

FESTIVAL
DELLO
SVILUPPO
SOSTENIBILE
2024

PROMOSSO DA



Università
degli Studi
di Palermo



Centro «
Sostenibilità -
Transizione
Ecologica»



RUS



A SCUOLA DI SOSTENIBILITÀ: IL PERCORSO DAL MARE ALLA TAVOLA

DATA E ORA

30 MAGGIO 2024

ORE 9.00 - 13.30

LOCALITÀ

SALA LANZA, ORTO BOTANICO, VIA LINCOLN N. 2, PALERMO

UNIVERSITÀ DEGLI STUDI DI PALERMO

Consumo di pesce e salute

Silvio Buscemi

Dipartimento PROMISE e CSTE

UNIPA



+ Lungh. = 0,097 cm

Carotide
L12-3
MI 0,9
TIS 0,2

F2 Gn 50
< 232dB/C4
H/3/4

DESTRA

23Hz 4cm

T
P ▲ R
3,0 12,0

T
P ▲ R
3,0 12,0

Vas-C

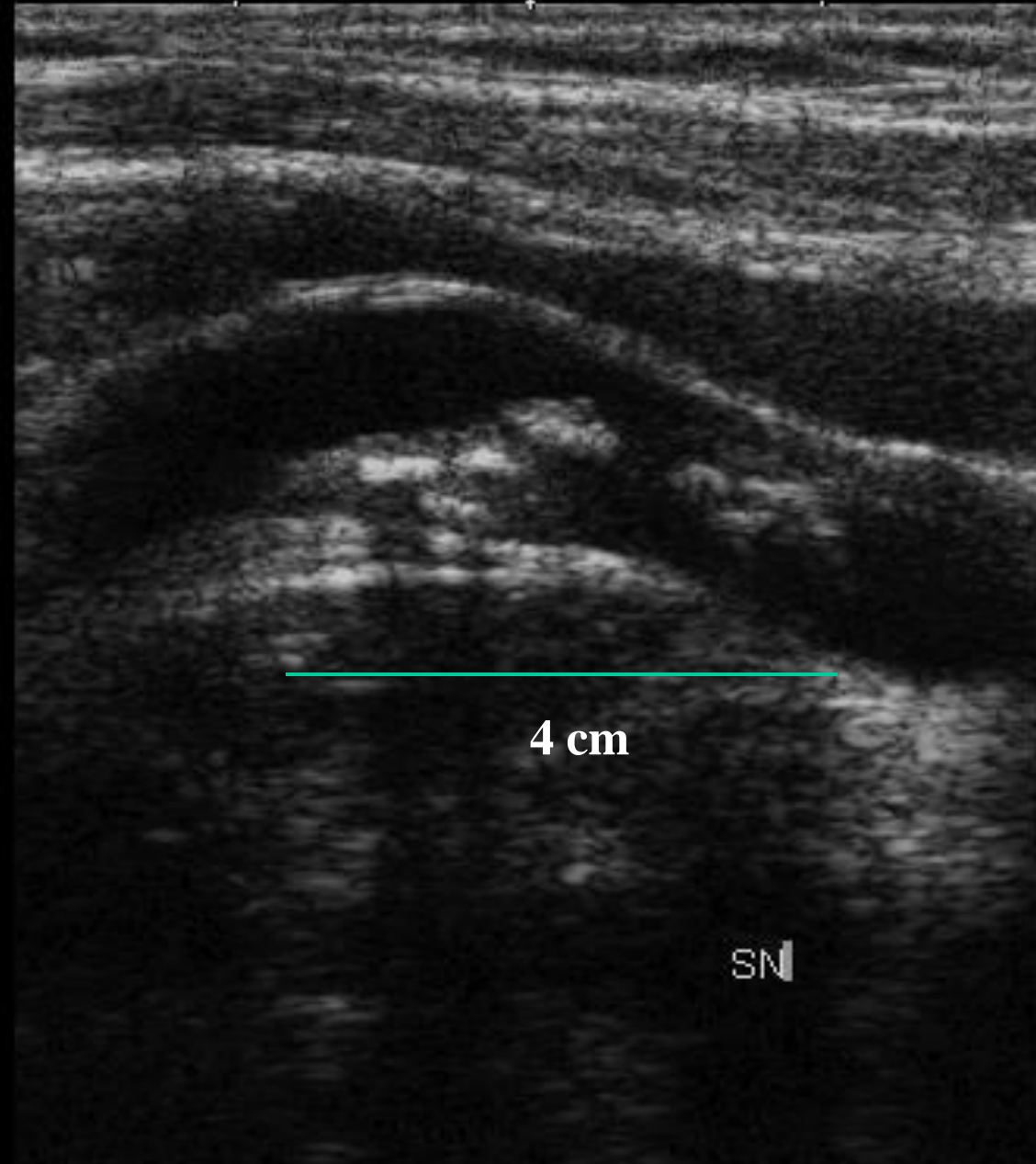
L10-5 7.5

FPS 14h

S

1 μ m

1 nm



SN

4 cm

S

40

31

Vas-C

L10-5 7.5

FPS 14h

S



BIF
C DX

40

S

31

2D 55/0/19

MI 0.8

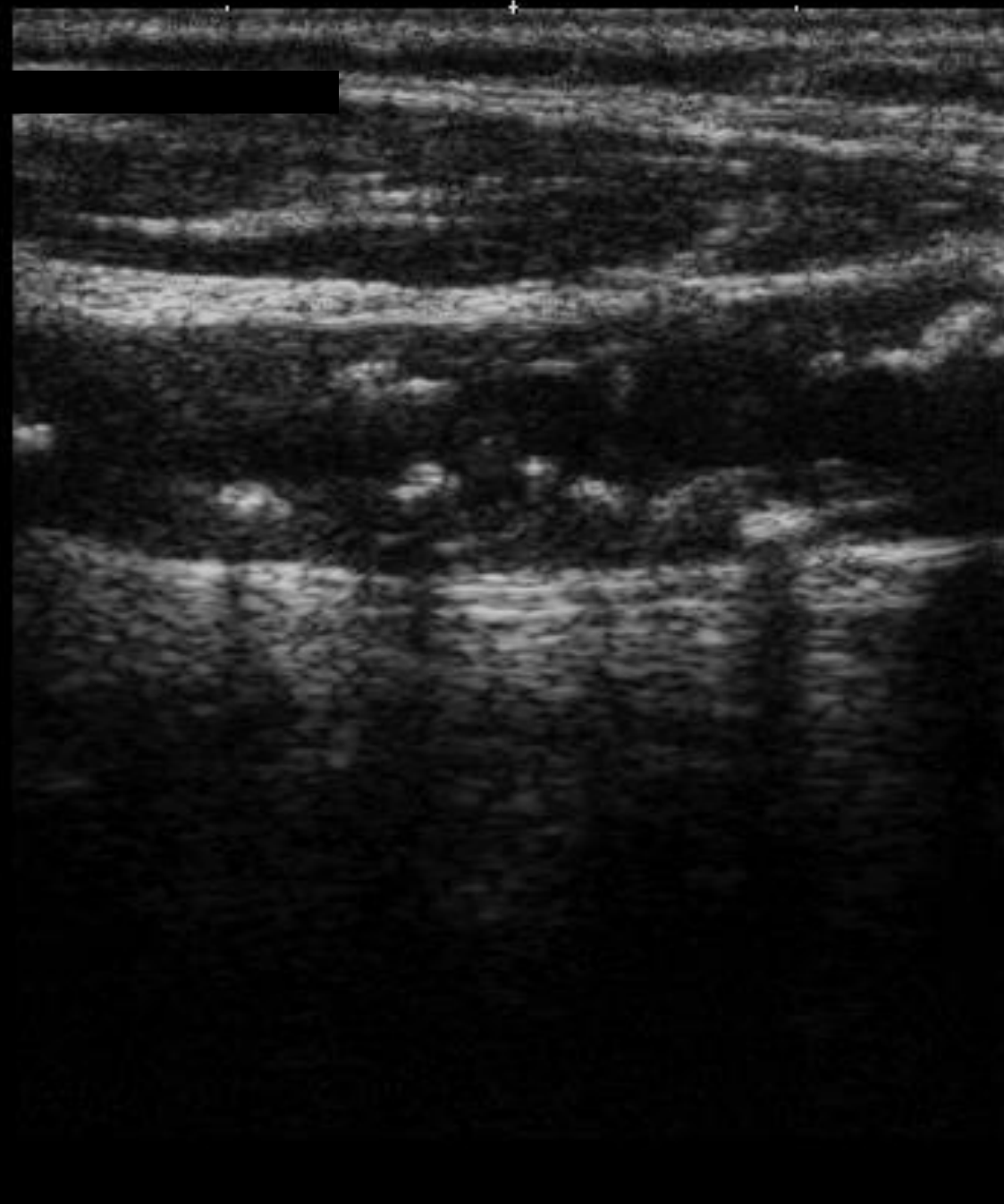
Tx 100%



Vas-C

L10-5 7.5

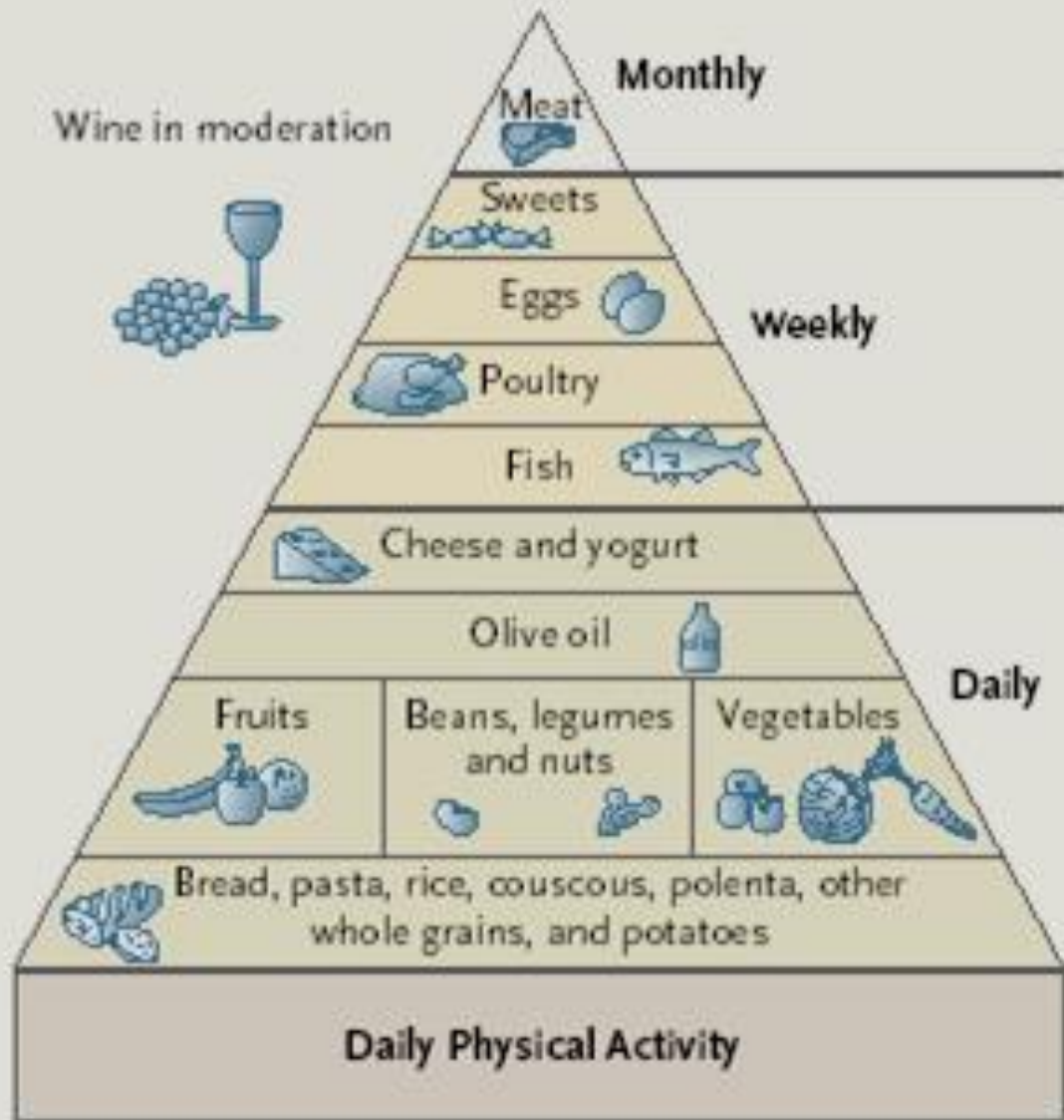
FPS 14h



8

40

31  



Food Pyramid Reflecting the Traditional Healthy Mediterranean Diet.

Mediterranean diet pyramid
A contemporary approach to delicious, healthy eating

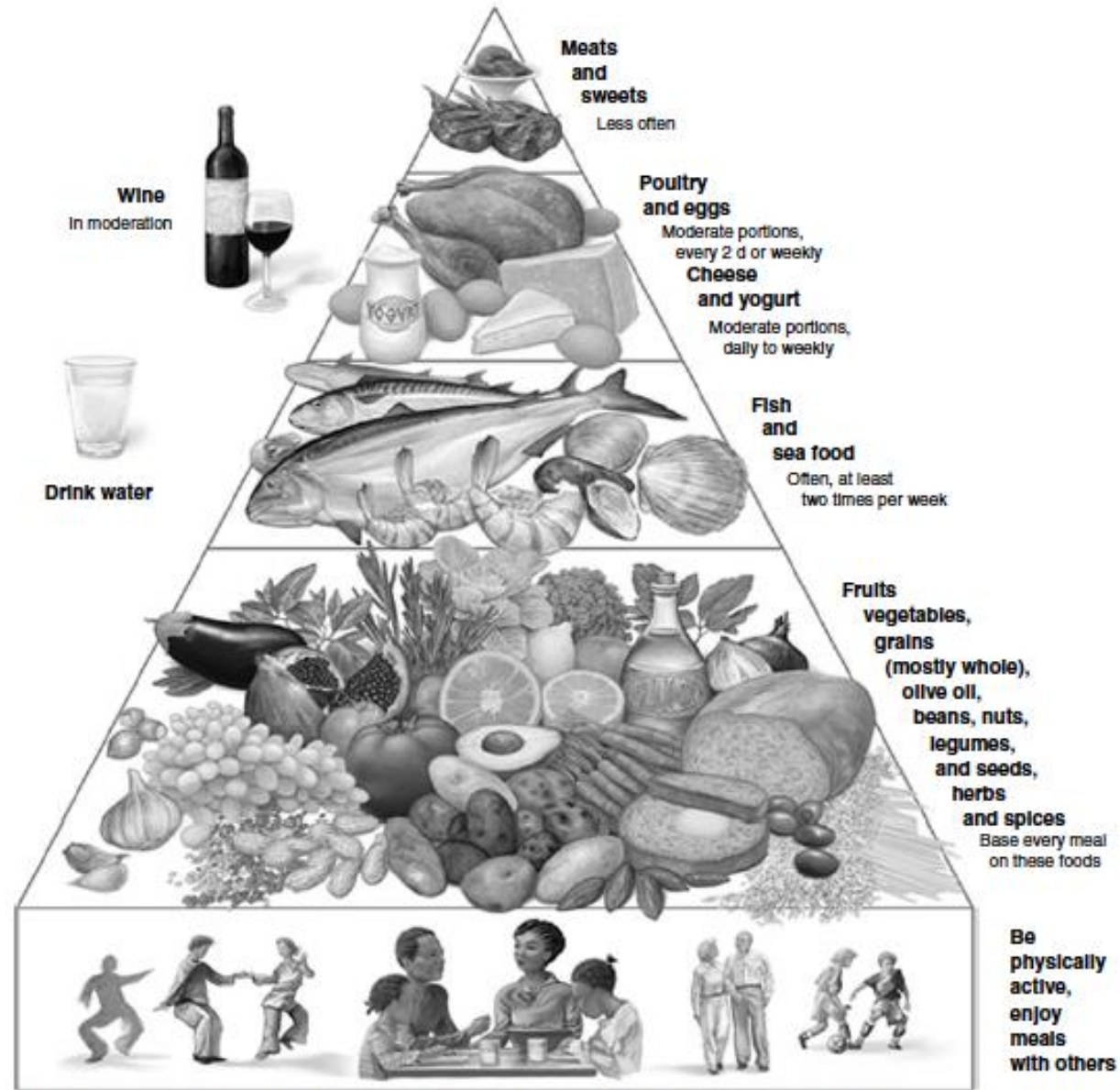


Fig. 2. Key features of the Mediterranean diet expressed as a Mediterranean diet pyramid. (From Oldways Preservation & Exchange Trust⁽¹⁴⁹⁾; reproduced with permission.)

Asymptomatic Carotid Atherosclerosis (plaques and/or IMT ≥ 0.9)

ABCD

Fish intake:
1 vs < 1 servings/wk
>1 vs <1 servings/wk

Physical activity:
light vs none
moderate/heavy vs none

Use of statins (yes vs not)

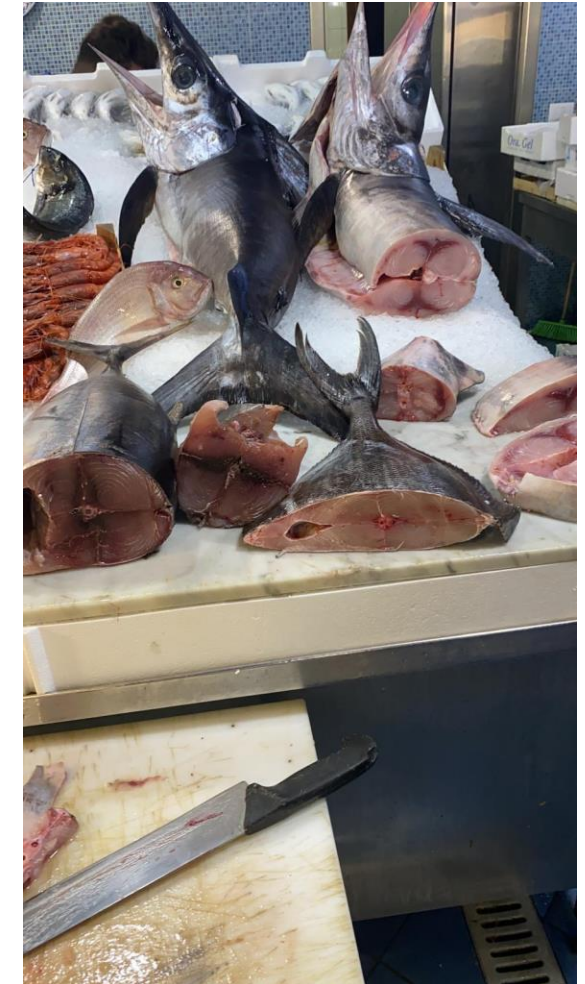
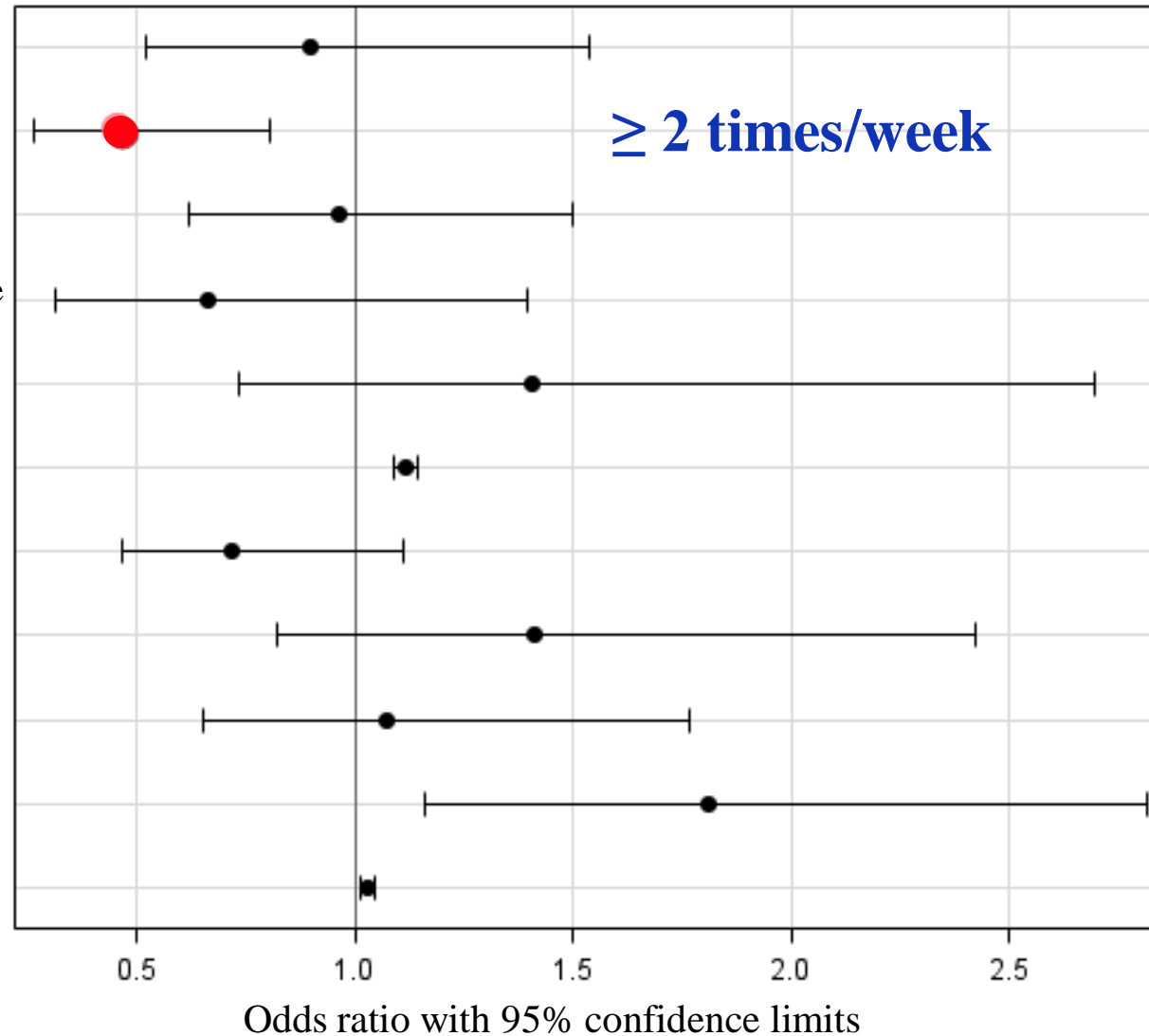
Age (years)

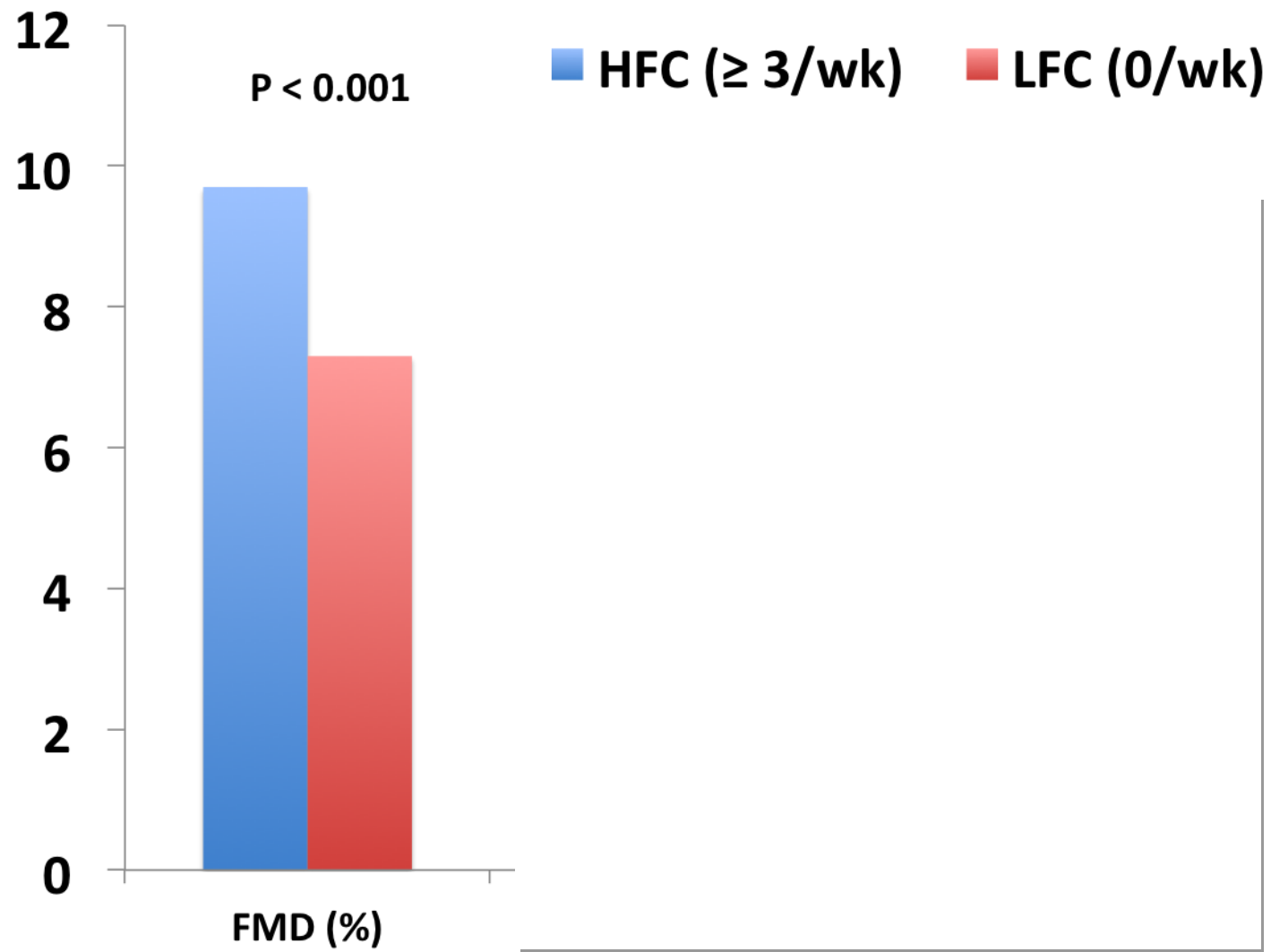
Sex (males vs females)

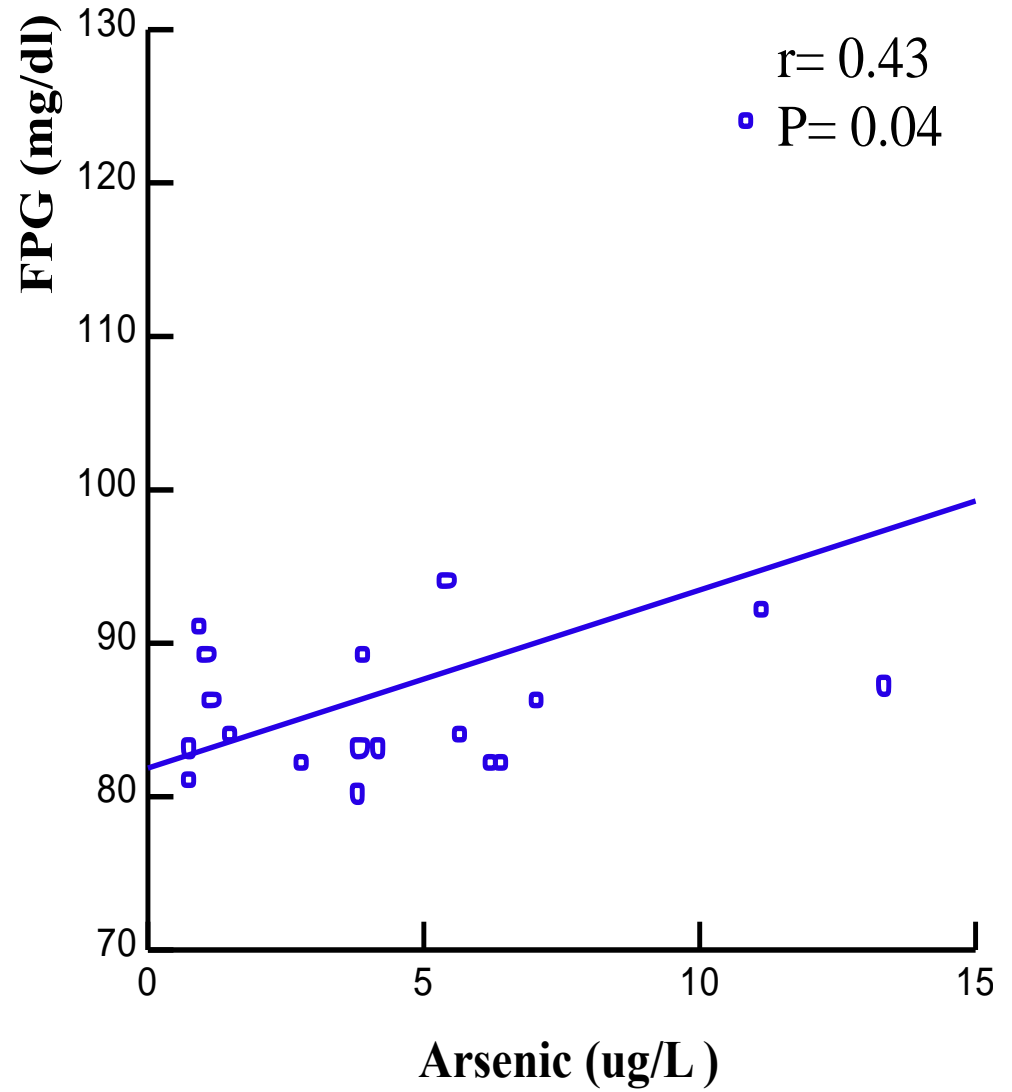
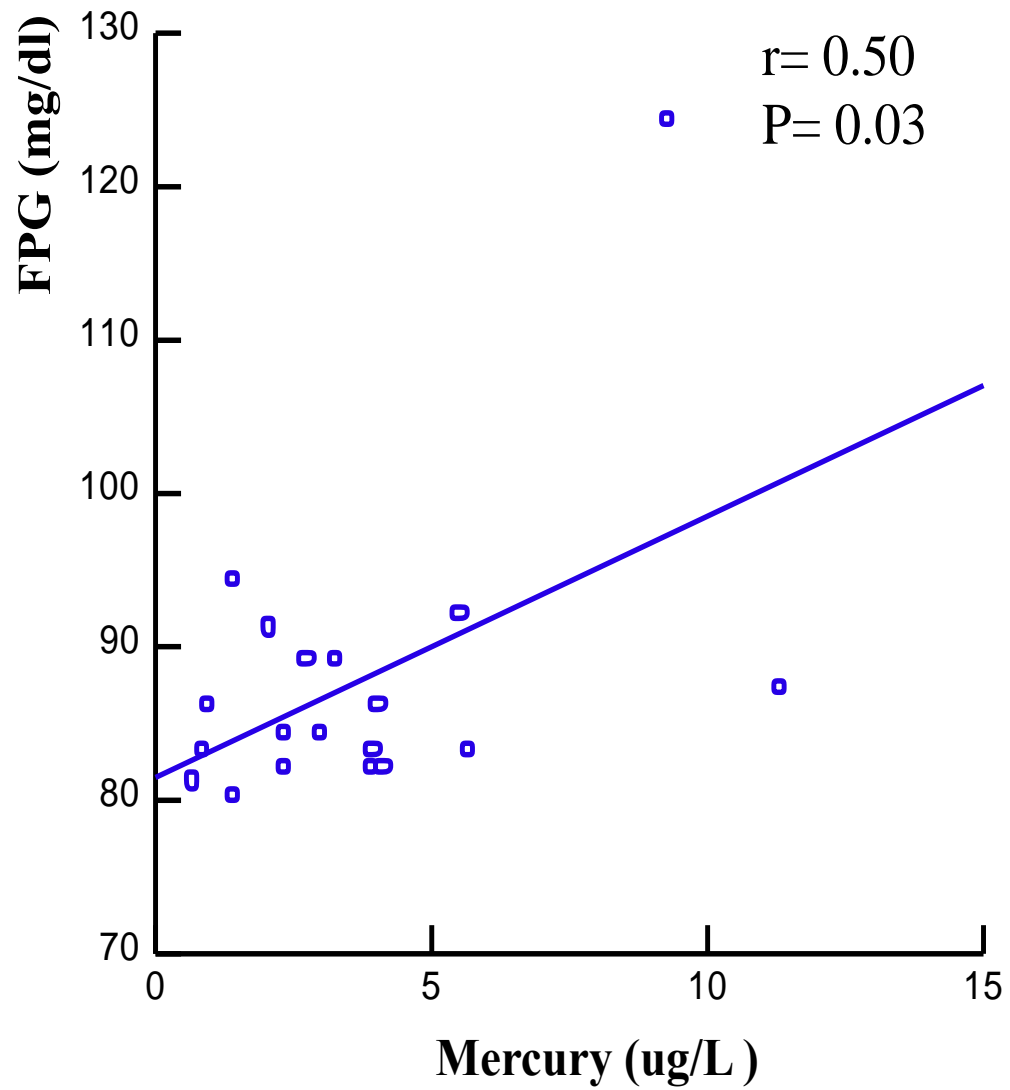
Smoking:
former vs never
current vs never

Hypertension on treatment
(yes vs not)

Pulse pressure (mmHg)







ORIGINAL ARTICLE

Microplastics and Nanoplastics in Atheromas and Cardiovascular Events

NEJM, MARZO 2024

R. Marfella, F. Prattichizzo, C. Sardu, G. Fulgenzi, L. Graciotti, T. Spadoni, N. D'Onofrio, L. Scisciola, R. La Grotta, C. Frigé, V. Pellegrini, M. Municinò, M. Siniscalchi, F. Spinetti, G. Vigliotti, C. Vecchione, A. Carrizzo, G. Accarino, A. Squillante, G. Spaziano, D. Mirra, R. Esposito, S. Altieri, G. Falco, A. Fenti, S. Galoppo, S. Canzano, F.C. Sasso, G. Matacchione, F. Olivieri, F. Ferraraccio, I. Panarese, P. Paolisso, E. Barbato, C. Lubritto, M.L. Balestrieri, C. Mauro, A.E. Caballero, S. Rajagopalan, A. Ceriello, B. D'Agostino, P. Iovino, and G. Paolisso

ABSTRACT

CONCLUSIONS

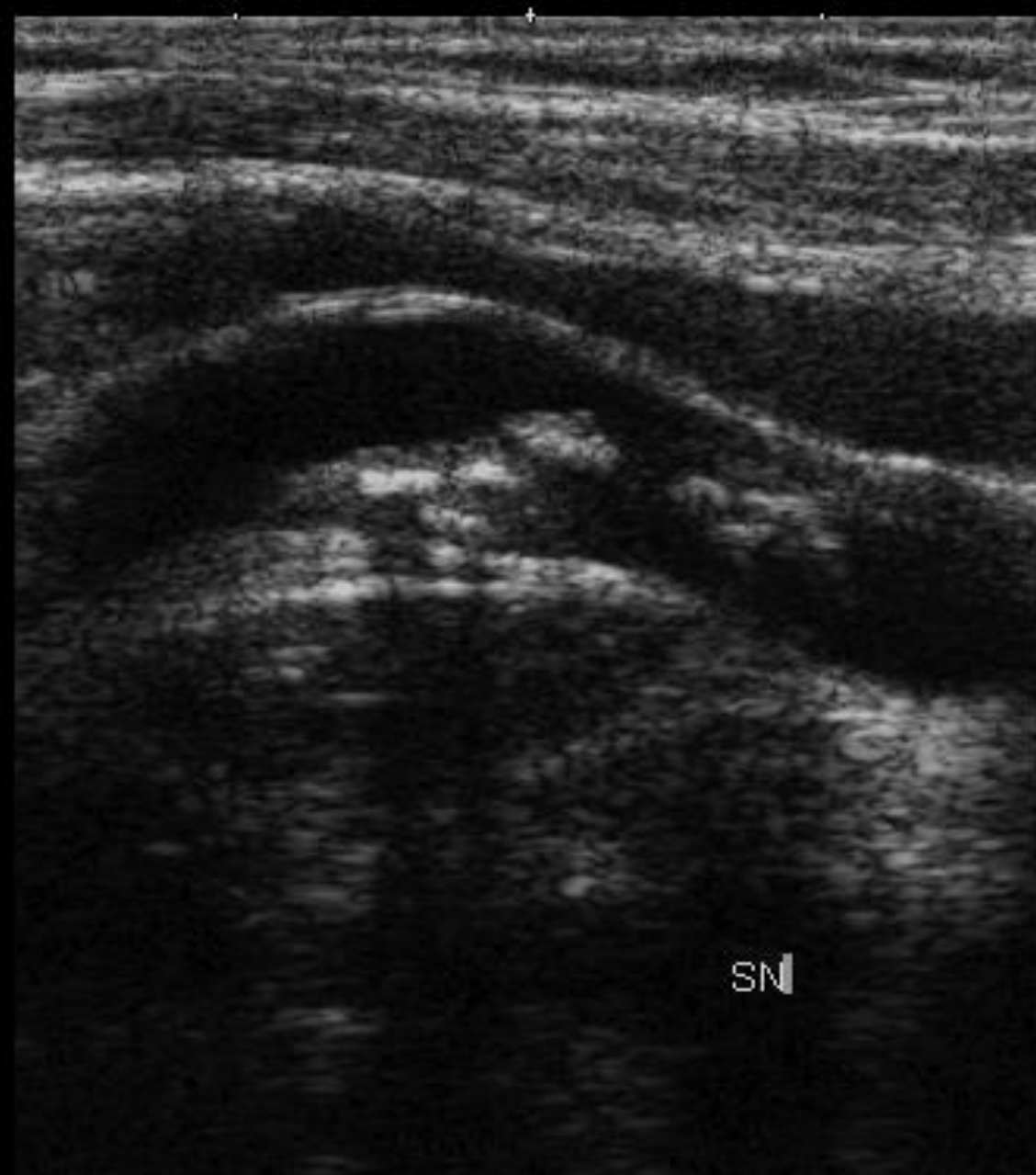
In this study, patients with carotid artery plaque in which MNPs were detected had a higher risk of a composite of myocardial infarction, stroke, or death from any cause at 34 months of follow-up than those in whom MNPs were not detected. (Funded by Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale and others; ClinicalTrials.gov number, NCT05900947.)

Vas-C

L10-5 7.5

FPS 14h

S



SN

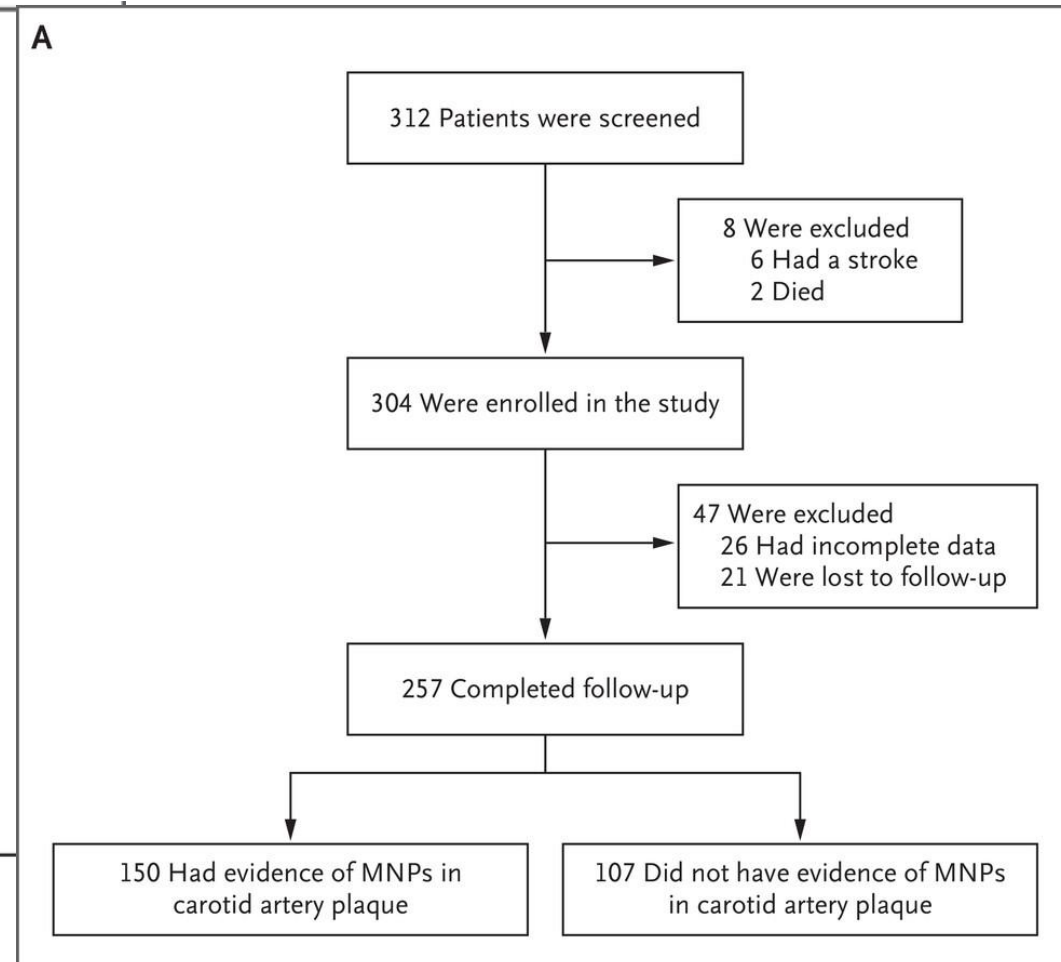
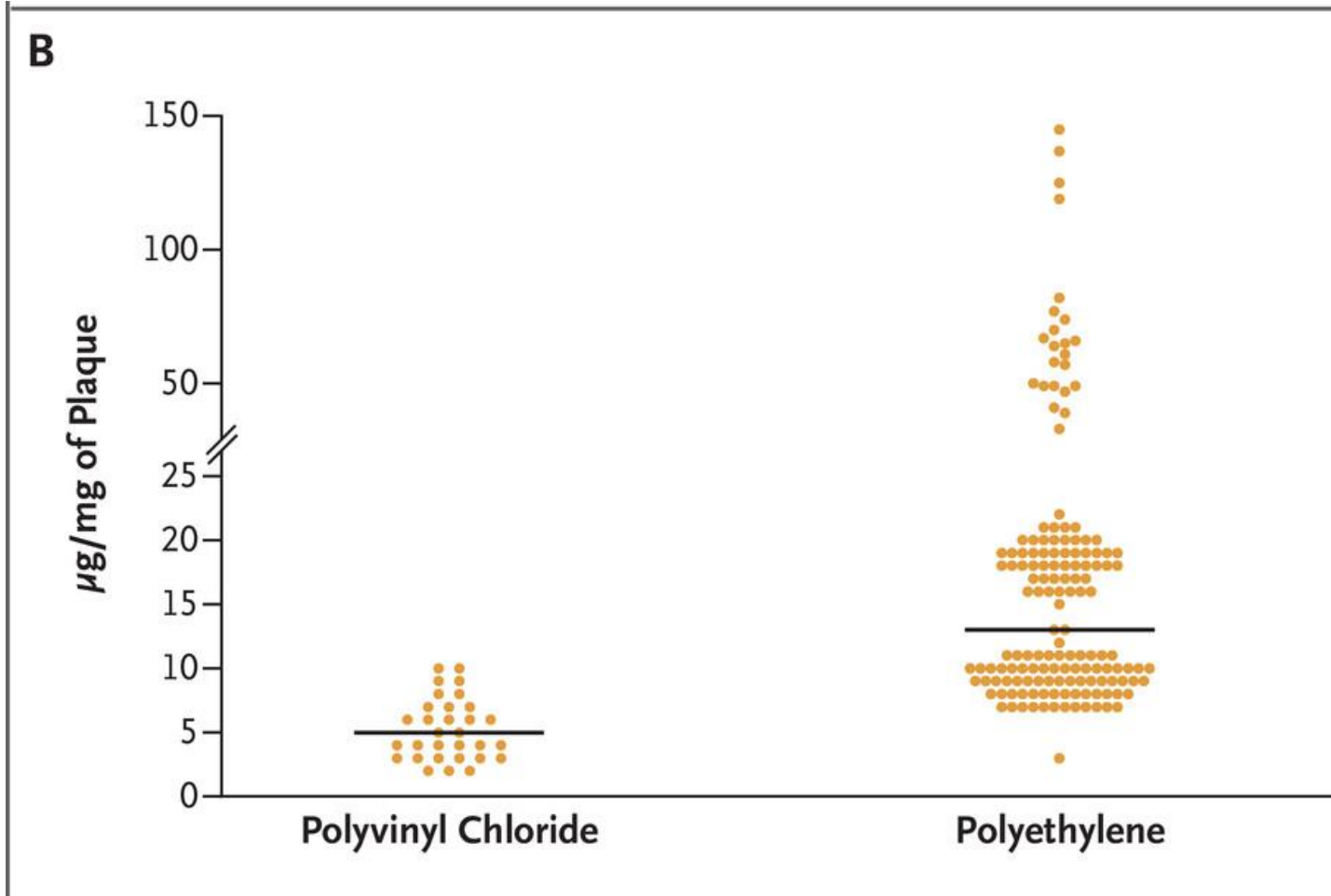
S

40

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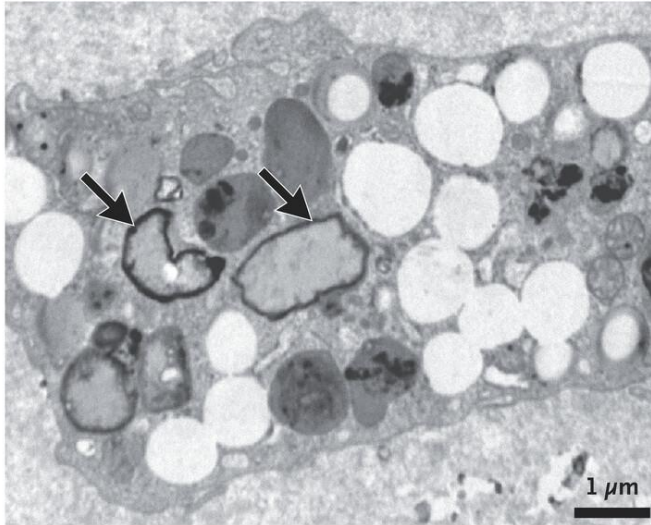
10

Microplastiche e nanoplastiche e placche carotidee

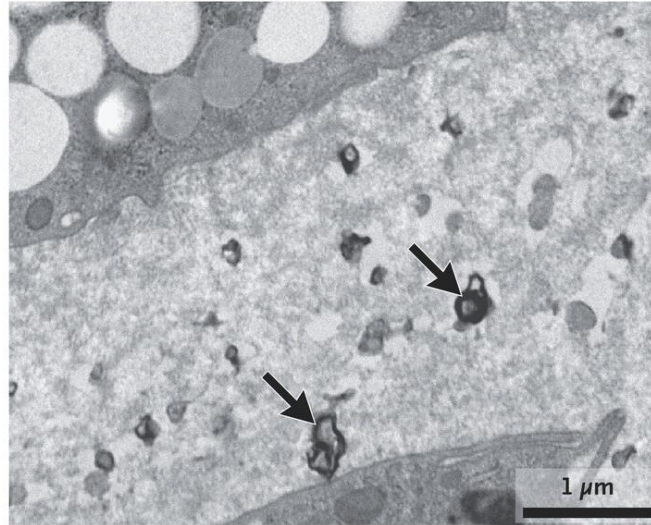


A Transmission Electron Microscopy

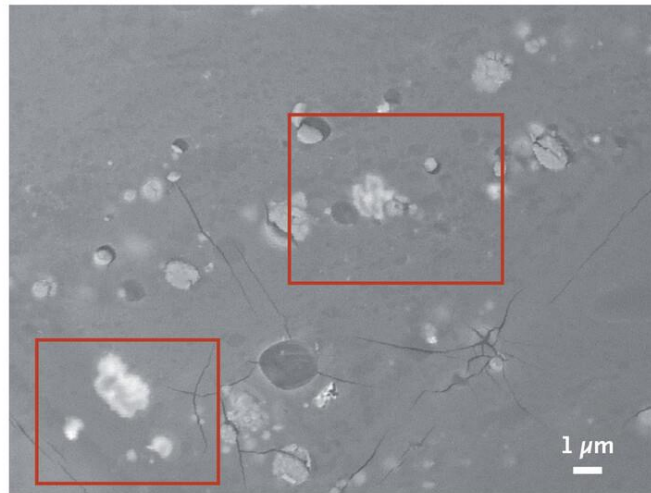
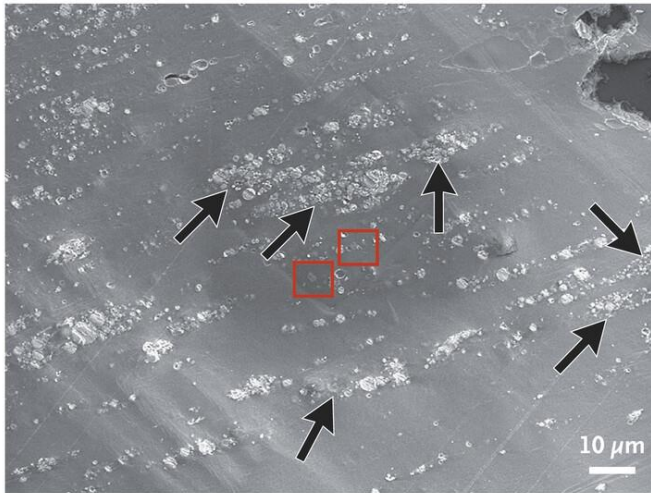
Inside Macrophage



Outside Macrophage



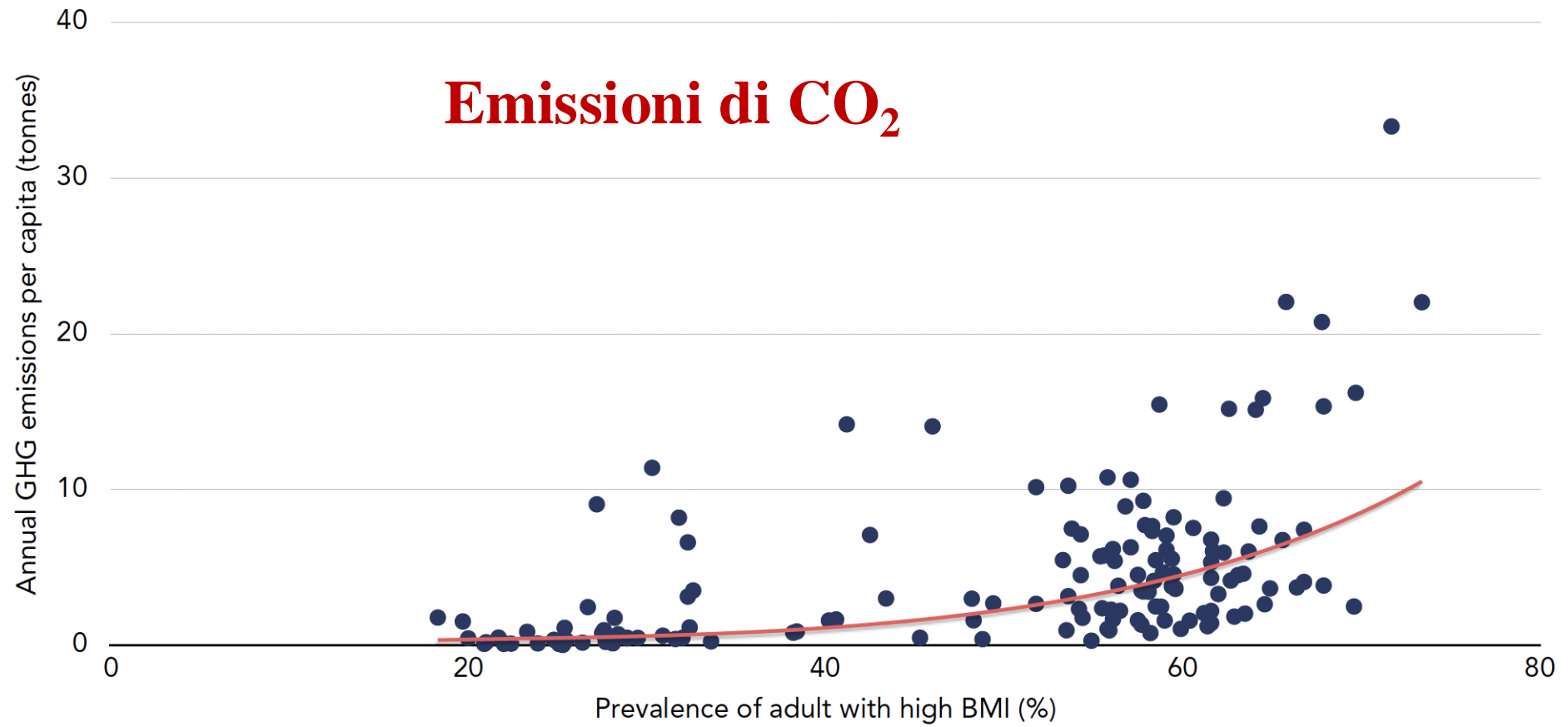
B Scanning Electron Microscopy Using Back-Scattered Electrons



Electron Microscopy Analysis of Atheromatous Plaque.

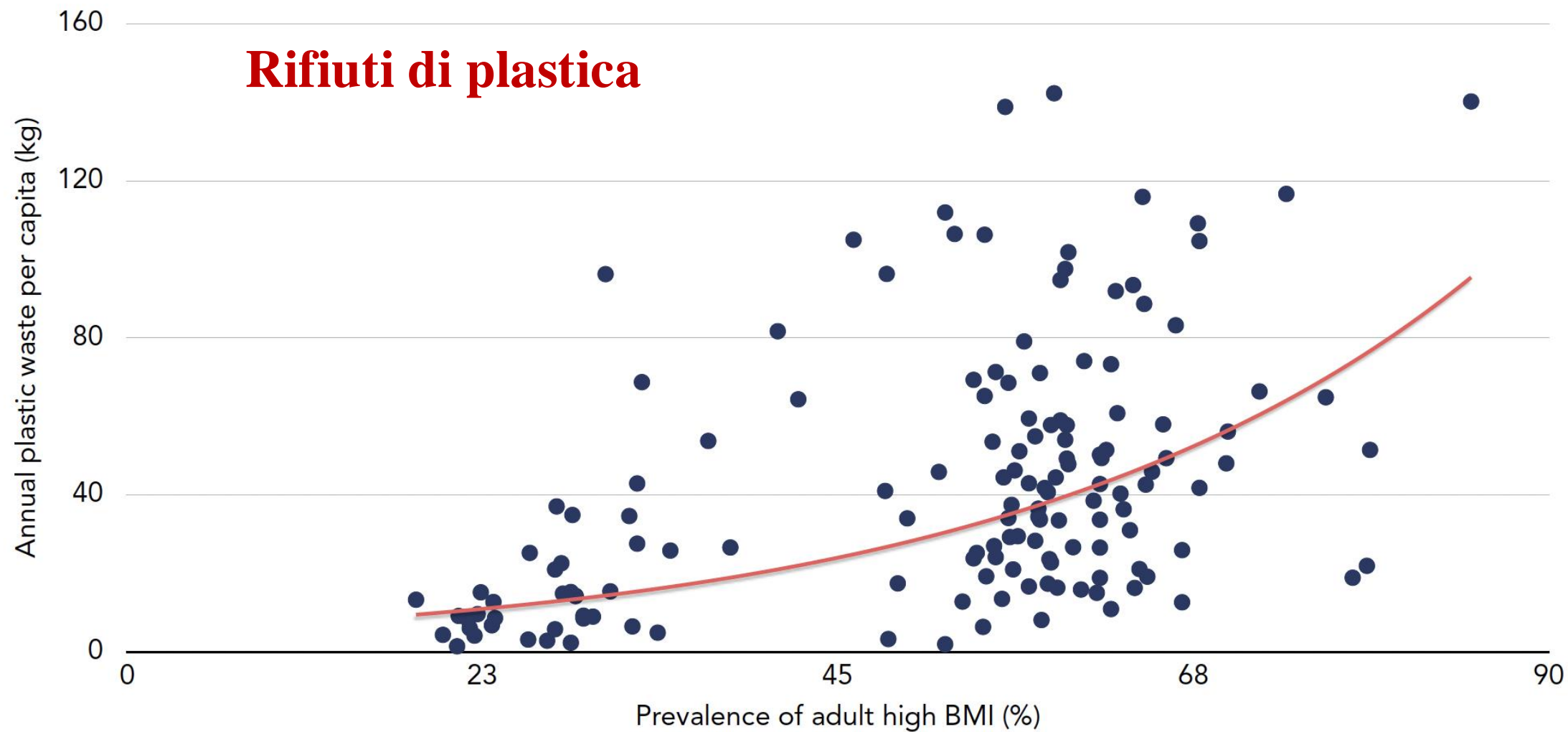
Panel A shows transmission electron microscopy images of particles of high internal electron transparency contoured by a very thin electron opaque line. These particles do not resemble usual organic material owing to their particularly irregular shape. These particles (arrows) were detected inside living macrophages and outside in the amorphous material of the plaque (arrows). Panel B shows images of the same specimen obtained with scanning electron microscopy using back-scattered electrons, which showed macrophages dispersed in the amorphous plaque material (arrows) and small particles of low-reflecting material contoured by a thin line of high-reflecting material identified in the plaque (red boxes).

Ambiente ↔ Obesità

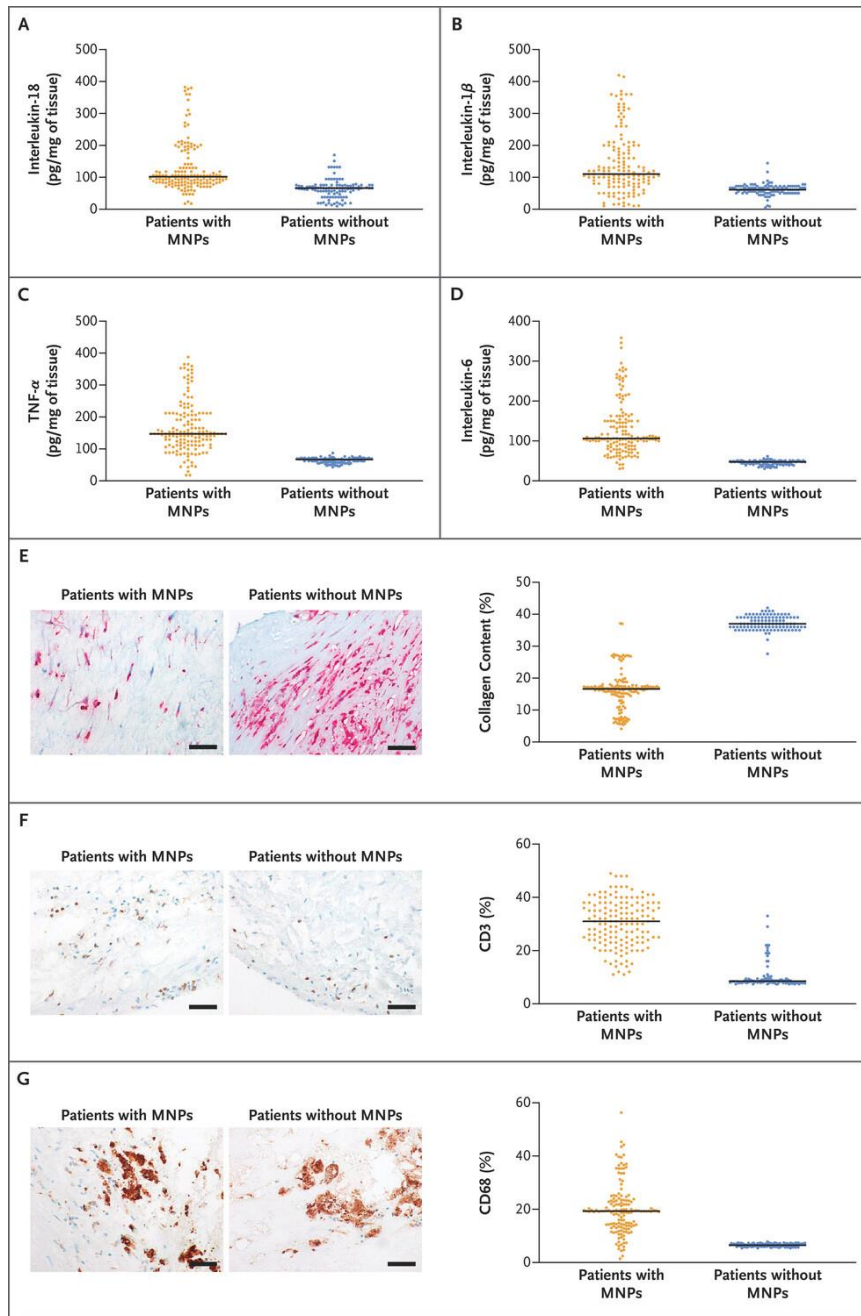


Source: World Obesity Federation analysis using data from NCD RisC, 2024 and International Energy Authority, 2023.

Rifiuti di plastica



Source: World Obesity Federation analysis using data from NCD RisC, 2024 and World Bank, 2023b



Inflammatory Markers in Plaque Samples.

Panels A through D show the abundance of interleukin-18, interleukin-1 β , tumor necrosis factor α (TNF- α), and interleukin-6, respectively, assessed by means of enzyme-linked immunosorbent assay. Panels E, F, and G show the abundance of collagen, CD3, and CD68, respectively, measured by immunohistochemical assay in the group of patients with evidence of MNPs within the plaque and the group with no evidence of MNPs. Medians and individual values are shown.