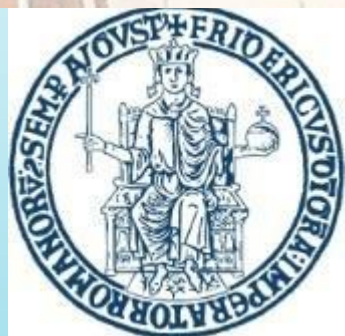




PRO.M.I.S.

Programma Mattone Internazionale Salute



L'Attività Fisica Adattata supportata da tecnologie: una realtà possibile

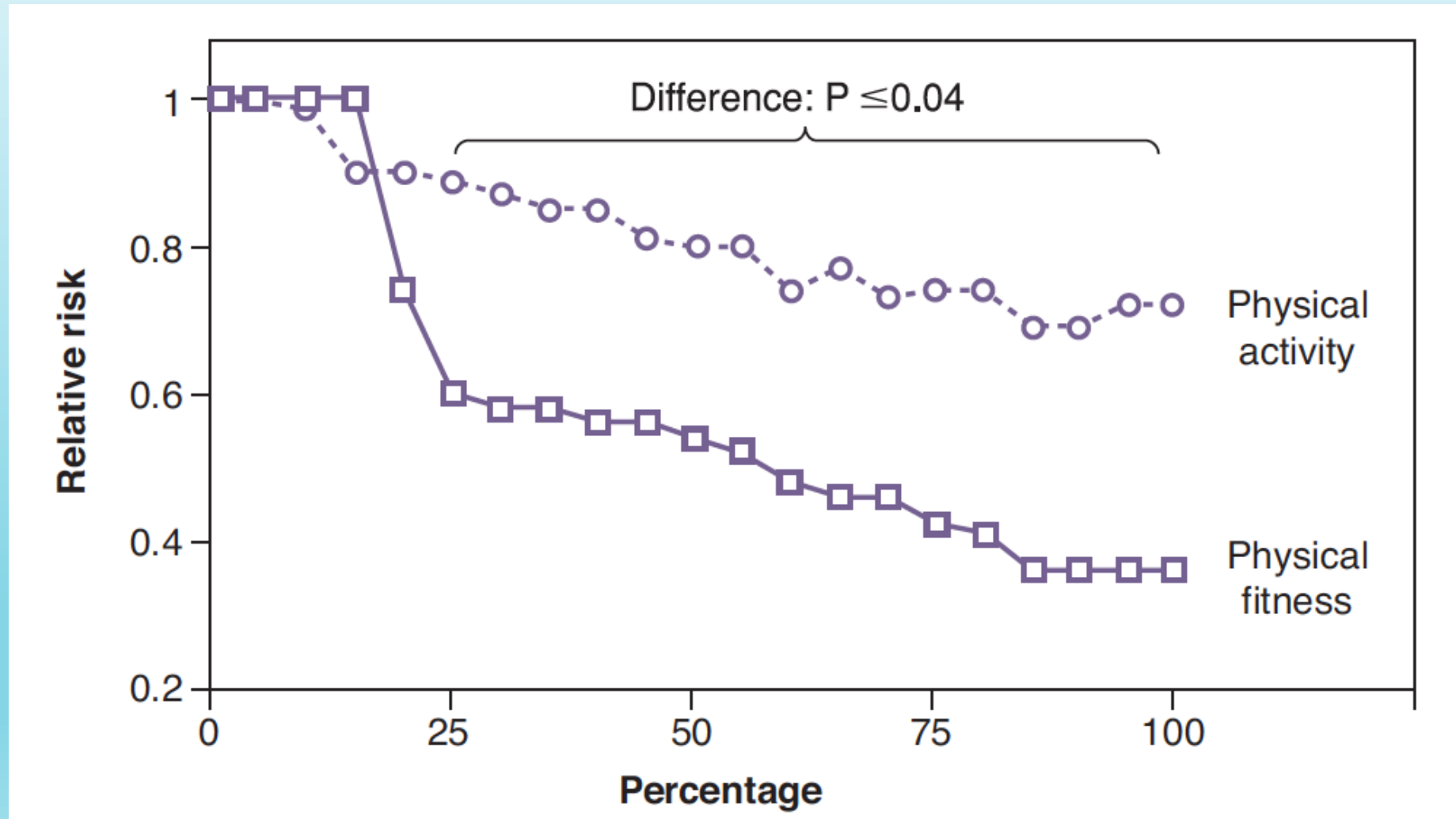
Prof. Guido Iaccarino,
Programma Didattico Assistenziale "Attività Fisica Adattata per la prevenzione primaria e secondaria e la terapia delle patologie degenerative croniche"
AOU Federico II, Università di Napoli Federico II



Definition of physical activity, exercise, and physical fitness

- ***Physical activity*** is defined as any bodily movement produced by skeletal muscles that results in energy expenditure.
- ***Exercise*** is a **subset** of physical activity that is planned, structured, and repetitive, and has as a final or intermediate objective to improve or maintain physical fitness
- ***Physical fitness*** has been defined as the ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure-time pursuits and meet unforeseen emergencies

Effects of Physical Activity and Physical fitness on relative risk of CVD



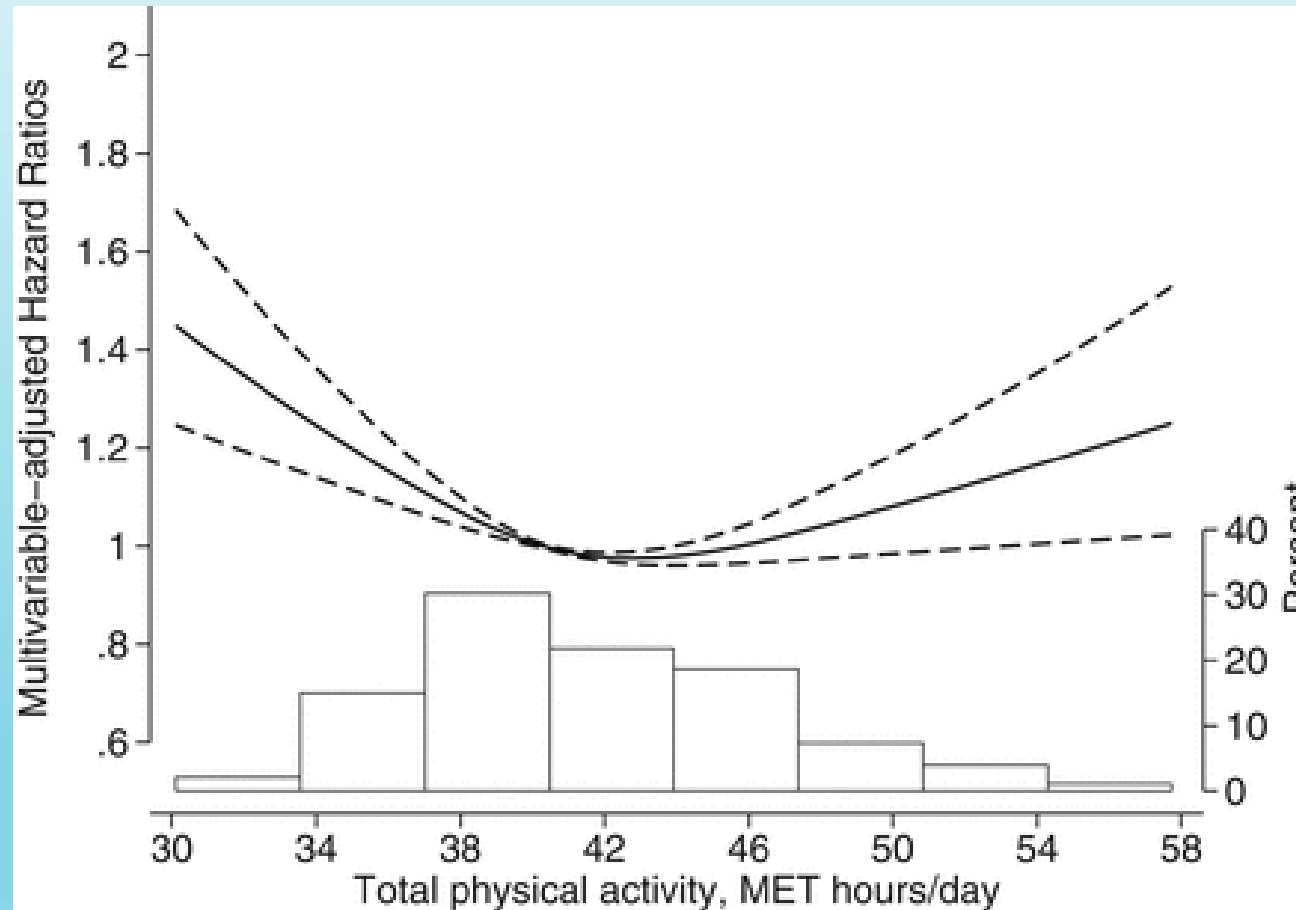
Physical Activity and Heart Failure Risk in a Prospective Study of Men



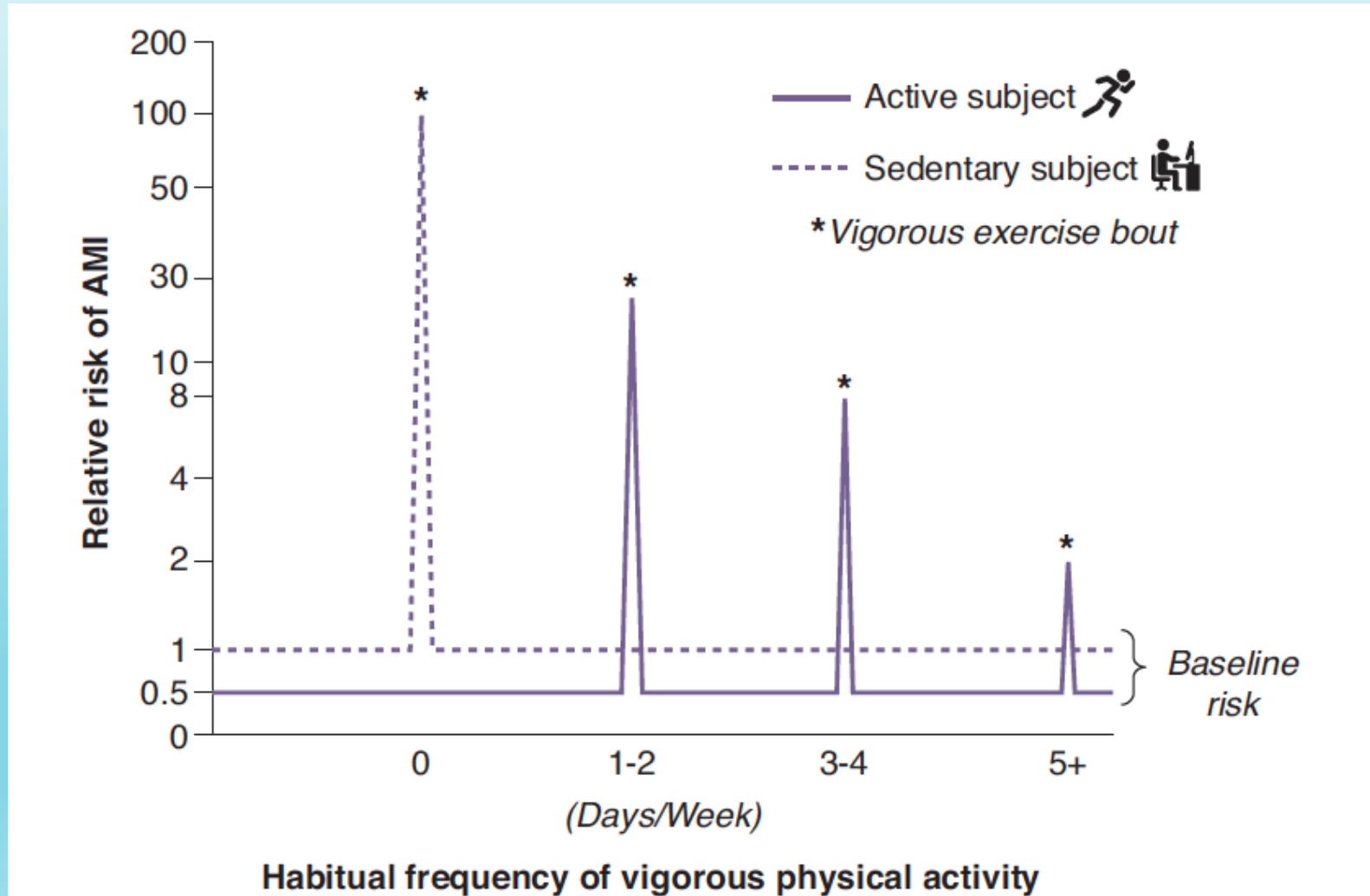
	Quartiles of Total Physical Activity (MET h/day)			
	<38 (n = 7,927)	≥38 to <42 (n = 7,981)	≥42 to <45 (n = 7,619)	≥45 (n = 7,614)
Mean age at study entry,* yrs	59	59	61	60
Ever smoker	64	62	62	62
Obesity	47	46	45	45
Diabetes	6	5	5	5
Hypertension	26	22	22	19
University education	25	24	15	8
Current drinker	93	93	92	91
History of stroke	3	2	1	2
History of angina	5	3	3	3
Family history of MI before 60 yrs of age	34	34	36	36
Self-reported health status				
Heavy manual work	30	82	99	100
Exercise >1 h/week	63	83	81	84
Walking/bicycling ≥20 min/day	75	90	90	93
Home/household work >1 h/day	46	62	63	68
Inactivity (watching television/reading) ≥3 h/day	9	14	14	17

TABLE 2 Hazard Ratios of HF and Differences in Median Age at HF Event (50th PD), With 95% CI, According to Different Types of Physical Activity			
Type of Physical Activity	Hazard Ratio (95% CI)*	Hazard Ratio (95% CI)†	50th PD (95% CI), days‡
Walking/bicycling, ≥20 min/day vs. <20 min/day	0.75 (0.68 to 0.82)	0.79 (0.72 to 0.87)	230 (144 to 317)
Exercise, ≥1 h/week vs. <1 h/week	0.80 (0.74 to 0.87)	0.86 (0.79 to 0.94)	125 (51 to 200)
Work occupation, active vs. mostly sitting	0.88 (0.81 to 0.96)	0.93 (0.85 to 1.01)	49 (-27 to 126)
Home/household work, ≥1 h/day vs. <1 h/day	0.97 (0.91 to 1.04)	0.95 (0.89 to 1.02)	3 (56 to 61)
Inactivity (watching television/reading), <3 h/day vs. ≥3 h/day	1.01 (0.89 to 1.15)	0.99 (0.87 to 1.12)	33 (-79 to 146)

U-shaped association of total physical activity and cardiovascular risk



Effects of chronic exercise on CVR to vigorous PA



Health-Related Physical Fitness Components

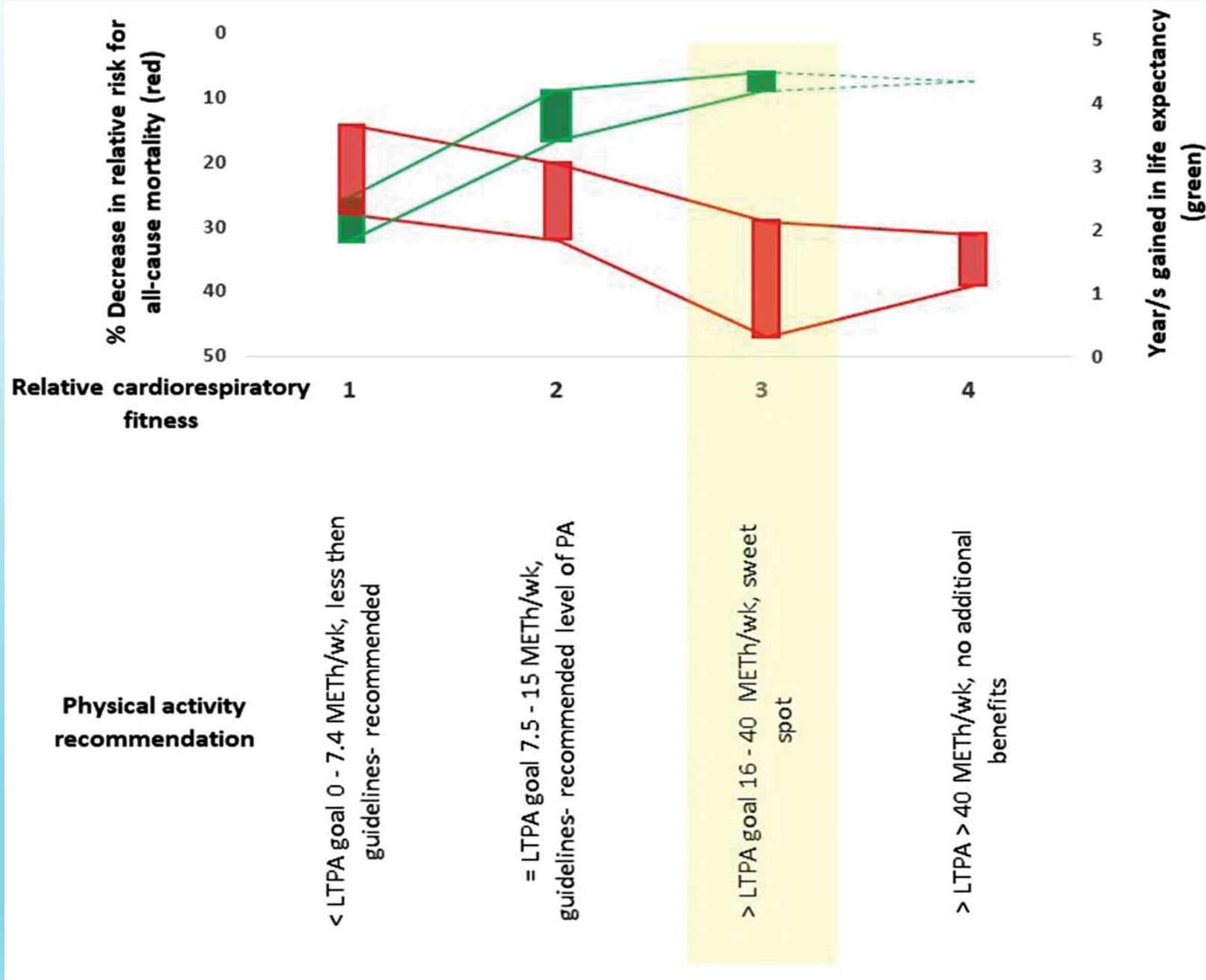
1. Cardiorespiratory endurance: the ability of the circulatory and respiratory system to supply oxygen during sustained physical activity
2. Body composition: the relative amounts of muscle, fat, bone, and other vital parts of the body
3. Muscular strength: the ability of muscle to exert force
4. Muscular endurance: the ability of muscle to continue to perform without fatigue
5. Flexibility: the range of motion available at a joint

Health physical evaluation

- Preexercise evaluation
- Resting measurements (BP, HR, Physical examination)
- Anthropometric and body composition assessment (H,W,BMI; BIA Body fat composition)
- Measurement of Cardiorespiratory fitness ($\text{VO}_{2\text{max}}$; submaximal Exercise Testing)
- Measurement of muscular fitness (strength; endurance; power) (groups of muscles)
- Measurement of flexibility (move a joint through a complete round of movement)

Relative CRF category (self-reported)			1—Sedentary		2—Somewhat active		3—Active/fit		4—Engaged in Sports
Goals of total PA (MET-h/week)			0–7.4		7.5–15		16–40		Above 40
Absolute PA intensity	Light, less than 3 METs (walking)	Speed (mph)	2–2.9 ¹⁰		N/A		N/A		N/A
		Duration (min/week)	75–90		N/A		N/A		N/A
		Frequency (times per week)	3		N/A		N/A		N/A
	Moderate, 3–5.9 METs (brisk walking)	Speed (mph)	3–4 ⁶	↓ After 6–8 weeks ↓	3–4	↓ After 6–8 weeks ↓	3–4	↓ NO add. benefits ↓	N/A
		Duration (min/week)	75–90 ¹¹		150–299		300–750		N/A
		Frequency (times per week)	3 or daily ¹²		3–5		5–7		N/A
	Transition		↓ AFTER 6–8 weeks ↓		↓ After 6–8 weeks ↓		↓ After 6–8 weeks ↓		↓ No add. benefits ↓
	Vigorous, 6–12 METs (running)	Speed (mph)	5–6 ⁶		7–7.5 ¹³		8 ¹³		8 ⁷
		Duration (min/week)	35–70 ⁷		75		150–375 ^{14,15}		↑ 700
		Frequency (times per week)	1–2 ^{16,17}		2–3 ^{18,19}		4–6 ^{20,21}		Daily
Potential health benefits			14–28% lower premature all-mortality risk ^{14,17} , 15–27% lower risk of CAD ^{15,22–25} , 1.8–2.5 year gain in life expectancy ^{14,17}		20–32% lower premature all-mortality risk ^{14,17,26} , 21–32% lower risk of CAD ^{15,22,26–28} , 3.4–4.2 year gain in life expectancy ^{14,17}		29–47% lower premature all-mortality risk ^{15,24,29} , 27–44% lower risk of CAD ^{15,22,29–32} , 4.2–4.5 year gain in life expectancy ^{14,18}		No additional health benefits after 40 MET-h/week ^{15,29,33}

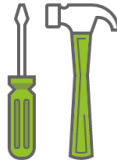
Relative CRF Category 1, Sedentary:	Not engaged in any PA
Relative CRF Category 2, Somewhat active:	Walking to/from work and occasionally engaged in exercise or LTPA
Relative CRF Category 3, Active fit:	Engaged in guidelines-recommended level of PA
Relative CRF Category 4, Engaged in Sports:	Athletics and professional sport's players



ICT support to Physycal Activity Prescription

 Guido Iaccarino

[🏠](#) [pazienti](#) [Professionisti](#) [gestione ▾](#) [Dati principali ▾](#) [messaggi](#)



Amministratore di questa applicazione

Questo modulo ti consente di gestire il team, aggiungere pazienti e terapeuti. Assegna anche percorsi clinici o abilita nuovi esercizi. Nella pagina delle impostazioni, puoi personalizzare questo sito in base alle esigenze della tua organizzazione.

— **Versione V2018-1 - 9 Gennaio 2018** —

Stai utilizzando la versione V2018-1 del sito Web Telerevalidatie.nl.

[See release notes](#) ✕ Aggiornamento automatico all'ultima versione

La tua versione è vecchia di 624 giorni. Ogni due settimane viene rilasciata una nuova versione di questo portale introducendo nuove funzionalità e correzioni di bug. Se si desidera eseguire l'aggiornamento a una versione più recente, contattare support@jcgroep.nl.

Imparare i fondamentali

Inizia un corso di e-learning di 15 minuti

[Maggiori informazioni](#) [Nessun interesse](#)

Programma di attività fisica prescritta a domicilio

Esercizi programmati

«

Settimana 39

»

Azioni

lunedì 23/09	martedì 24/09	mercoledì 25/09	giovedì 26/09	venerdì 27/09	sabato 28/09	domenica 29/09
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Grand avanti stessa

Il mov bicycle

Scale: soster

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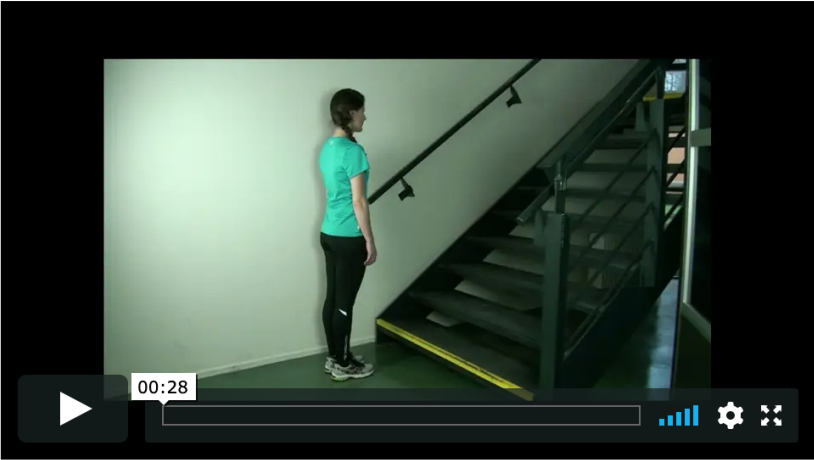
Estensi schier

In tutt delle s bracci

Con solo piede sulla scala

Esercizio

Commento



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Instructies voor deze patiënt

ripetizioni3 setsripetizioni1 min

istruzione

Salvare

✓ Is beschikbaar voor aanvullend oefenen Schakel uit

Scopo dell'esercizio

Questo esercizio mira a migliorare la forza e la resistenza dei muscoli del polpaccio.

Posizione di partenza


Su una scala.

Implementazione

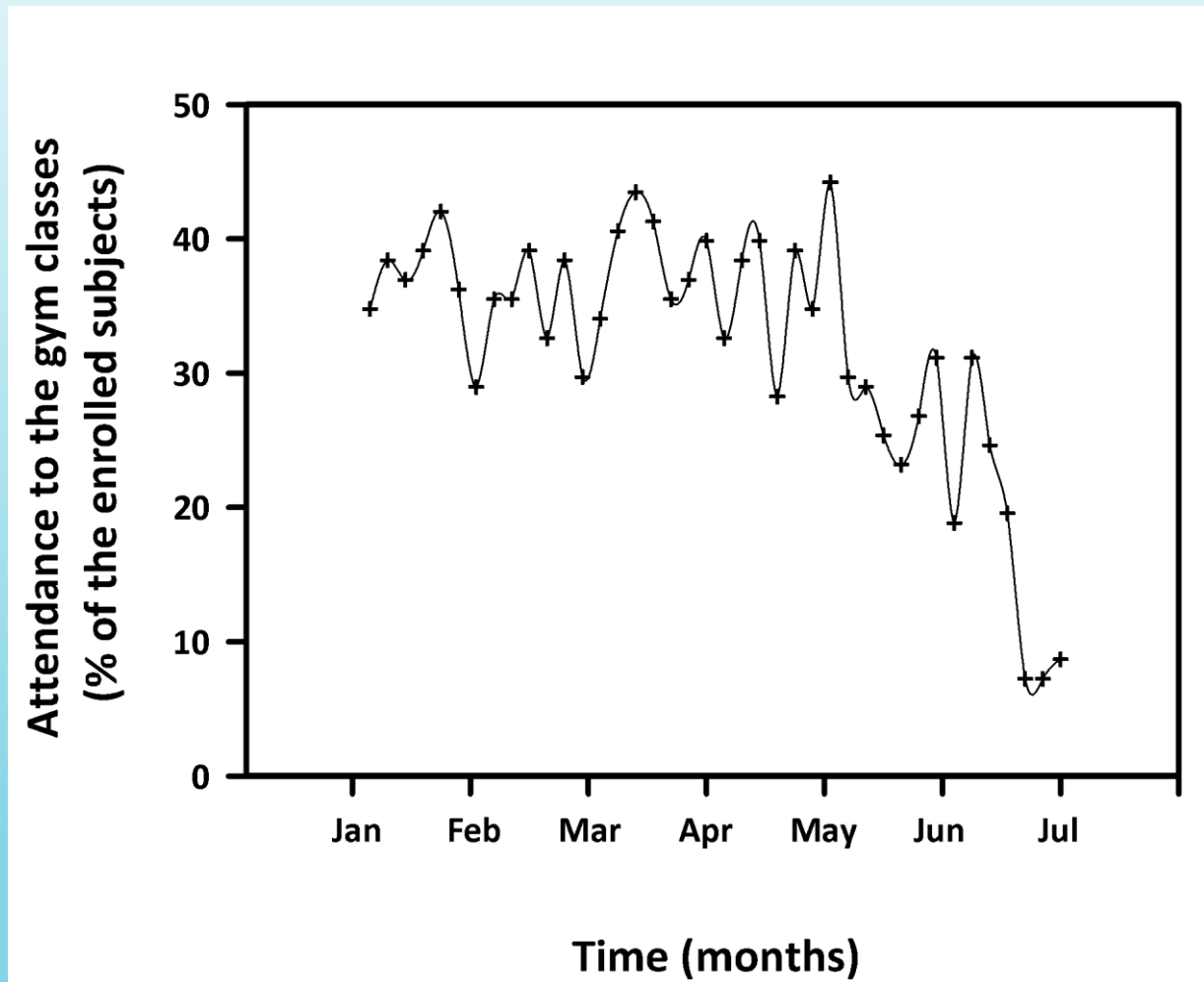
Posizionare il piede sul gradino inferiore. Sollevare i talloni e abbassarli di nuovo. Ripetere l'esercizio.

Filtra

Ricerca

Cammino sui talloni con appoggio

Impact of TELEREVALIDATIE on PAP adherence



The «thank you» slide

- Program «Attività Fisica Adattata» Federico II University Hospital
 - Michele Marzullo
 - Luigi Marotta
 - Francesco Buono
 - Giuseppe Iadicicco
 - Vincenzo Iadicicco
 - Alberto Cuocolo
 - Francesco Rozza
 - Nicola De Luca
 - Emanuele Barbato
 - Bruno Trimarco
- Laboratory of Molecular CV Physiology and Biology
 - Daniela Sorriento
 - Jessica Gambardella
 - Antonella Fiordelisi
- University of Verona
 - Federico Schena
- University of Salerno
 - Michele Ciccarelli
 - Valeria Visco
 - Maria Rosaria Rusciano
- Albert Einstein College of Medicine, NY
 - Gaetano Santulli

