

*12 Maggio 2015 - Cascina Triulzia- EXPO di Milano*



## **Guido Iaccarino**

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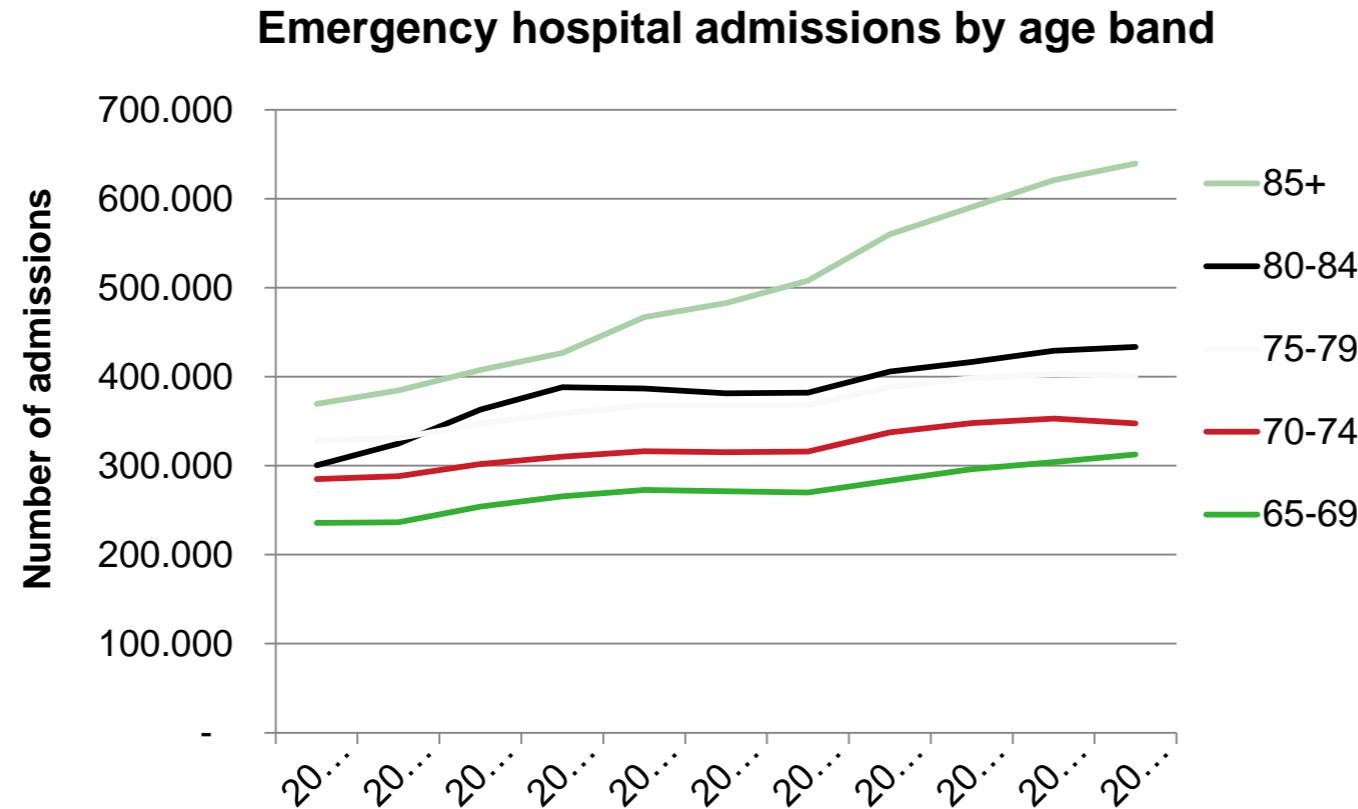
# **DIETA, ESERCIZIO FISICO E INVECCHIAMENTO ATTIVO (EIP ON ACTIVE AND HEALTHY AGING)**



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# Entro il 2030, il numero degli over 80 raddoppierà



Negli ultimi 10 anni, il 40% dell'incremento degli accessi in pronto soccorso è da parte di pazienti over 65s

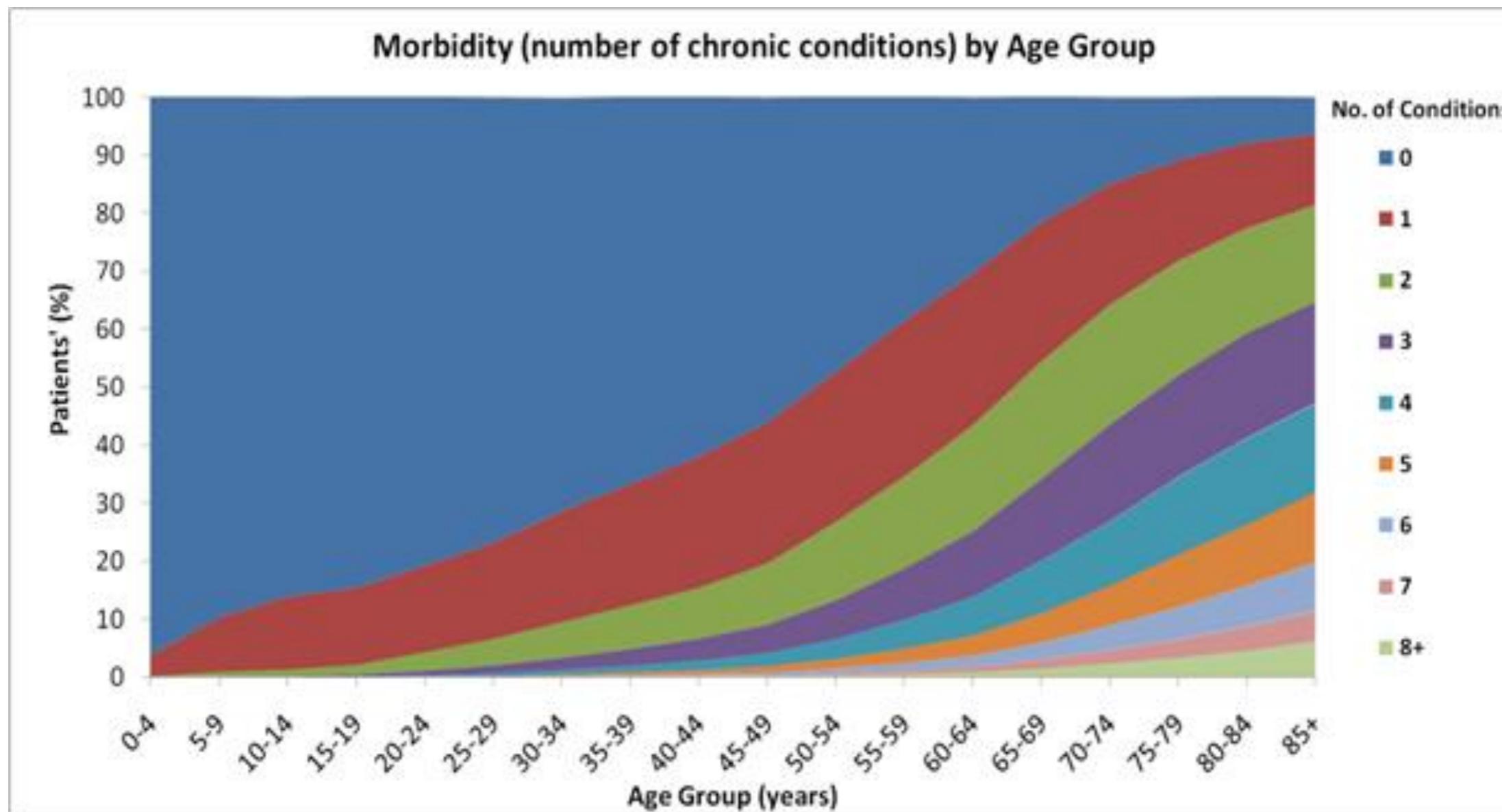
Anche la frequenza delle reammissioni in emergenza è aumentata per gli anziani

Fragilità (per range di età)

65-69	=	4%
70-74	=	7%
75-79	=	9%
80-84	=	16%
Over 85	=	26%



# Stime di Multimorbidità



La maggioranza degli over-65s ha 2 o più malattie croniche e la maggioranza degli over-75s ne ha almeno 3.

# European Innovative Partnership on Active and Healthy Aging

- Il programma del DG-SANTE della EC intitolato all'AHA
- Aumentare il numero di Healthy Life Years di 2 anni in Europa entro il 2020
- Nel 2013, la Campania è stata identificata “Reference Site” dal DG-SANTE per l'EIP-AHA



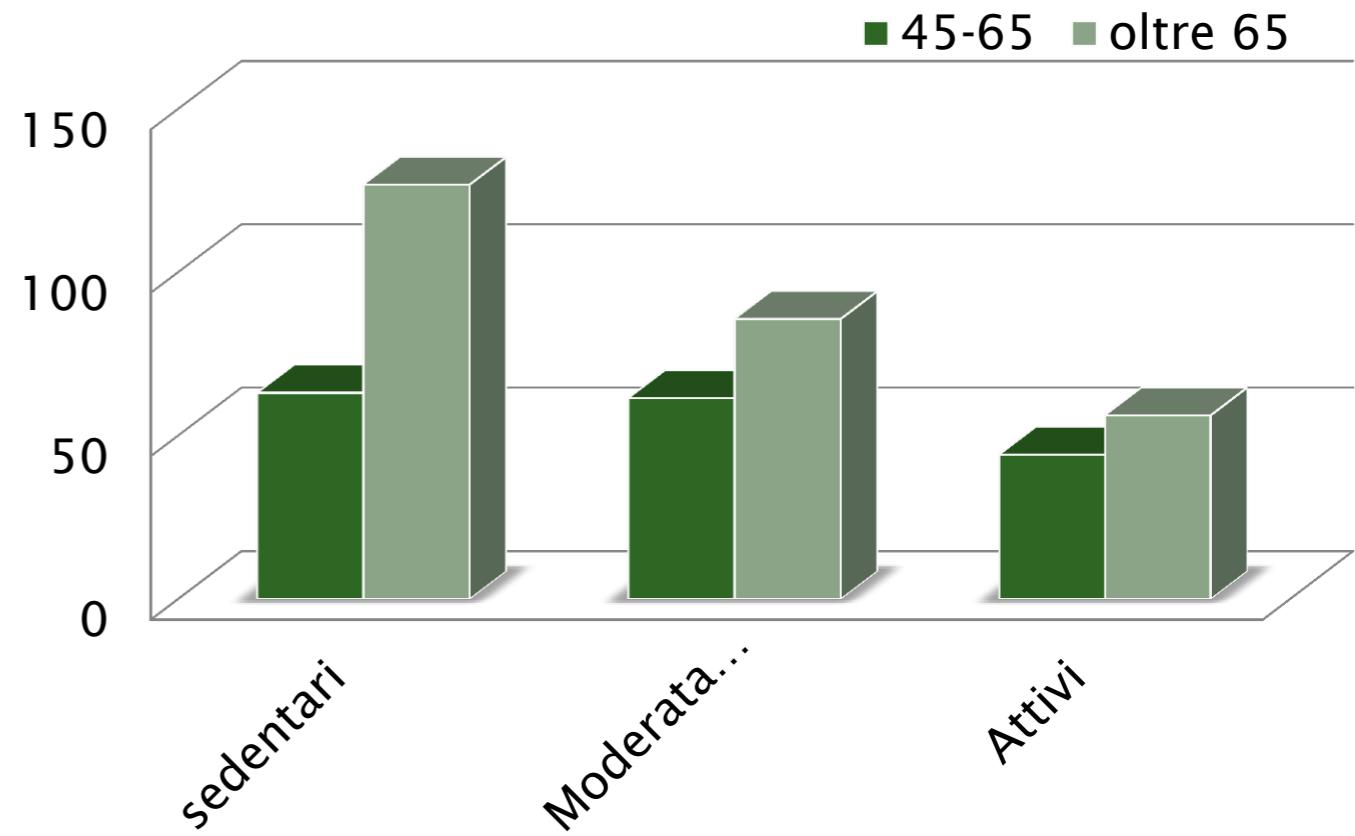
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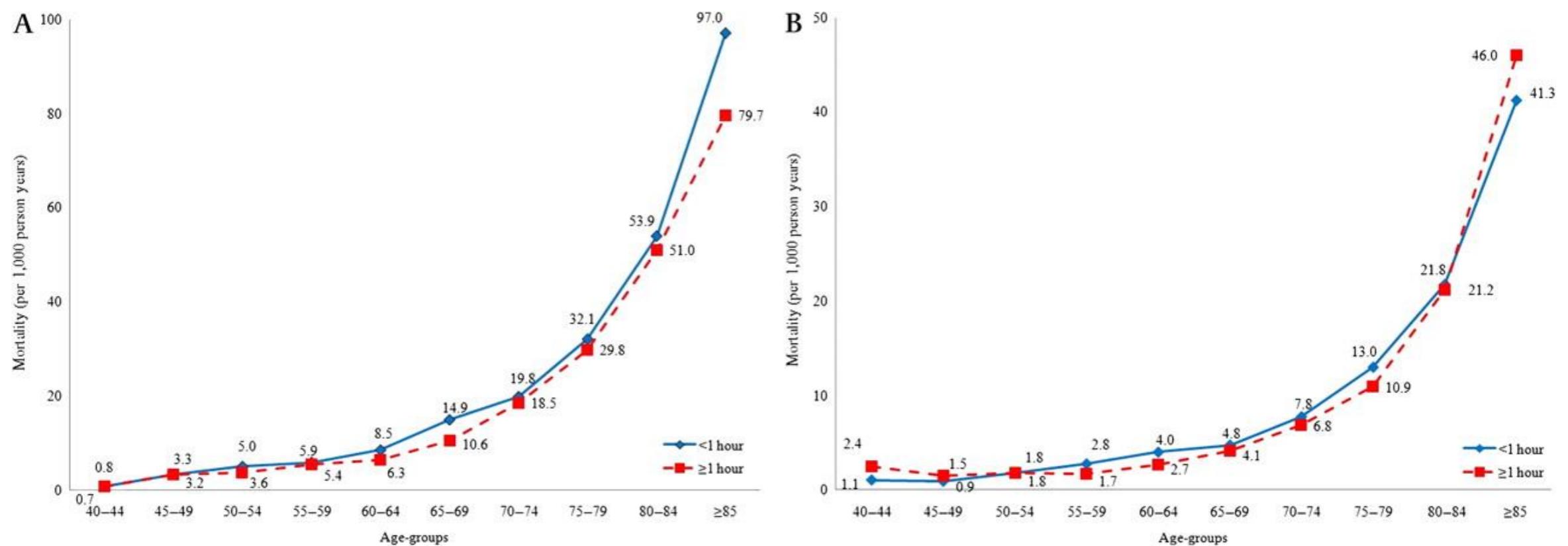
# Esercizio Fisico e AHA

Nel 1992, l'American Heart Association pubblicò un "position statement" sull'esercizio fisico:  
*"There is a relation between physical inactivity and cardiovascular mortality, and inactivity is a risk factor for the development of coronary artery disease."*

**Eventi Cardiovascolari nel Honolulu Heart Study**



## Multiadjusted mortality by time-spent-walking categories in each age group in (A) men and (B) women.



Masato Nagai et al. BMJ Open 2011;1:bmjopen-2011-000240

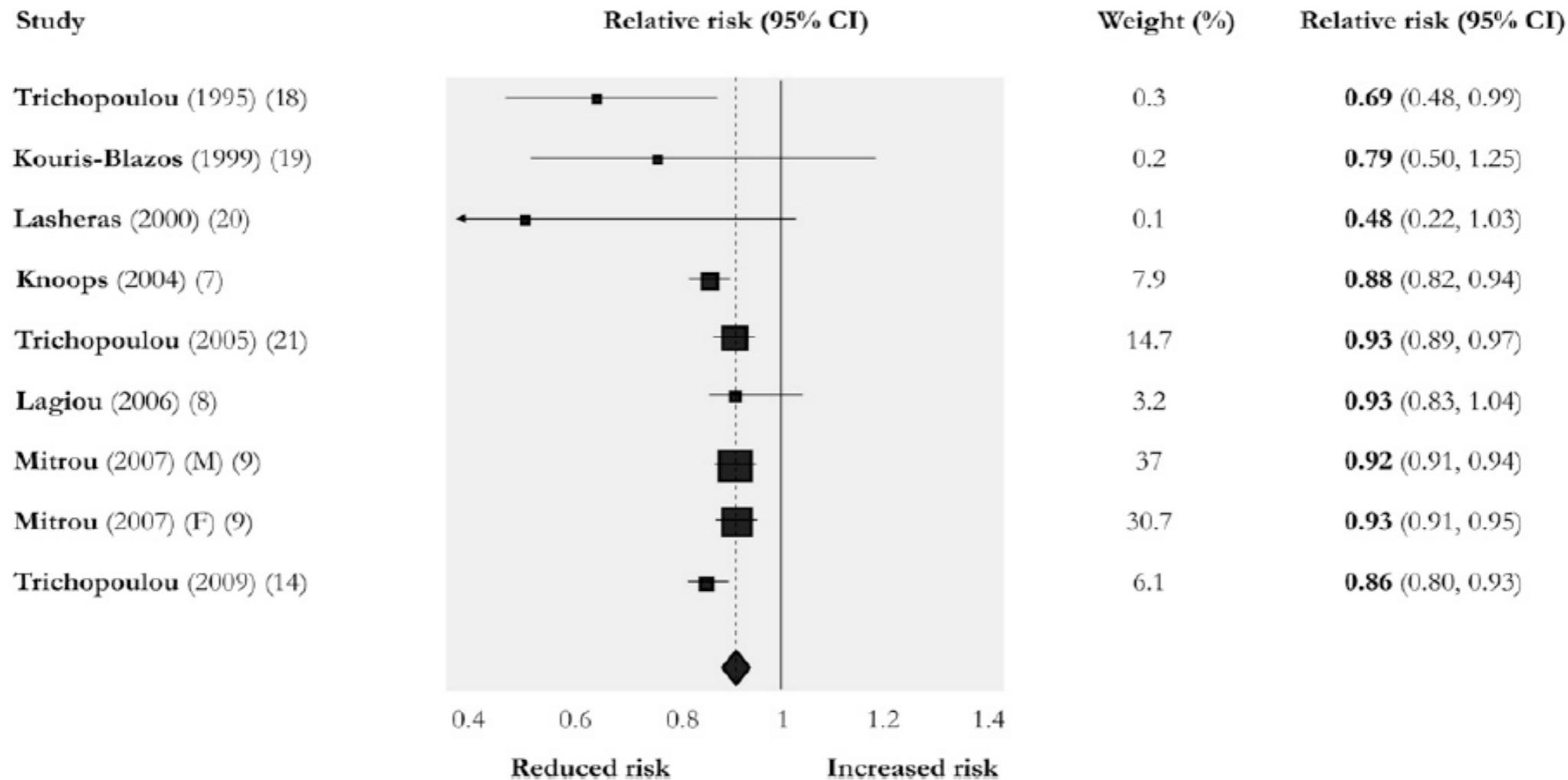
# Impact of walking on life expectancy and lifetime medical expenditure: the Ohsaki Cohort Study

Time spent walking	Univariate			Multiadjusted*		
	Estimate	95% CI	p Value	Estimate	95% CI	p Value
<b>Life expectancy (years) at age 40 years</b>						
Men	<1 h	42.41 41.45 to 43.26	0.0004	43.43 42.39 to 44.41	0.0073	
	≥1 h	44.19 43.15 to 45.19		44.81 43.66 to 45.94		
<b>Lifetime medical expenditure (£) at age 40 years</b>						
	<1 h	107 023.2 101 093.6 to 113 066.3	<0.0001	107 544.2 101 234.0 to 114 044.6	0.0048	
	≥1 h	94 402.1 87 812.3 to 101 248.0		99 423.6 92 515.9 to 106 694.7		
<b>Life expectancy (years) at age 40 years</b>						
Women	<1 h	52.25 49.79 to 54.92	0.0569	56.62 53.17 to 60.62	0.2351	
	≥1 h	54.25 51.38 to 57.48		57.78 54.02 to 62.22		
<b>Lifetime medical expenditure (£) at age 40 years</b>						
	<1 h	123 553.0 111 619.5 to 137 549.6	0.0644	131 766.8 115 902.4 to 150 714.3	0.2559	
	≥1 h	115 896.0 102 406.6 to 131 792.1		128 161.2 111 335.0 to 148 494.7		



# Meta-analysis of prospective studies on the effects of adherence to the Mediterranean diet on health status (18 cohorts, n=2,190,627, follow-up 4 to 20 yrs)

**Association between a 2-point ↑ of adherence score to MEDiet and overall mortality**



**Pooled risk estimate 0.92 (0.90-0.94)**

*Cos'è  
esattamente  
La dieta  
Mediterranea?*

.....  
**Scene di vita a  
Napoli nel 1700**



# MEDITERRANEAN DIET IN ITALY IN THE FIFTIES



“... a hearty dish of beans and short lengths of macaroni (pasta e fagioli); ... lots of bread (never served with any kind of spread);  
... great quantities of fresh vegetables; ... a modest portion of meat or fish (perhaps twice a week);  
... wine;  
... always fresh fruits for dessert.

*.... for the possible prevention of CHD, it would be hard to do better than imitate the diet of the common folk of Naples in the early 1950s”*

*Ancel and Margaret Keys.*

**HOW TO EAT WELL AND STAY WELL: THE MEDITERRANEAN WAY**

*New York: Doubleday; 1975*

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# MEDITERRANEAN DIET IN ITALY IN THE FIFTIES

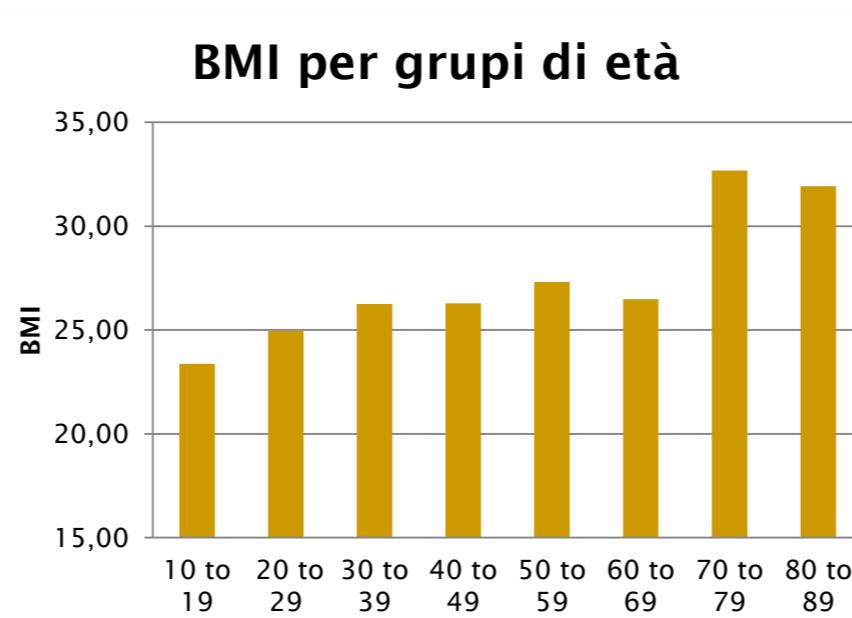
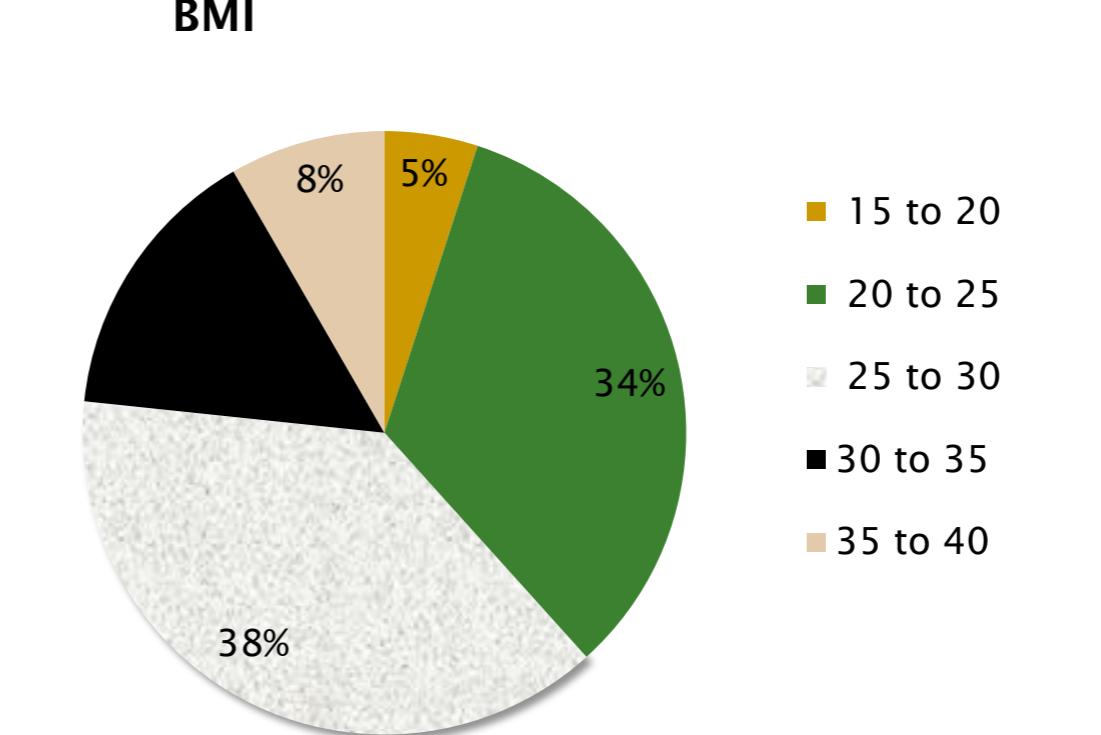
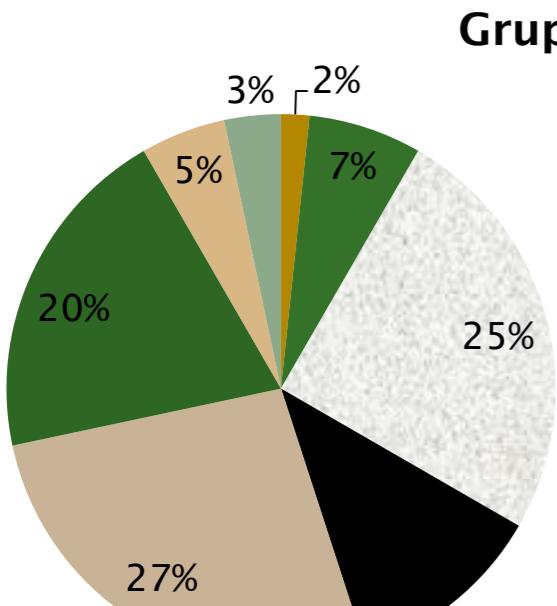


- **Media delle calorie quotidiane: ~2600/d**
- **Basso contenuto di grassi, principalmente derivati dall'olio (tot. 23%, SFA <7%, chol 220 mg)**
- **Proteine ~ 12% en**
- **Carboidrati~ 60% en**
- **Derivati da Cereali grezzi (54% en)**
- **Latte e derivati < 3%**

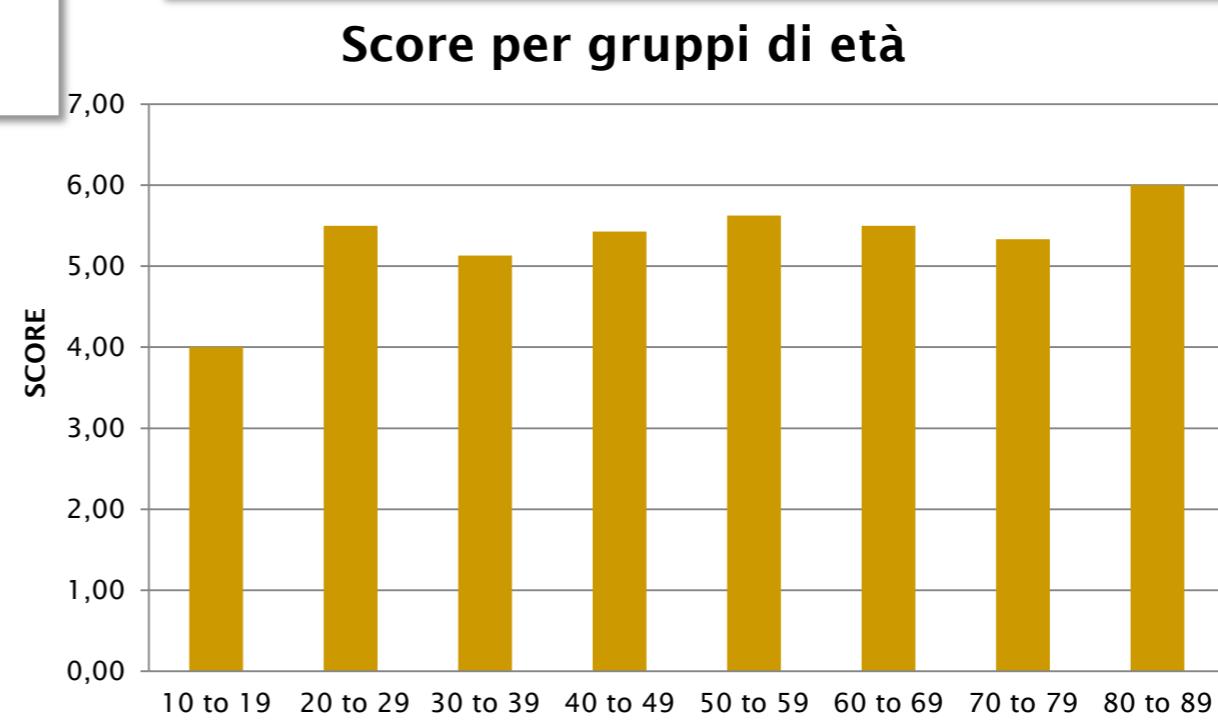
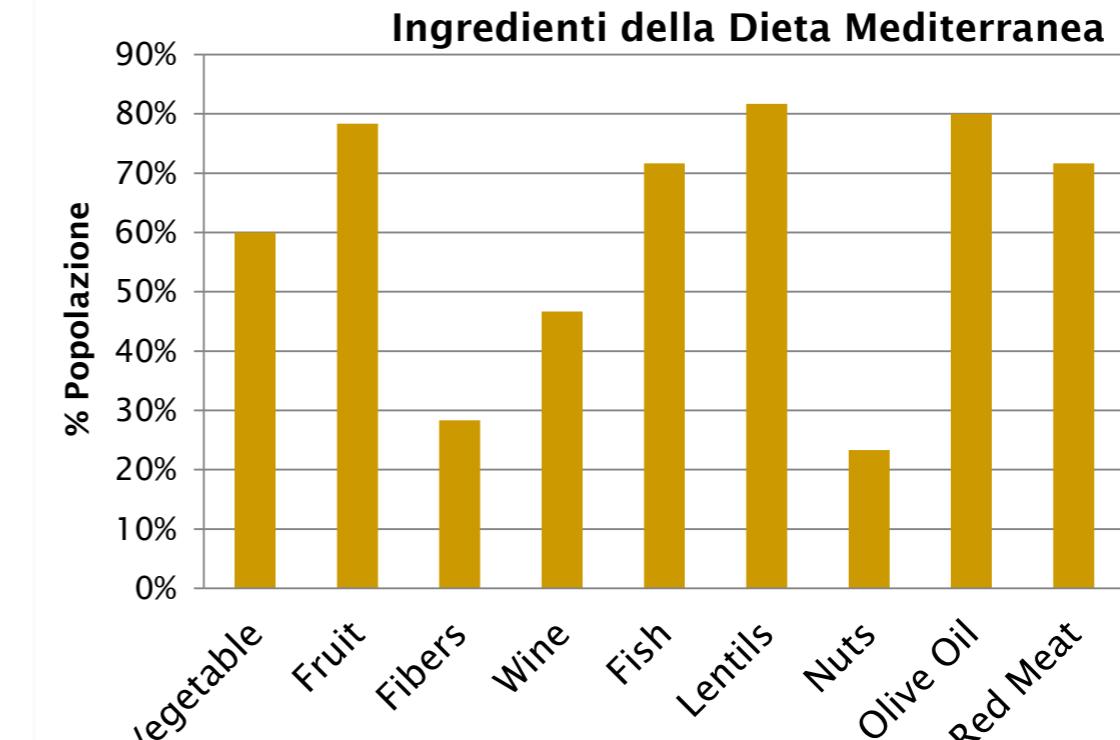
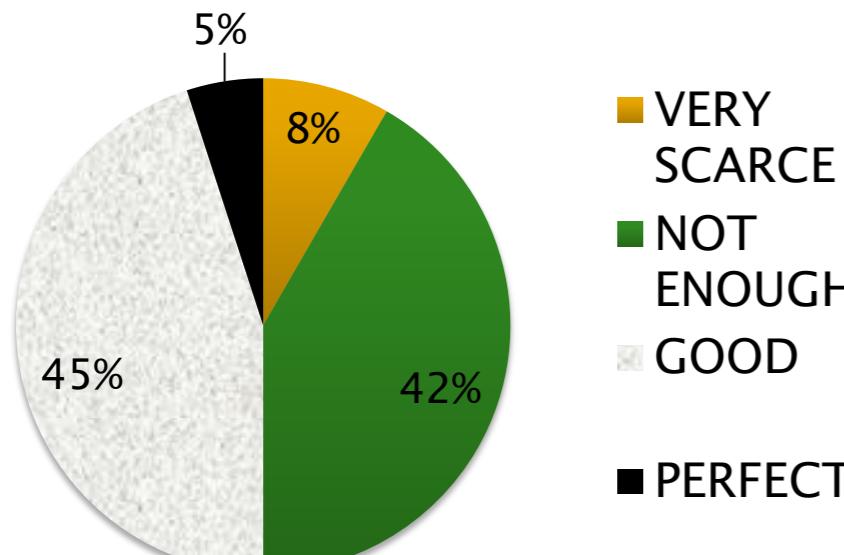
# Rate My Mediterranean Diet

Mangi.....?		se si, segna 1	se no, segna 0
<b>Verdure</b>	due o più piatti al giorno		
<b>Frutta</b>	2 o più pezzi al giorno		
<b>prodotti di farina integrale</b>	2 o più pezzi al giorno		
<b>Vino</b>	1/2-1 bicchiere per le donne, 1-2 bicchieri per gli uomini (non di più....)		
<b>Pesce</b>	2 o più volte a settimana		
<b>Legumi</b>	2 o più volte a settimana		
<b>noci</b>	un pugno almeno 4 volte a settimana		
<b>Olio</b>	Molto olio, poco burro		
<b>Carne rossa</b>	meno di 3 volte a settimana?		
<b>età</b>			
<b>sesso</b>			
<b>peso</b>			
<b>altezza</b>			
<b>Iperteso</b>			
<b>Diabetico</b>			
<b>Colesterolo alto</b>			
	Risultato		
<b>7-9</b>	Perfetto		
<b>5-6</b>	Buono		
<b>3-4</b>	Scarsa		
<b>0-3</b>	Molto Scarsa		

# Rate My Mediterranean Diet



# Rate My Mediterranean Diet



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# The POLLICA Study

## Baseline diet composition

FOOD	Men (n=25)	Women n=23)
Total EN intake (Kcal)	3260	2150
Protein (% en)	13	13
Total CHO (% en)	42	47
Total fat (% en)	31	35
Oleic acid (% en)	17	17
SFA (% en)	9	11
PUFA (% en)	4	4
Alcohol (% en)	14	5



# Il Reference Site EIP-AHA della Campania per la Promozione dei corretti stili di vita

**S. O. S. Sapori Odori Salute**

**Healthy life style promotion**

**2 days cooking lab**  
**15 Mediterranean diet orginal recepies developed**  
Translation in french and english available starting october 31° on : Marconi comprehensive Institute , Hotel School Ferrari and ASL Salerno web-site

**Nutritional assesment of:**  
**70 subjects >60**  
**30 Alzheimer patients through MNA questionnaire**

**3 Healthy eating training sessions** during school year 2013-2014, 1 in 2015:  
350 students, 120 family members and 20 Alzheimer patients

**US.acli UNIONE SPORTIVA**

## Sport and Health

17 U.S.acli gyms offer activities dedicated to over sixties all over the country

subjects	
All	459
60-64	142
>65	317

M=25%  
F=75%

Engagement into physical activity	
Yes	18%
No	57%
Seldom	10%

Frequence of diabetes	
YES	8,6%
NO	82,6%

  
**Camminata per la salute**  
Vivere in movimento per vivere in buona salute.  
[www.usaci.org](http://www.usaci.org) [sportsalute.usaci@accli.it](mailto:sportsalute.usaci@accli.it)

In 2015 USaci has organized 47 «walk for health» of all over Italy.

**XI Giornata Mondiale contro l'Ipertensione Arteriosa: 16 Maggio 2015**  
**Due postazioni: Salerno e Castelnuovo Cilento**

**Screening dei valori di pressione**  
**Questionari sugli stili di vita**  
**Questionari nutrizionali**  
**200 screening per parametri metabolici**  
**Pranzo a base di piatti della tradizione Mediterranea Cucinati dagli studenti dell'Istituto Alberghiero "Ancel Keys" di Castelnuovo Cilento**





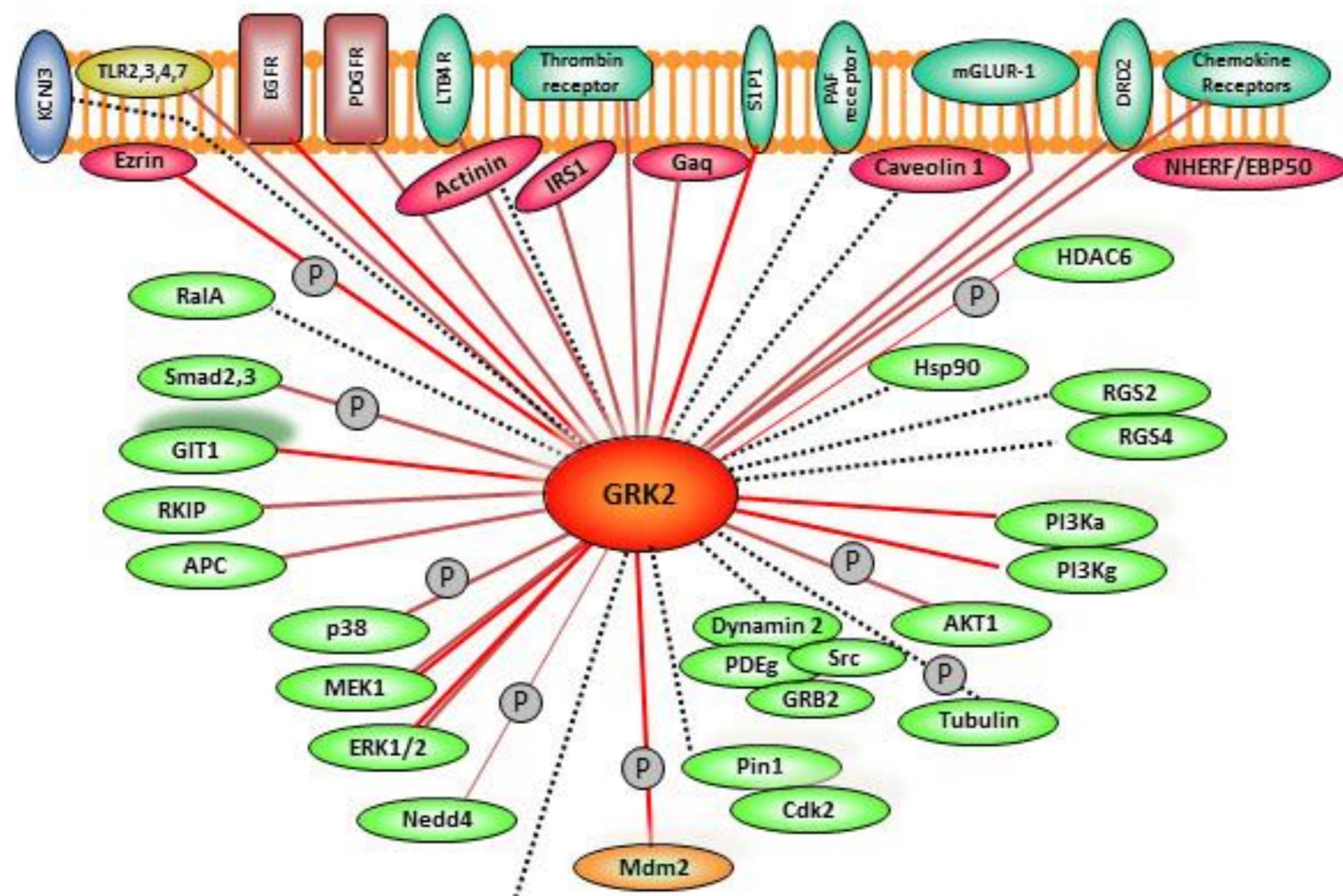
**La Città d'Ippocrate**



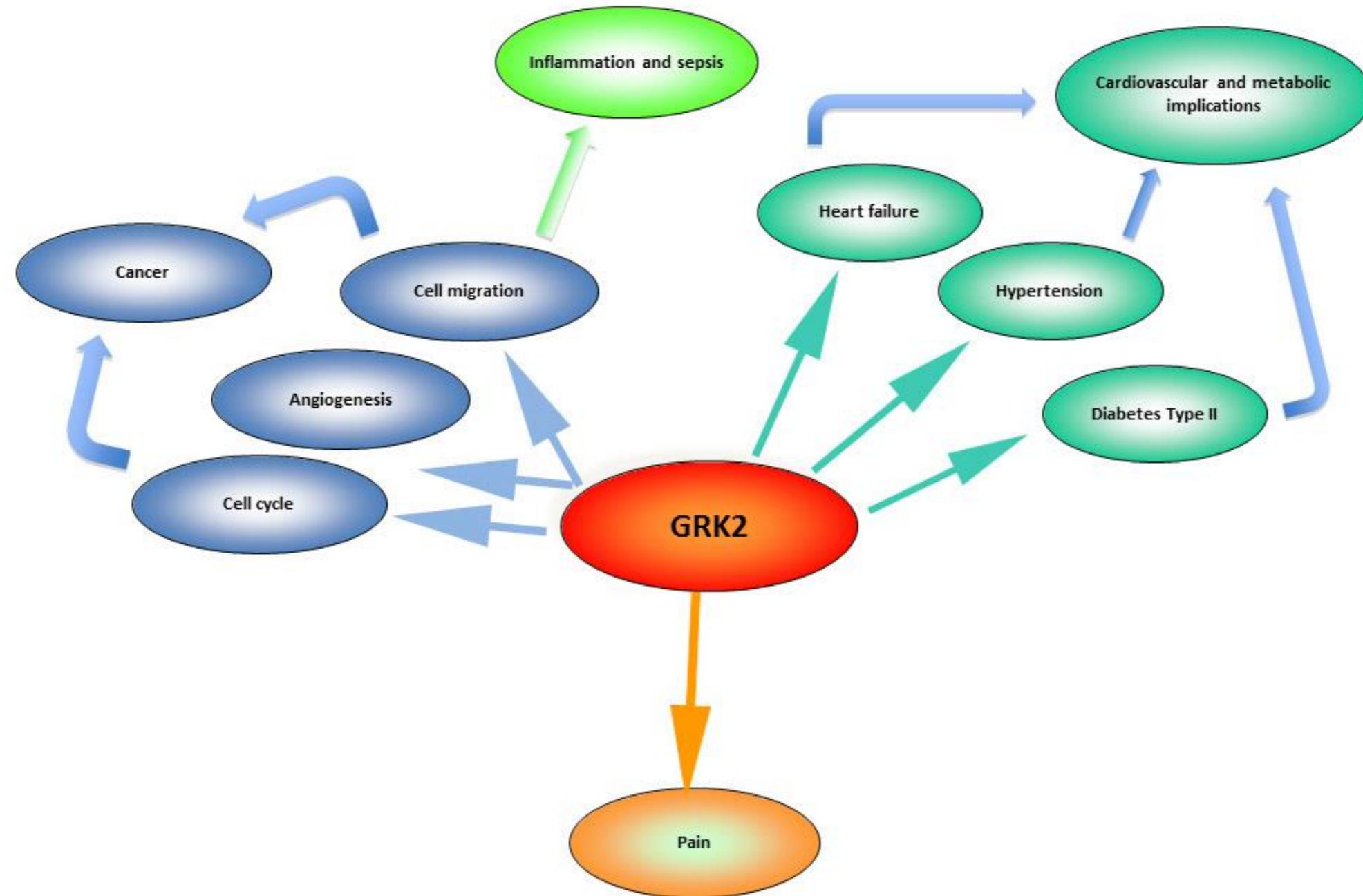
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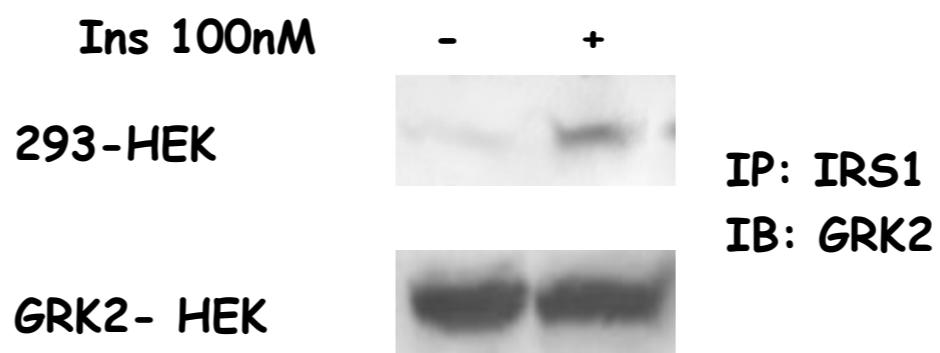
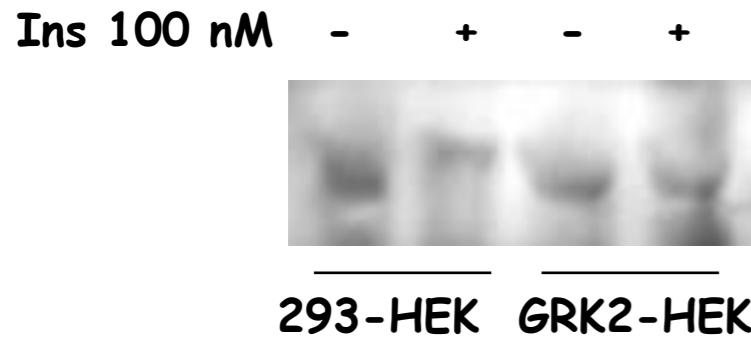
# EIP-AHA: More research on mechanisms for Healthy Aging



# GRK2 come meccanismo molecolare della multimorbidità

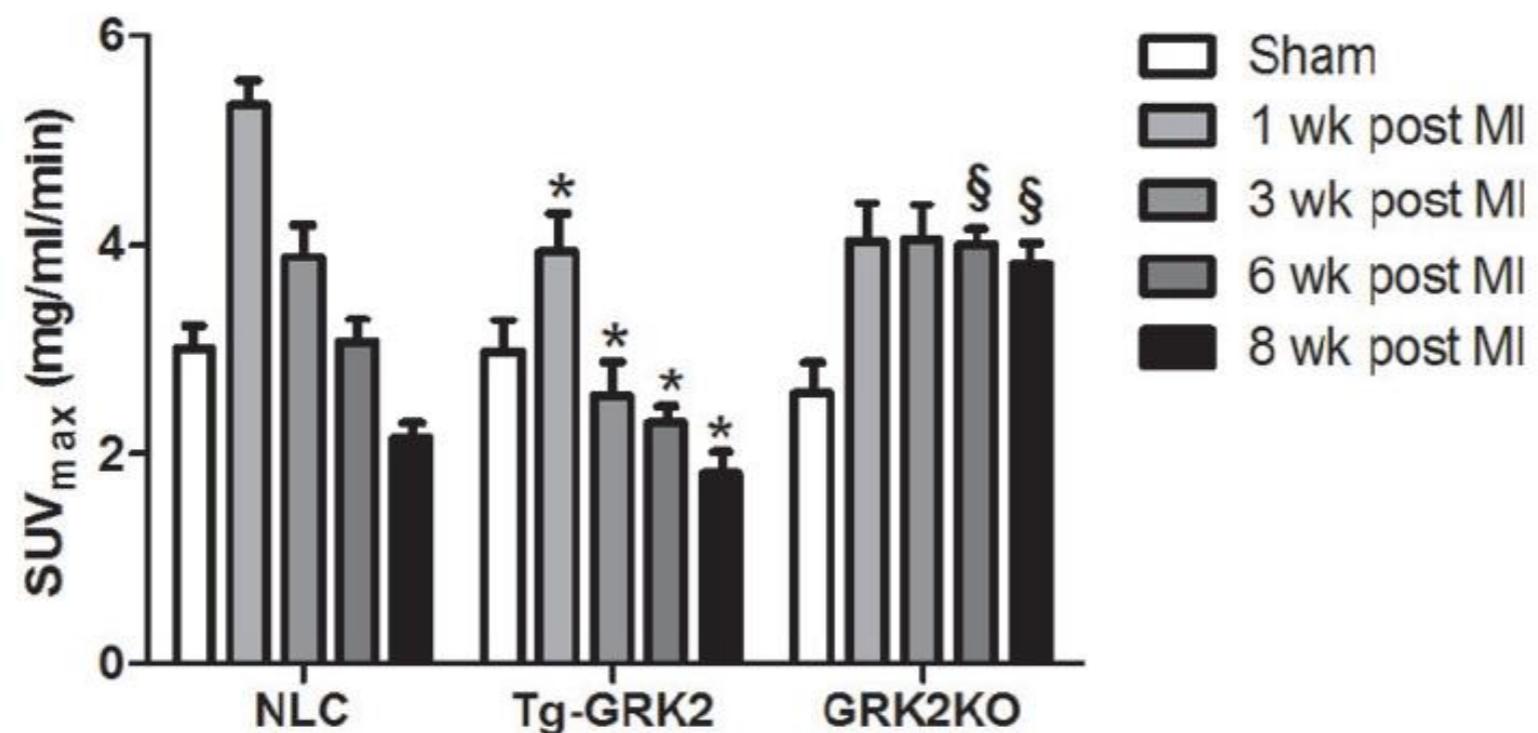
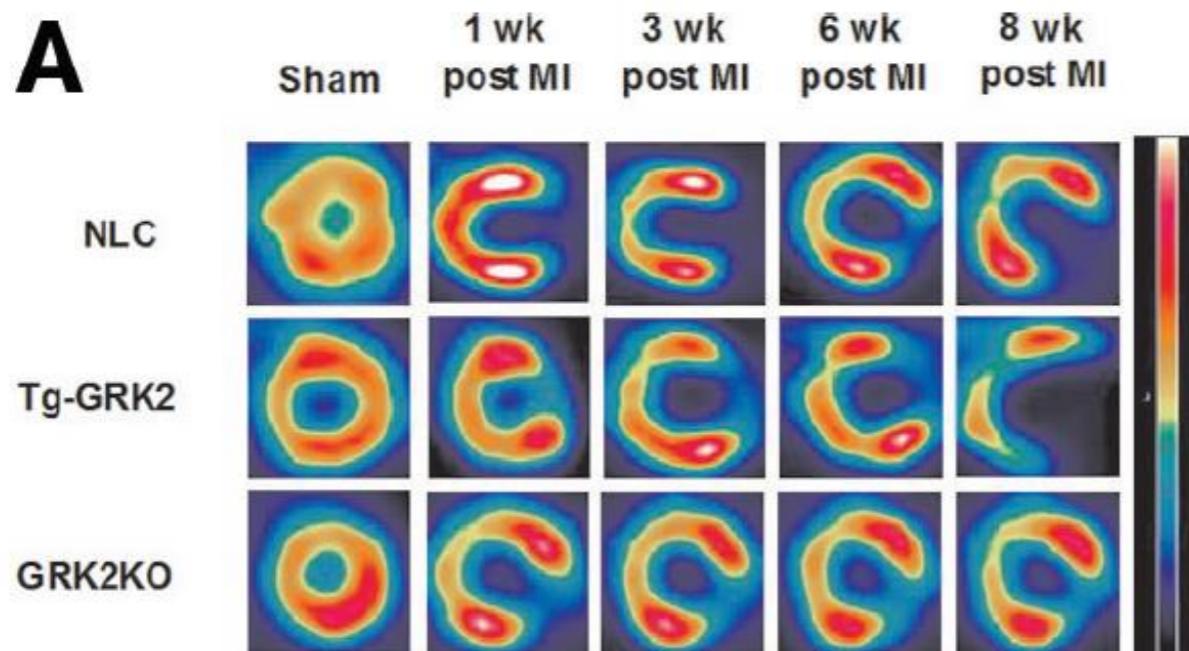


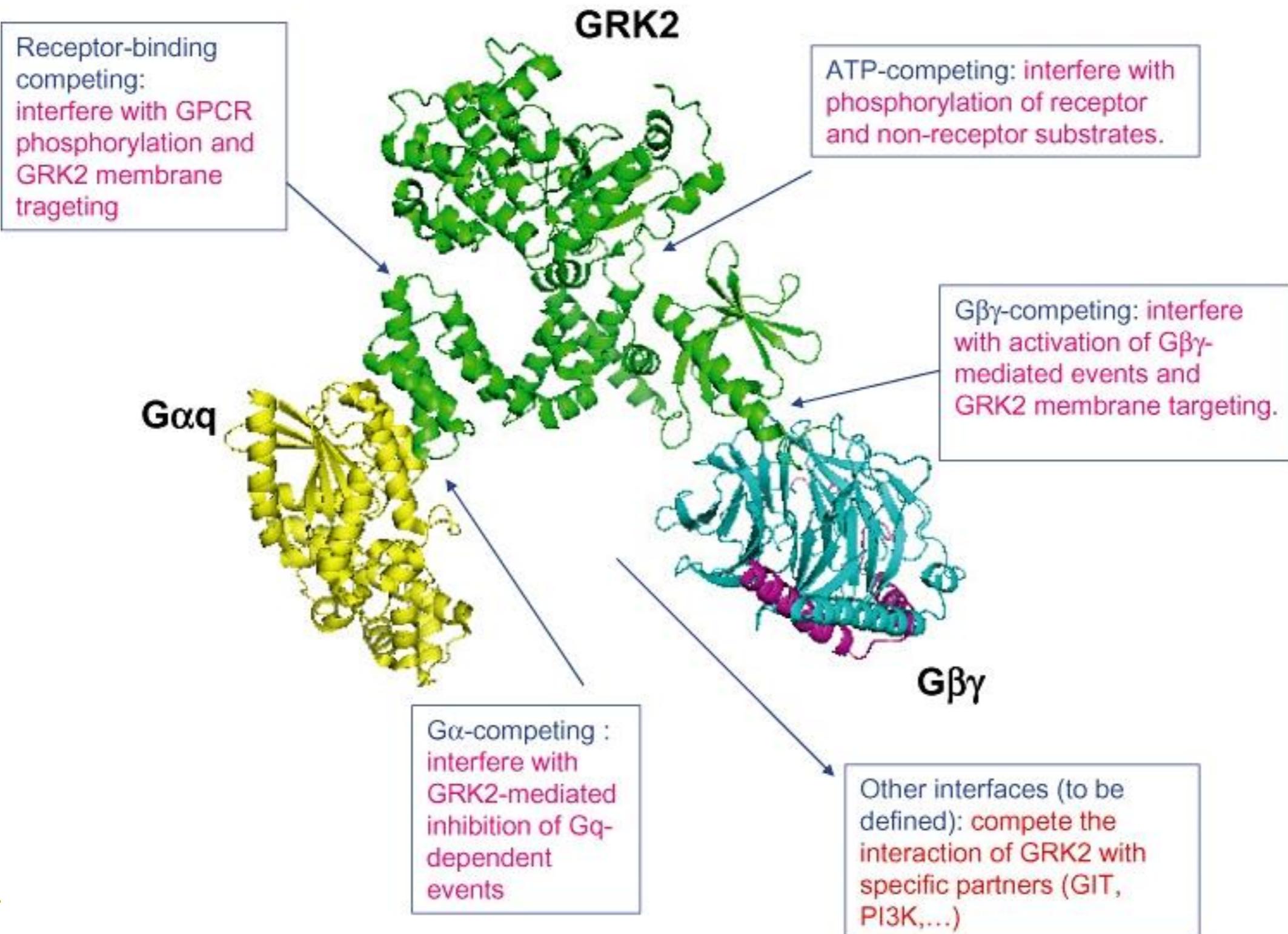
# GRK2 inhibits insulin induced IRS1 activation



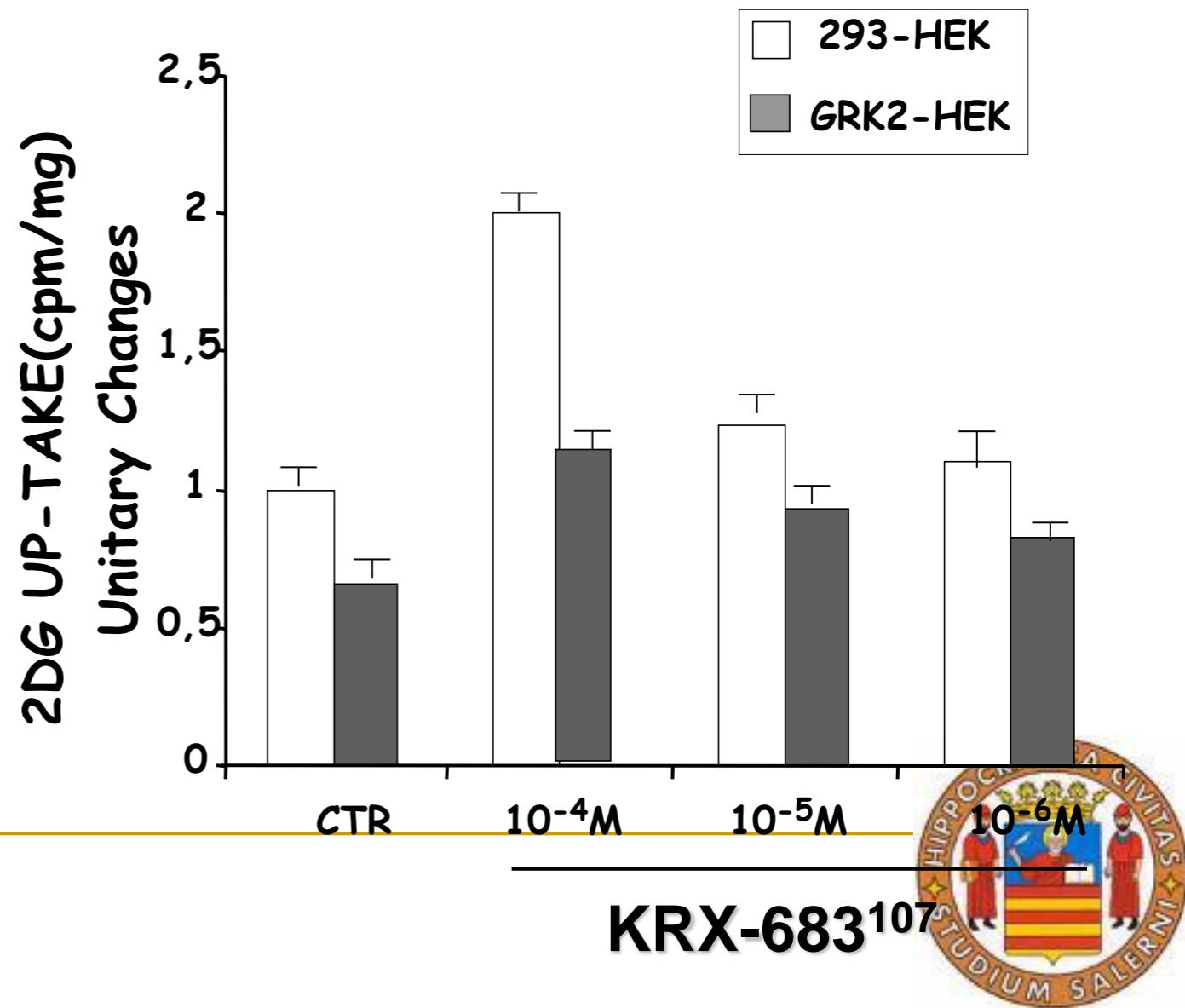
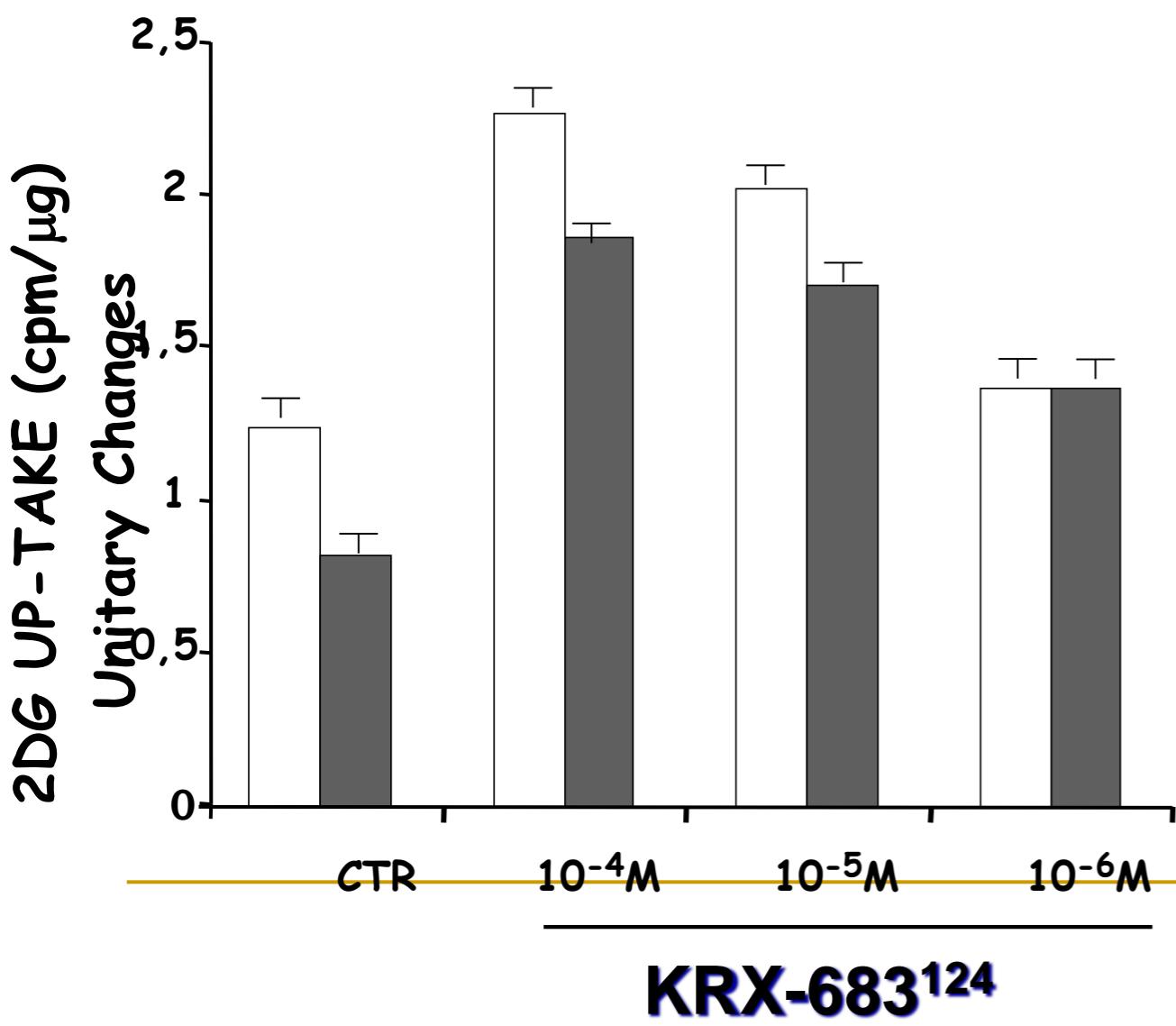
# Glucose utilization after MI

A

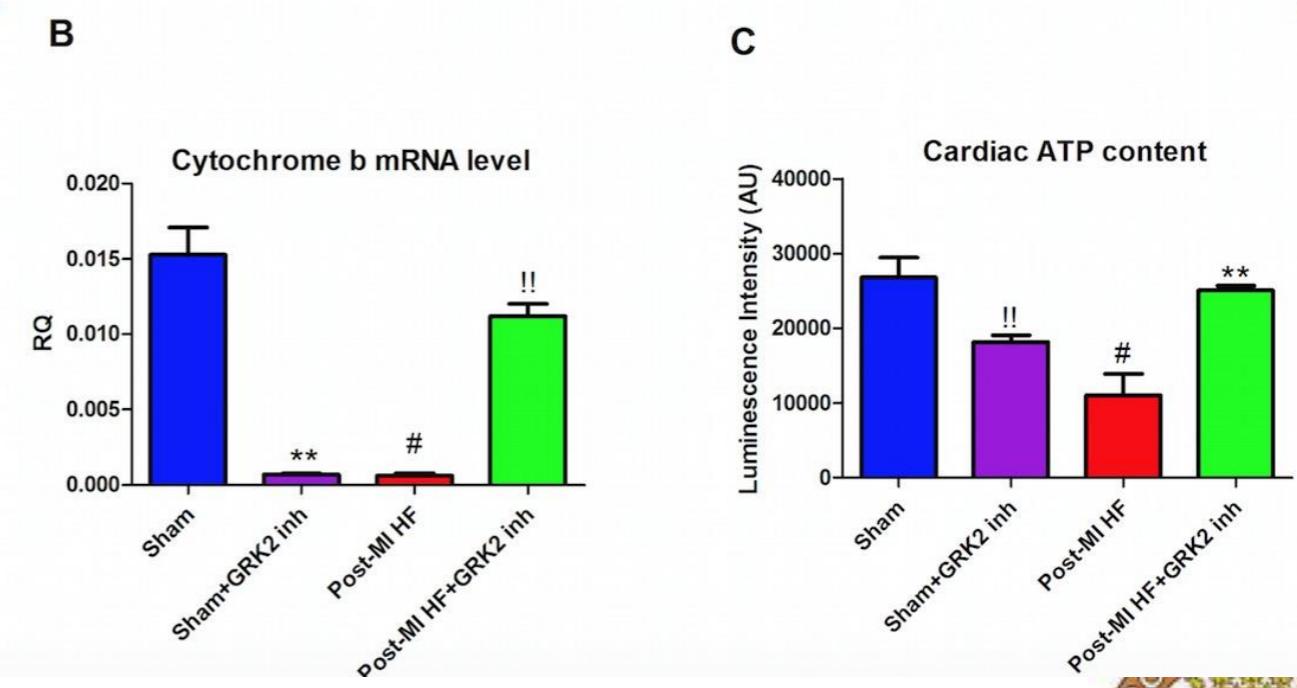
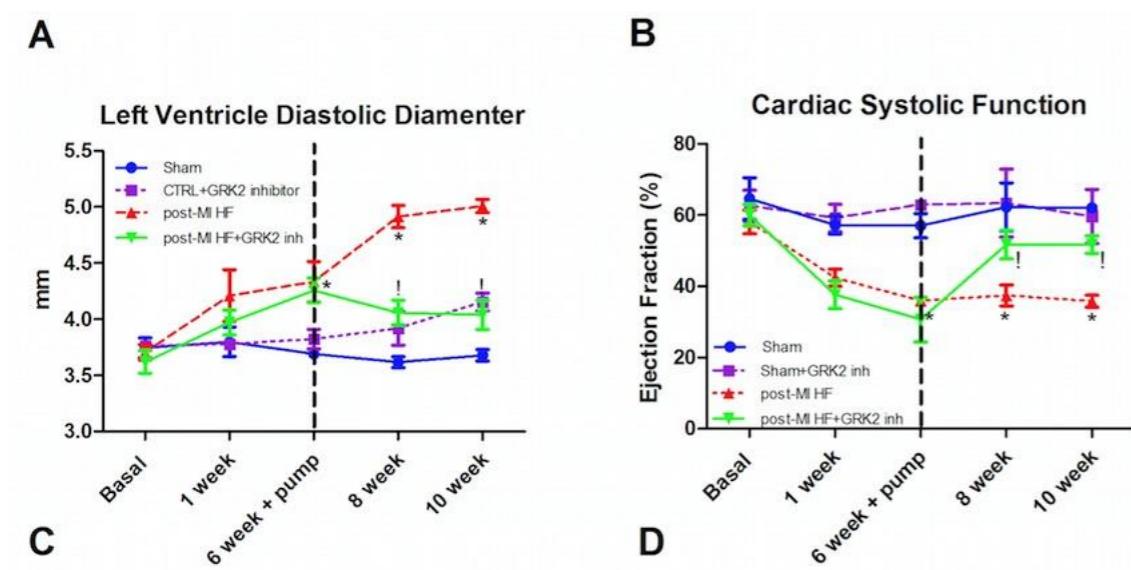
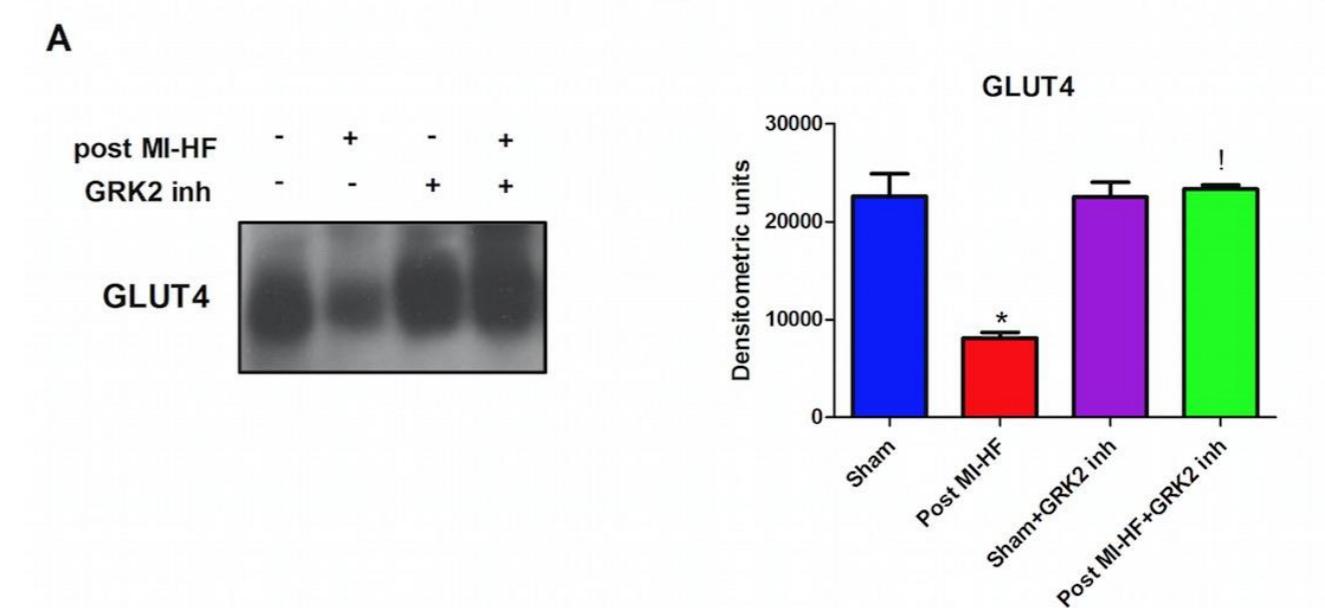
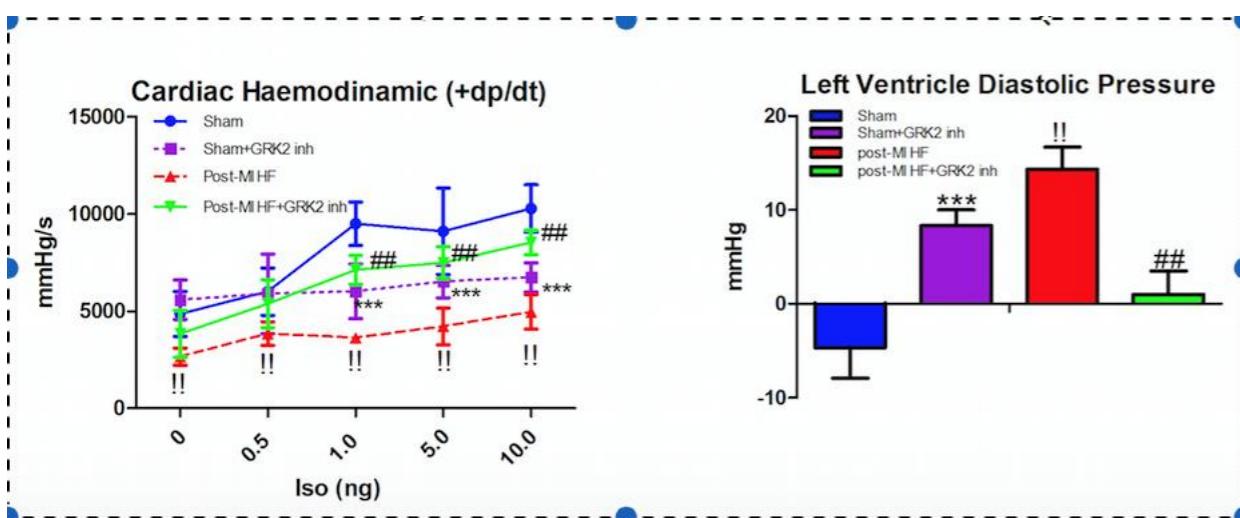




# GRK2 inhibition improves Insulin induced Glucose Uptake



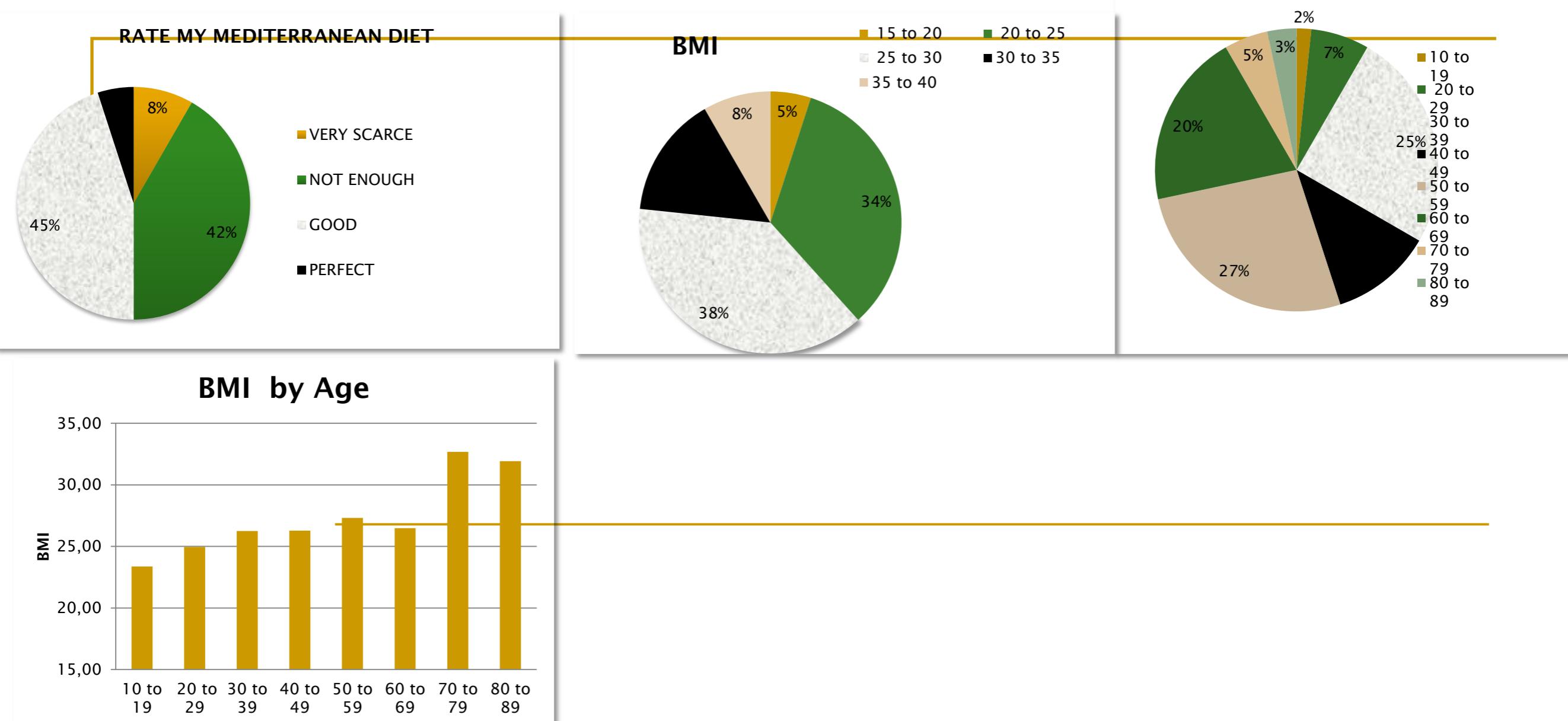
# Effetti dell'inibizione di GRK2 nello scompenso cardiaco



# Thank you Slide

- Daniela Sorriento
- Gaetano Santulli
- Maddalena Illario
- Ersilia Cipolletta
- Pietro Campiglia
- Michele Ciccarelli
- Bruno Trimarco

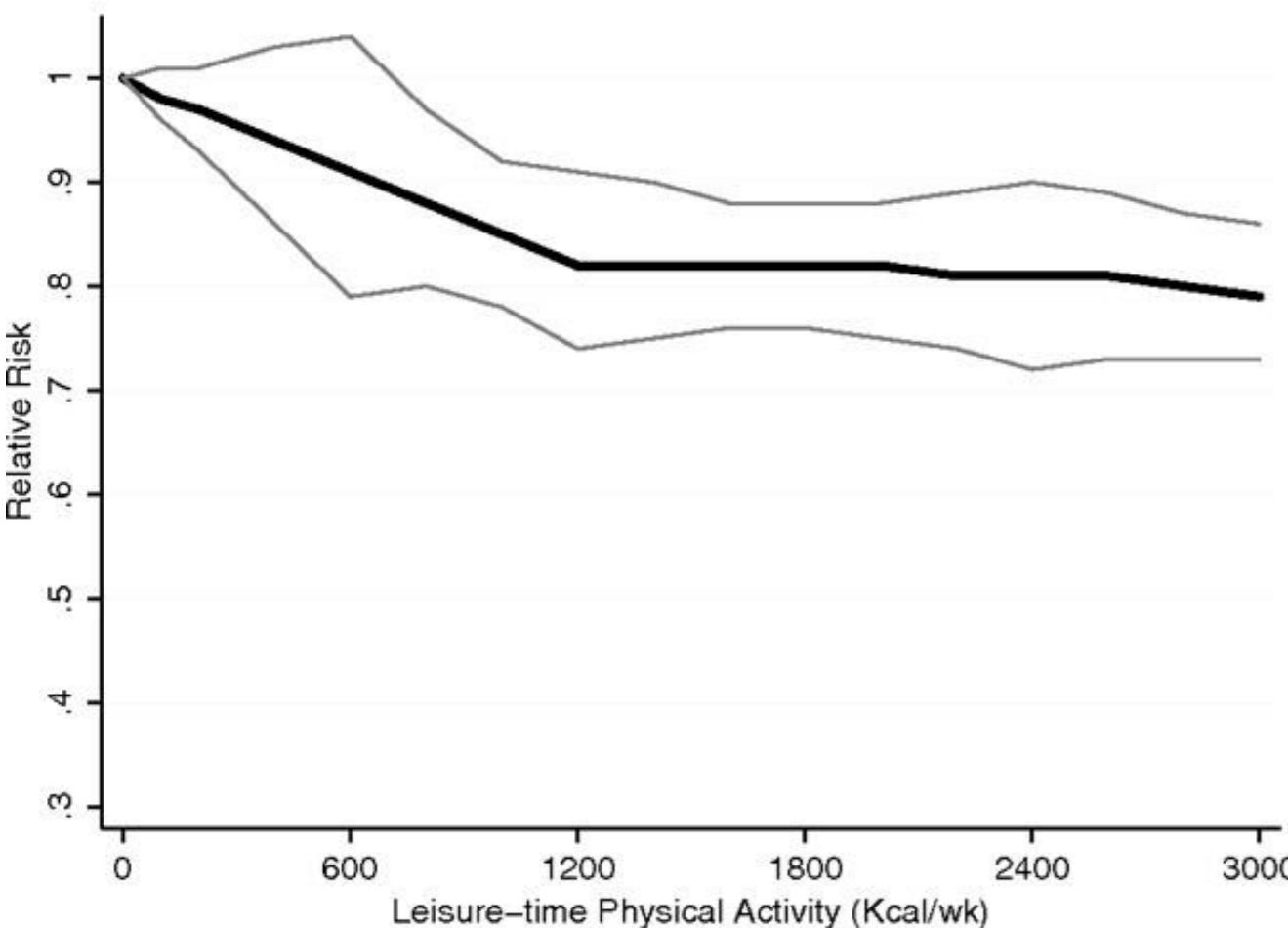




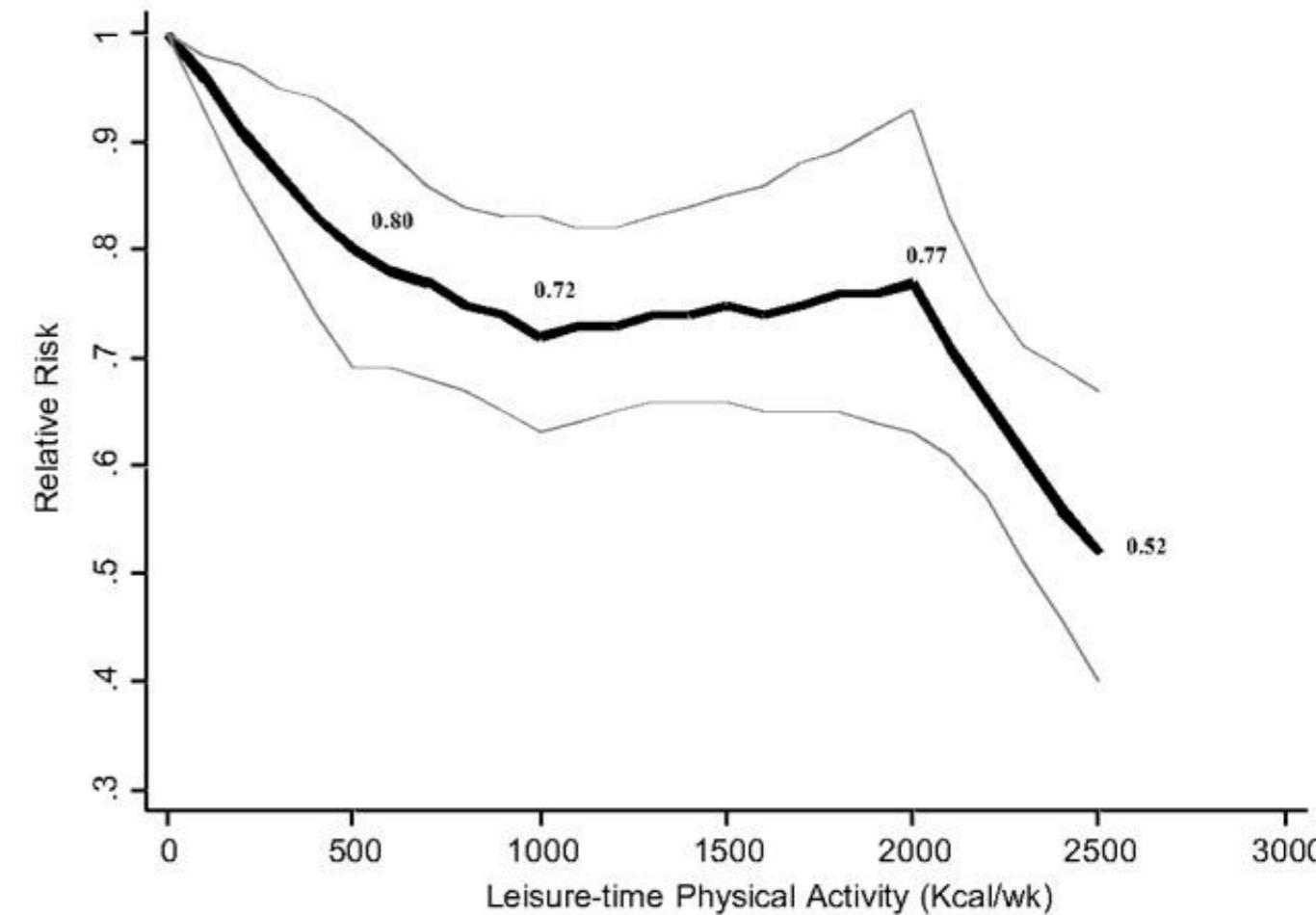
Among the southern Italians, the habit to a Mediterranean diet is less diffused than in the '50s when Ancel Keys described the Mediterranean Style eating well to stay well. There is room for an intervention to increase the adherence to the Mediterranean diet even among older adults in southern Italy.

## Generalized least squares (GLST) regression spline (smoothed fit) models with 95% confidence intervals (CIs).

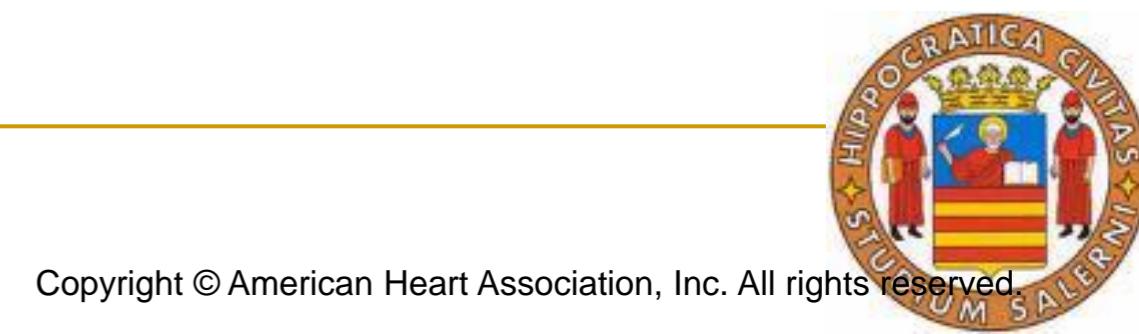
Men - Pooled Relative Risk of CHD by Kcal/wk of LTPA



Women - Pooled Relative Risk of CHD by Kcal/wk of LTPA



Jacob Sattelmair et al. Circulation. 2011;124:789-795



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# PERFECT STORM:

- I sistemi sociosanitari sono sempre più ingolfati
- Con il cambiamento demografico cambiano i bisogni:  
Semplci → Sempre più complessi  
(Fragilità)
- Gli anni della Crisi peggiorano la disponibilità di risorse

# Attività fisica e AHA

Lo studio di Copenhagen dimostrò che essere molto in forma ma non fare attività fisica i.e. un ex atleta che non ingrassa ma non si allena, non assicura protezione contro la mortalità e ceh al contrario, persone non sedentarie, anche se non in forma (attività fisica leggera per almeno 4 ore a settimana) hanno un rischio più basso rispetto a persone che non fanno attività fisica (anche se in forma)

Per la Salute Pubblica, l'osservazione che l'esercizio fisico fa bene a tutte le età, aiuta ad invecchiare meglio, non deve essere strenuo o prolungato, che include le attività lavorative e non deve essere effettuato tutti i giorni rappresenta una opportunità enorme di intervento



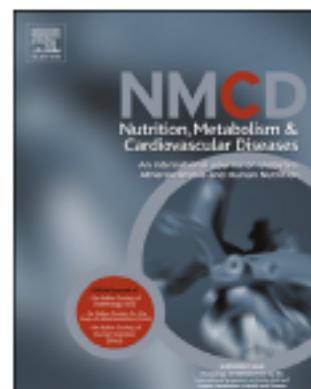


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## Nutrition, Metabolism & Cardiovascular Diseases

journal homepage: [www.elsevier.com/locate/nmcd](http://www.elsevier.com/locate/nmcd)



# Decline of the Mediterranean diet at a time of economic crisis. Results from the Moli-sani study



M. Bonaccio <sup>a,\*<sup>1</sup></sup>, A. Di Castelnuovo <sup>a,1</sup>, A. Bonanni <sup>b,1</sup>, S. Costanzo <sup>a,1</sup>, F. De Lucia <sup>c,1</sup>,  
M. Persichillo <sup>a,1</sup>, F. Zito <sup>d,1</sup>, M.B. Donati <sup>a,1</sup>, G. de Gaetano <sup>a,1</sup>, L. Iacoviello <sup>a,1</sup>

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# ADHERENCE TO A MEDITERRANEAN-LIKE DIETARY PATTERN IN EUROPE

IDEFICS study (n=16,220, 2-9 yrs old): ecological analysis

