

## Prodotti funzionali con prove d'efficacia in COVID sintomatiche e Long-COVID

Ampliano il ventaglio di cure disponibili per la COVID-19, anche a domicilio, **sempre di intesa con il curante**.

Sono stati scelti e inseriti con questi criteri di massima:

- prodotti o principi attivi di **efficacia molto promettente**, in base a studi randomizzati controllati (RCT) favorevoli e di discreta/sufficiente validità, integrati da studi osservazionali coerenti.



*Dott. A. Donzelli*

Anche dove le prove non siano definitive, curanti e assistiti informati li possono considerare nella misura in cui, insieme, siano anche:

- **sicuri** (primum non nocere!)
- **biologicamente plausibili**
- **economici** (con un costo-opportunità molto favorevole)
- **accessibili** (o che possano rapidamente diventarlo)
- **senza megasponsor commerciali** né ricercatori con **grandi Conflitti d'interessi**

Ciò non esaurisce certo il numero di terapie efficaci contro la Covid-19 (incluse terapie approvate o in approvazione), che tuttavia ad oggi non rispondono a una o più delle condizioni-filtro qui utilizzate.



# Curcumin for COVID-19: real-time meta analysis of 26 studies



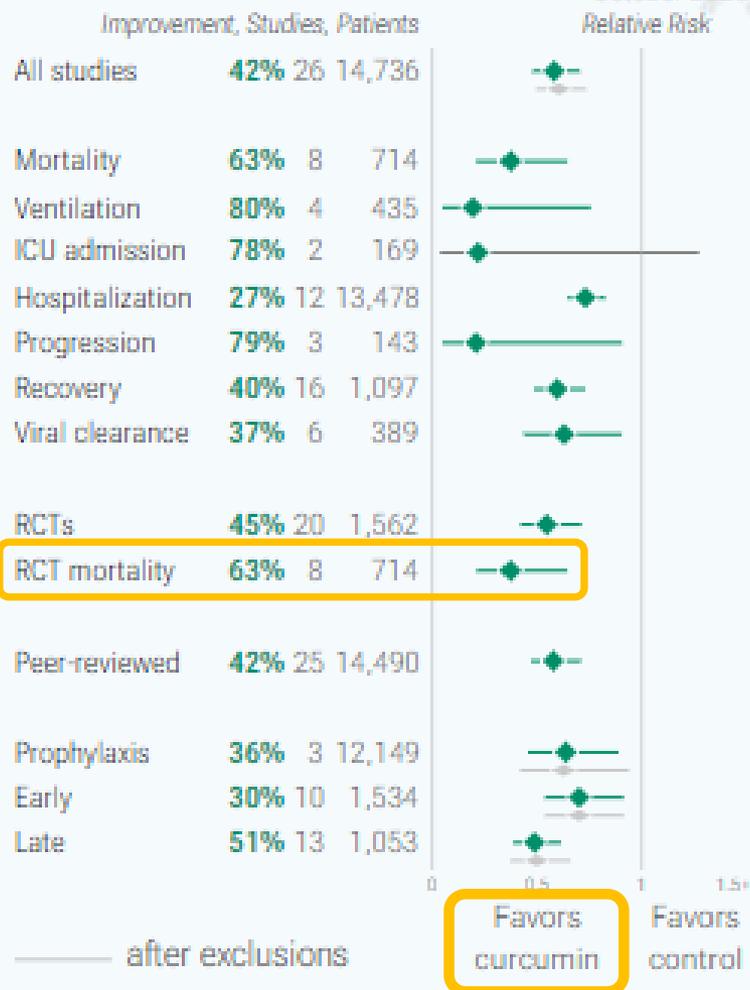
- Statistically significant lower risk is seen for mortality, ventilation, hospitalization, progression, recovery, and viral clearance. 18 studies from 16 independent teams in 8 countries show statistically significant improvements.
- Meta analysis using the most serious outcome reported shows 42% [30-52%] lower risk. Results are similar for Randomized Controlled Trials, higher quality studies, and peer-reviewed studies.
- Results are robust — in exclusion sensitivity analysis 24 of 26 studies must be excluded to avoid finding statistically significant efficacy in pooled analysis.
- Studies typically use advanced formulations for greatly improved bioavailability.
- No treatment or intervention is 100% effective. All practical, effective, and safe means should be used based on risk/benefit analysis. Multiple treatments are typically used in combination, and other treatments may be more effective. The quality of non-prescription supplements can vary widely *Crawford, Crighton*.
- All data to reproduce this paper and sources are in the appendix. Other meta analyses show significant improvements with curcumin for mortality *Kow, Shafiee, Shojaei, Vahedian-Azimi*, hospitalization *Shojaei, Vahedian-Azimi*, recovery *Shafiee*, and symptoms *Vahedian-Azimi*.

## Curcumin for COVID-19

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October 2023

Relative Risk





# Sono tutti RCT, tre in doppio cieco

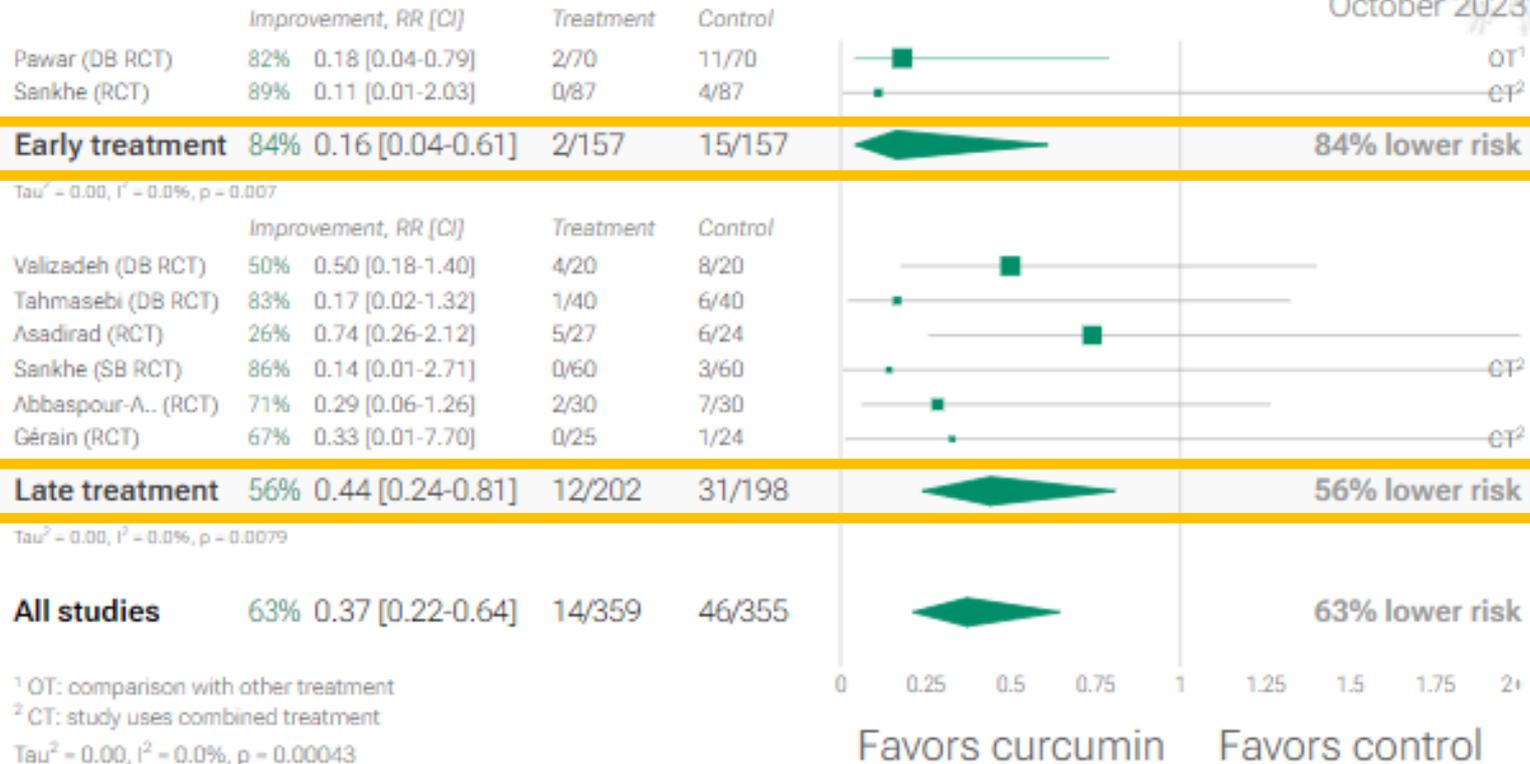
Woman  
drinking  
*golden milk*



**Figure 3.** Random effects meta-analysis for all studies with pooled effects. This plot shows pooled effects, see the specific outcome analyses for individual outcomes, and the heterogeneity section for discussion. Effect extraction is pre-specified, using the most serious outcome reported. For details of effect extraction see the appendix.

## 8 curcumin COVID-19 mortality results

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**Figure 4.** Random effects meta-analysis for mortality results.



## Curcumin as a Potential Treatment for COVID-19

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Coronavirus disease 2019 (COVID-19) is an infectious disease that rapidly spread throughout the world leading to high mortality rates. Despite the knowledge of previous diseases caused by viruses of the same family, such as MERS and SARS-CoV, management and treatment of patients with COVID-19 is a challenge. One of the best strategies around the world to help combat the COVID-19 has been directed to drug repositioning; however, these drugs are not specific to this new virus. Additionally, the pathophysiology of COVID-19 is highly heterogeneous, and the way of SARS-CoV-2 modulates the different systems in the host remains unidentified, despite recent discoveries. This complex and multifactorial response requires a comprehensive therapeutic approach, enabling the integration and refinement of therapeutic responses of a given single compound that has several action potentials. In this context, natural compounds, such as Curcumin, have shown beneficial effects on the progression of inflammatory diseases due to its numerous action mechanisms: antiviral, anti-inflammatory, anticoagulant, antiplatelet, and cytoprotective. These and many other effects of curcumin make it a promising target in the adjuvant treatment of COVID-19. Hence, the purpose of this review is to specifically point out how curcumin could interfere at different times/points during the infection caused by SARS-CoV-2, providing a substantial contribution of curcumin as a new adjuvant therapy for the treatment of COVID-19.

**Keywords:** curcumin, COVID-19, SARS-CoV-2, new therapies, ACE2

### INTRODUCTION

#### OPEN ACCESS

##### Edited by:

Sugunadevi Sakthiah,  
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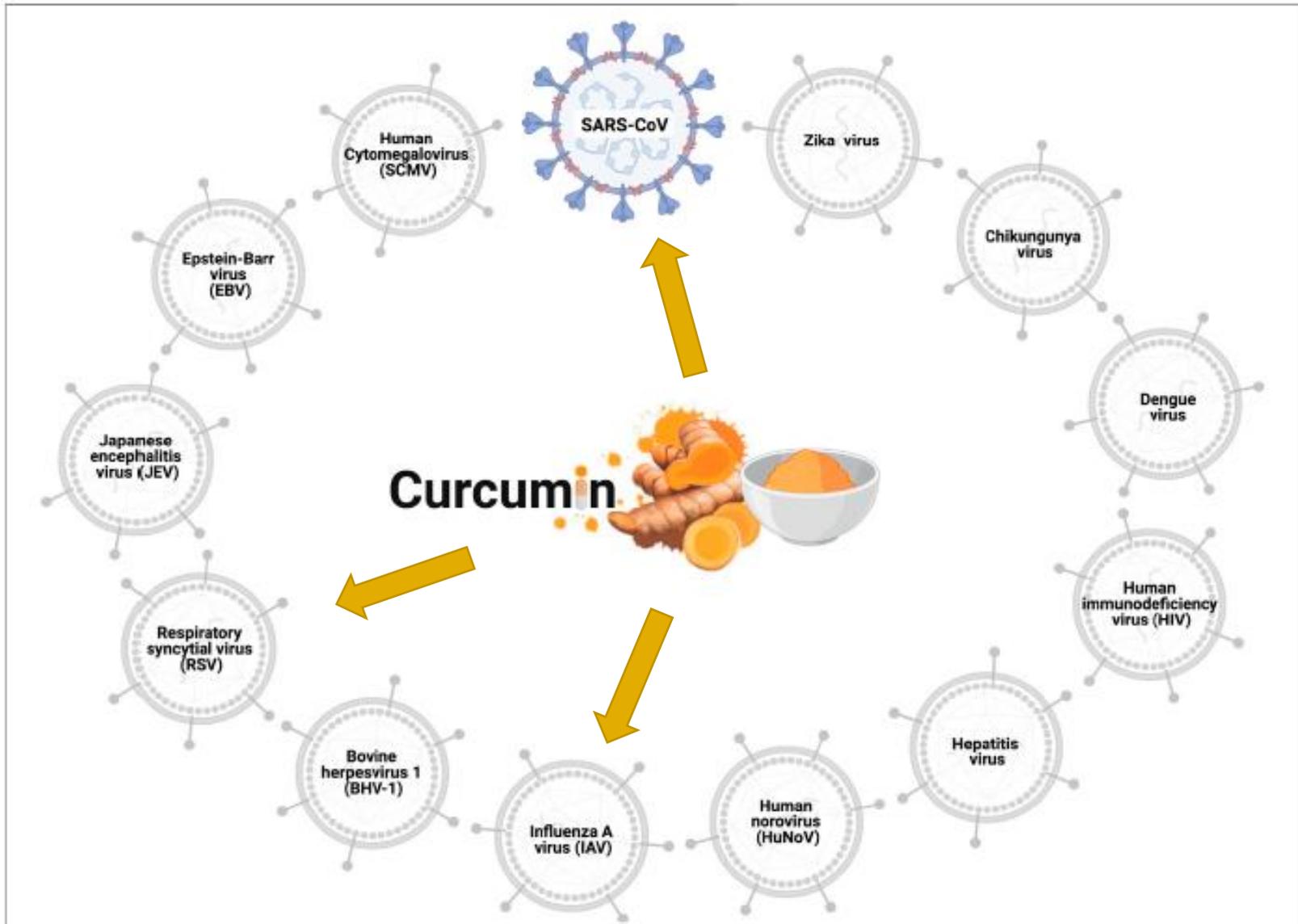
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**FIGURE 1 |** Antiviral effects of curcumin. Curcumin prevents cell infection and viral replication in the SARS-CoV, influenza A virus (IAV), zika virus, chikungunya virus, hepatitis C virus (HCV), human norovirus (HuNoV), viral hemorrhagic septicoemia virus in fish (VHSV), bovine herpesvirus 1 (BHV-1), respiratory syncytial virus (RSV), Japanese encephalitis virus (JEV), Epstein-Barr virus (EBV), human cytomegalovirus (HCMV), and human immunodeficiency virus (HIV).



## Oral Curcumin With Piperine as Adjuvant Therapy for the Treatment of COVID-19: A Randomized Clinical Trial

Kirti S Pawar<sup>1\*</sup>, Rahul N Mastud<sup>1</sup>, Satheesh K Pawar<sup>2</sup>, Samragni S Pawar<sup>3</sup>, Rahul R Bhoite<sup>4</sup>, Ramesh R Bhoite<sup>1</sup>, Meenal V Kulkarni<sup>5</sup> and Aditi R Deshpande<sup>6</sup>

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**Results:** Patients with mild, moderate, and severe symptoms who received curcumin/piperine treatment showed early symptomatic recovery (fever, cough, sore throat, and breathlessness), less deterioration, fewer red flag signs, better ability to maintain oxygen saturation above 94% on room air, and better clinical outcomes compared to patients of the control group. Furthermore, curcumin/piperine treatment appeared to reduce the duration of hospitalization in patients with moderate to severe symptoms, and fewer deaths were observed in the curcumin/piperine treatment group.



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### Specialty section:

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Pawar KS, Mastud RN, Pawar SK, Pawar SS, Bhoite RR, Bhoite RR, Kulkarni MV and Deshpande AR (2021) Oral Curcumin With Piperine as Adjuvant Therapy for the Treatment of COVID-19: A Randomized Clinical Trial. *Front. Pharmacol.* 12:659392. doi: 10.3389/fphar.2021.659392

**Results:** Patients with mild, moderate, and severe symptoms who received curcumin/piperine treatment showed early symptomatic recovery (fever, cough, sore throat, and breathlessness), less deterioration, fewer red flag signs, better ability to maintain oxygen saturation above 94% on room air, and better clinical outcomes compared to patients of the control group. Furthermore, curcumin/piperine treatment appeared to reduce the duration of hospitalization in patients with moderate to severe symptoms, and fewer deaths were observed in the curcumin/piperine treatment group.

**Conclusions:** Administration of oral curcumin with piperine as an adjuvant symptomatic therapy in COVID-19 treatment could substantially reduce morbidity and mortality, and ease the logistical and supply-related burdens on the healthcare system. Curcumin could be a safe and natural therapeutic option to prevent Post-Covid thromboembolic events.

**Clinicaltrials.gov identifier:** CTRV2020/05/025482

**Keywords:** curcumin, COVID-19, adjuvant therapy, traditional medicine, anti-inflammatory, post-covid thromboembolic episodes

# Cumino nero

## 4 nigella sativa COVID-19 RCT mortality results

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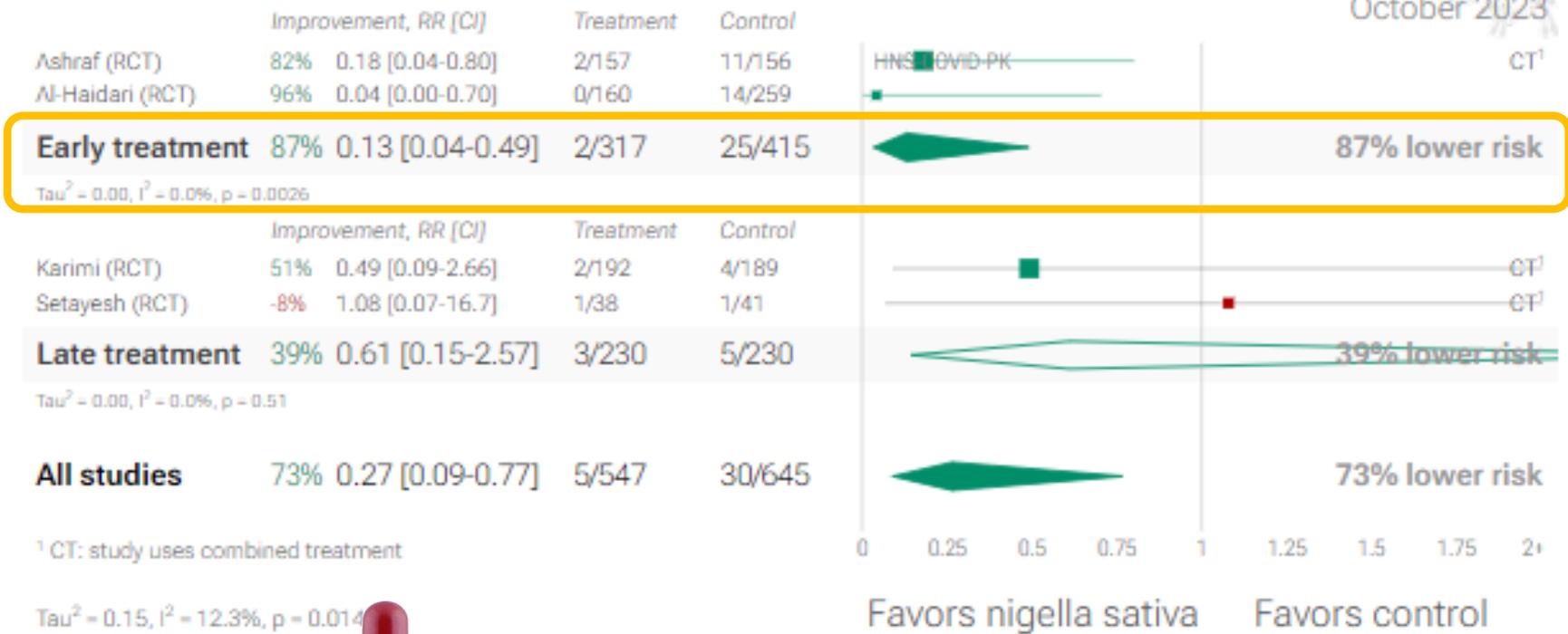


Figure 12. Random effects meta-analysis for RCT mortality results.



## REVIEW

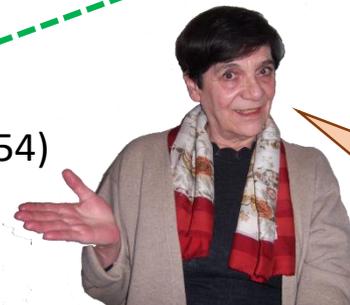
WILEY

## Quercetin for the treatment of COVID-19 patients: A systematic review and meta-analysis di 6 RCT

Huzaifa Ahmad Cheema<sup>1</sup>  | Aruba Sohail<sup>2</sup> | Areej Fatima<sup>2</sup> | Abia Shahid<sup>1</sup> |  
Muhammad Shahzil<sup>1,3</sup> | Mohammad Ebad Ur Rehman<sup>4</sup> | Rehmat Ullah Awan<sup>5</sup>  |  
Sampath Chinnam<sup>6,7</sup> | Abdulqadir J. Nashwan<sup>8</sup> 

5.4 with odds ratio (OR) as the effect measure. Quercetin decreased the risk of intensive care unit admission (OR = 0.31; 95% confidence interval (CI) 0.10–0.99) and the incidence of hospitalisation (OR = 0.25; 95% CI 0.10–0.62) but did not decrease the risk of all-cause mortality and the rate of no recovery. Quercetin may

Ma in tendenza sì: **0,39** (0,10-1,54)



Una già si  
accontenta...

e **0,55** (0,28-1,07)

Dunque la mortalità nei RCT non si è ridotta in modo significativo, ma **4 volte su 5 si è associata a un miglioramento...**

## 5 quercetin COVID-19 mortality results

c19early.org  
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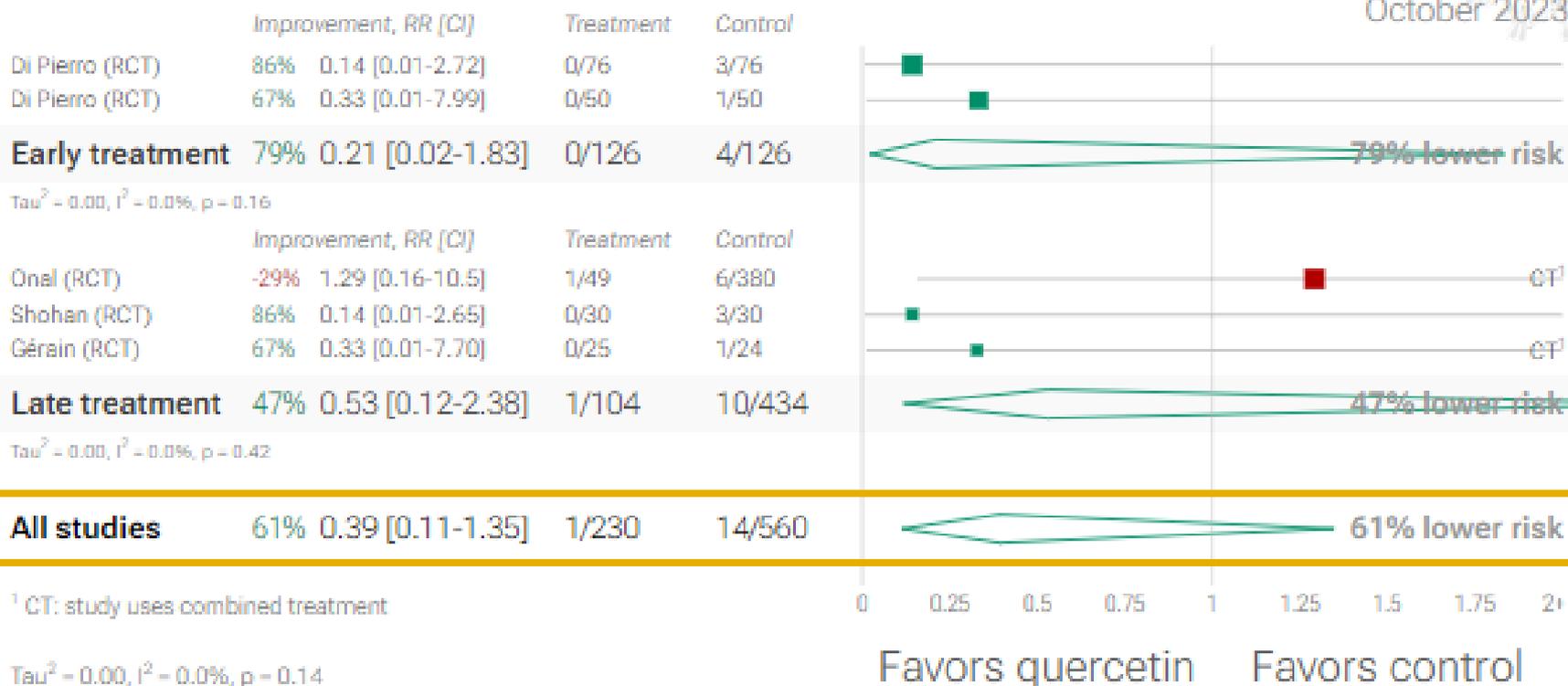
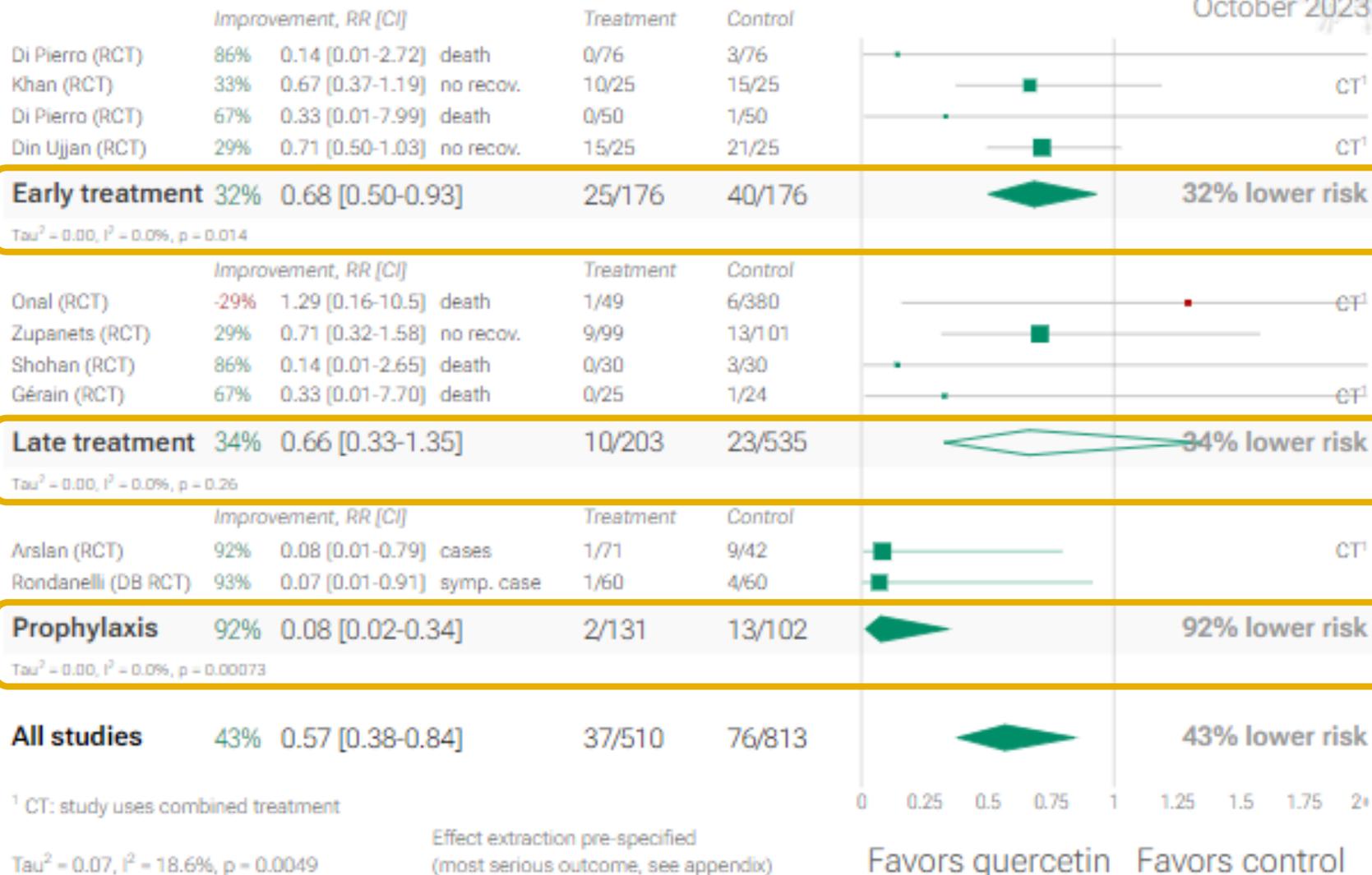


Figure 4. Random effects meta-analysis for mortality results.

Se si guarda anche agli altri esiti nei RCT (non solo mortalità), **vince in modo signif.**

## 10 quercetin COVID-19 Randomized Controlled Trials

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**Figure 14.** Random effects meta-analysis for all Randomized Controlled Trials. This plot shows pooled effects, see the specific outcome analyses for individual outcomes, and the heterogeneity section for discussion. Effect extraction is pre-specified, using the most serious outcome reported. For details of effect extraction see the appendix.

# Maggiori fonti alimentari di quercetina



aneto



(Quercetin Phytosome® - QP)

pesto di  
foglie di  
ravanelli



coriandolo  
fresco



# Melatonin for COVID-19

18 studies from 159 scientists  
14,301 patients in 6 countries

Statistically significant lower risk for **mortality, ventilation, and recovery.**

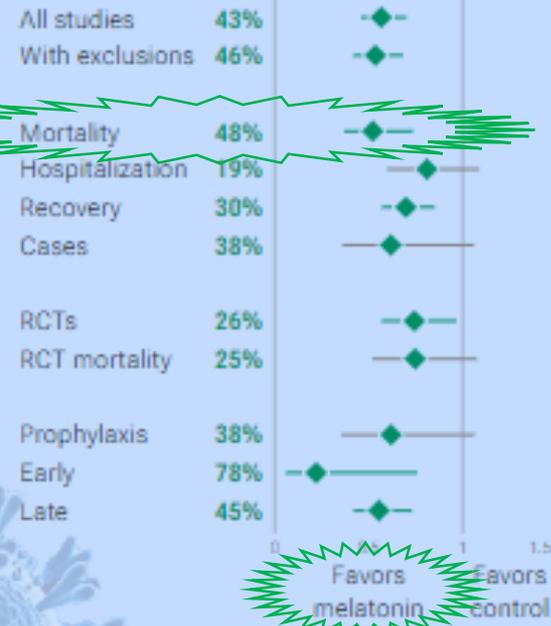
9 studies from 9 independent teams in 5 countries show statistically significant improvements.

**26%** lower risk in **9 RCTs** CI 4-43%

**48%** lower **mortality** in **9 studies** CI 27-63%

**25%** lower **mortality** in **4 RCTs** CI -7-48%

COVID-19 MELATONIN STUDIES. OCT 2023. C19EARLY.ORG



Recent: Loh Molina-Carballo Taha Tóth. Melatonin has been officially adopted in part of 1 country. Submit updates/corrections

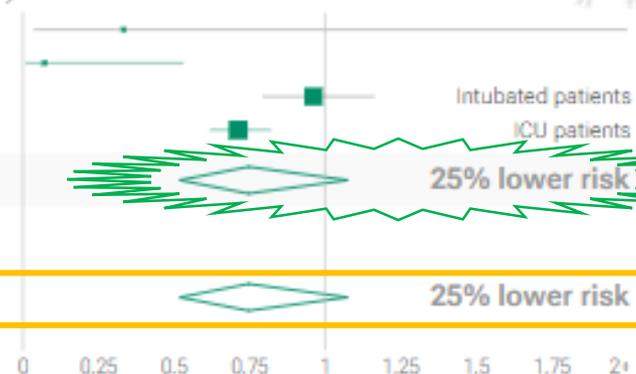
## 4 melatonin COVID-19 RCT mortality results

c19early.org  
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	Improvement, RR [CI]	Treatment	Control	Dose (1d)
Mousavi (RCT)	67% 0.33 [0.04-3.09]	1/48	3/48	3mg
Hasan (RCT)	93% 0.07 [0.01-0.53]	1/82	13/76	10mg
Alizadeh (DB RCT)	4% 0.96 [0.80-1.16]	28/33	30/34	21mg
Ameri (RCT)	29% 0.71 [0.62-0.82]	73/109	110/117	10mg

**Late treatment** 25% 0.75 [0.52-1.07] 103/272 156/275

$Tau^2 = 0.07, I^2 = 75.6\%, p = 0.12$



**All studies** 25% 0.75 [0.52-1.07] 103/272 156/275

$Tau^2 = 0.07, I^2 = 75.6\%, p = 0.12$

Favors melatonin Favors control



Figure 15. Random effects meta-analysis for RCT mortality results.

iodopovidone

# PVP-I for COVID-19

**12** studies from **125** scientists  
**2,549** patients in **8** countries

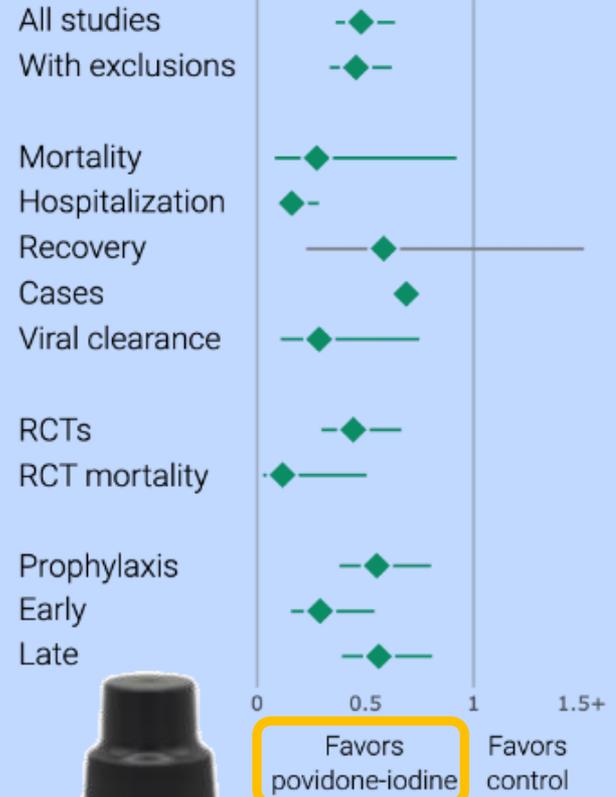
Statistically significant improvement for **mortality, hospitalization, cases, and viral clearance.**

6 studies from 4 countries show statistically significant improvements.

**56%** improvement in **10 RCTs** CI [33-70%]

**72%** lower **mortality** in **2** studies CI [8-92%]

COVID-19 PVP-I STUDIES. JAN 5 2022. C19PVPI.COM



# 9 povidone-iodine COVID-19 studies

c19pvpi.com Nov 12, 2021

	Improvement, RR [CI]	Treatment	Control
Mohamed (RCT)	86% 0.14 [0.01-2.21] viral+	0/5	3/5
Choudhury (RCT)	88% 0.12 [0.03-0.50] death	2/303	17/303
Guenezan (RCT)	63% 0.37 [0.06-1.63] viral load	12 (n)	12 (n)
Elzein (DB RCT)	89% 0.11 [0.01-1.00] viral load	25 (n)	9 (n)
Arefin (RCT)	79% 0.21 [0.08-0.54] viral+	4/27	19/27
Baxter (RCT)	65% 0.35 [0.01-8.27] hosp.	0/37	1/42
Pablo-Marcos	29% 0.71 [0.32-1.56] viral load	31 (n)	40 (n)
<b>Early treatment</b>	<b>71% 0.29 [0.16-0.54]</b>	<b>6/440</b>	<b>40/438</b>
Tau <sup>2</sup> = 0.15; I <sup>2</sup> = 22.0%			
Zarabanda (RCT)	-27% 1.27 [0.26-6.28] no recov.	3/13	2/11
<b>Late treatment</b>	<b>-27% 1.27 [0.26-6.28]</b>	<b>3/13</b>	<b>2/11</b>
Tau <sup>2</sup> = 0.00; I <sup>2</sup> = 0.0%			
Seet (CLUS. RCT)	45% 0.55 [0.38-0.80] severe case	42/735	64/619
<b>Prophylaxis</b>	<b>45% 0.55 [0.38-0.80]</b>	<b>42/735</b>	<b>64/619</b>
Tau <sup>2</sup> = 0.00; I <sup>2</sup> = 0.0%			
<b>All studies</b>	<b>60% 0.40 [0.25-0.65]</b>	<b>51/1,188</b>	<b>106/1,068</b>



Il maggior RCT, **unico su mortalità: -88%**

**71% improvement**

**-27% improvement**

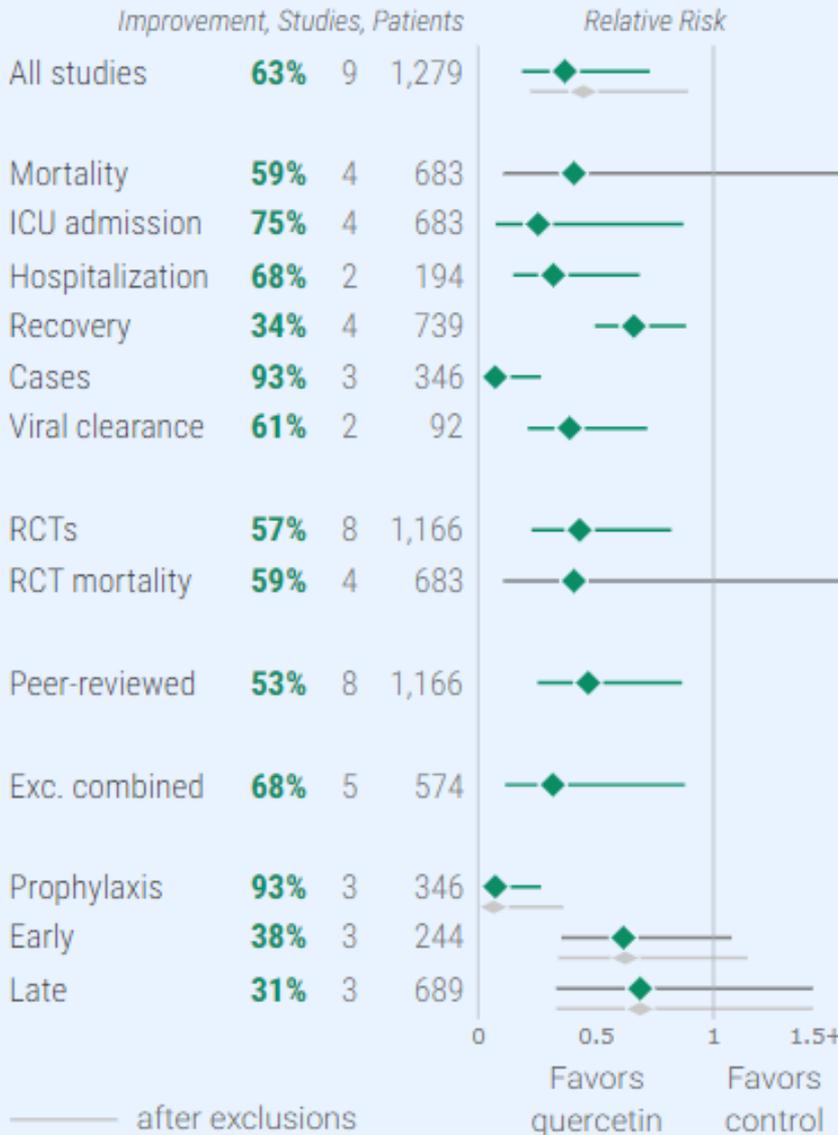
Tardi non serve!

**45% improvement**

**60% improvement**



**Quercetin for COVID-19** c19quercetin.com Oct 2022



Non sarebbero prove definitive? Ma **intanto che si aspettano migliori RCT:**



poi sputare

RESEARCH ARTICLE

Long-Term Recovery from SARS-CoV-2 (COVID-19)

**Intrahospital supervised exercise training improves survival rate at hypertensive patients with COVID-19**



Francisco Fernandez,<sup>1,2\*</sup> Manuel Vazquez-Muñoz,<sup>3,4\*</sup> Andrea Canals,<sup>5</sup> Alexis Arce-Álvarez,<sup>3</sup> Camila Salazar-Ardiles,<sup>1,8</sup> Cristian Alvarez,<sup>6</sup> Rodrigo Ramirez-Campillo,<sup>6</sup> Gregoire P. Millet,<sup>7</sup> Mikel Izquierdo,<sup>8,9</sup> and David C. Andrade<sup>1</sup>

<sup>1</sup>Exercise Applied Physiology Laboratory, Centro de Investigación en Fisiología y Medicina de Altura, Departamento ....

Valutazione retrospettiva degli effetti di un **programma con supervisione di esercizi in ospedale** per pz con COVID-19 confermata e ipertesi.

439 pz ipertesi con **COVID grave** (ai tempi nessuno vaccinato) sono stati divisi:

- 201 gruppo esercizio (iniziato purché pz stabilizzati: saturazione O<sub>2</sub> ≥90%, temperatura <38,5° C, frequenza respiratoria <40/minuto,...)
- 239 gruppo di controllo, ben bilanciato per caratteristiche ecc., salvo esercizio.

Esclusi pz con aritmie, ischemia cardiaca, tromboembolie, nefropatie.

# Caratteristiche esercizi

## Cardiopolmonari

Cammino, marcia militare, cammino punta piedi e tacchi...

10-15' prime 3-4 sessioni, poi aumento ogni sessione, 1-2 al dì



## Respiratori

Respirazione diaframmatica, contrazione addominale attiva...

10-15' prime 3-4 sessioni, 2-3 volte al dì



© 2023 Healthwise

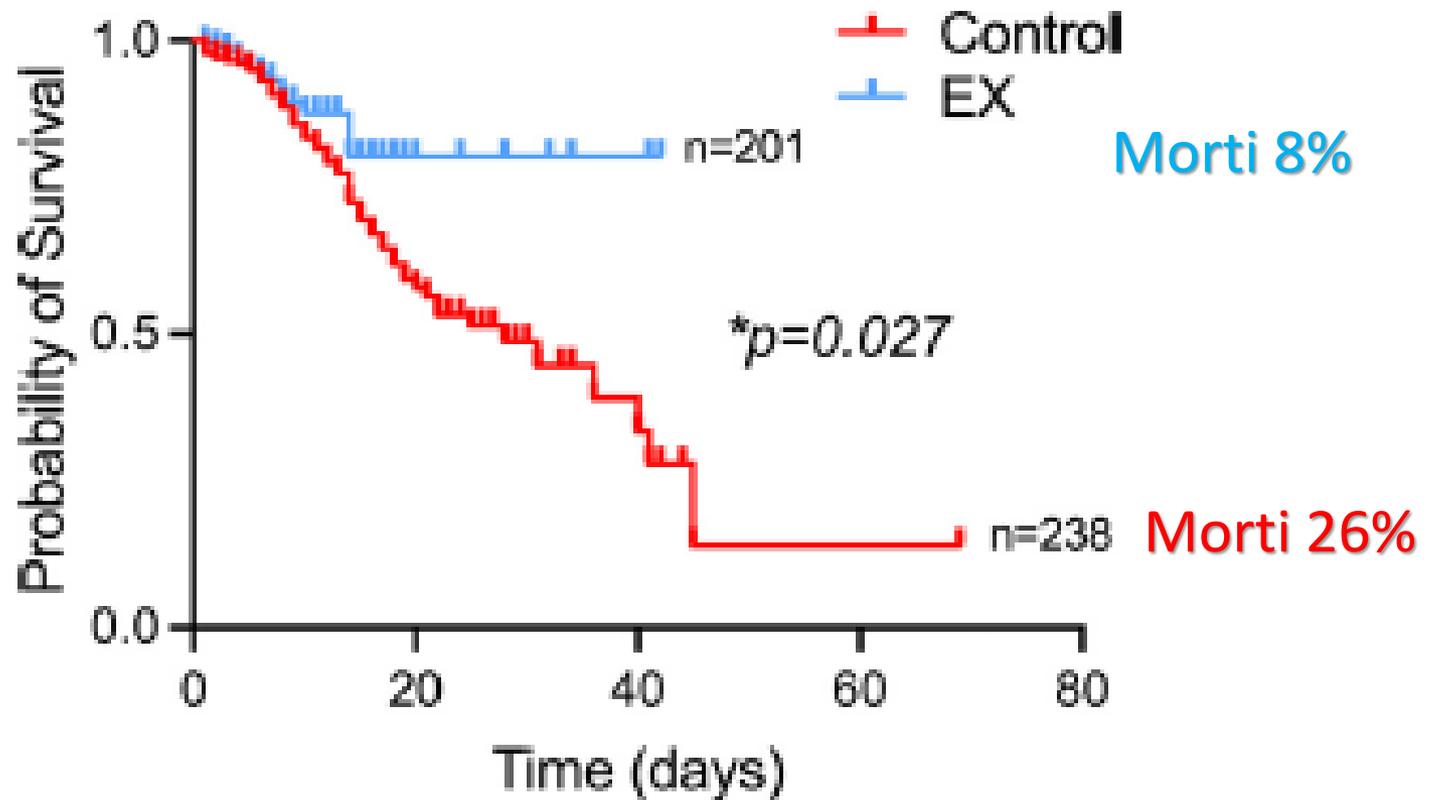
## Muscoloscheletrici

Solleverare manubri, stare in piedi e sedersi, Stabilizzazione lombare

10-15 ripetizioni, 1-2 volte al dì

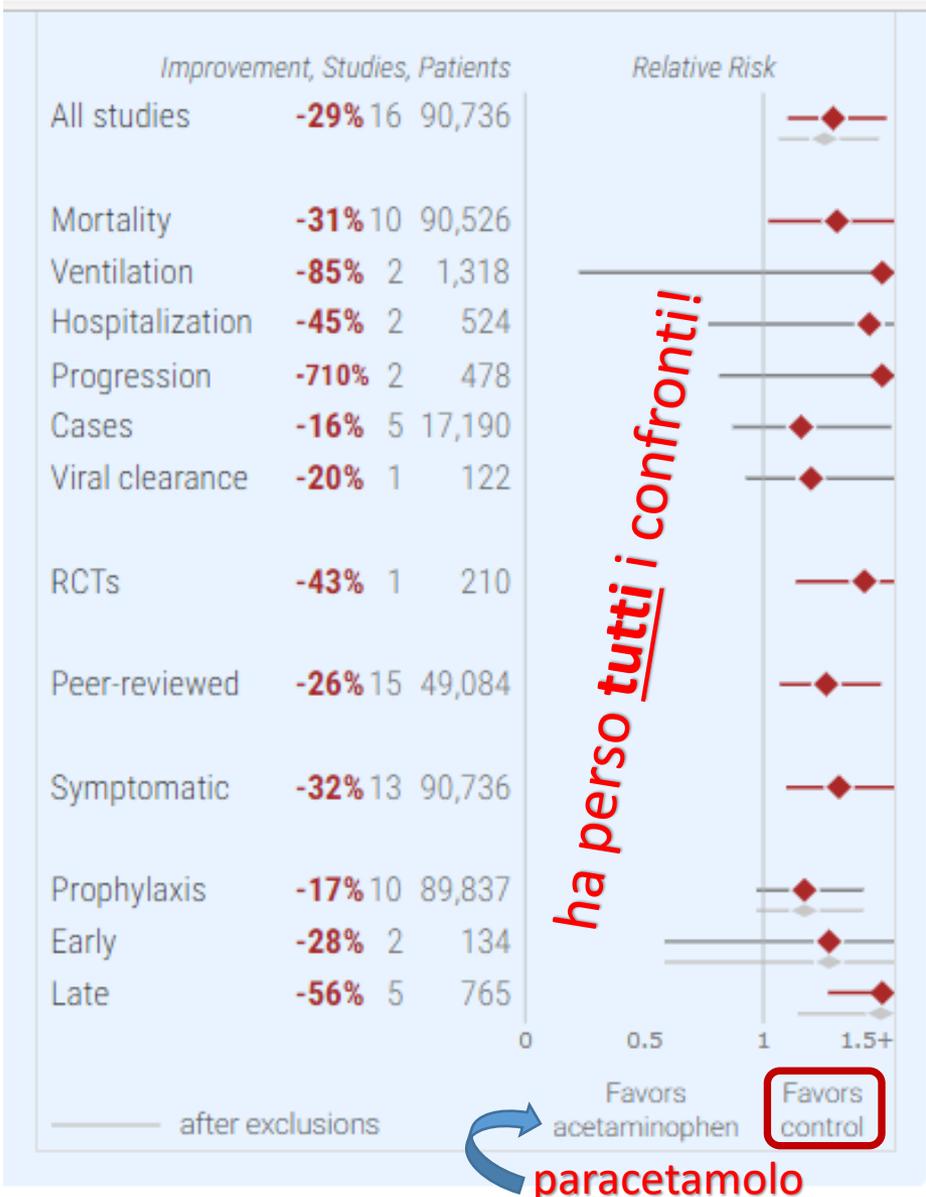


Con costante valutazione di molti parametri durante gli esercizi

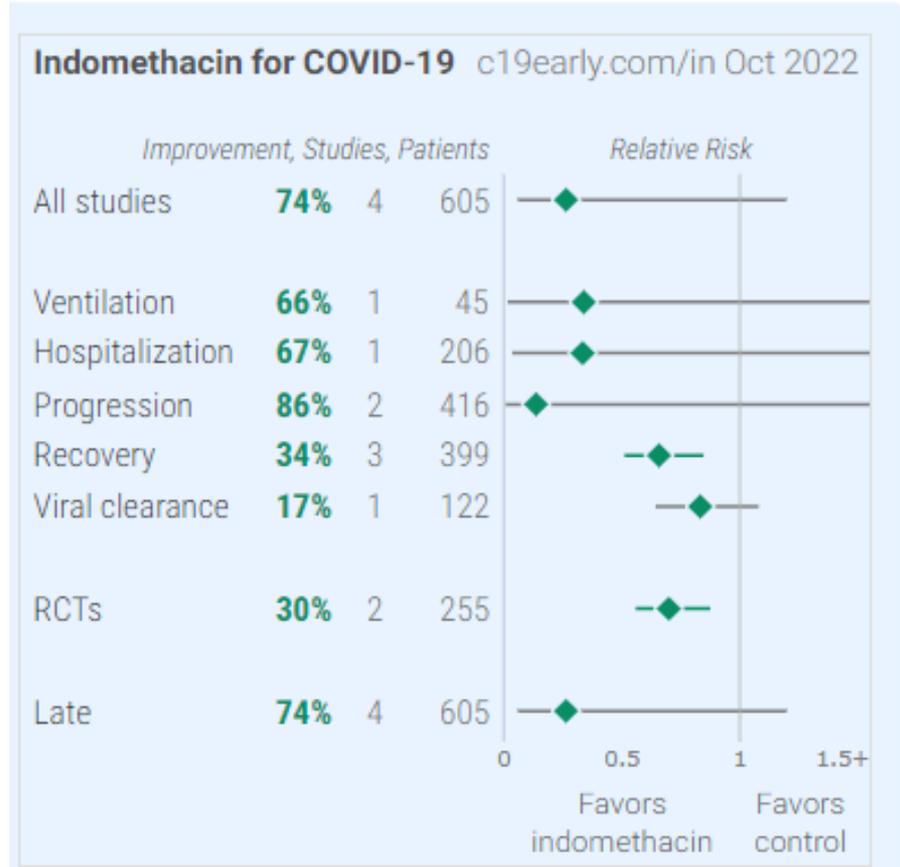


**Figure 1.** Intrahospital exercise training increases the probability of survival in hypertensive patients with COVID-19. Of note, the EX was able to promote a significant increase in the probability of survival in patients with HTN suffering from COVID-19 during their hospitalization. Log-rank Cox test, Chi-squared: 4.83; Hazard ratio: 1.8; 95% CI: 1.117–2.899;  $P = 0.027$ . COVID-19, coronavirus disease 2019; EX, exercise training; HTN, hypertension.

... e, fino a quel momento, tener conto degli studi esistenti (benché non conclusivi):



[COVID-19 early treatment: real-time analysis of 2,233 studies \(c19early.com\)](https://c19early.com)



Come fanno OMS e AIFA a consigliare ancora paracetamolo?!



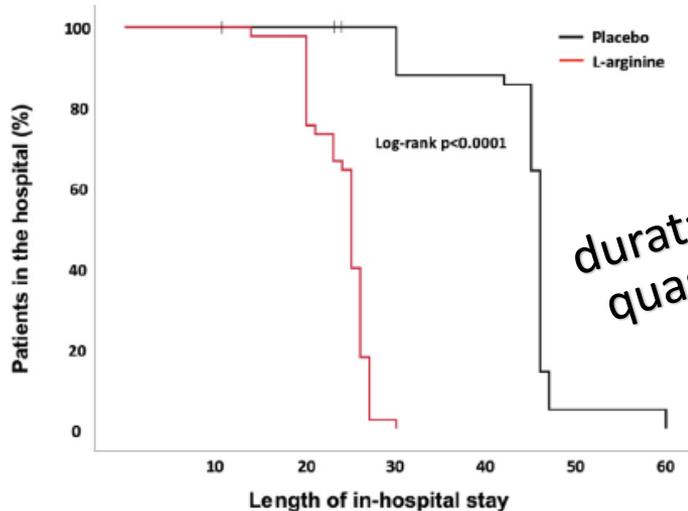


Research paper

Effects of adding L-arginine orally to standard therapy in patients with COVID-19: A randomized, double-blind, placebo-controlled, parallel-group trial. Results of the first interim analysis

Giuseppe Fiorentino<sup>a,1</sup>, Antonietta Coppola<sup>a,1</sup>, Raffaele Izzo<sup>b</sup>, Anna Annunziata<sup>a</sup>, Mariano Bernardo<sup>a</sup>, Angela Lombardi<sup>c,d</sup>, Valentina Trimarco<sup>e</sup>, Gaetano Santulli<sup>b,c,f,g,\*</sup>, Bruno Trimarco<sup>b,g</sup>

<sup>a</sup>COVID-19 Division, A.O.R.N. Ospedali dei Colli, Naples, Italy



Number at risk (number censored)		0	10	20	30	40	50	60
Placebo	45 (0)	45 (1)	38 (2)	36 (0)	2 (0)	0 (0)		
L-Arginine	45 (0)	34 (0)	1 (0)	0 (0)	0 (0)	0 (0)		

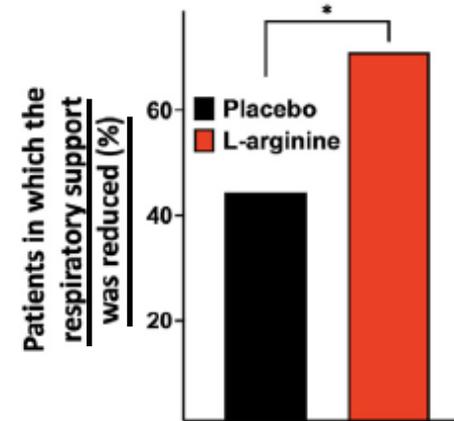


Fig. 2. Respiratory support at baseline and at day 10 (A) and percentage of patients in which the respiratory support was reduced, evaluated 10 days after randomization (B) in the per-protocol analysis; \*:  $p < 0.01$ .

CPAP: continuous positive airway pressure; HFNC: high-flow nasal cannula; LTOT: long-term oxygen therapy; NIV: non-invasive ventilation.

Fig. 3. Kaplan-Meier curves assessing in the per-protocol analysis the length of in-hospital stay.



## L-Arginina: finalmente un prodotto utile nel Long-COVID

Pharmacological Research

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

870 pz trattati con L-Arginina + Vit. C, verso 520 del gruppo di controllo con multivitaminico

Combining L-Arginine with vitamin C improves long-COVID symptoms:

The LINCOLN Survey Raffaele Izzo <sup>a,1</sup>, Valentina Trimarco <sup>b,1</sup>, Pasquale Mone <sup>c</sup>, Teresita Aloè <sup>d</sup>, ...

Table 2

Survey results in the two groups of patients.

		Alternative Treatment (N=521)	L-Arginine + Vitamin C (N=870)	p
→ Asthenia	Absent (%)	0.4	94.9	<0.0001
	Mild (%)	5.2	4.0	
	Severe (%)	94.4	1.1	
→ Dyspnea	Absent (%)	5.4	74.2	<0.0001
	Mild (%)	55.1	25.4	
	Severe (%)	39.5	0.4	
→ Chest tightness	Absent (%)	26.3	86.1	<0.0001
	Mild (%)	50.9	13.4	
	Severe (%)	22.8	0.5	
→ Dizziness	Absent (%)	66.6	87.3	<0.0001
	Mild (%)	25.9	11.1	
	Severe (%)	7.5	1.1	
→ Gastrointestinal disorders	Absent (%)	63.3	87.7	<0.0001
	Mild (%)	26.7	12.7	
	Severe (%)	10.0	0.6	
→ Headache	Absent (%)	39.2	81.8	<0.0001
	Mild (%)	44.1	16.8	
	Severe (%)	16.7	1.4	
→ Anosmia	Absent (%)	52.0	87.2	<0.0001
	Mild (%)	34.0	11.0	
	Severe (%)	14.0	1.8	
→ Concentration difficulty	Absent (%)	32.8	79.1	<0.0001
	Mild (%)	46.8	19.4	
	Severe (%)	20.4	1.5	
→ Sleeplessness	Absent (%)	39.5	80.7	<0.0001
	Mild (%)	42.6	17.5	
	Severe (%)	17.9	1.8	

miglioramento significativo di tutti i sintomi



2022, 14, 4984. <https://doi.org/10.3390/nu14234984>

Article

## Effects of L-Arginine Plus Vitamin C Supplementation on Physical Performance, Endothelial Function, and Persistent Fatigue in Adults with Long COVID: A Single-Blind Randomized Controlled Trial

Matteo Tosato <sup>1</sup>, Riccardo Calvani <sup>1,\*</sup>, Anna Picca <sup>1,2</sup>, Francesca Ciciarello <sup>1</sup>, Vincenzo Galluzzo <sup>1</sup>, Hélio José Coelho-Júnior <sup>1,3</sup>, Angela Di Giorgio <sup>1</sup>, Clara Di Mario <sup>4</sup>, Jacopo Gervasoni <sup>1</sup>, Elisa Gremese <sup>1,3,4</sup>, Paolo Maria Leone <sup>1</sup>, Antonio Nesci <sup>1</sup>, Anna Maria Paglionico <sup>1</sup>, Angelo Santoliquido <sup>1,5</sup>, Luca Santoro <sup>1</sup>, Lavinia Santucci <sup>6</sup>, Barbara Tolusso <sup>4</sup>, Andrea Urbani <sup>1,7</sup>, Federico Marini <sup>8</sup>, Emanuele Marzetti <sup>1,3</sup> and Francesco Landi <sup>1,3</sup> on behalf of the Gemelli against COVID-19 Post-Acute Care Team

<sup>1</sup> Fondazione Policlinico Universitario A. Gemelli IRCCS, 00168 Rome, Italy

- 23 partecipanti **L-Arginina 1,66 g + Vit. C 500 mg 2 volte al dì x 28 gg**
- 23 partecipanti multivitaminico 2 volte al dì x 28 gg (età media 51 aa.)

Al termine: **migliorata distanza camminata in 6'**, **forza stretta di mano**, **funzione endoteliale** ed estremo affaticamento (**fatigue**)

In particolare, la fatigue è stata riportata da:

- 2 partecipanti nel **gruppo L-Arginina (8,7%)**
- 21 nel gruppo **placebo (80,1%)**;

differenza altamente significativa  $p < 0.0001$ ).



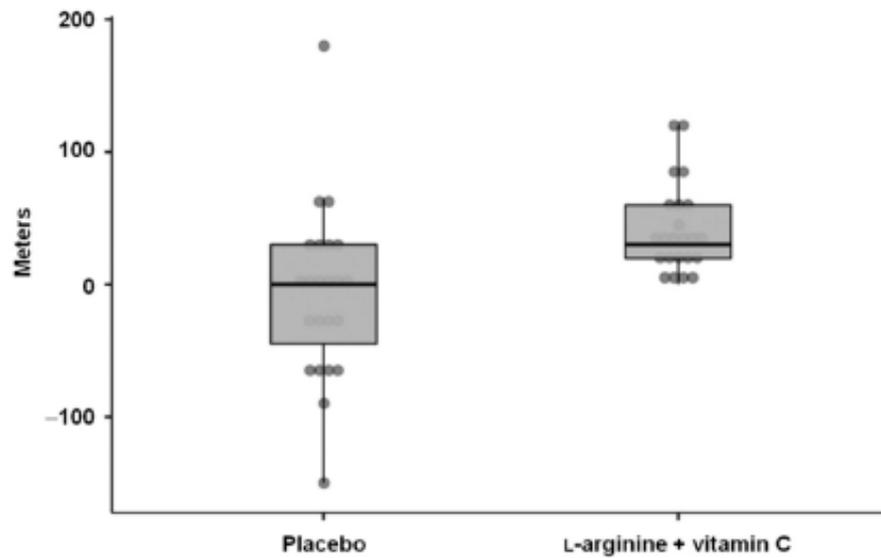


Figure 3. Changes from baseline to day 28 in the 6 min walk test distance in the two intervention groups.

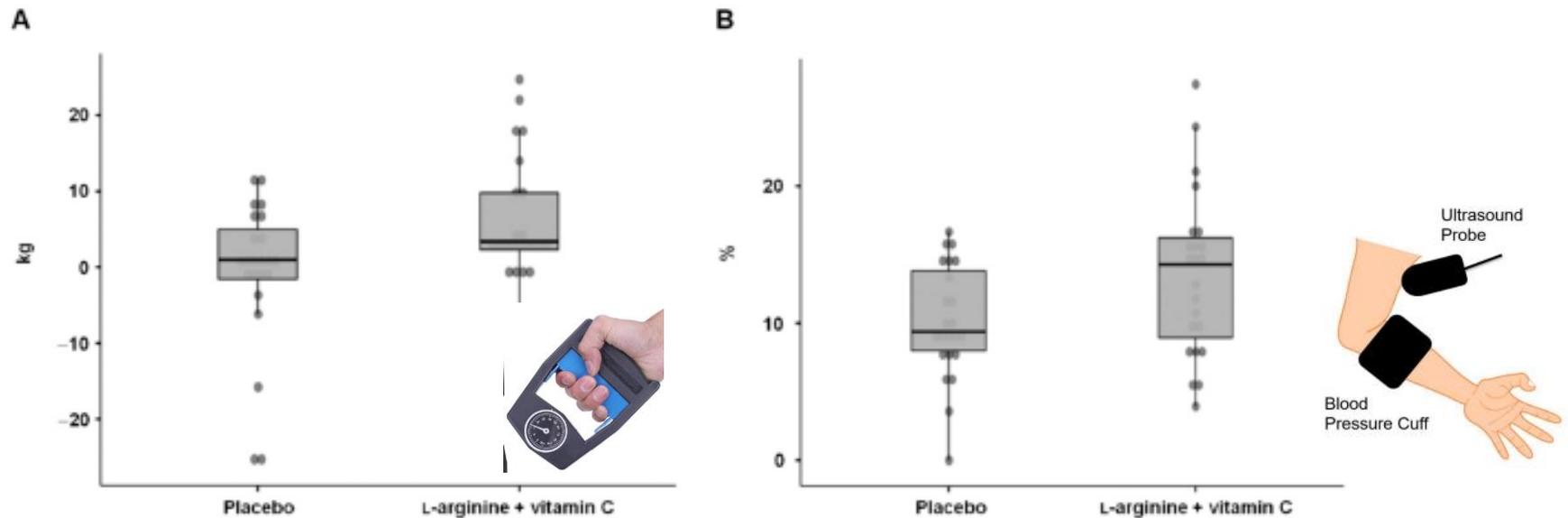


Figure 4. Changes from baseline to day 28 in (A) handgrip strength and (B) flow-mediated dilation in the two intervention groups.

~1,6 g di arginina si trovano anche in:



~25 g



~45 g



~70 g



~70-80 g

Sono fonti buone e salutari di arginina anche **legumi** e **semi**

Sono fonti buone e salutari di Vit. C anche **frutta** e **verdura** fresche. mg Vit. C/100 g →



→ 166 mg



110 mg



85 mg



200 mg



110 mg



59 mg



57 mg

## Consumption of gold kiwifruit reduces severity and duration of selected upper respiratory tract infection symptoms and increases plasma vitamin C concentration in healthy older adults RCT in crossover

Denise C. Hunter<sup>1\*</sup>, Margot A. Skinner<sup>1</sup>, Frances M. Wolber<sup>2</sup>, Chris L. Booth<sup>2</sup>, Jacelyn M. S. Loh<sup>1†</sup>, Mark Wohlers<sup>1</sup>, Lesley M. Stevenson<sup>1‡</sup> and Marlena C. Kruger<sup>2</sup>

<sup>1</sup>The New Zealand Institute for Plant and Food Research Limited, 120 Mt Albert Road, Private Bag 92169,

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samples were collected at baseline and at the end of each treatment and washout period. Gold kiwifruit did not significantly reduce the overall incidence of URTI compared with banana, but significantly reduced the severity and duration of head congestion, and the duration of sore throat. Gold kiwifruit significantly increased plasma vitamin C,  $\alpha$ -tocopherol and lutein/zeaxanthin concentrations, and erythrocyte folate concentrations, and significantly reduced plasma lipid peroxidation. No changes to innate immune function (natural killer cell activity, phagocytosis) or inflammation markers (high-sensitivity C-reactive protein, homocysteine) were detected. Consumption of gold kiwifruit enhanced the concentrations of several dietary plasma analytes, which may contribute to reduced duration and severity of selected URTI symptoms, offering a novel tool for reducing the burden of URTI in older individuals.



in 4 sett.  
giorni di:  
**mal di gola**  
2 vs 5,5  
**cong. testa**  
<1 vs 4,5





Original Investigation | Physical Medicine and Rehabilitation

## Rehabilitation Interventions for Physical Capacity and Quality of Life in Adults With Post-COVID-19 Condition

### A Systematic Review and Meta-Analysis di RCT

Dimitra V. Poulipoulou, MSc; Joy C. Macdermid, PhD; Emily Saunders, BSc; Sue Peters, PhD; Laura Brunton, PhD; Erin Miller, PhD; Kieran L. Quinn, PhD;  
Tiago V. Pereira, PhD; Pavlos Bobos, PhD

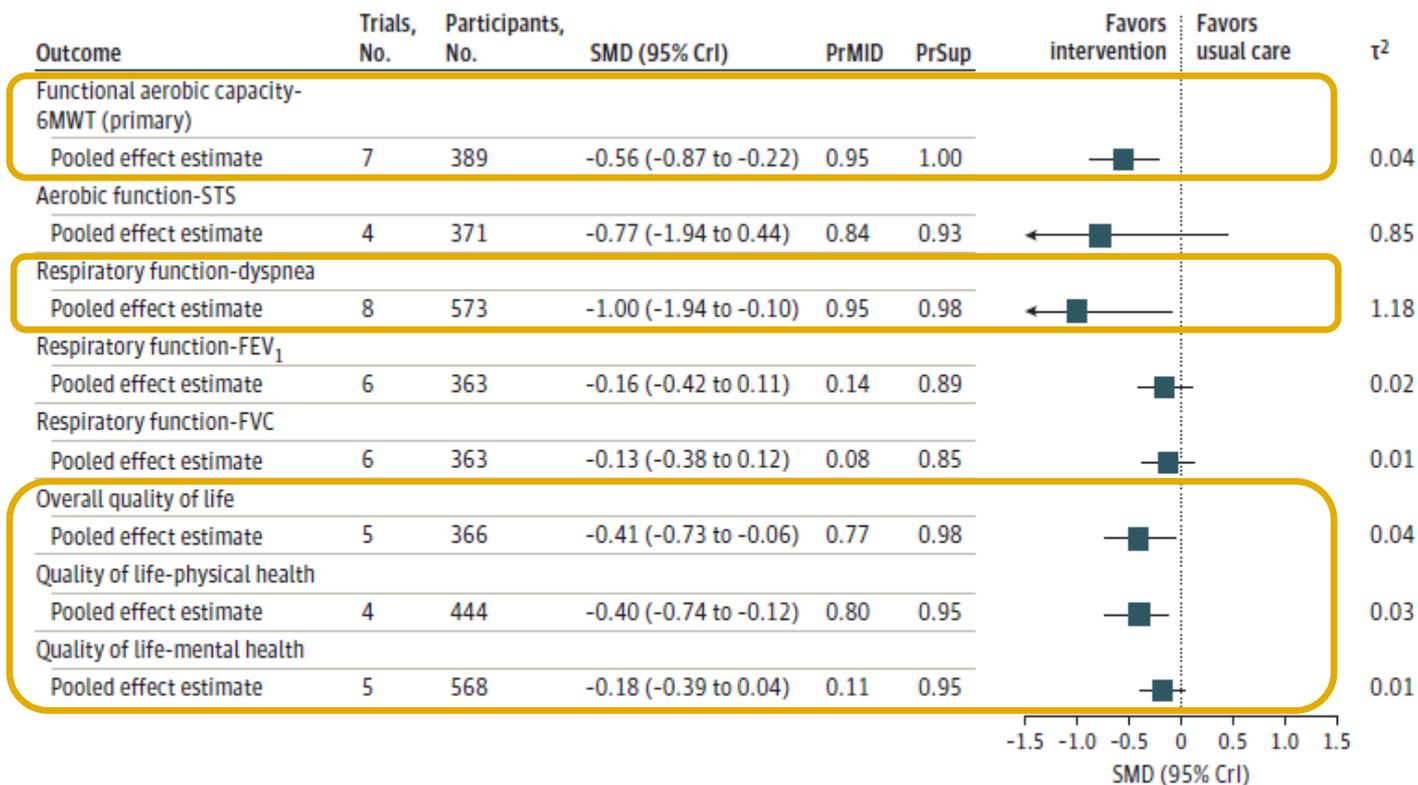
14 RCT (1244 pazienti, età media 50 anni), con riabilitazione: **esercizi respiratori da soli** o **con allenamento di resistenza e/o aerobico e supervisione**, in media per 6 settimane, rispetto a cure correnti o esercizi senza supervisione. Esito primario miglioramento al *test 6 minuti di cammino*.

### Risultati:

- **miglioramento funzionale della capacità di esercizio** (+36 metri vs controlli, 99% di probabilità che siano superiori alle cure correnti), **e della forza e resistenza degli arti inferiori** (test *sit to stand*: alzarsi 5 volte da sedia standard senza braccioli, misurando il tempo) (moderata certezza)
- **miglioramento della qualità di vita** (moderata certezza)
- Tendenza all'aumento di eventi avversi indotti dall'esercizio (bassa certezza)



Figure 3. Treatment Outcomes of Rehabilitation Interventions vs Usual Care



Beh, c'è un miglioramento lieve o moderato per tutti gli esiti studiati

All results are based on a bayesian random-effects model. Results are reported as standardized mean differences (SMDs) and 95% credible intervals (CrIs). PrSup is the probability of the superiority of rehabilitation interventions over usual care (ie, the probability that the SMD is <0). PrMID is the probability of the true treatment effect

being equal to or more exacerbated than the between-group mean difference (MID) threshold (ie, the probability that the SMD is ≥ 0.5). 6-minute walking test; FEV<sub>1</sub>, forced expiratory volume in the first second; FVC, forced vital capacity; STS, 30-second sit-to-stand test.



Federica Angelini, Presidente Comitato Ascoltami

# Effectiveness of honey for symptomatic relief in upper respiratory tract infections: a systematic review and meta-analysis

Hibatullah Abuelgasim ,<sup>1</sup> Charlotte Albury,<sup>2</sup> Joseph Lee<sup>2</sup>



- ▶ A Cochrane systematic review found that honey can improve cough in children; honey has not been systematically reviewed for other URTI symptoms, or in other patient groups

## What are the new findings?

- ▶ Honey is more effective than usual care alternatives for improving URTI symptoms, particularly cough frequency and cough severity

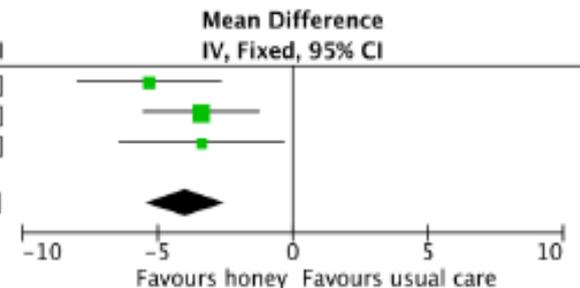
## How might it impact on clinical practice in the foreseeable future?

- ▶ Honey can be used as an alternative to antibiotics by clinicians who wish to offer treatment for URTIs, which may help to combat antimicrobial resistance



Study or Subgroup	Honey			Usual care			Weight	Mean Difference IV, Fixed, 95% CI
	Mean	SD	Total	Mean	SD	Total		
Ayazi 2017	-9.5104	7.3608	67	-4.2	4.5	20	30.2%	-5.31 [-7.96, -2.67]
Cohen 2017	-5.16	7.3612	75	-1.77	5.4431	66	46.9%	-3.39 [-5.51, -1.27]
Paul 2007	-10.71	7.4898	35	-7.3434	7.5016	70	22.9%	-3.37 [-6.41, -0.33]
<b>Total (95% CI)</b>			<b>177</b>			<b>156</b>	<b>100.0%</b>	<b>-3.96 [-5.42, -2.51]</b>

Heterogeneity:  $\text{Chi}^2 = 1.42$ ,  $\text{df} = 2$  ( $P = 0.49$ );  $I^2 = 0\%$   
 Test for overall effect:  $Z = 5.35$  ( $P < 0.00001$ )



**Tè.** Un'Umbrella review di metanalisi di studi osservazionali su tè e salute<sup>50</sup> mostra nelle tre con dati sulla **mortalità totale** un'associazione con effetto-dose (-24%), massima **con tre tazze al dì** (che diventa nulla o sfavorevole con **>5 tazze/die**), confermata sia per **tè verde** che **nero**.

L'effetto in laboratorio delle catechine del tè mostra **inibizione** dell'assorbimento del **virus influenzale**, soppressione della replicazione e dell'attività della neuraminidasi, efficacia anche contro **virus del raffreddore**.<sup>51</sup>

Una rassegna di 4 studi clinici<sup>51</sup> in gruppi d'intervento con gargarismi con tè o suoi costituenti (vs gargarismi con acqua) ha mostrato significativa riduzione d'incidenza di **influenza** in uno studio con **tè verde**, e tendenze favorevoli in un altro con tè verde e in due con catechine.

Uno studio al computer<sup>46</sup> ha mostrato efficacia sul SARS-CoV-2 delle catechine, e in particolare di **epigallocatechina gallato**, abbondante nel **tè verde**, ma presente in tutti i tè.



bianco