Simposio: HEALTHY AGING
Torino, 28 Novembre 2013

Composizione Corporea

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Modelli di composizione corporea

Bilancia

BIA

PESO

Massa grassa

Sottocutanea

Viscerale

Massa magra

Muscolo

osso

CT scan

MRI

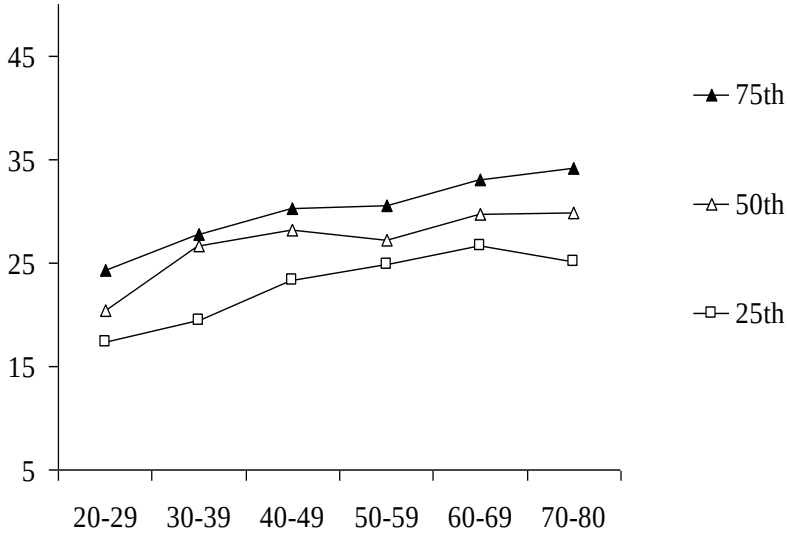
DEXA

pQCT

Percentuale di massa grassa ed età

VALORI PER LA POPOLAZIONE ITALIANA

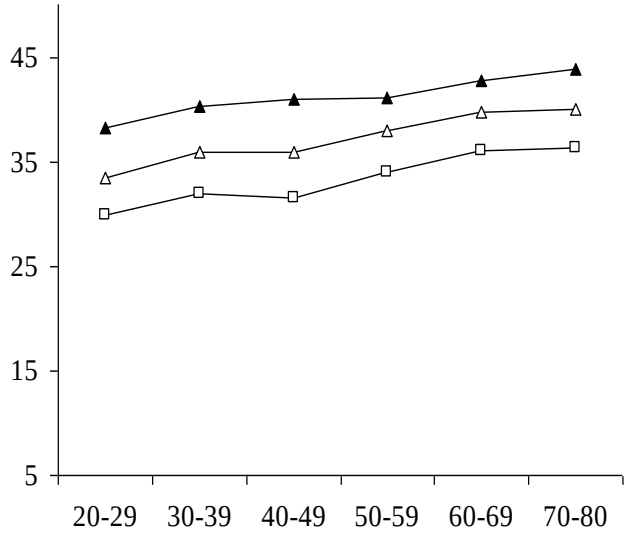
UOMINI n. 431



20-29 anni: 13-20%

70-80 anni: 21-31%

DONNE n. 1435

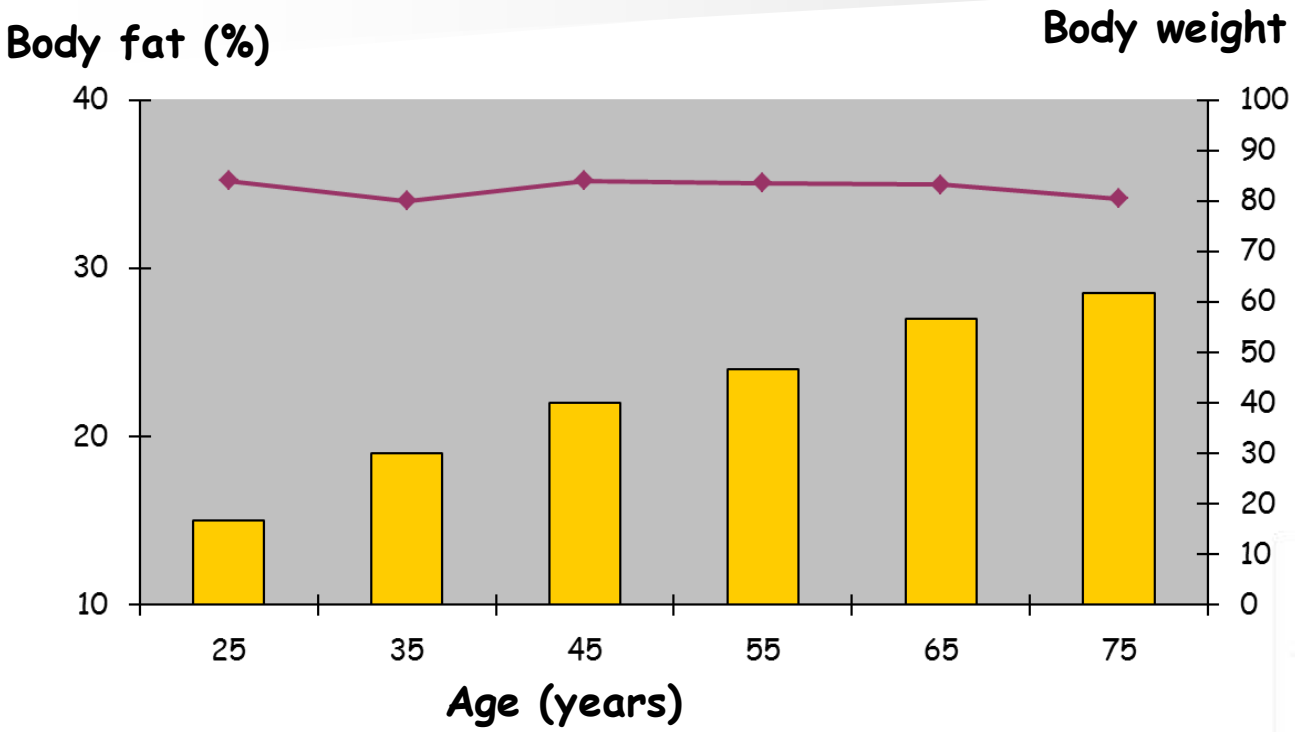


20-29 anni: 26-35%

70-80 anni: 33-41%

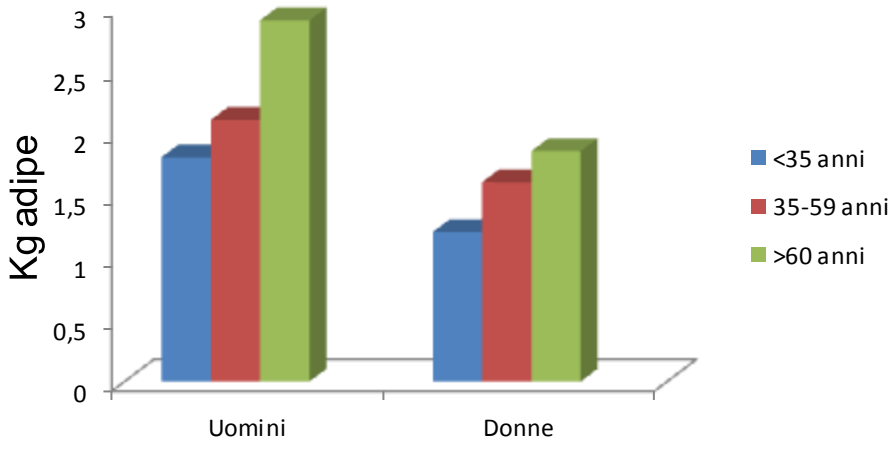
Coin A et al, Clin Nutr 2008

Peso corporeo, massa grassa ed età

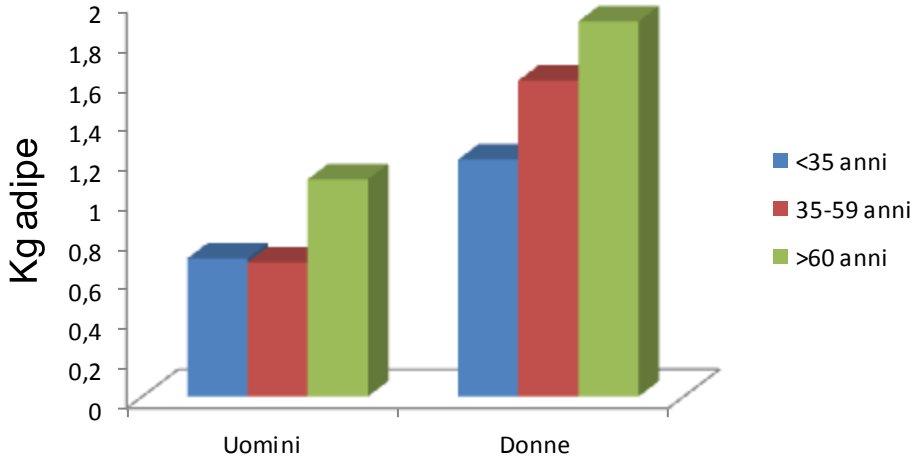


Prentice AM & Jebb SA, Obes Rev 2001

Tessuto adiposo viscerale, intramuscolare ed età



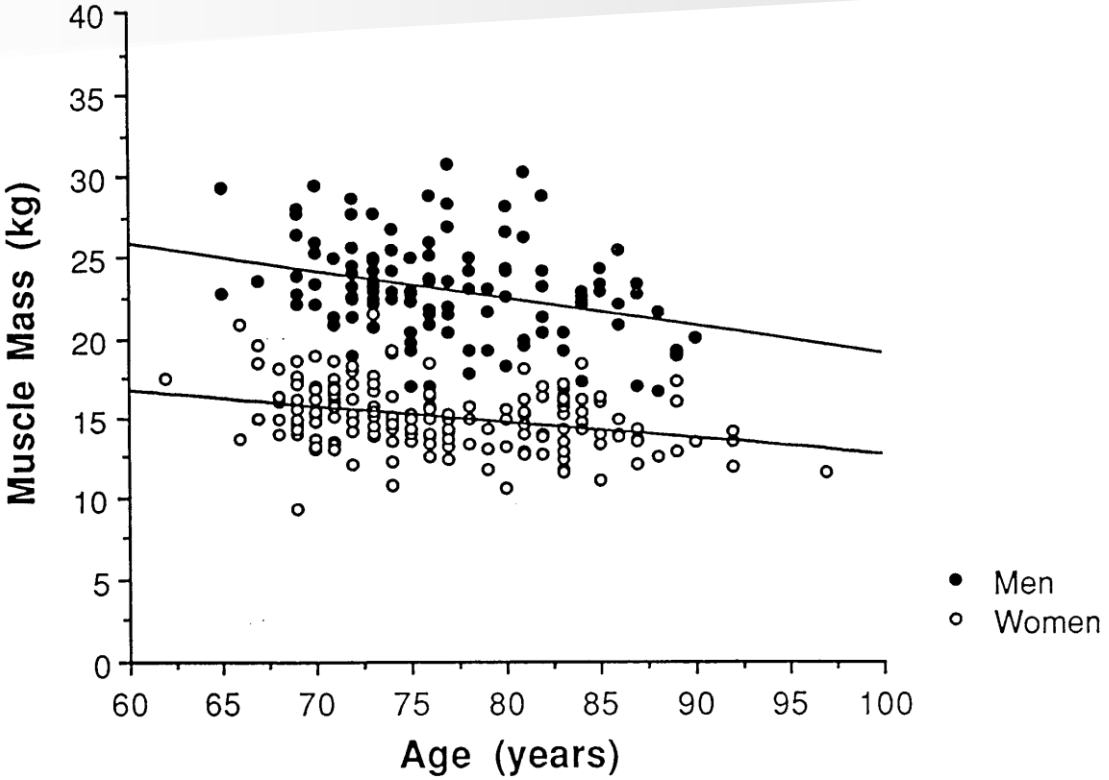
Grasso viscerale



Grasso intramuscolare

Gallagher et al, Am J Clin Nutr 2004

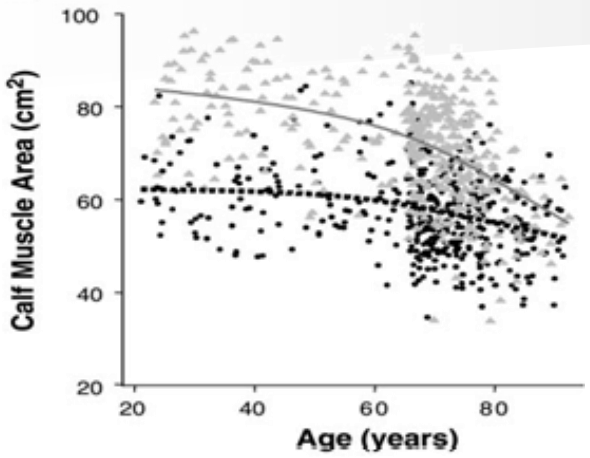
Massa muscolare e invecchiamento

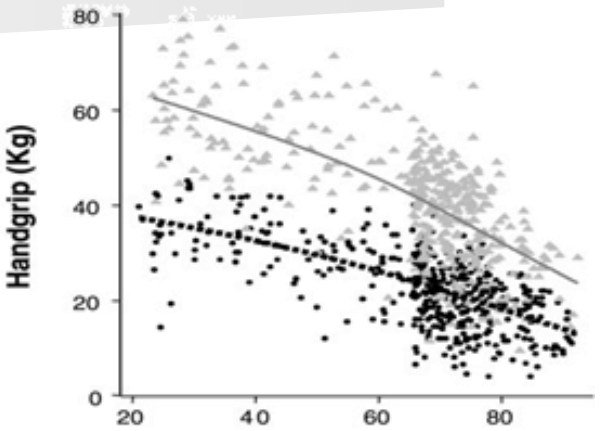


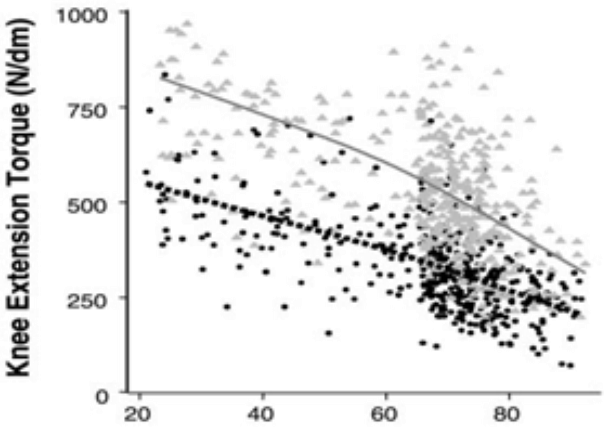
Baumgartner RN et al, Mech Ageing Dev 1999

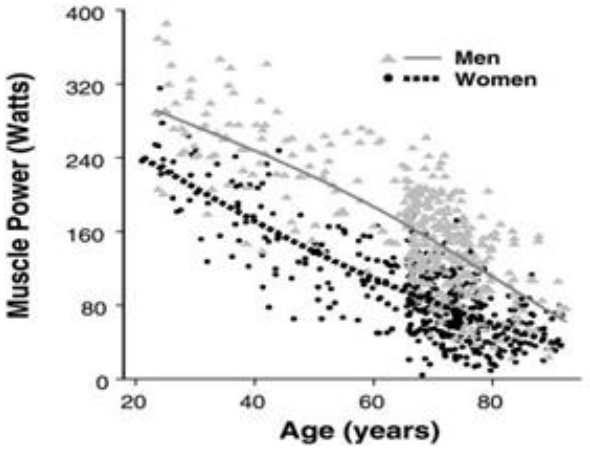
Riduzione della massa e della forza muscolare con l'età

(469 uomini, 561 donne - Studio InCHIANTI)





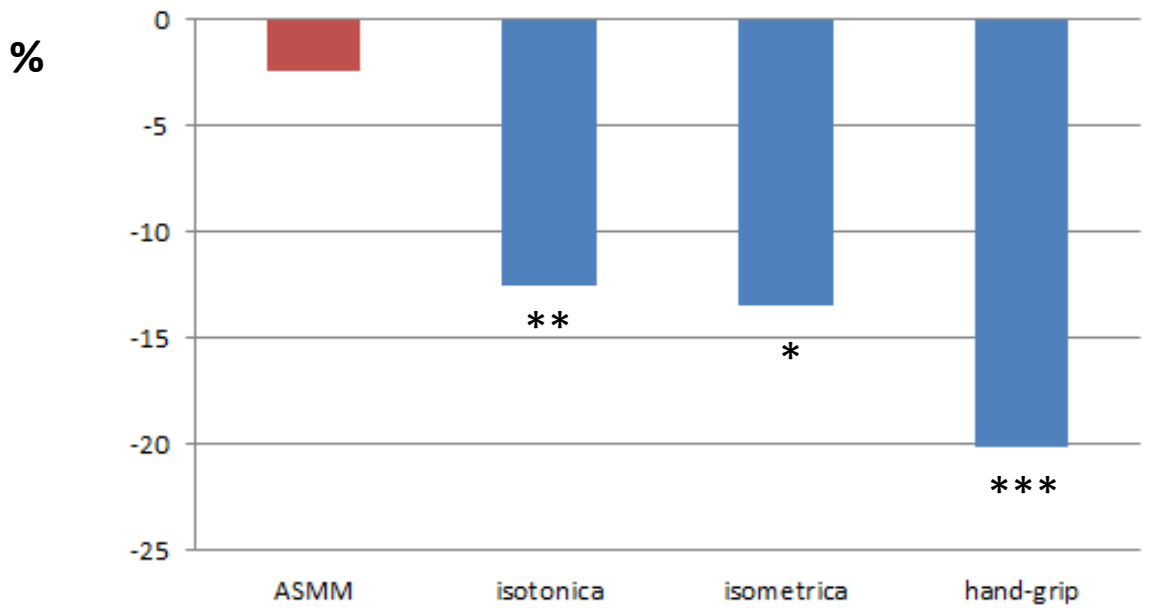




Lauretani F et al, J Appl Physiol 2003

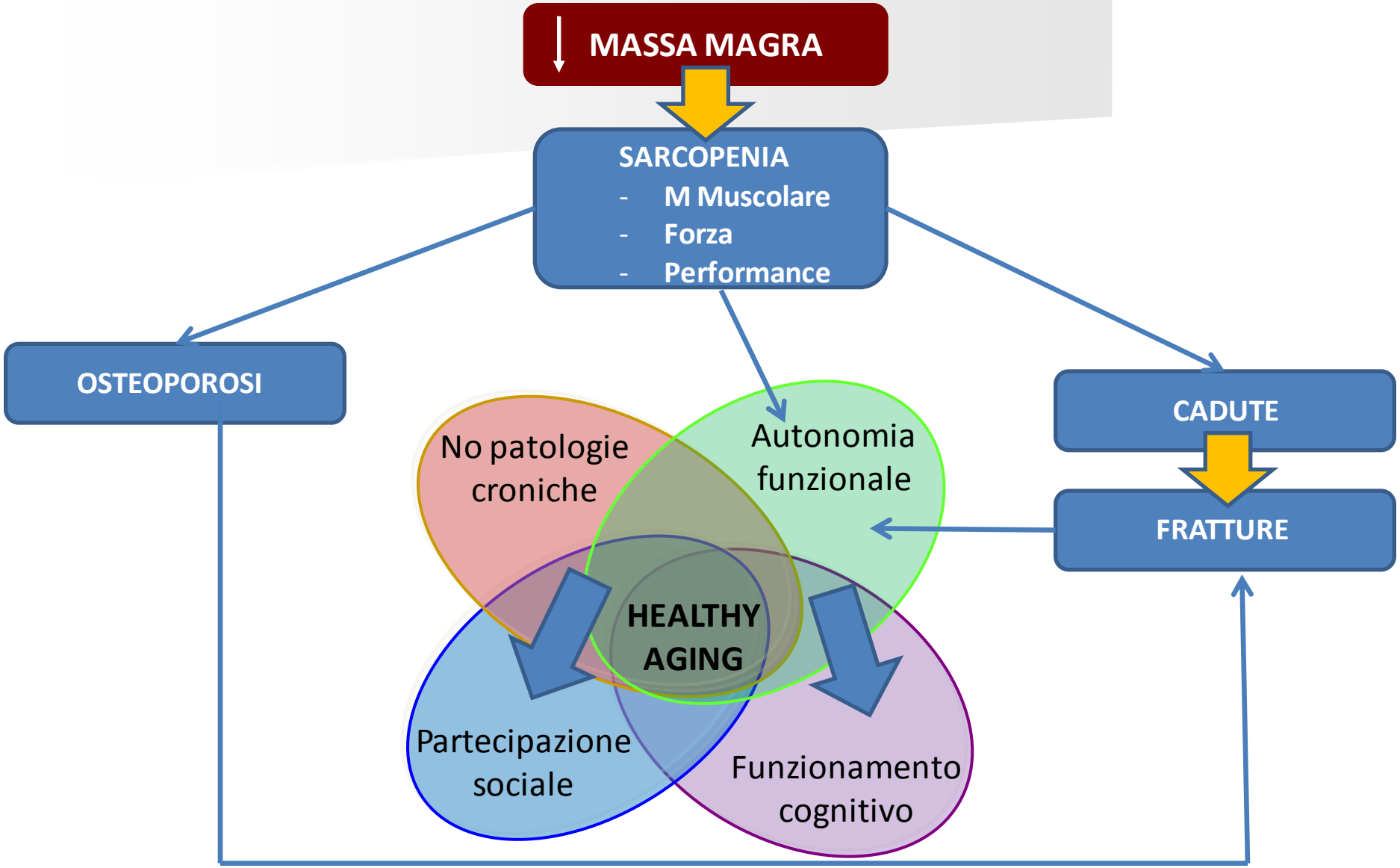
Riduzione della forza e performance fisica nell'anziano

(100 donne anziane; follow up: 3 anni)



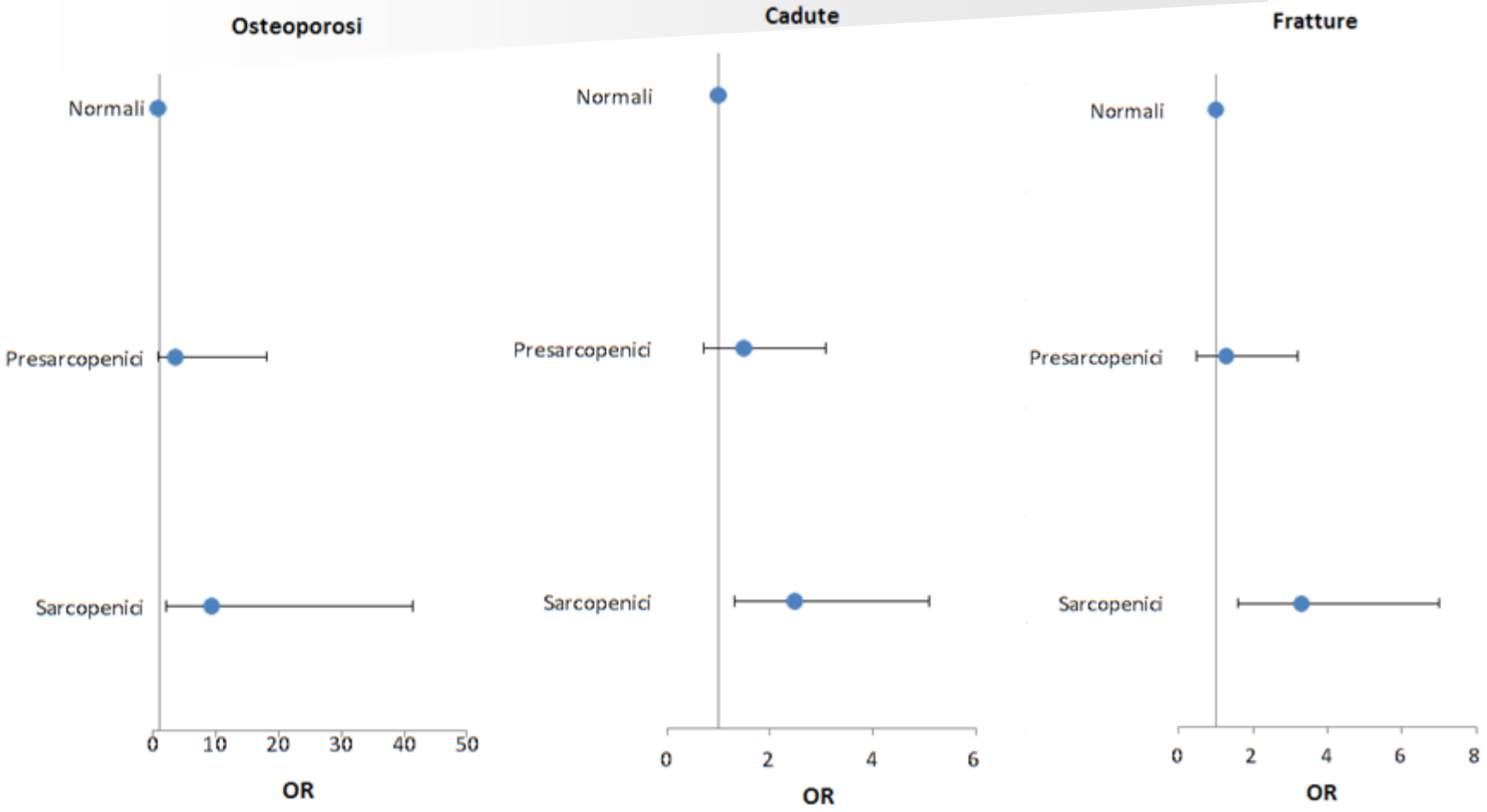
Sergi G et al, Exp Gerontol 2012

Massa magra e healthy aging



Sarcopenia, osteoporosi, fratture e cadute

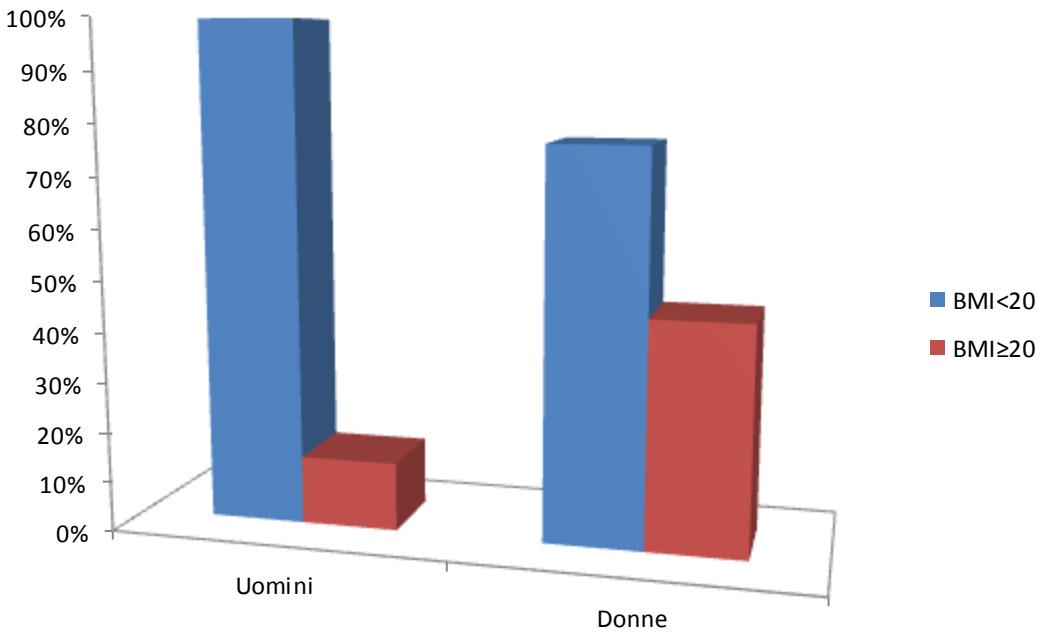
(Osteoporosis Risk Factor and Prevention Study - 590 donne, età media 68 anni)



Sjöblom S et al, Maturitas 2013

Sottopeso e prevalenza di sarcopenia

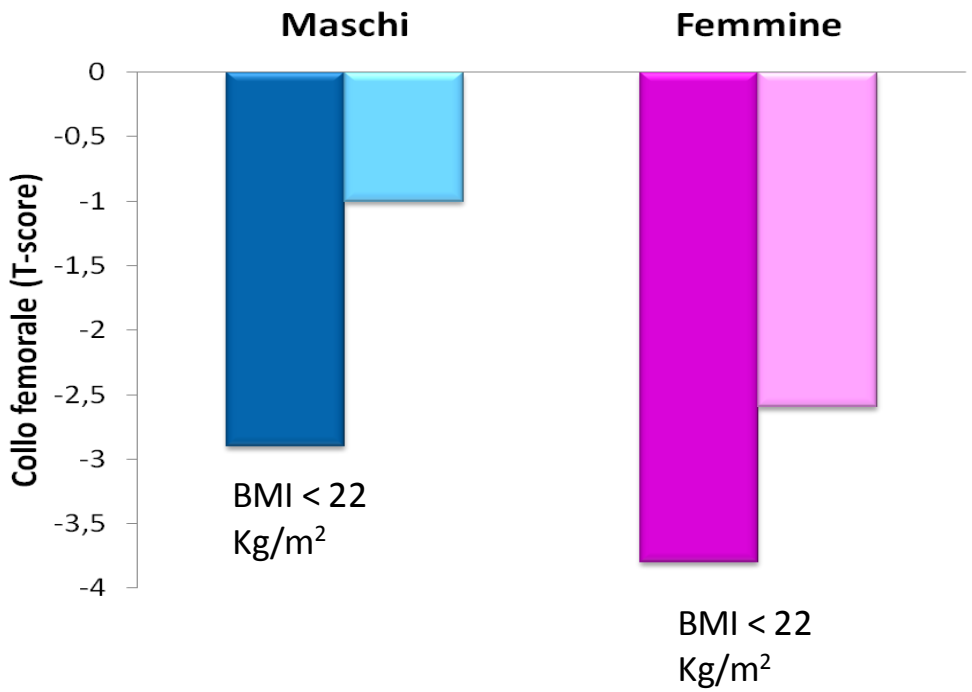
(102 soggetti, >65 anni)



Sergi G et al, J Gerontol A Biol Sci Med Sci, 2002

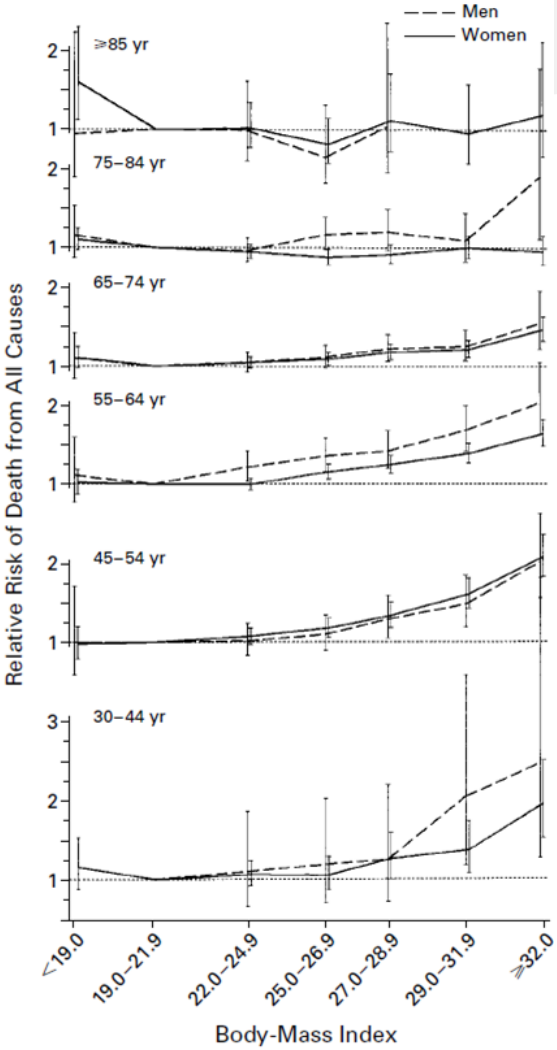
T-score femorale in anziani sottopeso e normopeso

(60 donne e 51 uomini)

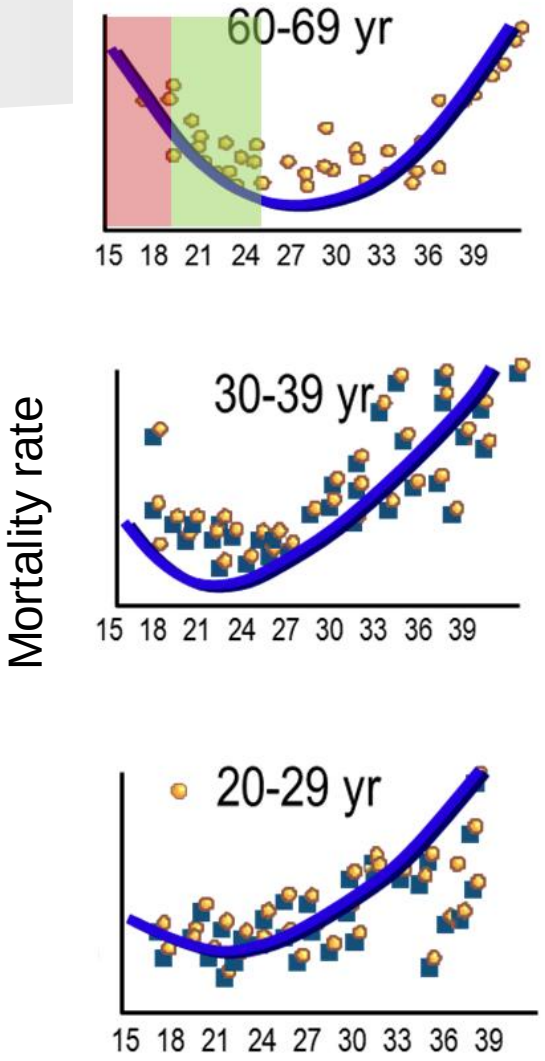


Coin A et al, Osteop Int 2000

BMI e mortalità nelle diverse classi di età



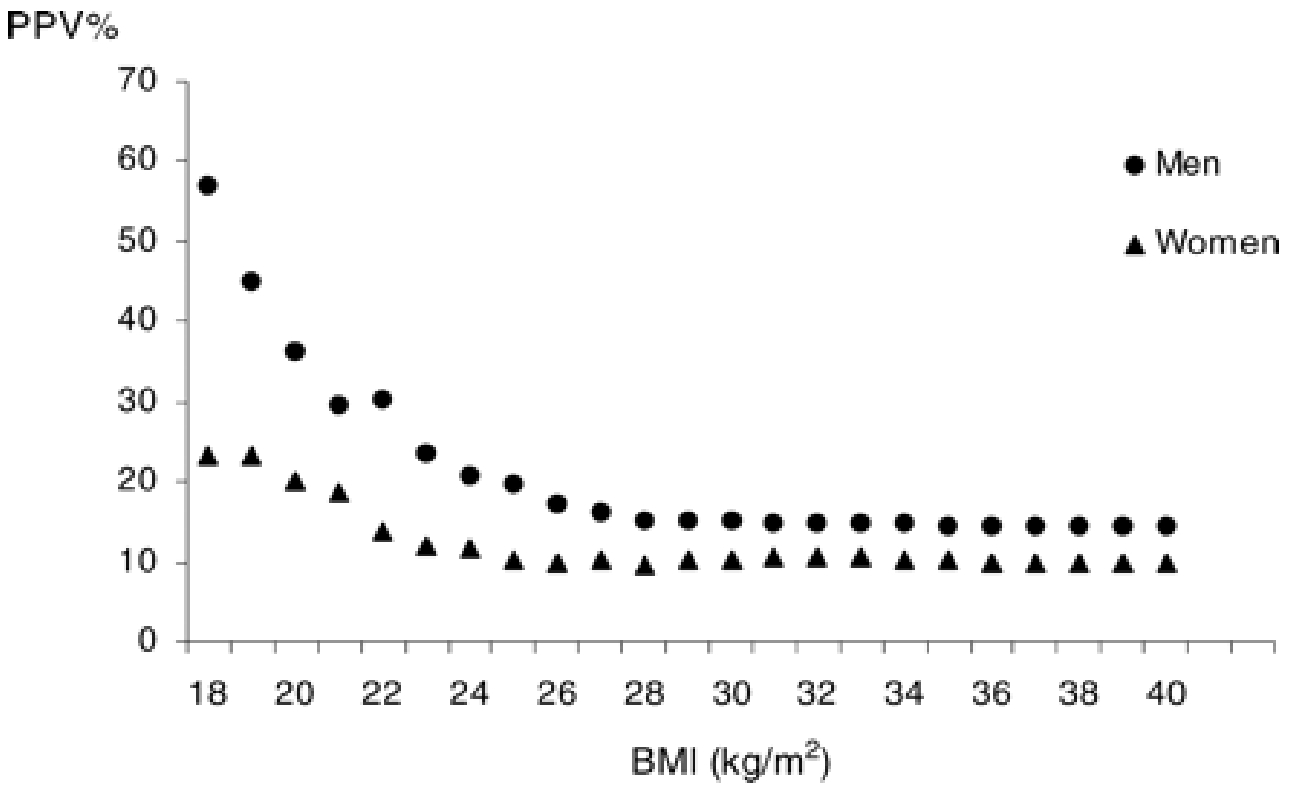
Stevens J et al, NEJM 1998



Andres R et al, Int J Obes 1980

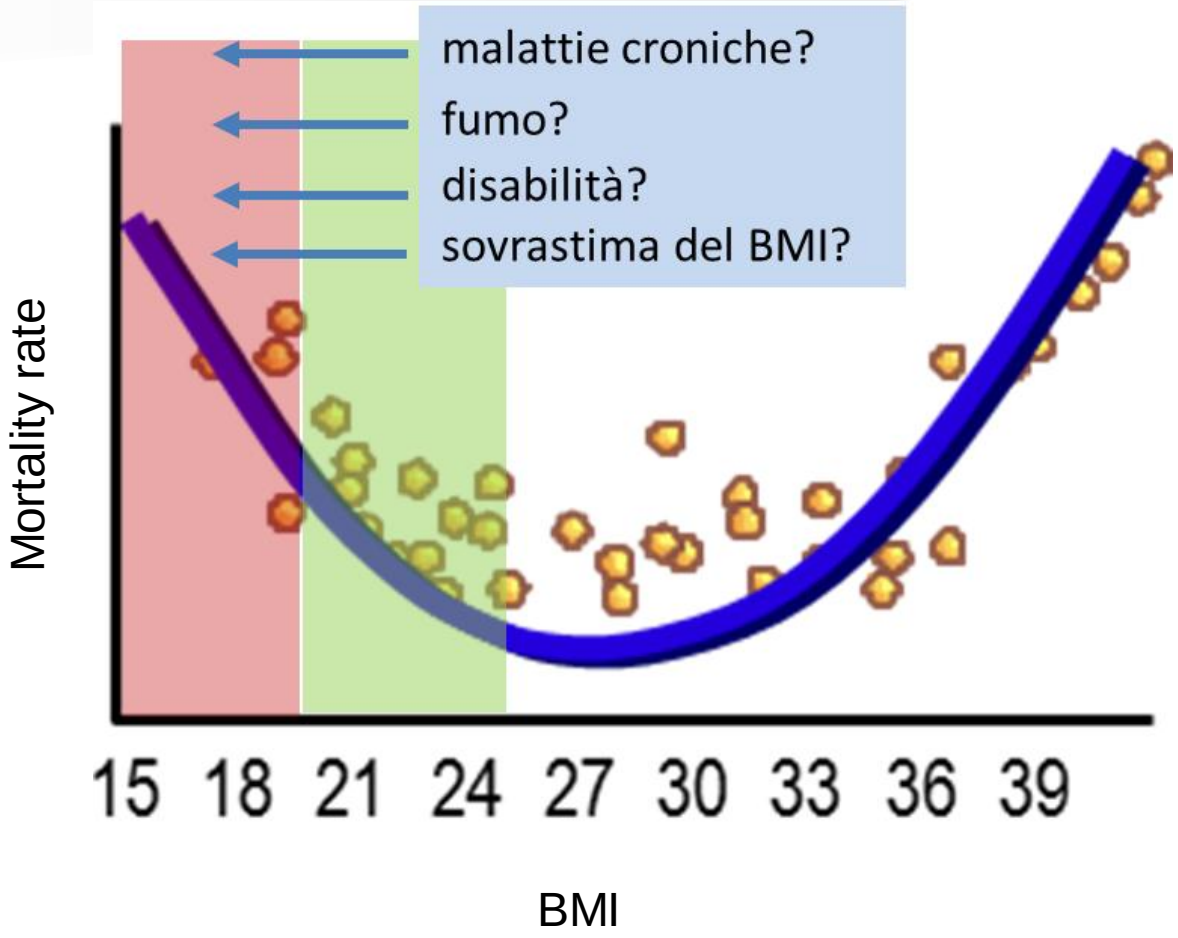
BMI e rischio di mortalità nell'anziano

(1663 uomini e 1447 donne – età 65–84- Studio ILSA)



Sergi G et al, J Gerontol A Biol Sci Med Sci 2005

Sottopeso-normopeso e mortalità: biases



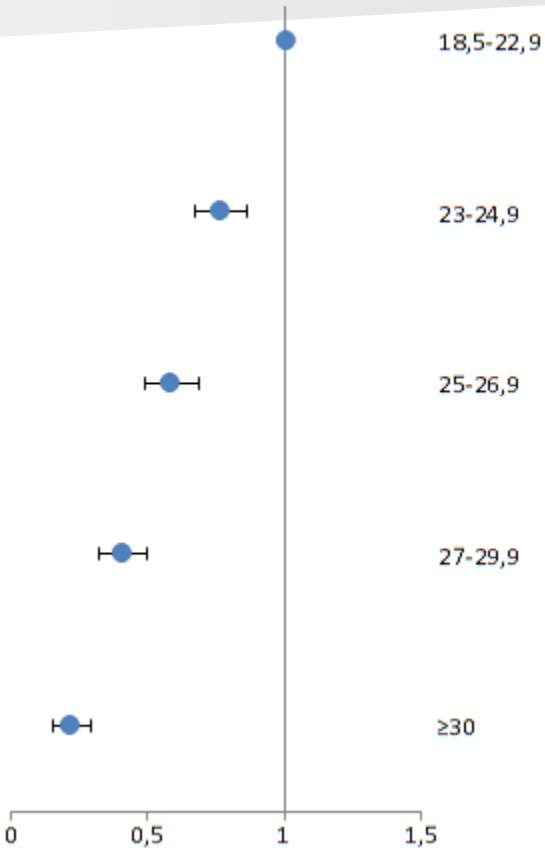
BMI a 50 anni e healthy aging

(The Nurses' Health Study -17065 donne- follow up >20 anni)

Healthy survivors:

Liberi da:

- Neoplasie
- Diabete
- Infarto miocardico
- By pass coronarico
- Scompenso cardiaco
- Stroke
- Insufficienza renale
- BPCO
- Malattia di Parkinson
- Sclerosi multipla
- SLA



Classi di BMI

OR Sopravvivenza libera da malattia

Sun Q et al, BMJ 2009

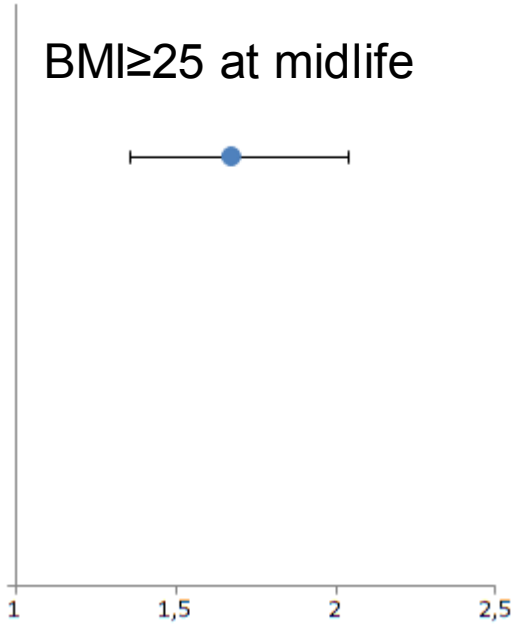
Healthy aging e sovrappeso a 55 anni

(Honolulu Asia Aging Study. 5820 uomini seguiti per 40 anni 1965-2005)

Exceptional survivors a 85 anni:

Liberi da:

- Malattia coronarica
- Stroke
- Neoplasia
- BPCO
- M. Parkinson
- Diabete
- Limitazioni funzionali
- Deficit cognitivi

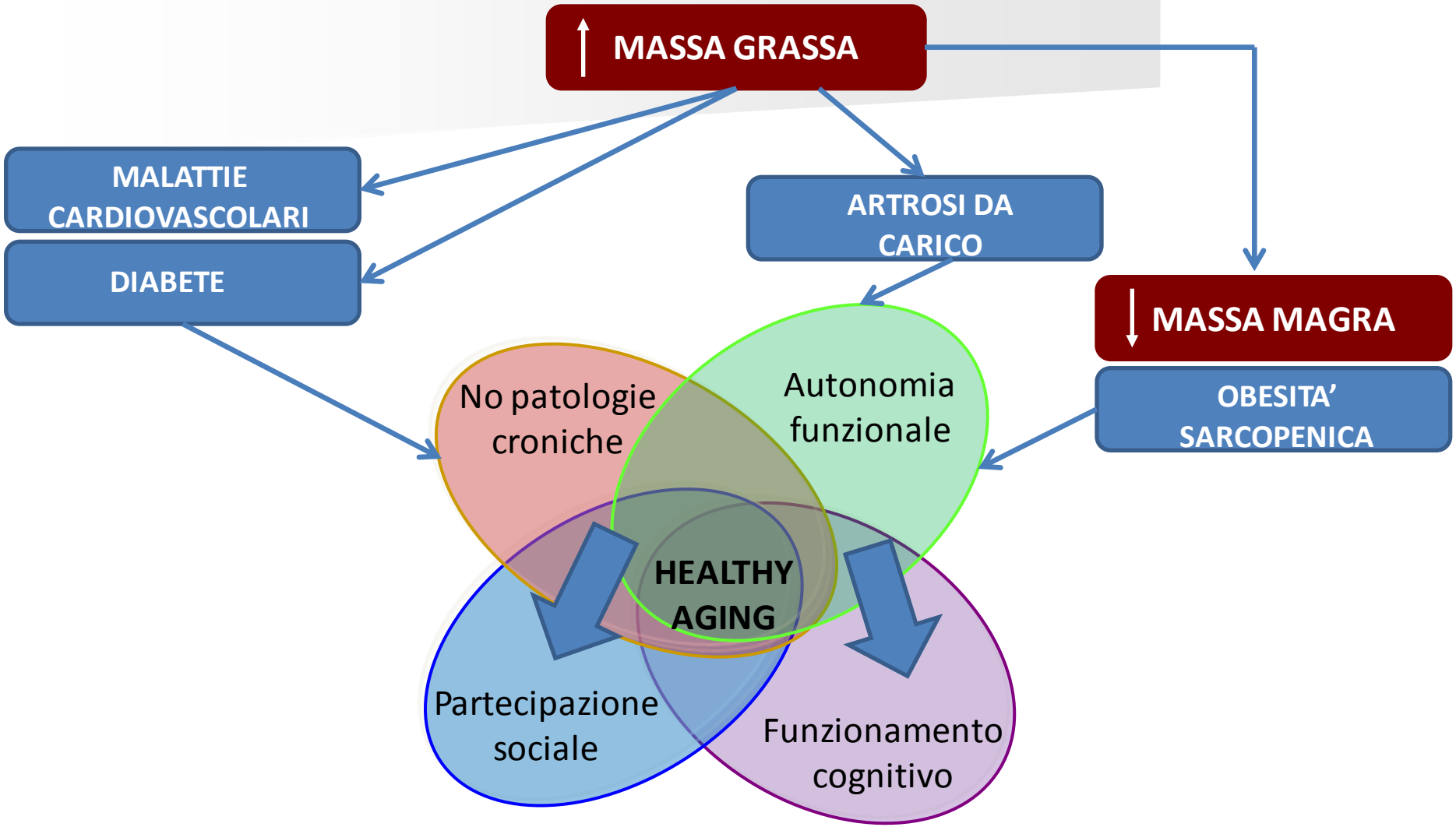


OR

Usual survival vs Exceptional survival

Willcox B, JAMA 2006

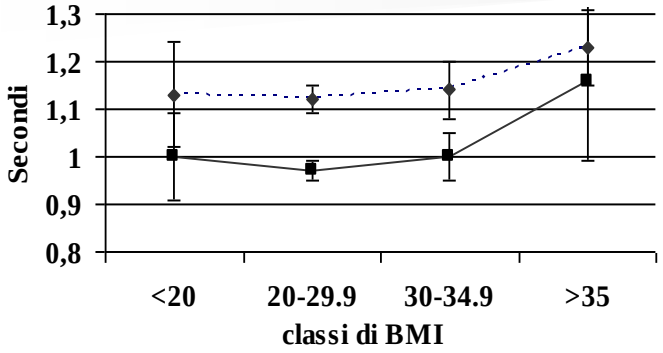
Massa Grassa ed Healthy Aging



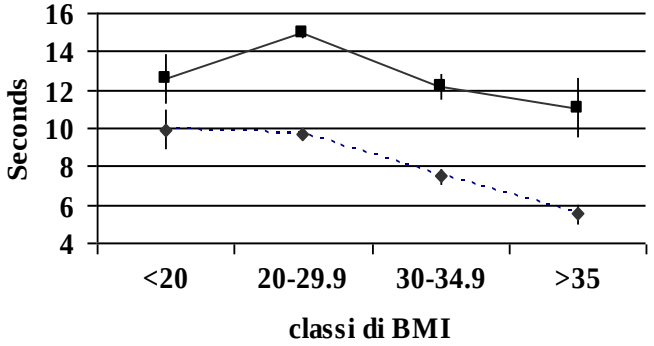
Obesità e performance motoria nell'anziano

(1436 uomini, 1236 donne- età media 73 aa - studio ILSA)

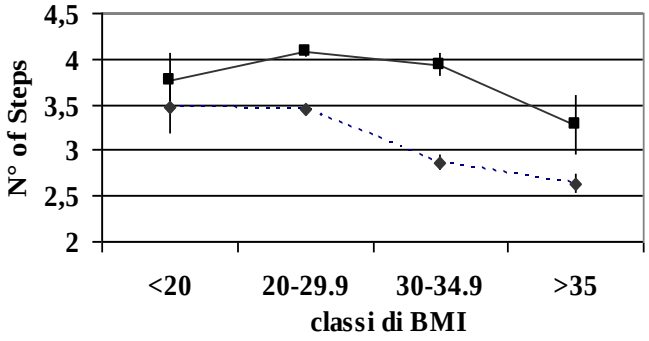
Alzarsi dalla sedia



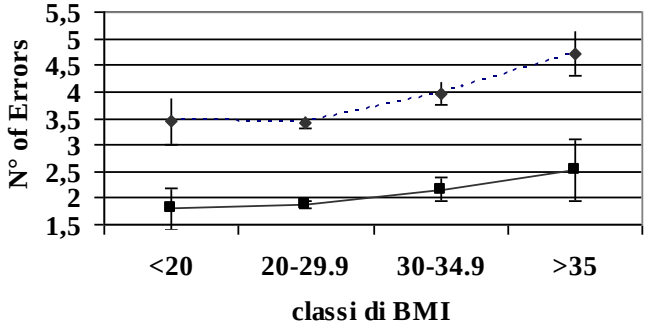
Stare in piedi su una ganba



Salire i gradini



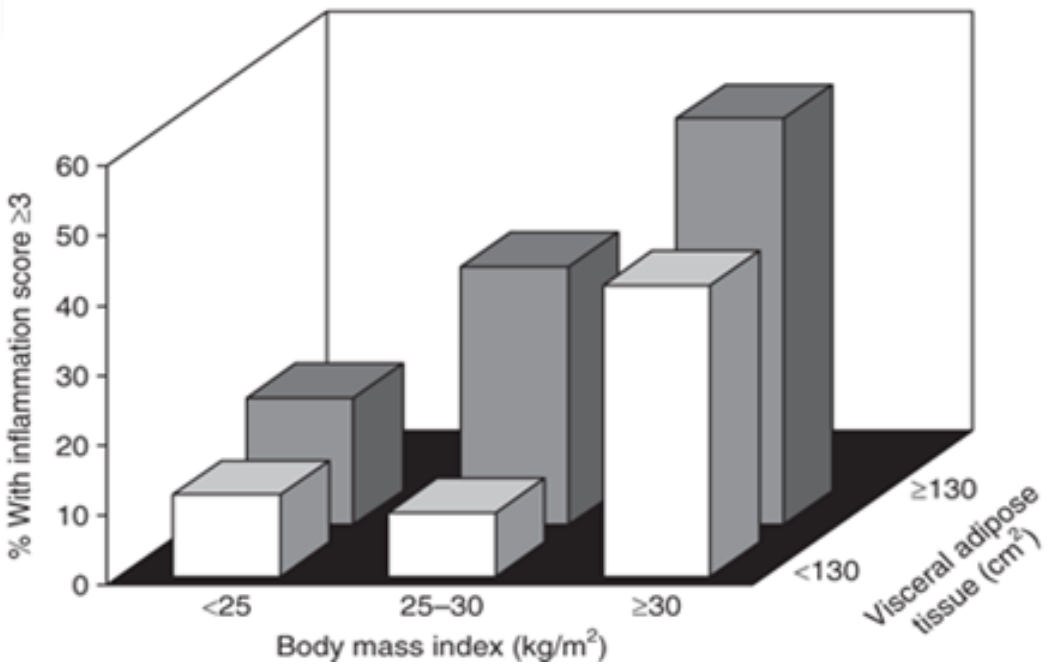
Camminare in tandem



Sergi G et al, JAGS 2007

BMI, tessuto adiposo viscerale ed infiammazione

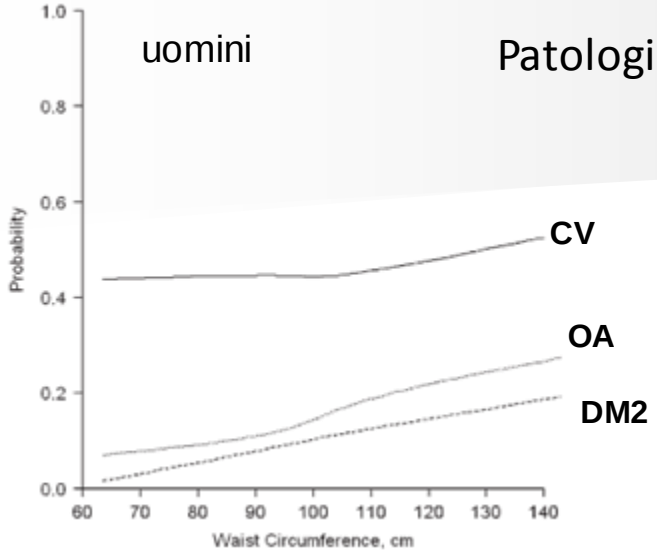
Inflammation score: somma CRP, IL6, TNFα > 50° percentile

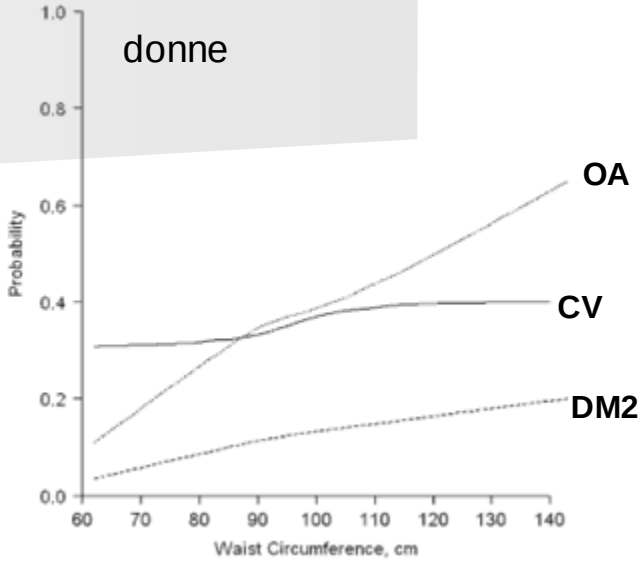


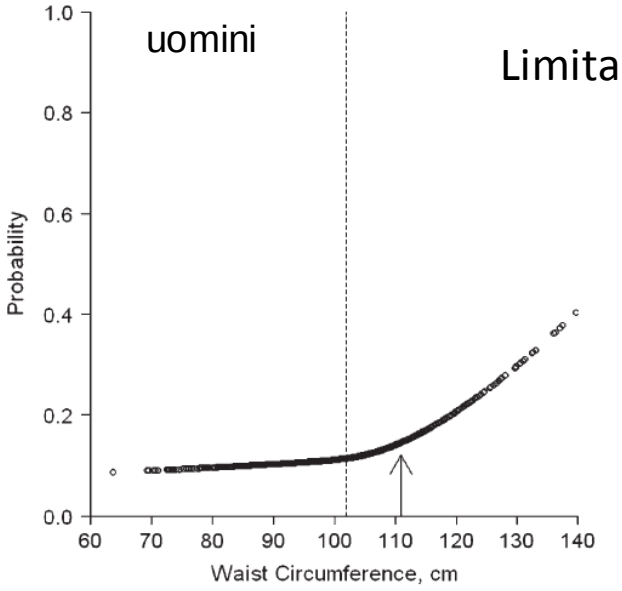
Mathieu P et al, Clin Pharmacol Ther 2010

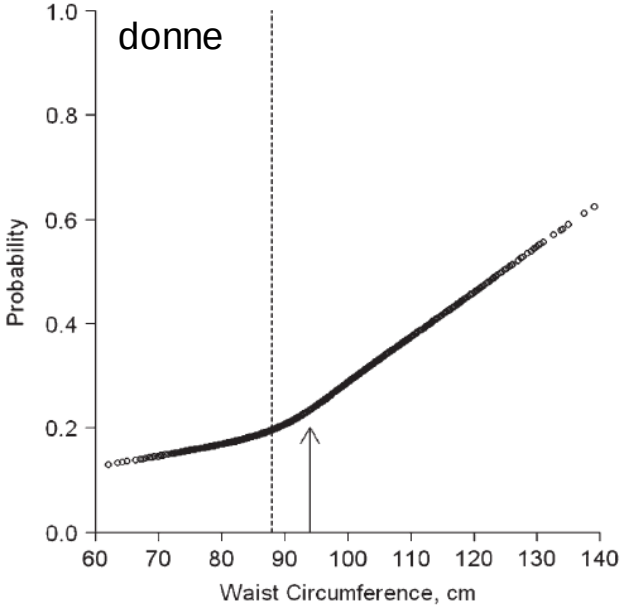
Circonferenza vita patologie croniche e funzione

(Longitudinal Aging Study Amsterdam - 2232 soggetti, >70 anni)





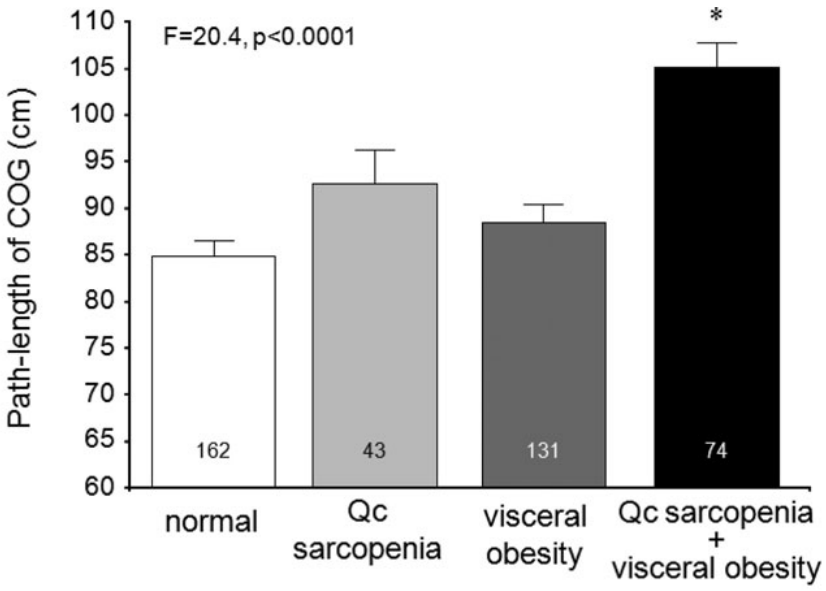


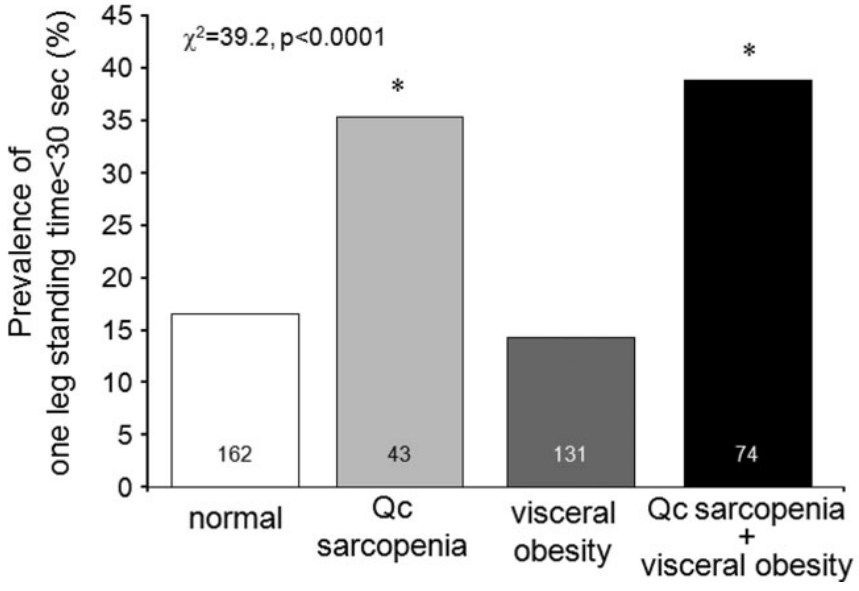


Heim N et al, Am J Epidemiol 2011

Obesità viscerale, sarcopenia e instabilità posturale

(162 uomini età media 69 anni, 248 donne età media 66.4 anni)

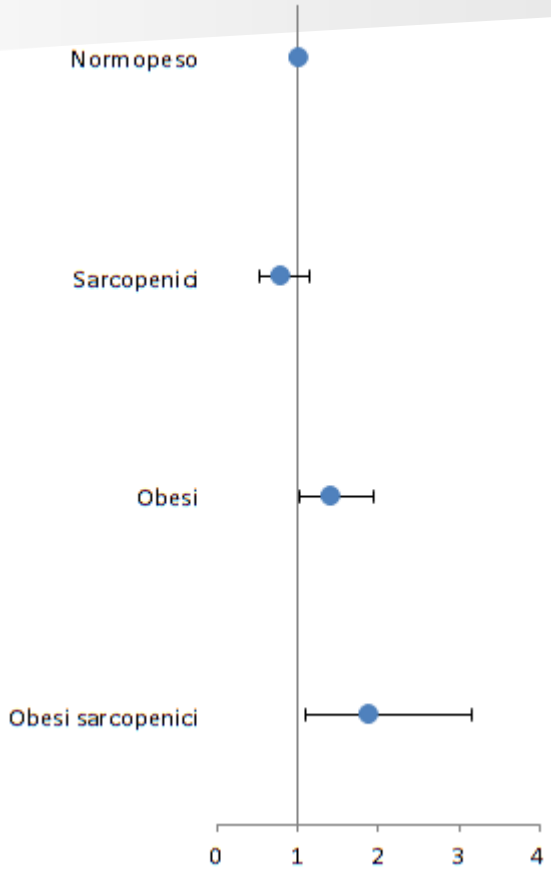




M. Ochi et al, Geriatr Gerontol Int 2010

Obesità sarcopenica e artrosi

(2893 soggetti, età media 65 anni)

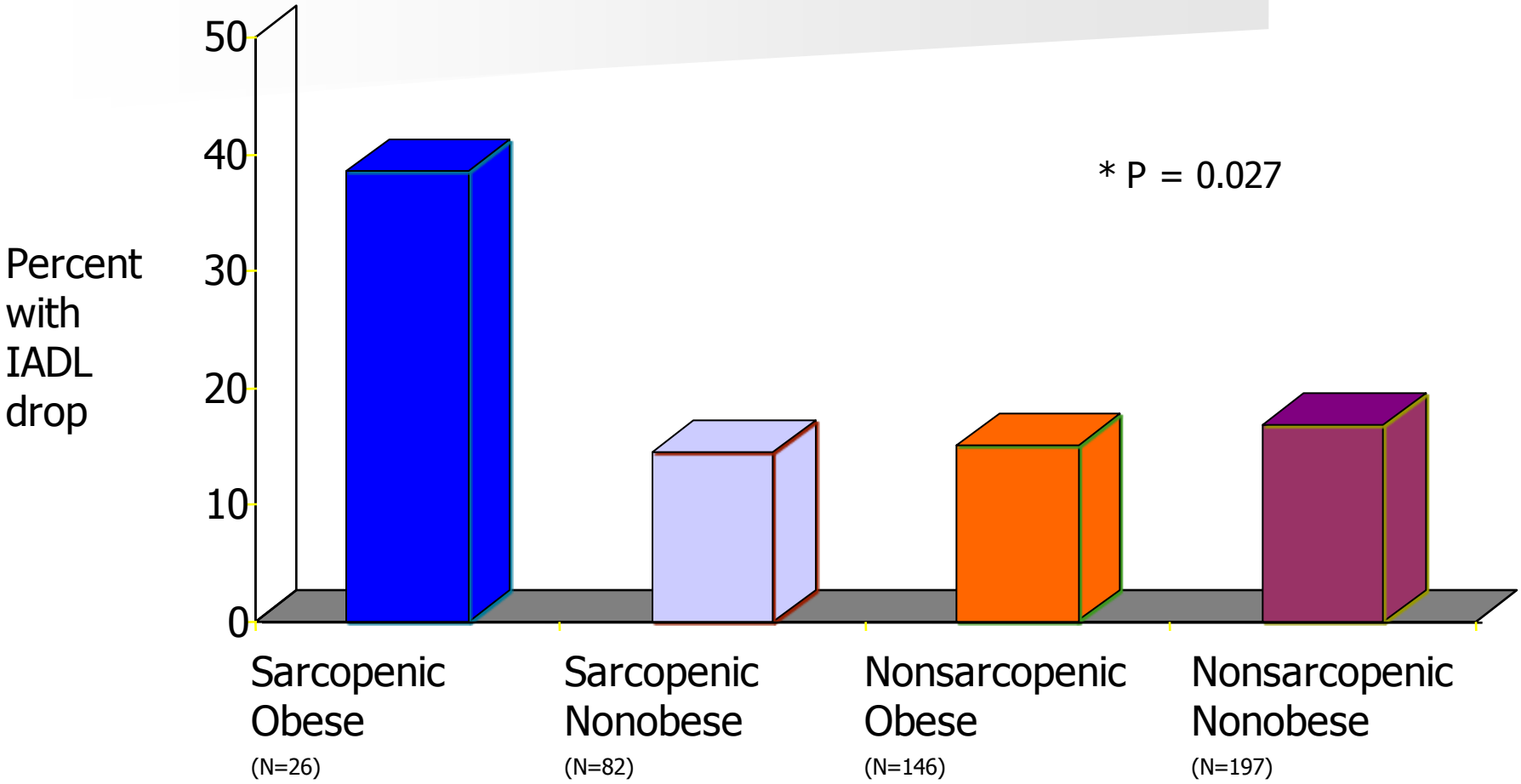


OR artrosi

Lee S et al, Arthritis Rheum 2012

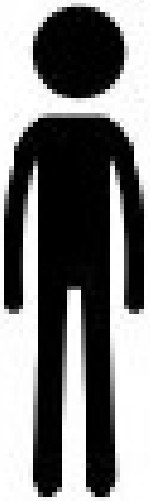
Obesità sarcopenica e disabilità

(451 uomini anziani healthy 73 aa - follow-up 8 anni)



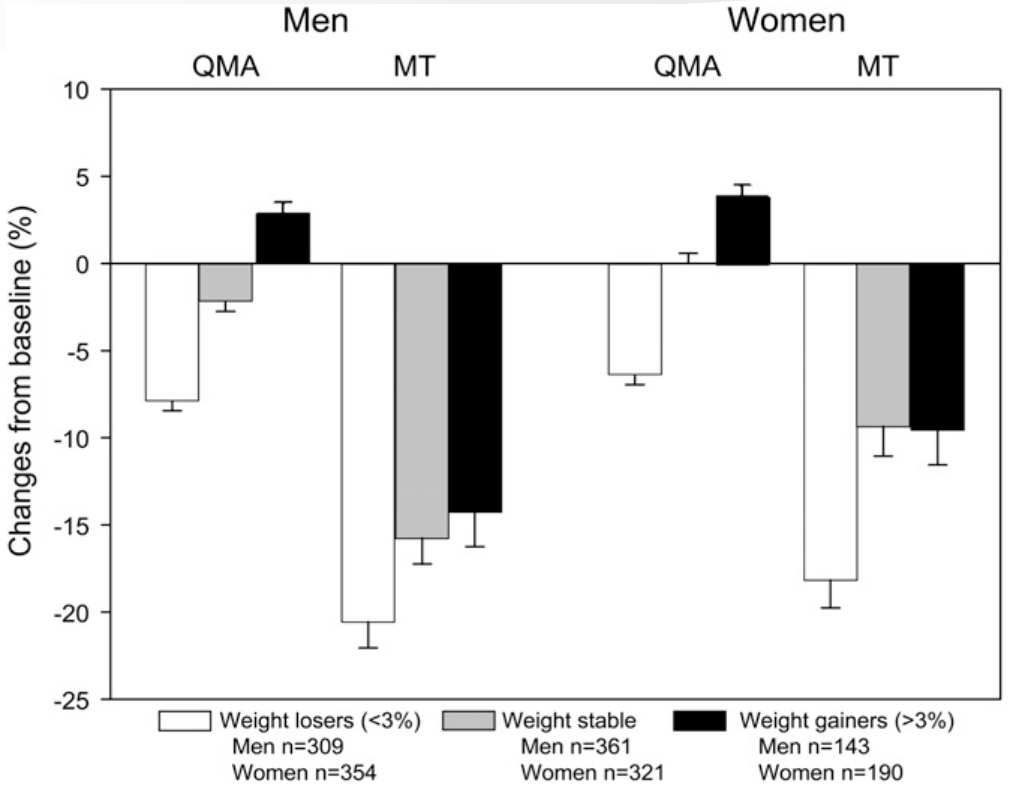
Baumgartner et al, Obes Res 2004

Variazioni di peso e salute nell’anziano



Variazioni di peso, perdita di massa e forza muscolare

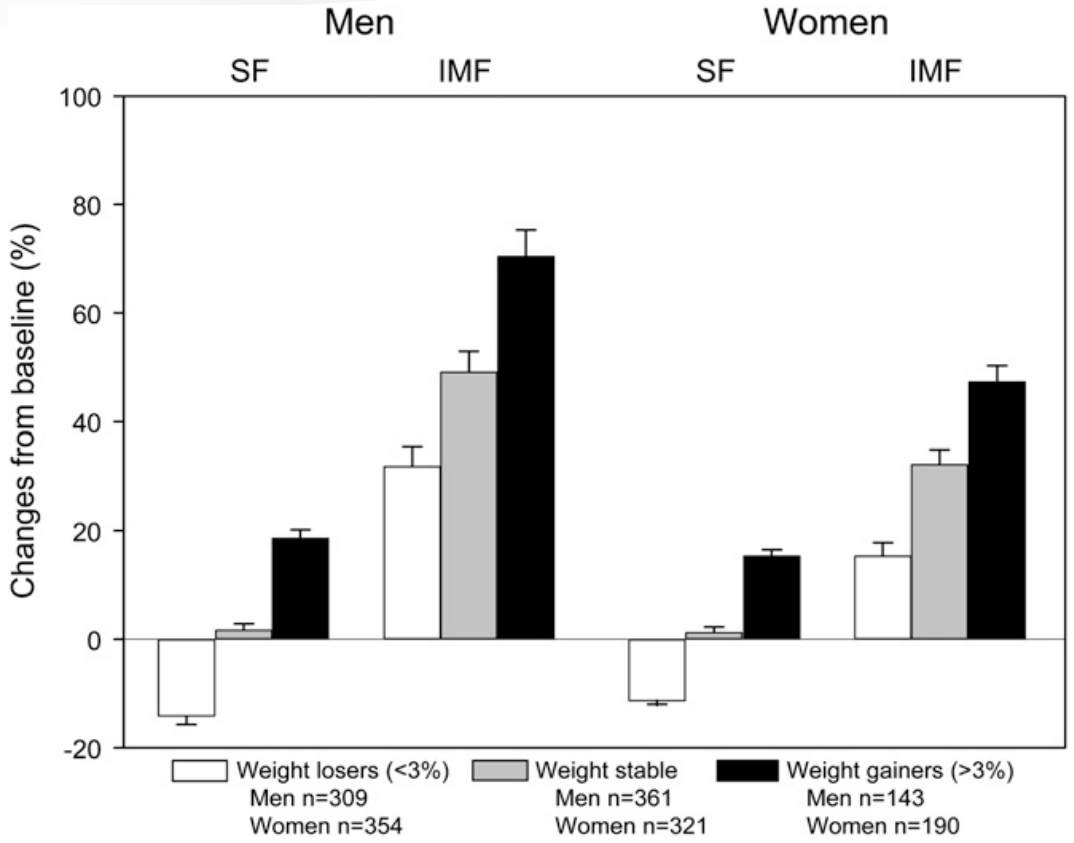
(Health, Aging and Body Composition study – 1678 anziani; follow-up 5 anni)



Delmonico MJ et al, Am J Clin Nutr 2009

Variazioni di peso ed infiltrazione adiposa intramuscolare

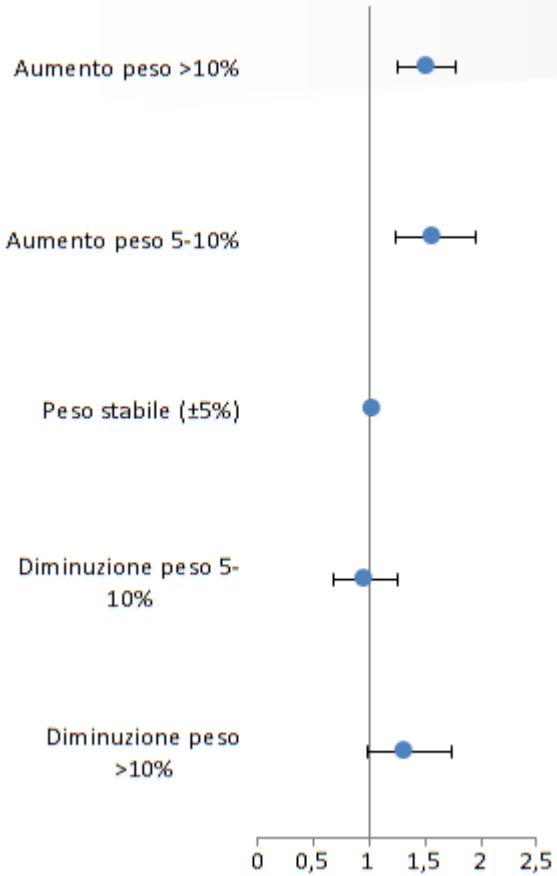
(Health, Aging and Body Composition study – 1678 anziani; follow-up 5 anni)



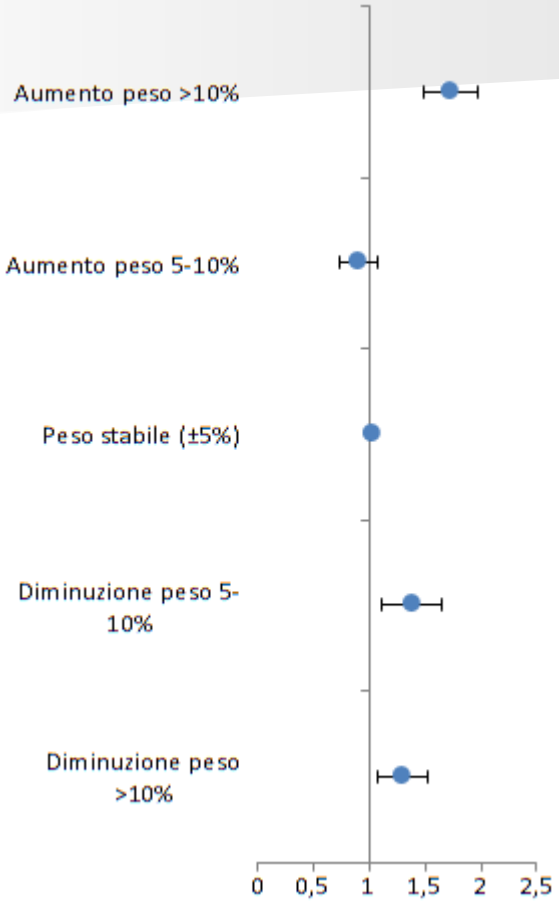
Delmonico MJ et al, Am J Clin Nutr 2009

Variazioni di peso e disabilità nelle ADL

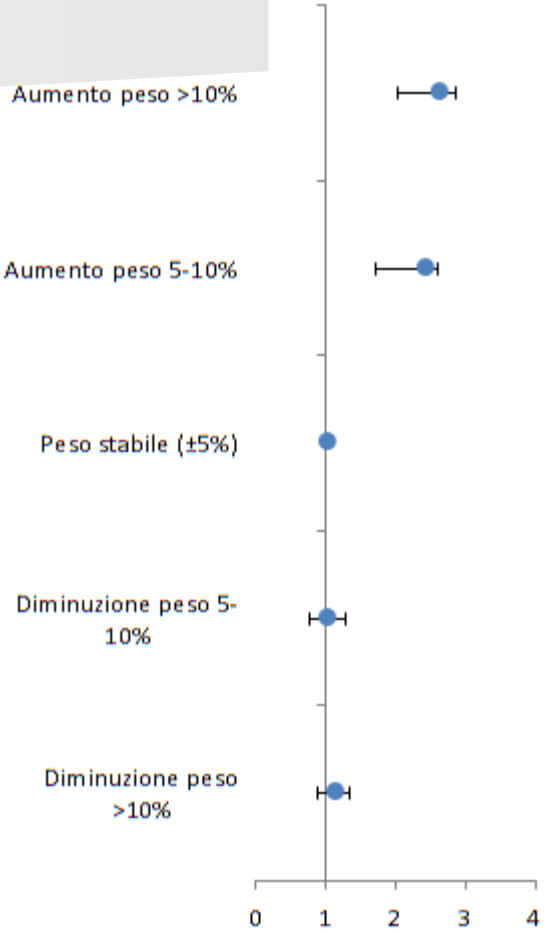
(1187 uomini e 1723 donne >65 anni, studio Pro.V.A.)



OR disabilità Normopeso



OR disabilità Sovrappeso



OR disabilità Obesi

Busetto L et al, JAGS 2009

Conclusioni

- Mantenere un normale peso corporeo nell'età adulta, evitando il sovrappeso e l'obesità.
- Preservare la massa magra
- Nell'anziano evitare oltre all'obesità anche il sottopeso

Grazie per l'attenzione