67° CONGRESSO NAZIONALE SIGG

LA LONGEVITÀ DECLINATA AL FEMMINILE

SELF-REPORTED DIFFICULTY IN WALKING 400 METERS THE "*RED FLAG*" FOR PROBABLE SARCOPENIA

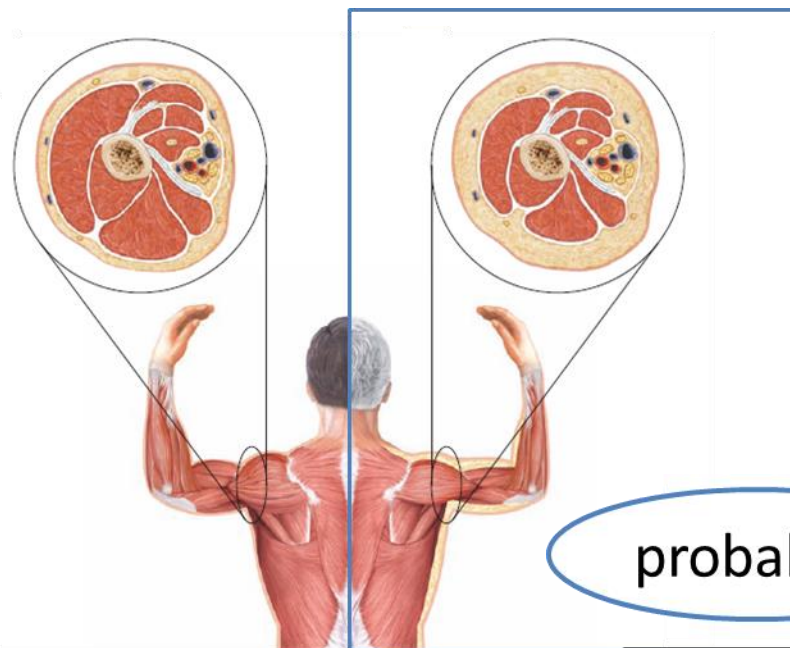**Sara Salini**
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SOCIETÀ ITALIANA DI GERONTOLOGIA E GERIATRIA

Roma, 30 novembre - 3 dicembre 2022
UNIVERSITÀ CATTOLICA DEL SACRO CUORE

GUIDELINES

Sarcopenia: revised European consensus on definition and diagnosis

Alfonso J. Cruz-Jentoft[1], Gülistan Bahat[2], Jürgen Bauer[3], Yves Boirie[4], Olivier Bruyère[5], Tommy Cederholm[6], Cyrus Cooper[7], Francesco Landi[8], Yves Rolland[9], Avan Aihie Sayer[10], Stéphane M. Schneider[11], Cornel C. Sieber[12], Eva Topinkova[13], Maurits Vandewoude[14], Marjolein Visser[15], Mauro Zamboni[16], Writing Group for the European Working Group on Sarcopenia in Older People 2 (EWGSOP2), and the Extended Group for EWGSOP2
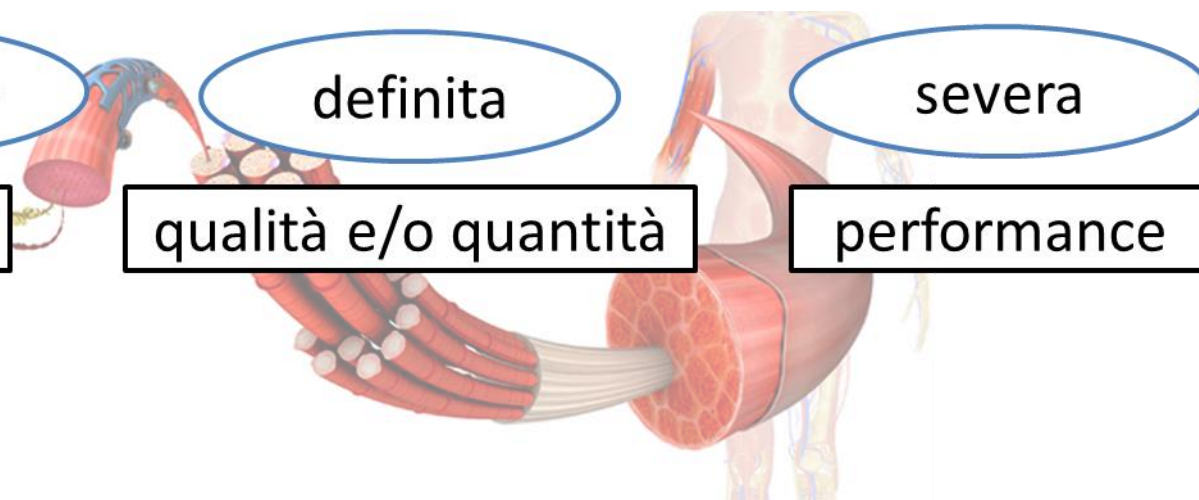
probabile — forza

definita — qualità e/o quantità
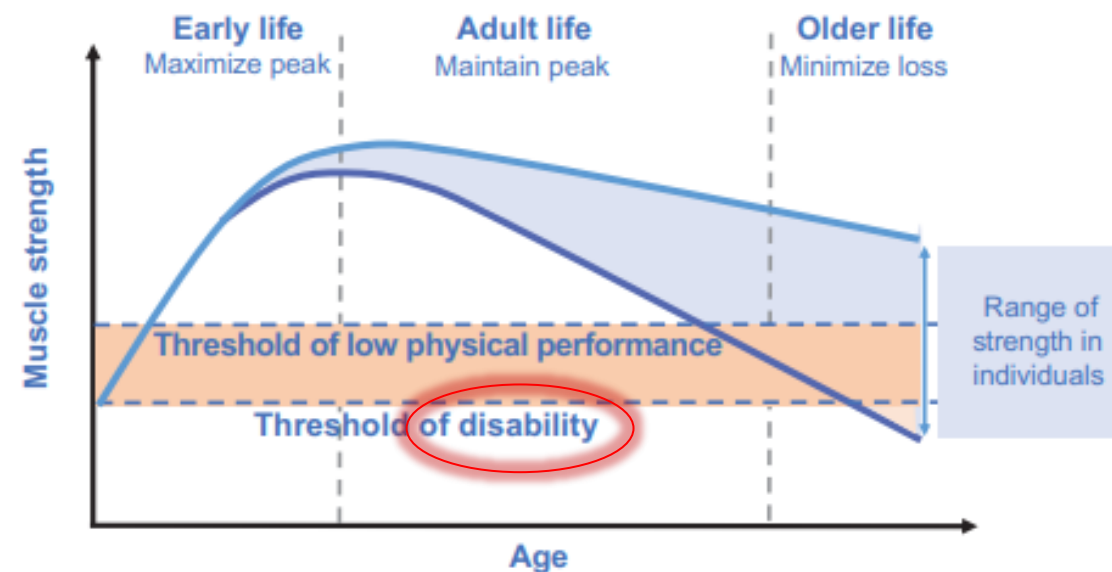
severa — performance

Aging	• Age-associated muscle loss
Disease	• Inflammatory conditions (e.g., organ failure, malignancy) • Osteoarthritis • Neurological disorders
Inactivity	• Sedentary behavior (e.g., limited mobility or bedrest) • Physical inactivity
Malnutrition	• Under-nutrition or malabsorption • Medication-related anorexia • Over-nutrition/obesity

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Longevity Check-Up 7+

Dal 1 giugno 2015….ad oggi!

Circa 15000 soggetti valutati
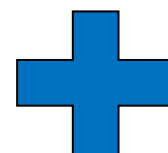
fumo

dieta

esercizio fisico

BMI

PA

colesterolemia

glicemia

VALUTAZIONE COMPOSIZIONE CORPOREA

1) Circonferenza metà braccio: _____cm

2) Plica tricipitale: _____mm

3) Circonferenza polpaccio: _____cm

4) Hand Grip (braccio dominante): _____Kg

5) Chair Stand Test (5 volte): _____secondi

+

SINGOLA DOMANDA
'Ha difficoltà a camminare per 400 metri?'

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Sarcopenia in daily practice: assessment and management

Charlotte Beaudart[1*] ⓘⓓ, Eugène McCloskey[2,3], Olivier Bruyère[1], Matteo Cesari[4,5], Yves Rolland[6], René Rizzoli[7], Islène Araujo de Carvalho[8], Jotheeswaran Amuthavalli Thiyagarajan[8], Ivan Bautmans[9], Marie-Claude Bertière[10], Maria Luisa Brandi[11], Nasser M. Al-Daghri[12], Nansa Burlet[1], Etienne Cavalier[13], Francesca Cerreta[14], Antonio Cherubini[15], Roger Fielding[16], Evelien Gielen[17], Francesco Landi[18], Jean Petermans[19], Jean-Yves Reginster[1], Marjolein Visser[20,21], John Kanis[2,22] and Cyrus Cooper[23,24]
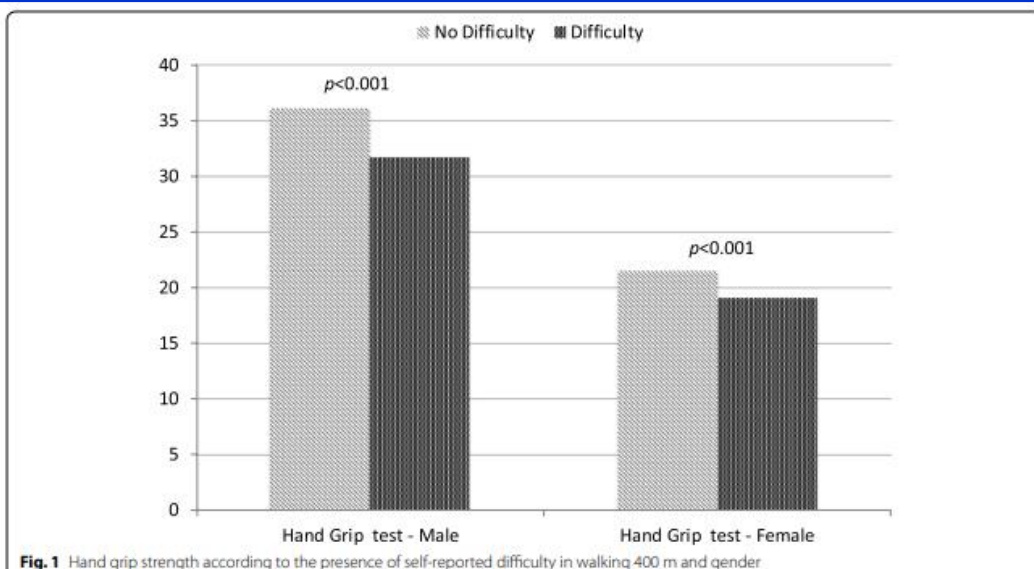
Table 1 Characteristics of study population (65 year and older) according self-reported difficulty in walking 400 m[a]

Characteristics	Total Sample (n = 2901)	Self-reported difficulty NO (n = 2067)	Self-reported difficulty YES (n = 834)	p
Age (years)	72.7 ± 5.7	72.0 ± 5.3	74.5 ± 6.1	< 0.001
Gender (Female)	1599 (55)	1047 (51)	552 (66)	< 0.001
Smoking	385 (13)	290 (14)	95 (12)	0.03
Healthy diet	2199 (76)	1606 (78)	593 (71)	< 0.001
Physical activity	1438 (50)	1199 (58)	239 (29)	< 0.001
BMI (Kg/m^2)	26.2 ± 4.0	25.6 ± 3.5	27.8 ± 4.6	< 0.001
Hypertension	2267 (80)	1577 (78)	690 (84)	< 0.001
Cholesterol (mg/dL)	199 ± 33	201 ± 33	196 ± 31	0.01
Diabetes	382 (13)	235 (11)	147 (18)	< 0.001
Sarcopenia	529 (19)	264 (13)	265 (34)	< 0.001

No Difficulty   Difficulty

Fig. 1 Hand grip strength according to the presence of self-reported difficulty in walking 400 m and gender
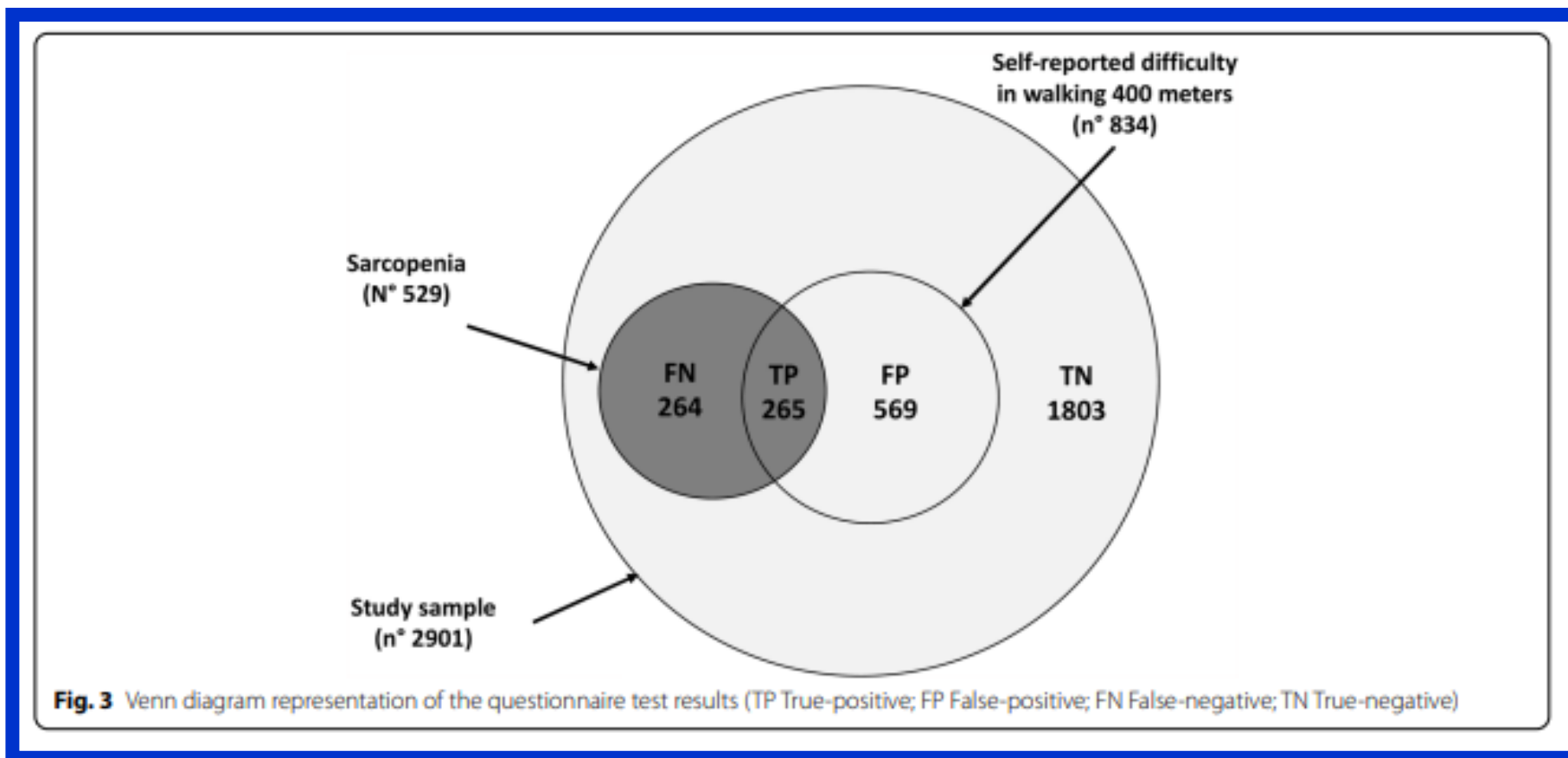
After adjusting for age, gender, smoking habit, healthy diet, physical activity, BMI, hypertension,
cholesterol level and diabetes,
**participants with difficulty
in walking 400 m were over two times
more likely to have
Probable Sarcopenia!**

	Univariate Odds Ratio (95% CI)	Adjusted Odds Ratio Model 1 (95% CI)	Adjusted Odds Ratio Model 2 (95% CI)	Adjusted Odds Ratio Model 3 (95% CI)
400 m difficulty				
NO	1.0 (Referent)	1.0 (Referent)	1.0 (Referent)	1.0 (Referent)
YES	3.34 (2.75–4.07)	2.45 (1.98–3.03)	2.24 (1.79–2.80)	2.13 (1.68–2.69)

Model 1: adjusted for age and gender

Model 2: adjusted for age, gender, smoking habit, healthy diet and physical activity

Model 3: adjusted for age, gender, smoking habit, healthy diet, physical activity, BMI, hypertension, cholesterol level and diabetes

Fig. 3 Venn diagram representation of the questionnaire test results (TP True-positive; FP False-positive; FN False-negative; TN True-negative)

The positive predictive value was 24.0 [21.8 – 26.4], **the negative predictive** value was 88.7 [87.7 – 89.6].

TAKE HOME MESSAGES

❖ The self reported difficulty in walking 400 m could be suggested as a method for the **early detection** of individuals at risk of probable sarcopenia.

❖ Simplifying the screening process could help to earlier identify sarcopenia and consequently to be more proactive in **implementing prevention and treatment strategies.**

❖ In the near future the use of technological systems (i.e., smartphones, social media) could help to **reach a greater segment of the population** and enhance the usefulness of this tool.

GRAZIE PER L'ATTENZIONE!