



Resources for nutritional management of patients with COVID-19

INTRODUCTION

The prevalence and risk of malnutrition and dysphagia are known to be high among patients with and post COVID-19^{1,2}, with anorexia leading to a drastic reduction of food intake³. Hospitalized patients present digestive symptoms (50%), asthenia/discomfort (35-69.6%), nausea/vomiting (4-10.1%), cough (59.4-77%) or olfactory/gustatory disorders^{4,5}. On discharge, patients usually present **severe loss of skeletal muscle mass and function** which may lead to disability, poor quality of life and additional morbidity¹.

Recent trials confirm the effectiveness of nutritional assessment and individualized nutritional care in reducing complications and improving clinical outcomes in medical inpatients^{6,8}.

The prevention, diagnosis and treatment of malnutrition should therefore be routinely included in the management of COVID-19 at-risk patients and should be a key goal in recovering the patient's health status.



AIM

- To offer a structured compilation of relevant clinical nutrition guidelines and recommendations published on COVID-19 and nutrition.
- To help identify the key recommendations in clinical nutrition among the large amounts of data generated on the COVID-19 pandemic to ultimately benefit the patient.

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A COVID-19 PATIENT JOURNEY

The patient infected by COVID-19 follows a journey full of uncertainties due to the limited knowledge about the pathology and its treatments, as well as to the saturation of the healthcare professionals and systems⁹. Find the attached Journey*.

Journey of patients with COVID-19 isolated in their homes
April 2020

First Covid-19 patient journey map following Covid-19 patients who are isolated in their homes.

[See Publication](#)

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Mapa da Experiência do Paciente COVID-19, Familiares e Profissionais de Saúde

Journey map designed for identifying the pain of patients, their families, and health care professionals and identifying good practices to be adopted in Brazil and worldwide.

[See Publication](#)

B GUIDELINES PUBLISHED BY ENTERAL AND PARENTERAL NUTRITION SOCIETIES

European Society for Parenteral and Enteral Nutrition (ESPEN)

ESPEN expert statements and practical guidance for nutritional management of individuals with SARS-CoV-2 infection
March 2020

In this document, the ESPEN aims at providing concise guidance for nutritional management of COVID-19 patients by proposing 10 practical recommendations.

[See Publication](#)

American Society for Parenteral and Enteral Nutrition (ASPEN)

Resources for Clinicians Caring for Patients with Coronavirus
March 2020

Professional resources for the nutritional management of individuals with SARS-CoV-2. Includes Report on Nutritional Support Practice Processes with COVID-19 in mild or severe symptoms.

[See Publication](#)

British Association of Parenteral and Enteral Nutrition (BAPEN)

Practical Advice and Guidance for management of nutritional support during COVID-19
April 2020

Documents and guidelines developed by BAPEN groups and committees in response to the coronavirus pandemic and based on the available evidence and expert consensus.

[See Publication](#)

Société Francophone Nutrition Clinique et Métabolisme. French Speaking Society of Clinical Nutrition and Metabolism (SFNCM)

Stratégie de prise en charge nutritionnelle à l'hôpital: avis d'experts de la SFNCM

Nutritional recommendations and treatment algorithm for clinicians managing patients with COVID-19, covering all the patient journey.

[See Publication](#)

Federación Latinoamericana de Terapia Nutricional, Nutrición Clínica y Metabolismo (FELANPE)

Articles and nutritional recommendations for patients with COVID-19
May 2020

Guidelines and nutritional recommendations for clinicians caring for patients with coronavirus from different Latin-American Nutrition Societies.

[See Publication](#)

Società Italiana di Nutrizione Artificiale e Metabolismo. Italian Society for Artificial Nutrition and Metabolism (SINPE)

Raccomandazioni Pratiche per il Trattamento Nutrizionale dei Pazienti Affetti da COVID-19
April 2020

Nutritional recommendations and treatment algorithm for clinicians managing patients with COVID-19, covering all the patient journey.

[See Publication](#)

Associação Portuguesa de Nutrição Entérica e Parentérica. Portuguese Association of Enteral and Parenteral Nutrition (APNEP)

Algoritmo Terapêutica Nutricional COVID-19

Nutritional algorithm for clinicians managing patients infected with COVID-19 including recommendations for ONS.

[See Publication](#)

Sociedad Española de Nutrición Clínica y Metabolismo. Spanish Society of Clinical Nutrition and Metabolism (SENPE)

Algoritmo de tratamiento nutricional en pacientes con COVID-19
April 2020

Nutritional treatment algorithm for clinicians managing patients with COVID-19 Consensus of the Spanish Society of Intensive Care Medicine and Coronary Units-Spanish Society of Parenteral and Enteral Nutrition (SEMICYUC-SENPE).

[See Publication](#)

Sociedad Española de Endocrinología y Nutrición. Spanish Society of Endocrinology and Nutrition (SEEN)

Management of disease-related malnutrition (DRM) in hospitalised patients with COVID-19
March 2020

Nutritional recommendations for clinicians managing patients at risk of malnutrition on admission and hospitalized with COVID-19. Nutritional algorithm is included.

[See Publication](#)

Irish Society for Clinical Nutrition and Metabolism (IrSPEN)

Guidance for Nutrition relating to COVID-19
April 2020

This document was developed to offer some guidance on managing nutritional support during COVID-19 for vulnerable patients, those in ICU and patients with co-morbidities, which are independently associated with malnutrition and its negative impact on patient survival.

[See Publication](#)

Brazilian Parenteral and Enteral Nutrition Society (BRASPEN)

Fluxo de assistência nutricional para pacientes admitidos com COVID-19 e SCOVID-19 em unidade hospitalar
April 2020

This guideline provides steps and algorithm for managing hospitalized patients with COVID-19.

[See Publication](#)

Polish Society for Parenteral, Enteral Nutrition and Metabolism (POLSPEN)

Zalecenia dla realizacji domowego żywienia do- i pozajelitowego podczas pandemii SARS-CoV-2
April 2020

A 23-recommendation summary of enteral and parenteral nutrition for managing hospitalized patients and those recovering from COVID-19 at home.

[See Publication](#)

South African Society for Parenteral and Enteral Nutrition (SASPEN)

SASPEN Nutritional management of patients with COVID-19
April 2020

This guideline is based on the recommendations put forward by the ASPEN as well as the ESPEN.

[See Publication](#)

AustralAsian Society for Parenteral and Enteral Nutrition (AuSPEN)

Nutrition Management for Critically and Acutely Unwell Hospitalised Patients with COVID-19 in Australia and New Zealand
Continually updated

The purpose of this document is to provide evidence-based advice for nutrition management of critically ill and acutely unwell hospitalised patients during the COVID-19 pandemic (Phase 2 management strategies). It provides key adaptations of usual best practice, taking into consideration staff safety, reduced staffing, resource utilisation, and the clinical condition of the patients.

[See Publication](#)

REFERENCES

1. Barazzoni R, Bischoff SC, Breda J et al. ESPEN expert statements and practical guidance for nutritional management of individuals with SARS-CoV-2 infection. Clinical Nutrition 2020. pii: S0261-5614(20)30140-0. 2. Li T, Zhang Y, Gong C et al. Prevalence of malnutrition and analysis of related factors in elderly patients with COVID-19 in Wuhan, China. Eur J Clin Nutr 2020 Apr 22. doi: 10.1038/s41430-020-0642-3. Online ahead of print. 3. Caccialanza R, Laviano A, Lobascio F et al. Early Nutritional Supplementation in Non-Critically Ill Patients Hospitalized for the 2019 Novel Coronavirus Disease (COVID-19): Rationale and Feasibility of a Shared Pragmatic Protocol. Nutrition 2020;74:110835. doi: 10.1016/j.nut.2020.110835. Epub 2020 ahead of print. 4. Pan L, Mu M, Yang P et al. Clinical characteristics of COVID-19 patients with digestive symptoms in Hubei, China: a descriptive, cross-sectional, multicenter study. Am J Gastroenterol 2020;115(5):766-73. 5. Información científica-técnica, enfermedad por coronavirus, COVID-19 [Internet]. Ministerio de Sanidad de España. [Accessed May 2020]. Available at: https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/ITCoronavirus.pdf. 6. Gomes F, Baumgartner A, Bounoure L et al. Association of Nutritional Support with Clinical Outcomes Among Medical Inpatients Who Are Malnourished or at Nutritional Risk: An Updated Systematic Review and Meta-analysis. JAMA Netw Open 2019; 2(11): e1915138. 7. Schuetz, P, Fehr R, Baechli V et al. Individualised nutritional support in medical inpatients at nutritional risk: a randomised clinical trial. Lancet 2019;393(10188): 2312-21. 8. Liu G, Zhang S, Mao Z et al. Clinical significance of nutritional risk screening for older adult patients with COVID-19. Eur J Clin Nutr 2020. https://doi.org/10.1038/s41430-020-0659-7. Online ahead of print. 9. Lalanza S, De los Hoyos V, Rubio P, Benítez A. Needs of COVID-19 patients isolated at home [Internet]. Instituto Experiencia Paciente. [Accessed May 2020]. Available at: https://iexp.es/insights/needs-of-COVID-19-patients-isolated-at-home/.

