

PMB definition guideline: Medical Nutrition Therapy for PMB conditions (adults and paediatrics) Version 1

Published date: 24 November 2021

Comments due: 18 January 2022

# Disclaimer:

The medical nutrition benefit definition guideline was developed for the majority of standard patients and is aligned with best practice. These benefits may not be sufficient for outlier patients. Therefore, regulation 15(h) may be applied for patients who are inadequately managed by the stated benefits. The diagnostic categories included in this PMB Guideline reference all PMB conditions included in the National Department of Health 2020 draft National Clinical Nutrition Guide.

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## ABBREVIATIONS

BMI	-	Body Mass Index
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
MAM	-	Moderate acute malnutrition
MNT	-	Medical Nutrition Therapy
MUAC	-	Mid upper arm circumference
ONS	-	Oral Nutrition Supplementation
PEG/PEJ	-	Percutaneous Endoscopic Jejunostomy/Percutaneous Endoscopic Gastronomy
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

#### DEFINITIONS

#### **Medical Nutrition Therapy (MNT)**

A therapeutic approach to treating medical conditions and their associated symptoms via the use of a specifically tailored nutritional intervention devised and monitoring by a registered dietitian, and based upon the patient's diagnosis, medical record, treatment plan, clinical course, physical examination, symptoms, and full nutritional assessment (adapted from Skipper, 2009).

### Protein-energy malnutrition (PEM)

It is defined as an imbalance between the supply of protein and energy and the body's demand for them to ensure optimal growth and function. It can be classified as mild, moderate or severe and can be primary the cause – as a result of nutrient deficits, or secondary - as a result of disease, or medical treatments (MSD Manual)

### **Disease-related malnutrition (DRM)**

A particular malnutrition syndrome, which results from the physiological inflammatory and/or anorexigenic or other mechanisms of illness or disease and presented as a loss of body mass/low body mass index (i.e. evidence of Protein-Energy Malnutrition) and/or compromised nutritional intake with functional impairment (derived from Jensen, 2013).

### Food for Special Medical Purposes (FSMP)

The category of foods for special dietary uses which are specially processed or formulated and presented for the dietary management of patients and may be used only under the supervision of a registered dietitian.; They are intended for the exclusive or partial feeding of patients with limited or impaired capacity to take, digest, absorb or metabolise ordinary foodstuffs or certain nutrients contained therein, or who have other medically determined nutrient requirements, whose dietary management cannot be achieved only by modification of the normal diet, by other foods for special dietary uses, or by a combination of the two.

## 1. INTRODUCTION

- 1.1. The legislation governing the provision of the Prescribed Minimum Benefits (PMBs) is contained in the Regulations enacted under the Medical Schemes Act, 131 of 1998 (the Act). Regarding some of the Diagnosis Treatment Pairs (DTPs), medical scheme beneficiaries find it difficult to be fully aware of their entitlements in advance. In addition, medical schemes interpret these benefits differently, resulting in a lack of uniformity of benefit entitlements.
- 1.2. The benefit definition project is undertaken by the Council for Medical Schemes (CMS) to define the PMB package and guide the interpretation of the PMB provisions by relevant stakeholders.

# 2. SCOPE AND PURPOSE

- 2.1. This guideline is intended as a recommendation for medical nutrition therapy (MNT) benefits for a wide variety of PMB conditions for which MNT as PMB level of care has been previously undefined, including both adults and paediatrics. This will align the PMBs for nutrition support to the 2020 National Department of Health Draft *National Clinical Nutrition Guide*, which has been developed in preparation for the universal health coverage implementation process.
- 2.2. The purpose of this guideline is to provide a detailed clarification in respect of benefits and entitlements to members and beneficiaries of medical schemes as regards specified MNT benefits for multiple core PMB conditions for which MNT is central to disease treatment and/or management, in any type of in-patient clinical setting as well as as part of out-patient, community, residential or home care.

# 3. MEDICAL NUTRITION THERAPY IN TREATMENT AND MANAGEMENT OF DISEASE

- 3.1. MNT is a purposeful, evidence-based therapeutic intervention forming an integral part of medical care intended to treat or manage an acute or chronic medical condition (Sucher, 2020). In some clinical scenarios, MNT is essential treatment of the disease, such as in inborn errors of metabolism or the various forms of malnutrition. In other conditions, MNT is a therapeutic management tool, which provides adjunctive health benefits in the form of enhanced clinical, metabolic, biochemical, or anthropometric health parameters with the consequences of improved disease status, improved response to therapies, reduced disease progression or other measurably improved clinical outcomes. Examples are chronic diseases of lifestyle.
- 3.2. MNT is also a clinically appropriate intervention where treatment of a disease condition or acute illness by means of pharmaceutical, surgical, or other medical interventions creates or worsens nutritional deficits, compromises nutritional status, impedes nutrient absorption, assimilation, or metabolism, produces symptoms or side-effects which lead to reduced nutrient intake, or where nutritional losses occur. Examples are cancers, gastrointestinal diseases or in the post-operative setting.
- 3.3. MNT is associated with various measurable clinical benefits including maintenance and restoration of nutritional status, management of symptoms of disease and treatment, improved metabolic control, reduced dependency on chronic drugs or reduced chronic drug dosing requirements, reversal of health risk factors, reduced or slowed chronic disease progression, treatment of disease processes, prevention of clinical complications, improved

functional capacity and enhanced quality of life (MNI Report, 2012).

- 3.4. Apart from being clinically beneficial, MNT has been demonstrated in international studies from various countries to be both cost-effective and cost-saving. Cost-savings occur mainly because of shorter ICU and hospital stays, reduced healthcare resource utilisation and reduction in clinical complications, with the overall effect of reduced global cost of care. The potential for MNT to reduce overall health care spend is not well recognised. Malnourished patients cost on average 2-3 times more to treat than those without malnutrition, while net savings generated from clinically rational utilisation of MNT have been shown to be around 10% (Freijer et al 2013; Freijer, et al, 2014, Schuetz et al, 2020). Given the constraints on healthcare resources in South Africa, CMS recommends that schemes collect, analyse, and share their findings to support future MNT policy as a cost-saving interventional strategy in disease prevention and management.
- 3.5. There is no disease or illness that is benefitted or improved by an underlying, concurrent, or progressive malnourished state. Apart from the underlying malnutrition that may occur as a result of hunger or socioeconomic conditions, many diseases and illnesses are commonly associated with a specific malnutrition syndrome, known as disease-related malnutrition (DRM) (Jensen et al, 2013). DRM occurs when the physiological inflammatory and/or anorexigenic state induced by disease coexists or coincides with signs, symptoms, and treatment modalities that negatively impact nutritional intake and parameters, leading to compromised nutritional status and unfavourable body composition and various types of poor clinical outcomes, including mortality.
- 3.6. Management of DRM by means of MNT is crucial since malnourished patients progress more rapidly in their clinical course, experience more complex disease progression, tolerate and respond to medical treatment interventions more poorly, develop more clinical complications, require more frequent hospitalisation and have longer hospital stays. Therefore, their clinical care is both more complicated and more expensive than that of their well-nourished counterparts (Arends, et al, 2017a; Freijer et al, 2013).
- 3.7. The spectrum of MNT ranges from oral diet strategies (diet and food modifications of various kinds, including nutrient supplements) combined with skilled nutritional counseling/education/advice, feeding environment adaptation, dietary planning, coordination of overall nutritional care, use of oral nutrition supplements, enteral tube-feeding of various kinds, and parenteral nutrition. Any or all of these approaches can be used in combination or in sequence to achieve the stated nutritional goals and depending on clinical circumstances and factors as well as ethical considerations. See Figure 1.



### Figure 1. The spectrum of routes of MNT

# 4. THE ROLE OF THE PROFESSIONAL DIETITIAN IN DELIVERING MEDICAL NUTRITION THERAPY

- 4.1. MNT is a nutrition-based intervention within the wider regulated scope of practice of the registered dietitian. While some aspects of nutrition screening and monitoring can be incorporated into the workflow of other health professionals, the registered dietitian is the South African health professional regulated to provide executive, scientifically justified therapeutic nutrition interventions and counselling services as part of medical treatment of patients.
- 4.2. Nutrition screening is the basic evaluation of nutritional risk and malnutrition. According to international practice standards, nutrition screening should be incorporated into every level of healthcare where patients or potential patients interact with health-related point of care (Cederholm and Jensen, 2017). Nutrition screening can be done by any suitably trained health professional not limited to a registered dietitian and can be used as a basis for referrals of patients to dietetic care.
- 4.3. The dietitian provides MNT according to a Nutrition Care Process framework (Lacey and Pritchett, 2003; Swan et al, 2017), which is intended to provide consistent care structure and quality. The Nutrition Care Process is an integrated cycle of steps incorporating:
  - 4.3.1. **Nutrition Assessment and/or Re-assessment** based upon appropriate anthropometric techniques, biochemical data, clinical data, socio-economic information, and nutritional/dietary intake data
  - 4.3.2. Nutrition Diagnosis identifying and labelling nutritional problems and their causes or contributing factors

- 4.3.3. **Nutrition Intervention** including the determination of nutritional requirements, formulation of nutritional goals and implementing nutrition delivery. This may include training/counselling of caregivers or family members.
- 4.3.4. **Nutrition Monitoring and Evaluation** including the monitoring of progress, success, and outcomes against key indicators.
- 4.4. The clinically appropriate number of professional consultations with a registered dietitian for delivery of MNT depends on the diagnosis, clinical condition, and progress of the patient.
- 4.5. Dietitians may work within a multi-disciplinary team, as necessary, in order to deliver medical nutrition therapy within an integrated, co-operative and comprehensive overall medical plan.
- 4.6. Dietitians may be involved in Care Pathways at various points of care, upon referral at diagnosis. See Figure 2.
- 4.7. Dietitians are able to play an important role in cost containment and reducing pressure on in-patient facilities by delivering all aspects of MNT outside of an acute care in-patient clinical setting. It is important to recognise that an integrated care pathway for MNT delivery across the spectrum of healthcare services from hospital settings into sub-acute and community-based care facilities under dietetic supervision is clinically, ethically, practically, and economically feasible.





## 5. CRITERIA FOR MNT IN PMB CONDITIONS

For some illnesses and diseases, merely the diagnosis of one of the PMB conditions outlined in this guidance document automatically prompts the requirement for MNT upon referral from the treating provider, since nutrition support interventions are the means of treating or managing the diagnosed condition. PMB conditions which fall into this category are:

- Malnutrition falling under DTP 236K: ICD-10 E40-E46
- Life-threatening congenital abnormalities of carbohydrate, lipid, protein, and amino acid metabolism DTP 901K: all ICD-10s in this DTP category
- Inborn errors of liver metabolism falling under DTP 911G: E70.2, E70.9, E72.0, E72.2 E72.5, E72.8, E72.9, E74.0, E74.4, E74.8, E74.9, E77.0, E77.1, E77.8, E78.6, E78.8, E78.9
- Anorexia Nervosa and Bulimia Nervosa DTP 908T: ICD-10 F50.0-F50.3

For the other PMB conditions contained in this guideline, the diagnosis should trigger an assessment for the requirement for MNT. Certain pre-defined global entry and exit criteria are universally applicable as triggers for MNT and dietetic care, and discharge from such nutritional care. These are outlined below. Other additional criteria relate only to specific diseases, diagnoses, or disease progression patterns. These are stated within the remainder of the document as each condition/diagnosis is discussed. Of special note is Chronic Diseases of Lifestyle (see Table 12), which should be actively managed according to protocols in line with international guidelines for the various metabolic and weight-related risk factors of those diseases. The criteria described in this section and any additional disease-specific criteria outlined in section 7 of this document are not mutually exclusive. Therefore, section 5 of this document should be read in conjunction with section 7 below.

### 5.1. Entry criteria

Universal entry criteria for MNT for PMB conditions are:

- Unintentional weight loss of  $\geq$  5% usual body weight in an adult regardless of the time (see Table 2 below).
- The presence of Protein-Energy Malnutrition (PEM) of any grade measured by body mass index (BMI) in an adult (see Table 3 below);
- The presence of age-appropriate weight-for-height/length Z-score of below -2 standard deviations and/or height/length-for-age of below -2 standard deviations and/or mid upper arm circumference of below age-related threshold and/or BMI-for-age below -2 standard deviations in a baby or child (WHO Guideline, 2017, see Table 4 below);
- The presence of weight loss or a sustained drop/downward crossing of two percentile lines on growth charts in a baby or child (see Table 4 below);
- The presence of BMI-for-age of >98<sup>th</sup> percentile or more than +3 standard deviations in a child (see Table 4);
- The presence of premature birth (<37 weeks), low birth weight (<2500g), very low birth weight (<1500g) or extremely low birth weight (<1000g) in an infant;

- The presence of clinical conditions or symptoms negatively impacting nutrient intake or assimilation and/or which increase nutritional losses;
- The diagnosis of any condition for which the clinically appropriate primary treatment/management or main adjunctive treatment/management is MNT in any form.

**Note:** assessment of nutritional risk and growth parameters according to growth charts used for babies and children should utilise the correctly adapted growth charts and adjusted/corrected parameters for premature babies, cerebral palsy, Down syndrome etc as applicable.

Classification of severity of malnutrition and malnutrition risk by percentage weight changeDurationSignificant weight lossSevere weight loss1 months5%> 5%3 months7.5%> 7.5%6 months10%> 10%

## Table 1. Weight loss history (Mahan, Escott-Stump & Raymond, 2012)

#### Table 2: Classification of Protein-Energy Malnutrition (PEM) in adults (Lee & Nieman, 2003).

Body Mass Index (BMI)	= <u>Body weight (kg)</u> height (m) <sup>2</sup>	
BMI (kg/m²)	PEM Severity	
> 18.5	Normal	
17.0 – 18.4	Mild	
16.0 – 16.9	Moderate	
<16	Severe	

Table 3:	Classification	of malnutrition	in infants and	children
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	Criteria			CI	assification			
WFH/L	6-59 months	< -3 standar	d deviations	Between -2 and -3	Losing weight	> -2 standard	Between +2	> +3 standard
				standard deviations	Flattening	deviations	and +3	deviations
BMI/Age	5-18 years				growin curve		deviations	
MUAC	6-59 months	≤ 11	.5 cm	11.5-12.5 cm			> 12.5cm	
	5-9 years	<13.	5 cm	13.5-14.5 cm			> 14.5 cm	
	10-14 years	<16 cm		16-18.5 cm			> 18.5 cm	
	15-18 years	<21	cm	21-23 cm		> 23 cm		
Visible wa	isting	Yes	Yes/No	No				
Bilateral p	oitting oedema	No	Yes	No*				
Medical co	omplications	No	Yes	No/Yes		Not a	pplicable	
Appetite/a	ble to breastfeed	Good	Poor	Good/Poor				
Well and alert		Yes	No	Yes/No				
Diagnosis		SAM	SAM	MAM	Poor growth	Normal	Overweight	Obese
		without	with					
		complications	complications					

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WFH/L – weight-for-height/length; BMI – body mass index; MUAC – mid upper arm circumference; SAM – severe acute malnutrition; MAM – moderate acute malnutrition \*If yes, consider/treat as SAM with complications

## 5.2. Criteria for routes of MNT delivery

Patients requiring MNT may benefit from one or more routes of MNT delivery in combination or in sequence while transitioning from one to another. See Figure 3.

### 5.2.1. Food-based MNT

This MNT modality is suitable for patients who are completely able to consume their nutritional and fluid requirements through the intake of ordinary food, but who require therapeutic modification of the diet content, composition, type or pattern under dietetic supervision and expertise.

### 5.2.2. Oral Nutrition Supplementation (ONS)

ONS is intended to supplement ordinary oral diet under any/all the following conditions:

- Patients meet universal or disease-specific entry criteria for MNT.
- Patients cannot achieve or maintain an ordinary oral intake meeting at least 80% of their nutritional requirements via ordinary food alone;
- Patients require significant texture or consistency modification of oral intake;
- Patients require FSMP products with specialised compositional features that cannot be replicated using ordinary food in the clinical judgement of the dietitian (e.g. hydrolysed or amino-acid based formulas);
- Patients have no medical contraindications to oral intake and/or oral intake of liquid foodstuffs

# 5.2.3. Enteral nutrition (EN)

EN is indicated under any/all of the following conditions:

- Patients meet universal or disease-specific entry criteria for MNT;
- Patients are unable to meet at least 80% of their nutritional requirements orally due to increased requirements, inadequate oral intake or symptoms (e.g., dysphagia, oral mucositis);
- Oral intake is unsafe or mechanically/technically impossible (e.g. structural or mechanical head/facial/dental pathology; reduced state of consciousness; dysphagia with risk of pulmonary aspiration; obstruction of the oropharynx, or any part of the upper gastrointestinal tract; mechanical ventilation; tracheostomy etc);
- Where disordered sucking, swallowing or other oral feeding disorder occurs in paediatric patients;
- Patients require specialised FSMP products that cannot be replicated using an oral form of MNT as per the dietitian's clinical judgement, due to the nature of the diagnosis, symptoms or other clinical condition (e.g., short bowel syndrome, malabsorption syndromes, organ dysfunction; severe gastrointestinal intolerance);
- Patients have no medical contraindications to enteral feeding.

Enteral nutrition may be delivered via a nasogastric/nasojejunal, jejunostomy or PEG/PEJ tube depending on the expected duration of enteral feeding and optimal site of access. In medically stable patients, enteral nutrition outside of the hospital setting is feasible. Patients without other indications for in-patient care need not remain in hospital purely for the purposes of continued enteral feeding.

# 5.2.4. Parenteral Nutrition (PN)

PN is indicated under any/all of the following conditions:

- Patients meet universal or disease-specific entry criteria for MNT;
- When the gastrointestinal tract is not functional or accessible (e.g., paralytic/mechanical ileus, bowel obstruction, ischaemia or perforation);
- When enteral intake is contraindicated or likely to exacerbate limited gastrointestinal functional capacity with unfavourable risk-benefit ratio (e.g. necrotizing enterocolitis, toxic megacolon, diffuse peritonitis, gastrointestinal bleeding);
- Patients are unable to meet at least 80% of their nutritional, fluid and electrolyte requirements enterally due to increased requirements, inadequate enteral intake or other symptoms driving enteral losses (e.g., high output fistula/stoma, intractable diarrhoea, high physiological stress);

Parenteral nutrition may be delivered via a centrally or peripherally inserted vascular cannula depending on the expected duration of parenteral nutrition delivery, nutritional and fluid requirements and clinical setting.

## 5.3. Exit criteria

Patients may only be exited entirely from the MNT benefit when any of the following criteria are met:

- Applicable indicators of nutritional risk or malnutrition have normalised and remained normal without relapse OR have improved and stabilised to an adequate, clinically acceptable degree in the assessment of the dietitian AND the underlying condition/disease/circumstance which caused the nutritional compromise has resolved;
- In patients without malnutrition, when the underlying condition/disease which precipitated the nutritional risk or requirement for MNT has resolved;
- Symptoms or nutrition-impacting clinical problems which necessitated commencement of MNT have resolved, or improved to the point where MNT is no longer required in the judgement of the dietitian;



 Continued MNT is regarded as unethical, futile or non-beneficial/harmful in the consensus judgement of the multidisciplinary team.

With due consideration to the above exit criteria, MNT modalities may require withdrawal in a stepwise or sequential fashion, as follows:

For patients on parenteral nutrition, parenteral formulations may be discontinued when both of the following criteria are met:

- Enteral and/or oral nutrition becomes feasible and safe due to resolution of the original requirement for parenteral nutrition AND enteral and/or oral nutrition is able to consistently provide at least 80% of nutritional requirements;
- Patients are able to maintain hydration and electrolyte status by enteral and/or oral means alone.

For patients on enteral tube-feeds, enteral feeding may be discontinued when any of the following criteria are met:

- Ability to eat an oral diet returns and where oral intake will successfully and safely provide at least 80% of nutritional requirement as evaluated by a dietitian;
- Symptoms or nutrition-impacting clinical conditions driving nutritional losses via the gastrointestinal tract are well controlled to the extent that they do not impact upon nutrient assimilation or nutritional status, allowing for progression to oral diet.

Note: Patients discontinuing enteral feeding may still require ONS.

For patients on ONS, ONS may be discontinued when the following criterion is met:

• Ability to eat ordinary oral diet is restored to the extent that intake provides nutritional requirement;

Note: There can be no exit from MNT for chronic diseases and permanent conditions for which MNT is a primary aspect of treatment or disease management. However, MNT modalities and frequency of consultations with the dietitian can be modified to a baseline maintenance level once clinical stability occurs and remains stable.

# 6. CHOICE OF FOOD FOR SPECIAL MEDICAL PURPOSES PRODUCT

Multiple Food for Special Medical Purposes (FSMP) products are available (see Figure 4) for clinical use both in and out of hospital and the appropriate choice of product regarded as clinically appropriate should be determined by the dietitian, with reference to various clinical factors. For use in all levels of clinical care from in-patient facilities, sub-acute care, residential care facilities and community- and home-based, FSMP products include unscheduled commercial liquid, semi-liquid and powdered products regulated for use under medical supervision. FSMP products are widely available in the state sector according to the transversal contract (<u>http://www.treasury.gov.za/divisions/ocpo/ostb/contracts/RT9-2020.zip</u>). The following points apply as regards the use of FSMP for MNT:

 When a FSMP is used as the sole source of nutrition the product used must be nutritionally complete, providing the full range of required macro-or micronutrients to match requirements. Where, due to the nature or composition of the FSMP to be used for a specified disease or condition, it is not possible to provide a nutritionally complete formulation, the missing nutrients (usually vitamins and minerals) must be provided alongside the FSMP product in the form of a supplement(s).

- The FSMP used should be clinically appropriate for the disease/condition and the age and nutritional status of the
  patient being treated, with respect to the formulation, composition, nutrient profile and chemical complexity. In
  addition, the product should be appropriate to any concomitant conditions such as diabetes, fluid balance or organ
  dysfunction.
- Parenteral nutrition is not FSMP, but a schedule 3 drug.



Figure 4. Types and generic features of FSMP formulas for oral and enteral use (adapted from Blaauw and du

Toit, 2017)

# 7. NUTRITION-RELATED PMB level of care FOR PMB CONDITIONS

This section outlines the nutrition-related interventions and MNT to be regarded as PMB level of care for patients with PMB conditions for both adults and paediatrics (infants and children). The PMB entitlements include all and any forms of MNT as well as the minimum consultations with the registered dietitian required to assess, diagnose, prescribe, implement and monitor the applicable MNT.

# Table 4. Nutrition-related PMB level of care for PMB conditions related to pregnancy

# Entry criteria apply

DTP	52N Pregnancy: Antenatal and obstetric care necessitating hospitalisation, including delivery							
Care Setting				In-hospital only, includ	ing high care or ICU			
Diagnosis	Hyperemesis gravidaru	m with Maln	utrition in pregnancy	Pre-existing	Pre-eclampsia or	Endocrine, digestive, nutritional	Any complication of pregn	ancy, labour or
	metabolic disturbance O	R Late		diabetes mellitus OR	eclampsia or other	and metabolic diseases	delivery resulting in requireme	nt for MNT e.g. due
	vomiting in pregnan	су		diabetes mellitus	form of hypertension	complicating pregnancy	to intubation, ventila	ation etc
				arising in pregnancy	during pregnancy			
ICD-10	021.1, 021.2		025	024.0 – 024.9	010; 011; 014; 015	O99.2, O99.6	Examples:029; 071; 072; 074;	075; 089; 098
PMB level MNT	Oral intake	Oral intake not possible	Enteral nutrition not possible	Nutritional counselling		Oral intake	Oral intake not possible	Enteral nutrition
	Nutritional counselling	Enteral nutrition	Parenteral nutrition	Diet modification		Nutritional counselling	Enteral nutrition	not possible
	Dietary modification					Dietary modification		Parenteral nutrition
Broducto to bo	UNS Typically 2.3 unite*por day:	Typically, 1.2 litros por day:	Industry compounded or multi	Nono		UNS Typically, 2.3 units*por day of:	Typically, 1.2 litros por day of:	Industry
provided as part	A fat-free high energy sin	Δ standard lactose-free	chamber parenteral nutrition	NULLE		A fat-free high energy sin feed	A standard lactose-free enteral	compounded or
of DMR	feed	enteral feed (with or without	product			OR	feed (with or without fibre)	multi-chamber
	OR	fibre)	Schedule 3 drug			A high energy or energy dense sig	OR	parenteral nutrition
	A high energy or energy	OR				feed (with or without fibre)	A high energy enteral feed (with	product
	dense sip feed (with or	A high energy enteral feed				OR	or without fibre)	Schedule 3 drug
	without fibre)	(with or without fibre)				A high energy or energy dense,	OR	
	OR	OR				moderate, or high protein sip feed	A high energy or energy dense,	
	A high energy or energy	A high energy or energy				OR	moderate or high protein enteral	
	dense, moderate or high	dense, moderate or high				A semi-elemental sip drink	feed (with or without fibre)	
	protein sip feed	protein enteral feed (with or				OR A fat free clean fluid air fae duith	OR A comi clano stal facel	
	UK A somi olomontol sin drink					A fat free clear fluid sip feed with	A semi-elemental feed	
		other product as prescribed				OR	A disease-specific formula	
	A fat free clear fluid sip feed	for specific indications (such				A low electrolyte low mineral sin	OR	
	with protein	as glucose control.				feed	other product as prescribed for	
	OR	gastrointestinal symptoms or				OR	specific indications (such as	
	other product as prescribed	other organ dysfunction) by a				A protein-restricted sip feed	organ failure, glucose control,	
	for specific indications (such	dietitian				OR	gastrointestinal symptoms or	
	as glucose control,	OR				other product as prescribed for	other organ dysfunction) by a	
	gastrointestinal symptoms or	An equivalent powdered				specific indications (such as	dietitian	
	other organ dysfunction) by a	nutritionally complete medica				glucose control, gastrointestinal	OR	
	dietitian	nutrition supplement (food for				symptoms or other organ	An equivalent powdered	
	UK An aquivalant nowdored	special medical purposes)				dysfunction) by a dietitian	nutritionally complete medical	
	medical nutrition supplement					An equivalent powdorod modical	special medical purposes)	
	(food for special medical					nutrition supplement (food for	special medical pulposes)	
	purposes)					special medical purposes)		
PMB consults	3-7 times a week while in hose	bital depending on severity of ill	ness and complexity of MNT	1 consult while in hospit	al	3-7 times a week while in hospital of	lepending on severity of illness and	complexity of MNT
with dietitian			······································	in the second				

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# where commercial, ready-to-use sip or enteral feeds are substituted for powdered commercial products and used as the sole source of nutrition, it is essential that the powdered substitute be a nutritionally complete medical nutrition supplement (food for special medical purposes) containing a full range of micronutrients prescribed by a dietitian.

## Table 5. Nutrition-related PMB level of care for PMB conditions of neonates and infants

Note: The general policy for infant nutrition is the promotion and protection of breastfeeding in line with National Department of Health Policy. However, in the case where breastfeeding is medically contraindicated or impossible or induces metabolic crisis or other clinical conditions apply, specific FSMP products may be prescribed at PMB level of care according to Entry criteria. Ordinary Breastmilk Substitutes (infant formula) are not regulated in the FSMP category and are not PMB level of care.

Entry criteria

DTP	67N	967N	54N	901N	902N	901K	911G
	Low birth weight	Low birth weight	Necrotising	Congenital systemic	Neonatal endocrine, metabolic	Life-threatening congenital abnormalities of	Liver failure; hepatic vascular
	<1000g with	<2500g and >1000 with	enterocolitis in	infections affecting the	and toxin-induced conditions	carbohydrate, lipid, protein, and amino acid	obstruction; inborn errors of liver
	respiratory difficulties	respiratory difficulties	newborn	Newburn		metabolism	metabolism; biliary atresia
Care Setting		Hospit	al		Hospital	Hospital and	nome
Diagnosis	Extremely low birth	Other low birth weight;	Necrotising	Congenital infections	Neonatal jaundice	Life-threatening congenital abnormalities of	
	weight;	Other preterm infants	enterocolitis of	and infection in the		carbohydrate, lipid, protein and amino acid	
	Extreme prematurity		foetus and	newborn		metabolism	
			newborn				
ICD-10	P07.0, P07.2	P07.1,P07.3	P77	P35 – P38	P58 - P59	E70.0 – E70.2, E70.8; E71.0-E71.3; E72.0, E72.1	E70.2, E70.9, E72.0, E72.2-E72.5, E
						E74.1; E74.2; E75.0-E75.6;	72,9, E74.0, E74.4, E74.8, E77.0, E77.8,
							E78.6, E78.8, E78.9
PMB level MNT	Oral intake	Oral intake not	Oral intake or ent	eral formula not possible	Nutrition counselling	Oral or enteral nutrition	
		possible	Parenteral nutrition	ı		Highly specific and specialised restrictions, substi	tutions, modifications and
		Nasogastric or				supplementations to the diet depending on the pa	rticular inborn error. Complex to
		orogastric feeds				manage.	
		Criteria:				Criteria:	
		Respiratory distress				Breastfeeding contraindicated or induces metabol	ic crisis OR poor growth/development
		Preterm birth <34 weeks				parameters	
		gestation					
		Baby unable to suck					
Products to be	Human Breastmilk Fortifie	er OR if breastfeeding	Industry-compound	ded	None	Age- and growth appropriate volumes of	
provided as	impossible or clinically ina	appropriate:	Schedule 3 drug			specialised FSMP products designed for metaboli	c errors, with or without supplemental
part of PMB	FSMP prescribed by dietit	tian if clinically indicated				modules of energy and other macronutrients in va	rious possible combinations.
PMB consults	ts 3-7 times a week while in hospital depending on severity of illness and complexity of MNT		omplexity of MNT	1 consult while in hospital	3-7 times a week while in hospital depending on s	everity of illness and complexity of MNT	
with dietitian						Malnourished/poor growth: monthly as out-patie	ent
						Normal growth: 3-4 times per year as out-patient	

 Table 6. Nutrition-related PMB level of care for paediatric PMB conditions involving neurological or development difficulties

 Entry criteria apply

DTP	213A	83A	902A
	Difficulty in breathing, eating, swallowing, bowel, or	Encephalocele; congenital hydrocephalus	Epilepsy (status epilepticus, initial diagnosis, candidate for neurosurgery
	bladder control due to non-progressive neurological		
	(including spinal) condition or injury		
Care Setting	Hospital or home	Hospital or home when associated with	Hospital or home
		shunt/surgery episode	
Diagnosis	Cerebral Palsy	Hydrocephalus	Epilepsy
ICD-10	G81-82	Q03.8, Q03.9	G40 – G41
PMB level MNT	Applies to both diagnost	tic categories:	Oral Intake or enteral nutrition
	• • • • •	Depending on severity of seizure disorder	
	Oral intake	Oral intake not possible	
	Nutritional counselling and modification	Enteral nutrition via:	
		Nasogastric tube (short) /PEG (long)	
Products to be	1. Thickening agents	Age-appropriate volume of:	For oral and enteral feeding
provided as part of	Criteria for thickening agents:	A standard lactose-free enteral feed (with or	Ketogenic FSMP products/modules:
PMB	Poor swallow assessed by health professional	without fibre)	Age-appropriate volumes of:
		OR	A very high fat, low carbohydrate feed
	2. Age-appropriate volume of:	A high energy enteral feed (with or without fibre)	AND/OR
	A high energy sip feed (with or without fibre)	OR	High long-chain or medium-fat oil modules
	OR	A high energy high protein enteral feed (with or	
	A high energy moderate or high protein sip feed	without fibre)	
	OR	OR A comi clemental faced	
	A semi-elemental sip feed	A semi-elemental feed	
	OR	OR Other product quitable for enteral feeding of	
	Other product suitable for oral feeding of malnourished children	malagurighed shildren	
	OR		
	An equivalent powdered medical nutrition supplement (food for		
	special medical purposes)#	An equivalent powdered nutritionally complete	
		medical nutrition supplement (rood for special	
DND conculto with	2.7 times a weak in base the descending an associate of illness and	medical purposes)#	2.7 Almost a model in branital demonstration on according to fillence and complements of MART.
PWB consults with	3-7 times a week in nospital depending on seventy of liness and		3-7 times a week in hospital depending on seventy of liness and complexity of NiN I
dietitian	mainourished/poor growth or severe feeding difficulties: mo	ntniy as out-patient	Out-patient: 4-6 times per year depending on progress
	Normal growth and clinically stable: 1-2 times per year as out		

# Where commercial, ready-to-use sip or enteral feeds are substituted for powdered commercial products and used as the sole source of nutrition, it is essential that the powdered substitute be a nutritionally complete medical nutrition supplement (food for special medical purposes) containing a full range of micronutrients prescribed by a dietitian.

# Table 7. Nutrition-related PMB level of care for malnutrition (paediatric and adults)

# Entry criteria apply

	Paediatrics (age 0-18 years) *	Adults			Paediatrics and adults
DTP	236K		236K		236K
	Iron deficiency; vitamin and other nutritional deficiencies	Iron deficiency; vitamin and other i	nutritional deficiencies – life-threat	ening	Iron deficiency; vitamin and other
	– life-threatening				
Care Setting	Home/community OR hospital (if complicated by medical conditions)	Hospi	tal or home		Home
Diagnosis	Moderate acute malnutrition Severe acute malnutrition	Protein-energy m	alnutrition (all grades)		Life-threatening anaemia
ICD-10	E41 – E46	E4	1 – E46		D50-D52
PMB level MNT	Oral intake (or via enteral feeding tube if clinically necessary due to	Oral intake	Oral intake not possible	Enteral nutrition	Oral Intake
	poor oral intake)	Nutritional counselling	Enteral nutrition	not possible	Nutritional counselling
	Nutritional counselling and modification	Dietary modification		Parenteral	Dietary modification
	Follow WHO 10 steps management protocol	ONS		nutrition	
Products to be	Age-appropriate volume of:	Typically, 2-3 units*per day of:	Typically, 1-2 litres per day of:	Industry-	None, unless concomitant with E41-E46
provided as part	Ready-to-use therapeutic foods	A fat-free, high energy sip feed	A standard lactose-free enteral	compounded or	
of PMB	OR	OR	feed (with or without fibre)	multi-chamber	
	Low lactose, low protein feed without fibre of 0.75kcal/ml (F75) for	A nigh energy or energy dense sip feed (with or	OR A bigh anargy antoral food (with an	parenteral	
	malnourished children		without fibro)	Schodulo 3 drug	
	UR	A high energy or energy dense, moderate, or		Schedule 5 drug	
	High protein feed without fibre of Tkcai/mi (F100) for mainourished children	high protein sin feed	A high energy or energy dense		
	UK High operative leatene free feed of 1 EkCel/ml without fibre	OR	moderate, or high protein enteral		
		A semi-elemental sip drink	feed (with or without fibre)		
	UR Enriched cumplementary drink/feed	OR	OR		
		A fat free clear fluid sip feed with protein	A semi-elemental feed		
	Semi-elemental feed if persistent diarrhoea	OR	OR		
	OR	A low electrolyte, low mineral sip feed	A disease-specific formula		
	Equivalent high energy powdered ESMP supplement#	OR	OR		
	AND	A protein-restricted sip feed	other product as prescribed for		
	Combined vitamin and mineral complex for malnourished children	OR other product on prescribed for encoifie	specific indications (such as organ		
	'	indications (such as glucose control	astrointestinal symptoms or other		
		astrointestinal symptoms or other organ	organ dysfunction) by a dietitian		
		dysfunction) by a dietitian	OR		
		OR	An equivalent powdered		
		An equivalent powdered medical nutrition	nutritionally complete medical		
		supplement (food for special medical purposes)	nutrition supplement (food for		
		#	special medical purposes) #		
PMB consults	3-7 times a week while in hospital depending on severity of illness and	3-7 times a week in hospital depending on severity	y of illness and complexity of MNT		1 consult unless of complex cause
with dietitian	complexity of MNT				
	Out-patient: 1-4 times per month depending on progress in achieving catch-	Out-patient: 1-4 times per month depending on pr	ogress until exit criteria have been m	et	
	up growth until exit parameters are met				

Exit par	arameters: weight-for-height/length reaches -1 standard deviations or	
mid upp	per arm circumference at least 12.5cm	

\*Patients aged 12 and above may be treated using adult MNT products at discretion of dietitian

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian.

Table 8. Nutrition-related PMB level of care for PMBs involving the gastrointestinal tract (paediatrics and/or adults)

# Entry criteria apply

DTP	74	4N	31K	902F		254F	292F	41F	6F
	Neonatal and infant ( disorders, including r	GIT abnormalities and nalrotation and atresia	Hypoglycaemic coma; hyperglycemia; diabetic ketoacidosis	Gastric or intestinal ulcers with hemorrhage or perforation		Acute diverticulitis of colon	Regional enteritis; idiopathic proctocolitis – acute exacerbations and complications only	Abscess of intestine	Hernia with obstruction and/or gangrene; uncomplicated hernias under age 18
Care Setting	Hospital	or home	Home	Hospital		Hospital or home	Hospital	Hospital or home	Hospital if required in association with surgical episode
Diagnosis	Cystic	fibrosis	Reactive/alimentary hypoglycaemia	Peptic ulcer dise gastritis/gastritis/another ulcer with haemorrhage or	ase or gastrointestinal perforation	Acute diverticulitis of the colon	Crohn's disease Ulcerative colitis	Gastrointestinal fistula	Diaphragmatic hernia
ICD-10	E84.1 p	lus P75	E16.1 – E16.2	K25 – K29; K	92	K57.2 – K27.8	K50; K51	K63.1; K63.2	K44
PMB level	Oral intake	Oral intake insufficient	Oral intake	Oral intake not possible	Enteral nutrition	Appli	es to all diagnostic categori	es	
MNT	Nutritional counselling/modification ONS	Enteral nutrition	Nutritional counselling and modification	Enteral nutrition	not possible Parenteral nutrition	Oral intake Nutritional counselling and modification ONS	Oral intake not possible Enteral nutrition	Enteral nutrition not possible Parenteral nutrition	Oral intake Nutritional counselling and modification
Products to be provided as part of PMB	Typically, 2-3 units*per day of: A fat-free, high energy sip feed OR A high energy or energy dense sip feed (with or without fibre) OR A high energy or energy dense, moderate, or high protein sip feed OR A semi-elemental sip drink OR A fat free clear fluid sip feed with protein OR Feed high in medium- chain triglycerides OR	Typically, 1-2 litres per day of: A standard lactose-free enteral feed (with or without fibre) OR A high energy enteral feed (with or without fibre) OR A high energy or energy dense, moderate, or high protein enteral feed (with or without fibre) OR A semi-elemental feed OR A disease-specific formula OR Feed high in medium- chain triglycerides	Usually none	Typically, 1-2 litres per day of: A standard lactose-free enteral feed (with or without fibre) OR A high energy enteral feed (with or without fibre) OR A high energy or energy dense, moderate, or high protein enteral feed (with or without fibre) OR A semi-elemental feed OR A feed high in medium-chain triglycerides OR A disease-specific formula including fish oil or arginine- enriched	Industry- compounded or multi-chamber parenteral nutrition product <b>Schedule 3 drug</b>	Typically, 2-3 units*per day of: A fat-free, high energy sip feed OR A high energy or energy dense sip feed (with or without fibre) OR A high energy or energy dense, moderate, or high protein sip feed OR A semi-elemental sip drink OR A fat free clear fluid sip feed with protein OR A feed high in medium- chain triglycerides OR	Typically, 1-2 litres per day of: A standard lactose-free enteral feed (with or without fibre) OR A high energy enteral feed (with or without fibre) OR A high energy or energy dense, moderate, or high protein enteral feed (with or without fibre) OR A semi-elemental feed OR A feed high in medium- chain triglycerides OR A disease-specific formula including fish oil or arginine-enriched	Industry-compounded or multi-chamber parenteral nutrition product Schedule 3 drug	

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	Other FSMP product as	OR		OR		A disease-specific feed	OR		
	prescribed for specific	other FSMP product as		Glutamine-containing feed		including fish oil or	Glutamine-containing feed		
	indications by a dietitian	prescribed for specific		OR		arginine-enriched	OR		
	OR	indications by a dietitian		other FSMP product as		OR	Other FSMP product as		
	An equivalent powdered	OR		prescribed for specific		other FSMP product as	prescribed for specific		
	medical nutrition	An equivalent powdered		indications (such as organ		prescribed for specific	indications (such as organ		
	supplement (FSMP)#	nutritionally complete		failure, glucose control,		indications (such as	failure, glucose control,		
		medical nutrition		gastrointestinal symptoms or		glucose control,	gastrointestinal symptoms		
		supplement (FSMP)#		other organ dysfunction) by a		gastrointestinal symptoms	or another organ		
				dietitian		or other organ dysfunction)	dysfunction) by a dietitian		
				OR		by a dietitian	OR		
				An equivalent powdered		OR	An equivalent powdered		
				nutritionally complete medical		An equivalent powdered	nutritionally complete		
				nutrition supplement		medical nutrition	medical nutrition		
				(FSMP)#		supplement (FSMP)#	supplement (FSMP)#		
					PLUS (for all	diagnostic categories and a	II forms of MNT)		
				Oral or e	enteral glutamine su	pplement in liquid or powder l	form as prescribed by a dietitia	in	
PMB	3-7 times a week while	in hospital depending on	Out-patient: 1-2 consults	3-7 times a week while in hos	spital depending on	3-7 times a week while in ho	ospital depending on severity of	of illness and complexity	Out-patient: 1-2 consults
consults	severity of illness and cor	nplexity of MNT	if required	severity of illness and complexity of MNT		of MNT			if required
with dietitian	Out-patient:					Out-patient/home:			
	Malnourished/nutritiona	Il problems: 1-2 times				Malnourished/significant	nutritional problems: 1-4 time	es monthly	
	per month until stabilised					Clinically stable: 3-4 times	a year if required		
	Clinically Stable: 2-4 tim	es a year if required				•			

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian.

## Table 9. Nutrition-related PMB level of care for cancer PMBs (paediatrics and/or adults)

For adult patients, the following CMS PMB Guidelines for cancers of the gastrointestinal tract, and for palliative care of cancers also apply and are not in conflict with the below:

Due to the combined effects of cancer itself, the detrimental impact of anti-cancer treatments on nutritional status, nutritional requirements, nutritional intake and appetite, and the development of symptoms and side-effects of treatment which negatively impact upon all aspects of nutrition, MNT is an essential component of cancer care. Pro-active, early, and consistent MNT throughout the cancer healthcare journey is a core part of reducing progression to cancer cachexia, which can in turn be a treatment-limiting or delaying factor or may even necessitate discontinuation of anti-cancer therapy. This in turn can worsen cancer outcomes. Cachexia is not an inevitable consequence of cancer, but late or inadequate MNT intervention reduces the ability to prevent progression to refractory disease-related malnutrition (Arends et al, 2017a; Arends et al 2017b). MNT should be a routine, integrated aspect of any modality of cancer therapy. Some cancer types are associated with higher nutritional risk due to the site and management/treatment strategies.

DTP	952F; 950C; 950D; 950G; 950H; 950J; 950K; 954J; 952J; 950L; 952K; 952L; 953L;	901S	910S
	954L; 950B; 954M; 952M; 950A; 950M; 953M;	Acute leukemias, lymphomas	Multiple myeloma and chronic leukaemias
Care setting	Hospital or home	Hospital or home	Hospital or home
Diagnosis	Various cancers	Acute leukemia/lymphoma	Multiple myeloma and chronic leukemia
ICD-10	Any applicable	Any applicable	Any applicable
PMB level MNT	Applies t	o all diagnostic categories in adults and paediatrics	
	Oral intake	Oral intake not possible	Enteral nutrition not possible
	Nutritional counselling and modification	Enteral nutrition	Parenteral nutrition
	ONS		
Products to be provided as	Typically, 2-3 units*per day of:	Typically, 1-2 litres per day of:	Industry-compounded or multi-chamber parenteral
part of PMB under the	A fat-free, high energy sip feed	A standard lactose-free enteral feed (with or without fibre)	nutrition product
following circumstances:	OR	OR	Schedule 3 drug
1. In surgical patients	A high energy or energy dense sip feed (with or without fibre)	A high energy enteral feed (with or without fibre)	
1.1. Pre-operative	OR	OR	
carbohydrate loading	A high energy or energy dense, moderate or high protein sip feed	A high energy or energy dense, moderate, or high protein enteral feed	
1.2 Pre-operative nutrition	OR	(with or without fibre)	
optimisation	A semi-elemental sip drink		
1.3 Peri-operative nutrition	UR A fai face stars (Little faceto itte santais	A semi-elemental feed	
support	A fat free clear fluid sip feed with protein	UR A food high in modium chain trighteorides	
1.4 Post-operative nutrition	UR A food high in modium chain trighycoridae		
monogoment		A disease specific formula including fish oil or argining opriched	
2 In all patients undergoing	A disease-specific feed including fish oil or arginine-enriched		
2. In all patients undergoing		Glutamine-containing feed	
2 la ella etiente with an	Immune-enhancing feed	OR	
3. In all patients with pre-	OR	Immune-enhancing feed	
cacnexia, which may	other FSMP product as prescribed for specific indications (such as alucose control.	OR	
present with anorexia and	gastrointestinal symptoms or other organ dysfunction) by a dietitian	Other FSMP product as prescribed for specific indications (such as organ	
inflammation without	OR	failure, glucose control, gastrointestinal symptoms or another organ	
discernible weight loss	An equivalent powdered medical nutrition supplement (FSMP)#	dysfunction) by a dietitian	
4. In all patients with entry		OR	

criteria for MNT			An equivalent powdered nutritionally complete medical nutrition							
			supplement (FSMP)#							
	PLUS (for all diagnostic categorie	PLUS (for all diagnostic categories and all forms of MNT if gastrointestinal surgery, chemotherapy, or radiation therapy is used): Oral or enteral glutamine supplement 1-3 units daily in liquid or powder form								
			Cost: R50 per unit							
PMB consults with dietitian	In hospital: 3-7 times a week depending	n hospital: 3-7 times a week depending on severity of illness and complexity of MNT								
	Out-patient/home:	Out-patient/home:								
	Pre-operative carbohydrate loading	Pre-operative nutrition optimisation	Peri-operative nutrition support	Post-operative nutrition suppo	ort During ongoing medical interventions					
	1 consult	Early stage or good nutritional status: 1 consult during preparation/work-up for surgery Late stage or disease-related malnutrition:	Early stage or good nutritional statu Late stage or disease-related malnu	is: 2 per month trition: Weekly	Early stage or good nutritional status: 1-2 per month Late stage or disease-related malnutrition:					
		Weekly during work-up for surgery			Weekly					

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian.

# Table 10. Nutrition-related PMB level of care for PMB organ dysfunctions (paediatrics and adults)

# Entry criteria apply

DTP	911G	743G	325G	516F	910G	327G	901L	903L	904L	743G	905E	204E	56N	125D	
	Liver failure;	Hepatorenal	Acute	Oesophageal	Calculus of	Acute	End stage	Acute	Acute and	Hepatorenal	Other	Cardiac	Respiratory	Adult	
	hepatic vascular	syndrome	necrosis of	varices	bile duct with	pancreatitis	renal	glomerulonep	chronic	syndrome	correctable	failure: acute	conditions of	respiratory	
	obstruction;		liver		cholecystitis		disease	hritis and	pyelonephr		congenital	or recent	newborn	distress	
	inborn errors of						regardless	nephritic	itis; renal		cardiac	deterioration		syndrome;	
	liver metabolism;						of cause	syndrome	and		conditions	of chronic		inhalation and	
	biliary atresia								perinephric			cardiac		aspiration	
									abscess			failure		pneumonias	
Care Setting				•			Hospit	al or home				•			
				1			1								
Diagnosis	Acute and sub-ac	ute or chronic li	ver disease	Oesophageal	Gallbladder	Acute	Acute or o	chronic renal fail	lure including	hepatorenal	Heart D	isease	Respiratory	diseases and	
	including l	liver transplanta	ition	varices (all	disease	pancreatitis	syndrome	with or without	renal replacer	nent therapy	Congestive he	eart disease,	distress in ne	wborns and in	
				liver causes)							cardiomyopath	iy, congenital	adults includi	adults including COPD and	
	1/70	0 1/70 4 1/70 0		1/70.1/74		KOF				1/70 7	heart de	efects	asti		
ICD-10	K/2.0	U, K/2.1, K/2.9		K/0; K/1;	K80-K83	K85	N11 - N12;	NUU - NU5;	N10 - N12;	K/6./	Q20-Q26	111;150	P22 – P25; P28;	J43-J45, J80	
				K/4; 185			N14; N15;	NU7	N15.1				Q33		
							N18.3,								
DMD Issuel															
	Organ dysfunctions	and failures load t	o spocific moto	bolio putritional f	luid alactrolyta a	Applies to all t	impostic cat	ditions which wor	s and paediatr	ics no moro complex c	ne discasso prograss	oc or dovolone a	uto complications		
	is also commonly as	sociated with dis	o specific fileta	nalnutrition Each	organ dysfunctic	in presents spec	ific fluid electr	olyte and other n	utritional problem	ame which must	be individually ma	naged and will in	fluence choice of N	INT products and	
	methods appropriate	to manage nutrit	tional risks and	metabolic control	It should also be	realised that na	tients who are	eligible for organ	transplantation	and other surgica	al interventions will	respond better if	nutritionally optimis	ed to receive such	
	complex and physiol	ogically taxing int	terventions, wit	h lower risk of clir	nical complication	5.		og.z.o .o. oga					induitionally optimie		
	Oral intake	<u> </u>				Oral intake ins	ufficient/inapp	propriate/contrai	ndicated				Enteral	nutrition not	
	Nutritional counsellin	g/modification				Enteral nutrition						possibl	e		
	ONS	-											Parente	al nutrition	
Products to	Typically, 2-3 units*p	er day of:				Typically, 1-2 lit	res per day of:						Industry	-compounded or	
be provided	A fat-free, high energ	gy sip feed				A standard lacto	ose-free entera	I feed (with or with	hout fibre)				multi-ch	amber parenteral	
as part of	OR					OR							nutrition	product	
PMB	A high energy or ene	ergy dense sip fee	ed (with or with	out fibre)		A high energy e	nteral feed (with	th or without fibre)	)				Schedu	le 3 drug	
	OR		and a sublability	tala ala farad		OR			. h t. <sup>1</sup> t.	and for a difference	(the sect Chara)				
	A nign energy or ene	ergy dense, mode	erate or high pro	otein sip teed		A nign energy o	r energy dense	e, moderate, or nig	gn protein ente	ral feed (with or w	lithout fibre)				
	OR A somi_olomontal sin	drink				OR A somi-olomont	al food								
	OR					OR									
	A fat free clear fluid s	sip feed with prote	ein			A disease-speci	ific formula								
	OR					OR									
	Feed high in medium-chain triglycerides					Feed high in medium-chain triglycerides									
	OR					OR									
	Disease specific feed	t				Disease specific	c feed								
	OR OR														

	Feed containing branch-chain amino acids	Feed containing branch-chain amino acids	
	OR	OR	
	Other FSMP product as prescribed for specific indications by a dietitian	other FSMP product as prescribed for specific indications by a dietitian	
	OR	OR	
	An equivalent powdered medical nutrition supplement (FSMP)#	An equivalent powdered nutritionally complete medical nutrition supplement (FSMP)#	
PMB	In hospital: 3-7 times a week depending on severity of illness and complexity of MNT		
consults	Out-patient:		
with	Malnourished or complex nutritional care: 1-2 times per month until stabilised		
dietitian	Clinically Stable: 2-4 times a year if required		

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian

# Table 11. Nutrition-related PMB level of care for PMB chronic diseases of lifestyle (paediatrics and adults)

DTP	901E	CDL	CDL	902E Disorders of the arteries: visceral	CLD	901A Stroke – due to hemorrhage, or
	Hypertension – acute life-	Cardiomyopathy	Hyperlipidaemia	907E Acute and subacute ischemic	Diabetes Mellitus Type 1	ischaemia
	threatening complications			heart disease, including myocardial	Diabetes Mellitus Type 2	265A Transient cerebral ischaemia; life-
	and malignant			infarction and unstable angina		threatening cerebrovascular conditions NOS
	hypertension; renal artery					
	stenosis and other curable					
	hypertension					
Care Setting				Hospital (acute events or surgical e	pisodes) or home	
Diagnosis	Hypertension	Cardiomyopathy	Hyperlipidaemia	Coronary artery	Diabetes (insulin or non-insulin dependent)	Cerebral artery disease and stroke
				disease/atherosclerosis including	Including with acute or chronic complications	
				myocardial infarction and	(coma, DKA, gastroparesis, wounds)	
ICD-10	l10-12; l13; l15	!25.5; I42	E78.0-E78.5	l20-l25, K55	E10; E11; E14, O24.1 – O24.3	161-169
PMB level MNT			Appl	lies to all diagnostic categories in	adults and paediatrics	
			<i></i>			
	Nutritional counselling	leducation and ti	nerapeutic dietary mo	dification is a key preventative a	nd therapeutic strategy for management	of chronic diseases of lifestyle.
	Because risk factors s	uch as overweigh	nt and obesity along v	with poor dietary habits are respo	onsible for development and progression	of such diseases, MNT plays a crucial
	role in both primary an	d secondary prev	vention, reduction of	events, and avoidance of end-sta	ge and irreversible complications. MNT	strategies based on oral intake,
	however, can be comp	lex since poor ha	bits may be entrench	ned and take time to shift, or may	require careful coordination with medica	I strategies (e.g. new introduction of
	insulin regimes) In add	dition natients m	av often present with	features of more than one lifesty	le disease or syndrome or advanced dis	ease making the MNT more
	challenging Datients w	with these chronic	diseases require ch	ronic MNT for optimal disease ma	anagement Therefore simple control of	a single metabolic parameter such as
	blood glugges or ploor		be the definitive see	l of nutritional intervention in CD	anagement. Therefore, simple control of	a single metabolic parameter, such as
	blood glucose or plash	na lipius may not	be the definitive goa		Ls while other risk factors continue to ex	dist. Nutrition Care Plans for primary
	and secondary prevent	tion in line with p	revailing state level of	of care.		
Products to be	FSMP products for CDLs	s apply only if <b>Ent</b>	<b>ry criteria</b> are met, ty	pically associated with acute or chro	onic complications of these diagnoses, or wi	th other PMB conditions.
provided as part of						
РМВ						
PMB consults with	In hospital: 3-7 times a week d	epending on severity of	of illness and complexity of N	INT, if required for acute event		
dietitian	Out-patient:					
	Malnourished, complex nutri	itional care, advance	d disease or multiple risk f	actors: 2 times per month until stabilised		
	Clinically stable, but lifestyle	e risk factors remain	or goals not achieved: 3-4	times a year according to Nutrition Care Plan	1	

## Table 12. Nutrition-related PMB level of care for eating disorders (paediatrics and adults)

Entry criteria may apply, but the diagnosis itself prompts medical nutrition therapy, since nutritional intervention is the foundation of treatment. # Where commercial, ready-to-use feeds are

DTP	908T Anorexia nervosa and Bulimia nervosa							
Care Setting	Home/community or hospital							
Diagnosis	Anorexia nervosa and atypical Anorexia nervosa							
		Bulimia nervosa and atypical Bulimia nervosa						
ICD-10		F50.0-F50.3						
PMB level MNT	Oral intake	Oral intake insufficient or life-threatening complication	Enteral nutrition unsuccessful or contraindicated					
	Nutritional counselling and modification	Enteral nutrition, cautiously	Parenteral nutrition					
	This is the mainstay of MNT for patients in this DTP category	Patients are at very high risk of life-threatening refeeding syndrome and	This would be a relatively unusual intervention but may be					
	together with psychiatric or psychological therapy.	should not be provided MNT without expert supervision and monitoring.	necessary especially in life-threatening complications or during					
	ONS can be used and is often indicated but is frequently resisted	pregnancy. Life-threatening refeeding syndrome can occur,						
	by patients.		and expert nutritional and metabolic monitoring is essential.					
Products to be provided as part of PMB	Typically, 2-3 units*per day of:	Typically, 1-2 litres per day of:	Industry-compounded or multi-chamber parenteral nutrition					
	A high energy or energy dense sip feed (with or without fibre)	A standard lactose-free enteral feed (with or without fibre)	product					
	OR	OR	Schedule 3 drug					
	A high energy or energy dense, moderate or high protein sip feed	A high energy enteral feed (with or without fibre)						
	OR	OR						
	A semi-elemental sip drink	A high energy or energy dense, moderate or high protein enteral feed						
	OR	(with or without fibre)						
	Other FSMP product as prescribed for specific indications by a	OR						
	dietitian	A semi-elemental feed						
	OR	OR						
	An equivalent powdered medical nutrition supplement (FSMP)#	other FSMP product as prescribed for specific indications by a dietitian						
		OR						
		An equivalent powdered nutritionally complete medical nutrition						
		supplement (FSMP)#						
PMB consults with dietitian	3-7 times a week while in hospital depending on severity of illness a	and complexity of MNT						
	Out-patient: Chronic care is often needed in the region of 4-12 time	es per year depending on duration and severity, nutritional status and risk p	arameters.					

substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian

## Table 13. Nutrition-related PMB level of care for dysphagia (paediatrics and adults)

## Entry criteria apply

DTP	213A								
	Difficulty in breathing, eating, swallowing, bowel, or bladder control due to non-progressive neurological (including spinal) condition or injury								
Care Setting	Hospital or home								
Diagnosis	I	Dysphagia							
ICD-10		R13							
PMB level MNT	Oral intake	Oral intake not possible							
	Nutritional counselling/modification	Enteral nutrition							
	ONS								
Products to be provided as part of	Thickening agents	Typically, 1-2 litres per day of:							
РМВ	AND/OR	A standard lactose-free enteral feed (with or without fibre)							
	Typically, 2-3 units*per day of:	OR							
	A fat-free, high energy sip feed	A high energy enteral feed (with or without fibre)							
	OR	OR							
	A high energy or energy dense sip feed (with or without fibre)	A high energy or energy dense, moderate or high protein enteral feed (with or without fibre)							
	OR	OR							
	A high energy or energy dense, moderate or high protein sip feed	A semi-elemental feed							
	OR	OR							
	A semi-elemental sip drink	A disease-specific formula							
	OR	OR							
	A fat free clear fluid sip feed with protein	other product as prescribed for specific indications (such as organ failure, glucose control, gastrointestinal							
	OR	symptoms or other organ dysfunction) by a dietitian							
	other product as prescribed for specific indications (such as glucose control, gastrointestinal symptoms	OR							
	or other organ dysfunction) by a dietitian	An equivalent powdered nutritionally complete medical nutrition supplement (food for special medical purposes							
	OR								
	An equivalent powdered medical nutrition supplement (food for special medical purposes								
PMB consults with dietitian	3-7 times a week in hospital depending on severity of illness and complexity of MNT								
	Out-patient: 3-4 times a year while reliant on medical nutrition therapy or for monitoring of nutritional state	JS							

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian

Table 14. Nutrition-related PMB level of care for infectious diseases and inflammatory conditions (paediatrics and adults) Entry criteria apply

DTP	168S		115	CDL	CDL & 155E
	HIV infection	Tuberculosis			Rheumatoid arthritis with
					involvement of other organs
Care Setting		Hospital or	home		Home
Diagnosis	HIV/AIDS		Tuberculosis		Rheumatoid arthritis
			(pulmonary or extra-pulmonary site)	(adult or	juvenile onset) including with
				inv	olvement of other organs
ICD-10	B20-B24		A15 – A19; A31	M06; M08	M05
Care Setting		Hospital or	home		Home
PMB level MNT	Oral intake		Oral intake not possible	Oral Intake	
	Nutritional counselling/modification		Enteral nutrition	Nutritional coun	selling/modification
	ONS				
Products to be	Typically, 2-3 units*per day of:		Typically, 1-2 litres per day of:		
provided as part	A high energy or energy dense sip feed (with or without fibre)		A standard lactose-free enteral feed (with or without fibre)		
of PMB	OR		OR		
	A nigh energy or energy dense, moderate or nigh protein sip feed		A high energy enteral feed (with or without fibre)		
	A semi-elemental sin drink		A high energy or energy dense, moderate or high protein enteral feed (with		
	OR		or without fibre)		
	A disease-specific feed including with fish oil, glutamine, branch-chain a	amino acids	OR		
	or other immune-enhancing nutrient		A semi-elemental feed		
	OR		OR		
	other product as prescribed for specific indications (such as glucose co	ontrol,	A disease-specific formula including those with fish oil, glutamine, branch-		
	gastrointestinal symptoms or other organ dysfunction) by a dietitian		chain amino acids or other immune-enhancing nutrient		
	An equivalent powdered medical nutrition supplement (food for special	medical	other product as prescribed for specific indications (such as organ failure		
	purposes)		glucose control, gastrointestinal symptoms or other organ dysfunction) by a		
			dietitian		
			OR		
			An equivalent powdered nutritionally complete medical nutrition supplement		
			(food for special medical purposes)		
PMB consults	3-7 times a week in hospital depending on severity of illness and comp	Diexity of MNT	All south of the second the second	Out-patient: 1-2	times per year if required
with dietitian	Out-patient/community care: 3-4 times a year it required due to ongoin	ng nutritional r	isk, mainutrition or nutritional problems. Note: HIV patients on anti-retrovirals		
	may also develop new metabolic abnormalities such as dyslipidaemia o	or dysglycaem	na as a side-effect of medication and require management in line with lifestyle		
	protocols described in Table 12.				

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian

# Table 15. Nutrition-related PMB level of care for traumatic injury (paediatrics and adults)Entry criteria apply

DTP	112J	900J		339C	277S Anaerobic infections, life-threatening		1A
	The first of the second second sector	Dense standbard (00/ of	Fracture of fa	ace bones, orbit, jaw; injury to optic	904S Metastatic infections, septicaemia		Severe / moderate head injury:
	I oxic epidermal necrolysis	Burns, greater than 10% of	â	ind other cranial nerves	903S Deep-seated (excluding nail infections), disse	eminated	hematoma / oedema with loss of
	and staphylococcal	body surface, or more than		900D	and systemic fungal infections ;		consciousness
	scalded skin syndrome;	5% involving nead, neck,	Open fractu	re of ribs and sternum; multiple rib	356J Pyoderma; body, deep-seated fungal infection	ns	
	Stevens-Jonnson	nanos, perineum		fractures; flail chest	128S Tetanus; anthrax; Whipple's disease		
	synarome		<u>OR</u> other	in the context of multiple trauma			
Care Setting		Hospital, ste	o-down facility	or home (if ongoing nutritional comp	lications remain or nutritional rehabilitation required	)	
Diagnosis	Stevens-Johnson	Major burns		Fractures	Sepsis		Traumatic head injury
	syndrome						
ICD-10	L51.5	; T20-T32		Any applicable	Any applicable		S06; S09; T06
PMB level MNT				Applies to all diagnostic categories i	n adults and paediatrics		
	Oral intake			Oral intake not possible/inadequate	e/contraindicated	Enteral	nutrition unsuccessful or
	Nutritional counselling/modifica	ition		Enteral nutrition		contrain	ndicated
	ONS					Parenter	ral nutrition
Products to be	Typically, 2-3 units*per day of:			Typically, 1-2 litres per day of:		Industry-	-compounded or multi-chamber
provided as part of	A fat-free, high energy sip feed			A standard lactose-free enteral feed (v	with or without fibre)	parenter	al nutrition product
PMB	OR			OR		Schedu	le 3 drug
	A high energy or energy dense	sip feed (with or without fibre)		A high energy enteral feed (with or without fibre)			
	UK A high operation operation dependence	moderate er high protein ein feer		OR A high approvide party depage mode	urate or high protein enteral feed (with or without fibre)		
		, moderate of high protein sip leet	1				
	A semi-elemental sin drink			A semi-elemental feed			
	OR			OR			
	A fat free clear fluid sip feed wi	th protein		A feed high in medium-chain triglyceri			
	OR			OR			
	A feed high in medium-chain tri	iglycerides		A disease-specific formula including fi	ish oil or arginine-enriched		
	OR	<b>.</b>		OR			
	A disease-specific feed includir	ng fish oil or arginine-enriched		Glutamine-containing feed			
	UK Immuno onhonoing food			UK Immuno onbansing food			
				OR			
	other FSMP product as prescri	bed for specific indications (such a	is alucose	Other FSMP product as prescribed fo	r specific indications (such as organ failure, glucose		
	control, gastrointestinal sympto	oms or other organ dysfunction) by	a dietitian	control, gastrointestinal symptoms or	another organ dysfunction) by a dietitian		
	OR	<b>U</b> , , , ,		OR			
	An equivalent powdered medic	al nutrition supplement (FSMP)#		An equivalent powdered nutritionally of	complete medical nutrition supplement (FSMP)#		
PMB consults with	3-7 times a week in hospital or	step-down facility depending on s	everity of illness	and complexity of MNT			
dietitian	Community/home setting:						
	2-4 times per month during acu	ite post-discharge period if require	d				

Chronic care of traumatic brain injury with residual deficit: 2 times per year if clinically stable but feeding deficits or nutritional monitoring required

# Where commercial, ready-to-use feeds are substituted for powdered commercial products to be used as the sole source of nutrition, the powdered substitute be a nutritionally complete medical nutrition supplement (FSMP) containing a full range of micronutrients prescribed by a dietitian

## Table 16. Nutrition-related PMB level of care for palliative care (paediatrics and adults)

A <u>PMB definition guideline: Medical Nutrition therapy in palliative care (Adults)</u> has been developed to outline the nutritional PMB level of care for several incurable, life-threatening or life-limiting and chronic, progressive diseases for adults. That document is the PMB level of care for reference guideline for all adult patients falling in this diagnostic category. A similar definition guide has not been established for paediatrics although the same principles and general approach to health care applies, while diagnoses/conditions included in this definition may differ in children. As with adults, MNT in the palliative care journey can enhance quality of life and functional capacity, while also providing physiological benefits and reduced symptoms as well as reduced psychological distress. In children, the additional factor of optimal growth and development within the parameters of the disease, is improved by good nutritional care.

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