

PMB

Definition Guideline for Medical Nutrition Therapy (MNT)

60%

of nutritional requirement
as evaluated by a dietitian.



Disclaimer:

This MNT benefit definition guideline has been developed for most patients who require standard care. These benefits may not apply to all patients, especially those with complex presentations or comorbidities. Section 15(H) and 15(I) should be applied to beneficiaries who are inadequately managed by the defined benefit.

This guideline provides recommendations for:

- Assessment and diagnosis
- Indications for nutrition support
- Nutrition intervention
- Monitoring of nutrition support

Executive Summary

The legislation governing the provision of the Prescribed Minimum Benefits (PMBs) is contained in the Regulations enacted under the Medical Schemes Act, 1998 (Act No. 31 of 1998). It has become clear that medical scheme beneficiaries find it difficult to fully know their entitlements in advance. In addition, medical schemes interpret these benefits differently, resulting in a lack of uniformity of benefit entitlements. The guideline covers the assessment, diagnosis, treatment, and management of various PMB conditions with respect to medical nutrition therapy.

Furthermore, the guideline aims to define the Prescribed Minimum Benefits (PMBs) for Medical Nutrition Therapy (MNT) and to make recommendations and suggestions to enhance the overall care of individuals. The primary objective of the PMB definition guideline is to:

- Provide clear, comprehensive descriptions of the benefits, in terms of the provisions of the PMB regulations of the Medical Schemes Act, No. 131 of 1998 and
- Improve clarity in the funding decisions by medical schemes; and ensure protocols and algorithms developed by medical schemes are developed on best available clinical practice guidelines.

This guideline is based on the best available evidence (safety, efficacy, effectiveness, and economic aspects) and clinical practice knowledge of Medical Nutrition Therapy. Our recommendations were gathered by technical experts, healthcare professionals and the medical schemes industry. **Therefore, this Guideline should be read in conjunction with the supplementary information included in [Annexure A](#) to this guideline.** This PMB Definition Guideline was developed as a policy prescript in line with Section 15 (A) to (I) of the Medical Schemes Act, 131 of 1998, for the development of protocols and formularies, and should be viewed as such.

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ABBREVIATIONS

BMI	-	Body Mass Index
CAC	-	Clinical Advisory Committee
CMS	-	Council for Medical Schemes
COPD	-	Chronic Obstructive Pulmonary Disease
DKA	-	Diabetic ketoacidosis
DRM	-	Disease-related Malnutrition
DTPs	-	Diagnosis Treatment Pairs
EN	-	Enteral Nutrition
FSMP	-	Food for Special Medical Purposes
ICD	-	International Statistical Classification of Diseases and Related Health Problems
MAM	-	Moderate acute malnutrition
MNT	-	Medical Nutrition Therapy
MUAC	-	Mid upper arm circumference
ONS	-	Oral Nutrition Supplementation
PEG/PEJ	-	Percutaneous Endoscopic Gastrostomy/Percutaneous Endoscopic Jejunostomy
PEM	-	Protein Energy Malnutrition
PMB	-	Prescribed Minimum Benefit
PN	-	Parenteral Nutrition
SAM	-	Severe acute malnutrition
WFA	-	Weight-for-age
WFH	-	Weight-for-height
WFL	-	Weight-for-length

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1. Assessment and Diagnosis

1.1. General considerations

- 1.1.1. All Forms of MNT are considered and encompass tailored dietary interventions based on the patient's specific medical and nutritional needs. MNT is recognised as a key part of treatment for certain chronic and acute conditions.
- 1.1.2. The dietitian is responsible for diagnosing nutrition-related conditions, prescribing suitable MNT, and ensuring its effective implementation.
- 1.1.3. Regular monitoring of the patient's progress is a core component of care.
- 1.1.4. MNT is designed to address the unique nutritional requirements of patients of all ages, from infants to adults.
- 1.1.5. PMB Conditions are defined medical conditions for which medical schemes must provide minimum treatment as per the Medical Schemes Act of 1998
- 1.1.6. PMB entitlements guarantee access to comprehensive Medical Nutrition Therapy (MNT).
- 1.1.7. All forms of MNT relevant to the patient's condition are included. This ensures that no medically necessary nutritional intervention is excluded.
- 1.1.8. A minimum number of consultations with a registered dietitian is mandated. These are essential for:
 - Assessment: Evaluating the patient's nutritional and health status.
 - Diagnosis: Identifying nutrition-related issues or deficiencies linked to the PMB condition.
 - Prescription: Developing a tailored nutrition plan.
 - Implementation: Guiding and supporting the patient through the therapy.
 - Monitoring: Tracking progress and making adjustments to the plan as necessary.
- 1.1.9. This provision underscores the critical role of MNT in the management of PMB conditions and ensures that patients receive adequate professional support for improved health outcomes.
- 1.1.10. An assessment and diagnosis process for malnutrition and the risk of malnutrition, with an emphasis on early identification and ongoing screening is important.

1.2. Screening for Malnutrition and Risk of Malnutrition (see detail in Annexure A.)

- 1.2.1. Early detection of patients at risk of nutritional depletion is critical, facilitates timely support and ensures optimal use of healthcare resources, while resulting in better health outcomes.
- 1.2.2. Nutrition screening is a preliminary assessment aimed at identifying risks of malnutrition or existing malnutrition.
- 1.2.3. Screening should be part of care at all levels (hospitals, clinics, general practices) and it must be conducted by healthcare professionals with appropriate training and skills.
- 1.2.4. Hospital inpatients should be screened upon admission and reassessed weekly or when clinically indicated. Outpatients should be screened on the first visit to a primary healthcare practitioner and repeated when clinical concern arises.

1.3. Screening in General Practice and Specific Scenarios

- 1.3.1. Conduct screening at initial interaction with healthcare and repeat screening when there are clinical concerns or changes to medical condition.
- 1.3.2. Screening may trigger referrals to dietitian for more comprehensive nutritional assessment, which could include evaluation of :
 - Physical signs: unintentional weight loss, fragile skin, poor wound healing, wasted muscles.
 - Behavioural/sensory issues: poor appetite, altered taste, impaired swallowing.
 - Other indicators: altered bowel habits, loose-fitting clothes, or prolonged illness.
- 1.3.3. Assessments should include:
 - Body Mass Index (BMI): a measure of weight relative to height.
 - Unintentional weight loss: percentage lost and duration over which it occurred.
 - Nutrient intake: reduced intake and likelihood of future impairment.
 - Clinical criteria impacting on nutrient assimilation or intake.
 - Body composition and
 - Biochemical and metabolic indicators.
- 1.3.4. Criteria for Initiating Nutritional Support should be provided to individuals identified as malnourished or at risk for malnutrition due to contributing clinical criteria.

Malnutrition is generally defined by meeting any of the following criteria:

 - Low Body Mass Index (BMI):
 - A BMI of less than 18.5 kg/m² indicates severe undernutrition and warrants immediate nutritional intervention.

- Significant Unintentional Weight Loss (UWL) which is defined as weight loss exceeding 5% of body weight within the past 3 months highlights a serious nutritional deficit and
- Specific growth faltering criteria in babies and children according to standardised growth and development charts.
- Combination of low BMI and weight loss which is defined as a BMI below 20 kg/m² combined with unintentional weight loss greater than 5% of body weight within the last 3 to 6 months also qualifies as a criterion for intervention.
- Additional or alternative criteria as pertinent to specific diagnoses, as defined in detail in [Annexure A](#).

1.4. Referral to Dietetic Care

- Individuals meeting the above criteria should be referred to dietetic care services immediately for comprehensive evaluation and management.

2. Indications for Nutrition Support

2.1. Entry Criteria for Nutritional Support for PMB Conditions

- 2.1.1. MNT is covered under PMBs as described in this Guideline. It applies both to cases with PMB Conditions, where MNT is automatically indicated, and cases requiring individual evaluation based on universal criteria outlined in detail in [Annexure A](#).
- 2.1.2. Diagnosis of specific PMB conditions necessitates MNT upon referral by a healthcare professional, as nutritional interventions are essential to managing these conditions.

2.2. Conditions Automatically Requiring MNT

- 2.2.1. Malnutrition (DTP 236K; ICD-10 E40-E46).
- 2.2.2. Congenital Metabolic Abnormalities (DTP 901K): Includes conditions affecting carbohydrate, lipid, protein, and amino acid metabolism (all ICD-10s in this category).
- 2.2.3. Inborn Errors of Liver Metabolism (DTP 911G): Includes ICD-10 codes such as E70.2, E70.9, E72.0, E72.2–E72.5, E72.8–E74.9, and E77.0–E77.8.
- 2.2.4. Anorexia Nervosa and Bulimia Nervosa (DTP 908T; ICD-10 F50.0–F50.3).

2.3. Universal Entry Criteria for MNT

2.3.1. If MNT is not automatically indicated, the following criteria guides its initiation with reference to [Annexure A](#):

2.3.2. Clinical identifiers for Paediatric patients:

- Anthropometric measurements:
- Weight-for-height/length Z-score below -2 SD.
- Height/length-for-age below -2 SD.
- Mid-upper arm circumference (MUAC) below age-specific thresholds.
- BMI-for-age below -2 SD or above the 98th percentile.

2.3.3. Growth Chart Trends:

- Weight loss or decline across two percentile lines in growth charts.

2.3.4. Birth History:

- Premature birth (<37 weeks) or birth weight categories:
 - Low Birth Weight (<2500g)
 - Very Low Birth Weight (<1500g)
 - Extremely Low Birth Weight (<1000g).

2.3.5. MNT-indicated diagnoses:

- Conditions requiring primary or adjunctive treatment through MNT.

2.4. Clinical Identifiers for Adult Patients

2.4.1. A significant clinical indicator is unintentional weight loss, defined as a reduction of 5% or more from an individual's typical body weight over a specified of time. This percentage should be assessed relative to the patient's baseline weight.

2.4.2. Protein-Energy Malnutrition (PEM) can be assessed using Body Mass Index (BMI) and other clinical indicators.

2.4.3. A decrease in muscle mass (which can be checked through imaging techniques or physical assessments).

2.4.4. MUAC (Mid-Upper Arm Circumference) of less than 22 centimetres for females indicates a risk of malnutrition and for males, a measurement of less than 23

centimetres signals potential malnutrition concerns. These thresholds identify standardised malnutrition cut-offs and identify individuals who may require further evaluation or intervention.

2.4.5. For females, a body fat percentage below 14% is considered dangerously low. For males, a body fat percentage below 8% falls into the same category of dangerously low body fat. It would be unusual that these body fat percentages occur in well-nourished individuals.

2.4.6. Indicators of sarcopenia include measuring handgrip strength, which is a key objective measure of muscle function. For older adults, a handgrip strength of less than 27 kilograms for males or less than 16 kilograms for females is often considered a significant indicator of sarcopenia.

2.4.7. Pregnancy-Specific Indicators (PSI) include:

- The mid-upper arm circumference is a valuable anthropometric measure utilised to assess the nutritional status of pregnant women. A MUAC measurement of less than 23 centimetres indicates a potential risk of undernutrition. This screening tool assists healthcare professionals in identifying individuals who may require further nutritional evaluation and intervention, as adequate nutrition is paramount for the optimal growth and development of the foetus.
- The identification of biochemical or clinical evidence of micronutrient deficiencies is critical during pregnancy. Deficiencies in essential nutrients, such as iron, folate, and vitamin D, can be determined through laboratory analysis or observable clinical signs. These micronutrients are vital for preventing complications such as anaemia, neural tube defects, and bone health issues. Timely intervention to address any deficiencies is essential to safeguard the health of both the mother and the developing foetus.
- The monitoring of weight gain throughout pregnancy serves as an important indicator of maternal and foetal health. An inadequate total weight gain of less than 11.5 kilograms or a rate of less than 1 kilogram per month during the first trimester may suggest insufficient caloric and nutritional intake. Adequate weight gain is essential, as it is associated with improved pregnancy outcomes, including reduced risks of low birth weight and premature delivery.
- Excessive weight gain during pregnancy presents its own set of risks. Weight gain exceeding 16 kilograms may indicate poor dietary management. Evaluating weight gain in conjunction with pre-pregnancy BMI provides critical insights into maternal

health status. Continuous monitoring enables healthcare providers to offer tailored guidance to mitigate health risks effectively.

- These indicators are crucial for healthcare practitioners to monitor throughout the duration of pregnancy, ensuring the well-being of both the mother and the infant.
- Nutrient-impacting conditions are various factors and health conditions that can adversely affect the body's ability to take in and absorb essential nutrients. They may also lead to increased losses of vital nutrients, ultimately hindering overall health and nutritional status.

3. Nutrition Intervention

3.1. General considerations

3.1.1. Qualified healthcare professionals trained in nutrition support must ensure the following:

- Nutrient intake addresses energy, protein, fluid, electrolyte, micronutrient, and fibre needs.
- Considers the patient's clinical condition, activity levels, and risks like metabolic instability or refeeding syndrome and
- Tailors support based on gastrointestinal tolerance and the likely duration of MNT.

3.1.2. MNT is flexible and adaptable across various clinical environments. The guidance outlines key aspects of its delivery. MNT can be implemented across all care levels, including:

- Hospitals (all levels of care).
- Stepdown facilities.
- Rehabilitation centres.
- Residential facilities.
- Outpatient clinics and
- Home care settings.

3.1.3. Delivery modalities of MNT Includes all routes of nutritional support, such as:

- Oral Nutritional Supplementation
- Enteral Nutrition (via feeding tubes)
- Parenteral Nutrition (intravenous feeding)

- 3.1.4. Enteral and parenteral nutrition can be safely administered at home or within "hospital-at-home" programs under the supervision of dietitians. Clinical and ethical considerations guide the appropriateness of this approach.
- 3.1.5. Home parenteral nutrition: although required for a small subset of patients, home parenteral nutrition aligns with the standards of care available in public sector or tertiary hospitals. This option is typically reserved for specific, complex cases.
- 3.1.6. Patients should not be kept in the hospital solely for Medical Nutrition Therapy (MNT) delivery whenever possible as home-based MNT reduces healthcare costs by minimising hospital stays and also enhances patient comfort, lowers stress levels, and promotes recovery in a familiar environment.
- 3.1.7. Therapeutic interventions can be delivered through:
- Individual sessions: personalized one-on-one counselling and monitoring.
 - Group sessions: counselling or therapy in a group setting for shared learning and support.

3.2. Comprehensive Nutritional Adequacy Assessment

- 3.2.1. The total nutrient intake should encompass and balance contributions from all possible sources, including:
- Dietary Intake: regular food and oral fluids.
 - Oral Nutritional Supplements (ONS): fortified products to boost intake.
 - Enteral Nutrition: feeding through a tube (e.g., nasogastric, gastrostomy).
 - Parenteral Nutrition: intravenous feeding for patients who cannot use their gastrointestinal tract and
 - Intravenous Fluids: electrolyte and hydration support where needed.

3.3. Addressing Nutritional Requirements

- 3.3.1. Healthcare professionals should customise MNT to address the following requirements:
- Caloric intake to match or exceed energy expenditure.
 - Protein level adequate for maintaining or restoring muscle mass and overall tissue repair.
 - Micronutrients needed, including all essential vitamins and trace elements critical for metabolic and physiological functions.
 - Fluids to maintain hydration and electrolyte balance.

- Fibre to address gastrointestinal health and support normal bowel function and
- Electrolytes and minerals to ensure stability in conditions like catabolism or pyrexia.

3.3.2. In addition, healthcare professionals should consider:

- Underlying Clinical Conditions to adjust nutrient delivery for specific conditions, such as metabolic stress, infections, or chronic diseases.
- Activity levels of patients to adapt energy and protein provision to the patient's physical activity or mobility.
- Gastrointestinal tolerance to monitor for issues like nausea, diarrhoea, or intolerance to feeding.
- Complications such as refeeding syndrome, characterized by metabolic instability when reintroducing nutrition to malnourished patients and
- Duration of support to plan for the likely period of MNT, balancing short-term and long-term nutritional goals.

3.4. Criteria for Routes of MNT Delivery

3.4.1. The delivery method for MNT depends on the patient's clinical condition, nutritional needs, and the feasibility of meeting those needs through various routes.

3.4.2. The following summarizes criteria for each mode of MNT:

- Combination or transition of routes (Sequential or Combined Delivery): Patients may benefit from transitioning between or using multiple MNT methods simultaneously, as clinically indicated (e.g., oral diet with enteral feeding).
- Food-based MNT (Therapeutic Diets) should be suitable for patients who can meet their nutritional needs through food with dietary modifications (content, composition, or pattern), as guided by dietetic professionals.

3.4.3. Oral Nutrition Supplementation (ONS) complements regular oral diets under the following conditions:

Eligibility:

- Patients meet general or disease-specific entry criteria for MNT.
- Oral intake alone provides <60% of nutritional requirements.

Other Indications:

- Texture or consistency of intake requires significant modification.
- Need for Food for Special Medical Purposes (FSMP) (e.g., hydrolysed formulas).
- No contraindications to oral or liquid food intake.

3.4.4. Enteral Nutrition (EN) is indicated for patients who:

- Meet entry criteria for MNT and fail to meet at least 60% of nutritional needs orally due to increased requirements.
- Symptoms such as dysphagia or oral mucositis.
- Unsafe or impossible oral intake (e.g., structural/mechanical issues, reduced consciousness).
- Require FSMP products unsuitable for oral administration (e.g., malabsorption syndromes).

3.4.5. Feeding can be administered through nasogastric tubes, into the stomach, or nasojejunal tubes that extend from the nose to the jejunum (the middle section of the small intestine).

3.4.6. Additionally, jejunostomy tubes involve surgical placement directly into the jejunum, while PEG (Percutaneous Endoscopic Gastrostomy) and PEJ (Percutaneous Endoscopic Jejunostomy) tubes are placed through the abdominal wall into the stomach or jejunum, respectively.

3.4.7. The choice of feeding tube is based on several factors, including the anticipated duration of the feeding regimen, the patient's condition, and specific clinical needs. Optimal site selection is essential to ensure effective nutrient delivery and minimize the risk of complications.

3.4.8. Outpatient enteral nutrition is a viable option for patients who are medically stable and do not require constant supervision or intensive medical intervention. This setting allows for greater flexibility and comfort, as patients can receive necessary nutritional support while remaining in their own environment.

3.4.9. Hospitalisation solely for the administration of enteral nutrition is generally not advisable, unless patients have additional medical needs that necessitate inpatient care.

3.4.10. PN is reserved for cases where the gastrointestinal tract is nonfunctional or inaccessible. Indications include:

- All patients for which entry criteria for MNT have been met.
- GI dysfunction or contraindications to enteral feeding (e.g., ileus, perforation, toxic megacolon).
- Inability to meet at least 60% of nutritional needs enterally due to symptoms or increased losses (e.g., high-output stoma, intractable diarrhoea)

3.4.11. Central access is recommended for long-term use, making it ideal for patients with extensive nutritional requirements or chronic conditions that need continuous support.

3.4.12. Peripheral access is recommended for short-term use, catering to patients who have lower-volume nutritional needs or are in transitional care.

3.5. Choice of Food for Special Medical Purposes (FSMP) Products

3.5.1. The choice of FSMP is determined by the treating dietitian, based on:

- Clinical appropriateness for the disease or condition.
- Patient-specific factors such as age, nutritional status, and comorbidities (e.g., diabetes, fluid balance, or organ dysfunction).

3.5.2. FSMPs are available for use in inpatient, outpatient, residential care, and home care settings.

3.5.3. Products include unscheduled commercial liquids, semi-liquids, and powders regulated for medical supervision.

3.5.4. FSMPs used as the sole source of nutrition must provide complete macronutrients and micronutrients. In cases where products lack certain nutrients due to composition or clinical application, missing nutrients must be supplemented.

3.5.5. PN classified as a schedule 3/4 medicine. It must also provide a complete range of nutrients, tailored to the patient's needs.

4. Nutrition Support for Specific PMB Conditions

4.1. General considerations

4.1.1. The PMB entitlements for MNT cover both the nutrition therapy itself and the minimum number of dietitian consultations required for assessment, implementation, and monitoring.

4.2. Specified PMB Conditions for which MNT is reimbursable

4.2.1. Pregnancy: Includes antenatal care, hospitalisation, and delivery.

4.2.2. Neurological Conditions: Difficulty in eating, swallowing, or bowel/bladder control due to non-progressive neurological disorders or injuries.

4.2.3. Congenital Conditions: Encephalocele, congenital hydrocephalus.

4.2.4. Epilepsy: Status epilepticus, initial diagnosis, or candidates for neurosurgery.

4.2.5. Nutritional Deficiencies: Iron deficiency, vitamin deficiencies causing life-threatening conditions.

4.2.6. Gastrointestinal Disorders (Paediatric/Adult):

- Neonatal/infant GI abnormalities (e.g., malrotation, atresia).
- Hypoglycaemic coma, diabetic ketoacidosis.
- Gastric or intestinal ulcers with complications.
- Acute diverticulitis, inflammatory bowel disease (acute exacerbations).

4.2.7. Cancer: Specific types such as acute leukaemia, lymphomas, multiple myeloma, chronic leukaemia, and all other cancers.

4.2.8. Organ Dysfunctions:

- Liver conditions (failure, vascular obstruction, metabolic errors).
- End-stage renal disease, acute/chronic pyelonephritis.
- Acute pancreatitis.
- Cardiac conditions (congenital defects, acute/chronic failure).
- Respiratory conditions of newborns.
- Hypertension with life-threatening complications.

4.3. Choice of Food for Special Medical Purposes (FSMP) Products

- 4.3.1. Products include commercial liquids, semi-liquids, and powders, which must be used under medical supervision.
- 4.3.2. Dietitians select FSMPs based on clinical appropriateness for the patient's disease/condition and individual factors such as:
 - Age and nutritional status.
 - Coexisting conditions (e.g., diabetes, fluid imbalance, organ dysfunction).
 - Nutritional composition and chemical complexity.
- 4.3.3. FSMPs are used across various care levels such as Inpatient care, sub-acute facilities and residential and community/home-based care.
- 4.3.4. FSMPs used as the sole nutrition source must meet the full range of macronutrient and micronutrient needs.
- 4.3.5. If specific FSMPs are incomplete, missing nutrients (e.g., vitamins, minerals) must be supplemented appropriately.
- 4.3.6. FSMPs must align with the patient's age and medical and nutritional requirements, accounting for:
 - Disease-specific needs.
 - Concurrent conditions affecting nutrition or metabolism.
- 4.3.7. Parenteral Nutrition (PN) differs from FSMPs and is classified as a Schedule 3 or 4 medicine, requiring a comprehensive nutrient profile tailored to individual needs.

4.4. Nutrition Support for Specific Diagnosis and Conditions: PMB-Specific Conditions

- 4.4.1. Pregnancy: includes antenatal care and delivery requiring hospitalisation.
 - Neurological Disorders: Difficulty in breathing, swallowing, or eating due to conditions like:
 - Non-progressive neurological injuries.
 - Congenital hydrocephalus.
- 4.4.2. Gastrointestinal Disorders includes acute or chronic conditions requiring intensive management, such as:
 - Neonatal GI abnormalities (e.g., malrotation, atresia).
 - Diabetic ketoacidosis or hyperglycaemic emergencies.
 - Acute diverticulitis, inflammatory bowel disease, or GI ulcers with complications.

4.4.3. Cancer: Nutritional support for cancers, including:

- Acute leukaemia, lymphoma, multiple myeloma and all other cancers.
- Organ Dysfunctions: Conditions requiring FSMP or MNT, such as:

4.4.4. Liver failure, biliary atresia.

4.4.5. End-stage renal disease, acute pancreatitis.

4.4.6. Severe cardiac or respiratory compromise.

4.4.7. Diabetes Mellitus: Both Type 1 and Type 2, requiring tailored nutritional interventions.

4.4.8. Trauma and Severe Infections, including:

- Severe burns (>10% of body surface area).
- Anaerobic or metastatic infections.
- Severe head injuries or traumatic fractures.

4.4.9. Mental Health Disorders: Anorexia nervosa and bulimia nervosa. Infections and Chronic Inflammatory Diseases:

- HIV, tuberculosis, and severe rheumatoid arthritis.

4.4.10. Stroke and Cardiovascular Disease:

- Acute or recurrent strokes, and hypertension with complications.

4.5. Diagnosis and Treatment Pairs (DTPs)

4.5.1. Nutrition-Related PMB Level of Care for Pregnancy - Antenatal and Obstetric Care Necessitating Hospitalisation, Including Delivery

NOTE: MNT is reimbursed for in-hospital only, including high care or ICU. This diagnosis category covers several pregnancy complications, including:

- Hyperemesis Gravidarum with Metabolic Disturbance
- Late Vomiting in Pregnancy
- Malnutrition in Pregnancy
- Pre-existing Diabetes Mellitus or Gestational Diabetes
- Pre-eclampsia, Eclampsia, or Hypertension in Pregnancy

- Endocrine, Digestive, Nutritional, and Metabolic Diseases
- Any Complication of Pregnancy, Labour, or Delivery Requiring MNT, such as intubation, ventilation, etc.

The specific ICD-10 Codes include:

- O21.1, O21.2: Hyperemesis gravidarum,
- O25: Malnutrition in pregnancy
- O24.0 - O24.9: Diabetes in pregnancy,
- O10, O11, O14, O15: Pre-eclampsia, Eclampsia, or Hypertension
- O99.2, O99.6: Other complications
- Examples: O29, O71, O72, O74, O75, O89, O98

4.5.2. MNT Specific Interventions

When Oral Intake is possible (typically 2-3 Units per day) any of:

- A fat-free, high-energy sip feed,
- High energy or energy-dense sip feed (with or without fibre),
- High energy or energy dense, moderate/high protein sip feed,
- Semi-elemental sip drink,
- Fat-free clear fluid sip feed with protein,
- Other prescribed products (e.g., for glucose control, gastrointestinal symptoms, or organ dysfunction).
- Equivalent powdered medical nutrition supplements (FSMP) if clinically appropriate.

4.5.3. When Oral Intake is Not Possible (Typically 1-2 Litres per Day) any of

- Standard lactose-free enteral feed (with or without fibre),
- High energy enteral feed (with or without fibre),
- High energy or energy dense, moderate/high protein enteral feed,
- Semi-elemental feed,
- Disease-specific formulas,
- Other prescribed products (e.g., for organ failure, glucose control, gastrointestinal symptoms).
- Equivalent powdered nutritionally complete FSMP if clinically appropriate.

4.5.3. Parenteral Nutrition (when enteral nutrition is not possible):

- Industry-compounded or multi-chamber parenteral nutrition products

- Supplementary micronutrients and trace elements to achieve nutritionally complete MNT.
- Schedules 3 or 4 Medicine: Parenteral Nutrition is Schedule 3 or 4 medicine.

4.6. PMB-specific MNT for Neonates and Infants

4.6.1. General Considerations:

- The National Department of Health policy emphasises the importance of breastfeeding for infant nutrition.
- In instances where breastfeeding is medically contraindicated, impossible, or induces metabolic crises or other clinical conditions, specific FSMP are recommended.
- Ordinary Breastmilk substitutes such as infant formulas are not regulated as FSMP products and do not qualify as prescribed minimum benefits.

4.6.2. DTP and ICD-10 Codes for Neonates and Infants

- 67N: Low birth weight <1000g with respiratory difficulties
- 967N: Low birth weight <2500g and >1000g with respiratory difficulties
- 54N: Necrotising enterocolitis in newborn
- 901N: Congenital systemic infections affecting the newborn.
- 902N: Neonatal endocrine, metabolic, and toxin-induced conditions
- 911G: Life-threatening congenital abnormalities of carbohydrate, lipid, protein, and amino acid metabolism
- P07.0, P07.2: Extremely low birth weight; Extreme prematurity
- P07.1, P07.3: Other low birth weight; Preterm infants
- P77: Necrotising enterocolitis of foetus and newborn
- P35 - P38: Congenital infections and infection in the newborn
- P58 - P59: Neonatal jaundice
- E70.0 - E72.5: Life-threatening congenital metabolic conditions (carbohydrate, lipid, protein, amino acid metabolism)

4.6.3. Care Setting:

- Hospital Care is provided for all conditions, with a potential transition to home care for certain conditions, particularly for those with non-severe issues like neonatal jaundice.

4.6.4. Scope and level of minimum benefits for MNT

- Oral Intake and nutrition indicated as human breastmilk fortifier or donated expressed breastmilk if breastfeeding is impossible or clinically inappropriate.
- FSMP prescribed by dietitian when clinically indicated.
- When oral Intake not possible, nasogastric or orogastric feeds are used when respiratory distress or preterm birth (<34 weeks gestation) prevents sucking.
- Parenteral Nutrition is recommended when enteral or oral nutrition is not possible, especially for conditions like extreme low birth weight, metabolic errors, or life-threatening congenital abnormalities.

4.6.5. Products Provided as PMB Care

Oral or enteral intake possible for conditions such as

- Metabolic errors or Low Birth Weight, highly specific, age- and growth-appropriate FSMP products are provided, designed to address metabolic disorders, nutritional needs, and poor growth development. These may include:
 - FSMP with supplemental energy and other macronutrients in various combinations.
 - FSMP designed for metabolic errors.

Parenteral Nutrition:

- In cases where enteral feeding is not feasible, industry-compounded or multi-chamber parenteral nutrition products are provided, along with supplementary micronutrients and trace elements to ensure complete MNT is recommended.

4.6.6. Dietitian Consultations

- While in the hospital 3-7 consultations per week, depending on the severity of the illness and complexity of the MNT are recommended.
- In malnourished/poor growth it is recommended that monthly follow-up visits occur post hospitalisation
- In instances of normal growth, 3-4 follow-up consultations per year as outpatients are recommended.

4.7. Nutrition-Related PMB Level of Care for Paediatric Conditions Involving Neurological or Developmental Difficulties

4.7.1. General Policy for Paediatric Nutrition in Neurological or Developmental Conditions:

The PMB level of care for paediatric conditions related to neurological or developmental difficulties includes tailored nutritional support, whether in-hospital or at home. The care is adjusted based on the child's condition, feeding ability, and the severity of symptoms such as swallowing or breathing difficulties, seizures, or growth challenges.

4.7.2. Conditions and Diagnosis

DTP 213A: Difficulty in breathing, eating, swallowing, bowel, or bladder control due to non-progressive neurological (including spinal) conditions or injury.

- ICD-10: G81-G82 (Cerebral Palsy)
- 83A: Encephalocele; congenital hydrocephalus
- ICD-10: Q03.8, Q03.9 (Hydrocephalus)
- 902A: Epilepsy (status epilepticus, initial diagnosis, candidate for neurosurgery)
- ICD-10: G40-G41 (Epilepsy)

4.7.3. Nutritional support can be provided in both hospital and home settings, depending on the severity of the condition and the child's specific needs (e.g., requiring shunt surgery or neurosurgery).

4.7.4. Scope and level of minimum benefits

- Oral Intake or Enteral Nutrition is recommended for all conditions (Cerebral Palsy, Hydrocephalus, Epilepsy):
- Oral Intake includes modifications to a diet based on swallowing difficulties, seizure disorder severity, or nutritional needs.
- Enteral Nutrition is recommended for cases where oral intake is insufficient or impossible, enteral nutrition via a nasogastric tube (short-term) or PEG tube (long-term) may be required.
- Thickening Agents (For difficulty swallowing) is recommended to be prescribed when a poor swallow is assessed by a speech therapist.
- FSMP products, such as high energy sip feeds or protein-modified feeds, based on age and needs.

4.7.5. Age-Appropriate Enteral Feeds for hydrocephalus and epilepsy include:

- Standard lactose-free or lactose-containing enteral feeds (with or without fibre)
- High-energy or protein-modified feeds
- Semi-elemental feeds (including partially hydrolyzed formulas)
- Equivalent powdered medical nutrition supplements (FSMP) if clinically appropriate.
- For Epilepsy ketogenic FSMP products high-fat, low-carbohydrate feeds and oil modules tailored to support seizure management, as prescribed based on the specific needs of the child.

4.7.6. Dietitian Consultations

- While in hospital 3-7 consultations per week are recommended, depending on the severity of illness and complexity of MNT.
- For malnourished/poor growth or severe feeding difficulties monthly follow-up consultations are recommended as ambulatory care:
- Normal Growth or Clinically Stable: 1-2 consultations per year as needed.
- For epilepsy during the initial establishment of diet 1 outpatient consultation and 4-6 consultations as follow-up per year, depending on progress and response to dietary changes is recommended.

4.7.7. Products Provided as Part of PMB Care

- For oral and enteral feeding high-energy sip feeds (with or without fibre), high-protein sip feeds, or semi-elemental feeds as age-appropriate for malnourished children.
- Ketogenic feeds for children with epilepsy, including very high-fat, low-carbohydrate feeds, or oil modules (long-chain or medium-chain fats).

5. Nutrition-Related PMB Level of Care for Nutritional Deficiencies and Malnutrition

This section covers the management and nutritional support for both paediatric and adultpatients dealing with life-threatening iron deficiency, vitamin deficiencies, and severe malnutrition, with a particular focus on conditions such as moderate to severe acute malnutrition and life-threatening anaemia.

Conditions and Diagnoses

- 236K: Iron deficiency; vitamin and other nutritional deficiencies – life-threatening
- ICD-10: E41–E46 (Moderate acute malnutrition)
- ICD-10: D50–D52 (Iron deficiency anaemia)
- Severe Acute Malnutrition: ICD-10: E41–E46 (Protein-energy malnutrition)

- Protein-Energy Malnutrition: ICD-10: E41–E46 (All grades of protein-energy malnutrition).

Care Setting

- Home/Community or Hospital (if complicated by medical conditions) are recommended for adult and paediatric patients as clinically indicated.

5.1. Scope and level of minimum benefit

5.1.1. Oral Intake and Enteral Nutrition is recommended for:

- Moderate to Severe Acute Malnutrition: Nutritional counselling, oral intake (or enteral feeding tube if clinically necessary), and supplementation with necessary nutrients.
- Life-Threatening Anaemia and Nutritional Deficiencies:
- For paediatrics and adults: Oral intake with nutritional counselling and dietary modification.
- For severe cases or when oral intake is not possible: Enteral nutrition via nasogastric tube or parenteral nutrition.

5.1.2. Supplementation is recommended for all conditions including patient with deficient nutrients (e.g., iron, vitamins, and minerals), as per clinical protocols.

5.1.3. Products to be Provided as Part of PMB Care;

For Severe Acute Malnutrition (WHO 10 Steps Protocol) which include:

- Ready-to-use therapeutic foods.
- Low lactose, low protein feed (F75)
- High protein feed (F100) for malnourished children
- High energy, lactose-free feed
- Enriched supplementary drink/food.
- Semi-elemental feed for persistent diarrhoea
- Equivalent high energy powdered FSMP supplement
- Combined vitamin and mineral complex for malnourished children
- For Adults and Older Paediatrics (Iron Deficiency, Anaemia):
- Fat-free, high-energy sip feeds
- High energy or energy-dense sip feeds (with or without fibre)
- High energy or high-protein sip feeds
- Semi-elemental sip drink
- Fat-free clear fluid sip feed with protein

- Low electrolyte, low mineral sip feed
- Protein-restricted sip feed
- Powdered medical nutrition supplements (FSMP) if clinically appropriate
- For Enteral Nutrition:
- Standard lactose-free enteral feeds
- High-energy enteral feeds
- Semi-elemental feeds
- Disease-specific formulas

5.1.4. Dietitian Consultations

- While in the hospital 3-7 times per week recommended, depending on the severity and complexity of nutritional management (MNT).
- For severe cases or malnourished children, outpatient visits will be frequent, ranging from 1-4 times per month until catch-up growth parameters are met.

5.1.5. Outpatient Care is recommended for follow-up consultations for chronic malnutrition or poor growth occur monthly until exit criteria (weight-for-height or mid-upper arm circumference) are met, typically after achieving -1 standard deviations in growth measurements.

5.1.6. Exit is recommended at weight-for-height or mid-upper arm circumference of at least 12.5cm or growth reaching -1 SD in paediatrics and for adults as per [Annexure A](#).

5.1.7. Special Consideration for MNT in Malnutrition

- For severe acute malnutrition it is recommended to follow the WHO 10-step management protocol for children.
- In adults and children monitor for potential complications such as fluid and electrolyte imbalances and infection control.

5.1.8. For iron deficiency and Anaemia supplementation with iron and vitamins to restore normal levels, along with appropriate dietary modifications to prevent recurrence.

5.1.9. For protein-energy malnutrition: provide high-energy and protein supplements and monitor progress to ensure that the child or adult reaches optimal growth/anthropometric parameters.

5.2. Nutrition-Related PMB Level of Care for Gastrointestinal Tract (GIT) Conditions

5.2.1. This section outlines the care requirements for paediatric and adult patients with various gastrointestinal (GIT) conditions, including congenital and acquired disorders, and how nutritional management (MNT) is integrated to address these medical conditions.

5.2.2. Conditions and Diagnoses

- 74N: Neonatal and Infant GIT abnormalities (e.g., malrotation, atresia)
 - ICD-10: E84.1 plus P75 (Cystic fibrosis)
- 31K: Hypoglycaemic coma, hyperglycaemia, diabetic ketoacidosis
 - ICD-10: E16.1 - E16.2 (Reactive/alimentary hypoglycaemia)
- 902F: Gastric or intestinal ulcers with haemorrhage or perforation
 - ICD-10: K25–K29, K92 (Peptic ulcer disease, gastritis, other gastrointestinal ulcers with haemorrhage)
- 254F: Acute Diverticulitis of colon
 - ICD-10: K57.2–K27.8 (Diverticulitis)
- 292F: Regional enteritis, Idiopathic Proctocolitis – acute exacerbations and complications
 - ICD-10: K50 (Crohn’s disease), K51 (Ulcerative colitis)
- 41F: Gastrointestinal Fistula
 - ICD-10: K63.1, K63.2
- 6F: Diaphragmatic Hernia
 - ICD-10: K44 (Hernia with obstruction and/or gangrene, uncomplicated hernias under age 18).

5.2.3. Care Setting

- For paediatrics and/or adults-hospital or Home (depending on severity and complexity of condition and care requirements).

5.2.4. Scope and level of minimum benefit for PMB

Oral Intake and Enteral Nutrition:

- If oral intake is insufficient, enteral nutrition may be required
- Nutritional counselling and modification to manage symptoms and aid recovery.
- Oral Nutrition Supplements (ONS) to address energy deficits.

- Enteral Nutrition is recommended when oral intake is insufficient: Enteral nutrition via nasogastric tube (NGT) or other appropriate feeding methods.

Parenteral Nutrition is recommended,

- For patients where enteral nutrition is not possible, such as Gastrointestinal fistula, severe cases of Diverticulitis, Crohn's disease, and Ulcerative colitis.
- Supplementary micronutrients and trace elements are needed to achieve complete nutritional support in PN.

5.2.5. Products to be Provided as Part of PMB Care

For All GIT Conditions

- High energy sip feeds, energy-dense sip feeds (with or without fibre)
- Semi-elemental sip drinks, fat-free clear fluid sip feeds
- Medium-chain triglycerides (MCT)-based products
- Disease-specific formulas such as those with fish oil or arginine if appropriate

For Enteral Nutrition:

- Standard lactose-free enteral feeds
- High-energy or high-protein enteral feeds
- Semi-elemental feeds for patients with malabsorption issues (e.g., Crohn's disease and Ulcerative colitis)

For Parenteral Nutrition:

- Industry-compounded or multi-chamber parenteral nutrition (with micronutrients and trace elements)

5.2.6. For Specific Conditions (e.g., Crohn's Disease, Ulcerative Colitis):

- IBD-specific feeds containing nucleotides and TGF-B2 (for Crohn's patients)
- Glutamine-containing feed
- Other FSMP products as prescribed based on specific patient needs.

5.2.7. Additional Supplementation:

- Oral or enteral glutamine supplements (liquid or powder), prescribed by a dietitian for enhanced gut healing.

5.2.7. Dietitian Consultations

- While in hospital 3-7 times per week, depending on the severity of the condition and complexity of nutritional management (MNT).

- For complex cases, frequent follow-ups with a dietitian are crucial to manage GIT conditions effectively, particularly for those requiring enteral or parenteral nutrition.

5.2.8. Outpatient Care

- Malnourished or significant nutritional problems: 1-2 times per month until stabilised.
- Clinically stable patient 2-4 consultations per year is recommended if required.
- Specific follow-up for conditions like Crohn's disease for nutritional support for recovery and maintenance 1-2 outpatient consultations are recommended as required.

5.2.9. Exit Criteria

- Patients with complex GIT conditions like Crohn's disease and Ulcerative colitis may need follow-ups for managing nutritional status and achieving disease stability.

5.3. Nutrition-Related PMB Level of Care for Cancer (Paediatrics and Adults)

5.3.1. General considerations

- Cancer care requires a comprehensive approach to nutritional management, particularly due to the negative impact that cancer, its treatments (chemotherapy, radiation, surgery), and the development of cancer cachexia can have on nutritional status.
- Early, proactive, and consistent MNT is vital to prevent or manage malnutrition, support treatment, and improve overall outcomes.

5.3.2. Cancer Conditions Requiring MNT

- DTP Codes: Various cancer types, including acute leukaemia's, lymphomas, multiple myeloma, chronic leukaemia's, and other applicable cancers.
- ICD-10 Codes: Applicable for all cancer types: These vary depending on the cancer's site and type.

5.3.3. Key Principles of MNT for Cancer Care

- MNT should be integrated into every stage of cancer care, from diagnosis through to treatment (including surgery, chemotherapy, radiation therapy), and into palliative care where necessary.

- Proactive MNT is essential to prevent progression to cancer cachexia, which is a syndrome of severe weight loss, muscle wasting, and anorexia, often exacerbated by cancer treatments.
- Cachexia can limit or delay the effectiveness of cancer treatment and worsen cancer outcomes. Its prevention relies on early intervention with MNT.

5.3.4. Scope and level of minimum benefits

Oral Intake and/or supplementation is recommended,

- For patients able to maintain oral intake, to enhance the diet to meet energy, protein, and other nutritional needs.
- To support the intake of essential nutrients when dietary intake is inadequate.

Enteral Nutrition is recommended:

- When oral intake is insufficient: Patients who cannot meet their nutritional needs orally should be supported with enteral nutrition (e.g., nasogastric or gastrostomy tubes).

Parenteral Nutrition is recommended:

- For patients unable to tolerate enteral nutrition: In cases where patients cannot receive adequate nutrition via the gastrointestinal tract (due to severe disease, surgery, or complications), parenteral nutrition may be necessary.

5.3.5. Considerations for MNT and Nutrition Support

Depending on nutritional status and risk surgical patients may require:

- Pre-operative carbohydrate loading and nutrition optimisation.
- Peri-operative and post-operative nutrition support.
- Patients Undergoing chemotherapy or radiation require nutrition support using an appropriate route to manage side effects like anorexia, nausea, and weight loss, which can significantly impact treatment outcomes.
- In pre-cachexia (early stage of cachexia) nutrition support is required to prevent progression to full-blown cachexia when symptoms of anorexia and inflammation, but no significant weight loss. Early intervention in Patients with Disease-Related Malnutrition

5.3.6. Nutrition therapy should be tailored to the severity and stage of malnutrition. More frequent consultations for patients with late-stage disease-related malnutrition are required.

5.3.7. Nutritional Products Provided

Oral Nutrition Supplements (ONS)

- Fat-free, high-energy sip feeds (2-3 units/day).
- Energy-dense or high-protein sip feeds with or without fibre, semi-elemental drinks, or clear fluid feeds with protein.
- Medium-chain triglyceride (MCT)-containing products for enhanced absorption.
- Immune-enhancing or disease-specific feeds, such as those with fish oil or arginine.

Enteral Nutrition

- Typically, 1-2 litres per day of standard lactose-free enteral feeds, high-energy feeds, or semi-elemental feeds depending on patient needs.
- Glutamine-containing or immune-enhancing enteral feeds for additional therapeutic support including the prevention and treatment of side-effects of chemoradiation therapy such as oral mucositis and enteritis.

Parenteral Nutrition

- Industry-compounded or multi-chamber parenteral nutrition products with micronutrients and trace elements.

Glutamine Supplementation

- Oral or enteral glutamine supplementation is indicated for patients undergoing gastrointestinal surgery, chemotherapy, or radiation therapy. Typically, 1-3 units (0.3-0.5g/kg daily).

5.3.8. Dietitian Consultations

- While in-hospital 3-7 consultations per week depending on the severity of illness and complexity of MNT.
- Regular assessments to adjust the nutritional plan based on treatment phases and changes in the patient's condition.

5.3.9. Outpatient/Home Care

- Pre-operative nutrition optimisation: consultations typically 1-2 times depending on the patient's nutritional status.
- During ongoing medical interventions (chemotherapy, radiation): Weekly or biweekly consultations for patients with late-stage disease-related malnutrition.

- Early-stage or good nutritional status, 1-2 consultations per month is recommended.
- For patients with cachexia or pre-cachexia, frequent consultations (weekly) for monitoring and adjusting nutritional plans is recommended.
- Post-Treatment Care: Follow-up nutrition consultations to ensure recovery and address any ongoing nutritional deficiencies.

6. Nutrition-Related PMB Level of Care for Organ Dysfunctions (Paediatrics and Adults)

6.1. General Considerations

- Organ dysfunctions and failures can lead to significant metabolic, nutritional, and electrolyte imbalances, which worsen with disease progression or acute complications.
- The nutritional management for patients with organ dysfunction is essential for optimizing their condition, supporting treatment, and improving outcomes.
- Proper Medical Nutrition Therapy (MNT) helps manage these conditions, reduce the risk of complications, and improve the patient's response to complex interventions like organ transplants.

6.2. Diagnoses and Conditions Requiring MNT

Liver Diseases include acute and sub-acute liver disease, liver failure, inborn errors of liver metabolism, biliary atresia, hepatic vascular obstruction, hepatorenal syndrome, and oesophageal varices.

ICD-10 Codes: K72.0, K72.1, K72.9; K70; K71; K74; I85; K76.7.

- Pancreatic Diseases include acute pancreatitis and gallbladder diseases (e.g., calculus of bile duct with cholecystitis): ICD-10 Codes: K80-K83; K85.
- Renal Diseases include acute and chronic kidney failure, including conditions like acute glomerulonephritis, nephritic syndrome, acute pyelonephritis, renal and perinephric abscesses, and hepatorenal syndrome: ICD-10 Codes: N00-N05; N07; N11-N12; N14; N18.5, N18.9.
- Cardiac Diseases include congestive heart disease, cardiomyopathy, heart failure, and congenital heart defects: ICD-10 Codes: I11; I50; Q20-Q26.

- Respiratory Diseases include acute respiratory distress syndrome (ARDS), inhalation and aspiration pneumonia, chronic obstructive pulmonary disease (COPD), asthma, and respiratory distress in newborns: ICD-10 Codes : P22-P25; P28; J43-J45; J80.

6.3. Scope and level of minimum benefit

Oral Intake is recommended:

- For patients who can still manage oral intake, counselling and dietary adjustments are made to address fluid, electrolyte, and metabolic needs.
- Oral Nutrition Supplements (ONS) are recommended for those who cannot meet their nutritional needs through regular food, specific ONS are prescribed to provide extra calories, protein, or other nutrients.

Enteral Nutrition is recommended:

- When oral intake is insufficient or contraindicated: For patients who are unable to take in adequate nutrition orally, enteral nutrition via feeding tubes (e.g., nasogastric or gastrostomy) is provided.

Parenteral Nutrition

- When enteral nutrition is not feasible if enteral feeding is not possible or effective, parenteral nutrition is used to deliver essential nutrients intravenously.

6.4. Products Provided as Part of PMB

Oral Nutrition Supplements (ONS)

- Fat-free, high-energy sip feeds: Typically, 2-3 units per day of high-energy or energy-dense sip feeds, including those with or without fibre.
- High-protein or energy-dense sip feeds: For managing nutritional risks and promoting recovery.
- Semi-elemental sip drinks: To support digestion and absorption when patients have difficulty with standard feeds.
- Medium-chain triglyceride (MCT)-containing feeds: For enhanced energy absorption.
- Disease-specific or branched-chain amino acid-enriched feeds: These are prescribed based on the patient's specific condition or needs.

Enteral Nutrition

- 1-2 litres per day of standard or high-energy enteral feeds: Including options with or without fibre, semi-elemental formulas, and disease-specific formulas tailored for each organ dysfunction.
- Medium-chain triglyceride and branched-chain amino acid feeds: Used for specialized nutritional management based on the specific organ condition.

Parenteral Nutrition

- Industry-compounded or multi-chamber parenteral nutrition: Includes supplementary micronutrients and trace elements to achieve complete MNT when enteral feeding is not possible.

6.5. Consultation with Dietitians

- While in-hospital 3-7 consultations per week depending on the severity of illness and complexity of MNT.
- Dietitians assess nutritional needs and adjust therapy in real time to support the patient's condition.

6.6. Outpatient/Home Care

- Patients who require complex nutritional management should have consultations 1-2 times per month until stabilised.
- For clinically Stable Patients 2-4 consultations per year is recommended if required for ongoing nutrition monitoring and adjustments.

7. Nutrition-Related PMB Level of Care for Chronic Diseases of Lifestyle (CDLs) (Paediatrics and Adults)

7.1. General

- Chronic Diseases of Lifestyle (CDLs) are conditions strongly associated with poor dietary habits, obesity, and physical inactivity.
- Managing these diseases through nutrition-related interventions is critical to preventing complications and optimizing long-term health outcomes.

- Proper Medical Nutrition Therapy (MNT) is central to both the primary and secondary prevention of CDLs and plays a crucial role in reducing the risk of progression to end-stage complications.

7.2. Diagnoses and Conditions Requiring MNT for Chronic Diseases of Lifestyle (CDLs)

- Hypertension include acute life-threatening complications of hypertension, malignant hypertension, renal artery stenosis, and other curable causes of hypertension.
 - ICD-10 Codes: I10-I12; I13; I15.
- Cardiomyopathy
 - ICD-10 Code: I25.5; I42.
- Hyperlipidaemia
 - ICD-10 Codes: E78.0-E78.5 (including elevated cholesterol, triglycerides, or lipid disorders).
- Coronary Artery Disease (CAD) include atherosclerosis, myocardial infarction (heart attack), unstable angina, and acute or subacute ischemic heart disease.
 - ICD-10 Codes: I20-I25; K55.
- Diabetes Mellitus include Type 1 and Type 2 diabetes, including acute or chronic complications such as coma, Diabetic Ketoacidosis (DKA), gastroparesis, and diabetic wounds.
 - ICD-10 Codes: E10; E11; E14; O24.1–O24.3.
- Cerebral Artery Disease and Stroke include stroke due to haemorrhage or ischemia, transient cerebral ischemia, and other life-threatening cerebrovascular conditions.\
 - ICD-10 Codes: I61-I69.

7.3. Scope and level of minimum benefits

- Nutritional Counselling and Education
- MNT plays a crucial role in both primary and secondary prevention of CDLs. The focus is on controlling risk factors like overweight, obesity, and poor dietary habits.
- Education is vital in empowering patients to adopt healthier dietary patterns and behaviours that reduce the risk of complications.
- This can include changes to macronutrient distribution (e.g., reducing sugar intake for diabetes, or reducing saturated fats for hyperlipidaemia), portion control, and modifying sodium intake for hypertension.

7.4. Therapeutic dietary modification

- For patients with established disease, MNT strategies must focus on long-term management rather than just treating individual metabolic parameters (such as glucose or lipid levels). The goal is to achieve a balance that prevents complications while addressing multiple risk factors.
- Dietary plans must be tailored to the individual's disease stage, nutritional status, and any other coexisting risk factors (e.g., obesity, sedentary lifestyle).
- Since many patients with CDLs have entrenched poor habits, behavioural modification may be necessary and should be integrated into the overall MNT.

7.5. FSMP Products for CDLs

- Medical Nutrition Therapy Products (FSMP) are applicable for CDLs only when entry criteria are met, typically when the patient presents with acute or chronic complications (e.g., stroke, diabetic ketoacidosis, or myocardial infarction) or with other PMB conditions requiring specialised nutrition support.

7.6. Consultation with Dietitians

- While in hospital 3-7 consultations per week depending on the severity of the illness and the complexity of MNT. This is typically for acute events (e.g., stroke, myocardial infarction) or during surgical episodes.
- Dietitians may be involved in managing acute complications (e.g., DKA) and adjusting nutrition plans during hospitalisation.

7.7. Outpatient/Home Care

- For patients with advanced disease, multiple risk factors, or those requiring complex nutritional interventions, dietitians will see the patient 1-2 times per month until their condition stabilises.
- Once the patient is clinically stable but still at risk due to lifestyle factors (e.g., obesity, sedentary lifestyle), the dietitian's involvement will be reduced to 360 minutes per year, split across visits at the dietitian's discretion.
- After stabilisation, consultations may continue at a lower frequency of 180 minutes per year, adjusted based on the patient's ongoing needs and the success of their Nutrition Care Plan.

8. Nutrition-Related PMB Level of Care for Eating Disorders (Paediatrics and Adults)

8.1. General

- Eating disorders, such as Anorexia nervosa and Bulimia nervosa, typically involve both psychiatric or psychological therapy and nutritional intervention as core components of treatment.
- Medical Nutrition Therapy (MNT) is crucial for recovery, focusing on restoring nutritional status, addressing malnutrition, and preventing complications like refeeding syndrome.
- The role of dietitians is essential in managing the nutritional aspects of these conditions, especially in the acute stages or during complications.

8.2. Diagnoses and Conditions Requiring MNT

- Anorexia Nervosa
 - ICD-10 Codes: F50.0 (Anorexia nervosa), F50.1 (Atypical anorexia nervosa).
- Bulimia Nervosa
 - ICD-10 Codes: F50.2 (Bulimia nervosa), F50.3 (Atypical bulimia nervosa).

8.3. Scope and level of minimum benefits

Oral Intake

- The primary treatment for anorexia nervosa and bulimia nervosa focuses on nutritional counselling and modification.
- Dietary interventions aim to gradually normalise eating patterns, ensure adequate caloric intake, and address any nutritional deficiencies.
- The patient is educated on the importance of regular meals, balanced nutrition, and appropriate portion sizes. This process is supported by psychiatric or psychological therapy to address the underlying psychological factors influencing eating behaviours.

8.4. Oral Nutritional Supplements (ONS)

- ONS are often indicated but may be resisted by patients, particularly in anorexia nervosa, where there is a strong aversion to food intake.
- High energy or energy-dense sip feeds, high protein sip feeds, or semi-elemental drinks. These products are often required to meet daily nutritional needs, particularly when oral intake alone is insufficient.

- Typically, 2-3 units per day of high-energy sip feeds (with or without fiber), moderate-to-high protein sip feeds, or semi-elemental drinks.

Enteral Nutrition

- Enteral nutrition may be considered if oral intake is insufficient or if life-threatening complications arise (e.g., severe malnutrition or refeeding syndrome).
- Enteral nutrition must be done cautiously and under expert supervision due to the high risk of refeeding syndrome (a potentially fatal condition when nutrition is reintroduced too quickly in severely malnourished patients).

Typical Feeds include:

- Standard lactose-free enteral feed (with or without fibre).
- High-energy enteral feeds.
- Semi-elemental feeds.
- Other FSMP products as prescribed.

8.5. Parenteral Nutrition

- Indication: Parenteral nutrition is a relatively unusual intervention but may be necessary, particularly during life-threatening complications or pregnancy, when enteral nutrition cannot be tolerated.
- Close nutritional and metabolic monitoring is essential due to the potential for refeeding syndrome.
- Industry-compounded or multi-chamber parenteral nutrition products, supplemented with micronutrients and trace elements to ensure nutritionally complete MNT.

8.6. Consultations with Dietitians

- While in hospital 3-7 consultations per week, depending on the severity of the illness and the complexity of MNT.
- During hospitalisation, dietitians monitor the patient's nutritional status closely, adjusting nutrition plans as the patient progresses through treatment.
- Ongoing nutrition therapy is often required long-term, with consultations scheduled 4-12 times per year, depending on factors such as the disorder's duration, the condition's severity, and the patient's nutritional status.
- It is recommended that dietitian consultations totalling 720 minutes be allocated annually and distributed as necessary, based on the dietitian's discretion. These visits can be conducted individually or in group therapy settings.

9. Nutrition-Related PMB Level of Care for Dysphagia (Paediatrics and Adults)

9.1. General considerations

- Dysphagia, or difficulty swallowing, can arise from various conditions, including non-progressive neurological conditions or spinal injuries. The management of dysphagia often requires a multidisciplinary approach, and Medical Nutrition Therapy (MNT) plays a vital role in supporting adequate nutrition and preventing complications such as aspiration pneumonia and malnutrition.
- Diagnosis and conditions for MNT Requirement
 - Dysphagia -ICD-10 Code: R13

9.2. Scope and level of minimum benefits

- Oral Intake is indicated for patients with dysphagia, nutritional counselling is essential.
- Dietitians educate individuals on modifying food textures, meal planning, and strategies for eating to help with swallowing difficulties.
- Thickening agents are often used to modify the texture of liquids, making them easier to swallow and reducing the risk of aspiration.
- When oral intake is insufficient, high-energy, high-protein sip feeds are often used to meet the patient's nutritional needs.
- High-energy sip feeds (with or without fibre), high-protein sip feeds, semi-elemental sip drinks, or fat-free clear fluid sip feeds with protein may be tailored according to specific nutritional needs, such as glucose control, gastrointestinal symptoms, or other organ dysfunctions.
- If oral intake is not possible or sufficient, enteral nutrition (tube feeding) is considered, typically in cases of severe dysphagia or when the patient's swallowing function is impaired.

9.3. Typical Feeds that are recommended include:

- Standard lactose-free enteral feeds, which may be enriched with fibre or energy-dense formulations.
- High-energy enteral feeds or moderate-to-high protein feeds to support nutritional needs.
- Semi-elemental or disease-specific formulas, depending on the patient's condition.

- The product options recommended include nutritionally complete formulas, often referred to as Food for Special Medical Purposes (FSMP), which may be used in either liquid or powdered form.

9.4. PMB Products to Be Provided

- Thickening Agents are recommended to modify liquids to a safer consistency for swallowing.
- Oral Nutritional Supplements (ONS) of typically 2-3 units per day of high-energy or energy-dense sip feeds, moderate-to-high protein sip feeds, or semi-elemental drinks are recommended.
- Alternatively, a fat-free clear fluid sip feed with protein or a product tailored for specific needs (e.g., glucose control, gastrointestinal symptoms).
- Enteral Nutrition is recommended if oral Intake is Insufficient. Typically, 1-2 litres per day of enteral feed, which may be a standard, high-energy, or semi-elemental formulation.
- It is recommended that products are selected based on the patient's condition and nutritional needs.

9.5. Consultations with a Dietitian

- While in-hospital consultations 3-7 times a week depending on the severity of the illness and complexity of MNT which focus on immediate nutritional support, adjusting feeding plans as necessary.
- For ongoing monitoring of nutritional status and therapy, consultations 3-4 times per year is recommended which focus on maintaining nutritional status, adjusting feeding strategies, and monitoring any long-term consequences of dysphagia.

10. Nutrition-Related PMB Level of Care for Infectious Diseases and Inflammatory Conditions (Paediatrics and Adults)

10.1. General considerations

- Nutrition-related care is indicated for individuals with infectious diseases (such as HIV and Tuberculosis) and inflammatory conditions like Rheumatoid arthritis.
- MNT in these conditions is to prevent malnutrition, support the immune system, and promote healing, particularly in patients with chronic diseases or those undergoing treatment for these conditions.

10.2. Diagnoses and conditions for MNT requirement:

- HIV/AIDS
 - ICD-10 Code: B20-B24
- Tuberculosis (TB)
 - ICD-10 Code: A15-A19 (Pulmonary or Extra-pulmonary TB)
- Rheumatoid Arthritis (RA) with Involvement of Other Organs
 - ICD-10 Code- M05, M06, M08

10.3. Scope and level of minimum benefits

- Nutritional counselling/modifications are recommended to encourage patients to follow dietary modifications, including increasing protein and energy intake to prevent malnutrition and enhance immune function.
- Oral Nutritional Supplements (ONS) are often necessary for patients with poor appetite, unintentional weight loss, or malnutrition. A high-energy or high-protein supplement may be used to meet their nutritional needs.
- Enteral Nutrition is indicated if oral intake is not possible or sufficient (due to illness progression or swallowing difficulties), enteral nutrition is considered.
- Enteral Products may include high-energy, high-protein formulas or disease-specific feeds, particularly for immune-enhancing nutrition (e.g., those containing fish oil, glutamine, or branch-chain amino acids)
- In the case of HIV/AIDS or TB, managing nutrient needs and preventing further depletion is crucial.

10.4. PMB Products to Be Provided

Oral Nutritional Supplements (ONS)

Typical Products for ONS include:

- High-energy, energy-dense sip feeds (with or without fibre).
- High-protein sip feeds or moderate-to-high protein sip drinks.
- Disease-specific formulas, possibly enriched with fish oil, glutamine, branch-chain amino acids, or other immune-enhancing nutrients.
- Typically, 2-3 units per day to meet nutritional goals are recommended.

10.5. Enteral Nutrition is indicated if oral intake is not possible.

Typical Products recommended for EN includes:

- Standard lactose-free enteral feeds (with or without fibre).
- High-energy enteral feeds, moderate-to-high protein enteral feeds.

- Semi-elemental feeds or disease-specific formulas, particularly for immune function support (e.g., those containing glutamine or fish oil).
- Typically, 1-2 litres per day is recommended to ensure adequate intake.

10.6. Consultations with Dietitian

- While in-hospital consultations 3-7 times a week depending on the severity of illness and complexity of MNT. This is especially necessary in acute stages or during the treatment of severe infections or flare-ups (e.g., in HIV/AIDS or TB).

10.7. Outpatient/Community Care Consultations

- For HIV/AIDS consultations 3-4 times per year for ongoing monitoring if there is a nutritional risk or signs of malnutrition.
- Additionally, antiretroviral treatments can lead to metabolic abnormalities (e.g., dyslipidaemia or dysglycaemia), requiring further management.
- For Tuberculosis (TB) and Rheumatoid Arthritis (RA) consultations 1-2 times per year if required is recommended, primarily for nutritional monitoring and adjustment of dietary plans based on the patient's clinical status and treatment response.

11. Nutrition-Related PMB Level of Care for Traumatic Injury (Paediatrics and Adults)

11.1. General considerations

- Traumatic injuries, such as burns, fractures, severe head injuries, sepsis, and major skin conditions (e.g., Stevens-Johnson Syndrome or toxic epidermal necrolysis), require specialised Medical Nutrition Therapy (MNT) to support healing, minimize complications, and optimize recovery.
- These conditions often cause significant nutritional challenges, especially in the acute phase, and may require enteral or parenteral nutrition if oral intake is insufficient.

11.2. Diagnoses and conditions requiring MNT.

- Stevens-Johnson Syndrome
 - ICD-10 Code: L51.5
- Major Burns (greater than 10% body surface area, or more than 5% involving head, neck, hands, perineum)

- ICD-10 Code: T20-T32
- Fractures (Face bones, ribs, sternum, etc., with multiple trauma)
 - ICD-10 Code: Various applicable codes for fractures.
- Sepsis (Anaerobic infections, septicemia)
 - ICD-10 Code: Various applicable codes for infections and sepsis.
- Severe/Moderate Head Injury (haematoma, oedema with loss of consciousness)
 - ICD-10 Code: S06, S09, T06

11.3. Scope and level of minimum benefits

Oral Intake

- Nutritional Counselling/Modification with the focus on supporting wound healing, managing increased metabolic demands, and preventing malnutrition due to the traumatic nature of the injury is recommended.
- Oral Nutritional Supplements (ONS) recommended when oral intake is inadequate, especially in patients with burns, trauma, or severe head injuries.

11.4. Enteral Nutrition (EN)

- EN is indicated when oral intake is not feasible or sufficient (e.g., due to severe burns, trauma, or head injury), and EN is indicated to ensure adequate caloric and protein intake to support recovery.
- Products: High-energy, high-protein formulas, medium-chain triglycerides (MCT), disease-specific feeds (such as arginine-enriched or immune-enhancing), or semi-elemental formulas are used.

11.5. Parental Nutrition

- PN is indicated for patients where enteral nutrition is unsuccessful or contraindicated (due to GI dysfunction or inability to tolerate feeds), and parenteral nutrition is provided with micronutrient supplementation.
- This is used in severe trauma cases where the gut cannot be utilised.

11.6. PMB Products to Be Provided

Oral Nutritional Supplements (ONS)

Typical Products include:

- High-energy sip feeds (with or without fiber), protein-enriched sip feeds.
- Semi-elemental or disease-specific feeds, often immune-enhancing or containing fish oil, glutamine, arginine, or medium-chain triglycerides.
- Typically, 2-3 units per day is recommended.

11.7. Enteral Nutrition (for patients unable to meet needs through oral intake)

Typical Products for EN include:

- Lactose-free enteral feeds, high-energy or high-protein enteral feeds, semi-elemental feeds.
- Disease-specific formulas, such as those high in MCT, immune-enhancing feeds, or containing glutamine and fish oil.
- Typically, 1-2 litres per day is recommended.

11.8. Parenteral Nutrition (in cases of enteral nutrition failure)

- Industry-compounded parenteral nutrition product with supplemental micronutrients to ensure nutritional completeness.

11.9. PMB Consultations with Dietitian

- While in-hospital or step-down facility, consultations 3-7 times a week depending on the severity of illness and complexity of MNT is recommended.
- This is particularly important in the acute post-trauma phase or when the patient is recovering from severe burns or head injuries.
- Post-Discharge, consultations 2-4 times per month during the acute recovery period, especially for nutritional rehabilitation is recommended.
- For patients with severe head injury or ongoing traumatic deficits, consultations that occur 2 times per year once clinically stable but requiring feeding support or nutritional monitoring are recommended.