



SCUOLA
REGIONALE MARCHE
dello **SPORT**

Convegno

Aspetti fisiologici dell'allenamento master



Analisi della Prestazione in gare Master indoor



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Introduzione



Metabolismo Lattacido



Gare Master Indoor



Campionati Italiani 2006



Allenamento

Introduzione

Lattato & Prestazione

Lattato:

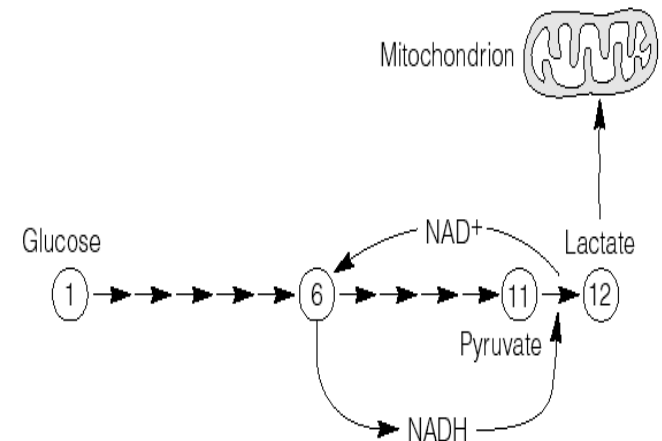
Prodotto finale della glicolisi

Capacità

[valore assoluto]

Potenza

[produzione x unità tempo]



Lattato & Prestazione

Presupposti Metodologici

Krustrup e coll 2006

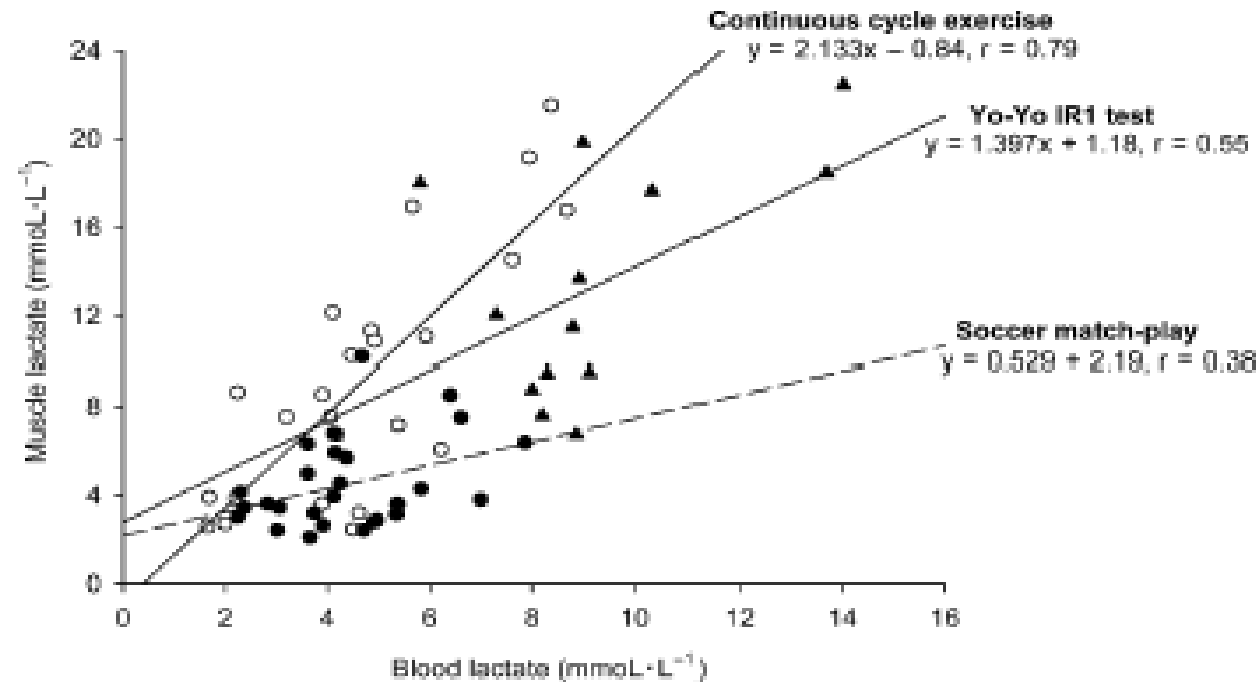
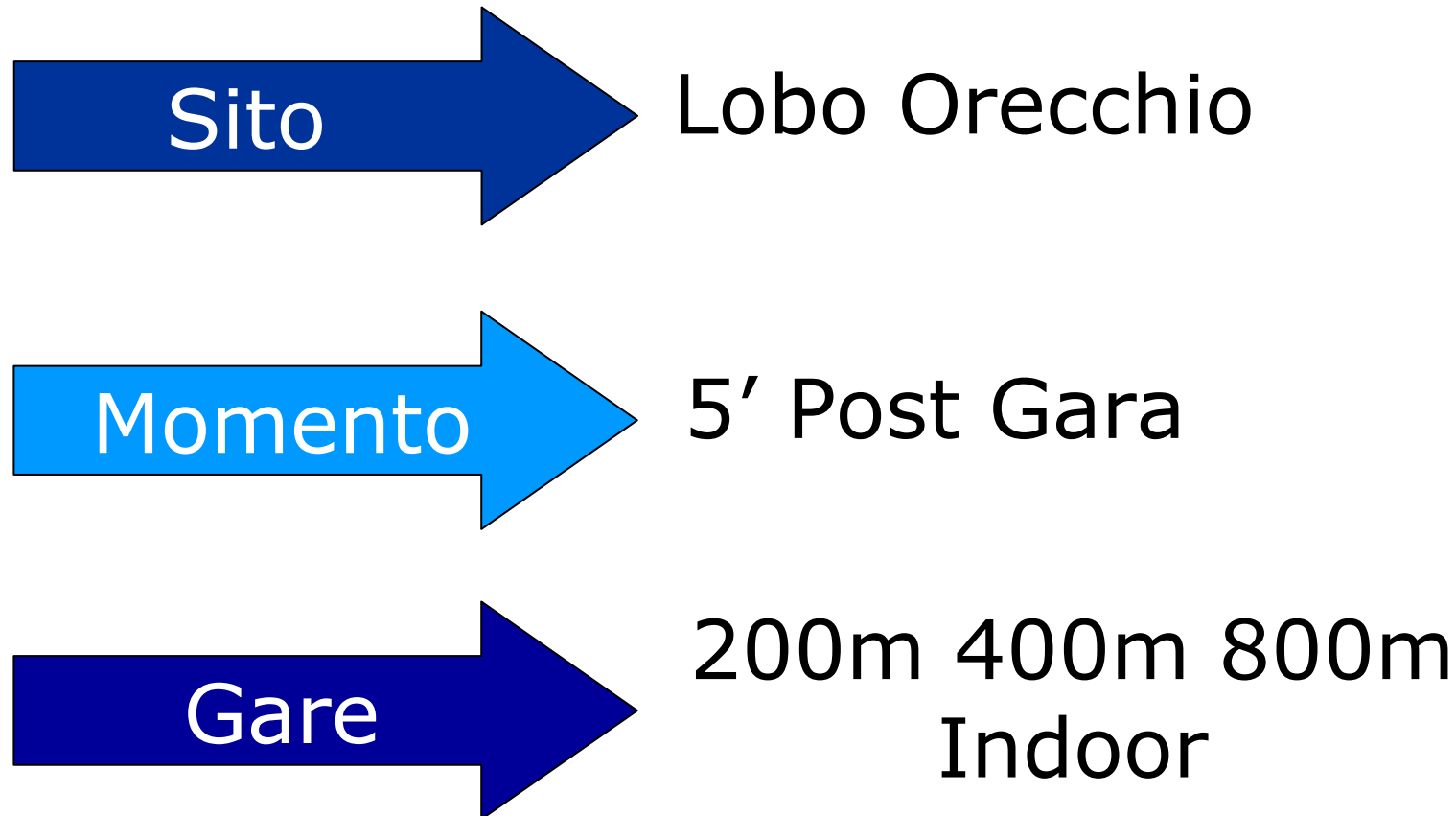


FIGURE 7—Individual relationship between muscle lactate, expressed in millimoles per liter of fluid, and blood lactate, during a soccer match (*filled circles*; data from the present study), at exhaustion in the yo-yo intermittent level 1 recovery test (*filled triangles*; data from (15)) as well as after 20 min of continuous cycle exercise at 80% of maximal oxygen uptake (*open circles*; data from (16)).

Presupposti Metodologici

Presupposti Metodologici

Prelievo:



Presupposti Metodologici

Valutazione Lattato

Micro-Prelievo Sangue

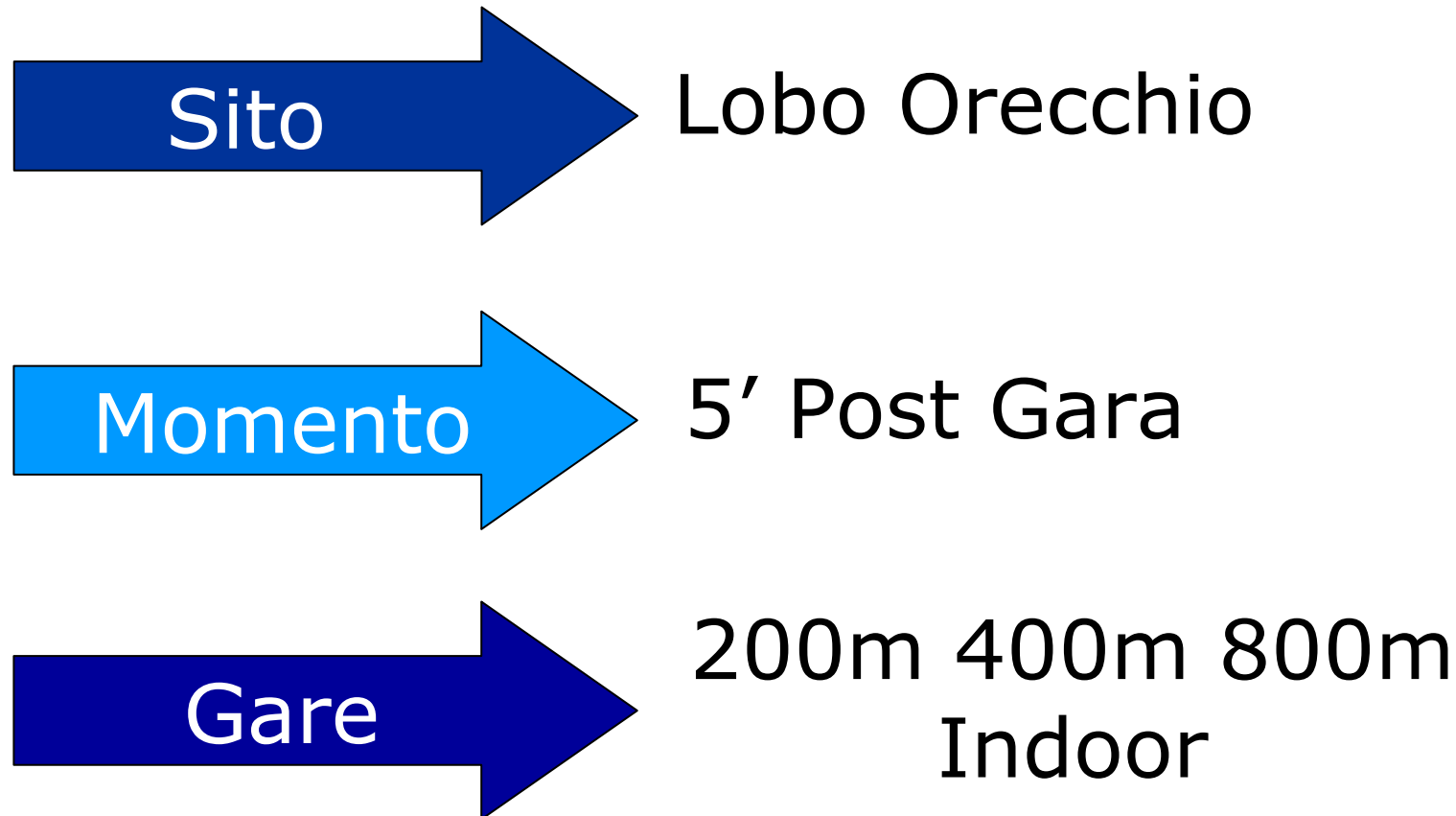
25 μ L



Valutazione Lattato

Presupposti Metodologici

Prelievo:



Presupposti Metodologici

Risultati

Ditroilo e Castagna 2006

Master M: valore min-max

Gara	N	Età	Statura	Peso	Prestazione	% record
200	12	36-71	170-189	63,5-83	23"38-42"35	102.7%
400	11	36-71	165-190	61-82	51"57-80"05	102.3%
800	13	36-71	164-184	58-78	120"83-181"87	105.0%
Totale		36				

Risultati

Risultati: Lattato Post Gara

Ditroilo e Castagna 2006

Maschi

Gara (N)	600 (2)	200 (0)	400 (0)	800 (9)	1500 (5)
valore medio (DS)	8,15 (1,08)	12,40 (0,88)	15,12 (1,70)	12,73 (1,69)	15,00 (1,10)

Femmine

Gara (N)	600 (2)	200 (4)	400 (6)	800 (4)	1500 (2)
valore medio (DS)	8,64 (0,21)	12,89 (2,16)	14,97 (2,26)	14,58 (0,50)	14,22 (0,74)

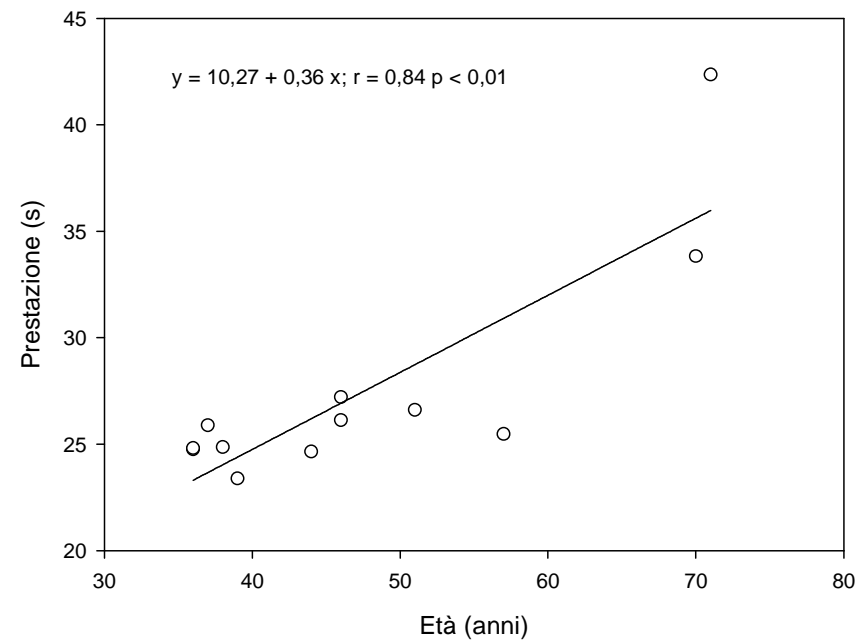
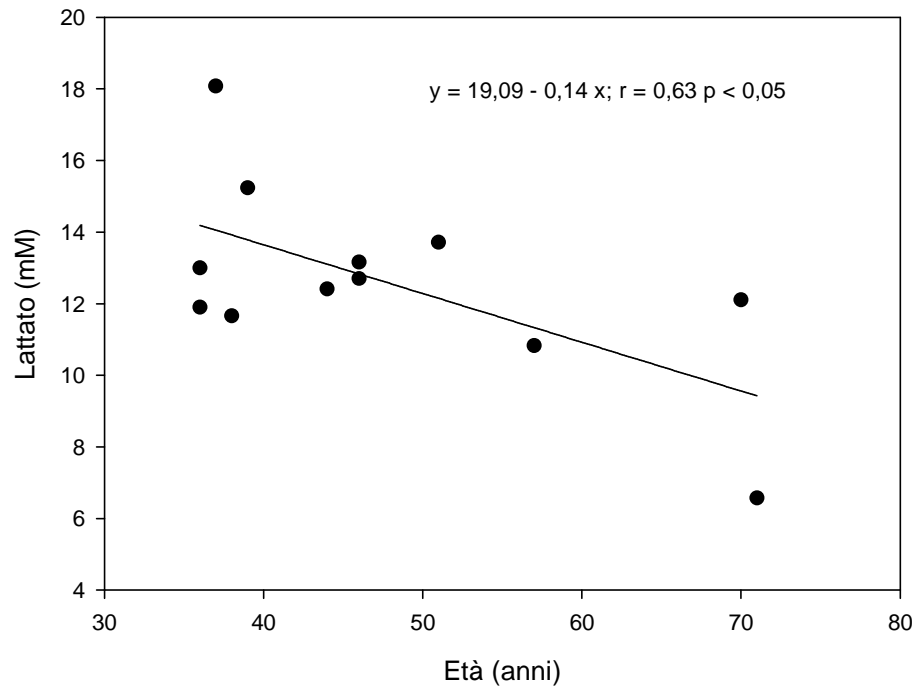
Master M

Gara (N)	200 (12)	400 (11)	800 (13)
Min-Max	6,57-18,08	7,75-18,03	8,25-17,00

Risultati: Lattato Post Gara

200m Indoor Master maschili

Ditroilo e Castagna 2006

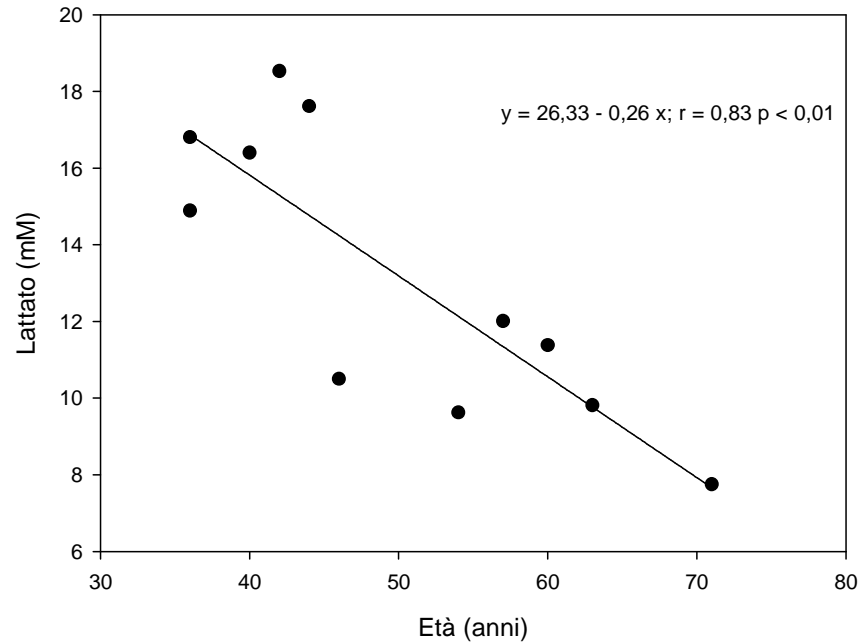


Ditroilo e Castagna 2006

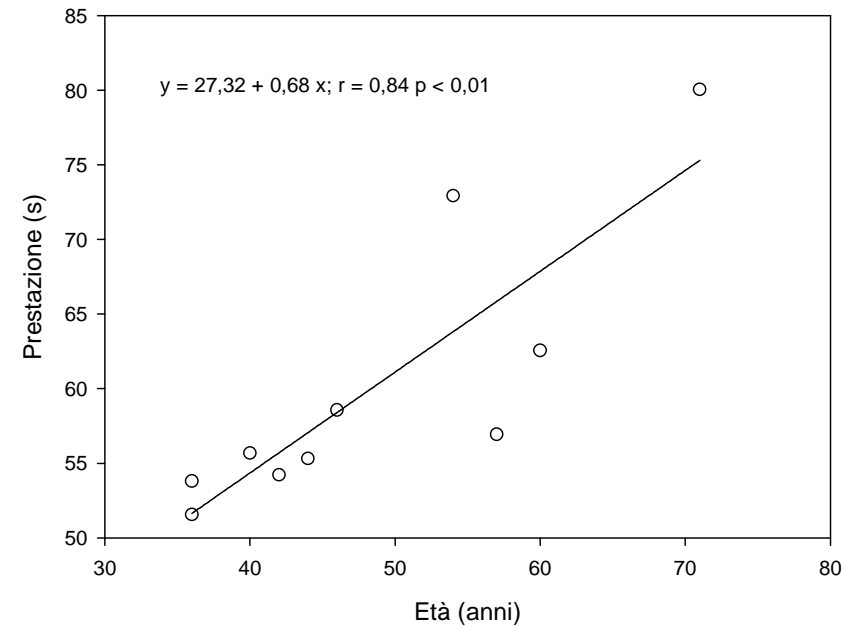
200 Indoor Master maschili

400m Indoor Master maschili

Ditroilo e Castagna 2006



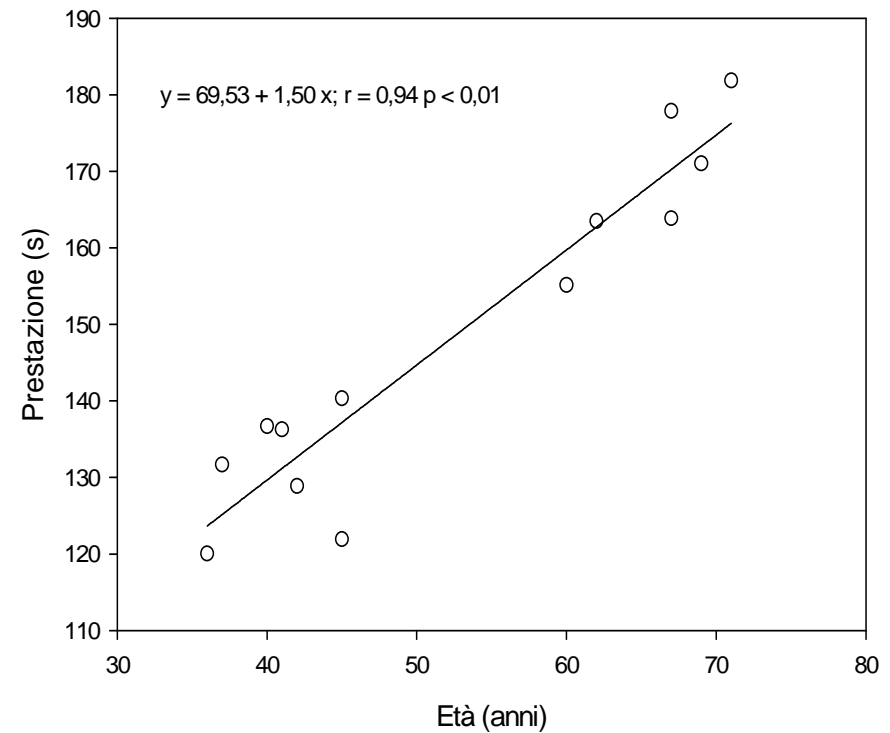
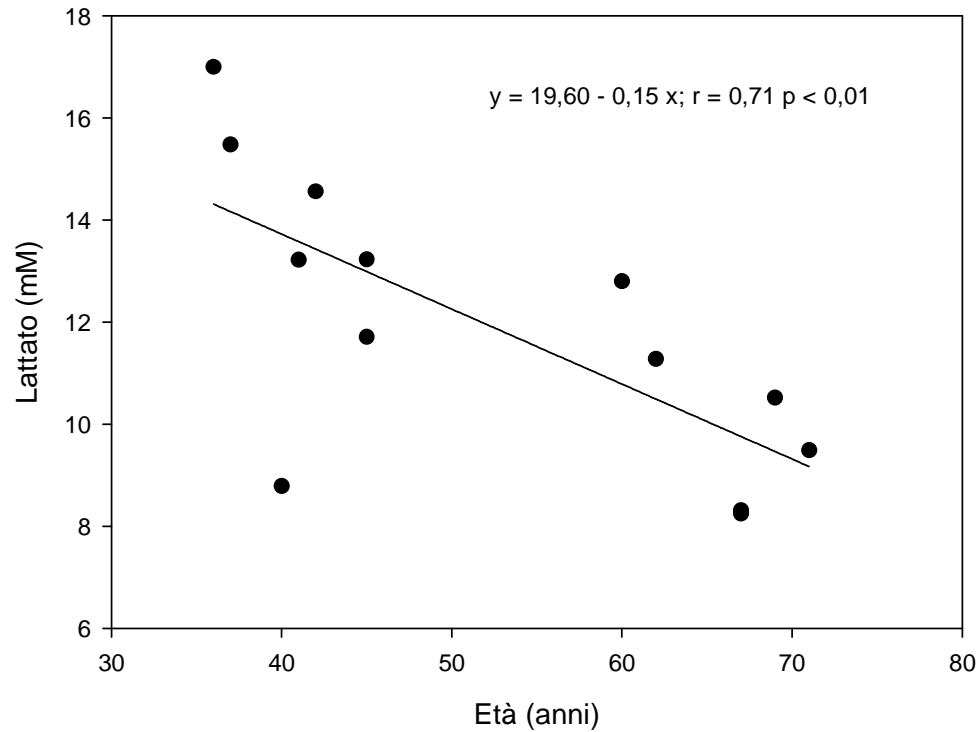
Ditroilo e Castagna 2006



400m Indoor Master maschili

800m Indoor Master maschili

Ditroilo e Castagna 2006



Ditroilo e Castagna 2006

800m Indoor Master maschili

Lattato & Atletica: Letteratura Internazionale

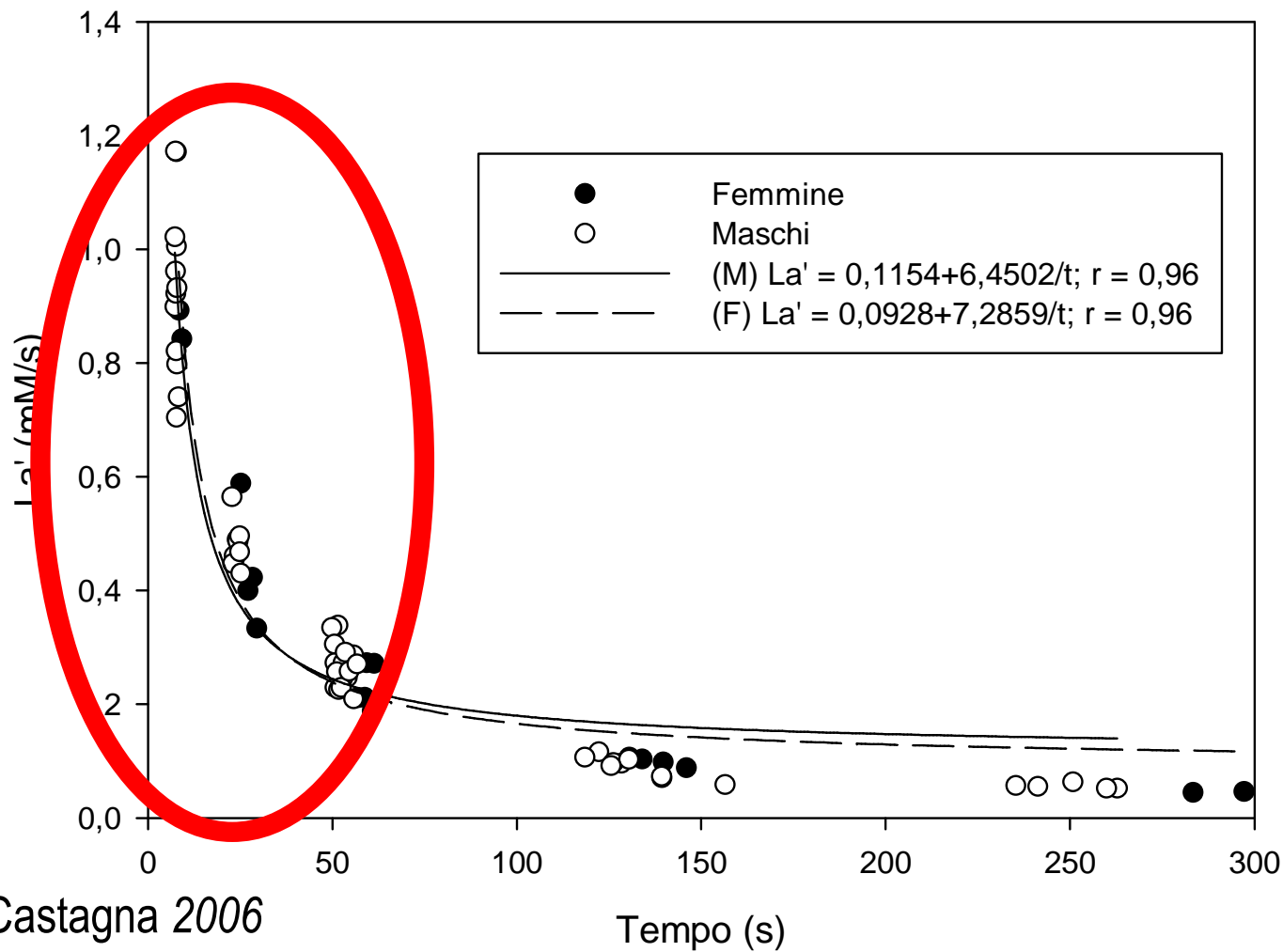
Lacour e coll 1990

Gara	Età	Miglior prestazione	Lattato (mM)
400 (n=4)	25.3 (1.5)	45.48 – 47.46	20,1 (2,2)
800 (n=5)	27.2 (1.7)	1'43"95 – 1'49"25	21,9 (2,1)
1500 (n=2)	28.0	3'34"91 – 3'35"52	20,8 (2,7)
400 (n=2)	21.0	51.97 – 52.05	21,8 (2,6)
800 (n=4)	25.8 (3.0)	1'59"83 – 2'06"55	18,6 (2,1)

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Cinetica Lattato

Tasso netto di accumulo del lattato in funzione del tempo di gara



Age and Sex Differences in Blood Lactate Response to Sprint Running in Elite Master Athletes

Marko T. Korhonen^{1,3}, Harri Suominen¹, and Antti Mero²

Catalogue Data

Korhonen, M.T.; Suominen, H.; and Mero, A. (2005). Age and sex differences in blood lactate response to sprint running in elite master athletes. **Can. J. Appl. Physiol.** 30(6): 647-665. © 2005 Canadian Society for Exercise Physiology.

Key words: aging, anaerobic metabolism, exercise performance

Mots-cles: vieillissement, métabolisme anaérobie, performance physique

Lattato & Atletica: Letteratura Internazionale

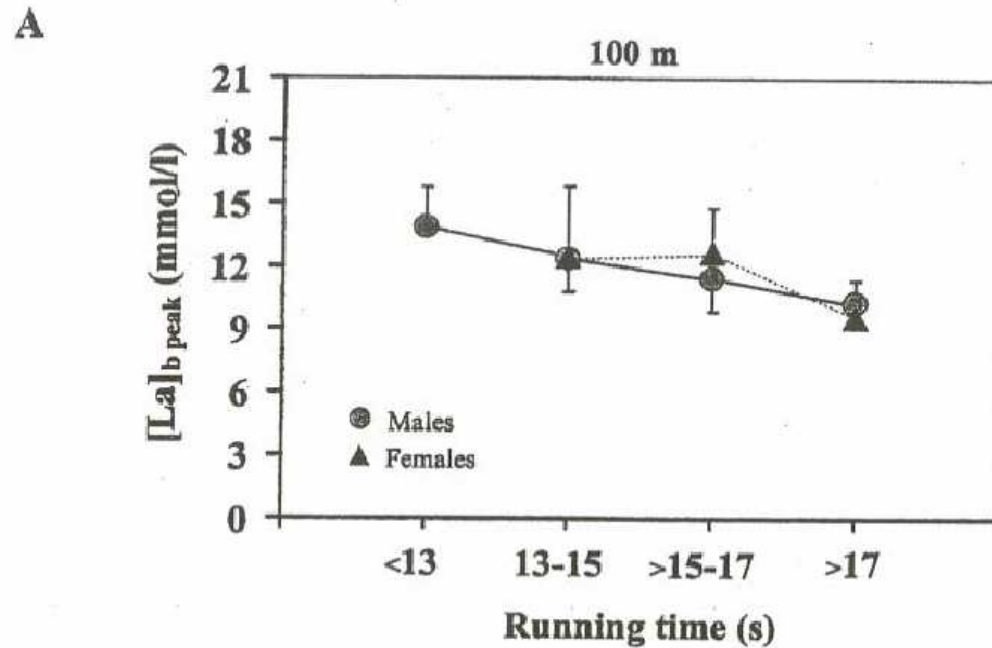
Korhonen et al. 2005

Table 4 Peak Blood Lactate Concentration After the 100-m, 200-m, and 400-m Sprint Events in Male and Female Runners

		Age Group			
		35–49	50–59	60–69	>70
100-m	<i>n</i> : M/F	7/ 8	7/ 8	8/ 5	13/ 6
	Men	14.6 ± 1.5 ^d	13.2 ± 2.2	13.7 ± 1.6 ^d	10.9 ± 2.4 ^{a,c}
	Women	12.7 ± 2.1 ^d	12.4 ± 1.5	12.6 ± 1.7 ^d	9.7 ± 1.2 ^{a,c}
200-m	<i>n</i> : M/F	10/ 17	12/ 13	13/ 7	12/ 3
	Men	17.4 ± 0.9 ^d	16.0 ± 1.5	16.6 ± 1.2	15.4 ± 2.0 ^a
	Women	16.0 ± 1.0 ^d	15.8 ± 1.1 ^d	16.2 ± 1.1 ^d	12.9 ± 2.0 ^{a,b,c}
400-m	<i>n</i> : M/F	10/ 15	12/ 10	7/ 11	15/ 2
	Men	17.0 ± 0.4 ^d	17.5 ± 1.5 ^d	16.8 ± 0.6 ^d	14.1 ± 2.2 ^{a,b,c}
	Women	16.3 ± 0.9 ^d	16.4 ± 1.5 ^d	15.8 ± 0.9	12.9 ± 5.7 ^{a,b}

Note: Significant difference, $p < 0.05$: ^a from the 35–49-yr-olds; ^b from the 50–59-yr-olds; ^c from the 60–69-yr-olds; ^d from the >70-yr-olds.

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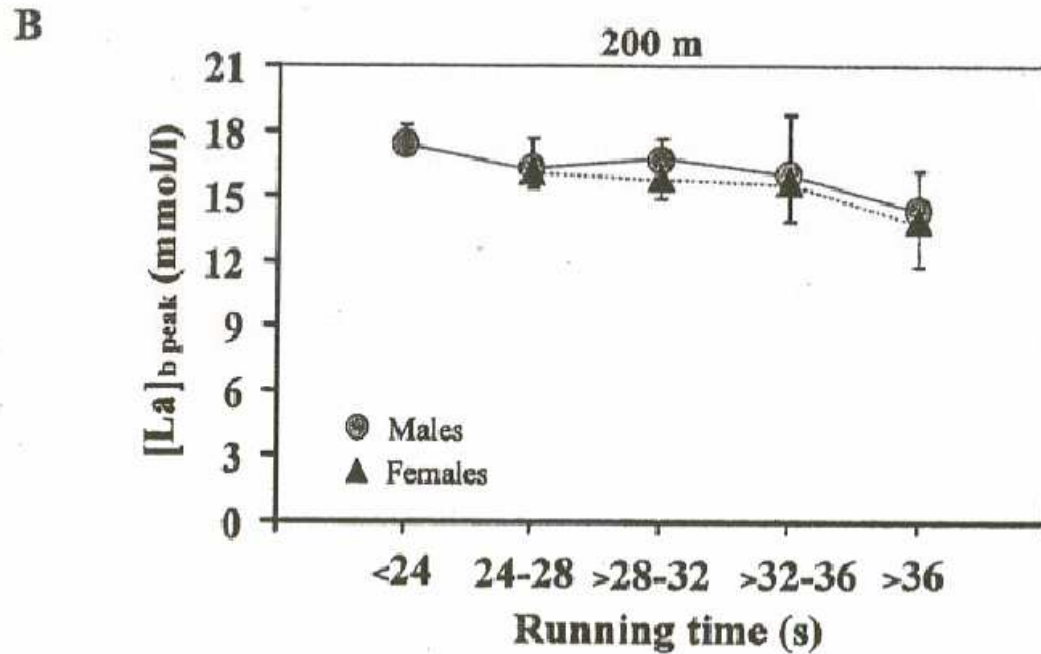


Korhonen et al. 2005



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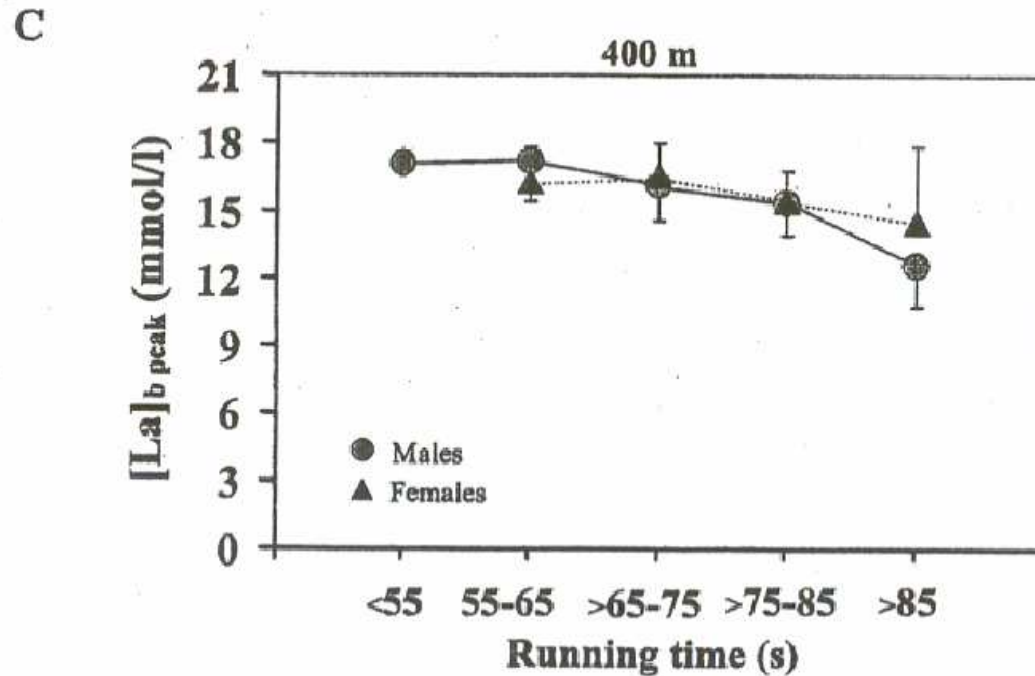


Korhonen et al. 2005



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Korhonen et al. 2005



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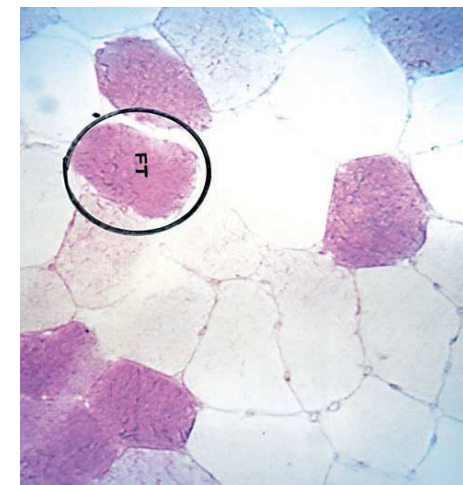
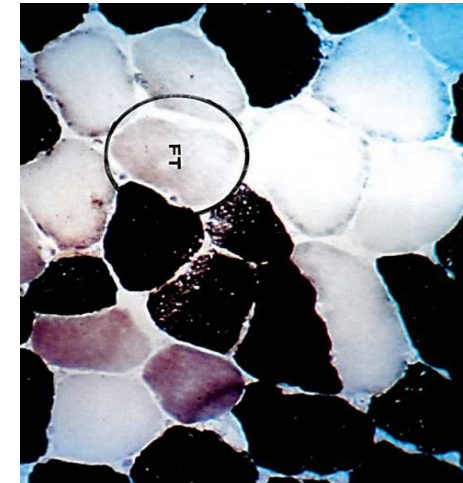
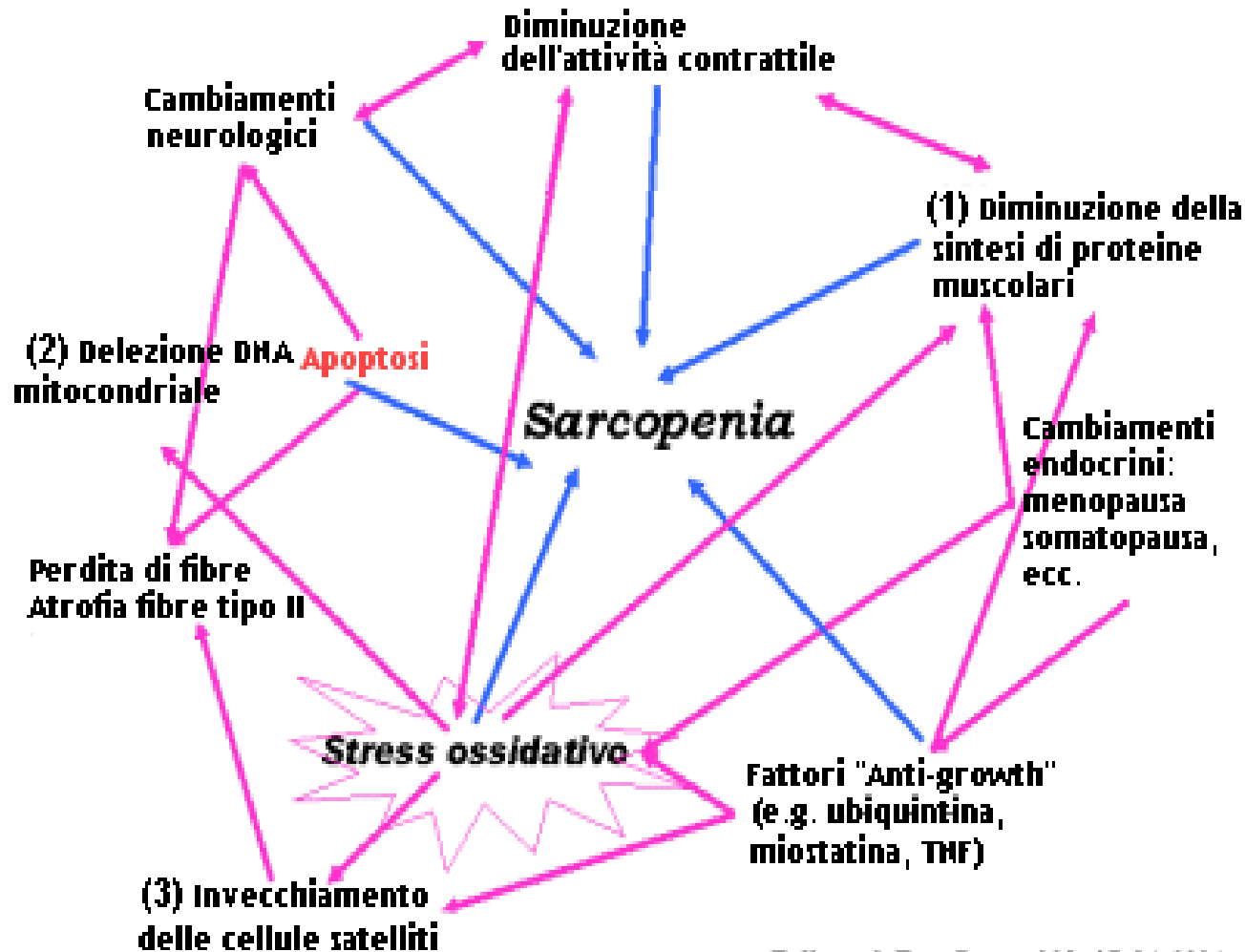
Conclusioni

- ↓ **Glicolisi**
- **Sarcopenia**
- **Training?**



Conclusioni

Sarcopenia



Fulle et al. *Exp. Gerontol* 39: 17-24, 2004

Sarcopenia

Conclusioni

- ↓ **Glicolisi**
- **Sarcopenia**
- **Training?**



Conclusioni

Conclusioni



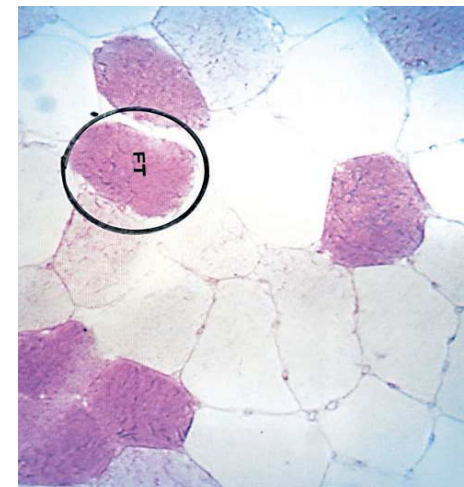
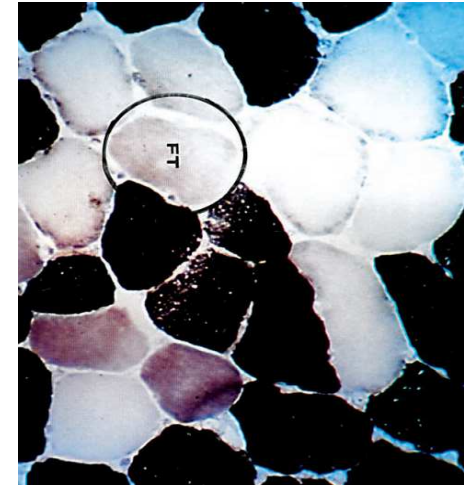
**Da 20 a 80 anni -40%
MMuscolare**



Sarcopenia



Multifattoriale



Conclusioni



Convegno

Aspetti fisiologici dell'allenamento master

