Nutritional care in COVID-19 is important in all sectors of care

Prevention, timely recognition and treatment of malnutrition should be standard care for patients with COVID-19[1] *European Society for Clinical Nutrition and Metabolism (ESPEN)*

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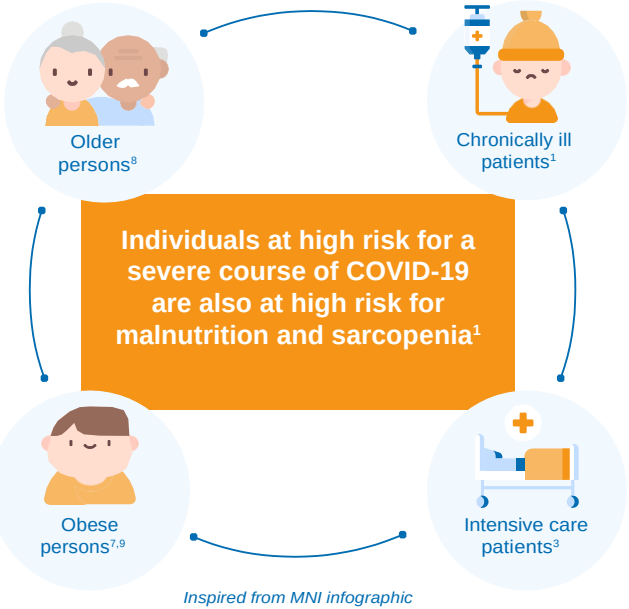
How big is the problem?

40 to 50% of the hospital patients with COVID-19 is malnourished [2-5]

Intensive care patients lose a lot of muscle mass. This can amount to **1KG** MUSCLE MASS LOSS PER DAY[6,7]

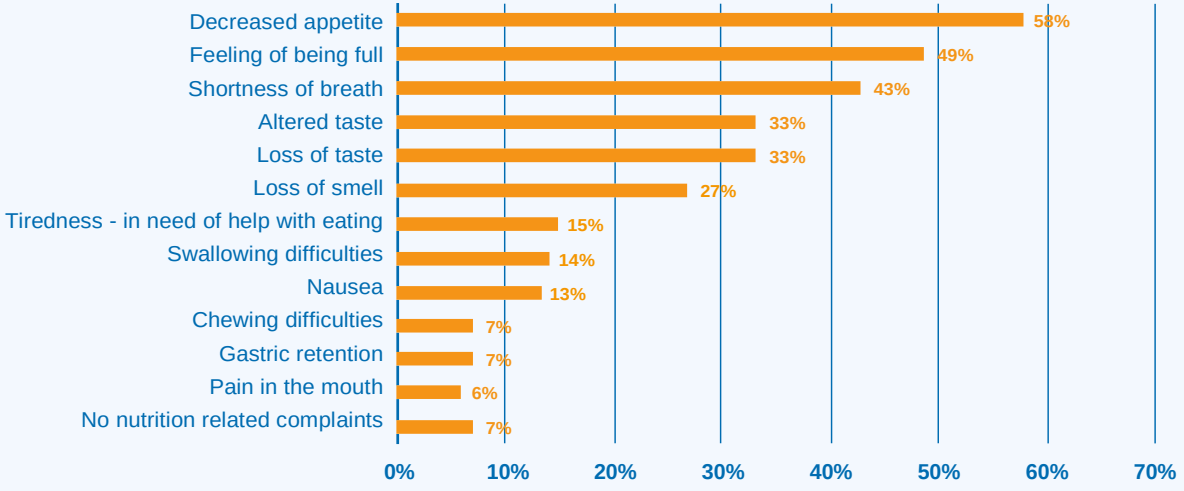


Inspired from MNI infographic

Why are patients with COVID-19 at high risk for malnutrition and sarcopenia?

1. Almost all patients have nutritional complaints that make eating difficult.[3]
2. Increased energy consumption due to high disease activity.[6,10]
3. High muscle breakdown and low muscle gain due to bed rest, insulin resistance and high disease activity

Nutritional complaints in the hospital (COVOED study[3])



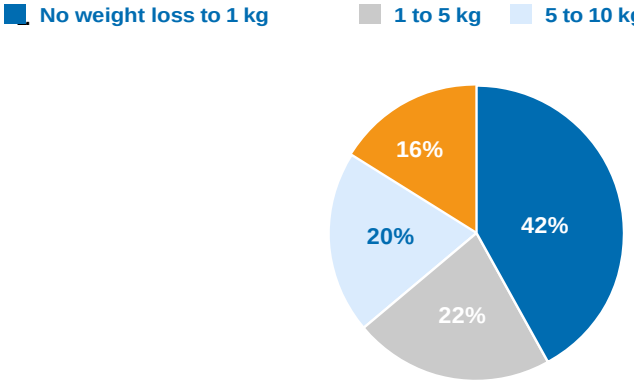
Malnutrition and sarcopenia affect disease course and recovery: [4,8,11-13]

- Reduced functionality due to loss of muscle mass and strength
- Higher risk of adverse events
- A longer recovery period
- Higher mortality risk

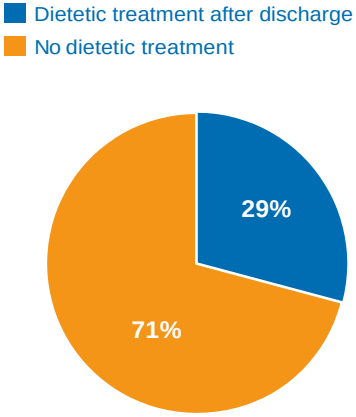
Results from the COVOED study

- Despite 67% being overweight, 35% of patients were malnourished at admission to the hospital.
- Almost all patients had one or more nutritional complaints. Decreased appetite, feeling of being full, altered taste, and loss of taste were the most common nutritional complaints (see figure on p.1).

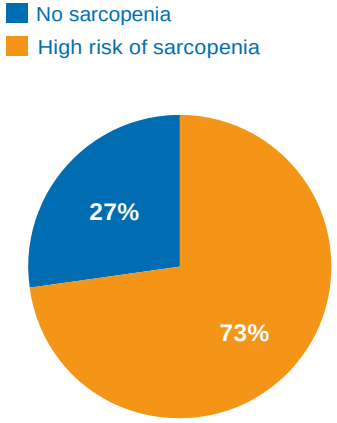
- **One in five COVID-19 patients had severe acute weight loss (>5 kg) during admission. In patients who had been in the intensive care unit, this was 36%.**



Although nutritional symptoms persisted long after discharge, only 29% of patients received continued nutritional treatment after hospital discharge in the recovery phase



Almost three-quarters of the patients had a high risk of sarcopenia (SARC-F).



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In hospitals

- There should be early screening for malnutrition; involve the dietitian early in treatment.
- Patients in the hospital with an inadequate nutritional intake should switch to enteral or possibly parenteral nutrition in a timely manner. The loss of muscle mass is too rapid and severe to wait long to do so.
- Patients in intensive care have high nutritional requirements. Choosing the amount and type of tube feeding should be tailored per patient..
- After ventilation, many patients develop swallowing problems. Screening and early treatment of swallowing problems can prevent further deterioration of nutritional status.
- Almost all patients who have been in the intensive care unit require dietetic care after discharge from the hospital. Transfer nutritional treatment to a dietitian in primary care or the rehabilitation center

In the home situation

- For the COVID-19 patient with (risk of) malnutrition, nutritional treatment must be continued by the dietitian after discharge from the hospital. Physical therapy, exercise therapy, occupational therapy and speech therapy should also be considered.
- In case of swallowing problems, texture adjustments to the diet, after consulting a speech therapist, should be considered.
- Patients and caregivers should be informed about the importance of following nutritional treatment, self-screening of nutritional risks, and indications of when to contact caregivers.
- Patients who have been in intensive care for a long time are at very high risk for post ICU syndrome (PICS). Include this in treatment and evaluation.

Call to action!

Early recognition and timely treatment of malnutrition and sarcopenia is essential in patients with COVID-19.
Nutritional care is part of the basic care for these patients, in the hospital, but certainly also in the recovery phase.

Literature

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