

Review of: "Can Urolithin A Help in Curing COVID-19 Infection?"

Domenico Tricarico¹

¹ University of Bari

Potential competing interests: No potential competing interests to declare.

The focus is of interest, but the manuscript is lacking references and data. Urolithin A (UA) is a natural gut microbiome-derived food metabolite that is synthesized after eating certain foods high in polyphenols, is proposed in the COVID-19. Individuals produce urolithin at varying rates based on their gut microbiome, which varies according to diet, age, and genetics and this may influence antiviral response but experimental data are lacking.

General comments: the nutritional status influence patient's immunity, and natural compounds including resveratrol, are well known for its immunomodulating and anti-inflammatory properties in COVID-19 (see Domi et al., 2023). Resveratrol for instance has additional antiviral activity inhibiting virus entrance in cells and viral replication. Resveratrol also improves autophagy and decreases pro-inflammatory agents expression acting as an anti-inflammatory agent. It regulates immune cell response and pro-inflammatory cytokines and prevents the onset of thrombotic events that usually occur in COVID-19 patients. Since resveratrol acts through different mechanisms, the effect could be enhanced, making a totally natural agent particularly effective as an adjuvant in COVID-19 therapy.

The mechanism of polyphenols can be also mediated by Urolithin A.

The Importance of Nutraceuticals in **COVID-19**: What's the Role of Resveratrol? Domi E, Hoxha M, Kolovani E, Tricarico D, Zappacosta B. *Molecules*. 2022 Apr 7;27(8):2376. doi: 10.3390/molecules27082376.