

EXEMPLAR OF EVIDENCE-BASED CARE IN PRACTICE

The Effect of early nutritional support on Frailty, Functional Outcomes, and Recovery of malnourished medical inpatients Trial (EFFORT)

WHAT did the initiative involve?

The trial aimed to assess the effect of early nutrition support on frailty, functional outcomes and recovery in malnourished inpatients.

Medical inpatients at nutritional risk (n=2088) were randomly assigned to receive either protocol-guided individualised nutrition support to reach protein and caloric goals (intervention group) or standard hospital food (control group).

Patients were screened for nutrition risk within 48 hours of admission using the nutritional risk screening 2002 (NRS) score. Patients with an NRS score of ≥ 3 were eligible to participate.

In the intervention group (n=1050), individualised nutritional support was initiated no later than 48 h after admission:

- To reach protein and calorie goals, an individual nutrition plan was developed by a registered dietitian.
- This plan was initially based on oral nutrition provided by the hospital kitchen (including food adjustment according to patient preferences, food fortification such as enrichment of hospital food by adding protein powder, and snacks between meals) and oral nutrition supplements
- A further increase in nutrition support to enteral tube feeding or parenteral feeding was recommended if at least 75% of the daily caloric and protein targets could not be reached through oral feeding within 5 days
- On discharge from hospital, patients received dietary counselling and, if indicated, a prescription for oral nutrition supplements in the outpatient setting.

Patients in the control group (n=1038) received standard hospital food according to their ability and desire to eat, with no nutrition consultation and no recommendation for additional nutritional support.

WHO was involved in the initiative?

Specialist dietitians.

WHERE did the initiative occur?

The inpatient setting at eight secondary and tertiary care hospitals, Switzerland.

WHO was the target of the initiative?

Adult medical patients (≥ 18 years) at nutritional risk (NRS score ≥ 3 points) and with an expected length of hospital stay of more than 4 days.

WHEN was the initiative undertaken?

During and after admission to hospital.

<p>HOW was the initiative undertaken?</p>	<p>A multicentre, randomized controlled trial.</p>
<p>OUTCOMES</p>	<p>By 30 days, 232 (23%) patients in the intervention group experienced an adverse clinical outcome, compared with 272 (27%) of 1013 patients in the control group (adjusted odds ratio [OR] 0.79 [95% CI 0.64–0.97], p=0.023).</p> <p>A secondary analysis of patients with a main admission diagnosis of cancer (n=506) found in the 30-day follow-up period, 50 patients (19.9%) died in the control group compared to 36 (14.1%) in the intervention group resulting in an adjusted odds ratio of 0.57 (95% CI 0.35-0.94; P = 0.027).</p> <p>Compared to usual hospital nutrition (without nutrition support), individualised nutrition support reduced the risk of mortality and improved functional and quality of life outcomes in cancer patients with increased nutritional risk.</p> <p>These findings strongly support systematic nutrition risk screening on admission to hospital, followed by a nutrition assessment and introduction of individualised nutrition support in patients at risk.</p>
<p>REFERENCE</p>	<p>Schuetz P et al. Individualised nutritional support in medical inpatients at nutritional risk: a randomised clinical trial. <i>Lancet</i>. 2019 Jun 8;393(10188):2312-2321. doi: 10.1016/S0140-6736(18)32776-4.</p> <p>Bargetzi L et al. Nutritional support during the hospital stay reduces mortality in patients with different types of cancers: secondary analysis of a prospective randomized trial. <i>Ann Oncol</i>. 2021 Aug;32(8):1025-1033. doi: 10.1016/j.annonc.2021.05.793.</p>