

Call for Evidence on the EU Initiative “A comprehensive approach to mental health”

MNI feedback with full scientific references & List of evidence

Brussels, 15 February 2023

MNI feedback to the consultation with full references

Nutritional care – including malnutrition screening – should be part of the support to people with mental and neurological disorders.

Disease-related malnutrition - in this context simply referred to as “malnutrition” - occurs when patients are not able to meet their nutritional needs via the normal diet due to diseases, ageing and/or side-effects of medical treatment. It is common across a variety of patient groups, e.g., in patients with cancer, gastrointestinal, respiratory, and neurological disease. Patients with neurological conditions or following a stroke may not be able to swallow or feed themselves.

Malnutrition is found to be common in people with intellectual disability and mental health problems with prevalence of underweight or of malnutrition risk of approximately 19%^{1,2}. As much as a third of psychiatric patients are at risk of malnutrition.³

A study⁴ it was found that the prevalence of malnutrition and its risk in patients in mental health units differed with different diagnoses:

- ~ 12.5% in patients with bipolar disorder;
- ~ 21.1% in patients with schizophrenia;
- ~ 55.6% in patients with major depression.

Malnutrition is a condition that affects 33 million people in Europe, and it costs an estimated €170 billion a year to European countries⁵. **Malnutrition impacts individuals at all stages of life, from infancy to old age.** It has a negative impact on growth and development impairment in children⁶. In a dedicated study⁷ on malnutrition screening in hospitalised children, the highest prevalence of chronic malnutrition was seen in children with neurological disease (31%). Being at risk of malnutrition causes a higher severity of symptoms and lower functioning. It has been recognised that the nutritional status has an impact on recovery from illness, mortality and treatment complications, such as length of hospital stays and the rate of readmissions.³

¹ [Bhaumik S, Watson JM, Thorp CF, Tyrer F, McGrother CW. Body mass index in adults with intellectual disability: distribution, associations and service implications: a population-based prevalence study. J Intellect Disabil Res 2008; 52\(Pt 4\):287-298.](#)

² [Russell C, Elia M. Nutrition Screening Week in the UK and Republic of Ireland in 2011. Hospitals, care homes and mental health units. Redditch, BAPEN. 2012. Ref Type: Report](#)

³ [Risch L, Hotzy F, Vetter S, Hiller S, Wallimann K, Seifritz E & Mötteli S. Assessment of Nutritional Status and Risk of Malnutrition Using Adapted Standard Tools in Patients with Mental Illness and in Need of Intensive Psychiatric Treatment. International.](#)

⁴ [Tsai AC, Chou YT, Chang TL. Usefulness of the Mini Nutritional Assessment \(MNA\) in predicting the nutritional status of people with mental disorders in Taiwan. J Clin Nurs 2011; 20\(3-4\):341-350.](#)

⁵ [Ljungqvist O, de Man F. Under nutrition - a major health problem in Europe. Nutr Hosp 2009; 24\(3\): 368-70.](#)

⁶ [Elia M, Russell C. Combating Malnutrition: Recommendations for action. Report from the Advisory Group on Malnutrition, Led by BAPEN. Redditch, 2009.](#)

⁷ [Joosten KF, Zwart H, Hop WC, Hulst JM. National malnutrition screening days in hospitalised children in The Netherlands. Arch Dis Child 2010; 95\(2\):141-145.](#)

Screening and early nutritional interventions for people with mental disorders is a key element of effective care: in particular, the nutritional support of those who are neurologically impaired should be addressed since the early stages of the disease.

The nutrition care of children who are neurologically impaired is a challenge for the nutrition care team: many factors should be considered in the assessment and development of a nutrition plan. For optimal care, management should be done by a multidisciplinary team including a registered dietitian. Improved nutrition status results in improved health outcomes.⁸ Many children with neurological impairment would benefit from individual nutritional assessment and management as part of their overall care⁹. The risk of malnutrition has been completely neglected to date.³ Stronger EU guidance is required to address persistent inconsistencies in malnutrition screening across Europe. Screening a patient for malnutrition takes only a few minutes, using tools validated by scientific societies¹⁰.

Optimal nutritional care can provide improvements in functional measures and quality of life of people with mental disorders¹¹.

Routine assessment of patients' nutritional status should be established as part of the treatment. Where patients are unable to sufficiently feed themselves, medical nutrition¹² - to be used under medical supervision - allows them to sustain themselves during treatment, leading to better outcomes.

List of scientific evidence - with hyperlinks - in relation to nutritional interventions in mental health-related disorders

- [ESPEN guideline clinical nutrition in neurology, Clinical Nutrition 37 \(2018\) 354e396](#)
- [Bhaumik S, Watson JM, Thorp CF, Tyrer F, McGrother CW. Body mass index in adults with intellectual disability: distribution, associations and service implications: a population-based prevalence study. J Intellect Disabil Res 2008; 52\(Pt 4\):287-298.](#)
- [Russell C, Elia M. Nutrition Screening Week in the UK and Republic of Ireland in 2011. Hospitals, care homes and mental health units. Redditch, BAPEN. 2012. Ref Type: Report](#)
- [Risch L, Hotzy F, Vetter S, Hiller S, Wallimann K, Seifritz E & Mötteli S. Assessment of Nutritional Status and Risk of Malnutrition Using Adapted Standard Tools in Patients with Mental Illness and in Need of Intensive Psychiatric Treatment. International.](#)

⁸ [Mascarenhas MR, Meyers R, Konek S. Outpatient nutrition management of the neurologically impaired child. Nutr Clin Pract 2008; 23\(6\):597-607.](#)

⁹ [Sullivan PB, Juszczak E, Lambert BR, Rose M, Ford-Adams ME, Johnson A. Impact of feeding problems on nutritional intake and growth: Oxford Feeding Study II. Dev Med Child Neurol 2002; 44\(7\):461-467.](#)

¹⁰ E.g., the Global Leadership Initiative on Malnutrition (GLIM): [de van der Schueren MAE, Keller H; GLIM Consortium; Cederholm T, Barazzoni R, Compher C, Correia MITD, Gonzalez MC, Jager-Wittenaar H, Pirlich M, Steiber A, Waitzberg D, Jensen GL. Global Leadership Initiative on Malnutrition \(GLIM\): Guidance on validation](#)

¹¹ [Stratton RJ, Green CJ, Elia M. Disease-related malnutrition: an evidence-based approach to treatment. 2003. Wallingford: CABI Publishing.](#)

¹² Medical nutrition encompasses specialised products for nutritional therapy: Oral Nutritional Supplements, Enteral Tube Feeding (via the gastrointestinal tract), and Parenteral Nutrition (intravenous feeding). Medical Nutrition helps patients of all ages to address nutritional insufficiencies arising from a disease, disorder or condition, when they are unable to meet their requirements via normal foods. Medical Nutrition products are to be used under medical supervision. Depending on the situation medical nutrition may be required for short or long term or even for life and may be administered in diverse healthcare settings or at home.

- [Tsai AC, Chou YT, Chang TL. Usefulness of the Mini Nutritional Assessment \(MNA\) in predicting the nutritional status of people with mental disorders in Taiwan. J Clin Nurs 2011; 20\(3-4\):341-350.](#)
- [Ljungqvist O, de Man F. Under nutrition - a major health problem in Europe. Nutr Hosp 2009; 24\(3\): 368-70.](#)
- [Elia M, Russell C. Combating Malnutrition: Recommendations for action. Report from the Advisory Group on Malnutrition, Led by BAPEN. Redditch, 2009.](#)
- [Joosten KF, Zwart H, Hop WC, Hulst JM. National malnutrition screening days in hospitalised children in The Netherlands. Arch Dis Child 2010; 95\(2\):141-145.](#)
- [Mascarenhas MR, Meyers R, Konek S. Outpatient nutrition management of the neurologically impaired child. Nutr Clin Pract 2008; 23\(6\):597-607.](#)
- [Kuperminc MN, Stevenson RD. Growth and nutrition disorders in children with cerebral palsy. Dev Disabil Res Rev. 2008;14\(2\):137-46. doi: 10.1002/ddrr.14. PMID: 18646022; PMCID: PMC2830751.](#)
- [Sullivan PB, Juszczak E, Lambert BR, Rose M, Ford-Adams ME, Johnson A. Impact of feeding problems on nutritional intake and growth: Oxford Feeding Study II. Dev Med Child Neurol 2002; 44\(7\):461-467.](#)
- [de van der Schueren MAE, Keller H; GLIM Consortium; Cederholm T, Barazzoni R, Compher C, Correia MITD, Gonzalez MC, Jager-Wittenaar H, Pirlich M, Steiber A, Waitzberg D, Jensen GL. Global Leadership Initiative on Malnutrition \(GLIM\): Guidance on validation](#)
- [Stratton RJ, Green CJ, Elia M. Disease-related malnutrition: an evidence-based approach to treatment. 2003. Wallingford: CABI Publishing.](#)
- [Huynh DT, Devitt AA, Paule CL et al. Effects of oral nutritional supplementation in the management of malnutrition in hospital and post-hospital discharged patients in India: a randomised, open-label, controlled trial. J Hum Nutr Diet. 2015; 28:331-343.](#)
- [Allen VJ, Methven L, Gosney MA. Use of nutritional complete supplements in older adults with dementia: systematic review and meta-analysis of clinical outcomes. Clin Nutr 2013; 32:950-957.](#)
- [Manders M, De Groot LC, Hoefnagels WH, Dhonukshe-Rutten RA, Wouters-Wesseling W, Mulders AJ, Van Staveren WA. The effect of a nutrient dense drink on mental and physical function in institutionalized elderly people. J Nutr Health Aging. 2009 Nov;13\(9\):760](#)
- [Hsiao CC, Tsai ML, Chen CC, Lin HC. Early optimal nutrition improves neurodevelopmental outcomes for very preterm infants. Nutr Rev. 2014 Aug;72\(8\):532-40. doi: 10.1111/nure.12110. Epub 2014 Jun 17. PMID: 24938866.](#)
- [Boland K, Maher N, O'Hanlon C, O'Sullivan M, Rice N, Smyth M, Reynolds JV. Home enteral nutrition recipients: patient perspectives on training, complications and satisfaction. Frontline Gastroenterol. 2017 Jan;8\(1\):79-84. doi: 10.1136/flgastro-2016-100736](#)
- [Stephens BE, Walden RV, Gargus RA, Tucker R, McKinley L, Mance M, Nye J, Vohr BR. First-week protein and energy intakes are associated with 18-month developmental outcomes in extremely low birth weight infants. Pediatrics. 2009 May;123\(5\):1337-43. doi: 10](#)
- [Aeberhard C, Leuenberger M, Joray M, Ballmer PE, Mühlebach S, Stanga Z. Management of Home Parenteral Nutrition: A Prospective Multicenter Observational Study. Ann Nutr Metab. 2015;67\(4\):210-7. doi: 10.1159/000440683. Epub 2015 Sep 30. PMID: 26418158.](#)

- [Pawellek I, Dokoupil K, Koletzko B. Prevalence of malnutrition in paediatric hospital patients. Clin Nutr. 2008 Feb;27\(1\):72-6. doi: 10.1016/j.clnu.2007.11.001. Epub 2007 Dec 20. PMID: 18086508.](#)
- [Nelson KE, Lacombe-Duncan A, Cohen E, Nicholas DB, Rosella LC, Guttman A, Mahant S. Family Experiences With Feeding Tubes in Neurologic Impairment: A Systematic Review. Pediatrics. 2015 Jul;136\(1\):e140-51. doi: 10.1542/peds.2014-4162. PMID: 26122806.](#)
- [Boland K, Maher N, O'Hanlon C, O'Sullivan M, Rice N, Smyth M, Reynolds JV. Home enteral nutrition recipients: patient perspectives on training, complications and satisfaction. Frontline Gastroenterol. 2017 Jan;8\(1\):79-84. doi: 10.1136/flgastro-2016-100736](#)
- [Diamanti A, Di Ciommo VM, Tentolini A, Lezo A, Spagnuolo MI, Campanozzi A, Panetta F, Sole Basso M, Elia D, Gambarara M. Home enteral nutrition in children: a 14-year multicenter survey. Eur J Clin Nutr. 2013 Jan;67\(1\):53-7. doi: 10.1038/ejcn.2012.184. Ep](#)
- [MNI Medical Nutrition Dossier "Better care though better nutrition: value and effects of medical nutrition" \(February 2018\)](#)
- [MNI Infographic on Malnutrition \(April 2020\)](#)