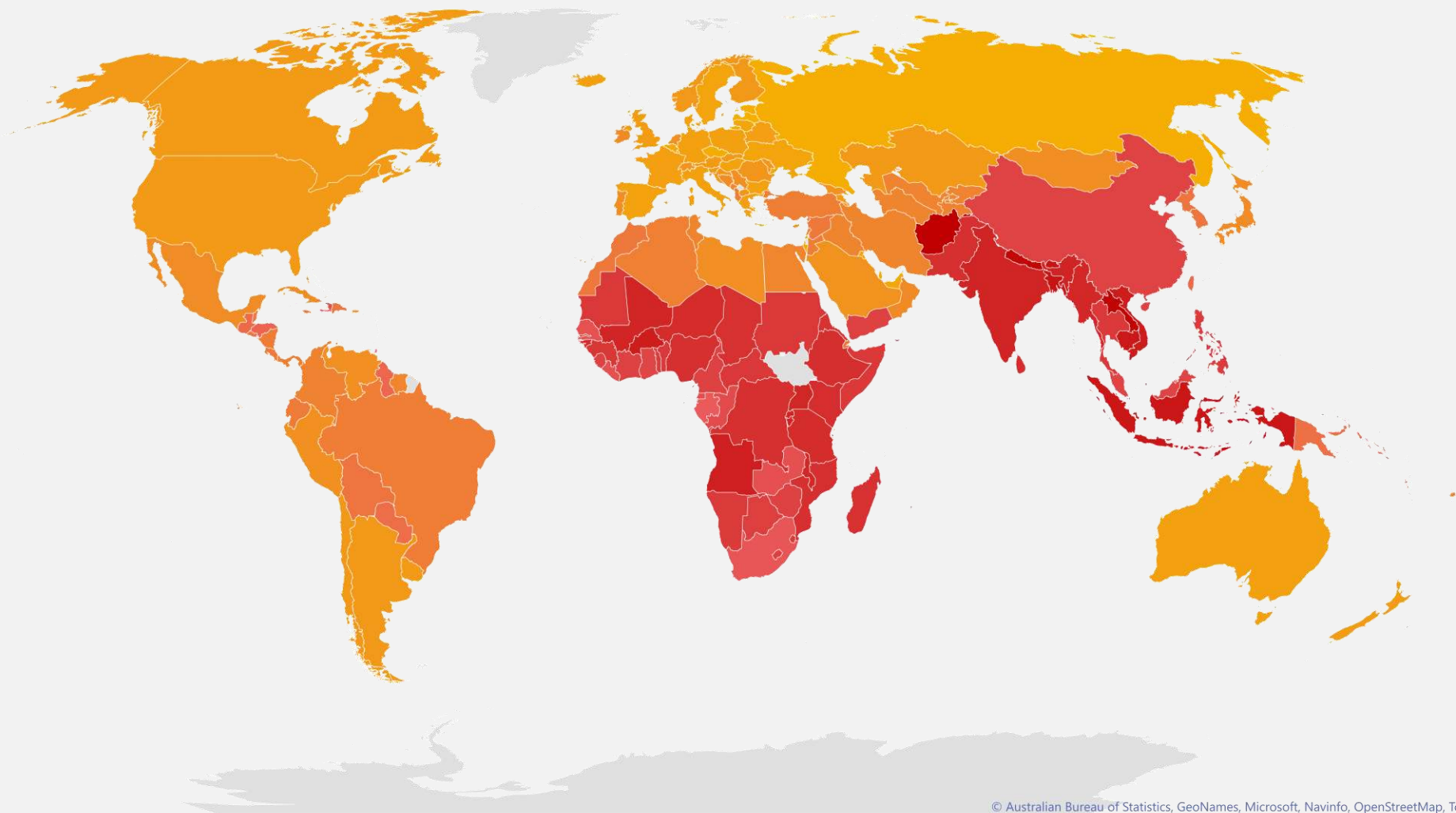
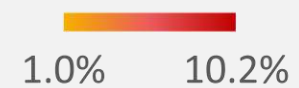
Obesity costing Saudi Arabia \$19 billion per year: Study

Increase in overall overweight/obesity prevalence 2000-2022 (absolute increase)



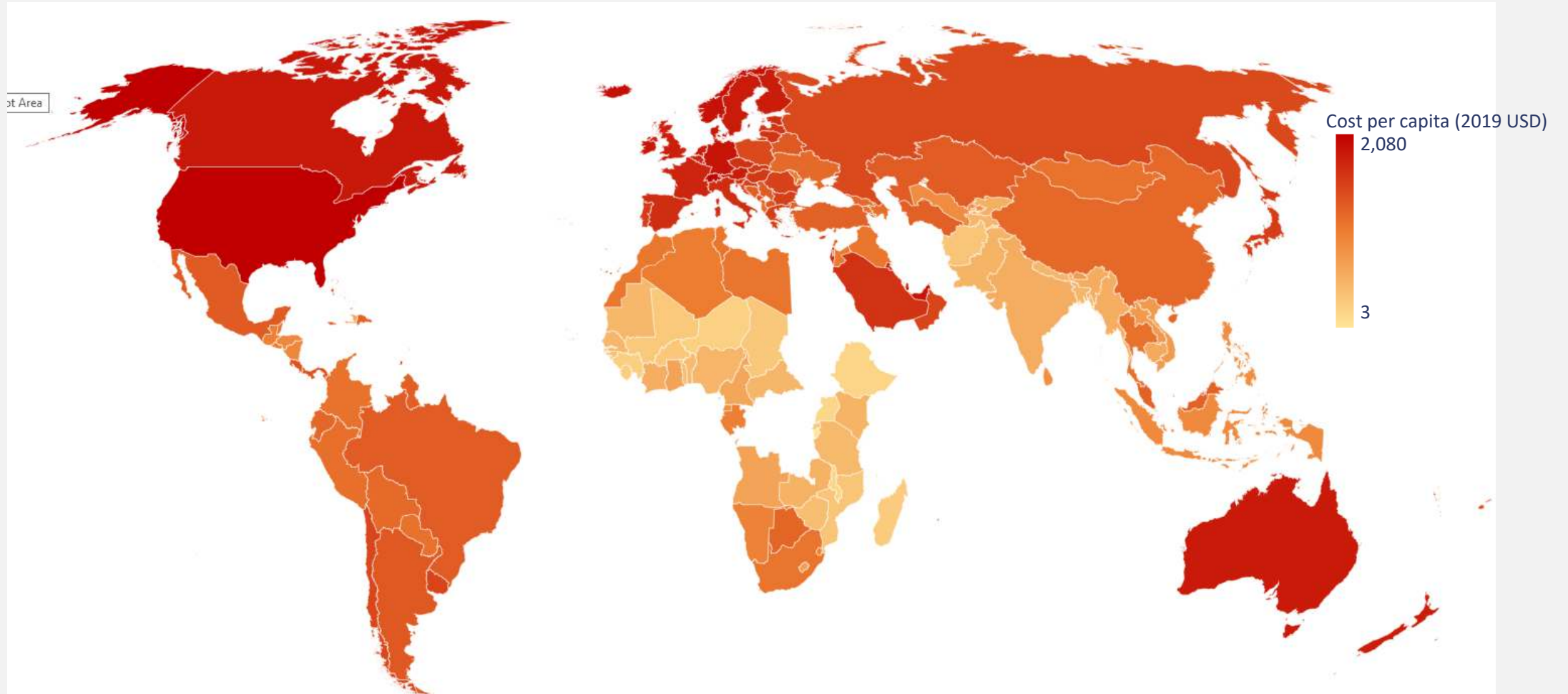
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Increase in overall overweight/obesity prevalence 2000-2022 (relative increase)

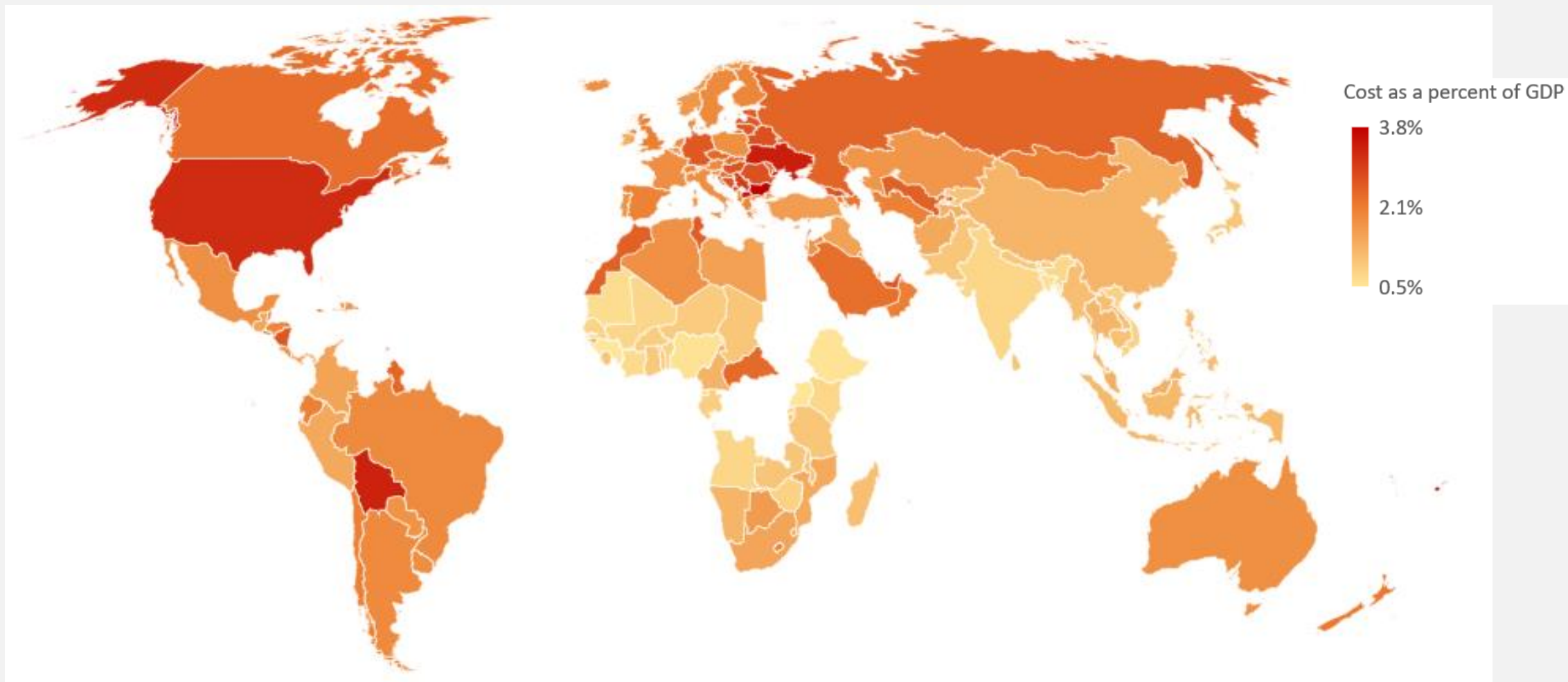


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In 2019, the economic impacts of overweight and obesity per capita range from USD 3-4 (Burundi, Uganda, Malawi, Ethiopia) to more than USD 1,400 (Luxembourg, Switzerland, USA)



In 2019, the economic impacts of overweight and obesity range from 0.5% of national GDP (Guinea, Uganda, Ethiopia, Equatorial Guinea, Nigeria) to 3.8% of GDP (Bulgaria, Fiji)

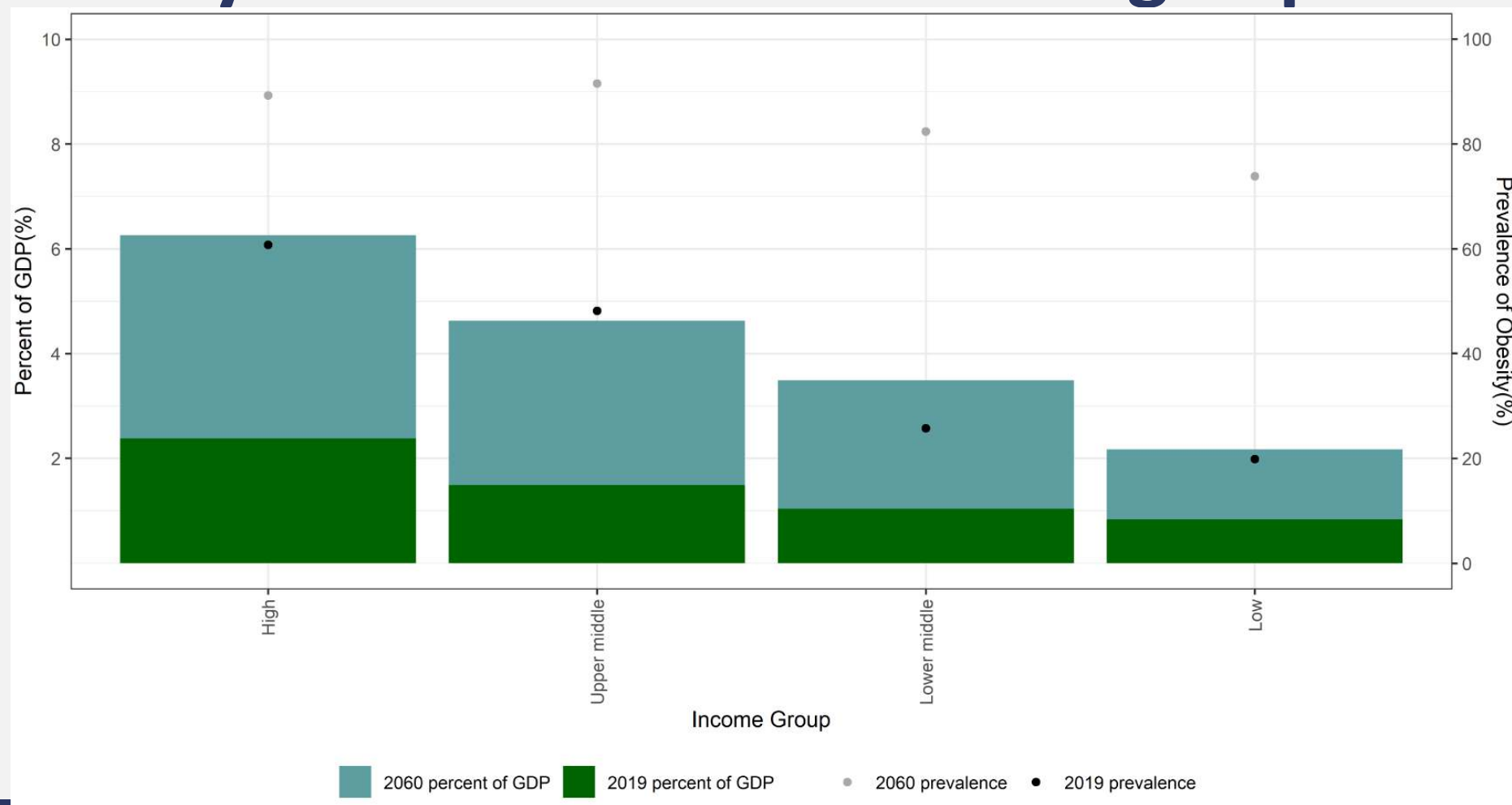


Current economic impact of overweight and obesity (2019)

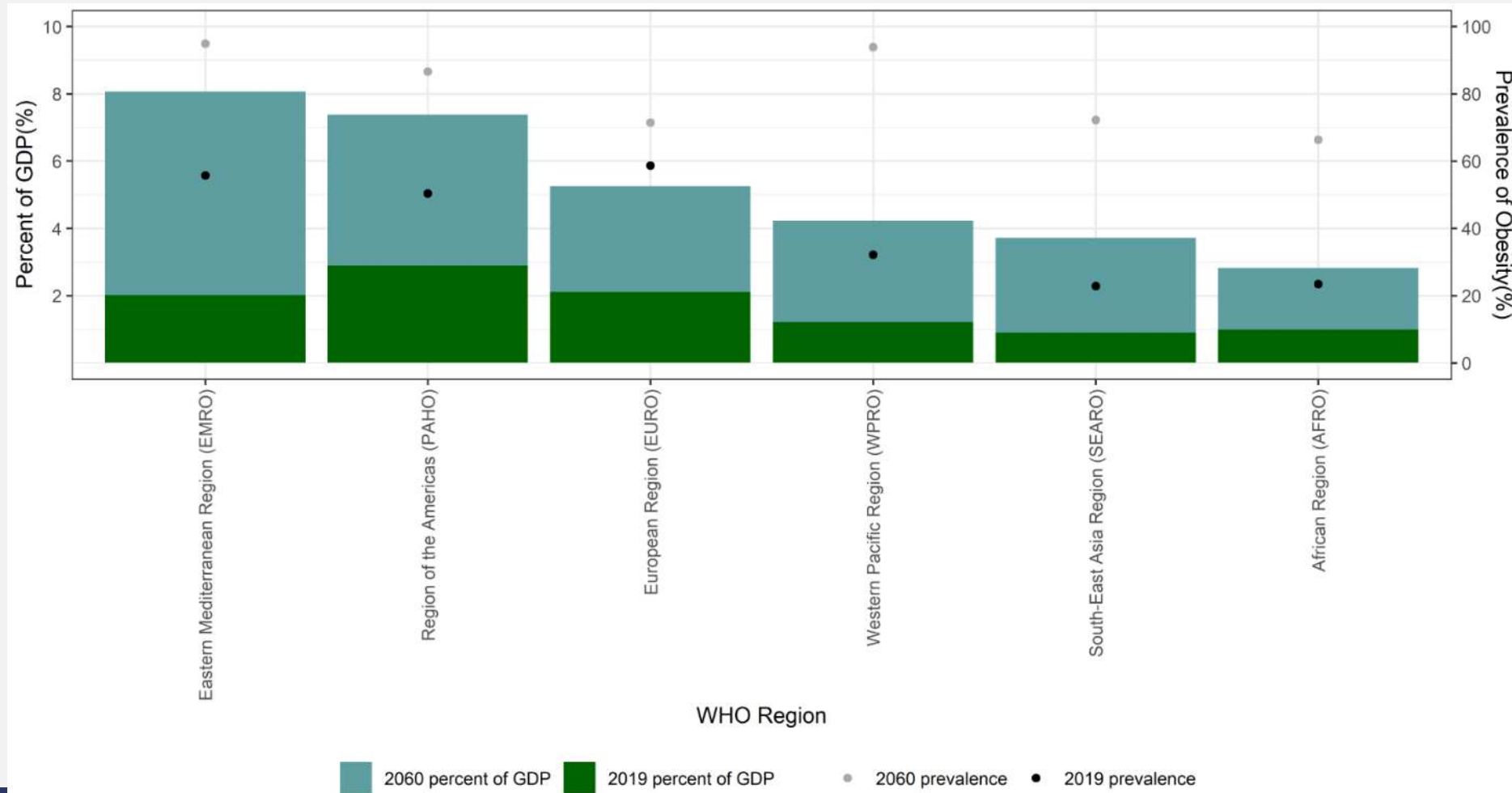
Country income group	Total direct costs (billions)	Total indirect costs (billions)	Total costs (billions)	Total costs per capita (USD)	Total costs as percent of GDP
Low-income	0.5	2.5	3.0	5.8	0.8%
Lower-middle income	9.4	56.6	66.0	22.7	1.0%
Upper-middle income	78.4	291.7	370.1	129.7	1.5%
High-income	514.9	771.6	1,286.4	1,074.9	2.4%

WHO Region	Total direct costs (billions)	Total indirect costs (billions)	Total costs (billions)	Total costs per capita (USD)	Total costs as percent of GDP
AFR	4.27	14.25	18.53	17.28	0.98%
EMR	12.60	48.56	61.16	99.97	2.02%
EUR	155.01	331.98	486.99	523.64	2.10%
AMR	352.24	467.53	819.76	846.08	2.90%
SEAR	4.99	39.67	44.66	22.60	0.89%
WPR	74.08	220.40	294.47	153.93	1.21%

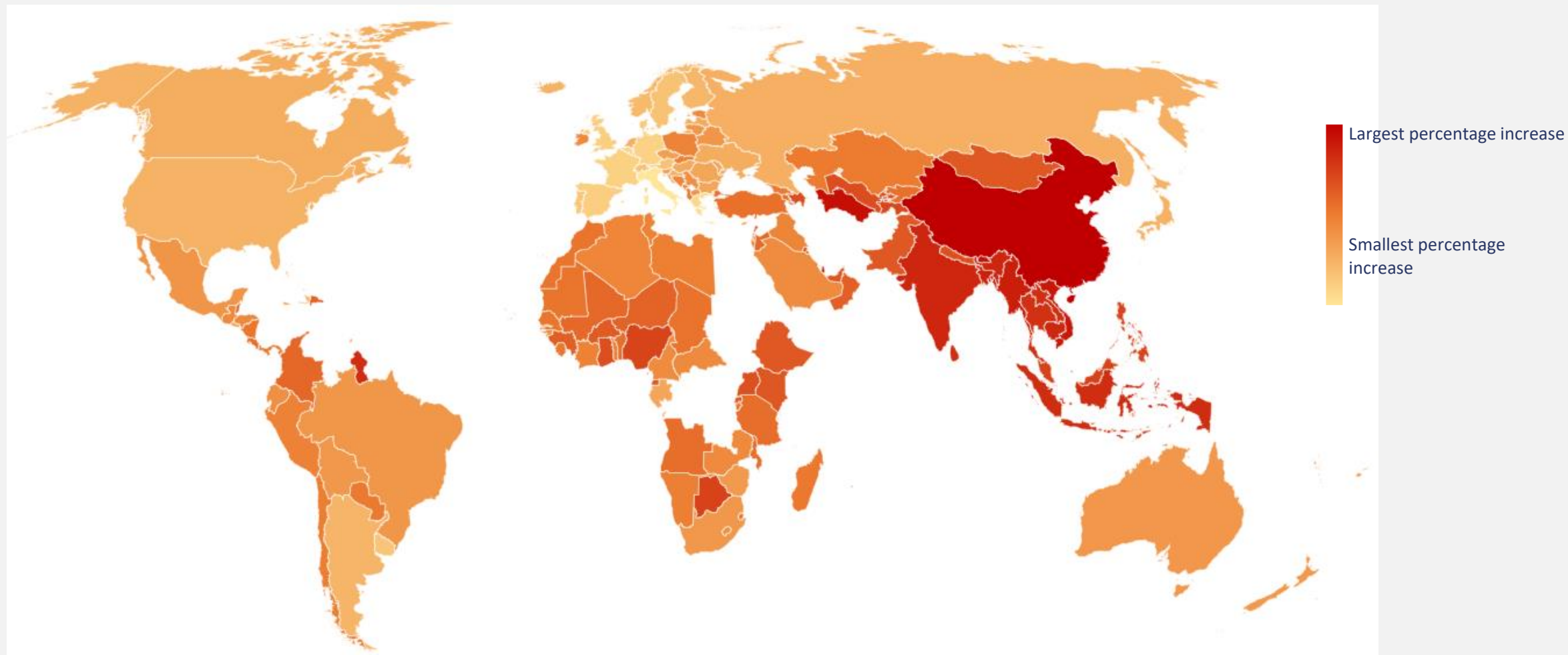
By 2060, the economic impacts of overweight and obesity substantially increase across all income groups



By 2060, the economic impacts of overweight and obesity substantially increase across all regions



By 2060, the largest percentage increase in total costs occur in LMICs and in the Western Pacific and Southeast Asia regions



Thank you
@rachelnugent
rnugent@rti.org

weight related stigma among adolescents in three low- and middle-income countries

Ishu Kataria, PhD
Angie Jackson-Morris, PhD
Center for Global NCDs
RTI International

Objective

To undertake formative research to provide initial insight into the prevalence and experience of weight-related stigma among adolescents in three low and middle-income countries [LMICs]

- Brazil
- Indonesia
- South Africa

“That comment, ‘Wow! you are different’, ‘you are a little bit fat, or fatter’, these comments never offended me, but the comments.. ‘Soon you will no longer fit into clothes, you will have to make clothes’, ‘You will no longer pass through the ratchet of a bus’.. These comments, sometimes I ended up not answering, but I didn't like it.. These kinds of offending comments, many I answered, others I didn't care about and let it go.”

- [Brazil, Female, 18 years, affected by
overweight]

FELT OR INTERNALIZED WEIGHT STIGMA

SOUTH AFRICA

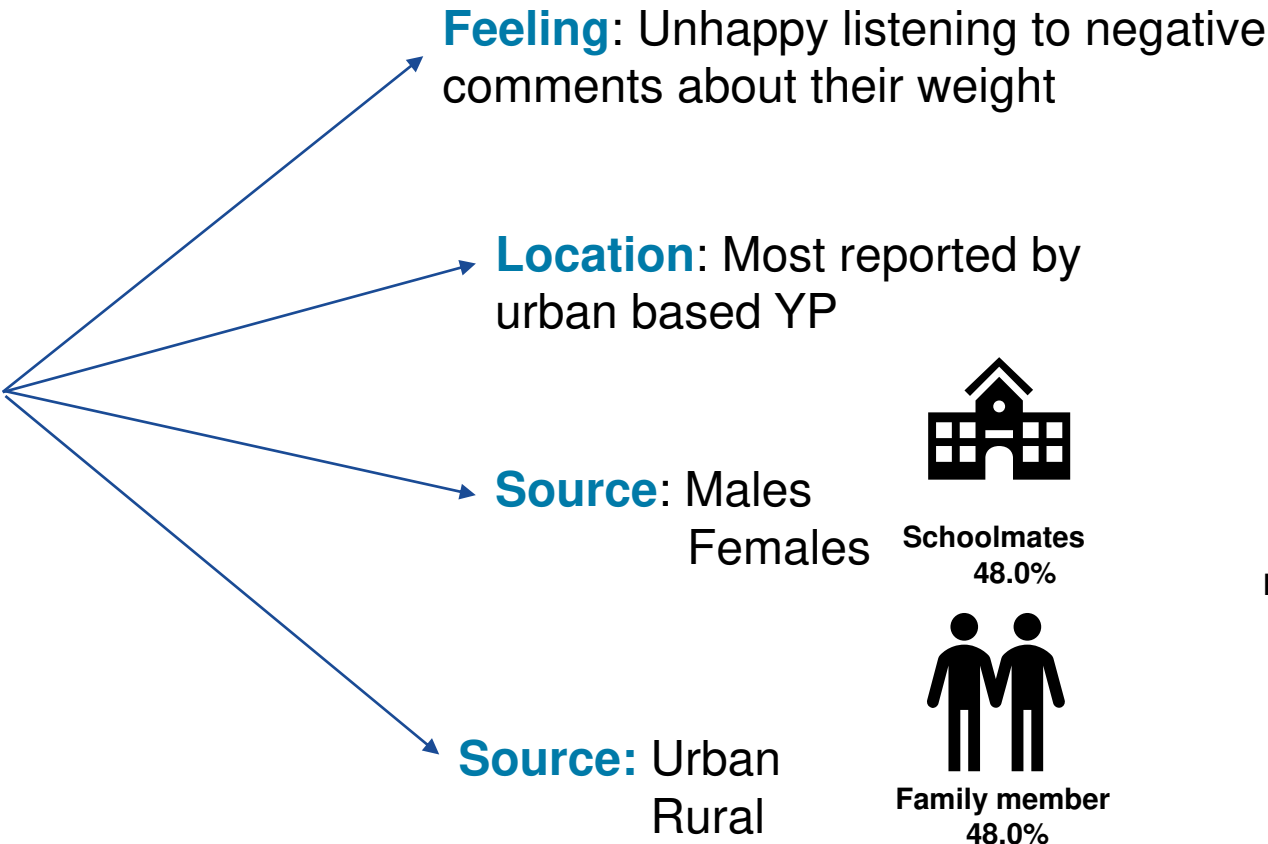
Both males and females affected by overweight had received negative comments about their weight



64.7%



73.3%



Family member
48.0%



Schoolmates
48.0%



Schoolmates
48.0%



Family member
48.0%

FELT OR INTERNALIZED WEIGHT STIGMA

BRAZIL

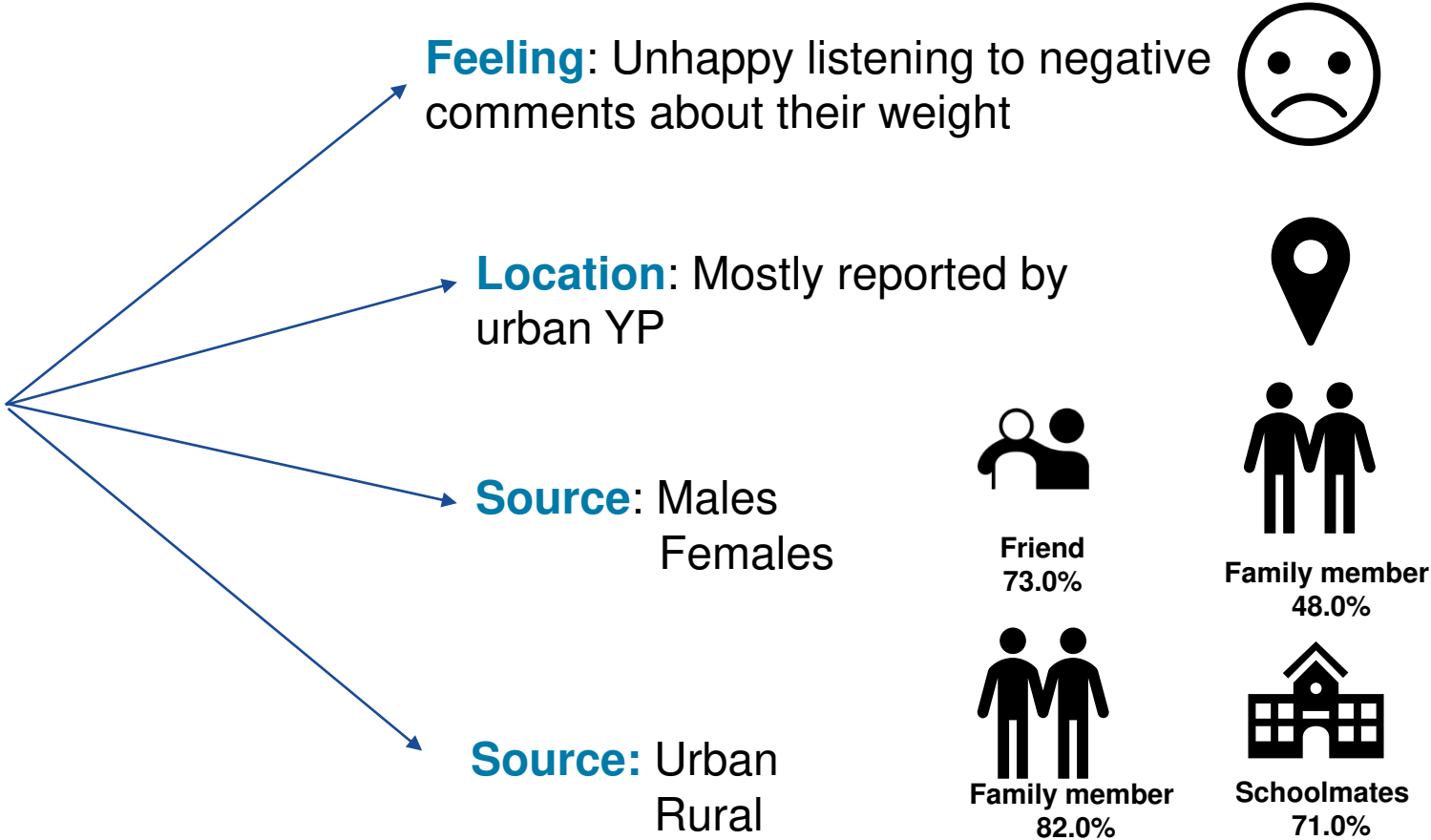
Both males and females affected by overweight had received negative comments about their weight



75.9%



92.6%



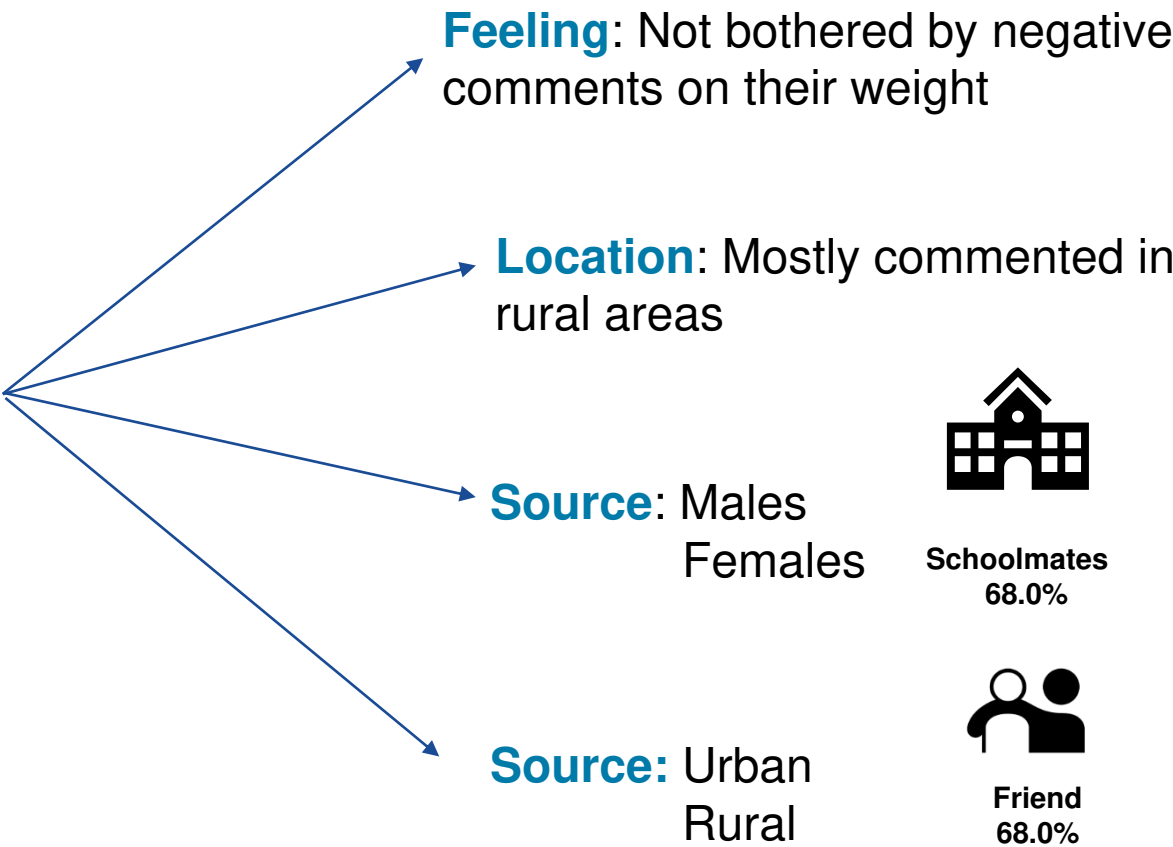
FELT OR INTERNALIZED WEIGHT STIGMA

INDONESIA

More than half of males affected by overweight had received negative comments about their weight, whereas females had not



53.8%



Schoolmates
68.0%



Friend
68.0%



Schoolmates
61.0%



Schoolmates
69.0%

Tackle

Tackle weight stigma

- Stop weight related bullying in schools
- Promote inclusive model of health & body image



Support

Support to achieve & maintain healthy weight

- Promote inclusive model of health & body image
- Stop the pressure
- Create supportive environments
- Recognize & address COVID impacts
- Address unequal opportunities and access

Acknowledgements & More Information

With Thanks to: **UNICEF**

Project Research Team

- Dr Ishu Kataria
ikataria@rti.org
- Dr Angie Jackson-Morris
ajackson-morris@rti.org

The Case for Investment in Interventions to Prevent and Reduce Overweight and Obesity among Children and Adolescents in Mexico

Preliminary Findings Presentation



Intervention selection

1) Fiscal interventions

2) Strengthening the ban on marketing of unhealthy foods to children

3) Social marketing campaign

4) Breastfeeding promotion

5) Strengthening school-based interventions

Target population in 2025

Fiscal interventions; Marketing of unhealthy foods; & Social marketing campaign

- 0-19 years old

Breastfeeding promotion

- 0-12 months old

School-based intervention

- 6-17 years old

Findings from the Nutrition Working Group Position Paper

Jennie Davis

and CORE Group NWG Co-Chairs:

Adriane Siebert

Charlotte Block

Shelley Walton



**Addressing Overweight and Obesity in Low- And Middle-
Income Countries: Roles and Recommendations for
Non-Governmental Organizations and Program Implementers**

A position paper by

The CORE Group Nutrition Working Group

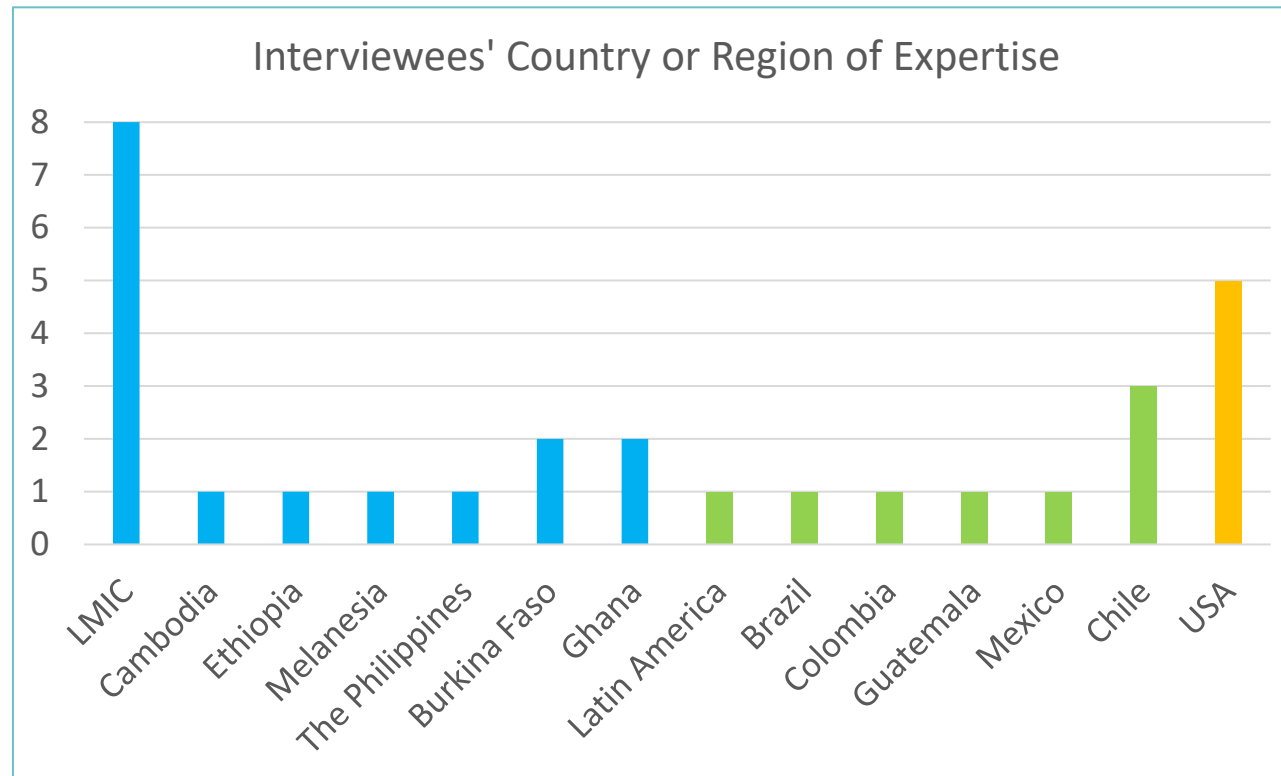
March 2022

Consultive Inquiry



- Semi-structured interviews with 29 nutrition, health, policy, economic experts from around the globe.
- 1-hr interviews conducted over Zoom March – June 2020
- Interview guide:
 1. Successful and unsuccessful interventions and preventions
 2. Gaps in policies and programs;
 3. Stakeholders to engage;
 4. Roles of NGOs in addressing ow/ob.
- Qualitative analysis of interview data using NVivo software

Interviews of Experts

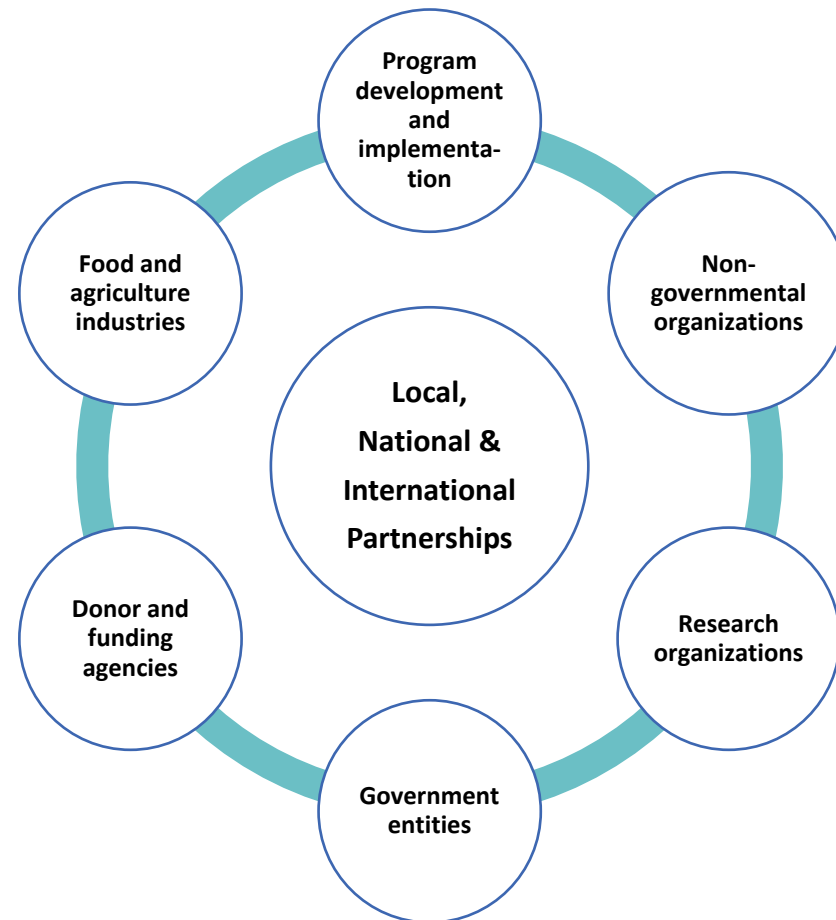


- LMIC represents experts with expertise in multiple LMICs
- USA includes Hawaii and American Samoa, and 2 policy experts
- Missing North African/Eastern Mediterranean Region

Roles for Local, National, & International NGOs and Program Implementers

1. Nutrition programming strategies and policies
2. Advocacy and stakeholder engagement
3. Research partnerships and implementation
4. Technical support

Roles for Local, National, & International NGOs and Program Implementers



Role 1. Nutrition programming strategies and policies

- Update current Infant & Young Child Feeding (IYCF) programs to address overnutrition
 - Growth monitoring programs
 - Prenatal visit counseling
 - Responsive feeding practices
- Prioritize schools
- Develop youth-led nutrition programming and include adolescents

Role 1. (cont.) Nutrition programming strategies and policies

- Prioritize and promote physical activity
 - Street safety in urban settings and schools
- Integrate cross-cutting nutrition education
 - Community nutrition education
- Prioritize the food environment
 - Accessible, affordable, and nutritious food
- Develop and strengthen nutrition policies and financing

Role 2. Advocacy and stakeholder engagement

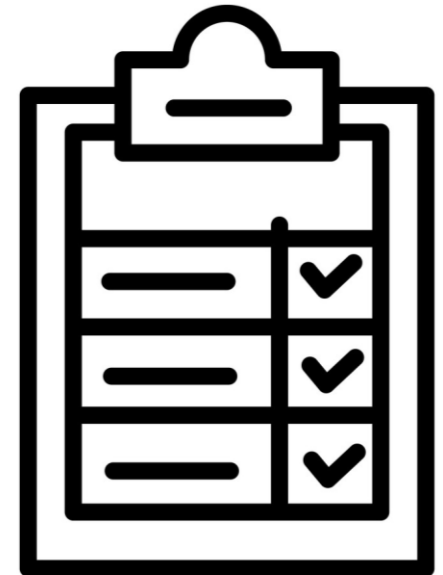
“NGOs have the latitude to advocate, lobby, and demand accountability. They must leverage their resources.”

- **Advocacy**
 - Form and maintain partnerships
 - Be a voice for communities who don't have a seat at the table
- **Stakeholder engagement**
 - Generate interest and address stigma
 - Increase access to funding

“We need to show donors how programs focused on undernutrition and food insecurity are also beneficial for obesity prevention.”

Role 3. Research partnerships and implementation

- Data needed to support and develop ow/ob programs and policies
- Integrate data collection into existing programs
- Plan for monitoring and evaluation in program and policy development
- Consider sustainability and scalability



Role 4. Technical support

- Leverage experience and expertise of NGOs and program implementers to:
 - Implement national health strategies
 - Legislation to address ow/ob
- Support governments and national and local entities to be aware, understand, and become interested in addressing ow/ob.



Recommendations

1. Generate data on ow/ob in LMICs
2. Collect biological, behavioral, and environmental indicators associated with ow/ob
3. Apply implementation science to ow/ob programming and policies to determine success
4. Consider ow/ob awareness and prevention in nutrition programs and policies
5. Actively challenge the stigma associated with ow/ob
6. Form communities of practice for ow/ob prevention

Position Statement

*It is the position of the Nutrition Working Group of CORE Group that prevention of overweight and obesity among adults, adolescents, and children **be incorporated into nutrition programming** in low- and middle-income countries (LMICs), **complementing the current focus** on undernutrition programming.*

*Approaches to address overweight and obesity should **prioritize** consideration and evaluation of the **varying LMIC contexts**, including differing settings, population characteristics, age groups, and nutrition status.*



Diets in transition: Consumption of commercial foods among infants and young children in LMIC

Alissa Pries, PhD

Senior Research Advisor

Assessment & Research on Child Feeding Project

May 4, 2022



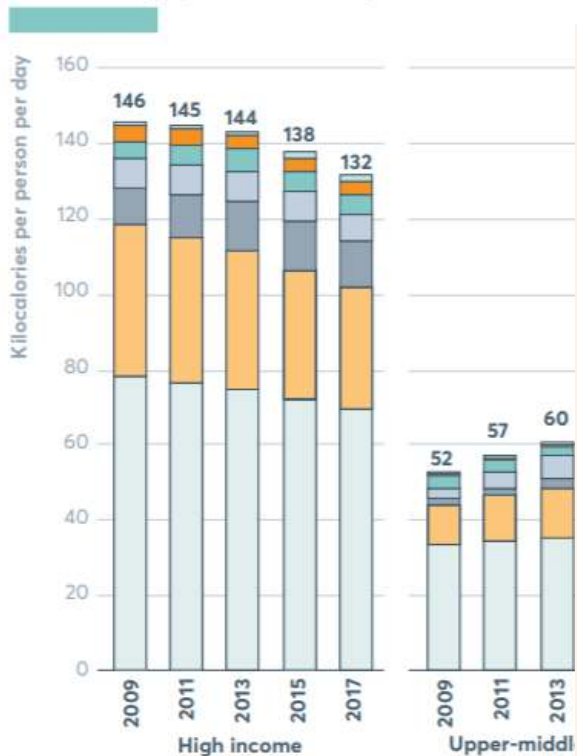
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ON CHILD FEEDING

hki.org

Food systems are changing...

Trends in energy purchased from sugar-sweetened beverages



Source: Data from the Euromonitor International Market Information Database

FINANCIAL TIMES

Nestlé document says majority of its food portfolio is unhealthy

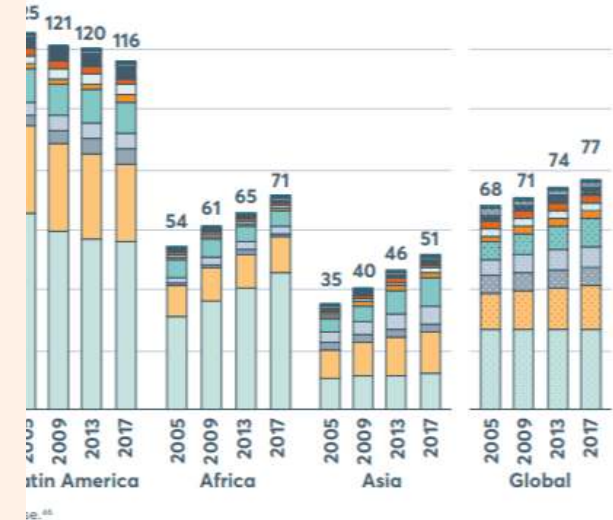
Internal company presentation acknowledges more than 60% of products do not meet 'recognised definition of health'



by region, 2005–2017

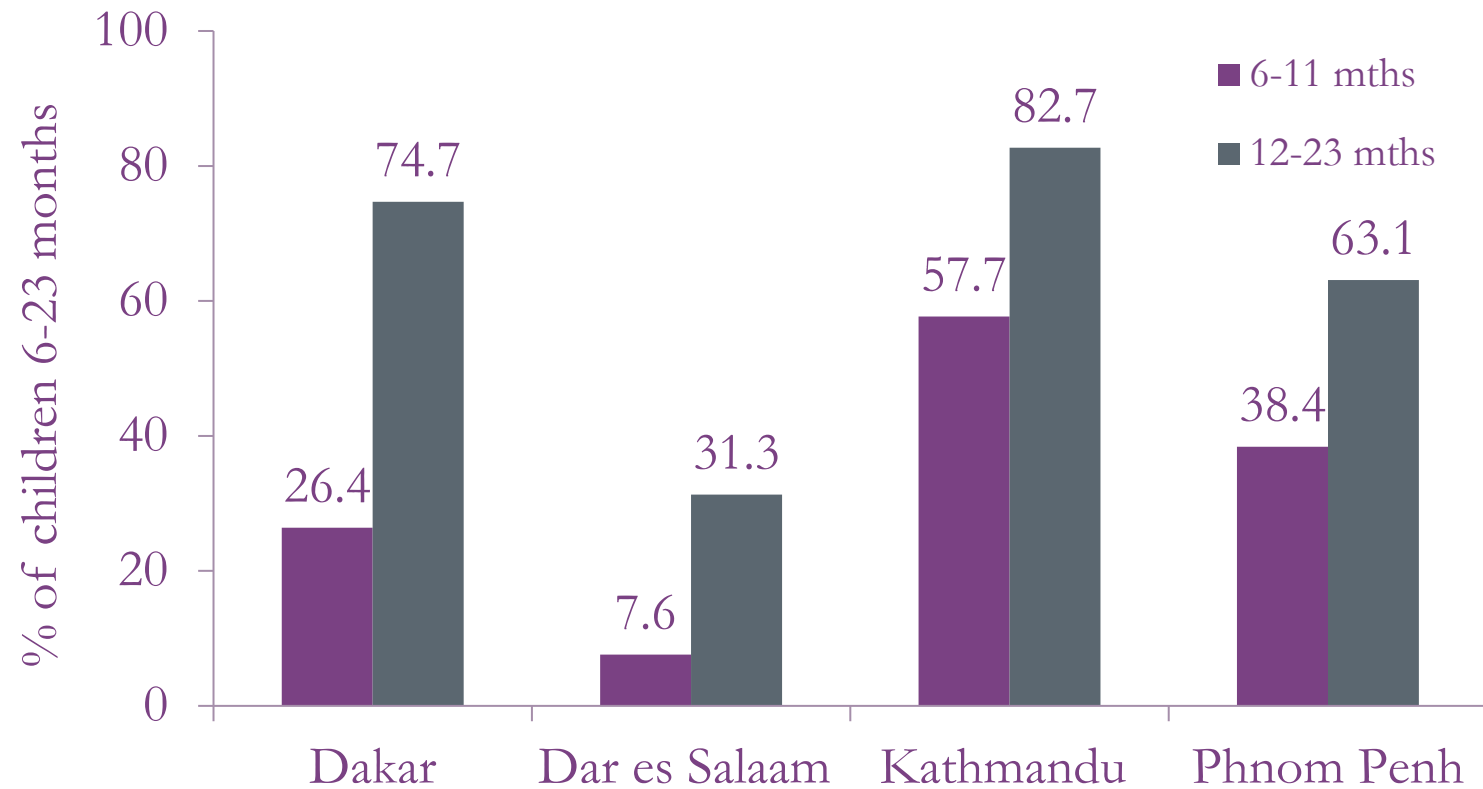
ings and condiments
at and seafood
ed foods

- Sweet biscuits, snack bars and fruit snacks
- Ice cream and frozen desserts



Diets are changing...

- And not just among adults and adolescents...



WHAT DOES THIS MEAN FOR DIETS...

OF INFANTS AND YOUNG CHILDREN?



BUT HOW **MUCH** OF THESE FOODS ARE YOUNG CHILDREN CONSUMING?



FOOD CATEGORIES	% TEI
UNHEALTHY SNACK FOOD/BEVERAGE	24.5 ± 0.7
FOODS	22.5 ± 0.7
Biscuits	10.8 ± 0.5
Candy/chocolates	3.5 ± 0.2
Savory snacks	3.4 ± 0.3
Instant noodles	2.2 ± 0.2
Sweet bread/bakery	2.0 ± 0.2
Traditional savory snacks	0.2 ± 0.04
Processed dairy	0.2 ± 0.09
Sugary breakfast cereal	0.1 ± 0.03
Traditional sweet snacks	0.1 ± 0.04
BEVERAGES	2.0 ± 0.2
Sweetened tea/water	0.8 ± 0.08
Fruit juice drinks	1.0 ± 0.1
Soft drinks	0.1 ± 0.04
Chocolate-powder drinks	0.1 ± 0.04



HOW MUCH OF THESE FOODS ARE YOUNG CHILDREN CONSUMING?

Authors	Setting	Age (months)	%TEI
Anderson et al. (2008)	Cambodia (urban)	12-23	38.2%
Denney et al. (2017)	Mexico (national)	6-23	16.1%
Jeharsae et al. (2011)	Thailand (conflict setting)	12-23	19.3%
Karnopp et al. (2017)	Brazil (urban)	0-23	19.7%
Kavle et al. (2015)	Egypt (peri-urban/rural)	6-23	14.1%
Lander et al. (2010)	Mongolia (urban)	6-23	36.2%
Pries et al. (2019)	Nepal (urban)	12-23	24.5%
Roche et al. (2011)	Peru (rural)	0-23	13.1%
Rodríguez- Ramírez et al. (2016)	Mexico (national)	6-23	~20%
Valmórbida and Vitolo (2014)	Brazil (urban)	12-16	13.6%
Webb et al. (2006)	Australia (national)	16-24	26.5%

NUTRITIONAL QUALITY OF COMMERCIAL FOODS IN SE ASIA

Growing up milks in Indonesia (n=92)	
Low sugar (green flag)	4%
Medium sugar (orange flag)	25%
High sugar (red flag)	71%



Reference: Pries AM, Mulder A, Badham J, Sweet L, Yuen K, Zehner E. Sugar content and labelling practices of growing-up milks in Indonesia. Maternal and Child Nutrition, DOI:10.1111/mcn.13186, 2021.

WHAT DOES THIS MEAN FOR CHILD NUTRITION?

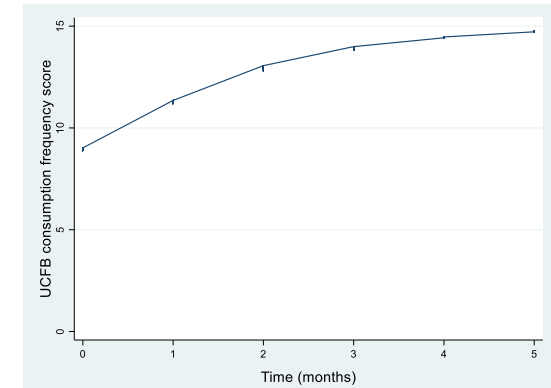
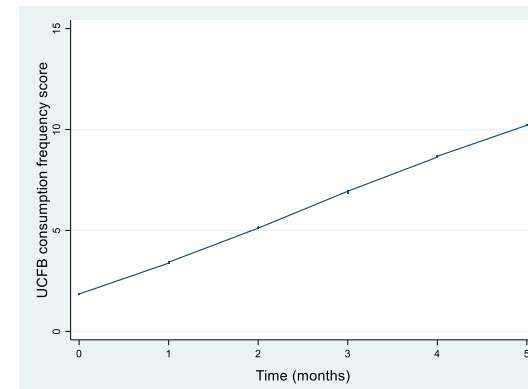
- Excessive energy intakes and risk of over-nutrition among older children

Research

JAMA Pediatrics | Original Investigation

Association Between Childhood Consumption of Ultraprocessed Food and Adiposity Trajectories in the Avon Longitudinal Study of Parents and Children Birth Cohort

Kiara Chang, PhD; Neha Khandpur, PhD; Daniela Neri, PhD; Mathilde Touvier, PhD; Inge Huybrechts, PhD; Christopher Millett, PhD; Eszter P. Vamos, PhD



- Studies indicating diet displacement of other nutritious foods
 - potential to contribute to undernutrition in early childhood, which also increases risk of overweight/obesity later in life

HOW CAN WE PROTECT CHILDREN'S DIETS

Food environment: **marketing** and **availability**



HOW CAN WE PROTECT CHILDREN'S DIETS

Food environment: **claims** and labelling

"G for
Genius"



"Packed
with fruit
goodness"



"Enriched
with
vitamins +
minerals"



"So
healthy"

"Contains
protein,
calcium,
vitamin D"



HOW CAN WE PROTECT CHILDREN'S DIETS

- Advertising restrictions
- Fiscal policy solutions
- Nutrient profiling & front-of-pack labelling



Conclusions

- The food system is **changing** – unhealthy **ultra processed** foods are becoming **dominant**
- **Diets** are also changing in response – among adults and **children**
- Increases in **overweight & obesity**, and contribution to **both** sides of the **double burden**
- **Nutrition education** is one approach, but **policy solutions** are also needed for **population-level** impact



THANK YOU!



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& RESEARCH
ON CHILD FEEDING

Children International



Salud / *Health*
Educación / *Education*
Empoderamiento / *Empowerment*
Empleabilidad / *Employment*



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Fátima Ruiz
Nutritionist, Universidad de Guadalajara.
Coordinator Monitoring, Evaluation and Learning.

La nutrición ha sido un componente clave en los programas.

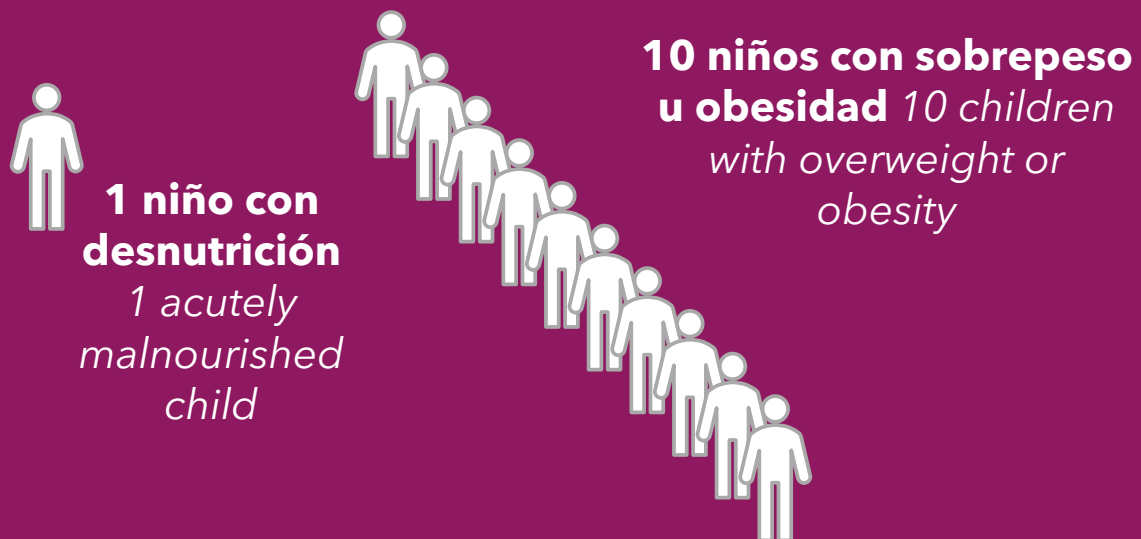
Nutrition has been a key component in the programs

Históricamente, las estrategias se han centrado en la desnutrición.

Historically, these strategies have focused on malnourished.

Sin embargo, en México fue necesario hacer un ajuste:

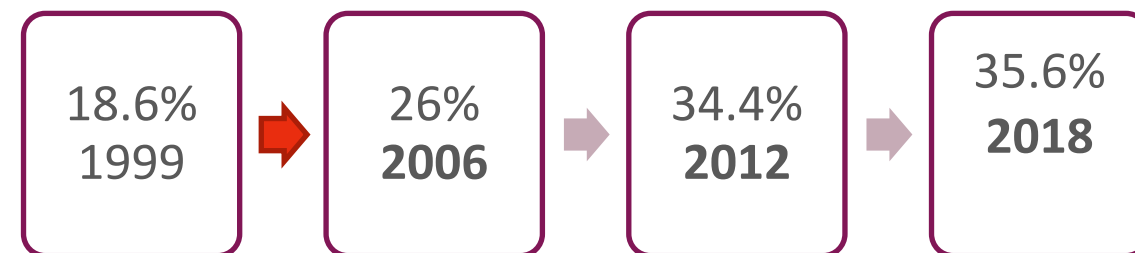
However, in Mexico it was necessary to make an adjustment:



Prevalencia de sobrepeso y obesidad en la población de 5 a 11 años en México

Prevalence of overweight and obesity in the population aged 5 to 11 years in México

ENSANUT



La desnutrición aguda deja de ser un problema de salud pública

Acute malnutrition is no longer a major public health issue

2016 -2019

4,379 niños/jóvenes y 1,077 cuidadores en temas de estilos de vida saludables para prevenir y controlar la obesidad.

4,379 children/youth and 1,077 caregivers reached on issues of healthy lifestyles to prevent and control obesity

Prevención *Community prevention*



Incrementos en conocimientos y comportamientos relacionados a dieta balanceada y actividad física

Improvements in knowledge and behaviors around balanced diet and physical activity

Aprendizajes / *Learning*

Equipos Multidisciplinarios
Multidisciplinary teams

Involucramiento familiar
Family involvement

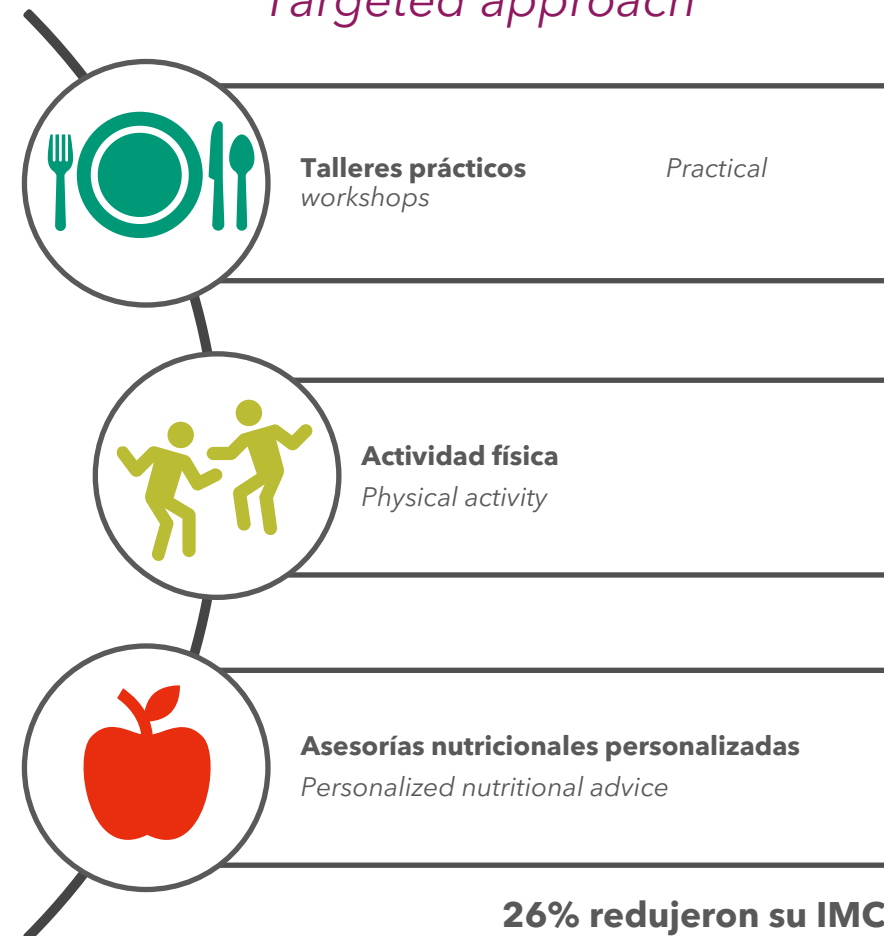
Actividad física
Physical activity

Énfasis en estilos de vida saludable
Emphasis on Healthy lifestyles

Estrategias prácticas
Practical Strategies

Sistemas y entornos alimentarios
Environment and food systems

Estrategia dirigida *Targeted approach*



26% redujeron su IMC
reduced their BMI

50% mantuvieron su IMC
maintained their BMI

20% implementaron nuevas estrategias para apoyar estilos de vida saludables
implemented new strategies to support healthy lifestyles



Advancing community health worldwide.

A Call to Action

Annie Toro, JD, MPH

President & Executive Director, What to Expect Project

Co-Chair, NCD Interest Group

May 4, 2022