

Nutrition Diagnosis Etiology Matrix

Below are the etiology categories and their definitions. Etiologies are grouped by the type of cause or contributing risk factor. In two specific instances, Access and Behavior etiologies, these alone may be the cause or contributing risk factor of the nutrition diagnosis or the practitioner may determine a more specific root cause, e.g., Belief-Attitudes of the problem.

Etiology Category	Definition
Beliefs–Attitudes Etiologies	Cause or contributing risk factors related to the conviction of the truth of some nutrition-related statement or phenomenon; feelings or emotions toward that truth or phenomenon and activities.
Cultural Etiologies	Cause or contributing risk factors related to the patient/client’s values, social norms, customs, religious beliefs and/or political systems.
Knowledge Etiologies	Cause or contributing risk factors impacting the level of understanding about food, nutrition and health, or nutrition-related information and guidelines.
Physical Function Etiologies	Cause or contributing risk factors related to physical ability to engage in specific tasks, may be cognitive in nature.
Physiologic–Metabolic Etiologies	Cause or contributing risk factors related to medical/health status that may have a nutritional impact (excludes psychological etiologies—see separate category).
Psychological Etiologies	Cause or contributing risk factors related to a diagnosed or suspected mental health/psychological problem (<i>Diagnostic and Statistical Manual of Mental Disorders, DSM</i>)
Social–Personal Etiologies	Cause or contributing risk factors associated with the patient/client’s personal and/or social history.
Treatment Etiologies	Cause or contributing risk factors related to medical or surgical treatment or other therapies and management or care.
Access Etiologies	Cause or contributing risk factors that affect intake and the availability of safe, healthful food, water, and food/nutrition-related supplies. A more specific root cause of Access Etiologies may not be known but may eventually reveal Beliefs-Attitudes, Cultural, Knowledge, Physical Function, Psychological, Social-Personal, or Treatment Etiologies.
Behavior Etiologies	Cause or contributing risk factors related to actions which influence achievement of nutrition-related goals. A more specific root cause of Behavior Etiologies may not be known but may eventually reveal Beliefs-Attitudes, Cultural, Knowledge, Physical Function, Psychological, Social-Personal, or Treatment Etiologies.

Category	Etiology	Diagnosis
Beliefs-Attitudes	Altered body image	Poor nutrition quality of life (NB-2.5)
Beliefs-Attitudes	Food preference	Limited food acceptance (NI-2.9), Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3), Undesirable food choices (NB-1.7)
Beliefs-Attitudes	Denial of need to change	Not ready for diet/lifestyle change (NB-1.3)
Beliefs-Attitudes	Desire for a cure for a chronic disease through the use of alternative therapy	Unsupported beliefs/attitudes about food or nutrition-related topics (NB-1.2)
Beliefs-Attitudes	Disbelief in science-based food and nutrition information	Unsupported beliefs/attitudes about food or nutrition-related topics (NB-1.2)
Beliefs-Attitudes	End-of-life care if patient/client or family do not desire nutrition support	Less than optimal enteral nutrition composition or modality (NI-2.5), Less than optimal parenteral nutrition composition or modality (NI-2.8)
Beliefs-Attitudes	Familial, societal, biological/genetic, and/or environmental related obsessive desire to be thin	Disordered eating pattern (NB-1.5)
Beliefs-Attitudes	Food faddism	Imbalance of nutrients (NI-5.5), Excessive protein intake (NI-5.7.2), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3), Excessive mineral intake (NI-5.10.2)
Beliefs-Attitudes	Limited food acceptance due to food aversion	Inadequate oral intake (NI-2.1), Limited food acceptance (NI-2.9),
Beliefs-Attitudes	Unsupported beliefs/attitudes about food, nutrition, and nutrition-related information	Excessive energy intake (NI-1.3), Inadequate oral intake (NI-2.1), Excessive oral intake (NI-2.2), Limited food acceptance (NI-2.9), Excessive alcohol intake (NI-4.3), Imbalance of nutrients (NI-5.5), Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3), Excessive protein intake (NI-5.7.2), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3), Excessive fiber intake (NI-5.8.6), Excessive mineral intake (NI-5.10.2), Underweight (NC-3.1), Suboptimal growth rate (NC-3.5), Food- and nutrition-related knowledge deficit (NB-1.1), Not ready for diet/lifestyle change (NB-1.3), Limited adherence to nutrition-related recommendations (NB-1.6), Physical inactivity (NB-2.1), Excessive physical activity (NB-2.2), Limited access to food or water (NB-3.2)
Beliefs-Attitudes	Irritability	Breastfeeding difficulty (NC-1.3)
Beliefs-Attitudes	Lack of self-efficacy for making change or demoralization from previous failures at change	Not ready for diet/lifestyle change (NB-1.3), Limited adherence to nutrition-related recommendations (NB-1.6), Poor nutrition quality of life (NB-2.5)
Beliefs-Attitudes	Lack of confidence in ability to change	Limited adherence to nutrition-related recommendations (NB-1.6)

Category	Etiology	Diagnosis
Beliefs-Attitudes	Lack of value for behavior change or competing values	Excessive energy intake (NI-1.3), Excessive oral intake (NI-2.2), Excessive alcohol intake (NI-4.3), Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3), Self-monitoring deficit (NB-1.4), Limited adherence to nutrition-related recommendations (NB-1.6), Physical inactivity (NB-2.1), Inability or to manage self-care (NB-2.3)
Beliefs-Attitudes	Lacks motivation and or readiness to apply or support systems change	Undesirable food choices (NB-1.7)
Beliefs-Attitudes	Negative impact of current or previous medical nutrition therapy (MNT)	Poor nutrition quality of life (NB-2.5)
Beliefs-Attitudes	Not ready for diet/lifestyle change	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5), Self-monitoring deficit (NB-1.4), Inability to manage self-care (NB-2.3), Poor nutrition quality of life (NB-2.5)
Beliefs-Attitudes	Perception of inadequate milk supply	Breastfeeding difficulty (NC-1.3)
Beliefs-Attitudes	Perception that lack of resources (e.g., time, financial, or interpersonal) prevent:	
	• Selection/food choices consistent with recommendations	Undesirable food choices (NB-1.7)
	• Changes	Not ready for diet/lifestyle change (NB-1.3), Limited adherence to nutrition-related recommendations (NB-1.6)
	• Sufficient level of activity	Physical inactivity (NB-2.1)
Beliefs-Attitudes	• Self-monitoring	Self-monitoring deficit (NB-1.4), Inability to manage self-care (NB-2.3)
	Unwilling or disinterested in:	
	• Learning/applying information	Food- and nutrition-related knowledge deficit (NB-1.1), Not ready for diet/lifestyle change (NB-1.3), Limited adherence to nutrition-related recommendations (NB-1.6), Undesirable food choices (NB-1.7), Inability to manage self-care (NB-2.3)
	• Reducing energy intake	Excessive energy intake (NI-1.3)
	• Reducing intake	Excessive oral intake (NI-2.2)
	• Modify protein or amino acid intake	Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
	• Tracking progress	Self-monitoring deficit (NB-1.4)
	• Unwillingness to purchase or consume fiber-containing foods	Inadequate fiber intake (NI-5.8.5)
• Weight regulation/preoccupation significantly influences self-esteem	Disordered eating pattern (NB-1.5)	

Category	Etiology	Diagnosis
Cultural	Culture of overeating	Predicted excessive energy intake (NI-1.5)
Cultural	Practices that affect nutrient intake	Predicted suboptimal nutrient intake (<i>specify</i>) (NI-5.11.1)
Cultural	Cultural practices that affect ability to:	
	<ul style="list-style-type: none"> • Access to food, fluid, nutrients 	Inadequate energy intake (NI-1.2), Inadequate oral intake (NI-2.1), Inadequate fluid intake (NI-3.1), Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Inadequate protein intake (NI-5.7.1), Inadequate carbohydrate intake (NI-5.8.1), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Unintended weight loss (NC-3.2)
	<ul style="list-style-type: none"> • Make appropriate food choices 	Inadequate fat intake (NI-5.6.1)
	<ul style="list-style-type: none"> • Breastfeed 	Breastfeeding difficulty (NC-1.3)
	<ul style="list-style-type: none"> • Learn/apply information 	Food- and nutrition-related knowledge deficit (NB-1.1), Undesirable food choices (NB-1.7)
	<ul style="list-style-type: none"> • Manage self-care 	Inability to manage self-care (NB-2.3)
	<ul style="list-style-type: none"> • Reduce carbohydrate intake 	Excessive carbohydrate intake (NI-5.8.2)
	<ul style="list-style-type: none"> • Regulate types of protein or amino acids consumed 	Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
	<ul style="list-style-type: none"> • Regulate timing of carbohydrate consumption 	Inconsistent carbohydrate intake (NI-5.8.4)
	<ul style="list-style-type: none"> • Regulate types of carbohydrate consumed 	Less than optimal intake of types of carbohydrate (<i>specify</i>) (NI-5.8.3)
	<ul style="list-style-type: none"> • Track personal progress 	Self-monitoring deficit (NB-1.4)
Knowledge	Food and nutrition knowledge deficit	Inadequate energy intake (NI-1.2), Excessive energy intake (NI-1.3), Excessive oral intake (NI-2.2), Inadequate fluid intake (NI-3.1), Excessive fluid intake (NI-3.2), Suboptimal bioactive substance intake (NI-4.1), Excessive bioactive substance intake (NI-4.2), Excessive alcohol intake (NI-4.3), Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Imbalance of nutrients (NI-5.5), Excessive fat intake (NI-5.6.2), Inadequate protein intake (NI-5.7.1), Excessive protein intake (NI-5.7.2), Inadequate carbohydrate intake (NI-5.8.1), Inadequate fiber intake (NI-5.8.5), Excessive mineral intake (<i>specify</i>) (NI-5.10.2), Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5), Excessive growth rate (NC-3.6), Self-monitoring deficit (NB-1.4), Inability to manage self-care (NB-2.3), Poor nutrition quality of life (NB-2.5), Limited access to food or water (NB-3.2), Limited access to nutrition-related supplies (NB-3.3)

Category	Etiology	Diagnosis
Knowledge	Food and nutrition knowledge deficit concerning:	
	• Sufficient oral food/beverage intake	Inadequate oral intake (NI-2.1)
	• Consumption of an appropriate variety of foods	Excessive mineral intake (<i>specify</i>) (NI-5.10.2)
	• Potentially unsafe food	Intake of unsafe food (NB-3.1)
	• Proper infant feeding, food/feeding preparation and storage	Intake of unsafe food (NB-3.1)
	• Adequate energy intake	Underweight (NC-3.1)
	• Appropriate amount or types of dietary protein or amino acids	Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Inadequate protein intake (NI-5.7.1), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
	• Appropriate amount or type of dietary fat	Inadequate protein–energy intake (NI-5.3), Inadequate fat intake (NI-5.6.1), Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3)
	• Appropriate amount and types of dietary carbohydrate	Excessive carbohydrate intake (NI-5.8.2), Less than optimal intake of types of carbohydrate (<i>specify</i>) (NI-5.8.3)
	• Appropriate timing of carbohydrate intake	Inconsistent carbohydrate intake (NI-5.8.4)
	• Physiological causes requiring careful timing and consistency in the amount of carbohydrate	Inconsistent carbohydrate intake (NI-5.8.4)
	• Physiological causes requiring use of modified carbohydrate	Less than optimal intake of types of carbohydrate (<i>specify</i>) (NI-5.8.3)
	• Physiological causes requiring use of modified carbohydrate intake	Excessive carbohydrate intake (NI-5.8.2)
	• Desirable quantities of fiber	Inadequate fiber intake (NI-5.8.5), Excessive fiber intake (NI-5.8.6)
	• Correct enteral formula needed	Inadequate enteral nutrition infusion (NI-2.3)
	• Food and supplemental sources of vitamins	Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Excessive vitamin intake (<i>specify</i>) (NI-5.9.2)
	• Food and supplemental sources of minerals	Inadequate mineral intake (<i>specify</i>) (NI-5.10.1)
	• Recommended dose of vitamin and mineral supplements	Imbalance of nutrients (NI-5.5)
	• Management of diagnosis requiring mineral restriction	Excessive mineral intake (<i>specify</i>) (NI-5.10.2)
• Management of diagnosed genetic disorder altering mineral homeostasis	Excessive mineral intake (<i>specify</i>) (NI-5.10.2)	

Category	Etiology	Diagnosis
Knowledge	Food and nutrition knowledge deficit, cont'd:	
	<ul style="list-style-type: none"> • Correct amount of enteral/parenteral formula 	Excessive energy intake (NI-1.3) Excessive parenteral nutrition infusion (NI-2.7)
	<ul style="list-style-type: none"> • Correct parenteral nutrition components 	Inadequate parenteral nutrition infusion (NI-2.6), Less than optimal parenteral nutrition composition or modality (NI-2.8)
	<ul style="list-style-type: none"> • Appropriate/correct access for delivering EN/PN 	Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6)
	<ul style="list-style-type: none"> • Health benefits of physical activity 	Physical inactivity (NB-2.1)
	<ul style="list-style-type: none"> • How to make nutrition-related changes 	Limited adherence to nutrition-related recommendations (NB-1.6)
	<ul style="list-style-type: none"> • Food-drug interactions 	Food-medication interaction (NC-2.3), Predicted food-medication interaction (NC-2.4)
	<ul style="list-style-type: none"> • On the part of the caregiver 	Excessive enteral nutrition infusion (NI-2.4), Excessive parenteral nutrition infusion (NI-2.7), Less than optimal enteral nutrition composition or modality (NI-2.5), Less than optimal parenteral nutrition composition or modality (NI-2.8)
	<ul style="list-style-type: none"> • Consumption of high-dose nutrient supplements 	Imbalance of nutrients (NI-5.5)
	<ul style="list-style-type: none"> • Infant/child hunger cues 	Food- and nutrition-related knowledge deficit (NB-1.1)
	Lack of prior exposure or exposure to inaccurate nutrition-related information	Food- and nutrition-related knowledge deficit (NB-1.1), Unsupported beliefs/attitudes about food or nutrition-related topics (NB-1.2), Self-monitoring deficit (NB-1.4), Undesirable food choices (NB-1.7), Inability to manage self-care (NB-2.3)
	Lack of prior exposure to accurate information regarding physical activity	Physical inactivity (NB-2.1)
	Failure to adjust for lifestyle changes or restricted mobility and decreased metabolism	Excessive energy intake (NI-1.3)
Physical function	Irritability	Breastfeeding difficulty (NC-1.3)
Physical function	Inability to physically: <ul style="list-style-type: none"> • Bend elbow at wrist • Grasp cups and utensils • Sit with hips square and back straight • Support neck and/or control head and neck • Coordinate hand movement to mouth 	Self-feeding difficulty (NB-2.6)
Physical function	Lack of self-feeding ability	Unintended weight loss (NC-3.2)
Physical function	Diminished ability to shop	Limited access to food or water (NB-3.2), Limited access to nutrition-related supplies (NB-3.3)
Physical function	Limited physical strength or range of motion	Self-feeding difficulty (NB-2.6)
Physical function	Physical inactivity	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5), Excessive growth rate (NC-3.6)

Category	Etiology	Diagnosis
Physical function	Change in physical activity anticipated	Predicted suboptimal energy intake (NI-1.4), Predicted excessive energy intake (NI-1.5)
Physical function	Voluntary or involuntary physical activity/movement	Increased energy expenditure (NI-1.1)
Physiologic-Metabolic	Age-related demands	Inadequate protein intake (NI-5.7.1), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Alteration in gastrointestinal tract	
	• Decreased functional length of GI tract	Increased nutrient needs (<i>specify</i>) (NI-5.1), Malnutrition (NI-5.2), Altered GI function (NC-1.4), Suboptimal growth rate (NC-3.5)
	• Alteration in GI anatomical structure	Increased nutrient needs (<i>specify</i>) (NI-5.1), Malnutrition (NI-5.2), Altered G function (NC-1.4), Inadequate fat intake (NI-5.6.1), Suboptimal growth rate (NC-3.5)
	• Alteration in GI function	Limited food acceptance (NI-2.9), Suboptimal bioactive substance intake (NI-4.1), Excessive bioactive substance intake (NI-4.2), Increased nutrient needs (<i>specify</i>) (NI-5.1), Malnutrition (NI-5.2), Inadequate fat intake (NI-5.6.1), Altered GI function (NC-1.4), Suboptimal growth rate (NC-3.5)
	• Change in GI tract motility	Altered GI function (NC-1.4)
	• Change in GI related organ function	Increased nutrient needs (<i>specify</i>) (NI-5.1), Altered GI function (NC-1.4), Suboptimal growth rate (NC-3.5)
	• Compromised endocrine function	Impaired nutrient utilization (NC-2.1), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Altered cholesterol metabolism/regulation	Decreased nutrient needs (<i>specify</i>) (NI-5.4)
Physiologic-Metabolic	Breast or nipple abnormality	Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Changes in taste, appetite	Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3)
Physiologic-Metabolic	Conditions leading to excess fluid loss	Inadequate fluid intake (NI-3.21)
Physiologic-Metabolic	Craniofacial malformations	Biting/Chewing (masticatory) difficulty (NC-1.2)
Physiologic-Metabolic	Decreased energy needs	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5), Excessive growth rate (NC-3.6)
Physiologic-Metabolic	Decreased ability to consume sufficient energy, nutrients	Inadequate energy intake (NI-1.2), Inadequate oral intake (NI-2.1), Inadequate protein–energy intake (NI-5.3), Inadequate protein intake (NI-5.7.1), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Unintended weight loss (NC-3.2)), Suboptimal growth rate (NC-3.5)

Category	Etiology	Diagnosis
Physiologic-Metabolic	Decreased nutrient needs related to low activity levels due to chronic disease or organ failure	Excessive enteral nutrition infusion (NI-2.4), Excessive parenteral nutrition infusion (NI-2.7), Excessive vitamin intake (<i>specify</i>) (NI-5.9.2)
Physiologic-Metabolic	Decreased total fat need or recommendation	Excessive fat intake (NI-5.6.2)
Physiologic-Metabolic	Altered fatty acid need or recommendation	Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3)
Physiologic-Metabolic	Developmental delay	Limited food acceptance (NI-2.9)
Physiologic-Metabolic	Difficulty chewing or swallowing high-fiber foods	Inadequate fiber intake (NI-5.8.5)
Physiologic-Metabolic	Difficulty latching on	Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Excessive energy intake	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5), Excessive growth rate (NC-3.6)
Physiologic-Metabolic	Food allergies and aversions impeding food choices consistent with guidelines	Undesirable food choices (NB-1.7)
Physiologic-Metabolic	Food intolerances	Decreased nutrient needs (<i>specify</i>) (NI-5.4)
Physiologic-Metabolic	Genetic predisposition to overweight/obesity	Predicted excessive energy intake (NI-1.5)
Physiologic-Metabolic	Heart failure	Decreased nutrient needs (<i>specify</i>) (NI-5.4)
Physiologic-Metabolic	Illness causing unexpected weight gain because of head trauma, immobility, paralysis or related condition	Unintended weight gain (NC-3.4)
Physiologic-Metabolic	Impaired cognitive ability, including learning disabilities, neurological or sensory impairment, and dementia	Inadequate fluid intake (NI-3.1), Food- and nutrition-related knowledge deficit (NB-1.1), Not ready for diet/lifestyle change (NB-1.3), Self-monitoring deficit (NB-1.4), Undesirable food choices (NB-1.7), Inability to manage self-care (NB-2.3), Impaired ability to prepare foods/meals (NB-2.4), Self-feeding difficulty (NB-2.6), Limited access to food or water (NB-3.2)
Physiologic-Metabolic	Inadequate energy intake	Underweight (NC-3.1)
Physiologic-Metabolic	Inadequate milk supply	Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Increased energy needs	Underweight (NC-3.1)
Physiologic-Metabolic	Injury, condition, physical disability or limitation that reduces physical activity or activities of daily living	Physical inactivity (NB-2.1)
Physiologic-Metabolic	Intolerance of EN/PN	Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6)

Category	Etiology	Diagnosis
Physiologic-Metabolic	Kidney, liver, cardiac, endocrine, neurologic, and/or pulmonary dysfunction	Limited food acceptance (NI-2.9), Excessive fluid intake (NI-3.2), Biting/ Chewing (masticatory) difficulty (NC-1.2), Altered nutrition-related laboratory values (<i>specify</i>) (NC-2.2), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Lack of developmental readiness to perform self-management tasks	Inability to manage self-care (NB-2.3)
Physiologic-Metabolic	Lethargy, sleepiness	Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Limited vision	Self-feeding difficulty (NB-2.6)
Physiologic-Metabolic	Limited food acceptance	Inadequate oral intake (NI-2.1), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Liver dysfunction	Decreased nutrient needs (<i>specify</i>) (NI-5.4), Excessive protein intake (NI-5.7.2), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
Physiologic-Metabolic	Loss of appetite awareness	Excessive oral intake (NI-2.2)
Physiologic-Metabolic	Malnutrition/malabsorption	Increased nutrient needs (<i>specify</i>) (NI-5.1), Breastfeeding difficulty (NC-1.3), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Mastitis and/or painful breasts, nipples	Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Mechanical issues such as inflammation, surgery, stricture, or oral, pharyngeal and esophageal tumors, mechanical ventilation	Swallowing difficulty (NC-1.1), Biting/ Chewing (masticatory) difficulty (NC-1.2)
Physiologic-Metabolic	Inborn errors of metabolism	Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
Physiologic-Metabolic	Metabolic abnormality	Excessive protein intake (NI-5.7.2), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
Physiologic-Metabolic	Metabolic disorders	Impaired nutrient utilization (NC-2.1)
Physiologic-Metabolic	Motor causes related to neurological or muscular disorders	Swallowing difficulty (NC-1.1)
Physiologic-Metabolic	Oral pain	Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Other organ dysfunction that leads to biochemical changes	Altered nutrition-related laboratory values (<i>specify</i>) (NC-2.2)
Physiologic-Metabolic	Partial or complete edentulism	Biting/Chewing (masticatory) difficulty (NC-1.2)
Physiologic-Metabolic	Physical disability	Impaired ability to prepare foods/meals (NB-2.4), Limited access to food or water (NB-3.2)

Category	Etiology	Diagnosis
Physiologic-Metabolic	Physiologic causes requiring modified amount or timing of carbohydrate intake	Excessive carbohydrate intake (NI-5.8.2), Less than optimal intake of types of carbohydrate (<i>specify</i>) (NI-5.8.3), Inconsistent carbohydrate intake (NI-5.8.4)
Physiologic-Metabolic	Physiological causes increasing nutrient needs due to:	
	<ul style="list-style-type: none"> Accelerated growth or anabolism 	Increased energy expenditure (NI-1.1), Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6), Increased nutrient needs (<i>specify</i>) (NI-5.1), Inadequate mineral intake (<i>specify</i>)(NI-5.10.1), Suboptimal growth rate (NC-3.5)
	<ul style="list-style-type: none"> Altered absorption or metabolism 	Inadequate fluid intake (NI-3.1), Increased nutrient needs (<i>specify</i>) (NI-5.1), Inadequate protein intake (NI-5.7.1), Inadequate carbohydrate intake (NI-5.8.1), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Predicted suboptimal nutrient intake (<i>specify</i>) (NI-5.11.1), Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Unintended weight loss (NC-3.2), Suboptimal growth rate (NC-3.5)
	<ul style="list-style-type: none"> Disease/condition 	Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6), Inadequate fluid intake (NI-3.1), Increased nutrient needs (<i>specify</i>) (NI-5.1), Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Inadequate protein intake (NI-5.7.1), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Unintended weight loss (NC-3.2)), Suboptimal growth rate (NC-3.5)
	<ul style="list-style-type: none"> Maintenance of body temperature 	Increased energy expenditure (NI-1.1), Inadequate fluid intake (NI-3.1), Suboptimal growth rate (NC-3.5)
	<ul style="list-style-type: none"> Prolonged catabolic illness 	Inadequate energy intake (NI-1.2), Inadequate oral intake (NI-2.1), Inadequate fluid intake (NI-3.1), Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Inadequate protein intake (NI-5.7.1), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Unintended weight loss (NC-3.2), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Altered metabolism	Predicted excessive energy intake (NI-1.5), Predicted excessive nutrient intake (NI-5.11.2)
Physiologic-Metabolic	Poor sucking ability	Breastfeeding difficulty (NC-1.3), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Prematurity	Altered nutrition-related laboratory values (NC-2.2) , Suboptimal growth rate (NC-3.5)

Category	Etiology	Diagnosis
Physiologic-Metabolic	Renal dysfunction	Decreased nutrient needs (<i>specify</i>) (NI-5.4), Excessive protein intake (NI-5.7.2), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
Physiologic-Metabolic	Small for gestational age, intrauterine growth retardation/restriction and/or lack of progress/appropriate weight gain per day	Underweight (NC-3.1), Suboptimal growth rate (NC-3.5)
Physiologic-Metabolic	Soft tissue disease (primary or oral manifestations of a systemic disease)	Biting/Chewing (masticatory) difficulty (NC-1.2)
Physiologic-Metabolic	Swallowing difficulty, and altered suck and breathing patterns in infants	Swallowing difficulty (NC-1.1), Breastfeeding difficulty (NC-1.3)
Physiologic-Metabolic	Xerostomia	Biting/Chewing (masticatory) difficulty (NC-1.2)
Psychological	Alcohol or drug addiction	Excessive alcohol intake (NI-4.3), Impaired nutrient utilization (NC-2.1)
Psychological	Addictive personality	Excessive physical activity (NB-2.2)
Psychological	Mental illness, confusion, or altered awareness	Intake of unsafe food (NB-3.1), Excessive oral intake (NI-2.2)
Psychological	Psychological causes such as depression and disordered eating	Inadequate energy intake (NI-1.2), Inadequate oral intake (NI-2.1), Inadequate fluid intake (NI-3.1), Excessive fluid intake (NI-3.2), Malnutrition (NI-5.2), Inadequate protein–energy intake (NI-5.3), Inadequate fat intake (NI-5.6.1), Inadequate protein intake (NI-5.7.1), Inadequate carbohydrate intake (NI-5.8.1), Excessive carbohydrate intake (NI-5.8.2), Less than optimal intake of types of carbohydrate (<i>specify</i>) (NI-5.8.3), Inconsistent carbohydrate intake (NI-5.8.4), Inadequate fiber intake (NI-5.8.5), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Excessive vitamin intake (<i>specify</i>) (NI-5.9.2), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Unintended weight loss, (NC-3.2), Suboptimal growth rate (NC-3.5), Undesirable food choices (NB-1.7), Excessive physical activity (NB-2.2), Limited access to food or water (NB-3.2), Limited access to nutrition-related supplies (NB-3.3)
Social-Personal	Lack of role models	Breastfeeding difficulty (NC-1.3), Physical Inactivity (NB-2.1)
Social-Personal	Lack of social support for implementing changes	Breastfeeding difficulty (NC-1.3), Not ready for diet/lifestyle change (NB-1.3), Self-monitoring deficit (NB-1.4), Limited adherence to nutrition-related recommendations (NB-1.6), Physical inactivity (NB-2.1), Inability to manage self-care (NB-2.3), Poor nutrition quality of life (NB-2.5)
Social-Personal	Family or social history of overeating	Predicted excessive energy intake (NI-1.5)

Category	Etiology	Diagnosis
Social-Personal	Increased psychological/life stress	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5), Predicted suboptimal energy intake (NI-1.4), Predicted excessive energy intake (NI-1.5)
Social-Personal	Change in living situation	Predicted suboptimal energy intake (NI-1.4), Predicted excessive energy intake (NI-1.5), Predicted suboptimal nutrient intake (<i>specify</i>) (NI-5.11.1)
Social-Personal	Living in a geographic location with danger for environmental emergency	Predicted suboptimal nutrient intake (<i>specify</i>) (NI-5.11.1)
Treatment	Accidental vitamin and/or mineral overdose from oral, enteral or parenteral sources	Excessive vitamin intake (<i>specify</i>) (NI-5.9.2), Excessive mineral intake (<i>specify</i>) (NI-5.10.2)
Treatment	Calories/kcal/kJ unaccounted for from IV infusion and/or medications	Excessive energy intake (NI-1.3)
Treatment	Changes in taste, appetite	Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3)
Treatment	Changes in GI tract motility	Altered GI function (NC-1.4)
Treatment	Chronic use of medications known to cause weight gain, such as use of certain antidepressants, antipsychotics, corticosteroids, certain HIV medications	Unintended weight gain (NC-3.4)
Treatment	Difficulty chewing or swallowing high-fiber foods	Inadequate fiber intake (NI-5.8.5)
Treatment	Excessive energy intake	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5),
Treatment	Food intolerances	Decreased nutrient needs (<i>specify</i>) (NI-5.4)
Treatment	High level of fatigue or other side effect of therapy	Undesirable food choices (NB-1.7), Impaired ability to prepare foods/meals (NB-2.4)
Treatment	Improvement in patient/client status, allowing return to total or partial oral diet; changes in the course of disease resulting in changes in nutrient requirements	Less than optimal enteral nutrition composition or modality (NI-2.5), Less than optimal parenteral nutrition composition or modality (NI-2.8)
Treatment	Inadequate energy intake	Underweight (NC-3.1)
Treatment	Infusion volume not reached or schedule for infusion interrupted	Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6)
Treatment	Insufficient electrolyte replacement when initiating feeding (PN/EN, including oral)	Imbalance of nutrients (NI-5.5)
Treatment	Lack of, compromised, or incorrect access for delivering EN/PN	Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6)
Treatment	Mechanical issues such as inflammation, surgery, stricture, or oral, pharyngeal and esophageal tumors, mechanical ventilation	Swallowing difficulty (NC-1.1), Biting/ Chewing (masticatory) difficulty (NC-1.2)

Category	Etiology	Diagnosis
Treatment	Medications that increase appetite	Excessive energy intake (NI-1.3), Excessive oral intake (NI-2.2),
Treatment	Medications that increase nutrient needs	Increased nutrient needs (<i>specify</i>) (NI-5.1)
Treatment	Medications that affect nutrient metabolism	Impaired nutrient utilization (NC-2.1)
Treatment	Medications that increase fluid needs or decrease thirst	Inadequate fluid intake (NI-3.1)
Treatment	Misused specialized protein products	Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
Treatment	Misdiagnosis of lactose intolerance/lactase deficiency	Inadequate mineral intake (<i>specify</i>) (NI-5.10.1)
Treatment	Nutrient/nutrient interaction and/or drug/nutrient interaction	Inadequate enteral nutrition infusion (NI-2.3), Inadequate parenteral nutrition infusion (NI-2.6), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Food-Medication Interaction (NC-2.3), Predicted food-medication interaction (NC-2.4)
Treatment	Overfeeding of parenteral/enteral nutrition (PN/EN)	Excessive energy intake (NI-1.3)
Treatment	Planned procedure, therapy or medication predicted to increase energy expenditure or nutrient need	Predicted suboptimal energy intake (NI-1.4), Predicted suboptimal nutrient intake (<i>specify</i>) (NI-5.11.1)
Treatment	Planned therapy or medication predicted to reduce energy/nutrient need or metabolic rate/metabolism	Predicted excessive energy intake (NI-1.5), Predicted excessive nutrient intake (NI-5.11.2)
Treatment	Planned procedure, therapy or medication predicted to decrease ability to consume sufficient energy or nutrients	Predicted suboptimal energy intake (NI-1.4), Predicted suboptimal nutrient intake (<i>specify</i>) (NI-5.11.1)
Treatment	Prolonged adherence to a low-fiber or low-residue diet	Inadequate fiber intake (NI-5.8.5)
Treatment	Prolonged hospitalization	Unintended weight loss (NC-3.2)
Treatment	Renal dysfunction	Decreased nutrient needs (<i>specify</i>) (NI-5.4), Excessive protein intake (NI-5.7.2), Less than optimal intake of types of proteins or amino acids (<i>specify</i>) (NI-5.7.3)
Treatment	Xerostomia	Biting/Chewing (masticatory) difficulty (NC-1.2)
Access	Access to foods and supplements in excess of needs	Excessive vitamin intake (<i>specify</i>) (NI-5.9.2)
Access	Caregiver intentionally or unintentionally not providing access to food or nutrition-related supplies	Limited access to food or water (NB-3.2), Limited access to nutrition-related supplies (NB-3.3)
Access	Community and geographical constraints for	Inadequate vitamin intake (NI-5.9.1), Limited access to food or water (NB-3.2), Limited access to nutrition-related supplies (NB-3.3)

Category	Etiology	Diagnosis
Access	Environmental causes, e.g., inadequately tested nutrient bioavailability of fortified foods, beverages, and supplements; marketing of fortified foods, beverages, supplements as a substitute for natural food source of nutrient(s)	Inadequate vitamin intake (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1)
Access	Exposure to contaminated water or food, e.g., community outbreak of illness documented by surveillance and/or response agency	Intake of unsafe food (NB-3.1)
Access	Failure to participate in federal food programs such as WIC, National School Breakfast/Lunch Program, food stamps	Limited access to food or water (NB-3.2)
Access	Financial constraints that may prevent sufficient level of activity (e.g., to address cost of equipment or shoes or club membership to gain access)	Physical inactivity (NB-2.1)

Category	Etiology	Diagnosis	
Access	Lack of, or limited access to:		
	<ul style="list-style-type: none"> Adaptive foods or eating devices conducive for self-feeding 	Self-feeding difficulty (NB-2.6)	
	<ul style="list-style-type: none"> Available and safe exercise environment and/or equipment 	Physical inactivity (NB-2.1)	
	<ul style="list-style-type: none"> Fluid 	Inadequate fluid intake (NI-3.1), Inadequate fiber intake (NI-5.8.5)	
	<ul style="list-style-type: none"> Fortified foods and beverages 	Inadequate mineral intake (<i>specify</i>) (NI-5.10.1)	
	<ul style="list-style-type: none"> Specialized protein products 	Excessive protein intake (NI-5.7.2)	
	<ul style="list-style-type: none"> Food or artificial nutrition 	Inadequate energy intake (NI-1.2), Inadequate oral intake (NI-2.1), Malnutrition (NI-5.2), Inadequate protein-energy intake (NI-5.3), Inadequate fat intake (NI-5.6.1), Inadequate protein intake (NI-5.7.1), Inadequate carbohydrate intake (NI-5.8.1), Inadequate vitamin intake (<i>specify</i>) (NI-5.9.1), Inadequate mineral intake (<i>specify</i>) (NI-5.10.1), Underweight (NC-3.1), Unintended weight loss (NC-3.2), , Suboptimal growth rate (NC-3.5), Poor nutrition quality of life (NB-2.5)	
	<ul style="list-style-type: none"> Fiber-containing foods 	Inadequate fiber intake (NI-5.8.5)	
	<ul style="list-style-type: none"> Food that contains a bioactive substance 	Suboptimal bioactive substance intake (NI-4.1)	
	<ul style="list-style-type: none"> Healthy food choices 	Excessive energy intake (NI-1.3), Excessive oral intake (NI-2.2), Excessive fat intake (NI-5.6.2), Less than optimal intake of types of fats (<i>specify</i>) (NI-5.6.3)	
	<ul style="list-style-type: none"> Recommended foods 	Undesirable food choices (NB-1.7)	
	<ul style="list-style-type: none"> Sufficient quantity or variety of culturally appropriate healthful food/water 	Limited access to food or water (NB-3.2)	
	Access	<ul style="list-style-type: none"> Safe and/or clear and accurately labeled food supply 	Excessive bioactive substance intake (NI-4.2) Intake of unsafe food (NB-3.1)
<ul style="list-style-type: none"> Food storage equipment/facilities 		Intake of unsafe food (NB-3.1)	
<ul style="list-style-type: none"> Self-management tools or decision guides or other nutrition-related supplies 		Inability to manage self-care (NB-2.3), Limited access to nutrition-related supplies (NB-3.3)	
Limited, absent, or failure to participate in community supplemental food programs such as food pantries, emergency kitchens, or shelters, with a sufficient variety of culturally appropriate healthful foods or nutrition-related supplies		Limited access to food or water (NB-3.2), Limited access to nutrition-related supplies (NB-3.3)	
Access		Schools lacking nutrition/wellness policies or application of policies ensuring convenient, appetizing, competitively priced culturally appropriate healthful foods at meals, snacks, and school sponsored activities	Limited access to food or water (NB-3.2)

Category	Etiology	Diagnosis
Behavior	Addictive behavior	Excessive physical activity (NB-2.2)
Behavior	Consumption of high-dose nutrient supplements	Imbalance of nutrients (NI-5.5)
Behavior	Eating behavior serves a purpose other than nourishment (e.g., pica)	Unsupported beliefs/attitudes about food or nutrition-related topics (NB-1.2), Limited food acceptance (NI-2.9)
Behavior	Excessive energy intake	Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5),
Behavior	Excessive physical activity	Underweight (NC-3.1)
Behavior	Food and nutrition compliance limitations	Excessive carbohydrate intake (NI-5.8.2), Less than optimal intake of types of carbohydrate (<i>specify</i>) (NI-5.8.3), Inconsistent carbohydrate intake (NI-5.8.4)
Behavior	Food or activity behavior-related difficulty	Poor nutrition quality of life (NB-2.5)
Behavior	Food preparation or eating patterns that involve only high-fiber foods to the exclusion of other nutrient-dense foods	Excessive fiber intake (NI-5.8.6)
Behavior	Disordered eating pattern	Excessive physical activity (NB-2.2), Underweight (NC-3.1), Overweight, adult or pediatric (NC-3.3.1), Obese, pediatric (NC-3.3.2), Obese, Class I (NC-3.3.3), Obese, Class II (NC-3.3.4), Obese, Class III (NC-3.3.5)
Behavior	Feeding via bottle or other route that may affect breastfeeding	Breastfeeding difficulty (NC-1.3)
Behavior	Frequent intake of foods containing bioactive substances	Excessive bioactive substance intake (NI-4.2)
Behavior	Limited food acceptance due to behavioral issues	Inadequate oral intake (NI-2.1), Suboptimal growth rate (NC-3.5)
Behavior	Inability to limit or refuse offered foods	Excessive oral intake (NI-2.2)
Behavior	Inadequate energy intake	Underweight (NC-3.1)
Behavior	Lack of focus and attention to detail, difficulty with time management and/or organization	Self-monitoring deficit (NB-1.4)
Behavior	Lifestyle change that reduces physical activity or activities of daily living	Physical inactivity (NB-2.1)
Behavior	Over consumption of a limited variety of foods	Excessive mineral intake (<i>specify</i>) (NI-5.10.2)
Behavior	Poor food planning, purchasing and preparation practices	Excessive oral intake (NI-2.2), Inadequate fiber intake (NI-5.8.5), Limited access to food or water (NB-3.2)
Behavior	Reluctance or avoidance of self-feeding	Self-feeding difficulty (NB-2.6)