



OBESITY: THE INVISIBLE PANDEMIC

The current landscape

Michele O. Carruba

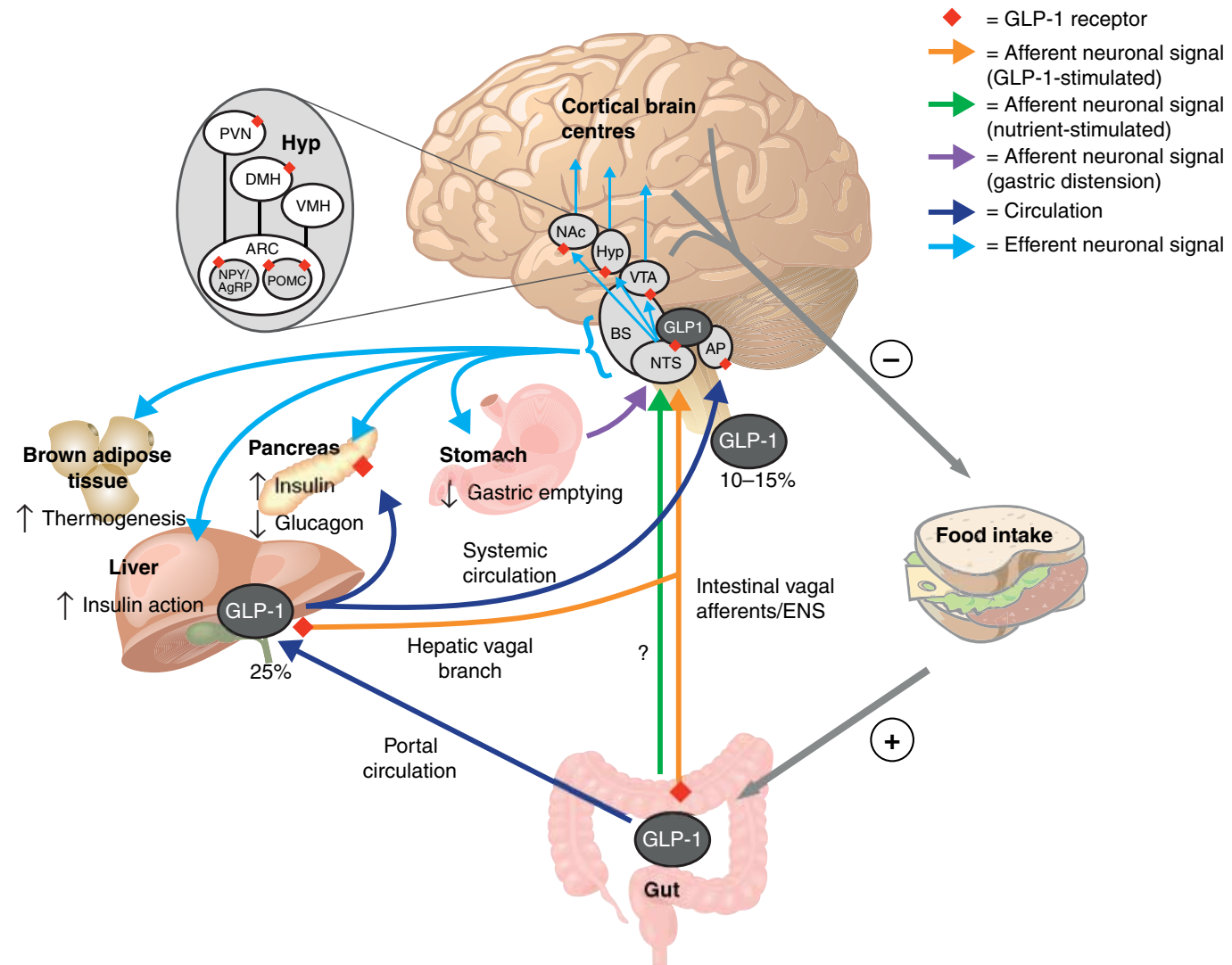
Università degli Studi di Milano

Centro di Studio e Ricerca sull'Obesità (CSRO)

Dipartimento di Tecnologie Biomediche e Medicina Traslazionale



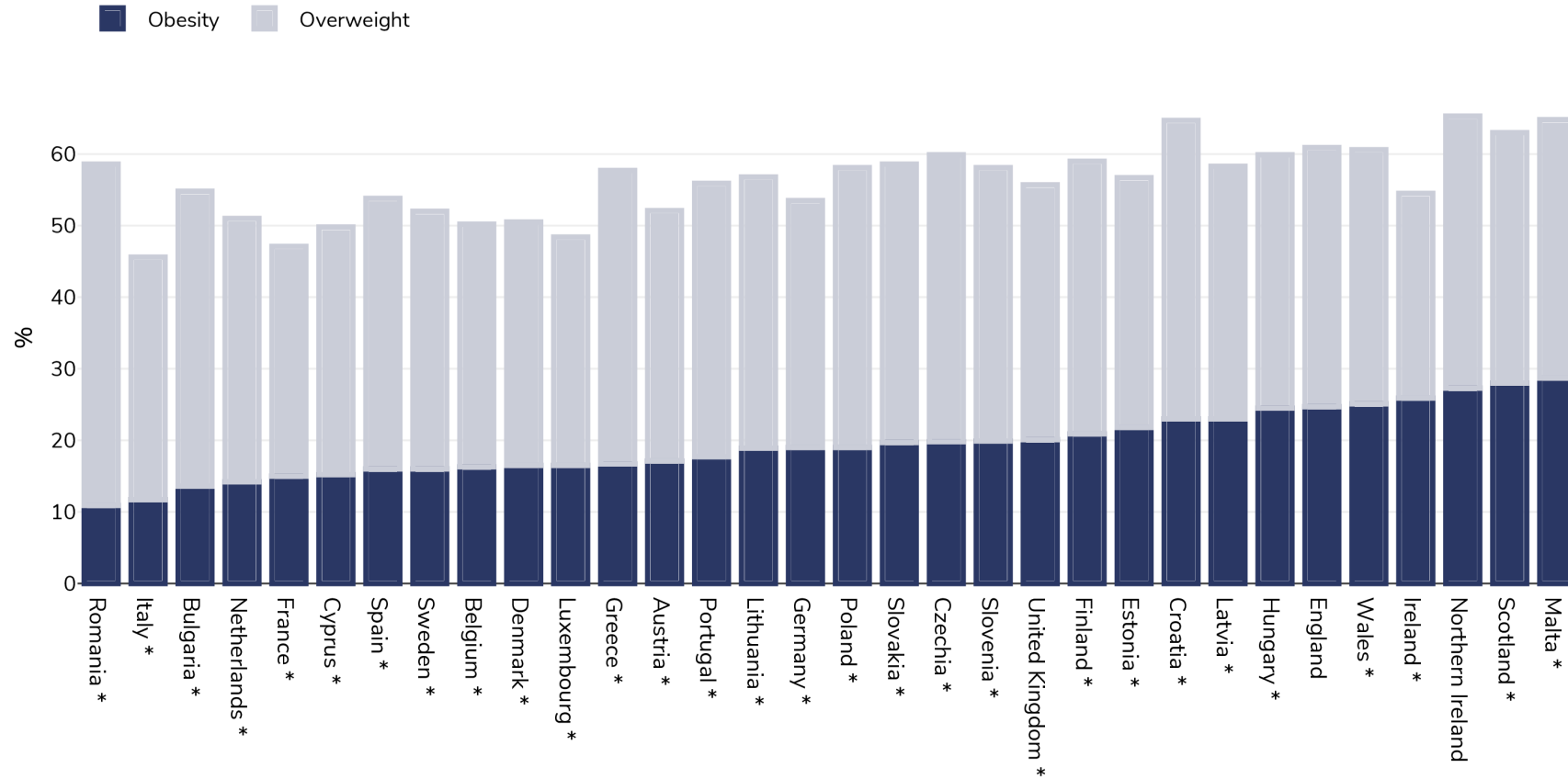
Central regulation of feeding and body weight



European Union + UK: Obesity prevalence



Adults



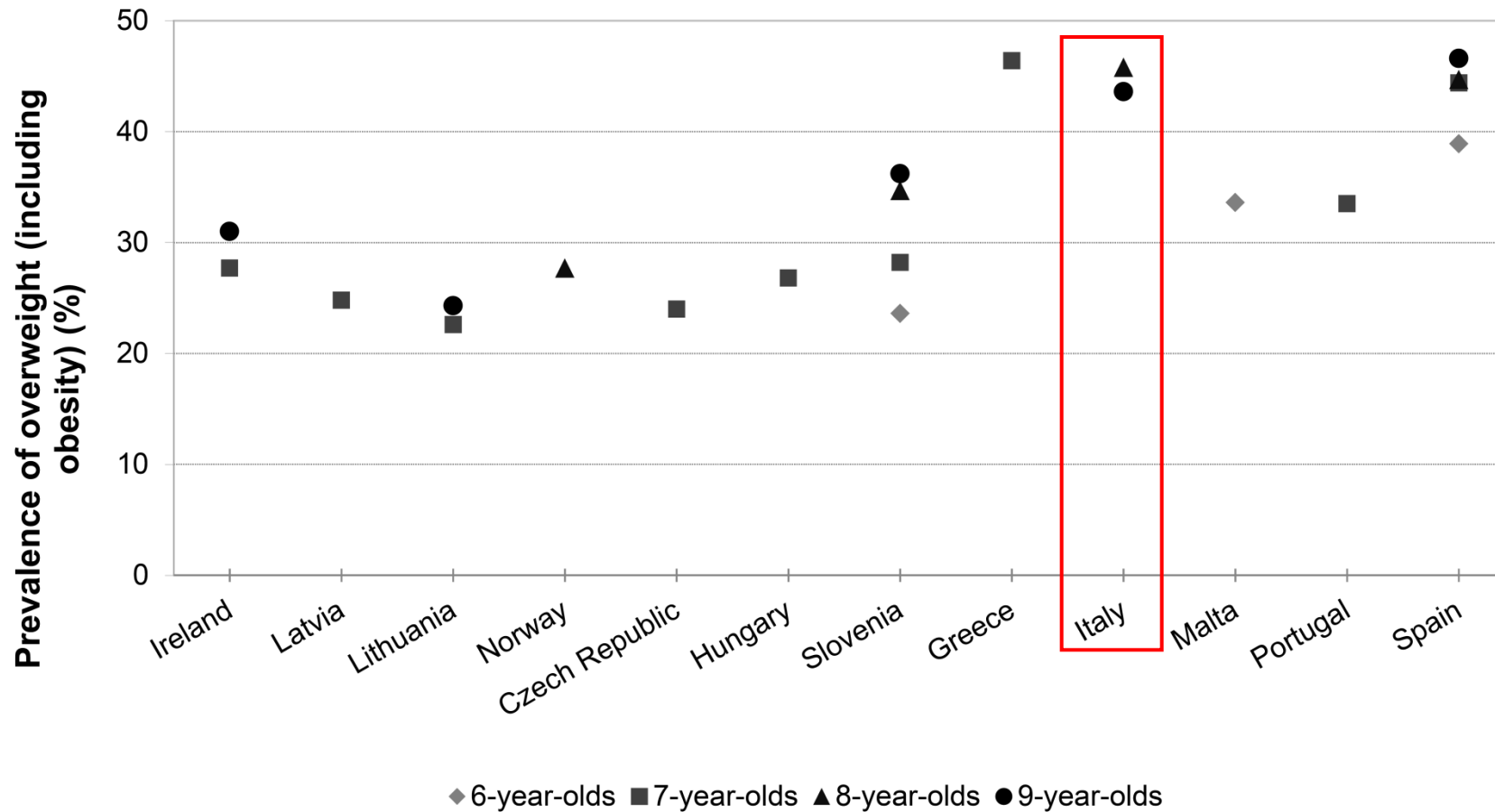
Survey type: Countries marked with a * are using self-reported data.

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

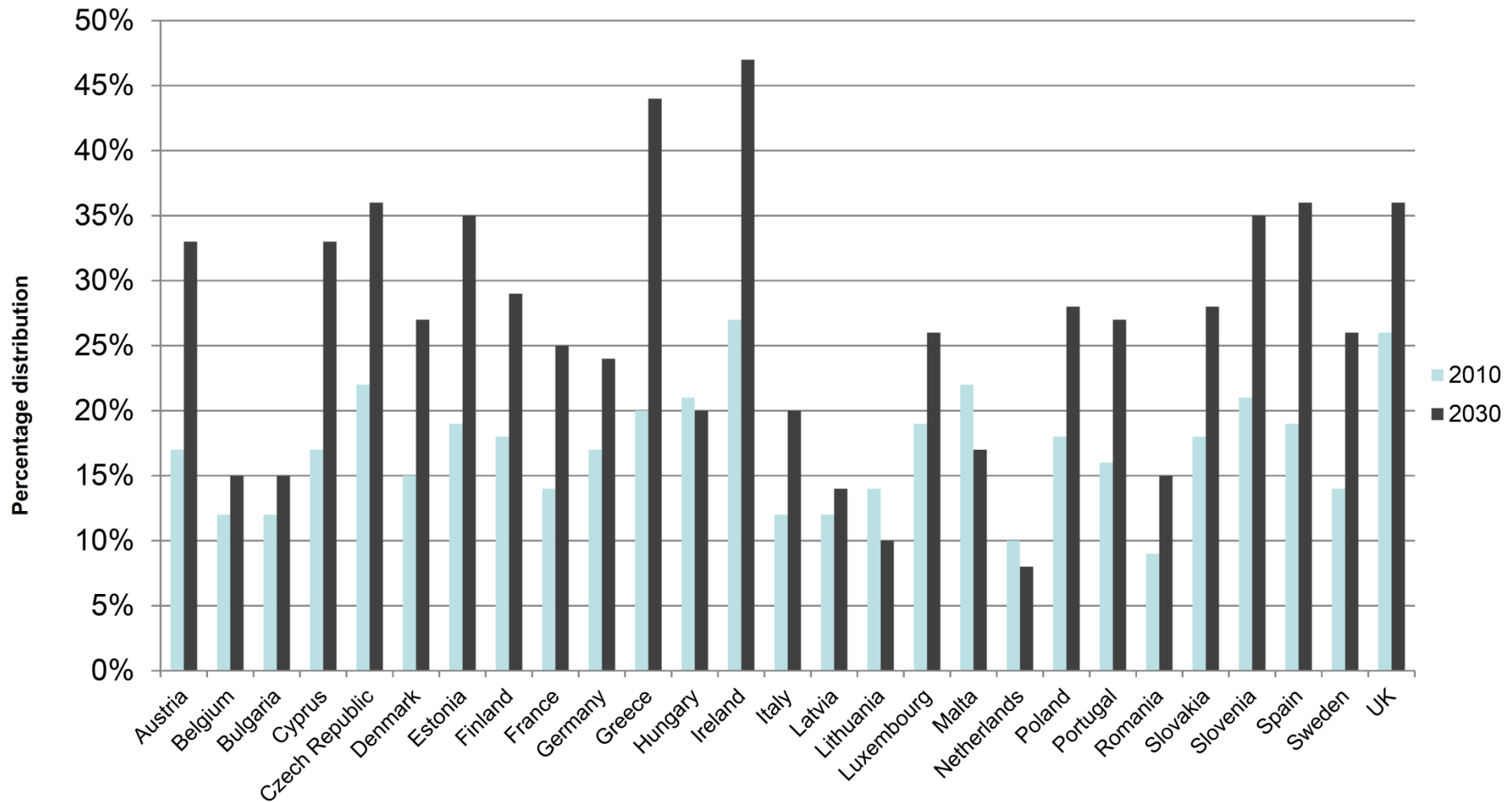
Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².



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

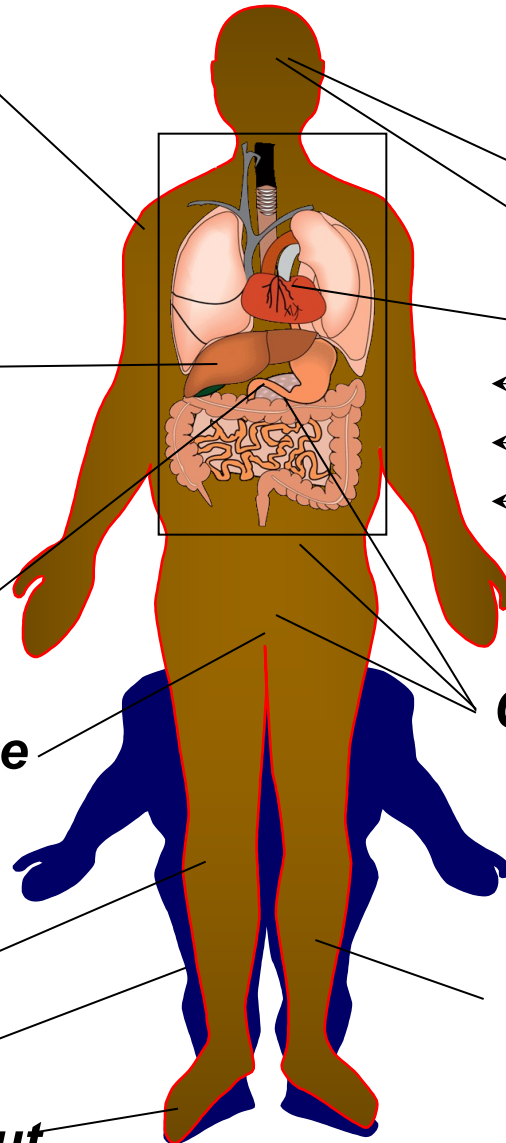
Renal disease

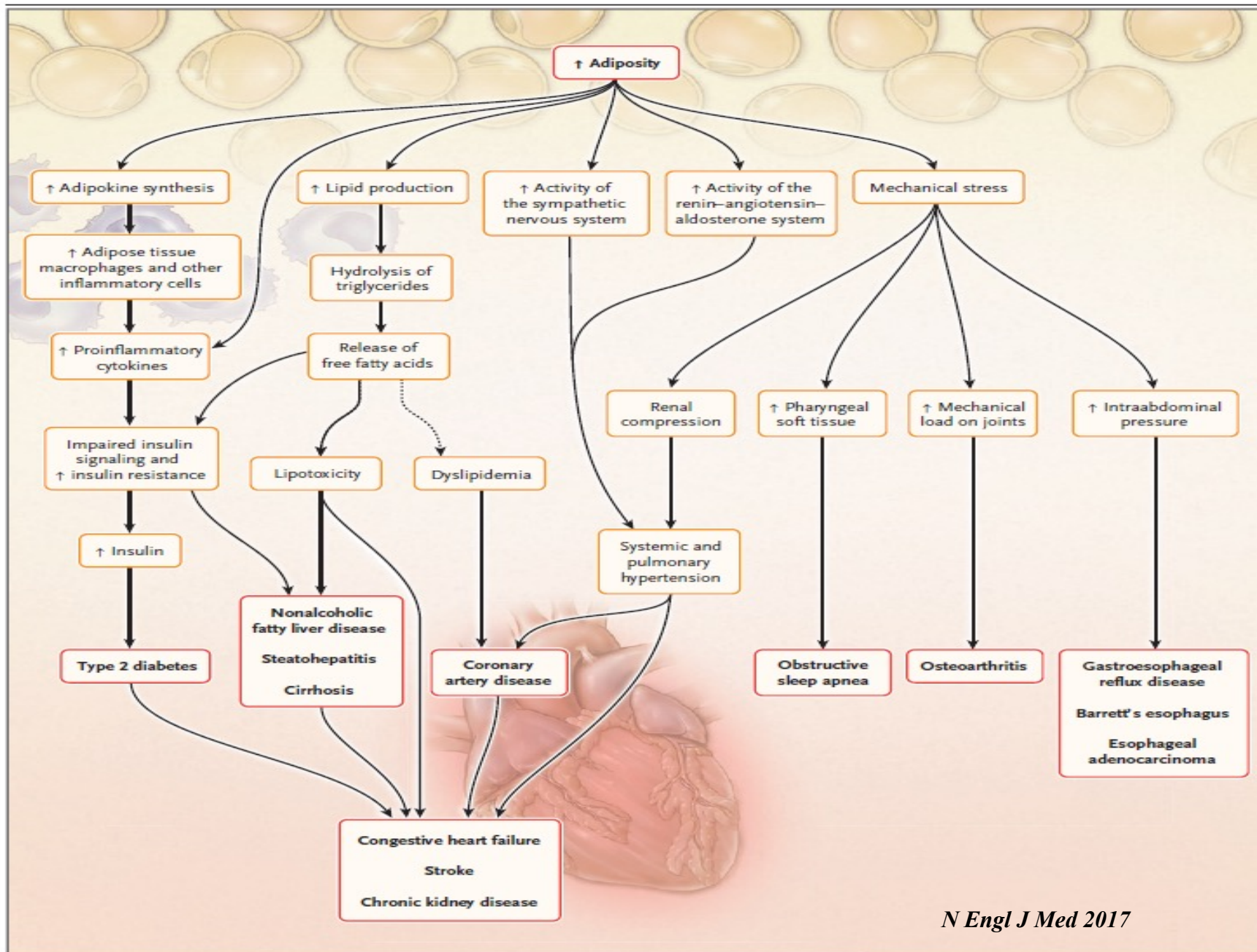
Cancer

***Disability
Frailty***

Phlebitis

venous stasis



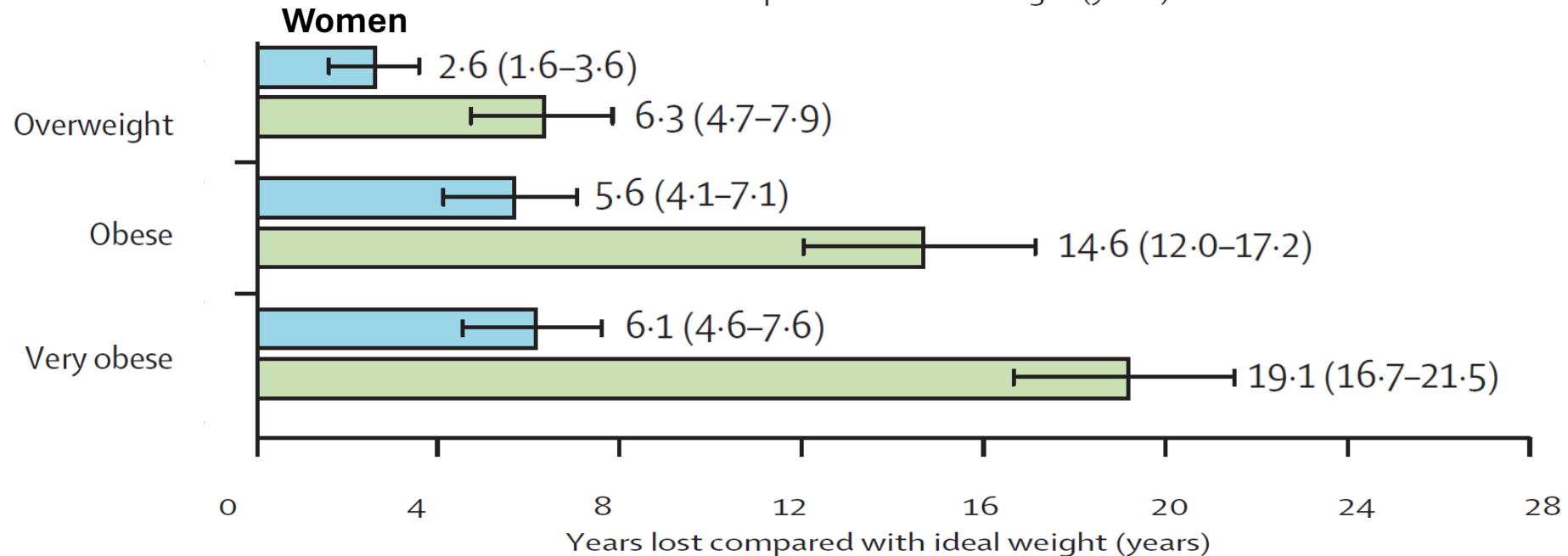
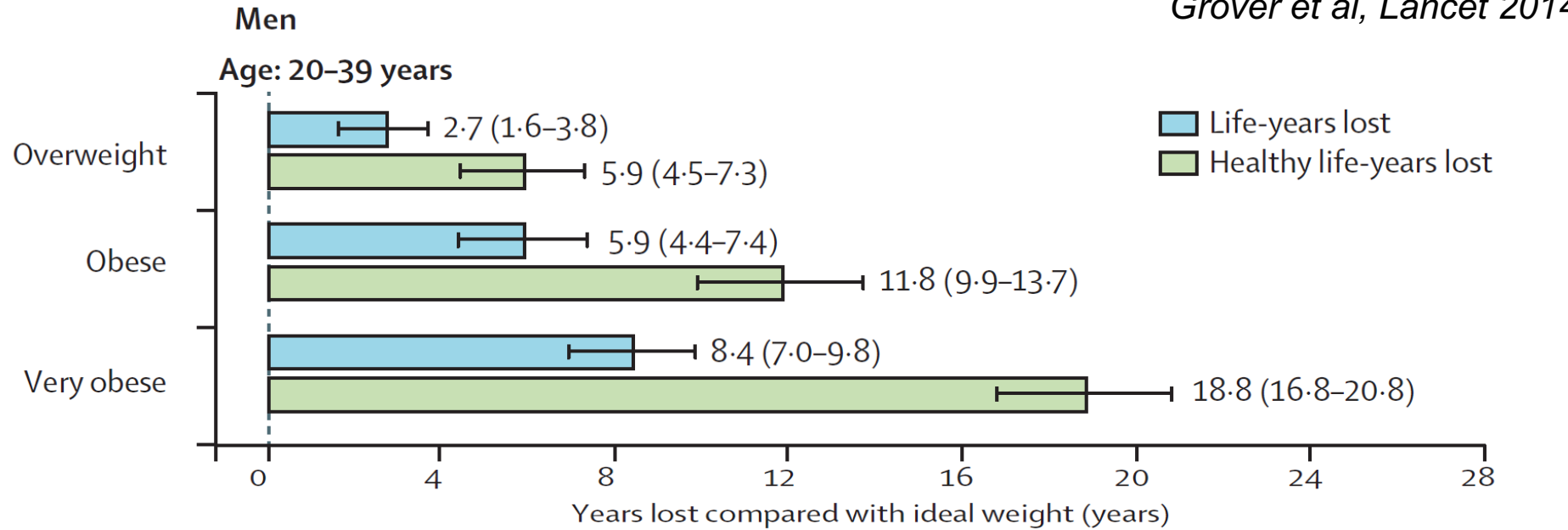


N Engl J Med 2017

Figure 1. Some Pathways through Which Excess Adiposity Leads to Major Risk Factors and Common Chronic Diseases. Common chronic diseases are shown in red boxes. The dashed arrow denotes an indirect association.

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

Grover et al, Lancet 2014



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.”

URBAN OBESITY

LA CARTA DI MILANO

Milano, 18 maggio 2020

cities
changing
diabetes



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LA STATALE

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2015 Milan Declaration: A Call to Action on Obesity

A Statement of the members of the European Association for the Study of Obesity to EXPO 2015

Signatories:

Austria	Simone Posch	Hungary	Judit Pettko	Romania	Silvia Bucur
Belgium	Elly Jeurissen	Iceland	Solveig Sigurðardóttir	Sweden	Orley Andreasson
Bulgaria	Svetlozara Ilieva	Ireland	Vicki Mooney	Sweden	Christina Fleetwood
Czech Republic	Alexandra Fríasová	Italy	Angela Ferracci	Sweden	Jenny Vinglid
France	Anne Sophie Joly	Italy	Deborah Laddo	Switzerland	Dominique Durrer
Georgia	Tamar Zerekidze	Netherlands	Mieke van Spanje	UK	Ken Clare
Germany	Swaantje Memmert	Poland	Magdalena Gajda		
Germany	Björn Brusgatis	Portugal	Carlos Oliveira		

Milan Declaration

A STATEMENT ON BEHALF OF MEMBERS OF THE EUROPEAN ASSOCIATION FOR THE STUDY OF OBESITY
MADE AT THE 9TH EUROPEAN CONGRESS ON OBESITY, MILAN, ITALY, JUNE 3-6 1999

CALL FOR ACTION ON OBESITY

PREAMBLE

There is great concern about the serious health, social and economic impact of overweight and obesity on individuals and communities within Europe and the rest of the world.
Current estimates indicate that among European adults the prevalence of obesity is on average 17% and in many countries it is rising. In addition a substantial proportion of Europeans are already overweight when judged against WHO criteria. The effect is serious across Europe. There are very high rates of obesity of 40-50%

in some areas, with national rates ranging from 5-22%. No country has been able to avoid the impact of this widespread disease.
Despite this health burden, few European countries have a comprehensive national strategy for the prevention of weight-related disease or the management of individuals who suffer an existing weight problem. Of particular concern is the proportion of children within Europe who are classified as overweight. Their future health and well being is being put at risk through inaction on this issue.

The current high prevalence and trends in obesity reflect changing lifestyles in a changing environment throughout Europe. The comprehensive management and prevention of obesity can only be achieved by promoting healthier lifestyles, with improved activity levels, a reduction in sedentary lifestyles and improved dietary habits.

STATEMENT

In view of the urgent need for action to deal with the epidemic of obesity and weight-related health issues, we members of the European Association for the Study of Obesity, with the support of others, call on governments and health agencies in Europe to:

- recognize that overweight and obesity are major causes of ill health which present a huge social and economic burden to communities within Europe
- immediately begin the process of developing comprehensive national and European strategies for action on obesity which take into account the needs of each country, build upon existing initiatives and are based on sound evidence of benefit

- support continued research and analysis of the problem of overweight and obesity that will inform the development of improved obesity prevention and management strategies
- increase the provision of health services with professional staff qualified to treat obesity

We also resolve to:

- provide leadership, support and guidance to governments and agencies towards the development of coherent national and Europe-wide strategies for the prevention and management of overweight and obesity

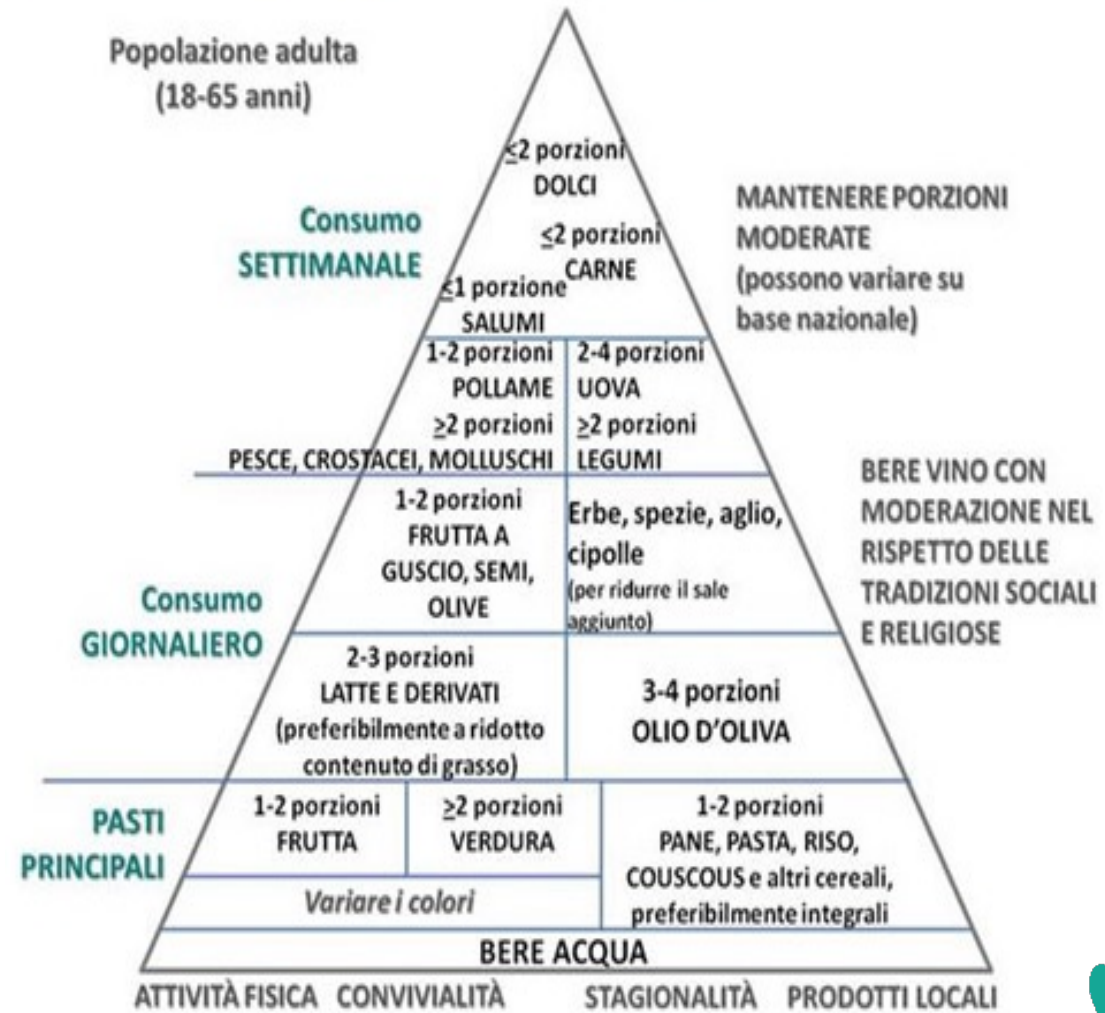
SIGNATORIES

Austria Austrian Obesity Association (Österreichische Adipositasgesellschaft) President Prof. Dr. Helmut Topol	Belgium Belgian Association for the Study of Obesity (Vlaamse Vereniging voor de Studie van de Overgewicht) President Prof. Dr. Luc Van Gaal	Finland Finnish Association for the Study of Obesity (Suomalainen Ylipaineliiton Seura) President Prof. Aili Rissanen	France Association Française d'Etudes et de Recherches sur l'Obésité (AFER) President Prof. Marc Lalonde	Germany German Association for the Study of Obesity (Deutsche Adipositas Gesellschaft) President Prof. Maria Roth-Bellina	Hungary Hungarian Association for the Study of Obesity (Magyar Elhízás Társaság) President Prof. Csaba Kovács	Israel Israel Society for the Study and Prevention of Obesity (Israel Society for the Study and Prevention of Obesity) President Prof. Elitza Bar	Ireland Irish Association of Dietitians for the Study of Obesity (IADSO) President Prof. Maria Roth-Bellina	Netherlands Dutch Association for the Study and Prevention of Obesity (Nederlandse Vereniging voor de Studie van de Overgewicht) President Prof. Dr. Theo M. van't Hof-Grootenboer	Portugal Portuguese Society for the Study of Obesity (Sociedade Portuguesa para o Estudo da Obesidade) President Dr. José Luís Anjo	Romania Romanian Association for the Study of Obesity (Asociația Română pentru Studiul Obesității) President Prof. Dr. Nicolae Hancu	Sweden Swedish Association for the Study of Obesity (Svenska Fettsjukvårssällskapet) President Dr. Torbjörn Sjostrom	Switzerland Swiss Association for the Study of Obesity (Société Suisse pour l'Etude de l'Obésité) President Dr. André Björntorp	United Kingdom UK Association for the Study of Obesity (UKASO) President Prof. Dr. Ken Clarendon
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Mediterranean Diet

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



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 Prof. Michele Carruba

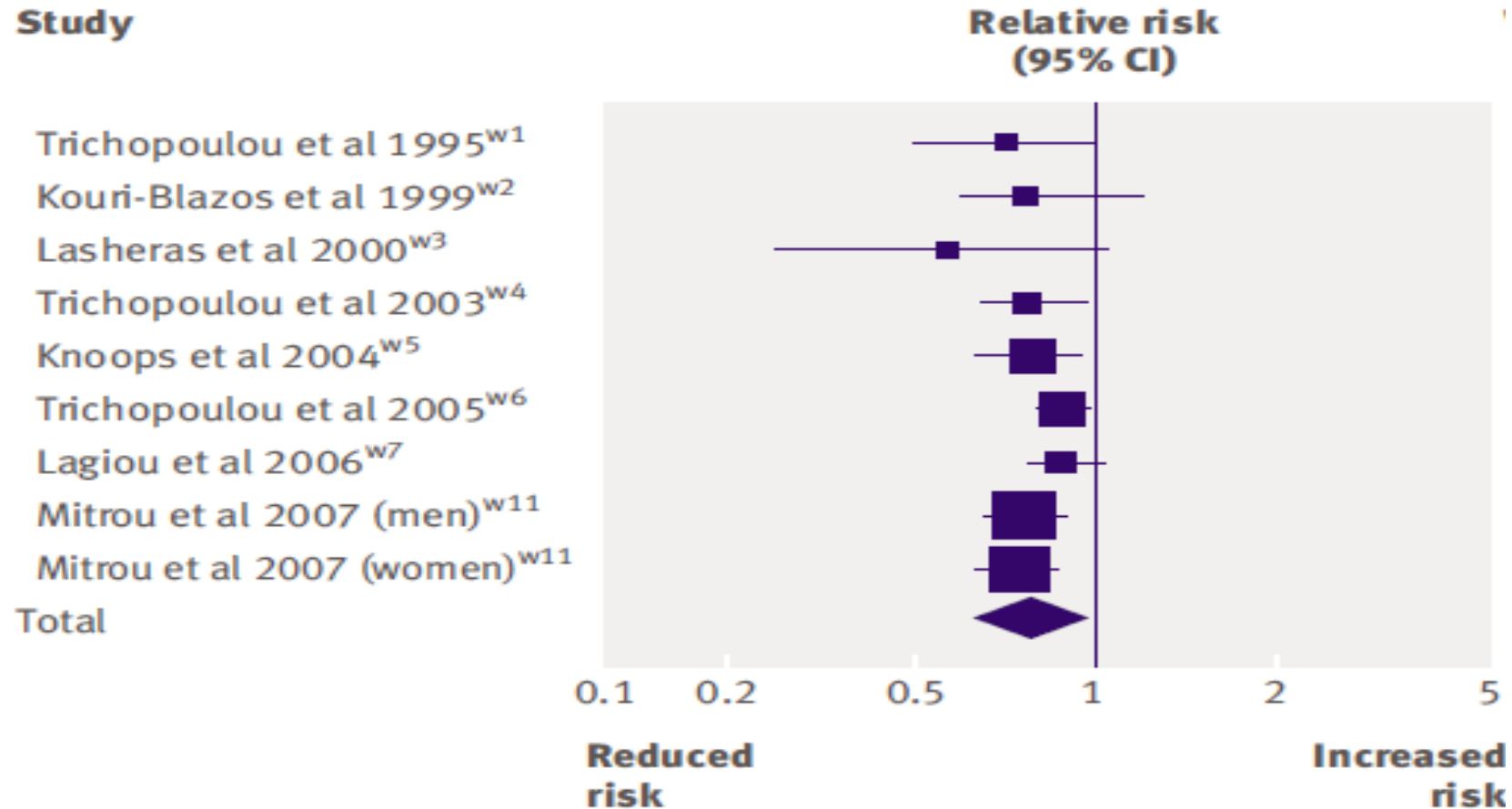


Characteristics food choices of the Mediterranean diet

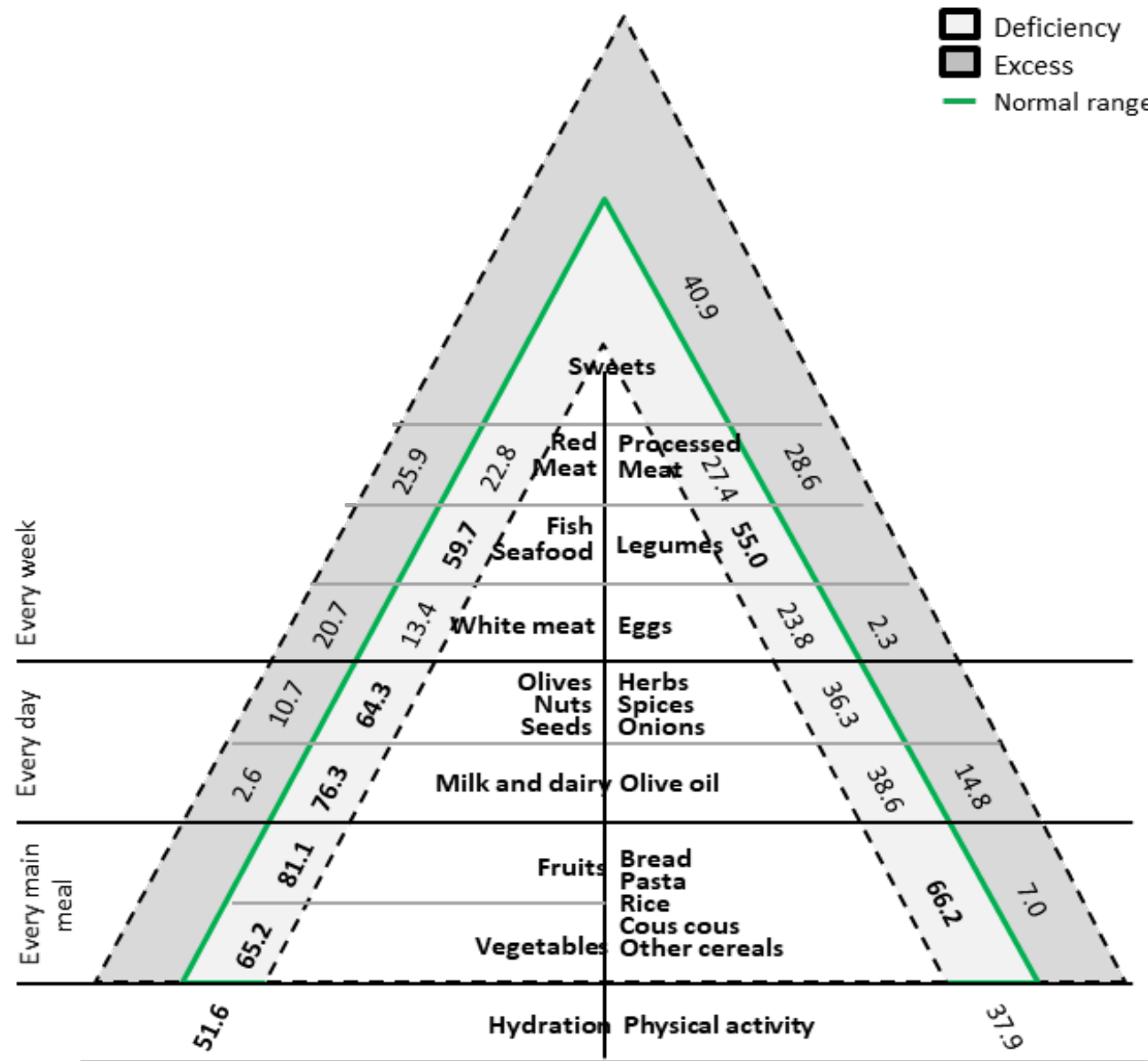
- ⇓ **Eggs and cheese**
- ⇓ **Red meat and processed meat**
- ⇓ **Animal fats**
- ⇑ **Sea food**
- ⇑ **Whole grains**
- ⇑ **Vegetables and legumes**
- ⇑ **Olive oil**
- ⇑ **Fresh fruits and nuts**



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



Four suggestions to EU institutions:

To acknowledge obesity as a true, chronic and recurrent disease, epidemic and potentially lethal;

To organize national healthcare systems to sustain economic efforts in favour of prevention and treatment of obesity;

To promote a culture of proper nutrition;

To educate children in schools on healthy nutrition and lifestyle.