

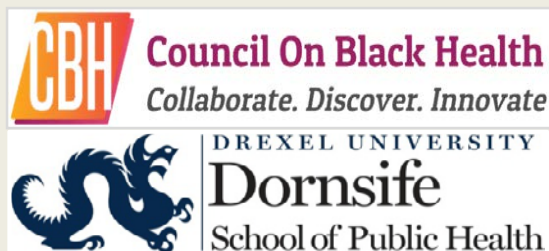
Common Threads in Obesity Risk among Racial/ethnic and Migrant Minority Populations

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Perspective

- The obesity epidemic is a major threat to population health globally.
- Racial/ethnic minority status is associated with above-average obesity risk compared to white majority populations
- Examining patterns of obesity risk in populations of color in different country contexts can lead to new insights and potentially to solutions.

Kumanyika et al, Community Energy Balance, *Preventive Medicine*, 2012

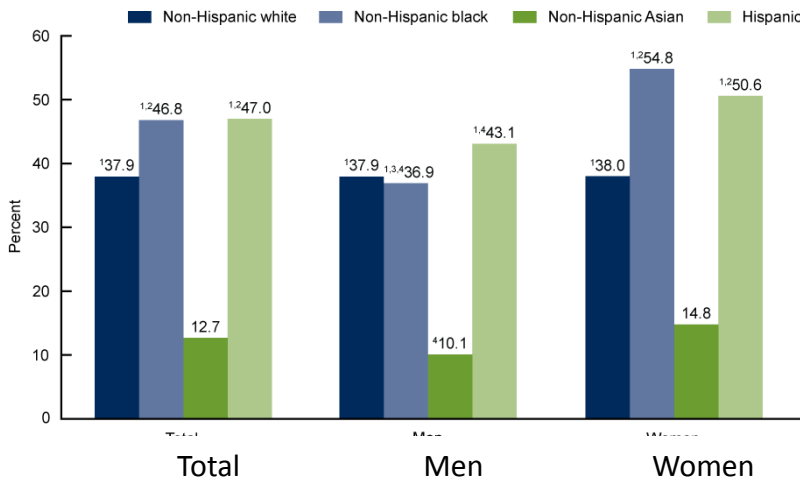
Kumanyika S, Unraveling Common Threads, under review

Causes of population-level obesity

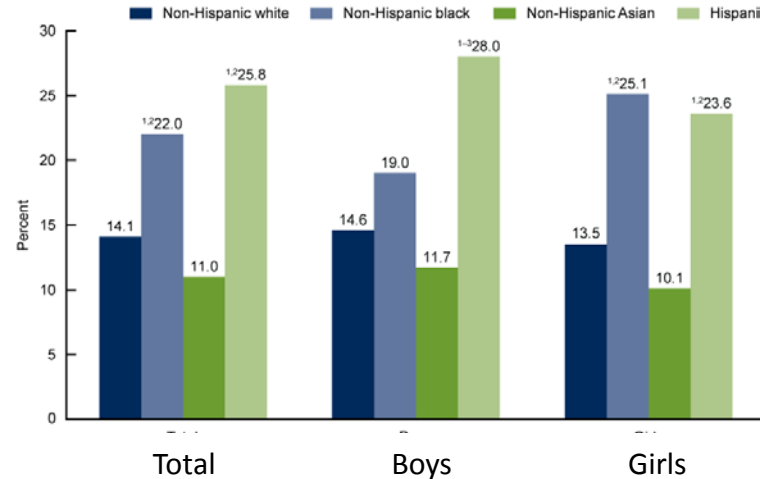
- Population-wide increases in obesity are driven by societal forces (and the policies that govern these forces) that directly or indirectly relate to food systems or physical activity and converge to result in caloric overconsumption and excess weight gain.
- Apparently, these forces operate differently for minority populations of color—the question is why.

Prevalence of Obesity in US Adults and Youth, 2015-2016 (% with BMI \geq 30)

Age-adjusted prevalence of obesity among adults > 20 y



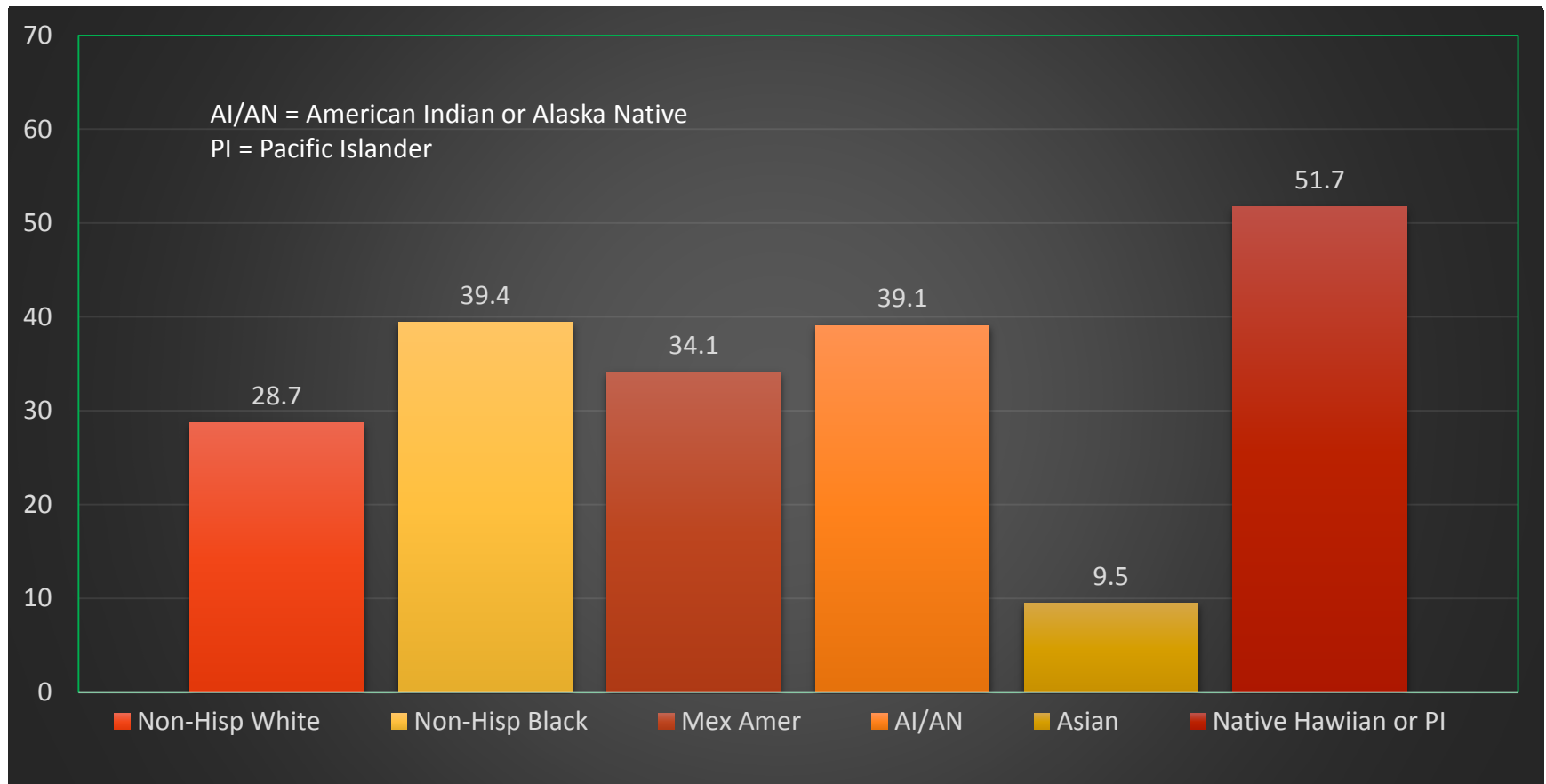
Age-adjusted prevalence of obesity among youth 2-19 y



Non-Hispanic black

Source: Hales CM, Carroll MD, Fryar CD, Ogden CL. NCHS data brief, no 288. Hyattsville, MD: National Center for Health Statistics. 2017. Available at: <https://www.cdc.gov/nchs/products/databriefs/db288.htm>.

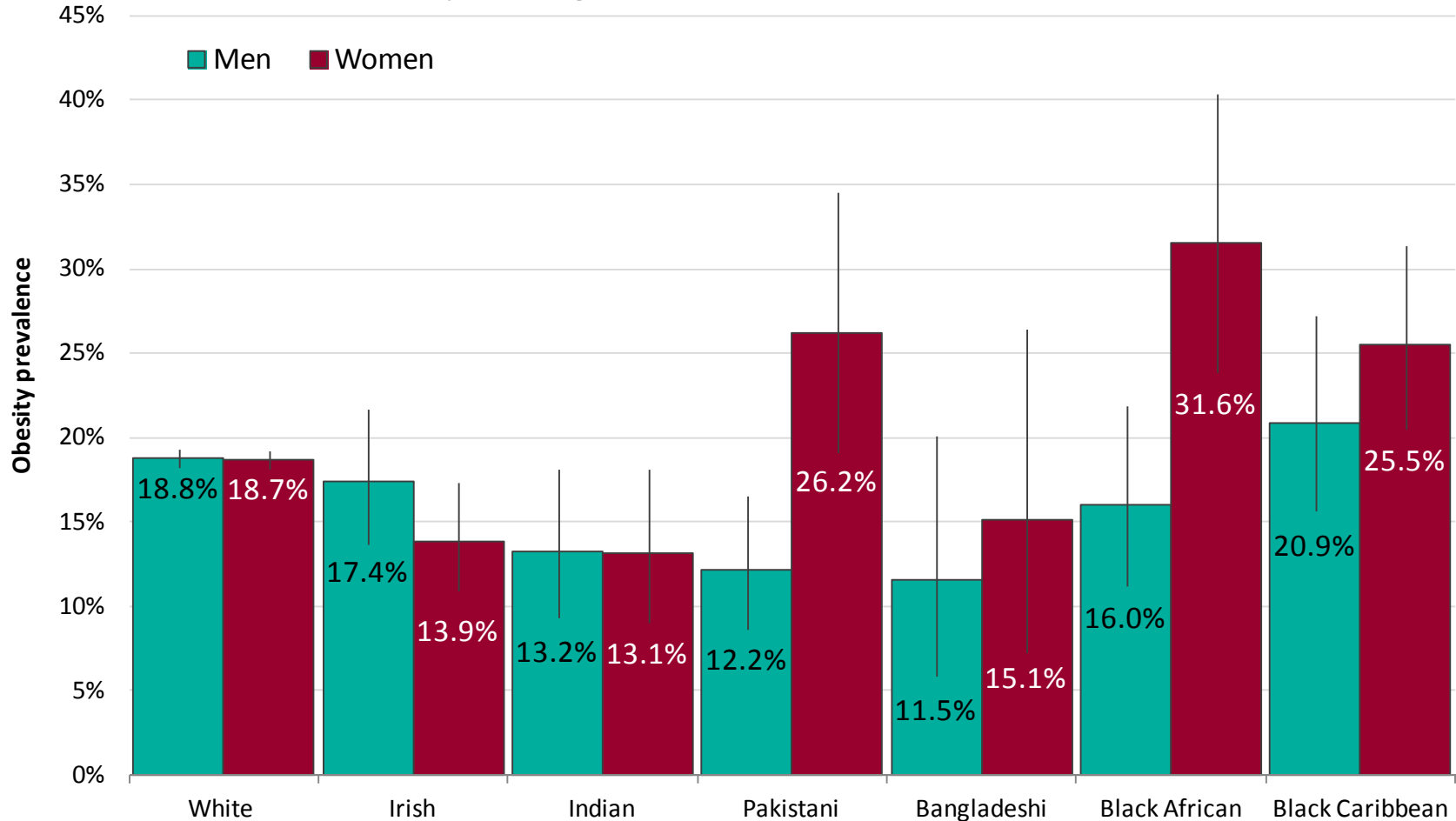
Self-reported obesity prevalence by race/ethnicity, United States, 2016 (% with BMI \geq 30)



Source: U.S. National Health Interview Survey, age-adjusted data for adults ages 18 y and over. U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Summary health Statistics. National Health Interview Survey, 2016. Available at: <https://www.cdc.gov/nchs/nhis/shs/tables.htm>. 2016.

Adult obesity prevalence by ethnic group

Health Survey for England 2006 to 2010



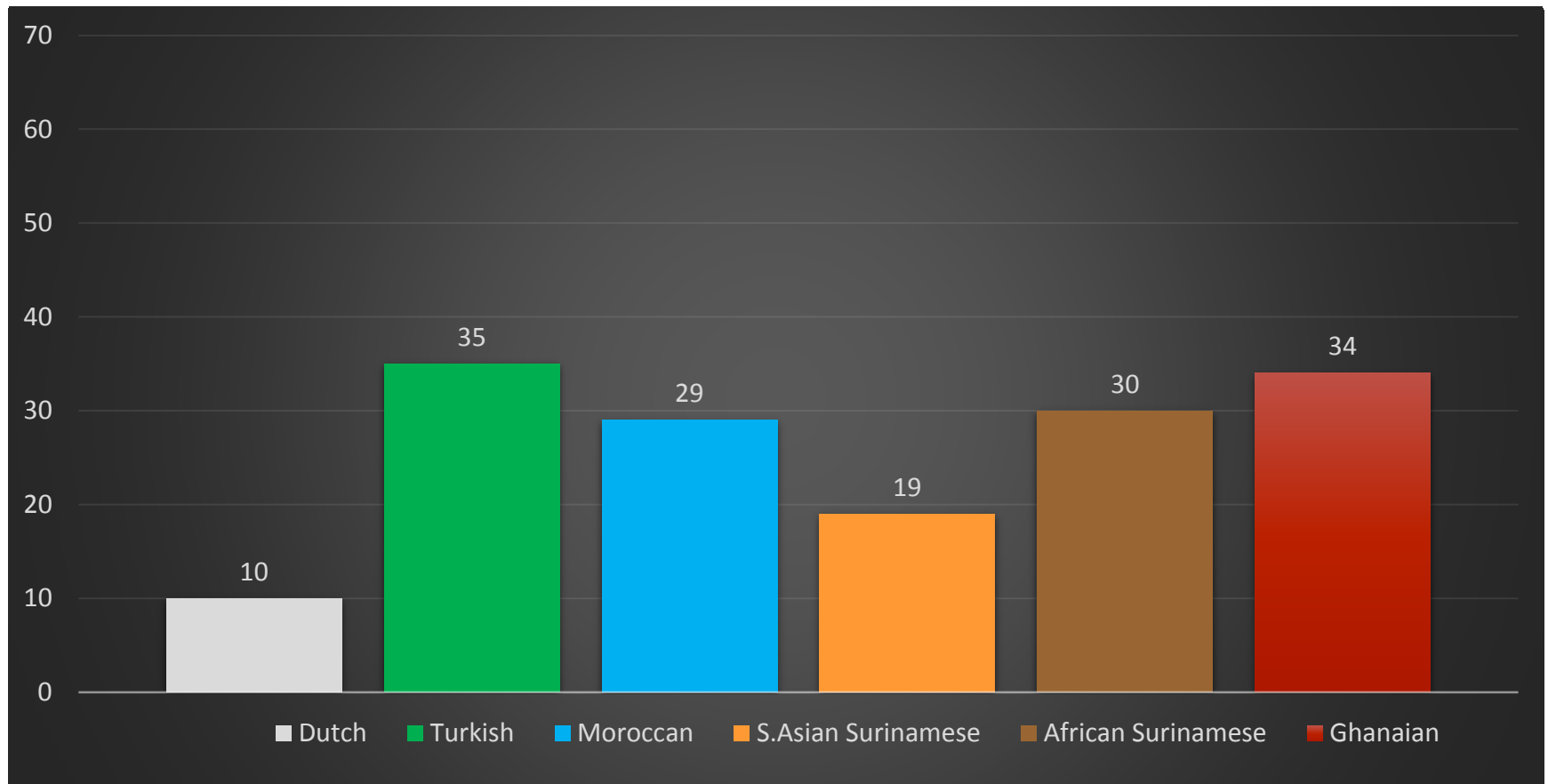
Obesity prevalence is age standardised

The chart shows 95% confidence intervals
Adult (aged 16+) obesity: BMI \geq 30kg/m²

Public Health England. Adult obesity slide set. Available at:

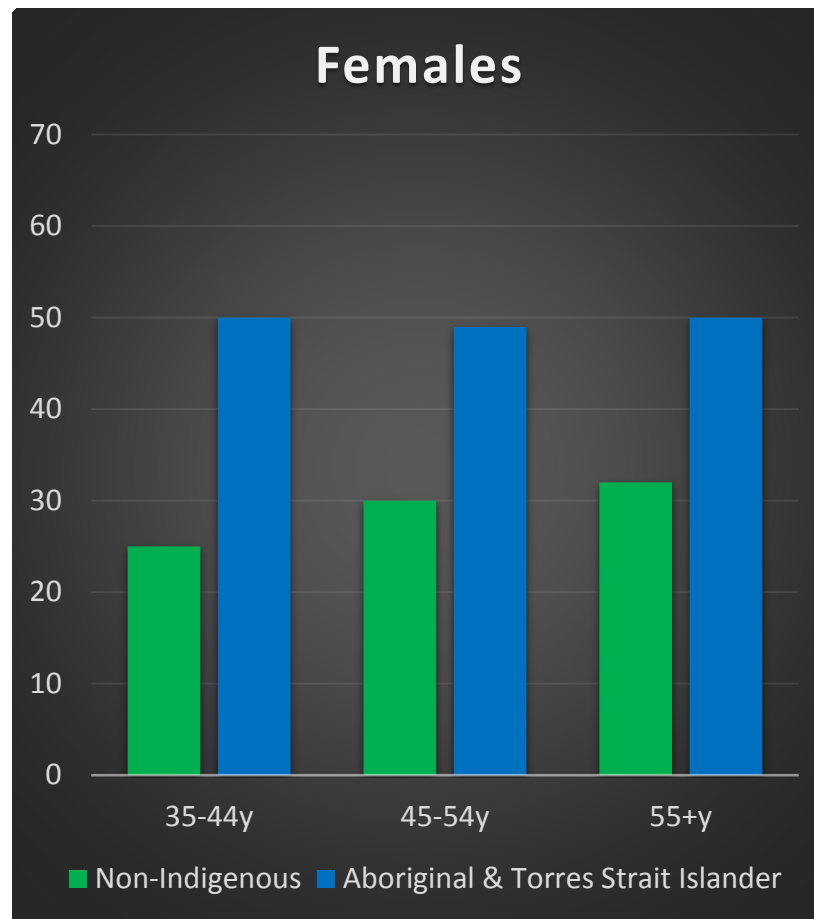
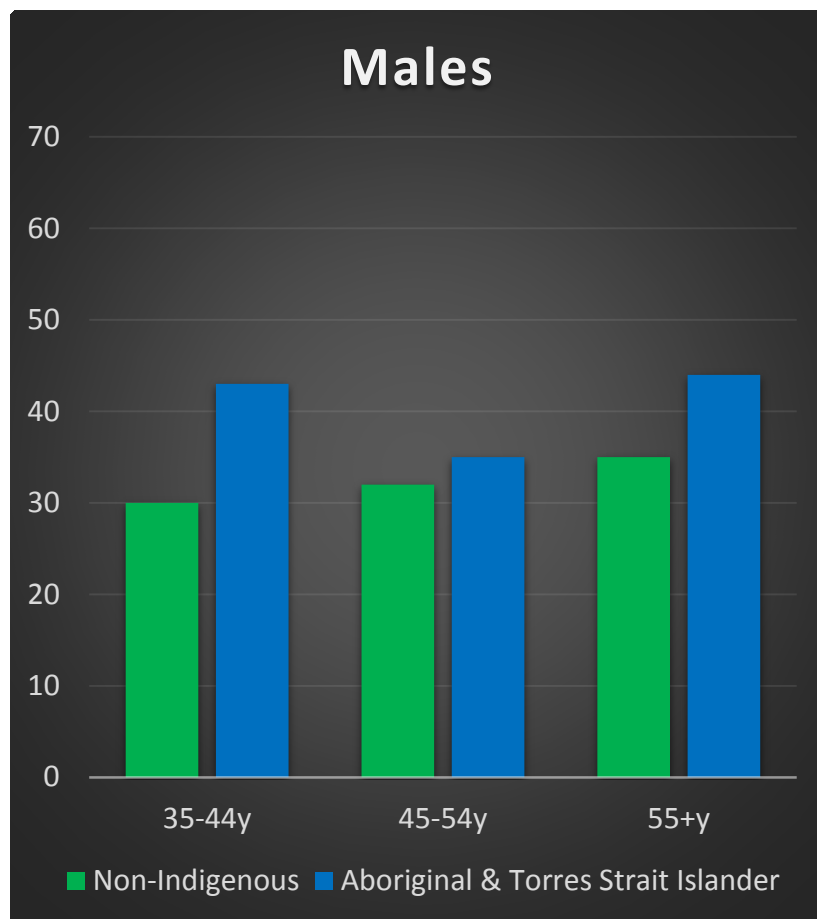
http://webarchive.nationalarchives.gov.uk/20170110165555/https://www.noo.org.uk/slide_sets. August 2016.

Obesity prevalence by ethnicity, Amsterdam, The Netherlands (% with BMI \geq 30)



Source: Schmengler H, Ikram UZ, Snijder MB, Kunst AE, Agyemang C. Association of perceived ethnic discrimination with general and abdominal obesity in ethnic minority groups: the HELIUS study. *Journal of epidemiology and community health*. 2017; 71:453-60.

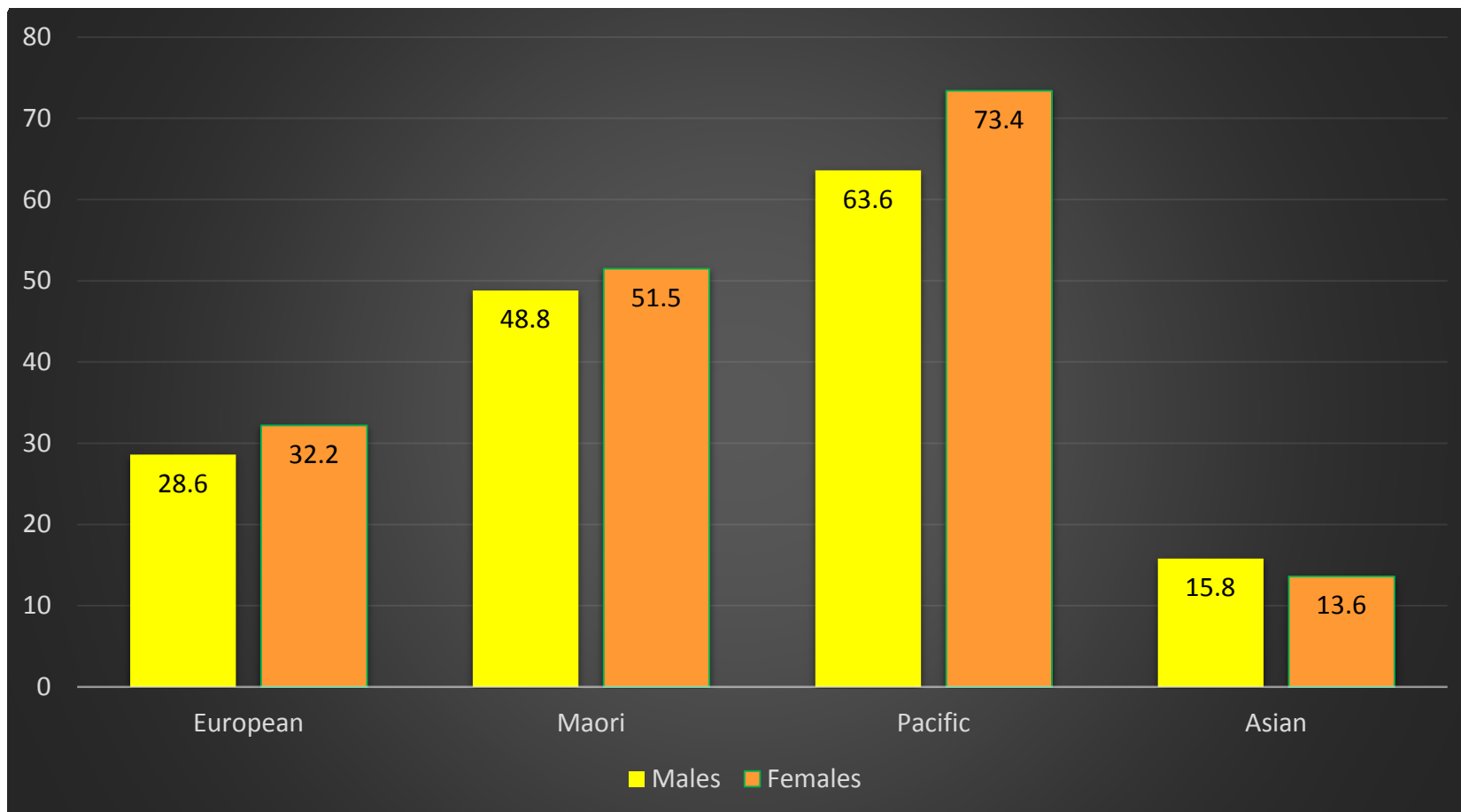
Male and female obesity rates by Indigenous status and age, Australia (BMI \geq 30)



Source(s): 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011-12 Australian Health Survey
Australian Bureau of Statistics. Overweight and Obesity: Available at:

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/A07BD8674C37D838CA257C2F001459FA?opendocument>. November 2013.

Male and female obesity rates by ethnic group, New Zealand (BMI \geq 30)



Source: New Zealand Health Survey, 2016-2017; age-adjusted data for adults ages 15+y. New Zealand Ministry of Health. Tier 1 Statistics 2016/2017. Available at: https://minhealthnz.shinyapps.io/nz-health-survey-2016-17-annual-data-explorer/_w_e5196d0b/_w_6cb88ed7/#!/explore-indicators. 2018.

Findings

- Higher prevalence in minority populations of color relative to reference or host populations, especially in women.
- Longitudinal studies in migrants indicate that initially lower weights yield to excess weight gain over time.
- Cross-national, within-group studies indicate effects of western environments, e.g., compared to home countries.
- Cross-national studies within western environments indicate effects of national contexts.

Explanations

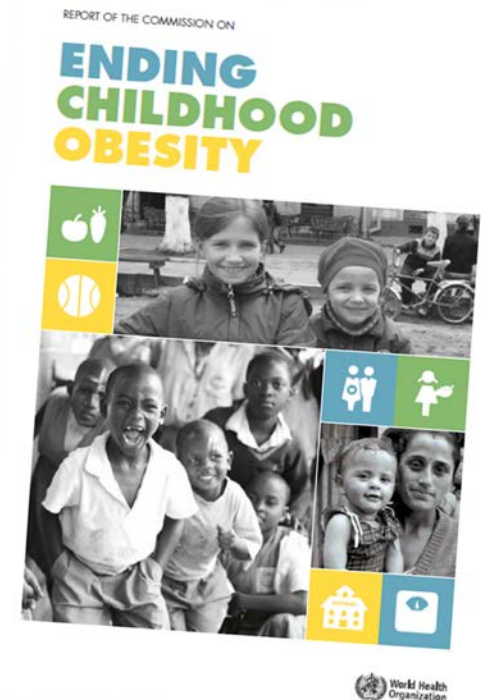
1. What is different about minority populations of color compared to host or reference populations?
2. What is similar in different societies as it relates to minority populations of color?

Collecting data by race or ethnicity

- Implies importance from a societal and policy perspective
- Routine in the US, although categories evolve – “race” is dominant; ethnicity is Hispanic or not
- “Color blindness” in Europe – country of origin and ethnicity identify populations of color; social class framing is preferred
- Subethnicity is important (i.e., heterogeneity) but not well addressed

In high-income countries, the risks of childhood obesity are greatest in lower socioeconomic groups. Although currently the converse is true in most low- and middle income countries, a changing pattern is emerging.

Within countries, certain population subgroups, such as migrant and indigenous children, are at a particularly high risk of becoming obese, due to rapid acculturation and poor access to public health information.



World Health Organization, 2016

Potential Influences on obesity in minority populations of color

Variable	Contexts
Racial/ethnic category (explicit or implicit, i.e., not being white)	<ul style="list-style-type: none">• Cultural food preferences• Neighborhood access (segregation)• Targeted marketing of unhealthy foods• Mobility (freedom of movement)• Historical and ongoing trauma
Socioeconomic status; social position	<ul style="list-style-type: none">• Neighborhood access (poverty)• Food purchasing power• Food insecurity• Activity patterns• Housing• Access to health care
Migration and migration stress	<ul style="list-style-type: none">• Adverse circumstances prior to or during migration• Abrupt exposure to obesogenic environment• Loss of connections with home environment• Downward social mobility

Potential Influences on obesity in minority populations of color

Variable	Contexts
Language/literacy	<ul style="list-style-type: none">• Access to nutrition information• Access to quality education• Better social integration
Cultural assets and protection	<ul style="list-style-type: none">• Preservation of traditional healthy behaviors• Buffering from aggressive promotion of unhealthy foods and beverages• Coping mechanisms, including faith
Structural empowerment and resilience	<ul style="list-style-type: none">• Ability to benefit from new opportunities• Social capital and social support
Stress	<ul style="list-style-type: none">• Eating and physical activity• “Embodiment”• Constant need to cope• Sleep

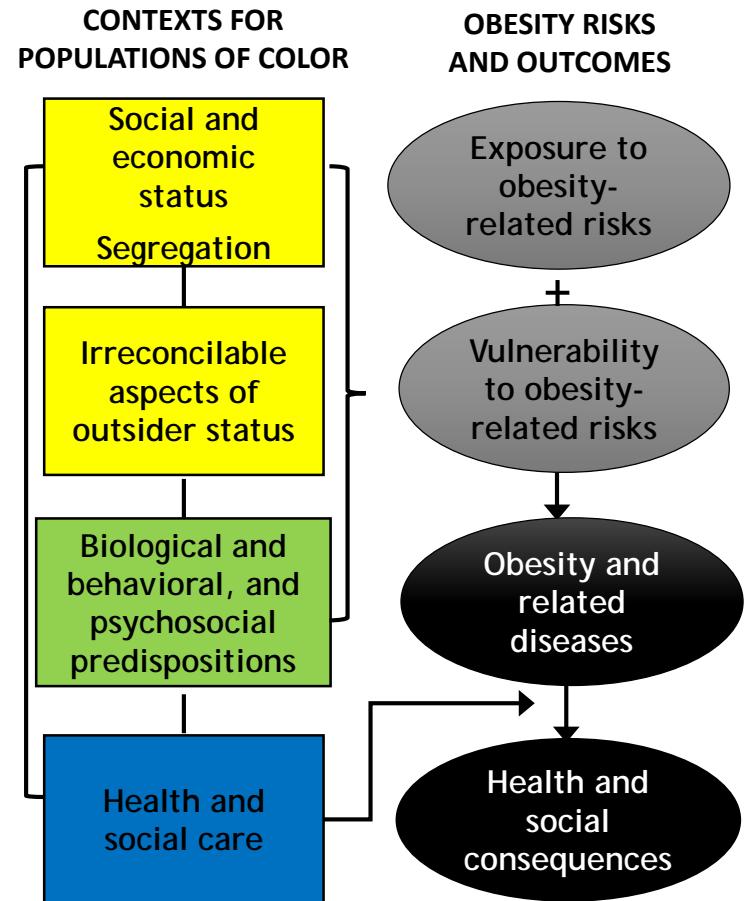
Stress and Health Disparities Report



- Related
- [Health Disparities Office](#)
 - [Stress and Health Disparities resources](#)
 - [Stress in America™](#)
 - [Psychology Topics: Stress](#)
 - [Psychology Topics: Health disparities](#)

Contexts, mechanisms and interventions among racial/ethnic minority and low socioeconomic status populations

Pathways for production of racial/ethnic and migrant inequities in obesity and potential points to intervene

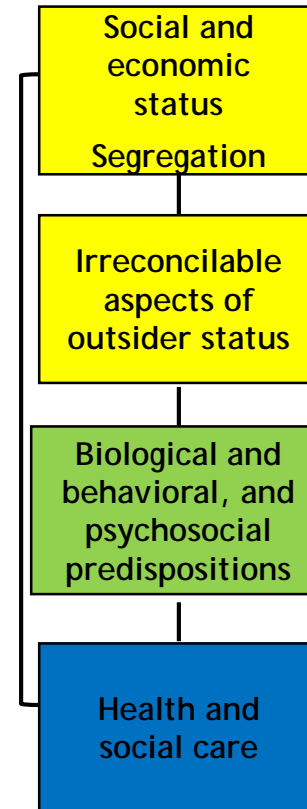


Pathways for production of racial/ethnic and migrant inequities in obesity and potential points to intervene

COUNTRY CONTEXTS

National-level contexts—historical, sociocultural, economic, political, policy, and health, including food systems and patterns of physical activity

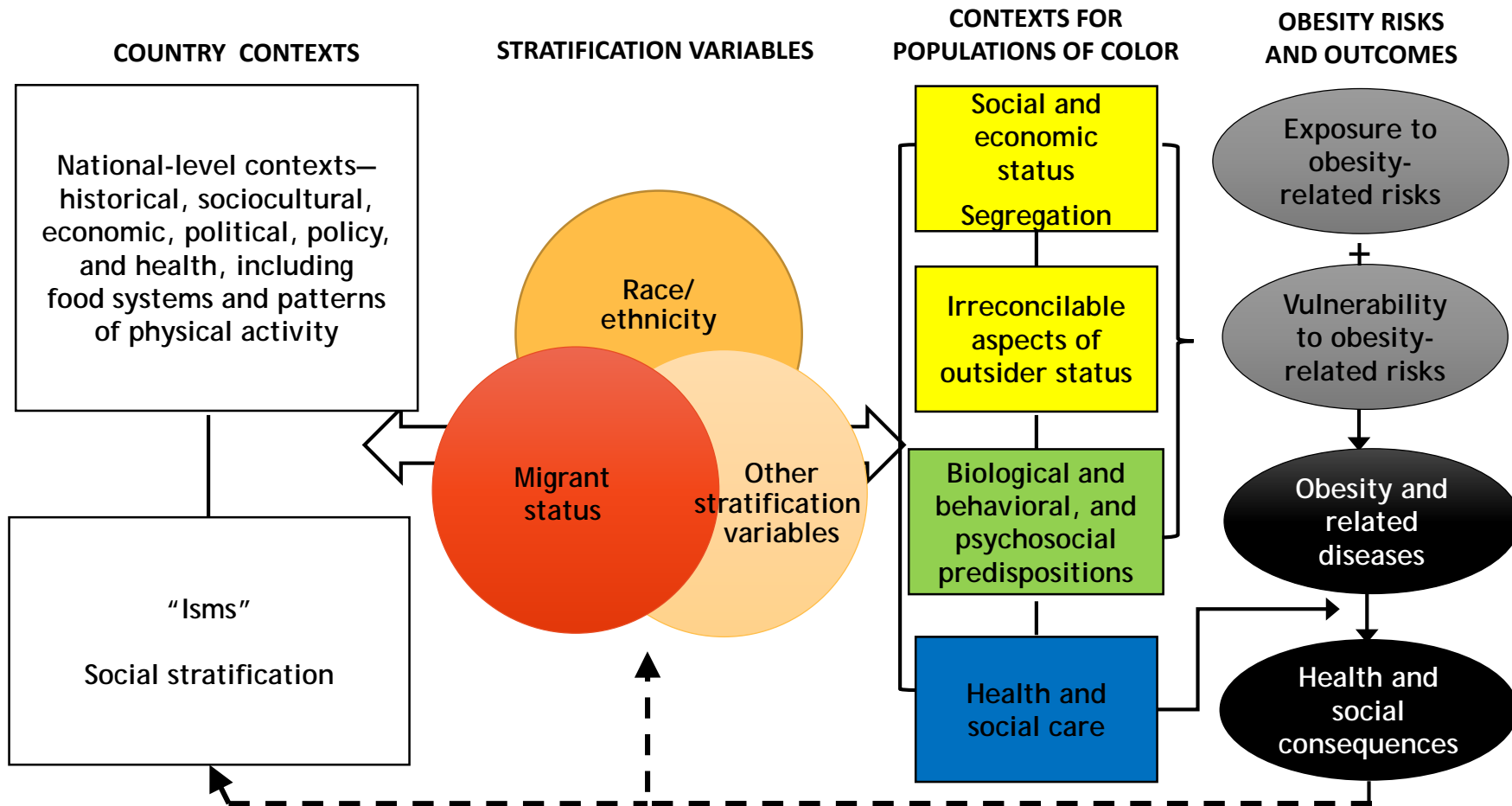
CONTEXTS FOR POPULATIONS OF COLOR



OBESITY RISKS AND OUTCOMES



Pathways for production of racial/ethnic and migrant inequities in obesity and potential points to intervene



Conclusions

- Obesity is more prevalent in ethnic minorities and immigrants vs. host populations
- Race, ethnicity, and migration intersect
- Studying this pattern in diverse high-income countries may inform policy actions
- Pathways emanating from social stratification based on race/ethnicity are implicated
- Solutions require disrupting racism (and other “isms” and addressing historical and ongoing stressors