



Olive Oil, Mediterranean diet and Health

Michele O. Carruba
Istituto Nutrizionale Carapelli



Università degli Studi di Milano
Centro di Studio e Ricerca sull'Obesità (CSRO)
Dipartimento di Tecnologie Biomediche e Medicina Traslazionale

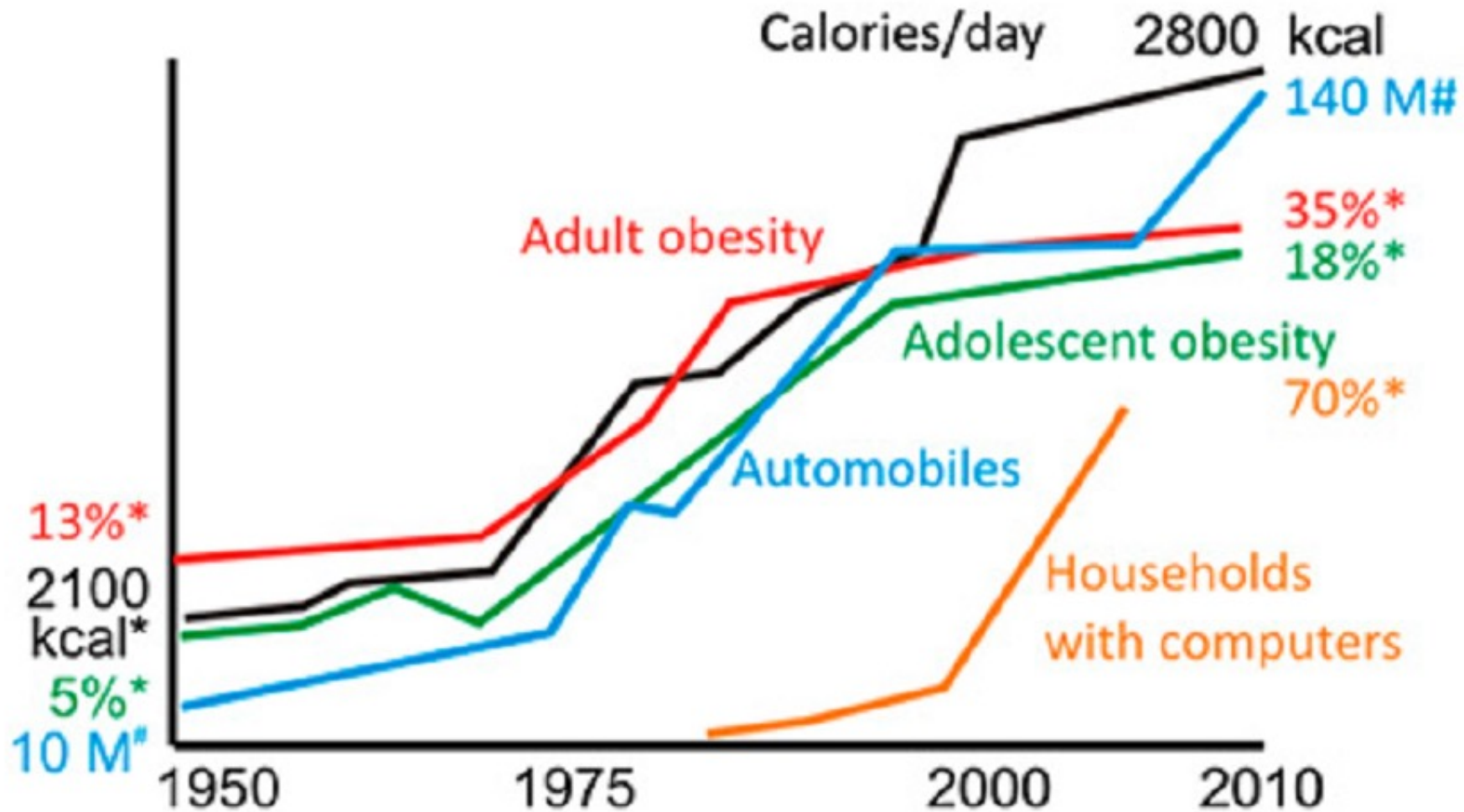


DETERMINANTS OF HEALTHY AGEING

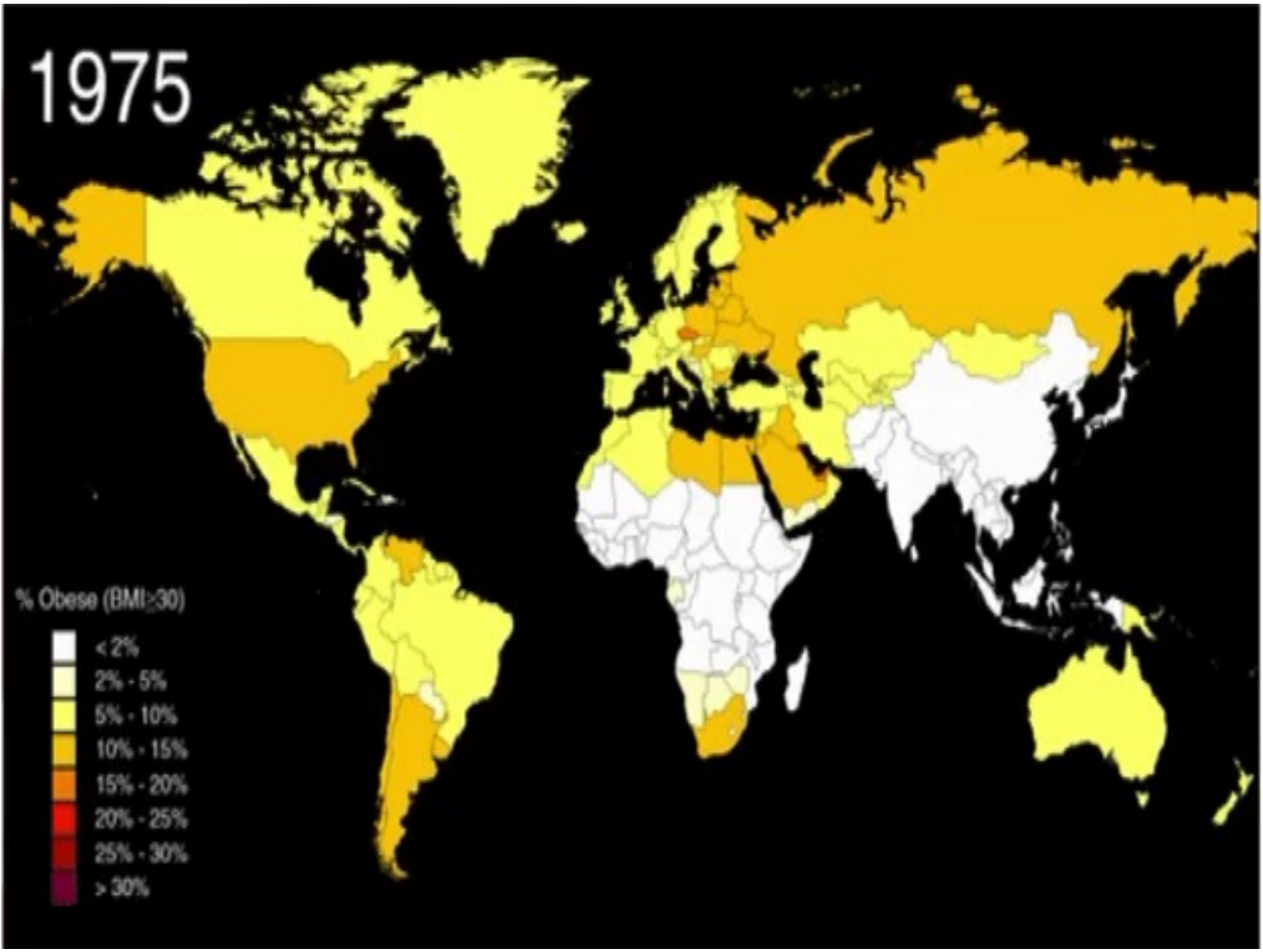
Medical care	10 %
Social conditions	15 %
Genetics	25 %
Life styles	50 %



The rising tide of obesity is strongly associated with daily calorie intake and sedentary lifestyle-promoting transportation



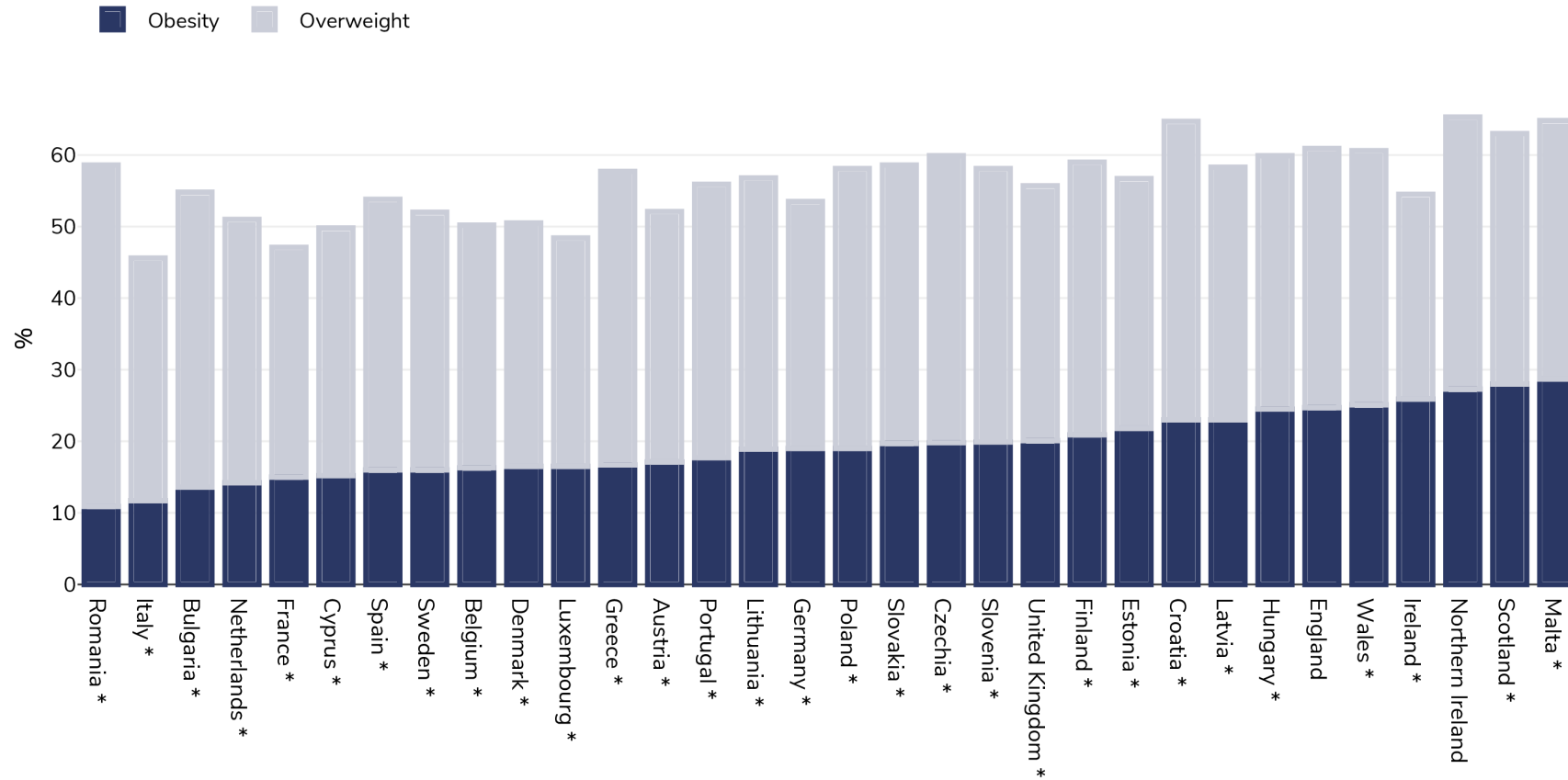
1975



European Union + UK: Obesity prevalence



Adults

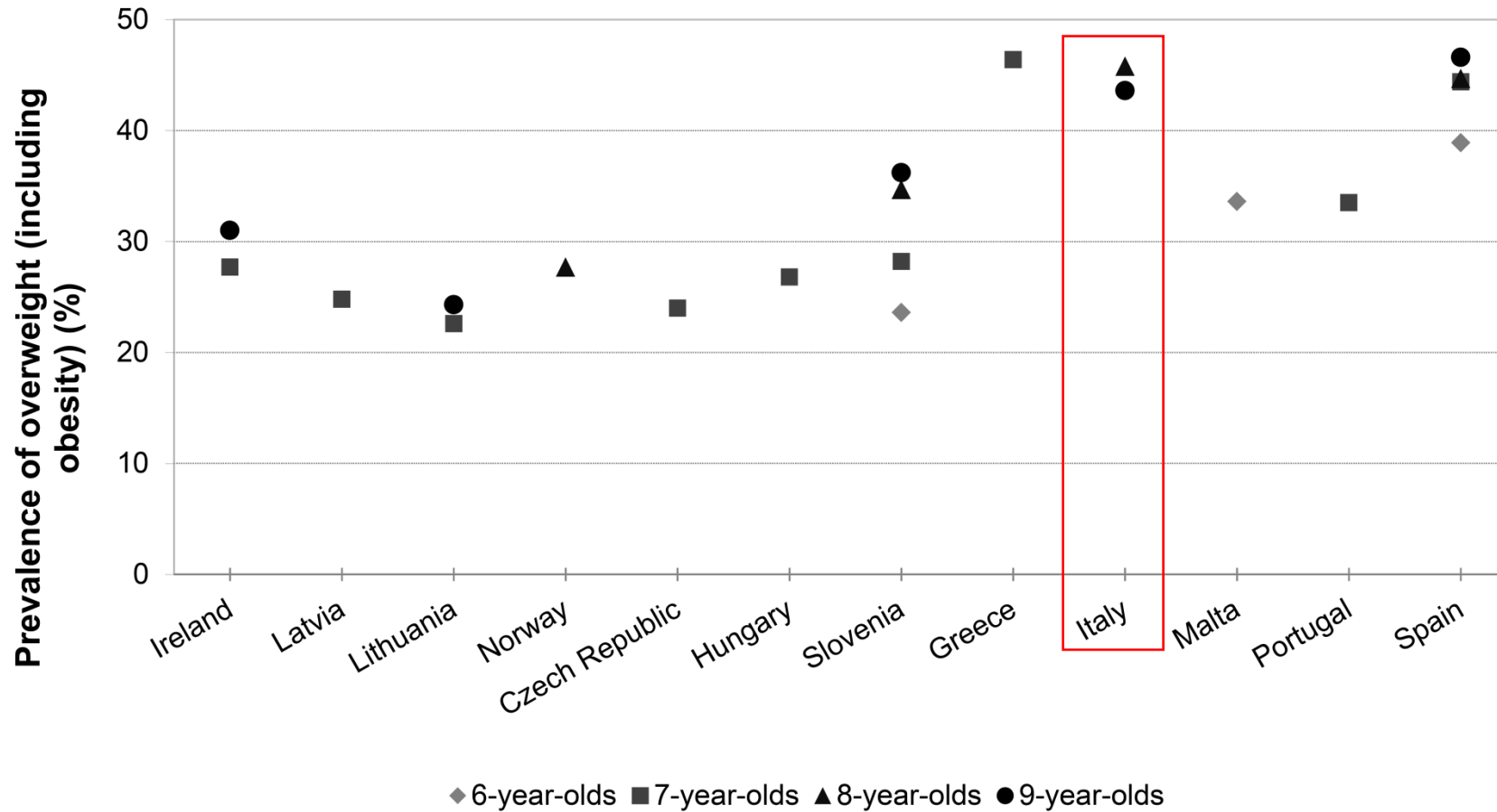


Survey type: Countries marked with a * are using self-reported data.

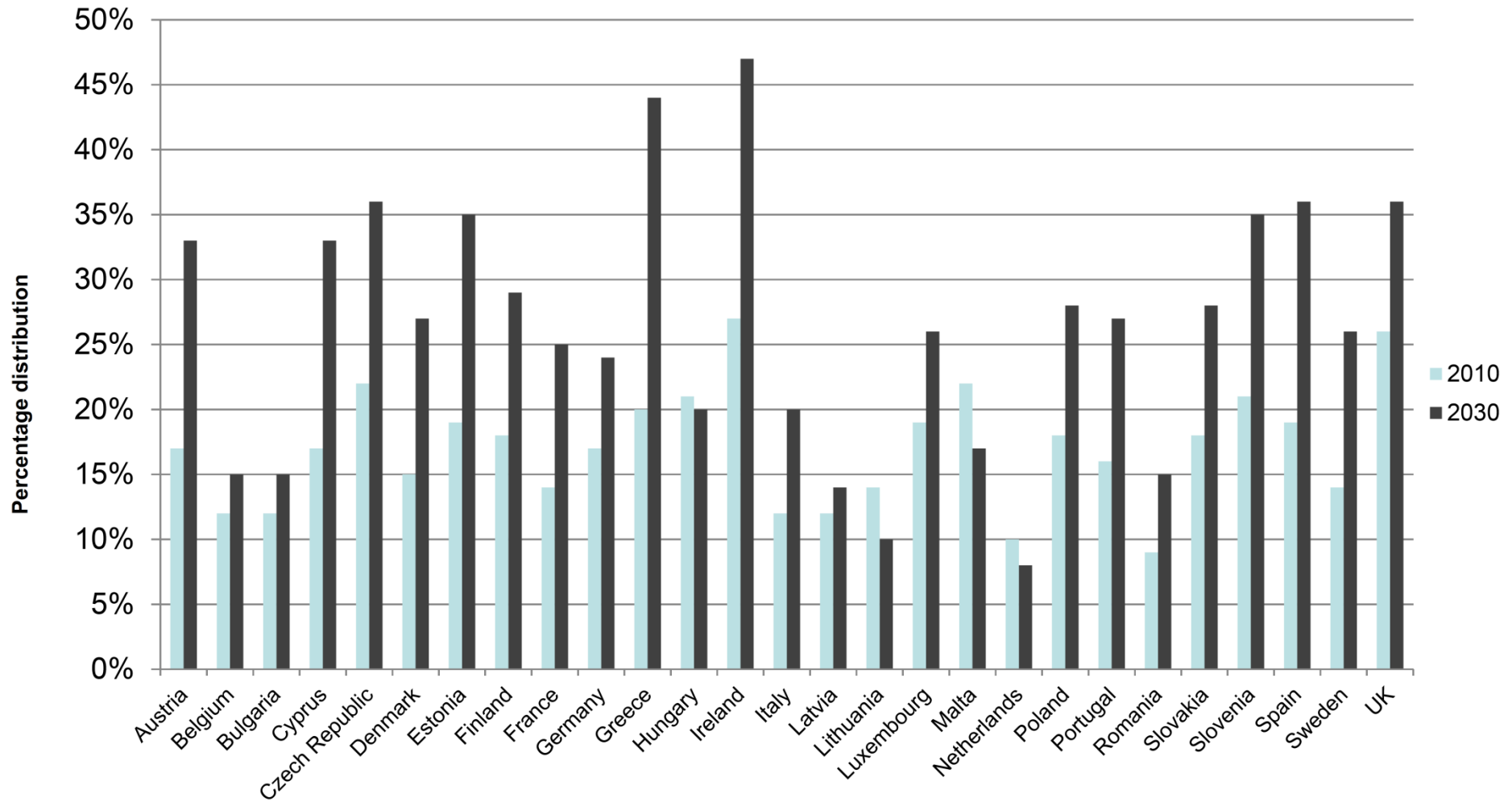
Notes: Different methodologies have been used to collect this data and so it is not strictly comparable.

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Childhood obesity prevalence in 11 EU countries + Norway – COSI 2010



Projected obesity for 2030



Complications of Obesity

Pulmonary disease

*abnormal function
obstructive sleep apnea
hypoventilation syndrome*

Nonalcoholic fatty liver disease

*steatosis
steatohepatitis
cirrhosis*

Gall bladder disease

***Urinary incontinence
Erectile dysfunction***

Osteoarthritis

Skin

Gout

Stroke

Cataracts

Coronary heart disease

Diabetes

Dyslipidemia

Hypertension

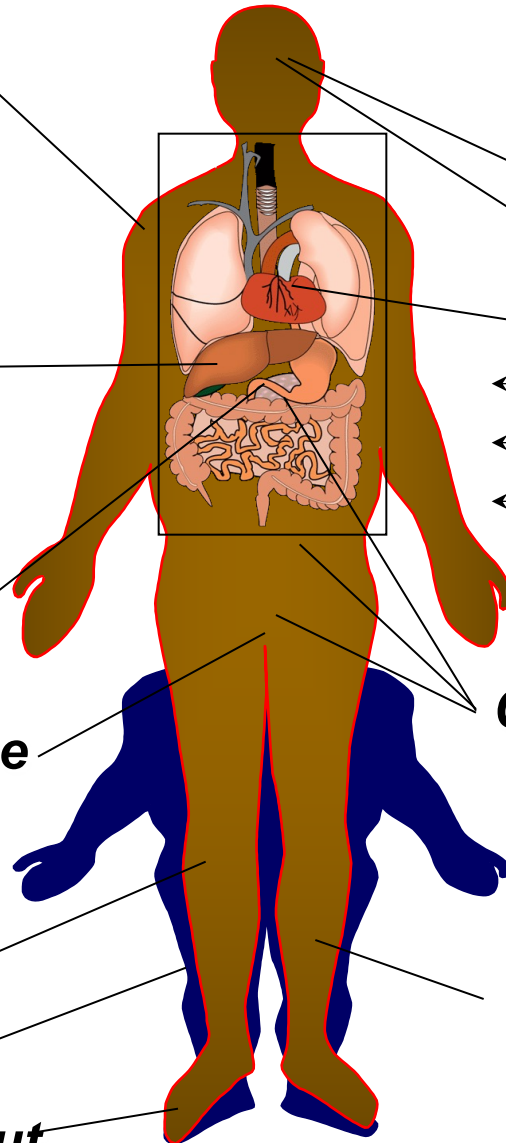
Renal disease

Cancer

***Disability
Frailty***

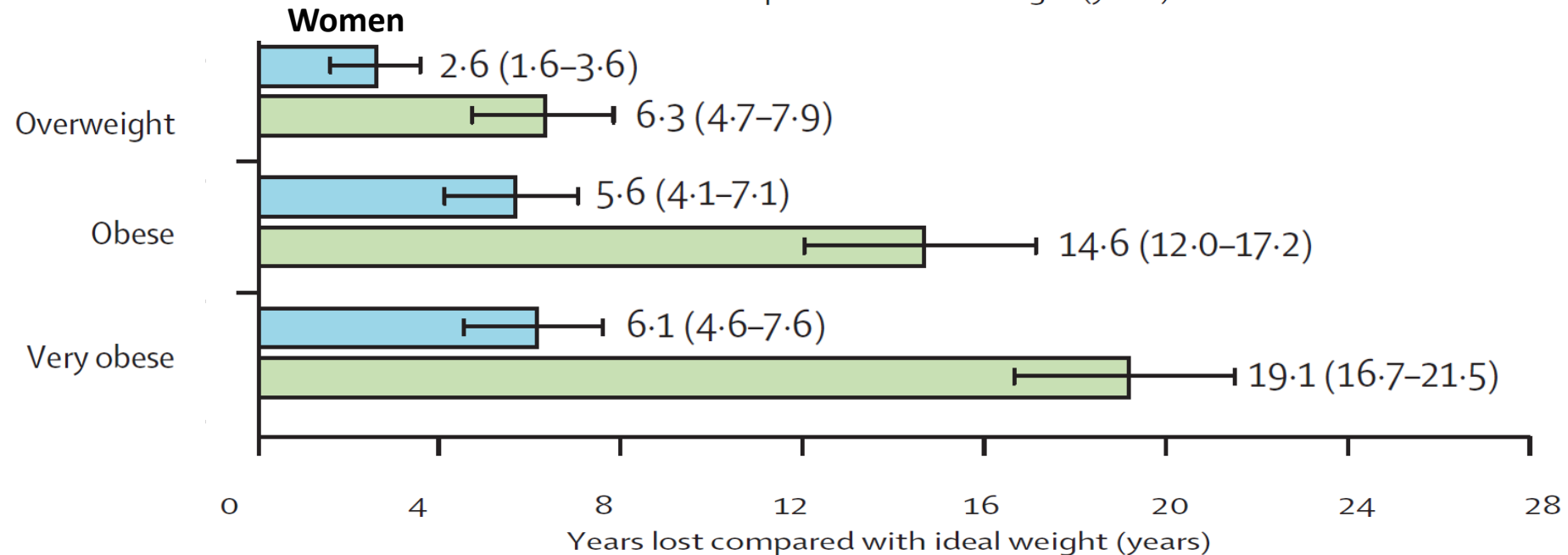
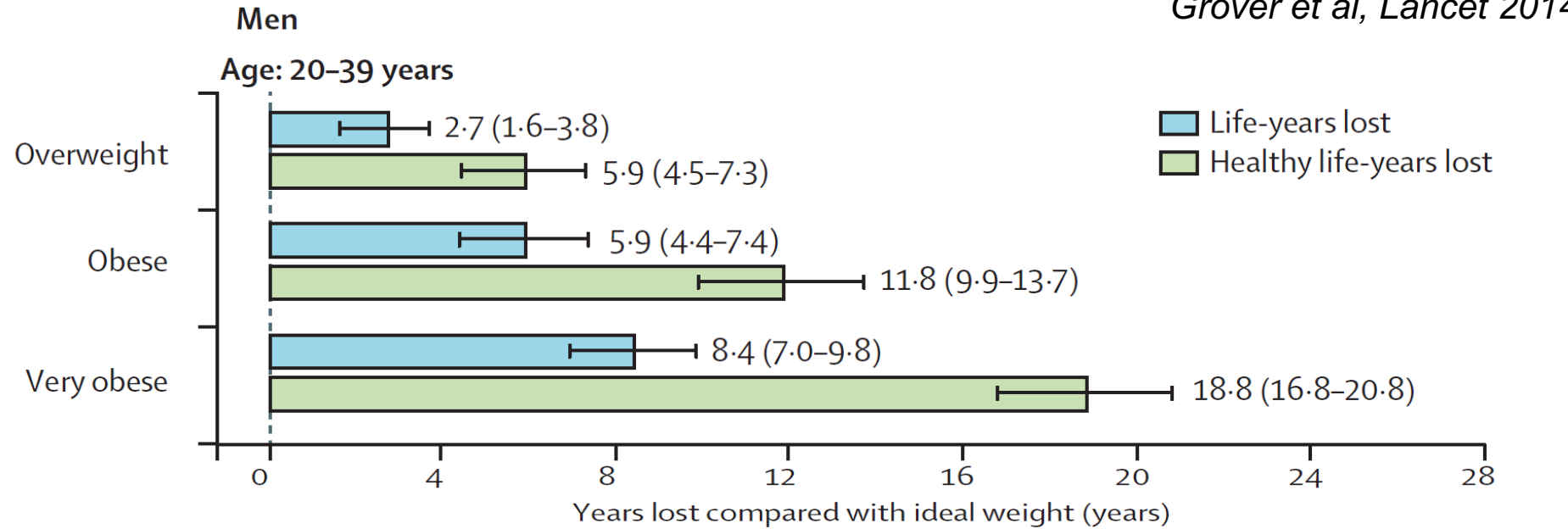
Phlebitis

venous stasis



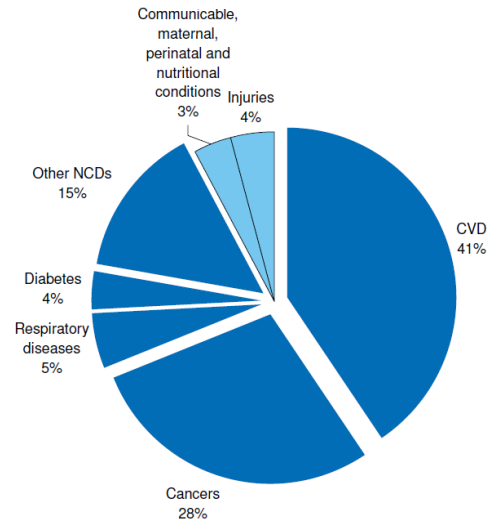
Years of life lost and healthy life-years lost in people with overweight and obesity: a modelling study

Grover et al, Lancet 2014



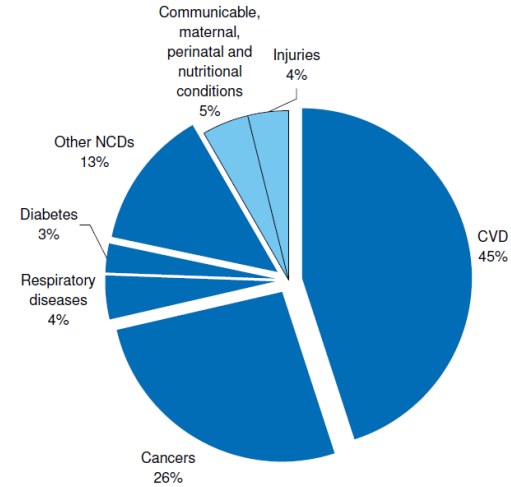
NCDs COUNTRY PROFILES 2011

Proportional mortality (% of total deaths, all ages)



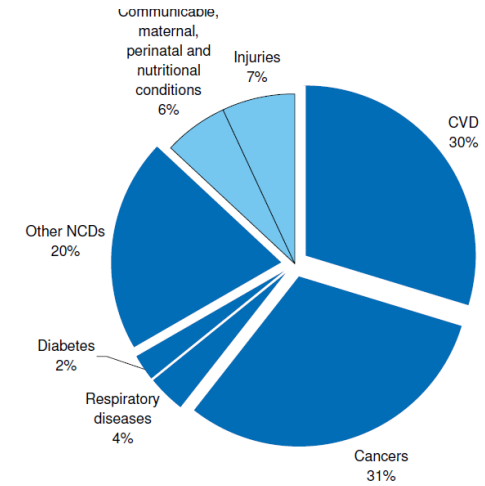
NCDs are estimated to account for 92% of all deaths.

Italy (92%)



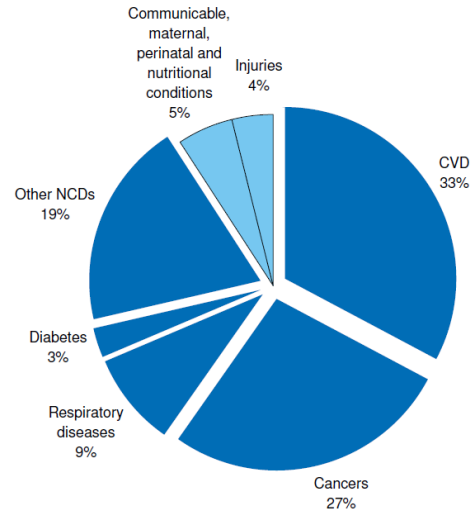
NCDs are estimated to account for 92% of all deaths.

Germany (92%)



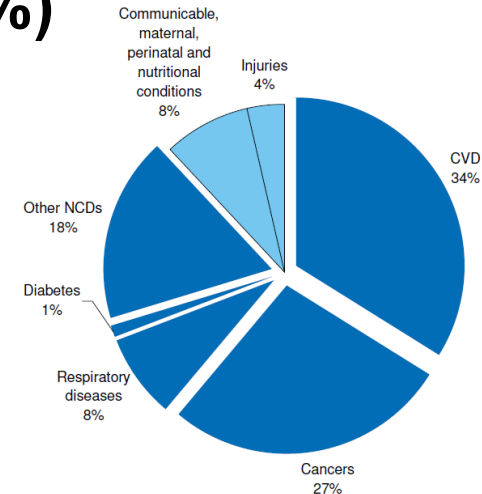
NCDs are estimated to account for 87% of all deaths.

France 87%



NCDs are estimated to account for 91% of all deaths.

Spain (91%)



NCDs are estimated to account for 88% of all deaths.

United Kingdom (88%)

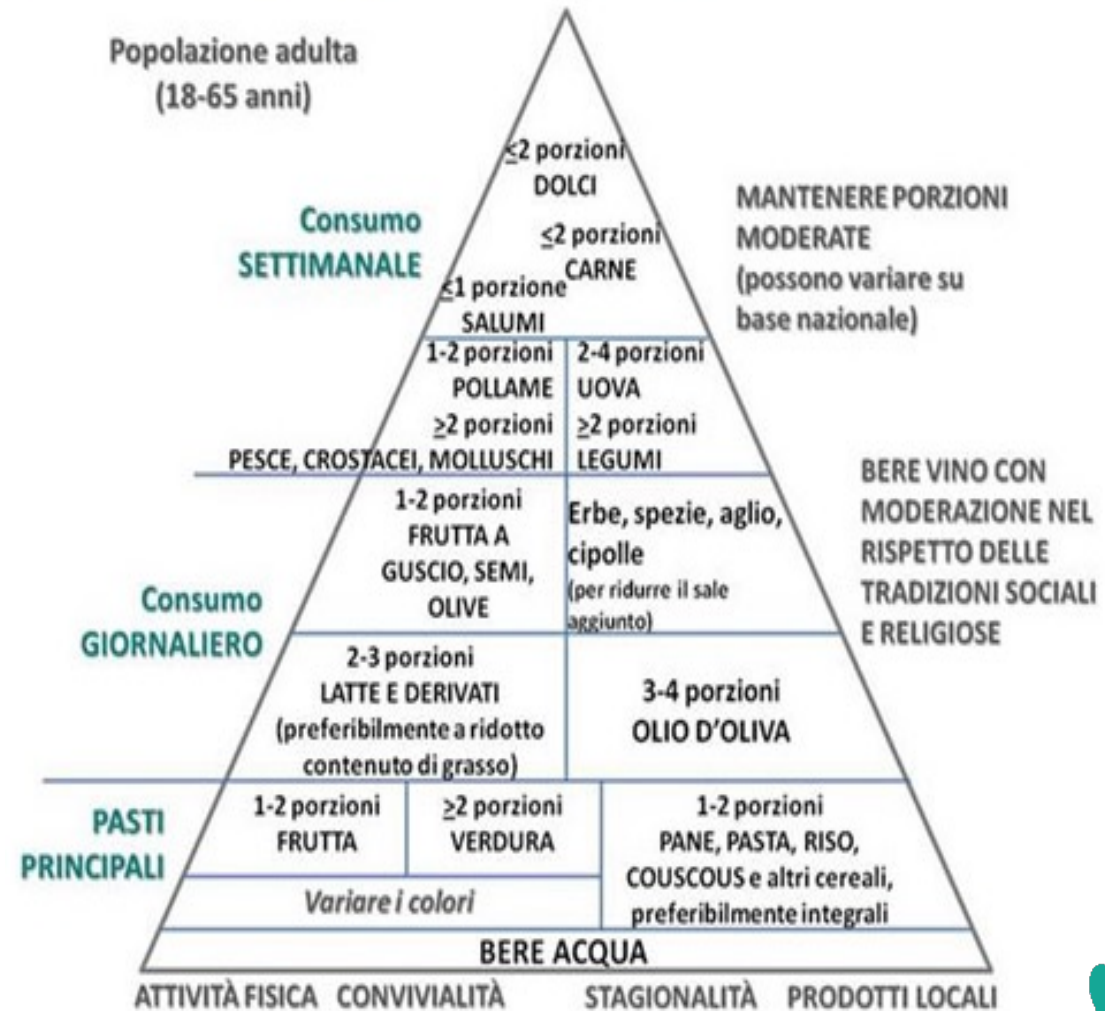
SPECIAL REPORT

**A Potential Decline in Life Expectancy in the United States
in the 21st Century**

“Unless effective population-level interventions to reduce obesity are developed, the steady rise in life expectancy observed in the modern era may soon come to an end and the youth of today may, on average, live less healthy and possibly even shorter lives than their parents.”

Mediterranean Diet

International guide lines for caloric assumption:
 Carbohydrates: 60%
 Lipids: 30%
 Proteins: 10 %



Centro Studio e Ricerca sull'Obesità (C.S.R.O.)
 Dipartimento di Farmacologia, Chemioterapia e Tossicologia Medica,
 Università degli Studi di Milano, Via Vanvitelli 32, Milano
 Prof. Michele Carruba

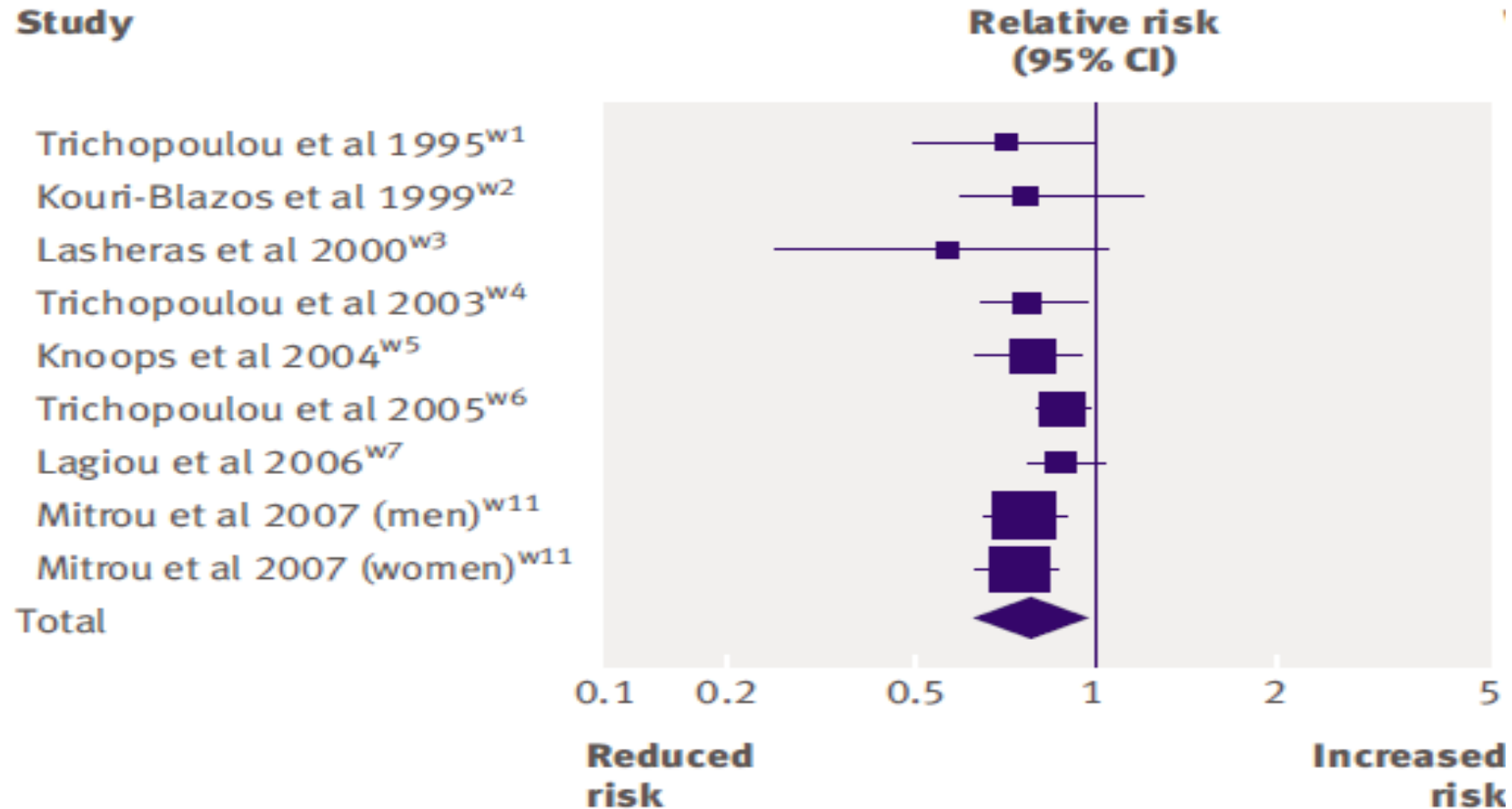


Characteristics food choices of the Mediterranean diet

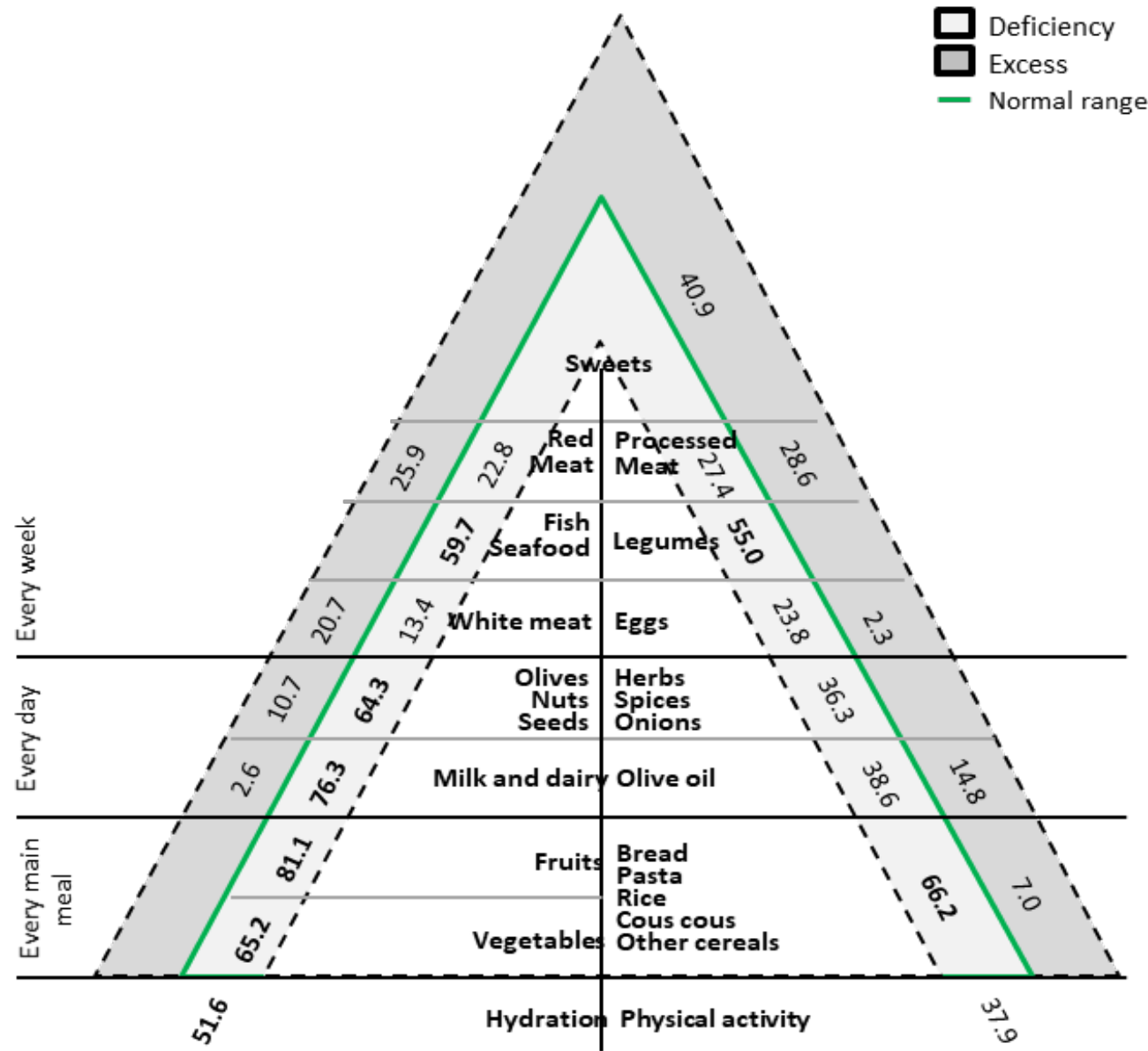
- ⇓ **Eggs and cheese**
- ⇓ **Red meat and processed meat**
- ⇓ **Animal fats**
- ⇑ **Sea food**
- ⇑ **Whole grains**
- ⇑ **Vegetables and legumes**
- ⇑ **Olive oil**
- ⇑ **Fresh fruits and nuts**



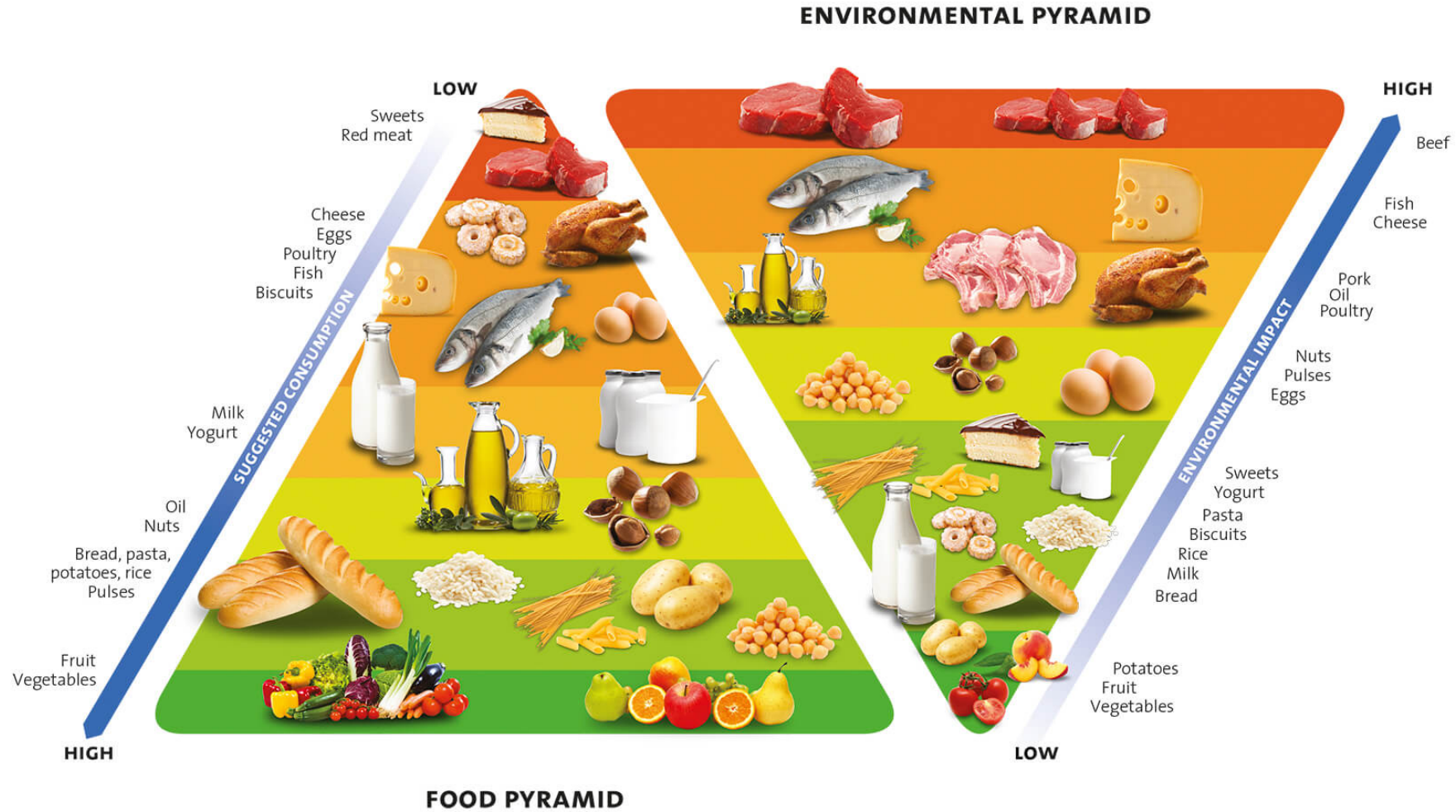
Implementation of two of the food choices characteristic of the traditional Mediterranean diet is associated with a 20% reduction in all-cause mortality



Most common deficiencies and excesses in today western diet



Environmental impact of food





COMITATO SCIENTIFICO

- **Michele Carruba (President) – Università degli Studi di Milano – Farmacologia**
- **Maria Lisa Clodoveo – Università degli Studi di Bari – Scienze e tecnologie alimentari**
- **Nadia Mulinacci – Università degli Studi di Firenze – Chimica degli Alimenti**
- **Gabriele Riccardi – Università degli Studi di Napoli - Endocrinologia e Malattie del Metabolismo**
- **Maurizio Servili – Università degli Studi di Perugia – Scienze e tecnologie alimentari**
- **Francesco Visioli – Università degli Studi di Padova – Scienze tecniche dietetiche applicate**