



S.I.C.O.B.
Bari

SPRING MEETING

18 - 19 MAGGIO 2023
THE NICOLAUS HOTEL

CONDIVIDERE PER CRESCERE
Strategie di integrazione
in Chirurgia Bariatrica

Presidente del Congresso
ANTONIO BRAUN



V ● Università
● degli Studi
● della Campania
Luigi Vanvitelli

Obesità: La Dimensione Del Problema

SALVATORE TOLONE MD, PHD, FACS

PROFESSORE ASSOCIATO

DELEGATO SICOB REGIONE CAMPANIA

**U.O.C. CHIRURGIA GENERALE, MINIINVASIVA ONCOLOGICA E
DELL' OBESITÀ**

(DIR: PROF L. DOCIMO)

salvatore.tolone@unicampania.it





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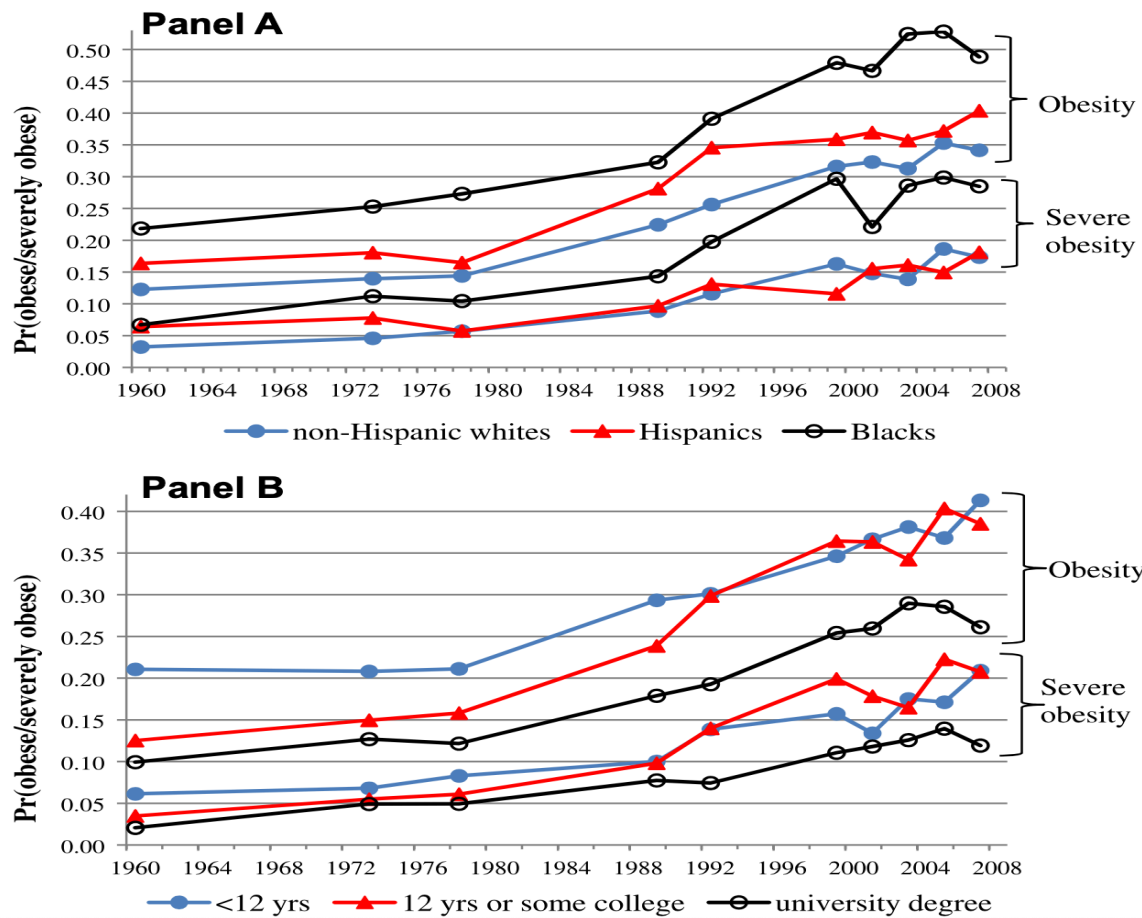
Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed



Bigger bodies: Long-term trends and disparities in obesity and body-mass index among U.S. adults, 1960–2008

Åsa Ljungvall ^{a,*}, Frederick J. Zimmerman ^b



Obesity epidemiology trends by race/ethnicity, gender, and education: National Health Interview Survey, 1997–2012

Cassandra Arroyo-Johnson, PhD, MS¹ and Krista D. Mincey, DrPH, MPH²

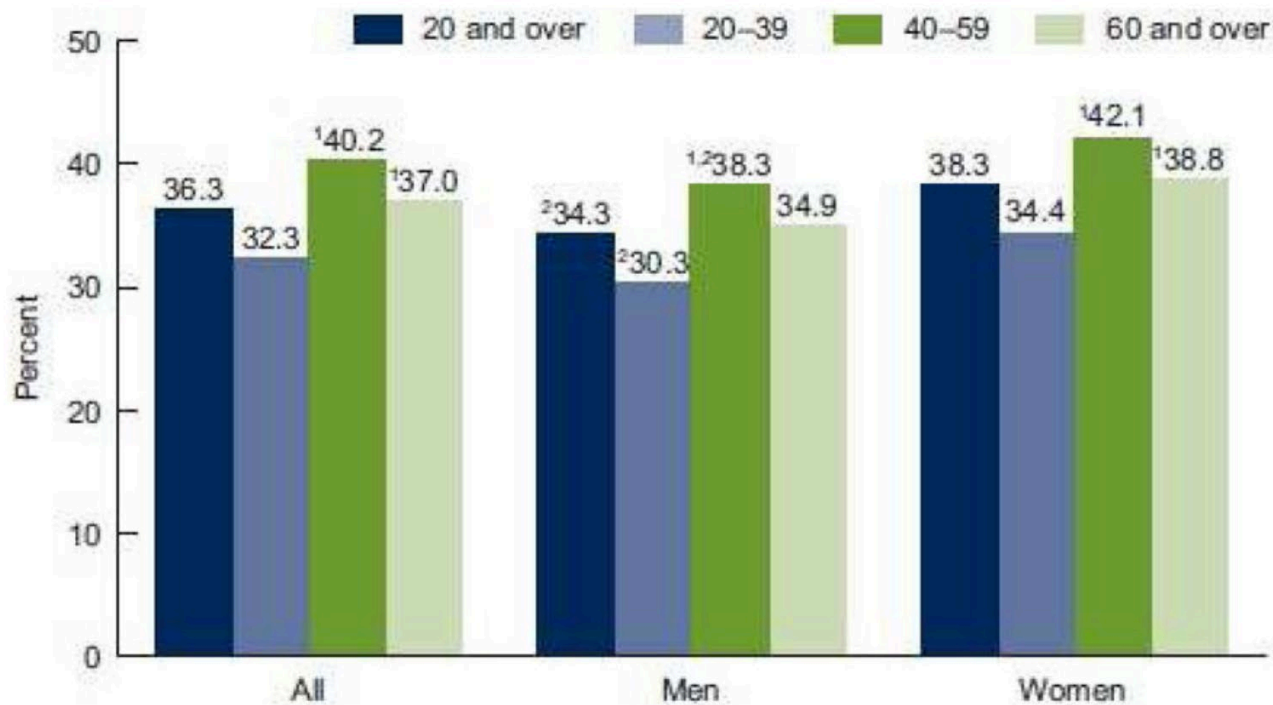


Figure 1. Obesity prevalence among adults aged 20 and over, by sex and age: National Health and Nutrition Examination Survey, 2011–2014

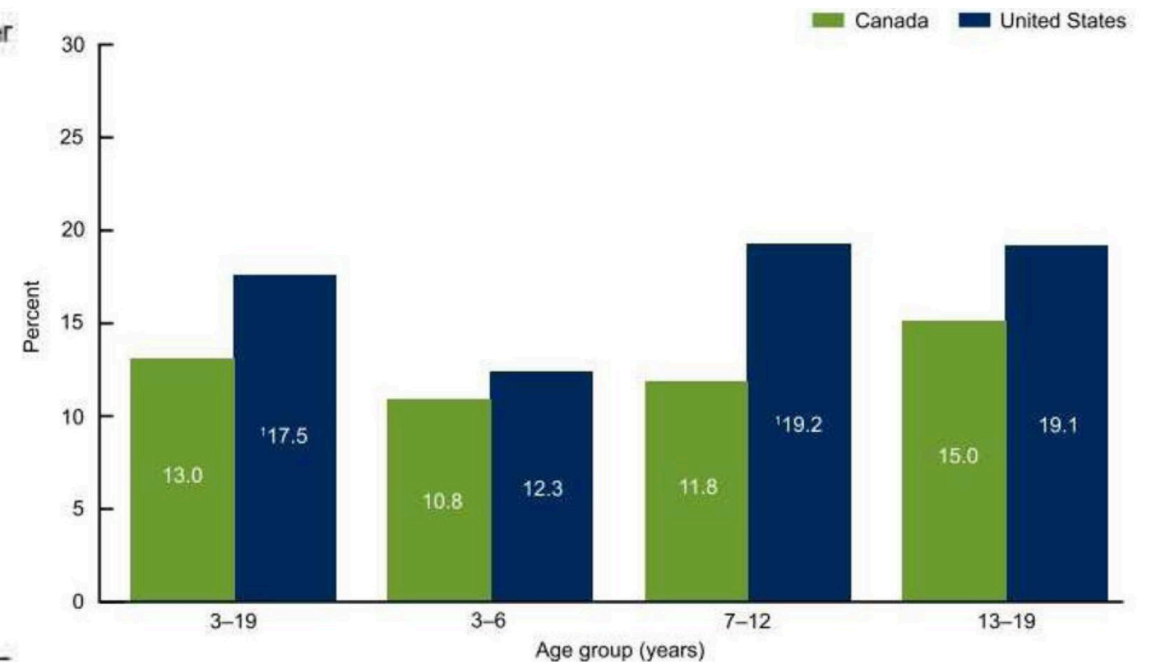
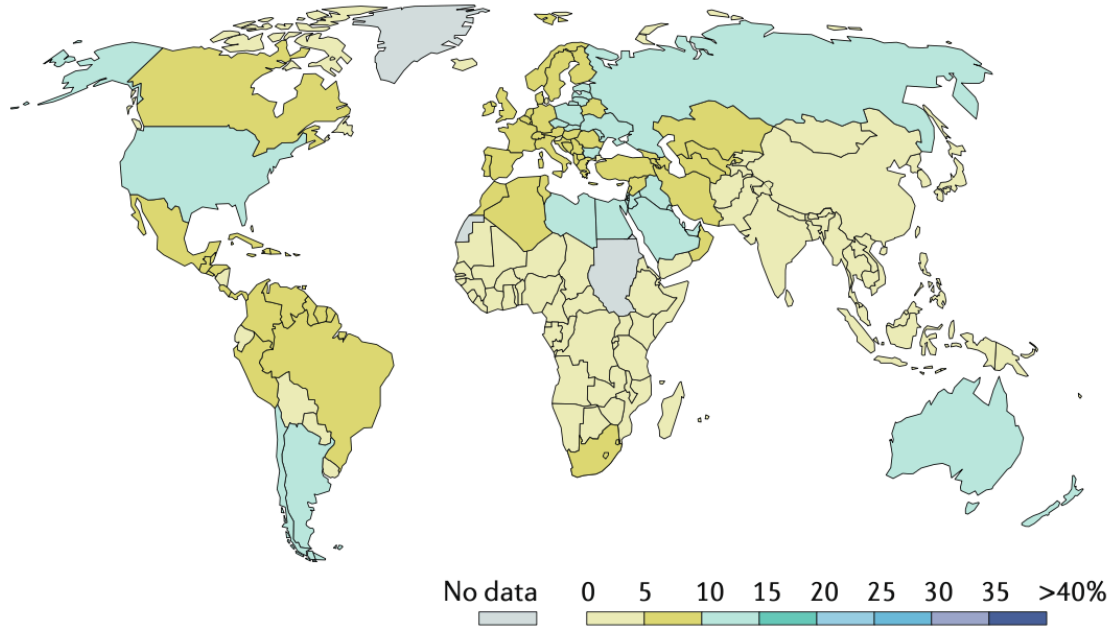
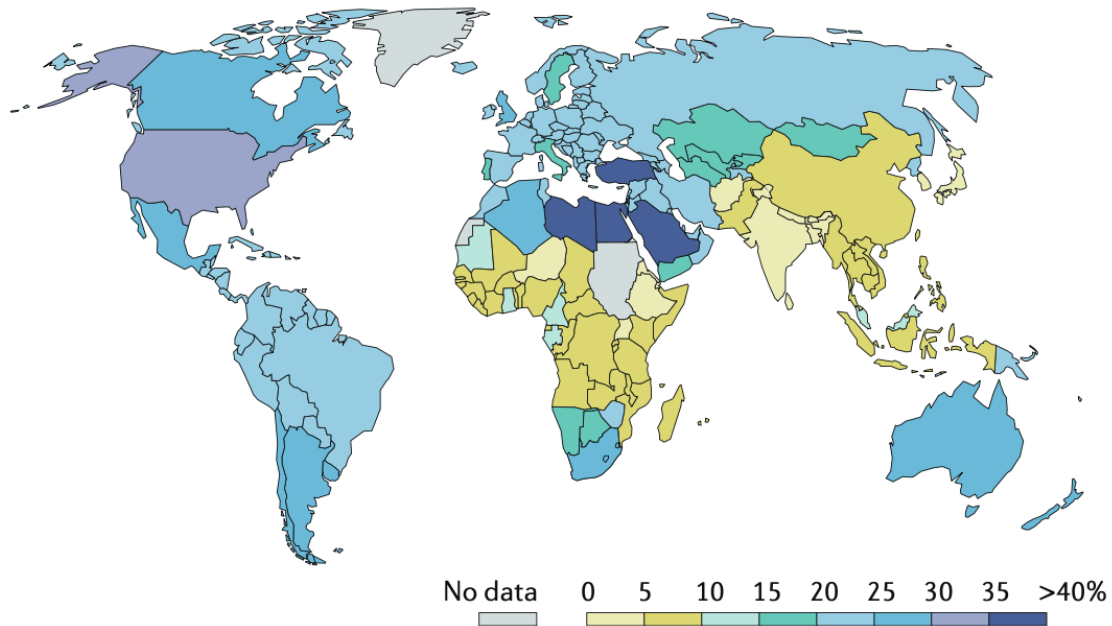


Figure 6. Obesity prevalence among children and adolescents aged 3–19 years, by sex: Canada, 2009–2013, and United States, 2009–2012

a Percentage of adults defined as obese, 1975



b Percentage of adults defined as obese, 2014



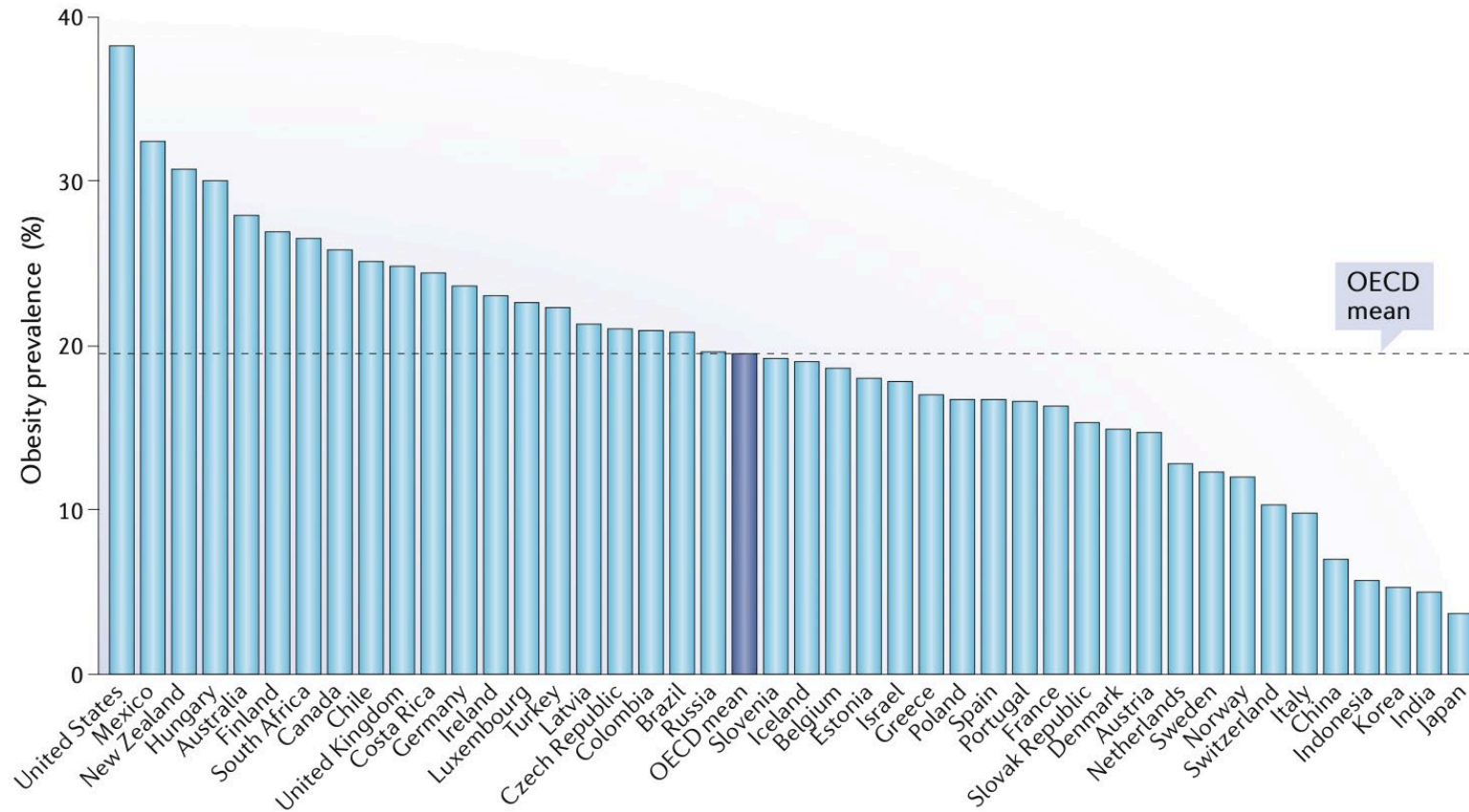
Obesity: global epidemiology and pathogenesis

Matthias Blüher

**GLOBAL
HEALTH**

Obesity: global epidemiology and pathogenesis

Matthias Blüher



Indicatore:

Dati standardizzati Dati grezzi

Dati standardizzati

Obesi
per regione di residenza

Passi 2020-2021

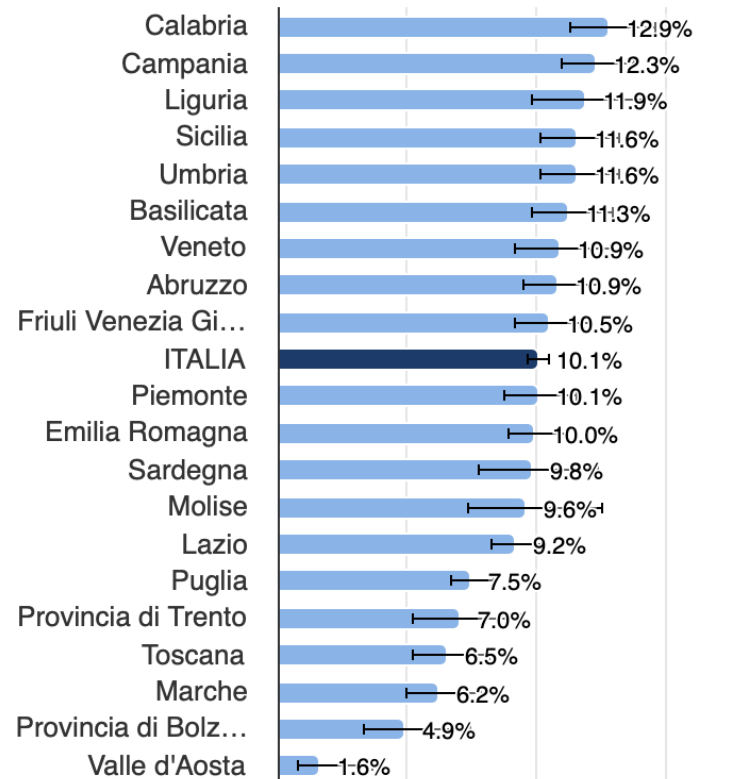


- peggiore del valore nazionale
- simile al valore nazionale
- migliore del valore nazionale

Sorveglianza Passi

Obesi
per regione di residenza

Passi 2020-2021



0% 5% 10% 15%

Sorveglianza Passi

Mostra valori

Indicatori - PASSI 2020-2021

	Sovrappeso	Obesi	Consiglio perdere peso a persone in eccesso ponderale
Abruzzo	33.2	11.3	40.7
Basilicata	35.5	11.8	46.8
Calabria	31.5	12.9	49.3
Campania	38.3	12.3	40.6
Emilia Romagna	31.1	10.6	50.8
Friuli Venezia Giulia	32.3	10.9	45.1
Lazio	29.5	9.6	48.6
Liguria	29.5	12.4	39.3
Lombardia			
Marche	27.7	6.4	45.2
Molise	33.6	9.8	41.1
Piemonte	27.7	10.3	52.5
Provincia di Bolzano	22.0	4.9	35.1
Provincia di Trento	26.9	7.0	45.3
Puglia	39.3	7.5	34.4
Sardegna	30.6	10.4	64.6
Sicilia	34.2	11.8	41.6
Toscana	28.3	7.0	49.1
Umbria	32.6	12.2	45.1
Valle d'Aosta	6.8	2.0	53.1
Veneto	30.9	11.1	47.8
Italia	32.5	10.4	44.7

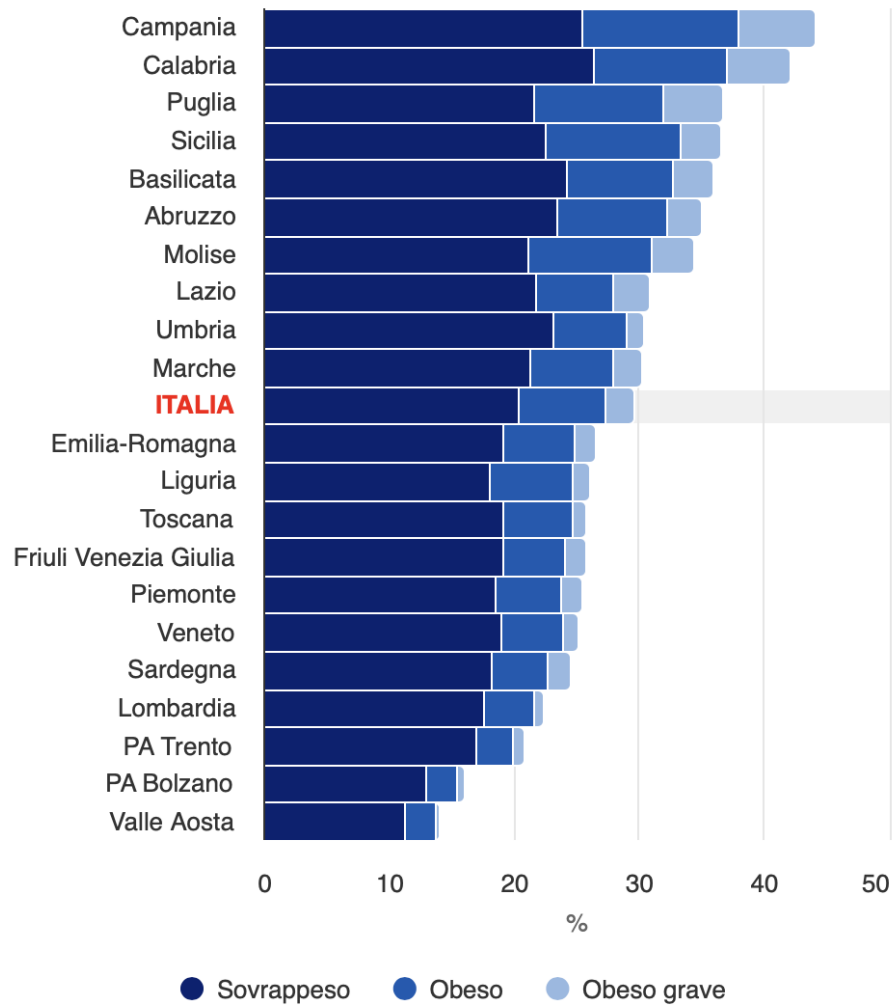
■ peggiore del valore nazionale

■ simile al valore nazionale

■ migliore del valore nazionale

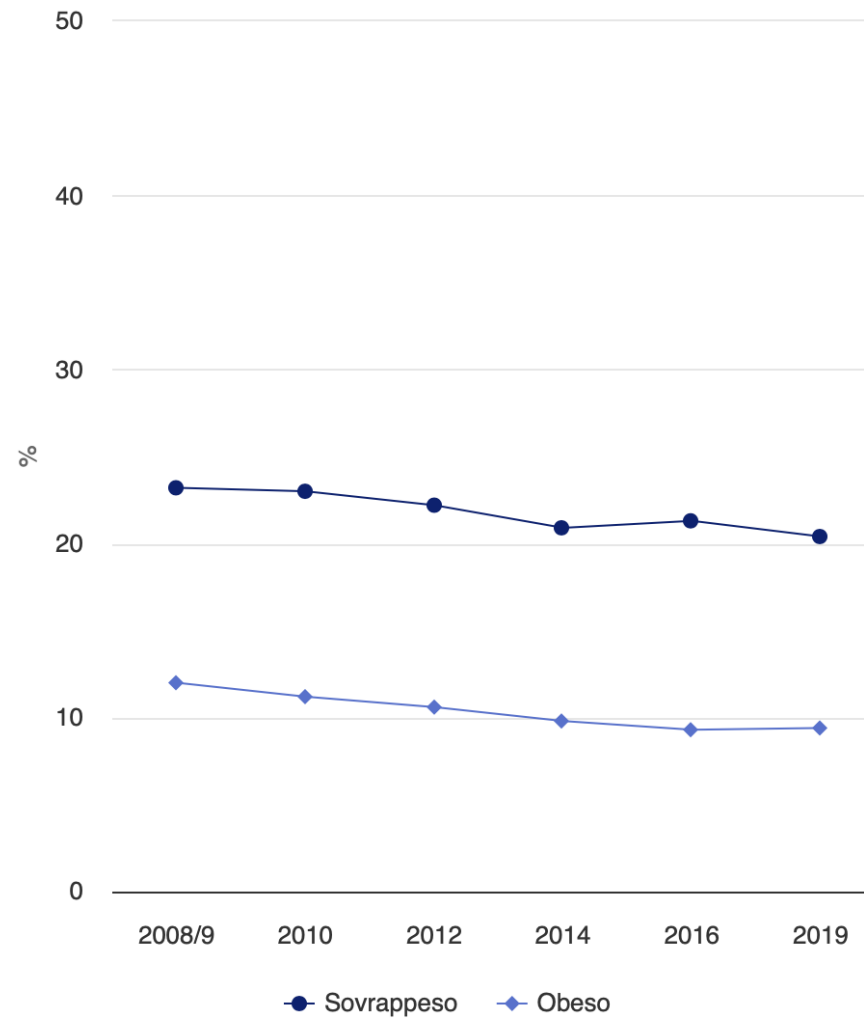
Sovrappeso, obesità e obesità grave

Indagine 2019



Trend sovrappeso e obesità in Italia

2008/9-2019

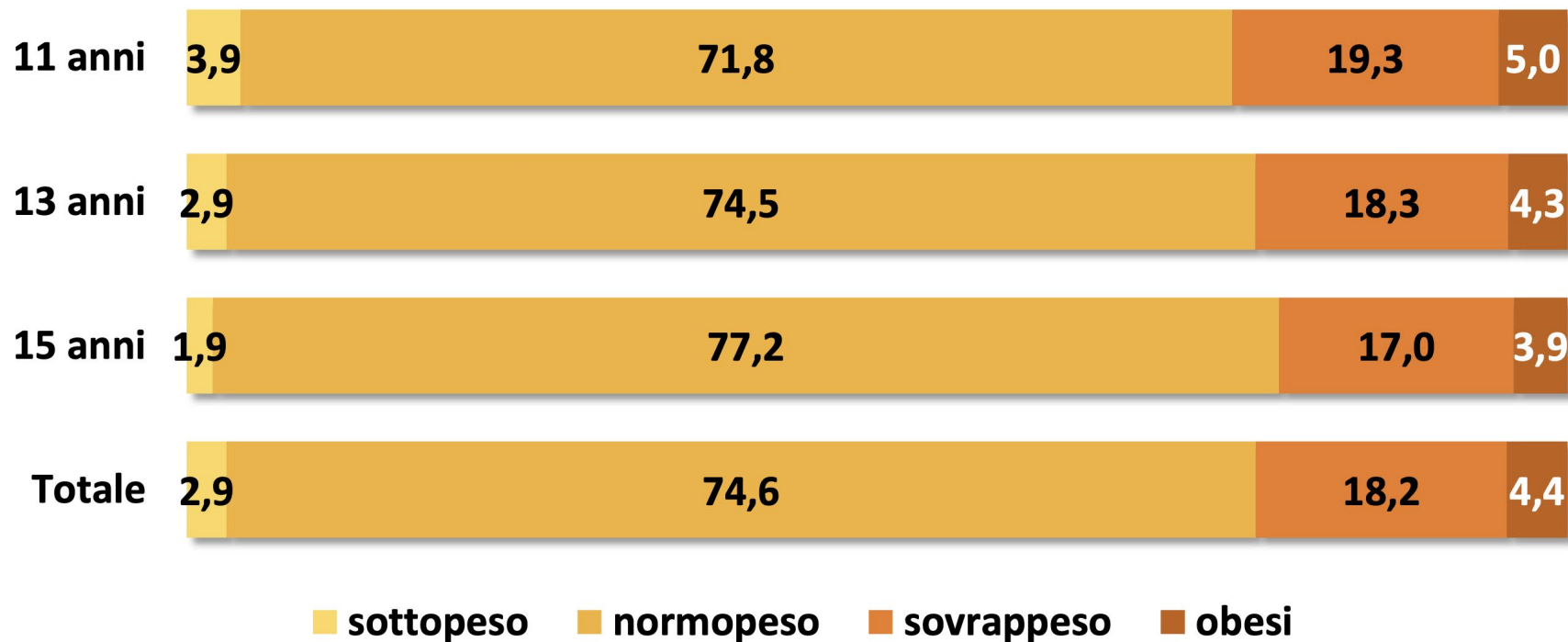


Indicazioni per l'utilizzo dei grafici

EpiCentro

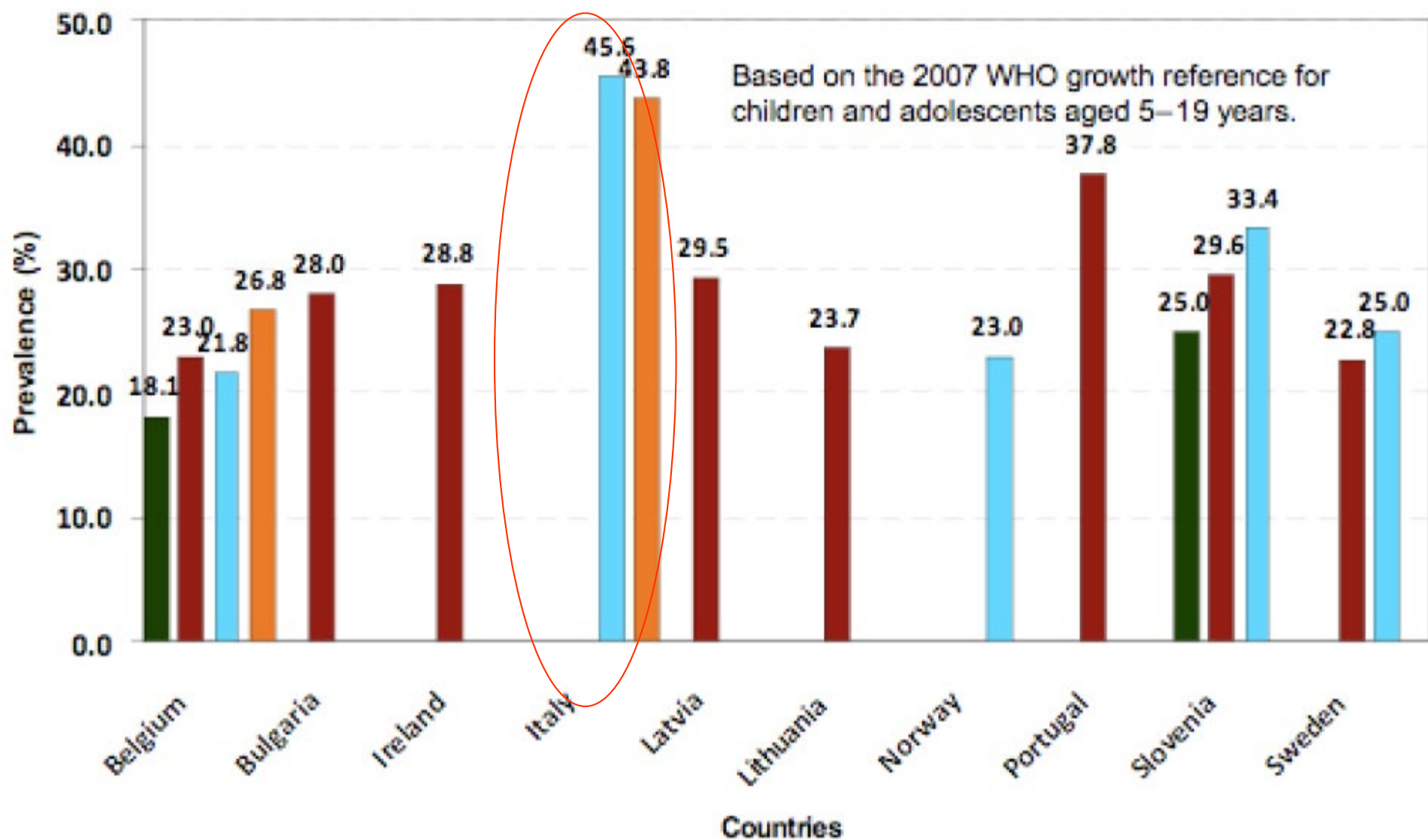
EpiCentro

– Stato nutrizionale 2022



Prevalence of overweight (incl. obesity) (%)

■ 6-year-olds ■ 7-year-olds ■ 8-year-olds ■ 9-year-olds



Prevalence and Predictive Clinical Characteristics of Metabolically Healthy Obesity in Obese Children and Adolescents

Ismail Dundar¹, Aysehan Akinci¹

1. Pediatric Endocrinology Department, Inonu University, Faculty of Medicine, Malatya, TUR

Corresponding author: Ismail Dundar, ismail.dundar@inonu.edu.tr

Review began 03/02/2023
Review ended 03/06/2023
Published 03/09/2023

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Children who met all the following criteria were classified as MHO, provided BMI-SDS >+2 SD (using the WHO growth charts)

1. HDL	>40 mg/dL (>1.03 mmol/L)
2. Triglycerides	≤150 mg/dL (≤1.7 mmol/L)
3. Blood pressure (systolic and diastolic)	≤90 th percentile
4. A measure of glycemia	Fasting plasma glucose ≤100 mg/dL (≤5.6 mmol/L)

TABLE 1: Consensus-based definition of MHO in children (8).

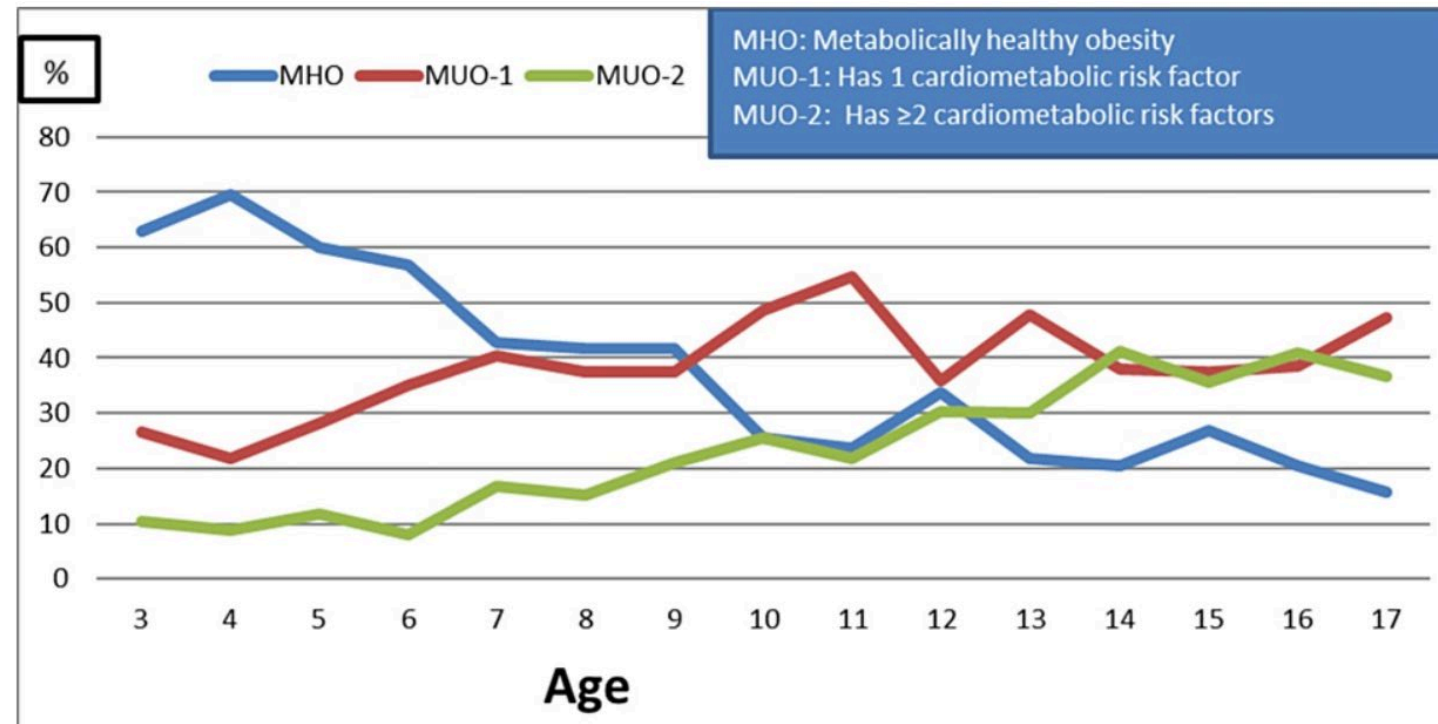
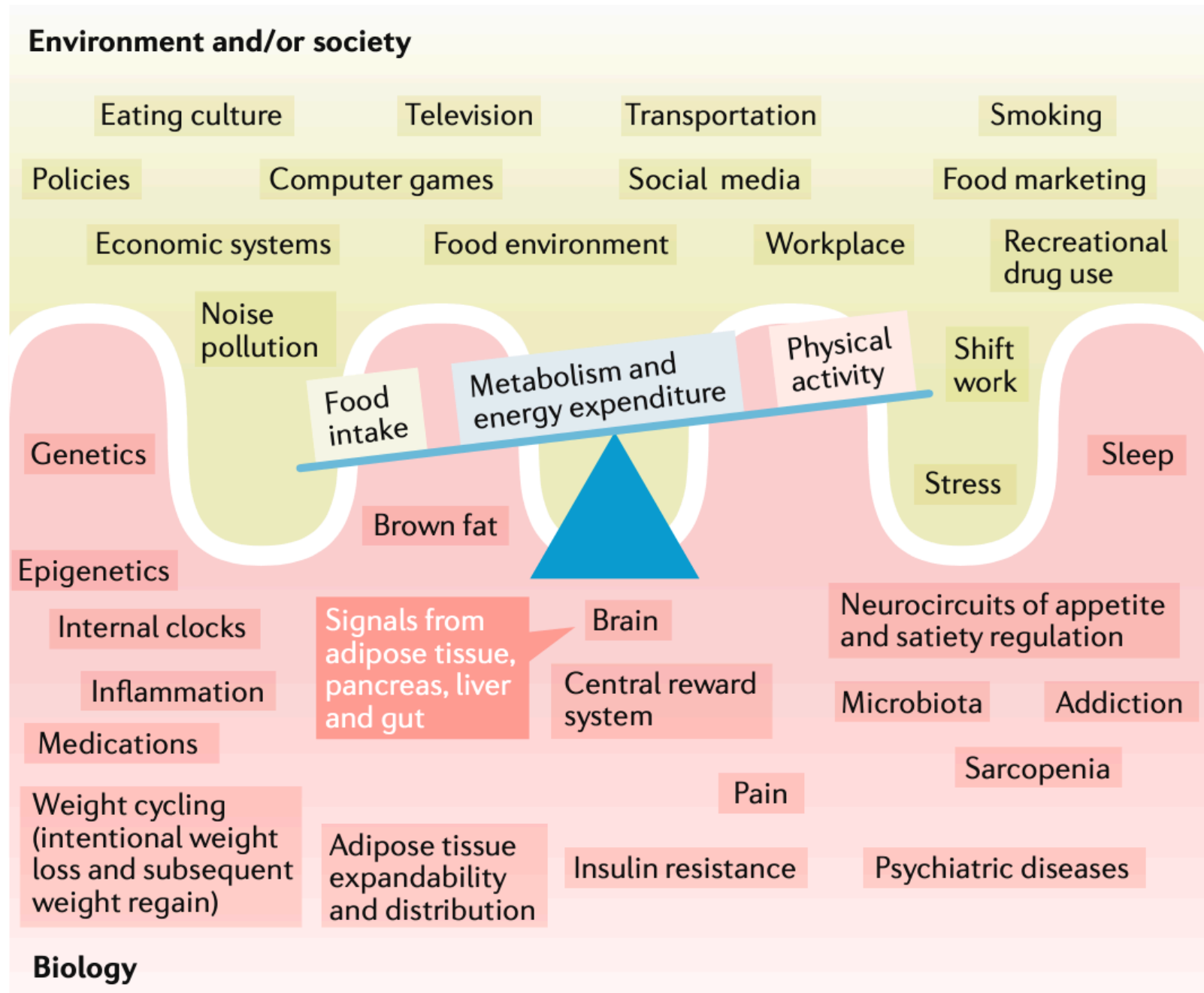


FIGURE 1: Percentage change of MHO, MUO-1, and MUO-2 according to patient age

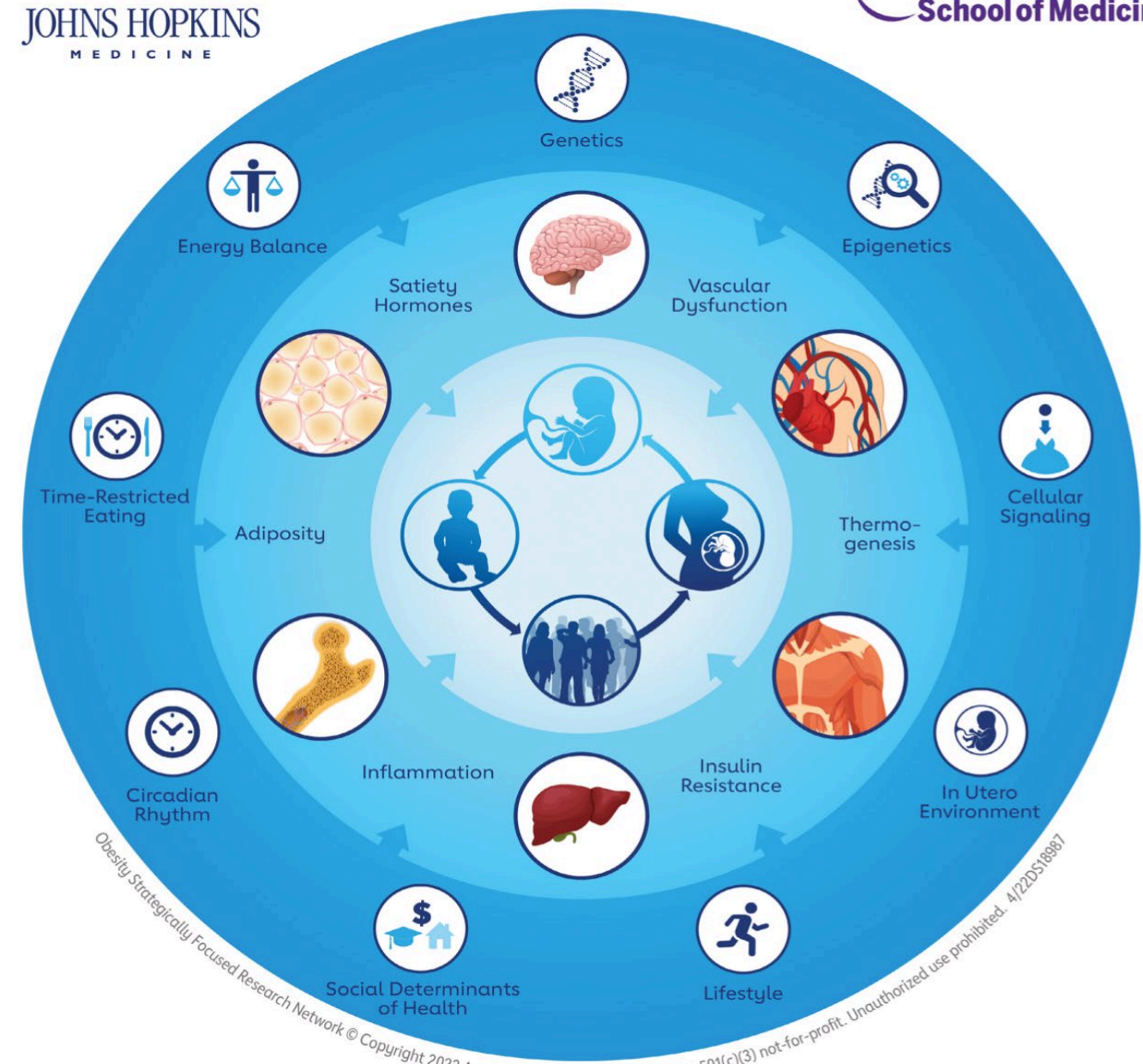
Obesity: global burden and pathogenesis

Matthias Blüher



Obesity and Overweight: Probing Causes, Consequences, and Novel Therapeutic Approaches Through the American Heart Association's Strategically Focused Research Network

Jeanne M. Clark MD, MPH; W. Timothy Garvey, MD; Kevin D. Niswender, MD, PhD; Ann Marie Schmidt MD; Rexford S. Ahima, MD, PhD; Jose O. Aleman MD, PhD; Ashley N. Battarbee MD; Joshua Beckman MD, MSc; Wendy L. Bennett MD, MPH; Nancy J. Brown MD; Paula Chandler-Laney PhD; Nancy Cox PhD; Ira J. Goldberg MD; Kirk M. Habegger, PhD; Lorie M. Harper MD; Alyssa H. Hasty, PhD; Bertha A. Hidalgo, PhD; Sangwon F. Kim, PhD; Julie L. Locher, PhD; James M. Luther MD, MSCI; Nisa M. Maruthur, MD, MHS; Edgar R. Miller MD, PhD; Mary Ann Sevick ScD; Quinn Wells MD, PharmD, MSCI



J Am Heart Assoc. 2023;12:e027693. I

Obesity Strategically Focused Research Network © Copyright 2022 American Heart Association, Inc., a 501(c)(3) not-for-profit. Unauthorized use prohibited. 4/22/25/18887

Long-Term Persistence of Hormonal Adaptations to Weight Loss

Priya Sumithran, M.B., B.S., Luke A. Prendergast, Ph.D., Elizabeth Delbridge, Ph.D., Katrina Purcell, B.Sc., Arthur Shulkes, Sc.D., Adamandia Kriketos, Ph.D., and Joseph Proietto, M.B., B.S., Ph.D.

N Engl J Med 2011;365:1597-604.

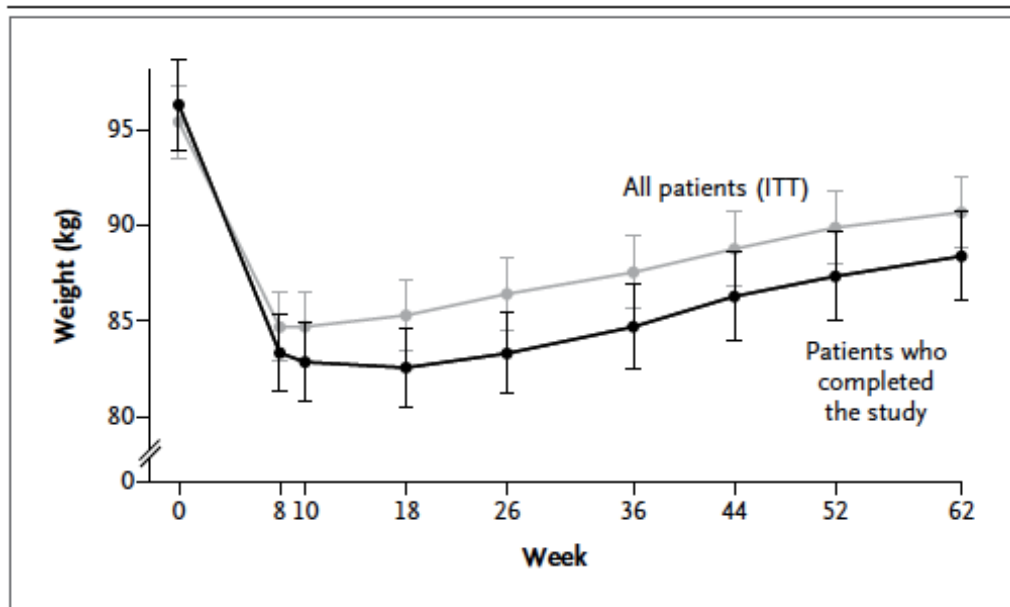


Figure 1. Mean (\pm SE) Changes in Weight from Baseline to Week 62.

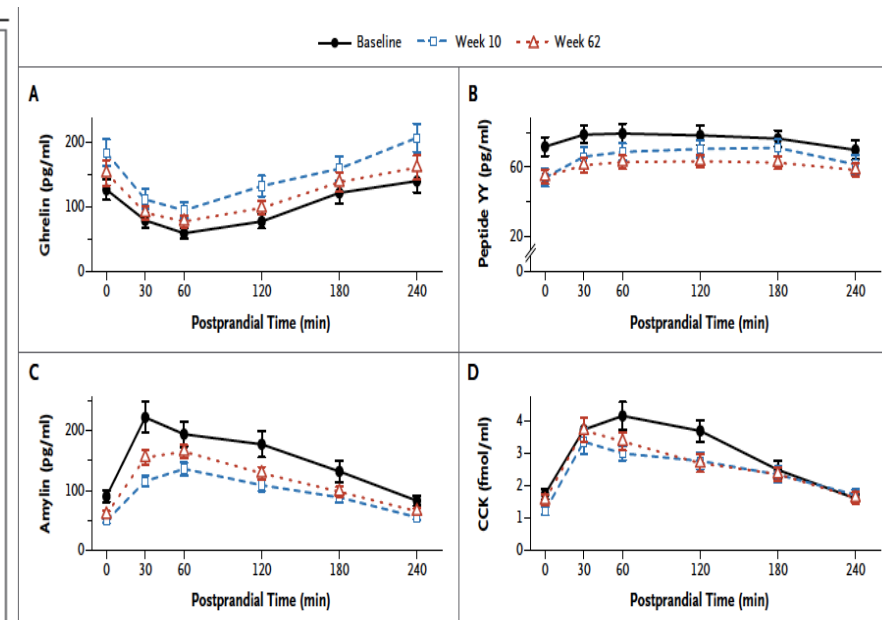
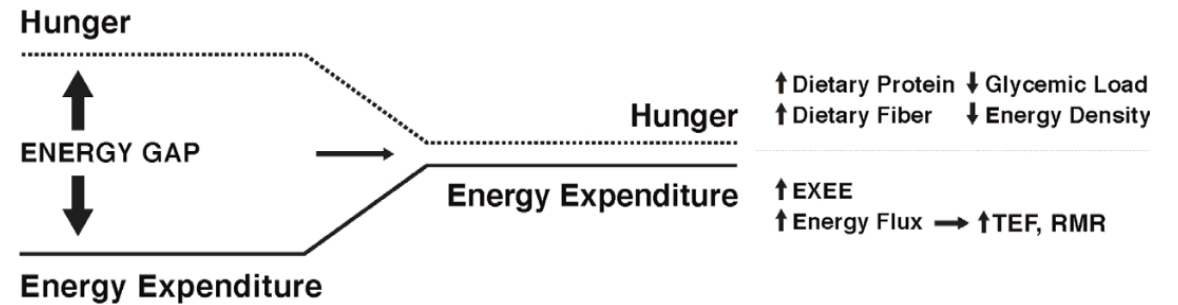
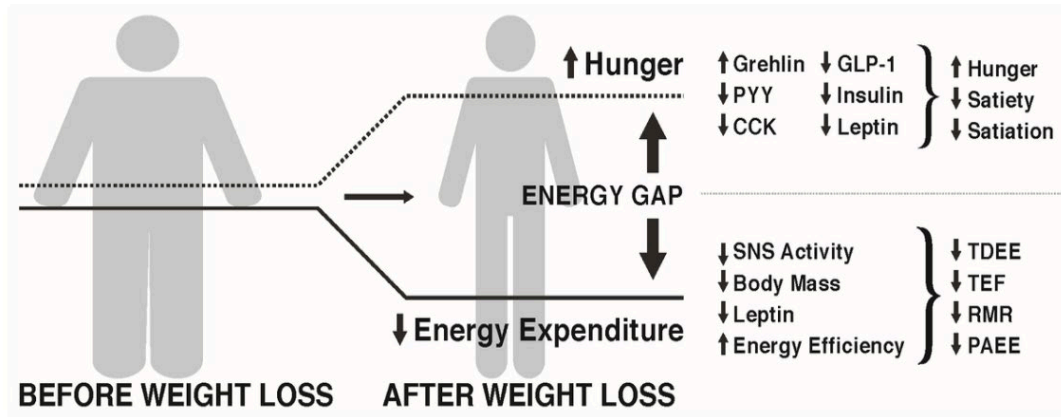


Figure 2. Mean (\pm SE) Fasting and Postprandial Levels of Ghrelin, Peptide YY, Amylin, and Cholecystokinin (CCK) at Baseline, 10 Weeks, and 62 Weeks.

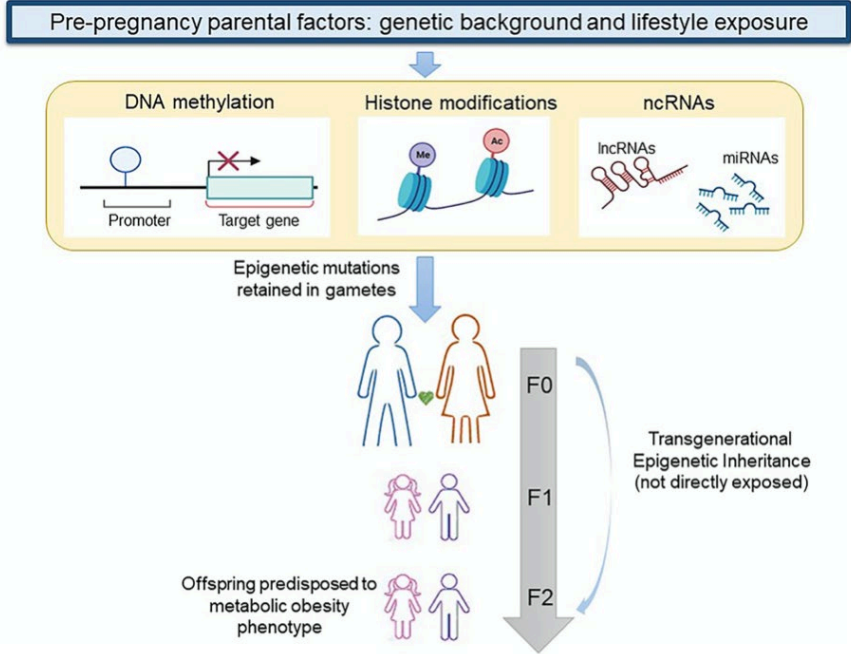
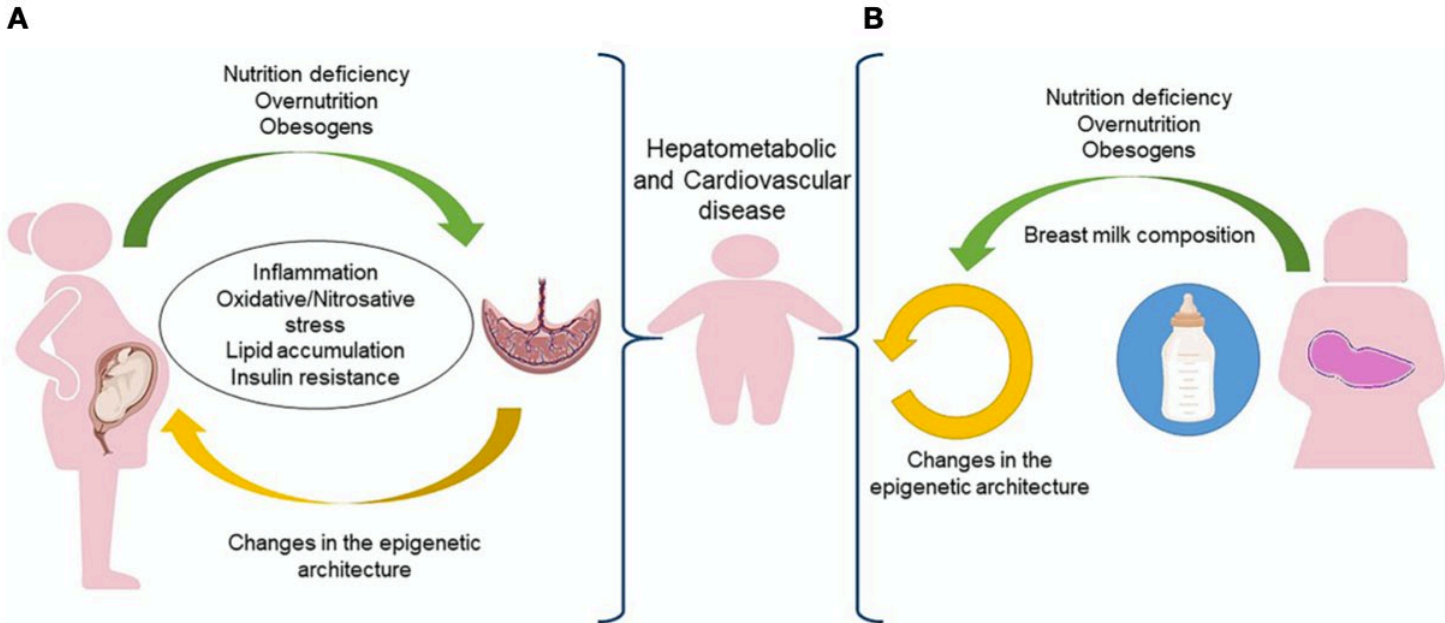
Attenuating the Biologic Drive for Weight Regain Following Weight Loss: Must What Goes Down Always Go Back Up?

Christopher L. Melby ^{1,*}, Hunter L. Paris ², Rebecca M. Foright ³ and James Peth ¹



Genetics, epigenetics and transgenerational transmission of obesity in children

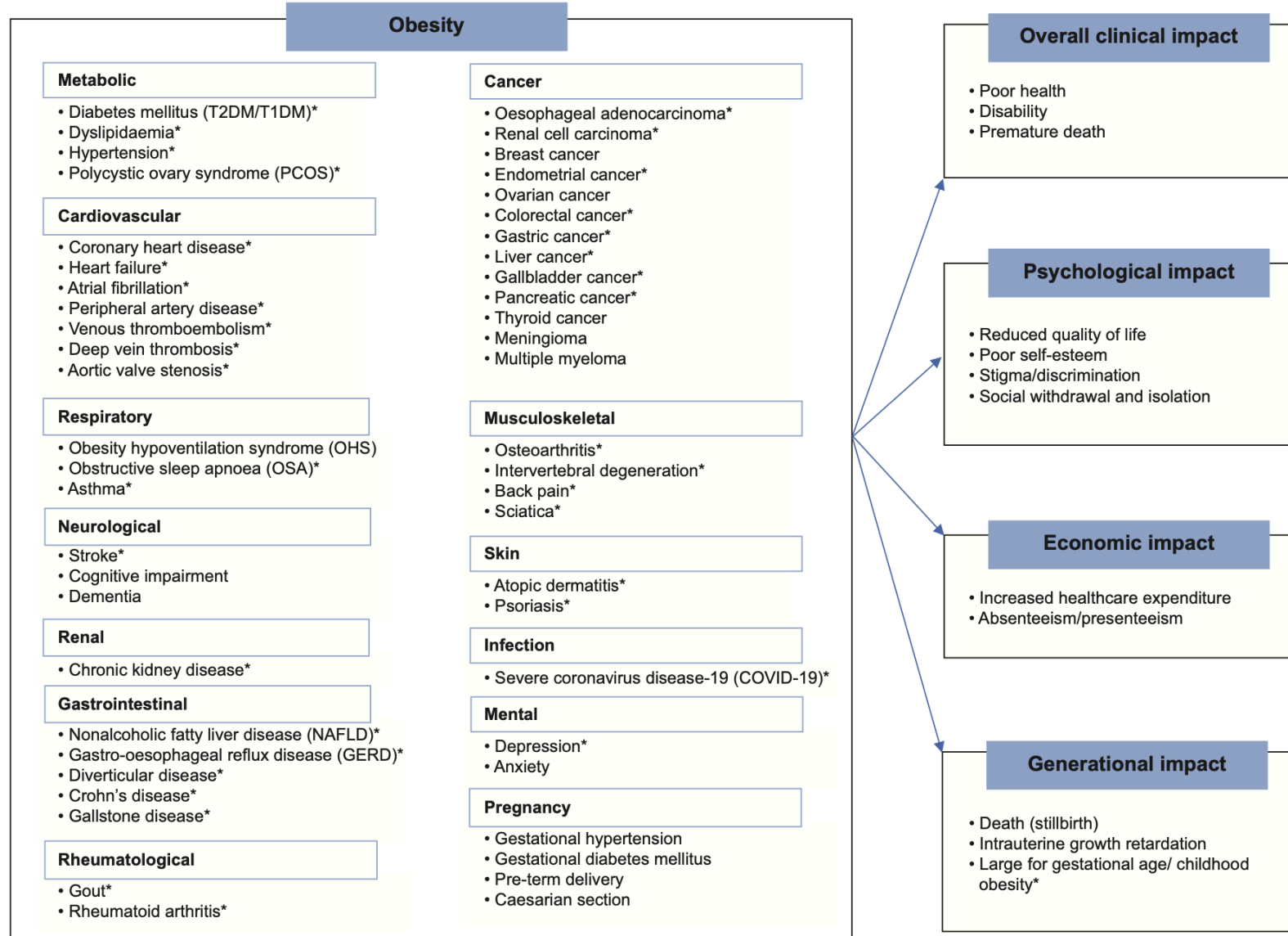
Nadia Panera^{1†}, Claudia Mandato^{2*†}, Annalisa Crudele¹, Sara Bertrando³, Pietro Vajro² and Anna Alisi^{1*}



The impact of obesity: a narrative review

Benjamin Chih Chiang Lam^{1,2}, MMed (Fam Med), MSc (Weight Management), Amanda Yuan Ling Lim^{3,4}, MMed (Int Med), MRCP, Soo Ling Chan⁵, MMed (Int Med), MRCP, Mabel Po Shan Yum⁶, M Soc Sc (Applied Psych), M Clin Psych, Natalie Si Ya Koh⁷, MMed (Int Med), MBA, Eric Andrew Finkelstein⁸, MHA, PhD

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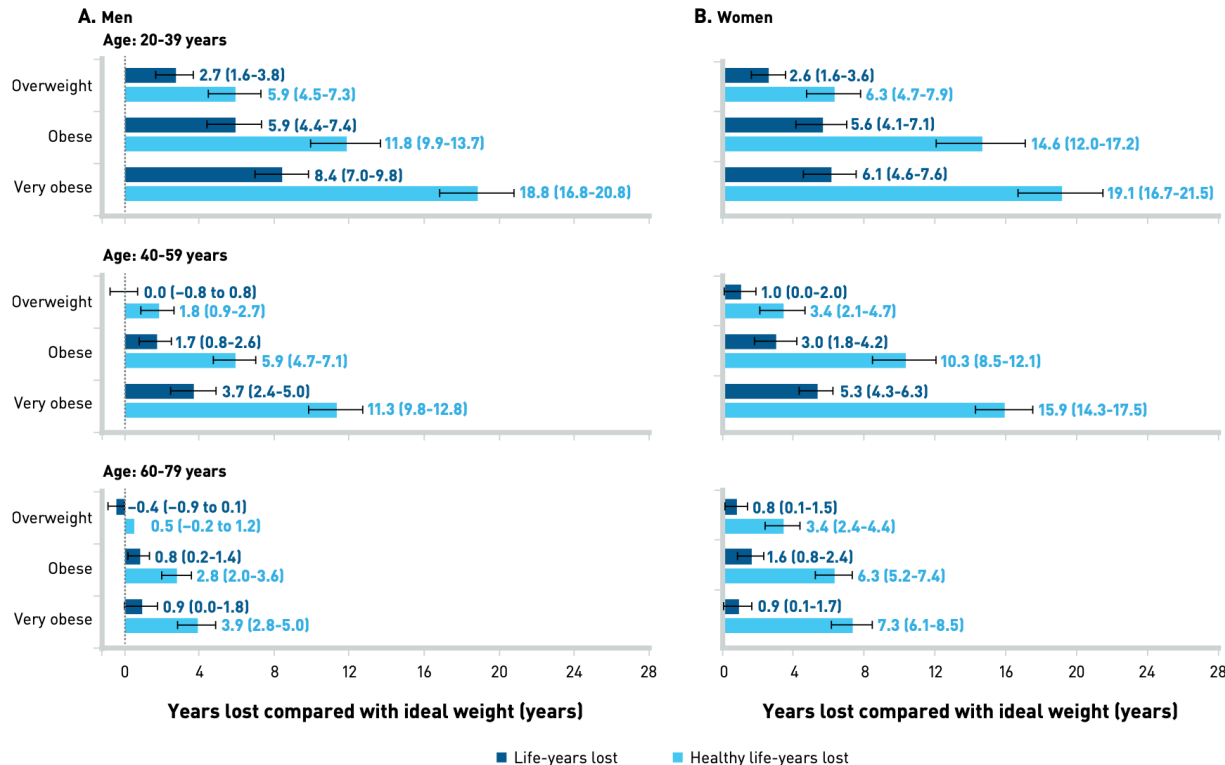
Patient Well-being and the Clinical and Economic Burdens Associated With Obesity in the United States

Danielle C. Massie, PharmD; Anastassia Amaro, MD; and Michael Kaplan, DO

Medical Expenditure Panel Survey (MEPS) 2016

Chronic diseases associated with overweight and obesity caused **\$480.7 billion** in direct medical costs and **\$1.24 trillion** in indirect costs. The result was a **total cost of \$1.72 trillion**, or approximately **9.3%** of the US gross domestic product in 2016.

FIGURE 1. Calculated Years of Life Lost and Healthy Life-years Lost in Men (A) and Women (B) Compared With Those With an Ideal Body Weight^{3,15,a,b}



Se sommiamo i patrimoni netti di Musk, Bezos e Gates Arriviamo a 519 billion



Economic burden of childhood overweight and obesity: A systematic review and meta-analysis

Jiying Ling¹  | Sisi Chen² | Nagwan R. Zahry³ | Tsui-Sui Annie Kao¹

TABLE 2 Direct healthcare costs by country and age categories

Category	Total medical costs (\$)	Nonhospital healthcare costs (\$)	Outpatient visit costs (\$)	Prescribed medication costs (\$)	Hospitalization costs (\$)	Length of hospital stay (days)
Age	<i>p</i> < 0.001	<i>p</i> < 0.001	-	<i>p</i> = 0.049	<i>p</i> < 0.001	<i>p</i> = 0.886
0-5	201.12	74.57	-	13.81	-	-
6-11	39.90	31.20	14.27	12.07	73.72	0.04
12-18	593.00	-	-	91.19	-	-
0-11	-	-	-	-	-2.01	-0.02
6-18	223.18	-	-	124.50	-	-
0-18	56.83	-	-	32.63	2971.69	0.40
Country	<i>p</i> = 0.243	-	-	<i>p</i> = 0.001	<i>p</i> < 0.001	<i>p</i> = 0.678
United States	274.75	-	-	132.82	2848.25	0.36
Europe	132.55	-	-	21.44	-	-
Australia	201.31	56.52	-	13.12	-	-
Canada	19.00	-	14.27	-	-	-
Japan	-	-	-	-	-2.01	-0.02

The average adolescent overweight rate in 1971–2000 would result in excess annual direct medical costs of \$177.02 million in 2020 and \$13.62 billion in 2050 and annual indirect costs of lost productivity of \$1.28 billion in 2020 and \$49.02 billion in 2050.

The economic burden of obesity in Italy: a cost-of-illness study

Margherita d’Errico¹ · Milena Pavlova¹ · Federico Spandonaro^{2,3}

Table 2 Prevalence of obesity in Italy stratified by age and BMI classification, adapted from Colao et al. [53]

Prevalence	Normal weight 18.50 ≥ BMI > 25, (%)	Overweight 25 ≥ BMI > 30, (%)	Obese BMI ≥ 30, (%)	Total (%)
18–29 years	62.0*	22.3*	15.8*	100
30–64 years	40.8**	36.4**	22.8**	100
65+ years	32.1	44.2	23.7	100

* $p < 0.0001$ vs 30–64 years and +65 years; ** $p < 0.0001$ vs +65 years

7,2% del PIL
2020!

Table 8 Costs attributable to obesity in billions of EUR in Italy in 2020

Direct healthcare costs		
Bariatric surgery	€0.24	1.8%
Diabetes	€0.65	4.9%
Cardiovascular diseases	€6.66	49.9%
Cancer	€0.33	2.5%
Total direct costs	€7.89	59.2%
Indirect costs		
Absenteeism	€2.62	19.6%
Presenteeism	€2.83	21.2%
Total indirect costs	€5.45	40.8%
Total	€13.34	100.0%

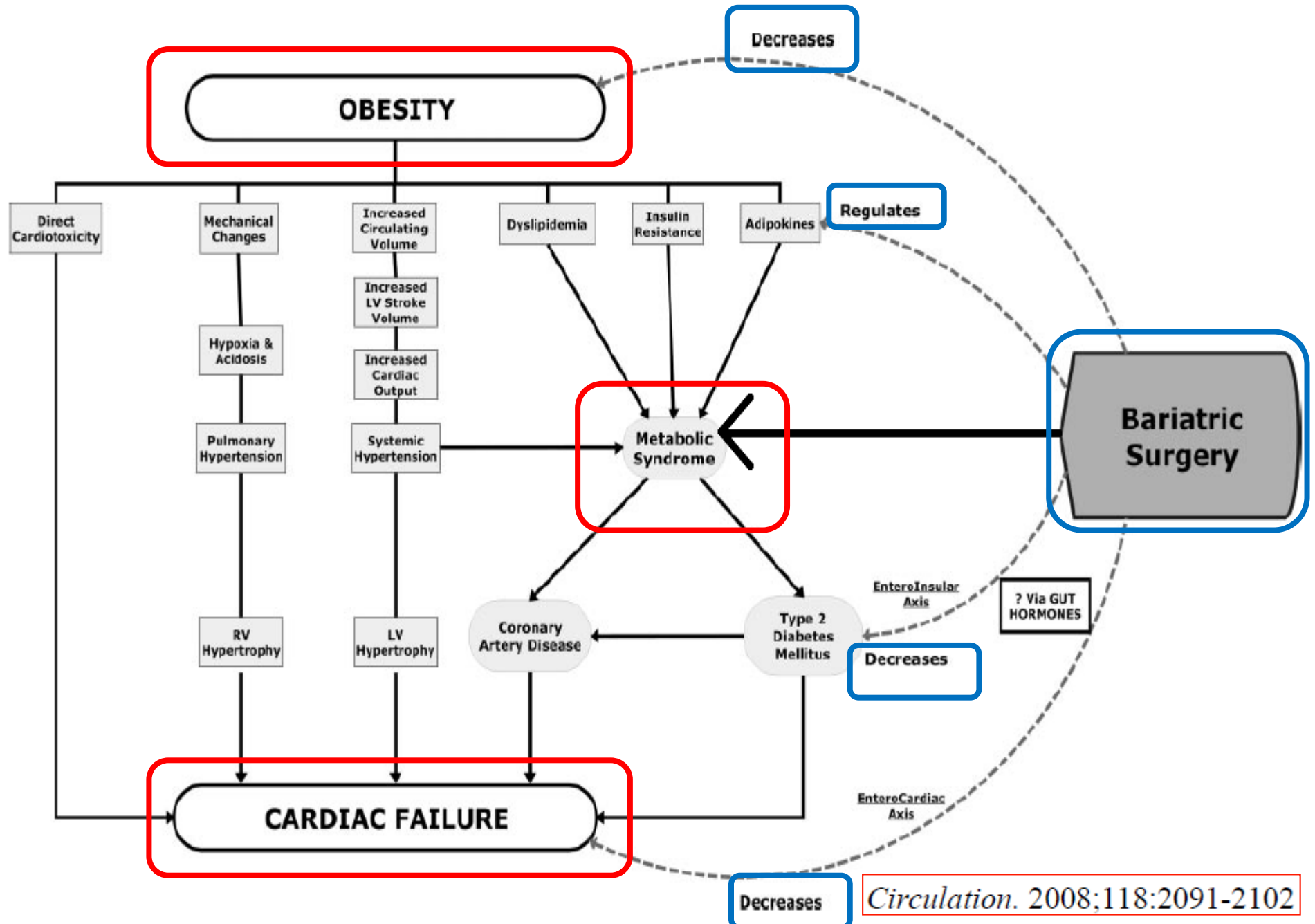
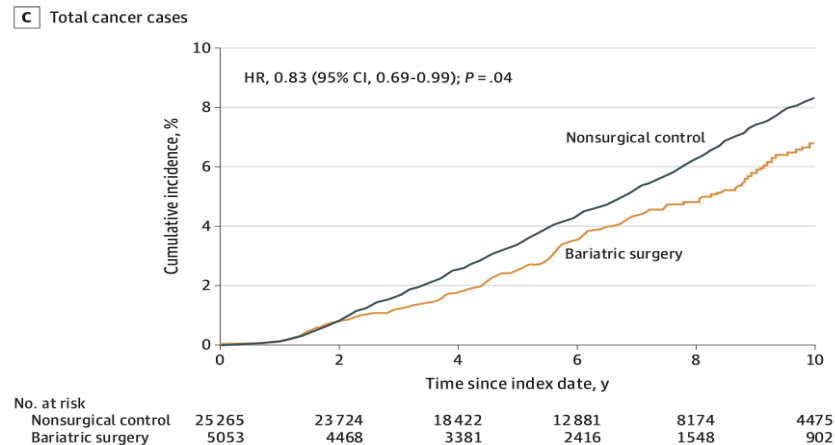
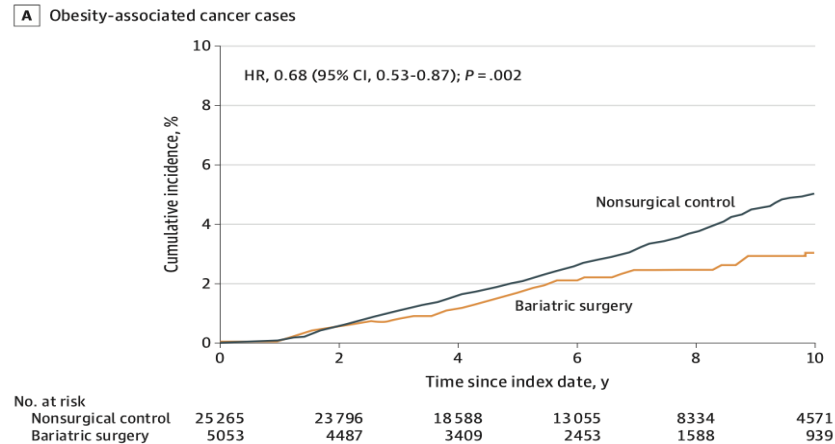


Figure 1. Obesity, cardiac failure, and the beneficial role of bariatric surgery. RV indicates right ventricular; LV, left ventricular.

Association of Bariatric Surgery With Cancer Risk and Mortality in Adults With Obesity

Ali Aminian, MD; Rickesha Wilson, MD; Abbas Al-Kurd, MD; Chao Tu, MS; Alex Milinovich, BA; Matthew Kroh, MD; Raul J. Rosenthal, MD; Stacy A. Brethauer, MD; Philip R. Schauer, MD; Michael W. Kattan, PhD; Justin C. Brown, PhD; Nathan A. Berger, MD; Jame Abraham, MD; Steven E. Nissen, MD

Figure 2. 10-Year Cumulative Incidence Estimates (Kaplan-Meier) for the Primary and Secondary End Points



30318 pz

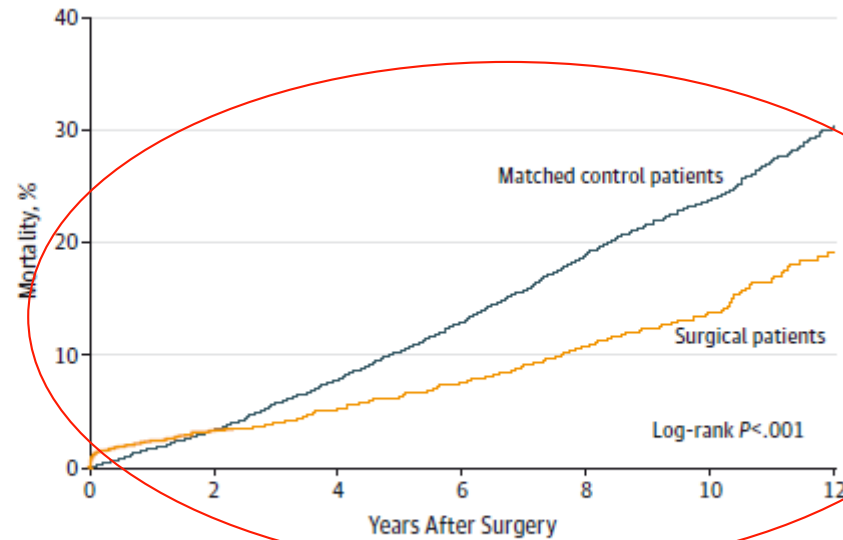
Riduzione dell'incidenza neoplasie a 10 anni del 30% !!

Association Between Bariatric Surgery and Long-term Survival

David E. Arterburn, MD, MPH; Maren K. Olsen, PhD; Valerie A. Smith, MS; Edward H. Livingston, MD, MS; Lynn Van Scoyoc; William S. Yancy Jr, MD, MHSc; George Eid, MD; Hollis Weidenbacher, PhD; Matthew L. Maciejewski, PhD

JAMA. 2015;313(1):62-70. doi:10.1001/jama.2014.16968

FOLLOW
UP A 12
ANNI!



No. at risk	0	2	4	6	8	10	12
Matched control patients	7462	7114	5306	3878	2641	1407	472
Surgical patients	2500	2416	1868	1412	1004	552	185

Tutti gli effetti della Chirurgia Bariatrica si traducono dunque in un allungamento della vita media

Clinical Indications, Utilization, and Funding of Bariatric Surgery in Europe

Oleg Borisenko • Zeynep Colpan • Bruno Dillemans •
Peter Funch-Jensen • Jan Hedenbro • Ahmed R. Ahmed

OBES SURG (2015) 25:1408–1416

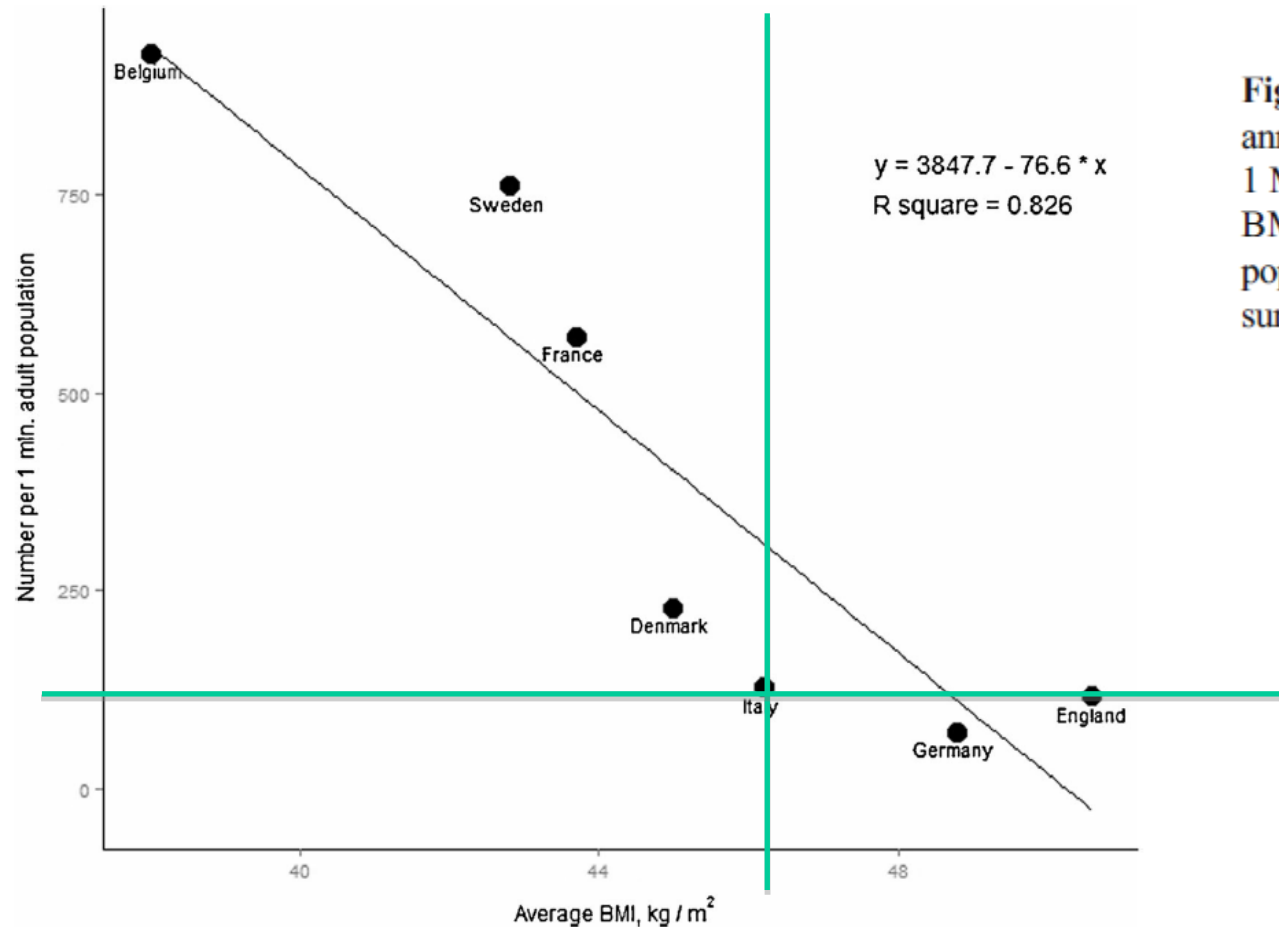


Fig. 1 Linear regression for the annual number of surgeries per 1 M population and the average BMI level of the patient population who underwent surgery

‘It makes you not want to eat’: Perceptions of anti-obesity public health campaigns in individuals diagnosed with an eating disorder

Claire Bristow¹ | Janette Simmonds² | Kelly-Ann Allen² | Louise McLean²

Domain	Themes
Effect on present or past self	Confirmation and justification of the eating disorder Campaigns as potential ‘triggers’ Reinforcing fears of food and weight gain
Effect on others	Potential to impact vulnerable populations Stigmatisation of persons in larger bodies
Campaign attributes	Recognition of necessity Negative associations Recommendations for improvement

Developing healthy eating promotion mass media campaigns: A qualitative study

Carolina Capitão^{1,2*†}, Raquel Martins^{1,2†},
Rodrigo Feteira-Santos^{1,2,3}, Ana Virgolino^{1,2}, Pedro Graça^{4,5,6,7},
Maria João Gregório^{4,5,6,7} and Osvaldo Santos^{1,2,8}

Main theme	Supporting verbatim
Informative campaigns	“If we are thinking about informative campaigns... mass media, right?... if this is where we are focusing on... (...) these actions should be combined with other punctual interventions (...) of more proximity...” [Professionals FG, E; Line/s 252 - 256]
Health/nutritional issues to address	“Making things maybe less... , that people like less... , into something pleasant to the palate and the sight, (...) And to associate with good experiences” [Professionals FG, G; Line/s 1119 - 1122]
Campaign formulation	“What the brand has to say, or the project has to say must be relevant, it has to be exciting, it has to be clear, true, and original. (...) The quality of the insight is measured by these five elements.” [FG professionals, C; Line/s 1134 - 1161] “There’s another level that is relevance by identification, which is where the influencers come in... It is the relevance that is like: «Eh, if Cristiano Ronaldo wears, I also want to wear». This is relevance by identification. And the other is relevance by improvement. That is «What you are saying to me will improve my life». What you told me today, I will implement it right away [?] at breakfast...” [FG professionals, C; Line/s 1136-1140] “But this is important (...) to simplify the message. This is... I think it is super-important to have an effect. (...) focusing only on one behavior rather than trying to change everything simultaneously.” [Professionals FG, F; Line/s 243 - 247]
Targeted audiences	“Children will be the vehicle for that information, and it focuses on behavioral change that carries the message to families and, in some way, is a source of contagion.” [FG professionals, E; Line/s 115 - 117]
Dissemination channels	“I think that television [to reach less urbanized areas] continues to make a lot of sense.” [Citizens FG3, A; Line/s 842 - 842]
Influencers’ involvement	“People identify with us; people see themselves in our place and that is what makes them follow our work. Of course (...), we take this to promote health and well-being... But that’s it..., that is why people identify with us, people... «I’ve also been in this position where she’s talking... I also do what she does... So, I also want to eat what she eats»” [Influencers FG, C; Line/s 376 - 381]

CONCLUSIONI





S.I.C.O.B.

Bari

SPRING MEETING

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Strategie di integrazione
in Chirurgia Bariatica

Presidente del Congresso
ANTONIO BRAUN

Grazie