

# Malnutrition: Challenges of the COVID-19 Pandemic and Strategies for Moving Forward

## REFERENCES

- Batchelor-Murphy MK, McConnell ES, Amella EJ, et al. Experimental Comparison of Efficacy for Three Handfeeding Techniques in Dementia. *J Am Geriatr Soc.* 2017;65(4):e89-e94. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5397360/>
- Chatindiara I, Allen J, Hettige D, Senior S, Richter M, Kruger M, Wham C. High prevalence of malnutrition and frailty among older adults at admission to residential aged care. *J Prim Health Care.* 2020 Dec;12(4):305-317. <https://pubmed.ncbi.nlm.nih.gov/33349318/>
- Chiodini I, Gatti D, Soranna D, et al. Vitamin D Status and SARS-CoV-2 Infection and COVID-19 Clinical Outcomes. *Front Public Health.* 2021;9:736665. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8727532/>
- Dorner B, Friedrich EK. Position of the Academy of Nutrition and Dietetics: Individualized Nutrition Approaches for Older Adults: Long-Term Care, Post-Acute Care, and Other Settings. *J Acad Nutr Diet.* 2018 Apr;118(4):724-735. <https://www.eatrightpro.org/-/media/eatrightpro-files/practice/position-and-practice-papers/position-papers/individualizednutritionapproachesforolderadults.pdf>
- Gérard M, Mahmutovic M, Malgras A, et al. Long-Term Evolution of Malnutrition and Loss of Muscle Strength after COVID-19: A Major and Neglected Component of Long COVID-19. *Nutrients.* 2021;13(11):3964. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8618979/>
- Hu J, Zhang Y, Xue Q, Song Y, Li F, Lei R, Wu J, Qian J. Early Mental Health and Quality of Life in Discharged Patients With COVID-19. *Front Public Health.* 2021 Dec 23;9:725505. <https://pubmed.ncbi.nlm.nih.gov/35004560/>
- Kaegi-Braun N, Faessli M, Kilchoer F, Dragusha S, Tribolet P, Gomes F, Bretscher C, Germann S, Deutz NE, Stanga Z, Mueller B, Schuetz P. Nutritional trials using high protein strategies and long duration of support show strongest clinical effects on mortality.: Results of an updated systematic review and meta-analysis. *Clin Nutr ESPEN.* 2021 Oct;45:45-54. <https://pubmed.ncbi.nlm.nih.gov/34620354/>
- Kananen L, Eriksson M, Boström AM, et al. Body mass index and Mini Nutritional Assessment-Short Form as predictors of in-geriatric hospital mortality in older adults with COVID-19 [published online ahead of print, 2021 Jul 29]. *Clin Nutr.* 2021;SQ261-5614(21)00360-5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8318666/>
- Krzyminska-Siemaszko R, Deskur-Smielecka E, Kaluzniak-Szymanowska A, Kaczmarek B, Kujawska-Danecka H, Klich-Raczka A, Mossakowska M, Matgorzewicz S, Dworak LB, Kostka T, Chudek J, Wieczorowska-Tobis K. Socioeconomic Risk Factors of Poor Nutritional Status in Polish Elderly Population: The Results of PolSenior2 Study. *Nutrients.* 2021 Dec 8;13(12):4388. <https://pubmed.ncbi.nlm.nih.gov/34959940/>
- Morán-López JM. Malnutrition and nutrition support in COVID-19: The results of a nutrition support protocol. *Endocrinol Diabetes Nutr (Engl Ed).* 2021;68(9):621-627. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8665355/>
- Novais F, Cordeiro C, Câmara Pestana P, Côrte-Real B, Reynolds Sousa T, Delerue Matos A, Telles-Correia D. O Impacto da COVID-19 na População Idosa em Portugal: Resultados do Survey of Health, Ageing and Retirement (SHARE) [The Impact of COVID-19 in Older People in Portugal: Results from the Survey of Health, Ageing and Retirement (SHARE)]. *Acta Med Port.* 2021 Nov 2;34(11):761-766. <https://pubmed.ncbi.nlm.nih.gov/34986084/>
- Pezzana A, Cereda E, Avagnina P, Malfi G, Paiola E, Frighi Z, Capizzi I, Sgnaolin E, Amerio ML. Nutritional Care Needs in Elderly Residents of Long-Term Care Institutions: Potential Implications for Policies. *J Nutr Health Aging.* 2015 Nov;19(9):947-54. <https://pubmed.ncbi.nlm.nih.gov/26482698/>
- Russel, C. Addressing Malnutrition in Older Adults During Care Transition. *Meals on Wheels America.* 2019. [https://www.mealsonwheelsamerica.org/docs/default-source/research/nourishing-transitions/addressing-malnutrition-web-final.pdf?sfvrsn=f045ba3b\\_2](https://www.mealsonwheelsamerica.org/docs/default-source/research/nourishing-transitions/addressing-malnutrition-web-final.pdf?sfvrsn=f045ba3b_2)
- Skipper A, Coltman A, Tomesko J, Charney P, Porcari J, Piemonte TA, Handu D, Cheng FW. Position of the Academy of Nutrition and Dietetics: Malnutrition (Undernutrition) Screening Tools for All Adults. *J Acad Nutr Diet.* 2020 Apr;120(4):709-713. [https://www.jandonline.org/article/S2212-2672\(19\)31366-8/pdf](https://www.jandonline.org/article/S2212-2672(19)31366-8/pdf)
- Soares MN, Eggelbusch M, Naddaf E, Gerrits KHL, van der Schaaf M, van den Borst B, Wiersinga WJ, van Vugt M, Weijs PJM, Murray AJ, Wüst RCI. Skeletal muscle alterations in patients with acute Covid-19 and post-acute sequelae of Covid-19. *J Cachexia Sarcopenia Muscle.* 2022 Jan 7. <https://pubmed.ncbi.nlm.nih.gov/34997689/>
- Sorensen J, Fletcher H, Macdonald B, Whittington-Carter L, Nasser R, Gramlich L. Canadian Hospital Food Service Practices to Prevent Malnutrition. *Can J Diet Pract Res.* 2021 Dec 1;82(4):167-175. <https://dcjournal.ca/doi/full/10.3148/cjdp-2021-013>
- Sümer A, Uzun LN, Özbek YD, Tok HH, Altınsoy C. Nutrition improves COVID-19 clinical progress. *Ir J Med Sci.* 2022 Jan 15. doi: 10.1007/s11845-021-02868-w. <https://pubmed.ncbi.nlm.nih.gov/35031937/>
- Taib A, Ong T, Mulvaney E, Neale C, Strawther N, Peters C, Sahota A, Sahota O. Can an Ice-Cream Based Supplement Help Address Malnutrition in Orthogeriatric Patients? *J Nutr Gerontol Geriatr.* 2021 Oct-Dec;40(4):280-289. <https://pubmed.ncbi.nlm.nih.gov/34635024/>
- Tangvik RJ, Bruvik FK, Drageset J, Kyte K, Hunsbår I. Effects of oral nutrition supplements in persons with dementia: A systematic review. *Geriatr Nurs.* 2021 Jan-Feb;42(1):117-123. <https://pubmed.ncbi.nlm.nih.gov/33383439/>
- Urazan JC, Padilla NE, Borda MG, Pinilla J, Fernandez MAG Sr, Fan MV. Latin American Older people and neuropsychiatric symptoms: a mini-systematic review of effects of COVID-19 Pandemic. *Alzheimers Dement.* 2021 Dec;17 Suppl 12:e058652. <https://pubmed.ncbi.nlm.nih.gov/34971087/>
- Vaillant MF, Agier L, Martineau C, et al. Food intake and weight loss of surviving inpatients in the course of COVID-19 infection: A longitudinal study of the multicenter NutriCovid30 cohort. *Nutrition.* 2022;93:111433. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8314865/>