

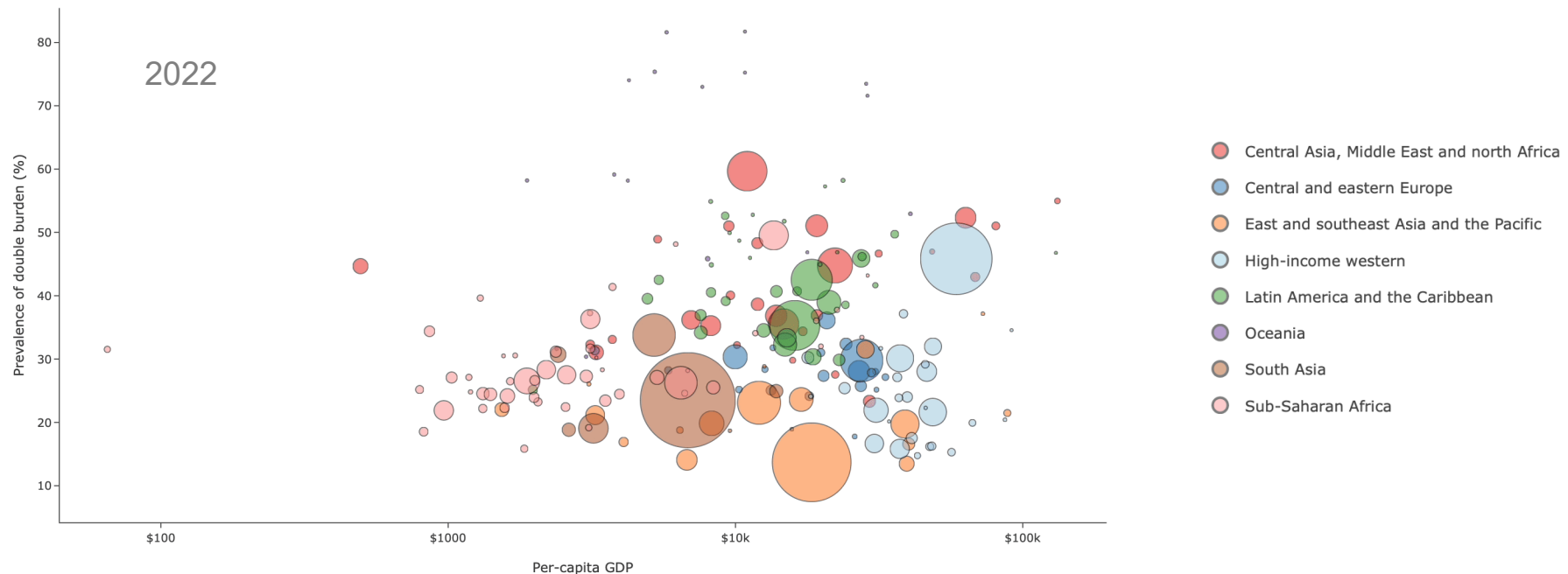
Worldwide trends in underweight and obesity from 1990 to 2022

NCD Risk Factor Collaboration (NCD-RisC)

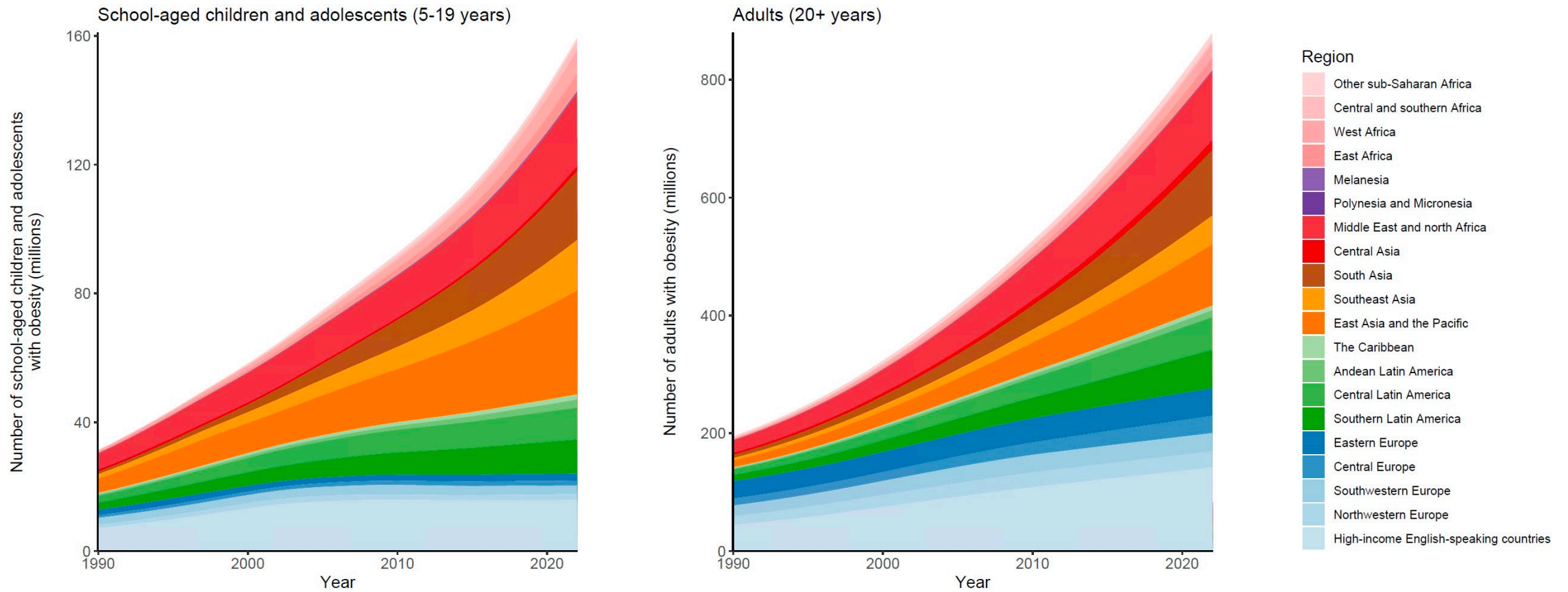
www.ncdrisc.org

A global study by a global collaboration

- Over 1,500 global collaborators; coordinated via WHO Collaborating Centre on NCD Surveillance, Epidemiology and Modelling
- Data from 3663 population-based studies in 197 countries, with measurement of height and weight in 222 million children, adolescents, and adults

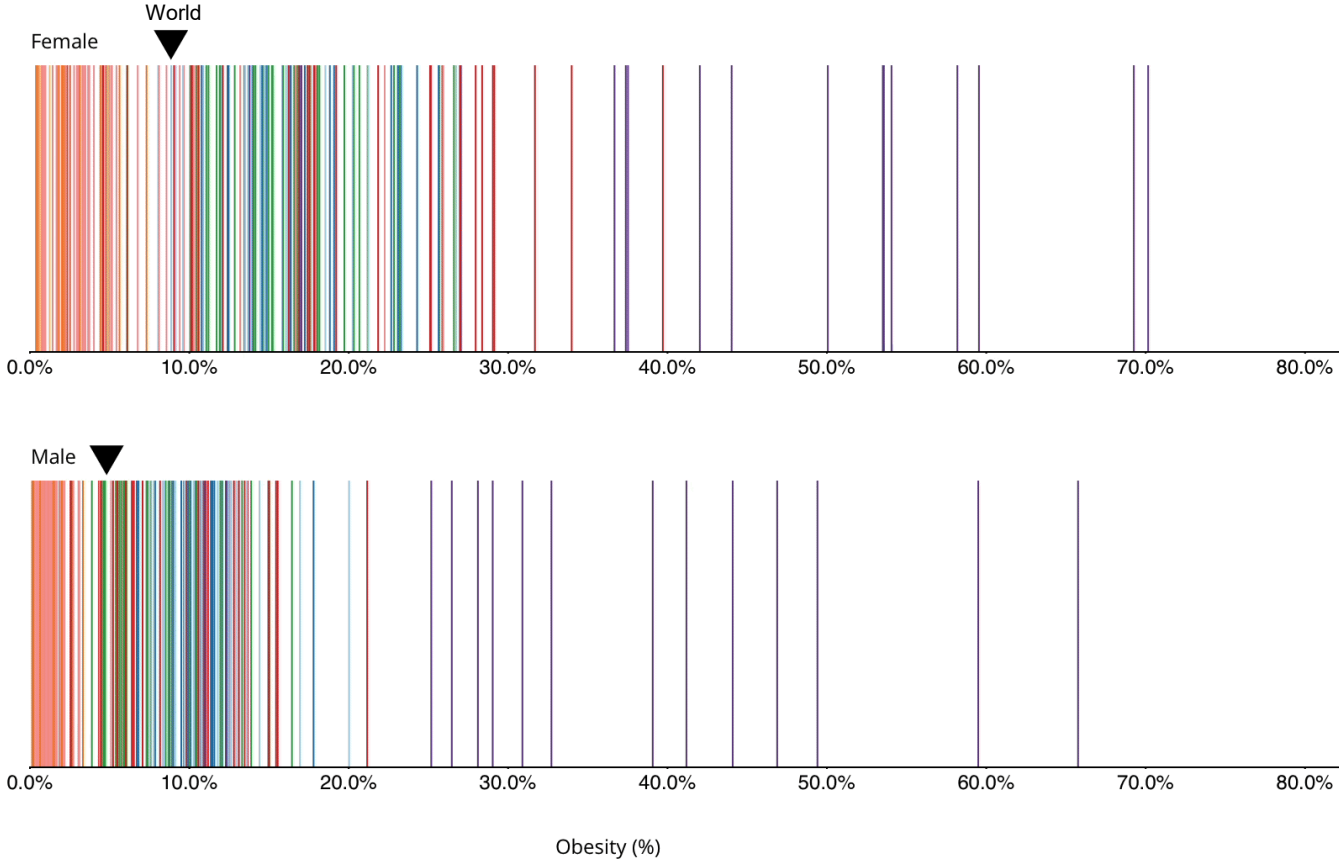


Over one billion school-aged children and adolescents, and adults, lived with obesity in 2022



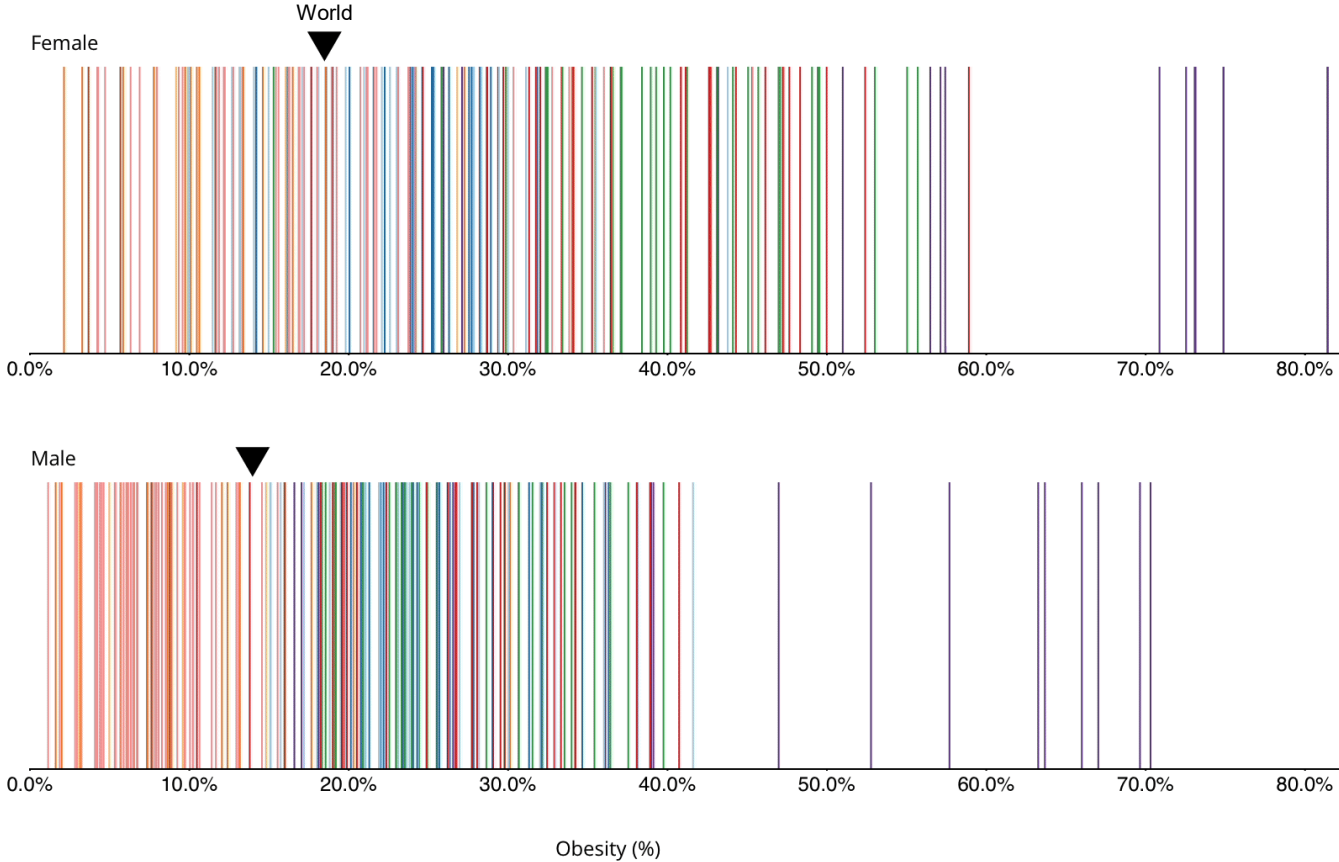
Prevalence of obesity has increased in most countries

1990



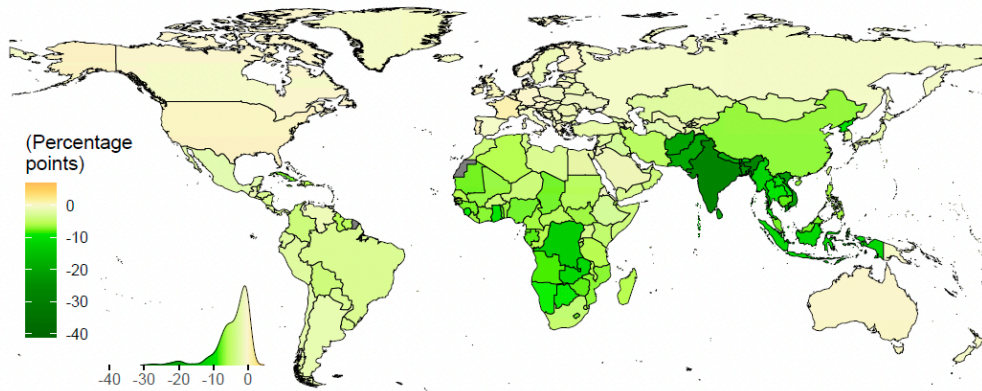
Prevalence of obesity has increased in most countries

2022

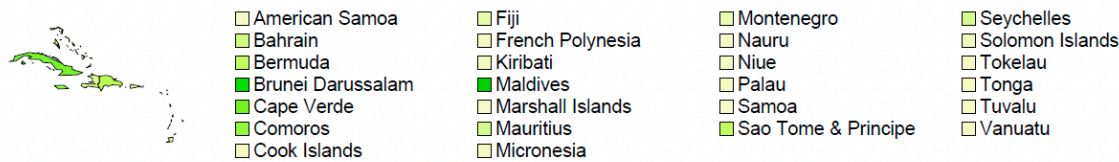
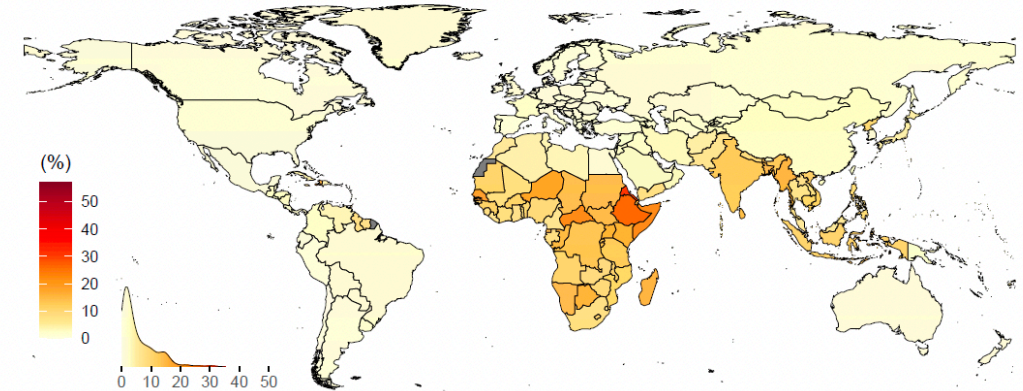


Underweight has declined but remains prevalent in south and southeast Asia, and in males in parts of Africa

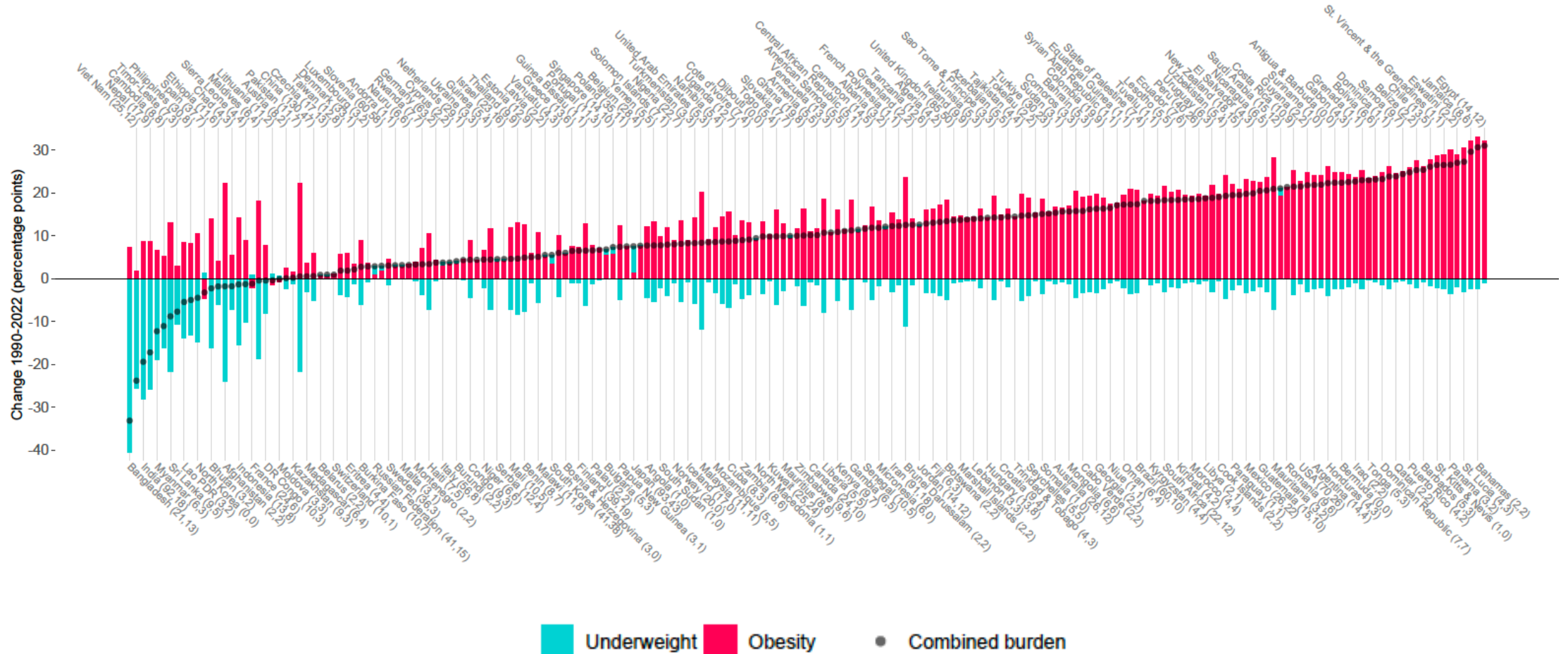
Change from 1990 to 2022



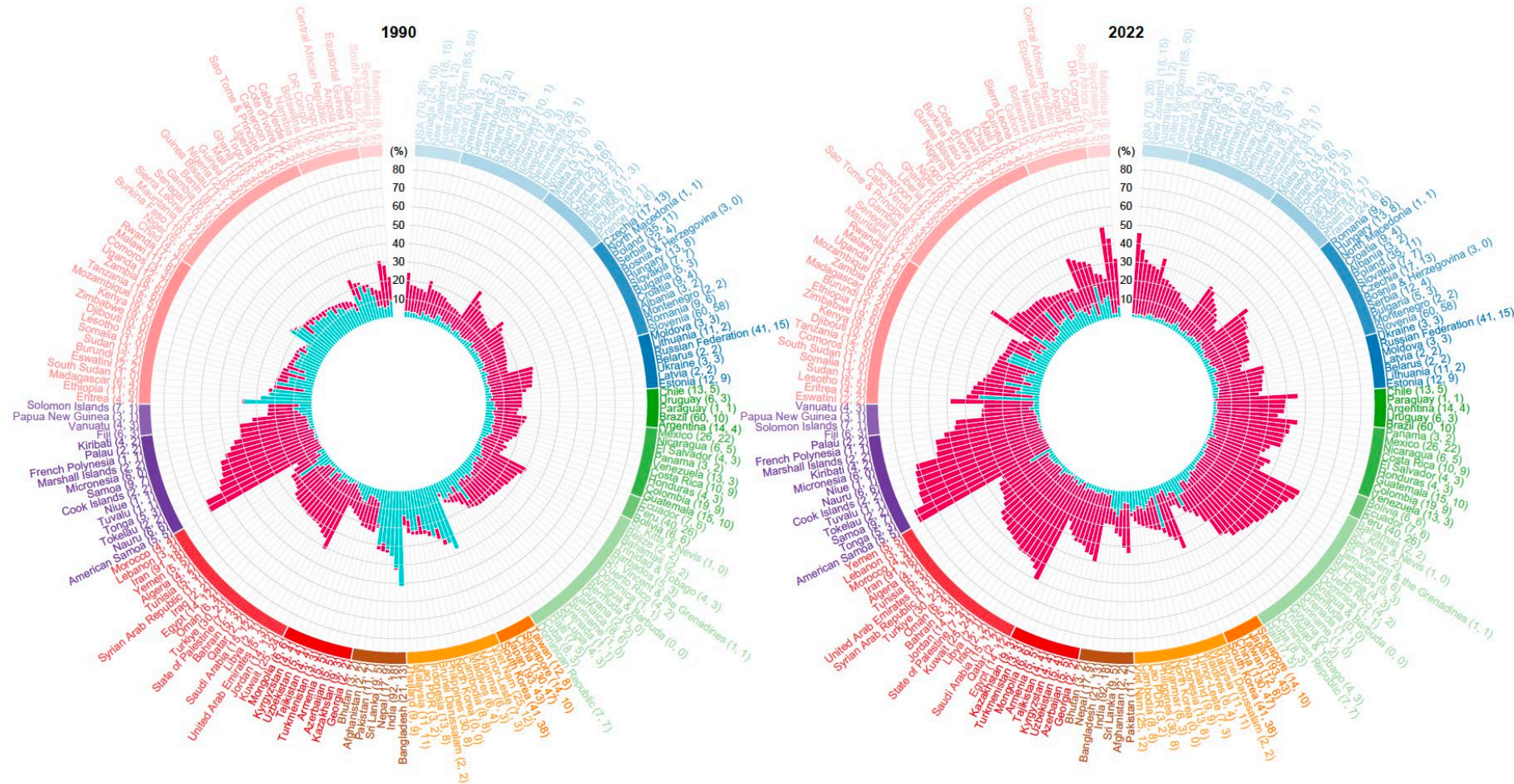
2022



An increase in the double burden of underweight and obesity



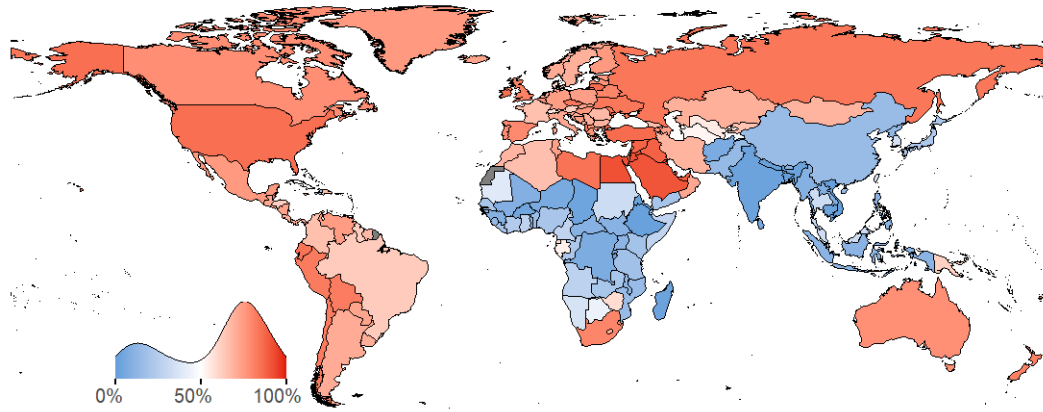
Double burden of obesity and underweight in 1990 and 2022



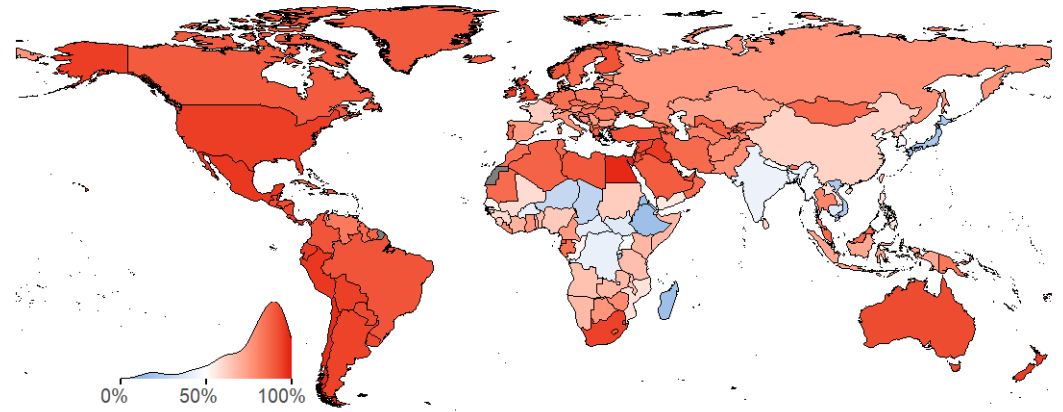
- Underweight
- Obesity
- High-income English-speaking countries
- Northwestern Europe
- Southwestern Europe
- Central Europe
- Eastern Europe
- Southern Latin America
- Central Latin America
- Andean Latin America
- The Caribbean
- East Asia and the Pacific
- Southeast Asia
- South Asia
- Central Asia
- Middle East and north Africa
- Melanesia
- East Africa
- West Africa
- Central and southern Africa
- Other sub-Saharan Africa

Increasing obesity dominance of malnutrition in adults

1990



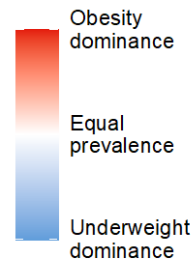
2022



- American Samoa
- Bahrain
- Bermuda
- Brunei Darussalam
- Cape Verde
- Comoros
- Cook Islands
- Fiji
- French Polynesia
- Kiribati
- Maldives
- Marshall Islands
- Mauritius
- Micronesia
- Montenegro
- Nauru
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- Samoa
- Sao Tome & Principe
- Seychelles
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu



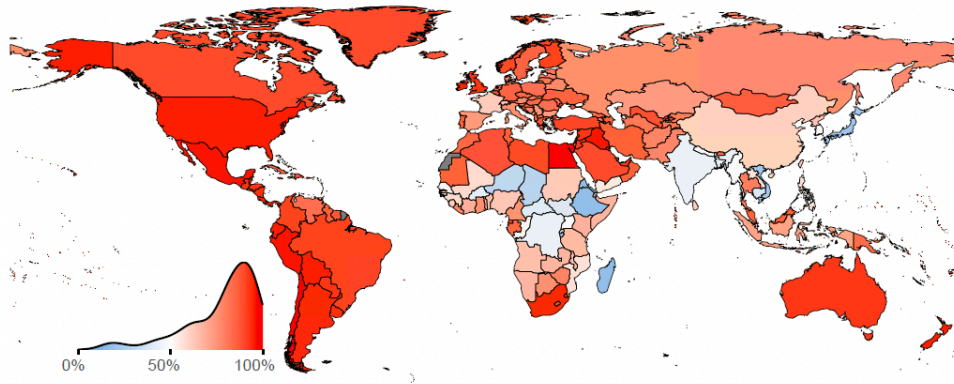
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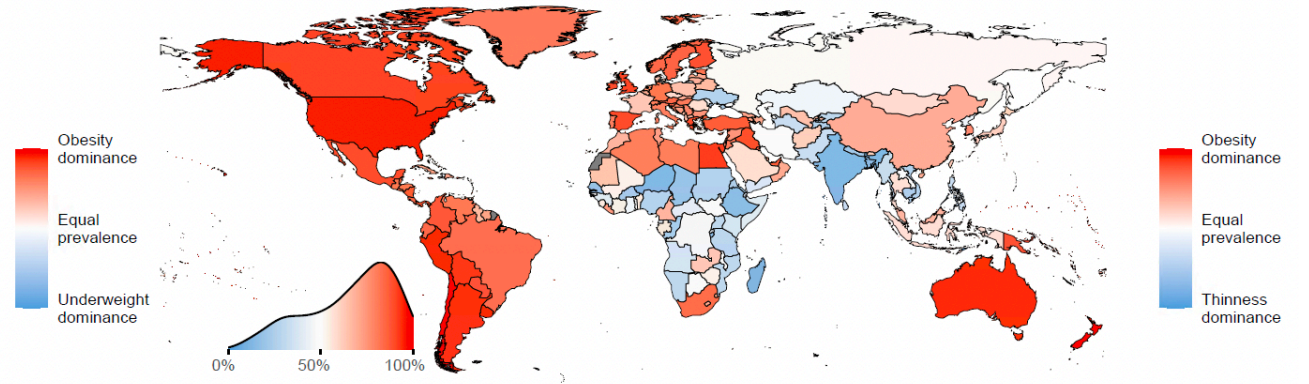
Transition to obesity dominance of malnutrition in children and adolescents is following that of adults

2022

Women



Girls



- American Samoa
- Bahrain
- Bermuda
- Brunei Darussalam
- Cape Verde
- Comoros
- Cook Islands
- Fiji
- French Polynesia
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Summary

- The double burden of underweight and obesity has increased in most countries, driven by an increase in obesity
 - Largest increases in some countries in Polynesia and Micronesia, the Caribbean, and the Middle East and north Africa, and in newly high-income countries like Chile
- Underweight remain prevalent in south Asia and parts of Africa and southeast Asia, despite having declined substantially
- The transition to obesity dominance first began in adults, and then followed in children and adolescents