

#### **PES Statement Cheat Sheet for RDs**

**NOTE:** This guide has been developed based on information retrieved from the Nutrition Care Process Reference Terminology (NCPT) Manual (2017) (1). It is not a comprehensive list of all nutrition diagnoses but includes those most commonly used in dietetic practice.

#### **Purpose of a PES Statement**

To identify and describe a nutrition-related problem that can be improved or resolved through a nutrition intervention by a Dietitian.

#### **How To Write a PES Statement**

A PES statement is comprised of 3 parts: the problem (P), etiology (E), and the signs and symptoms (S). These are linked together by two specific phrases as shown below:

D.	Pro	h	l۵m

A nutrition-related problem or diagnosis that can be improved or resolved through nutrition intervention.

# E: Etiology

related

to...

The cause that an RD can address to resolve or lessen the signs and symptoms. The nutrition intervention targets this.

## S: Signs/Symptoms

The signs and symptoms determining the diagnosis and whether it can be resolved or improved. These should be monitored to determine effectiveness of the nutrition intervention.

#### **Domains and Sub-Domains:**

#### Intake

- Energy Balance
- Oral Intake
- Nutrition Support Intake
- Fluid Intake
- Bioactive Substances
- Nutrient
- Fat and Cholesterol
- Protein and Amino Acid
- Carbohydrate and Fiber
- Vitamin and Mineral

## Clinical

Functional

as

*by...* 

evidenced

- Biochemical
- Weight
- Malnutrition Disorders

#### **Behavioural-Environmental**

- Knowledge and Beliefs
- Physical Activity and Function
- Food Safety and Access





# <u>Intake</u>

## **ENERGY BALANCE**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Increased energy expenditure	Wound healing Fever Cancer COPD Cerebral palsy Cystic fibrosis Physical activity	Unintentional weight loss Estimated energy needs
Inadequate (suboptimal) energy intake	Catabolism energy increases Poor intake Chewing/ swallowing issues Taste changes Limited access to food Knowledge deficit	Unintended weight loss Energy intake < needs Food avoidance Lack of food interest
Excessive energy intake	Limited access to healthy food Bingeing/ disordered eating Knowledge deficit Limited access to healthy food Lack of value to change Appetite stimulants Decreased metabolism/ needs	Undesired weight gain Overweight or obesity Energy intake > needs Elevated waist circumference High intake of calories and portions

# **ORAL INTAKE**

Problem	Etiology "related to…"	Signs/Symptoms "as evidenced
		by"





Inadequate (suboptimal) oral intake	Catabolism energy increases Poor intake Chewing/ swallowing issues Taste changes Limited access to food Knowledge deficit Depression/ disordered eating	Unintended weight loss Oral intake < needs Food avoidance/ lack of interest Nausea, vomiting Nutrient deficiencies Nutrient malabsorption Need for nutrition support
Excessive oral intake	Bingeing/ disordered eating Limited access to healthy food Knowledge deficit Poor satiety cues Appetite stimulants Unwilling to reduce intake Lack of value to change	Unintended weight gain Overweight or obesity Oral intake > needs High intake of calories and portions Excess fast food/ restaurant intake Binge eating patterns
Limited food acceptance	GI pain or discomfort Neurological disorders Food aversions Self-limitations Behavioural issues Unsupported beliefs/ attitudes	Unintended weight changes Nutrient deficiencies Erratic appetite Food intake < needs Suboptimal reliance on foods

## **NUTRITION SUPPORT INTAKE**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Inadequate EN infusion	Altered nutrient absorption Inappropriate formula Formula or rate intolerance Inadequate rate Infusion schedule interrupted NPO	Hypocalcemia Iron-deficiency anemia Unintended weight loss Underweight Dehydration Loss of muscle mass Nausea, vomiting, diarrhea Current volume/ rate < goal



Excessive EN infusion	Decreased energy needs Excessive rate Pump malfunction Rate setting error Overfeeding	High BUN:creatinine Hyperglycemia Hypercapnia Unintended weight gain Edema
EN composition inconsistent with needs	Needs different than estimate Excessive GI losses End of life	Unintended weight changes Nutrient imbalances Edema Constipation, diarrhea EN intake < or > needs
EN administratio n inconsistent with needs	Inadequate/ excessive rate Infusion schedule interrupted End of life	Hypo- or hyperglycemia High gastric residuals Nausea, vomiting, diarrhea Clogged tubes Reports of no access History of EN intolerance
Inadequate PN infusion	Altered nutrient absorption Pump malfunction Inadequate rate Awaiting PN access Infusion schedule interrupted PN intolerance	Hypocalcemia Iron-deficiency anemia Unintended weight loss Underweight Dehydration Loss of muscle mass Nausea, vomiting, diarrhea Current volume/ rate < goal
Excessive PN infusion	Decreased energy needs Excessive rate Pump malfunction Rate setting error Overfeeding	High BUN:creat Hyperglycemia Hypercapnia Elevated liver enzymes Unintended weight gain Edema PN intake > needs





PN composition inconsistent with needs	Needs different than estimate End of life	Nutrient imbalances Elevated liver enzymes Unintended weight changes PN intake < or > needs Edema History of PN intolerance
PN administratio n inconsistent with needs	Inadequate/excessive rate Infusion schedule interrupted End of life	Elevated liver enzymes Infusion site compromised Missed PN administration Nausea History of PN intolerance PN conflicting with interventions

## **FLUID INTAKE**

Problem	Etiology "related to…"	Signs/Symptoms "as evidenced by"
Inadequate fluid intake	Chewing/ swallowing issues Need for thickened fluids Excess fluid losses Increased exercise Decreased thirst cues Limited access to fluid Knowledge deficit Impaired cognition	High electrolytes High BUN Hyperglycemia Unintentional weight loss Constipation Thirst Dry skin Fluid intake < needs
Excessive fluid intake	End-stage renal disease Nephrotic syndrome Heart failure SIADH Increased thirst cues Knowledge deficit	Low electrolytes Increase in dietary sodium Edema and ascites Nausea and vomiting Headache Muscle spasms and convulsions Shortness of breath Fluid intake > needs





## **BIOACTIVE SUBSTANCES**

Problem	Etiology "related to…"	Signs/Symptoms "as evidenced by"
Inadequate bioactive substance (specify) intake Ex: psyllium, beta-glucans, plant sterols, soy protein	Knowledge deficit Altered GI function Limited access to bioactive foods	Bioactive food intake < needs Conditions benefiting from bioactive foods
Excessive bioactive substance (specify) intake Ex: psyllium, beta-glucan, caffeine, alcohol	Knowledge deficit Altered GI function Misuse of a substance Alcohol or caffeine addiction Lack of value for change	Labs indicating excess intake Elevated liver enzymes Unintended weight loss Constipation, diarrhea, nausea, Vomiting, gas, heartburn Mental status changes/ irritability Headaches/ migraines Cardiovascular changes Bioactive food intake > needs Use for weight loss/ cure Alcohol when contraindicated

## **NUTRIENT**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Increased nutrient needs (specify)	Altered absorption/metabolism Pancreas/ liver issues Short bowel syndrome Celiac or Crohn's disease Wound healing Infection	Labs indicating high nutrient needs Electrolyte imbalances Nutrient losses (fecal/ urinary) Unintended weight loss Underweight Nutrient deficiencies Nutrient intake < needs





Decreased nutrient needs (specify)	Renal or liver disease Altered cholesterol regulation IBD flare-up Heart failure IBS food intolerances Desired weight loss	Hyperlipidemia Hyperphosphatemia Hyperkalemia Low GFR High BUN High creatinine Elevated liver enzymes Nutrient intake > needs Amount of weight loss desired
Imbalance of nutrients	High dose supplements Knowledge deficit Food faddism Electrolyte replacement issues	Constipation, diarrhea, abdominal pain, nausea, vomiting Refeeding syndrome Supplement intake > needs Decreased nutrient values
Inadequate (suboptimal) protein-energ y intake	Catabolism energy increases Wound healing Malabsorption Limited access to food Knowledge deficit Self-feeding barriers	Weight loss Slow wound healing Protein/ energy intake < needs Food avoidance/ restriction Inability to prepare meals

## **FAT AND CHOLESTEROL**

Problem	Etiology "related to…"	Signs/Symptoms "as evidenced by"
Inadequate fat intake	Catabolism energy increases Fat malabsorption Altered GI function Less than optimal food choices Knowledge deficit	Fat intake < needs Unintended weight loss Scaly skin/ dermatitis
Excessive fat intake	Heart disease NAFLD Pancreatic disease Biliary diseases Limited access to healthy foods	Hyperlipidemia High lipase/ amylase Elevated liver enzymes Fecal fat test Steatorrhea Diarrhea, cramping, epigastric pain





	Knowledge deficit Lack of value for change Disordered eating	Intake of high-fat foods Fat intake > needs Pancreatic enzymes Lipid-lowering meds
Intake of types of fats inconsistent with needs	Knowledge deficit Limited access to healthy foods Lack of value for change Physiological altered fat needs	Dyslipidemia High lipase/ amylase Elevated liver enzymes Altered fatty acid panels Dermatitis Diarrhea, cramping, epigastric pain Type of fat intake < or > needs

## **PROTEIN AND AMINO ACID**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Inadequate protein intake	Catabolism energy increases Malabsorption Need dependent on age Wound/ burn/ post-op healing Self-feeding barriers Knowledge deficit Disordered eating	Edema Failure to thrive Muscle wasting Thin and fragile hair Protein intake < needs
Excessive protein intake	Liver or renal disease Knowledge deficit Metabolic abnormalities Food faddism	High BUN Low GFR Growth stunting Protein intake > needs Suboptimal supplementation
Intake of types of proteins or amino acids inconsistent with needs	Liver or renal disease Knowledge deficit Misused specialized products Food faddism PKU Celiac disease Limited protein access Lack of willingness to modify protein or amino acid intake	High BUN Low GFR Excess specific amino acids Unintended weight loss Delayed growth in children Epigastric pain, distention Type of protein intake < or > needs Suboptimal supplementation





## **CARBOHYDRATE AND FIBER**

Problem	Etiology "related to…"	Signs/Symptoms "as evidenced by"
Inadequate carbohydrate intake	Increased activity level Malabsorption Metabolic changes Limited access to food Self-feeding barriers Knowledge deficit	Ketone smelling breath Carbohydrate intake < needs
Excessive carbohydrate intake	Diabetes Lactase deficiency Knowledge deficit Lack of willingness to modify carb intake Disordered eating	Hyperglycemia High OGTT High HbA1c Dental caries Diarrhea Carb intake > needs Meds causing hyperglycemia Obesity
Intake of types of carbohydrate s inconsistent with needs	Altered carb needs d/t disease Knowledge deficit Disordered eating Lack of willingness to modify carb intake	Hyper or hypoglycemia Unintended weight change Constipation, diarrhea Type of carb intake < or > needs Meds altering glucose levels Intolerances/ allergic reactions
Inconsistent carbohydrate s	Need for carb timing Knowledge deficit Disordered eating Lack of willingness to modify carb timing	Hypo and hyperglycemia Carb timing Type of carb intake < or > needs Insulin or antidiabetic meds Meds altering glucose levels
Inadequate fiber intake	Limited access to fibrous foods Knowledge deficit Prolonged low fiber diet Non optimal food prep practices Lack of willingness to consume fibrous foods	IBD Short bowel syndrome Inadequate fecal bulk Fiber intake < needs





Excessive	Obsession w/ bowel frequency	IBS
fiber intake	Knowledge deficit	Short bowel syndrome
	Need for low fiber diet	Bowel obstruction
		Fiber intake > needs
		Nausea, vomiting, gas, diarrhea,
		cramping, high stool volume

## **VITAMIN AND MINERAL**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Inadequate intake of (specify) A, C, D, Folate, B6, B12 Calcium, Iron, Potassium, Phosphorous, Sodium, Zinc	Increased needs d/t disease Malabsorption Med-related alterations Limited access to food Geography/ season Knowledge deficit Depression/ disordered eating	Low vitamin or mineral lab values Signs and symptoms of deficiency Intake < needs Use of substances reducing absorption
Excessive intake of (specify) A, C, D, Folate, B6, B12 Calcium, Iron, Potassium, Phosphorous, Sodium, Zinc	Decreased needs d/t disease Foods/ supplements in excess Knowledge deficit Accidental overdose Depression/ disordered eating	High vitamin or mineral lab values Signs and symptoms of toxicity Intake > needs

# **Clinical**

## **FUNCTIONAL**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced
		by"

	T	1
Swallowing difficulty	Inflammation Surgery Tumors Prior ventilation Celebral palsy Multiple sclerosis Stroke Dysphagia	Abnormal swallow study Abnormal swallow nerve functions SLP assessment Need for modified texture/ liquids Coughing/ choking Prolonged chewing/ food pouching Regurgitation/ food "getting stuck" Swallow pain Aspiration pneumonia Decreased intake/ food avoidance
Biting/chewi ng Difficulty	Oral/ facial dysfunction Oral surgery Poor dentition Tooth /jaw pain Xerostomia Side effects of chemo/ radiation	Decreased intake/ food avoidance Oral lesions Unintended weight loss SLP assessment Need for texture modification
Breastfeedin g difficulty	Infant: Latching/ sucking difficulty Lethargy/ sleepiness Swallowing difficulty Alternate route of feeding Mother: Breast/ nipple pain/ abnormality Mastitis Inadequate milk supply Lack of support	Infant: Failure to thrive Dehydration Weight loss or poor weight gain Hunger after feeding Feeding resistance Cleft palate/ thrush Mother: Lack of milk when pumping Lack of confidence/ knowledge Lack of accommodations Feeding through alternate route Mastitis Candidiasis
Altered GI function	Bowel resection Pancreas or liver issues Short bowel syndrome IBD Celiac disease Cystic fibrosis GI cancer	Abnormal digestive enzymes Abnormal fecal studies Abnormal gastric emptying/ transit Diagnostic results Altered nutrient labs Unintended weight loss Nausea, vomiting





	Constipation, diarrhea Steatorrhea, fecal incontinence
	Food avoidance

## **BIOCHEMICAL**

Problem	Etiology "related to…"	Signs/Symptoms "as evidenced by…"
Impaired nutrient utilization	Altered GI function Malabsorption Metabolic disorders Medications Alcohol or drug addiction	Abnormal nutrient metabolism labs Abnormal pituitary hormones Vitamin and mineral deficiencies Hypo and hyperglycemia Unintended weight loss Muscle wasting
Altered nutrition-rela ted laboratory values	Kidney/ liver/ cardiac/ endocrine/ neurological/ pulmonary dysfunction Metabolic disorders Overhydration Refeeding syndrome	Abnormal lab values Unintended weight changes Micronutrient intake < needs Protein, K, Phos, Na, fluid intake > needs
Food-medica tion interaction	Ingestion/ administration of medication or food resulting in a harmful reaction	Altered lab values Known food-medication interaction Symptoms typical of interaction

# **WEIGHT**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Underweight	Disordered eating Excessive physical activity Inadequate energy intake Limited access to food Knowledge deficit	Decreased MUAC and TST Muscle wasting BMI < 18.5 Hunger Limited food supply in home Dieting/ food faddism Refusal to eat



		Malnutrition Nutrient deficiencies Energy intake < needs
Unintended weight loss	Increased nutrient needs Chewing/ swallowing issues Functional decline Limited access to food Prolonged hospitalization Depression or disordered eating Cancer	Weight loss % and timeframe Muscle and fat wasting Normal intake despite illness Chemo/ radiation side effects Impaired senses Energy intake < needs
Overweight/ Obesity	Decreased nutrient needs Excessive energy intake Depression or disordered eating Knowledge deficit Not ready for lifestyle change Physical inactivity Increased stress	BMI >25 Increased adiposity Over consuming high energy foods Unwilling to apply suggestions
Unintended weight gain	Physical immobility or trauma Hypothyroidism Cushing's syndrome Antidepressants Antipsychotics Steroids Edema Not ready for lifestyle change	Weight gain % and timeframe Increased adiposity Altered labs Energy intake > needs Recent increases in food intake Physical inactivity
Growth rate below expected	Critical illness Type 1 diabetes Nutrient malabsorption Feeding barriers Limited access to food Limited food acceptance Knowledge deficit	Small for gestational age Inadequate weight for length Inadequate length/ height for age Inadequate BMI Lack of appropriate weight gain Fluctuating maternal hormones Vitamin and mineral deficiencies Energy intake < needs Difficulty breastfeeding Normal intake despite illness





## **MALNUTRITION DISORDERS**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Starvation related malnutrition (undernutriti on)	Altered GI function Limited access to food Knowledge deficit Depression/ disordered eating Oral health limitations Impaired senses Substance abuse Poverty/ neglect	Malnutrition Unintended weight loss Loss of muscle and fat stores Edema Energy intake < needs
Chronic disease or condition related malnutrition (undernutriti on)	Altered GI function Increased energy needs Organ failure Cancer Malabsorption CKD	Malnutrition Unintended weight loss Loss of muscle and fat stores Edema Energy intake < needs
Acute disease or injury related malnutrition	Altered GI function Sepsis Pneumonia Wounds/ burns Major surgeries Increased energy needs Knowledge deficit	Malnutrition Unintended weight loss Loss of muscle and fat stores Edema Energy intake < needs
Non illness related pediatric malnutrition	Limited access to food Feeding intolerances Neglect/ poverty	Energy intake < needs Inadequate weight for length Inadequate length/ height for age Inadequate BMI Inadequate weight gain velocity Loss of muscle and fat stores Edema
Illness related pediatric malnutrition	Catabolism energy increases Altered nutrient utilization Depression / disordered eating	Energy intake < needs Inadequate weight for length Inadequate length/ height for age Inadequate BMI





	Inadequate weight gain velocity Loss of muscle and fat stores Edema
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# **Behavioural-Environmental**

## **KNOWLEDGE AND BELIEFS**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Food- and nutrition-rela ted knowledge deficit	Unsupported nutrition beliefs/ attitudes Lack of prior education Impaired cognition Prior incorrect knowledge Use for new education	Report of inaccurate knowledge Inability to apply information Unwilling/ disinterest to learn Need for further education
Not ready for diet/lifestyle change	Unsupported nutrition beliefs Impaired cognition Lack of social support Denial of need to change Financial constraints Lack of self-efficacy Specify diet/ lifestyle change	Reasoning why pt is not ready: cognition, self-report, refusal, unwillingness to accept Unwilling to change Negative body language Cannot understand changes Defensiveness/ hostility
Disordered eating pattern	Obsession to be thin Low self-esteem Anorexia nervosa Bulimia nervosa PICA Other eating disorders	Abnormal labs Diet history Significant weight fluctuations Changes in body composition Binge/ purge behaviour Denial of hunger Fatigue and weakness Avoidance of food/ social events Excessive physical activity Chronic dieting pattern Guilt around eating Misuse of laxatives, stimulants etc. Obsession with nutrient values
Limited adherence to	Specific diet education	Expected lab values not achieved



nutrition-rela ted recommenda tions	Lack of social support Lack of value for change Knowledge deficit Unwilling to apply info Unsupported nutrition beliefs	Expected anthropometric outcomes not achieved Failure to achieve agreed upon goals Frustration/lack of confidence Re-admission for nutrition issue
Undesirable food choices	Diet requirements Impaired cognition Financial constraints Disinterest in diet intervention Allergies or aversions	Unintended weight changes Inability to understand diet Limited access to healthy food Nutrient deficiencies or toxicities

# PHYSICAL ACTIVITY AND FUNCTION

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Physical inactivity	Lifestyle Functional or physical inability Cognitive impairment Lack of social support Limited access to equipment Time constraints	Infrequent or lower than optimal intensity/ movement habits Weight gain Overweight/ obesity Excess adiposity Limited muscle mass Sedentary activities
Excessive physical activity	Lifestyle Disordered eating Body dysmorphia Irritation nutrition beliefs Addictive personality	Weight loss Depleted adipose and muscle Overtraining Neglecting other activities Abnormal lab values

## **FOOD SAFETY AND ACCESS**

Problem	Etiology "related to"	Signs/Symptoms "as evidenced by"
Intake of unsafe food	Knowledge deficit Exposure to contaminated food	Foodborne illness Poisoning





	Impaired cognition Limited access to safe food Limited safe food storage/ prep	Physical discomfort Intake of nonfood Unsafe storage/ prep Mislabeled foods
Limited access to food	Poor housing condition No running water Financial constraints Accessibility barriers Caregiver neglect/ abuse Lack of food planning, purchasing, and preparation skills Lack of community support Mental illness	Condition of home Inability to pay water bill No finances for food Unintended weight loss Nutrient deficiencies Hunger Knowledge deficit Malnutrition Limited variety of food intake Illness or physical disability

#### References

1. Abridged Nutrition Care Process Reference Terminology (NCPT) Manual: Standardized Terminology for the Nutrition Care Process (2017 Edition)

