



Explanation file: **nutritionDay ICU Questionnaire – Sheet 1 UNIT SHEET**

sheet n.	NO.	QUESTION	ANSWER OPTIONS	QUESTION EXPLANATION	ANSWER EXPLANATION
1	1	Number of ICU beds	Current / Maximum	How many ICU beds are currently available and what the full capacity is.	Current: today available Maximum: full bed capacity
1	2	Type of ICU	Medical ICU / Surgical ICU / Interdisciplinary ICU / HDU / Other	Identifies the ICU's focus area to contextualize care type.	Medical: Non-surgical cases. Surgical: Post-op care. Interdisciplinary: Mixed. HDU: high dependency unit / intermediate care unit (lower intensity of care than ICU) Other: None of the above
1	3	Does your ICU regularly discharge to an intermediate care unit?	Yes / No / I don't know	Determines if there's a step-down unit between ICU and the general ward.	
1	4	Do you have a post-ICU clinic?	Yes / No / I don't know	Checks whether there is a specialized follow-up clinic for ICU patients.	
1	5	Do you have a regular follow-up after hospital discharge?	Yes / No / I don't know	Asks if patients are routinely monitored after leaving the hospital.	
1	6	Total number of staff in the ICU	number– insert a number by role e.g. 3, 4, 6, ...	Staff working in the ICU during the shift starting in the morning. Fulltime equivalents: indicate with decimal number . A person working 75% document 0.75.	Includes intensivists, nurses, dietitians, therapists, etc.
1	7	Is there a person on your unit dedicated to nutritional care?	Yes / No / I don't know	Verifies if a specific staff member focuses on nutrition within the ICU.	
1	8	Is there a nutrition team in your hospital?	Yes / No / I don't know	Checks if nutritional care is organized at the hospital level.	Typically an interdisciplinary team that may include MDs, nursing staff, dietician/nutritionist, pharmacist, kitchen representative,
1	9a	Do you have written procedures for nutritional care?	Yes / No / I don't know	Asks if your ICU follows documented nutrition protocols.	
1	9b	If YES, which one?	National / International / ICU Protocol / Individual Plan	Clarifies the type of nutritional procedures used.	National: Country-specific. International: e.g., ESPEN. ICU Protocol: Internal. Individual: Tailored.
1	10	How do you assess physical and nutritional status in the ICU?	(Weight, frailty, labs, mobility, etc.)	Identifies the tools or criteria used to assess a patient's nutritional condition.	Examples: grip strength, mobility, lab markers, weight changes.
1	11	Which parameters do you assess for physical and nutritional status?	Strength / Ultrasound / CT / BIA	Lists specific metrics used to evaluate body composition and function.	Strength: Grip test. Ultrasound: Muscle thickness. CT: Muscle cross-sectional area BIA: Bio-Impedance-Analysis.
1	12	What is your caloric goal on ICU Day 7?	kcal/kg/day / I don't know	Identifies your energy target for patients by day 7 in ICU.	
1	13	What is your protein goal on ICU Day 7?	g/kg/day / I don't know	Identifies your protein target by day 7 in ICU.	



1	14	How do you assess the caloric goal?	Indirect calorimetry / VCO ₂ / Weight-based / Equation / Other / NA	Asks what method you use to calculate the patient's energy needs.	Indirect: Metabolic gas analysis. VCO ₂ : Carbon dioxide production. Weight-based: Simple estimate. Equation: Predictive formulas.
1	15	Which body weight do you use?	Actual / Estimated / Ideal / Adjusted	Determines what kind of weight measurement is used for nutritional calculations.	Actual: Measured. Estimated: Visual guess. Ideal: Height-based. Adjusted: according to ESPEN guidelines that adjust the weight in patients with BMI>25.

Explanation file: **nutritionDay ICU Questionnaire – Sheet 2**

sheet n.	NO	QUESTION	ANSWER OPTIONS	QUESTION EXPLANATION	ANSWER EXPLANATION
2	1	Admitted to the ICU from	Operating room / Emergency room / Other ICU / Normal ward / Other institution / Home / Other / I don't know	Where the patient came from before ICU admission.	Operating room=Post-surgery; Emergency room=ER admission; Other ICU=transfer; Normal ward=general hospital; Other institution=other healthcare facility; Home=direct; Other=not listed; I don't know=unknown
2	2	Mobility before ICU admission	Independently mobile / Mobile with help / Bedridden / NA	Patient's ability to move before ICU admission mostly based on patient's history.	Independently=no help; With help=needs support; Bedridden=immobile; NA=not applicable
2	3	Did the patient have surgery?	Scheduled / Emergency / No surgery / I don't know	Whether surgery occurred before ICU admission.	Scheduled=planned before hospital admission or during actual stay; Emergency= patient did not know that surgery is necessary before hospital admission and surgery was necessary within 24-48 hours; No surgery= no surgical intervention during the actual hospital stay but readmission within 2 days of discharge are considered as patient had surgery ; I don't know=unclear
2	4	Days since surgery	Free text	How many days passed since surgery.	Each day is counted. Surgery on nutritionDay is 1 day. Typically calculate: (date of nutritionDay- date of surgery)+1
2	5	Diagnosis at ICU admission	Multiple selection	All diagnoses present at ICU admission.	Based on ICD-10 organ system list.
2	6	Main reason for admission	Single selection	Primary diagnosis leading to ICU admission.	Only one main diagnosis



2	7	Conditions/ Comorbidities	Multiple options / No comorbidities	Chronic/pre-existing conditions/comorbidities whether specific or general	GI disease: gastro-intestinal disease; Cancer (active): the patient has currently cancer in addition to the major diagnosis. Cancer (history): the patient has had cancer but actually without active treatment.
2	8	Main reasons for ICU dependency	Multiple selection	Why intensive care is necessary.	Abdominal, sepsis, trauma, transplant, etc. Typically organ functions that need support. Others includes admission for monitoring.
2	9	Glasgow Coma Scale (GCS)	Eyes (1–4), Verbal (1–5), Motor (1–6)	Central nervous system impairment. GCS is the sum of the individual scales. Total 3=deep coma, 15=fully alert.	Please estimate function without sedation. A deeply sedated patient without prior injury to the brain should have a GCS of 15.
2	10	Laboratory values at ICU admission	pH / pCO ₂ / PaO ₂ / FiO ₂ / Lactate / Glucose / Creatinine / WBC etc.	Patient's lab results at admission.	see detailed explanations below
2	11	Infections within last 10 days	Pneumonia / Urinary tract / Blood culture positive / Other	Indicate whether a specific infection was detected within the last 10 days.	For definition of clinical infections we apply the ECDC recommendations: https://www.ecdc.europa.eu/en/publications-data/protocol-surveillance-healthcare-associated-infections-and-prevention-indicators

10. Laboratory values at ICU admission (insert text as numbers)

pH: Please insert lowest (minimal) and highest (maximal) pH in the first 24 hours. If the value was only taken once please insert this value as maximum.

PCO₂: partial pressure of CO₂ from blood gas analysis in arterial or capillary blood. Indicate in mm Hg. If you measure kPa obtain mm Hg by multiplying with 7.5.

PaO₂: partial pressure of O₂ from blood gas analysis in arterial or capillary blood. Indicate in mm Hg. If you measure kPa obtain mm Hg by multiplying with 7.5.

PaO₂/FiO₂: Please calculate the ratio of partial pressure of arterial O₂ in mm Hg to the fraction of inspiratory O₂ taken at the same timepoint. For the PaO₂ use mm Hg and for FiO₂ use the percent value in decimal form (for example 30% --> 0.3).

Lactate: Please insert lowest (minimal) and highest (maximal) lactate. Please check mg/dl or mmol/L in the first 24 hours. If you have only one measurement on that day please insert as maximal. Conversion: 1 mmol/L = 9 mg/dL.



Glucose: Please insert lowest (minimal) and highest (maximal) glucose. Please check mg/dl or mmol/L in the first 24 hours. If you have only one measurement on that day please insert as maximal. Conversion 10 mmol/L = 180 mg/dL.

Heart rate: Please insert minimal and maximal values of the day. If you have only one measurement on that day please insert as maximal. Normal range 60-100 bpm (beats per minute).

Systolic blood pressure: Please insert minimal and maximal values of the day. If you have only one measurement on that day please insert as maximal. Normal range 90-140 mmHg.

Temperature: Please insert lowest (minimal) and highest (maximal) patient temperature in the first 24 hours. If the temperature was only taken once please insert this value as maximum. Please check "C" for Celsius or "F" for Fahrenheit.

Urine output: Please insert value in ml of the first 24h.

White blood cells (WBC): Please insert lowest (minimal) and highest (maximal) white blood cells in $10^3/\mu\text{L}$ or $10^9/\text{L}$ in the first 24 hours. If the white blood cell count was only taken once please insert this value as maximum.

Platelets: Please insert lowest (minimal) and highest (maximal) white blood cells in $10^3/\mu\text{L}$ or $10^9/\text{L}$ in the first 24 hours. If the white blood cell count was only taken once please insert this value as maximum.

Creatinine: Please insert the lowest (minimal) and highest (maximal) creatinine in the first 24 hours. Please check mg/dl or $\mu\text{mol/L}$. Conversion 1 mg/dL = 88.4 $\mu\text{mol/L}$.

Serum urea OR BUN: Please insert lowest (minimal) and highest (maximal) of serum urea in the first 24 hours. Please specify by checking mg/L or mmol/L **OR** Please insert the BUN minimal and maximal value of the day (mg/dl or mmol/l). Normal range 7-20 mg/dl.

Sodium: Please insert the lowest (minimal) and highest (maximal) Sodium (Na) in mmol/l in the first 24 hours. If you have only one measurement on that day please insert as maximum.

Potassium: Please insert lowest (minimal) and highest (maximal) potassium in mmol/l in the first 24 hours. If you have only one measurement on that day please insert as maximum.

Phosphate: Please insert lowest (minimal) and highest (maximal) phosphate. Please check mg/dl or mmol/L in the first 24 hours. If you have only one measurement on that day please insert as maximal. Conversion: 1 mmol/L = 3.1 mg/dL

Bilirubin (total): Please insert the lowest (minimal) and highest (maximal) bilirubin in in the first 24 hours. Please check mg/dl or $\mu\text{mol/L}$



Explanation file: **nutritionDay ICU Questionnaire – Sheet 3**

	NO.	QUESTION	ANSWER OPTIONS	QUESTION EXPLANATION	ANSWER EXPLANATION
3	1	Limitation of Care	No / DNR / Limited Care / Comfort Terminal Care	Identifies level of treatment limitations for the patient.	DNR: Do not resuscitate. Limited Care: Restricted interventions may be equivalent to DNE (Do not escalate). Comfort terminal Care: End-of-life Care including withdrawal of futile interventions.
3	2	Position	Prone / Supine	Patient's body position at nutritionDay. Typically for at least 6 hours.	Prone: Lying face down. Supine: Lying on the back.
3	3	Sedation	No / Intermittent / Continuous	Indicate if the patient is sedated and whether this is intermittent (bolus applications) or continuous.	
3	4	Sedation with Propofol	No / Yes / ml/day	If Propofol is used and its dosage.	
3	5	Neuromuscular Blocker	No / Intermittent / Continuous	Indicate use of muscle relaxants.	
3	6	Pain Control	Opioids / Epidural / Regional Pain Block / Alpha2-agonists / Other Analgetics / Other Sedatives / None	Pain management methods used.	
3	7	Respiratory Access	Tracheostoma / Endotracheal Tube / CPAP Mask/Helmet / Oxygen Mask / No / NA	How the patient is receiving respiratory support.	
3	8	Ventilation Support (>8 hours)	Invasive / Non-invasive / High-flow Oxygen / Oxygen Insufflation / Room Air / NA	Type of respiratory support lasting over 8 hours.	Indicate the most invasive with the longest support time.
3	9	Does the patient have spontaneous breathing activity?	Yes / No	Indicates spontaneous breathing activity.	Triggering of ventilatory support or spontaneous breathing.
3	10	Did you perform a ventilation weaning trial?	Yes / No	Assesses the process of checking respiratory capacity.	Spontaneous breathing trial means that ventilatory support is either reduced or stopped and the change in ventilatory pattern observed.
3	11	ECMO	No / Venovenous / Venoarterial	If extracorporeal membrane oxygenation is used.	Venovenous: Lung support. Venoarterial: Heart and lung support.



3	12	Vasoactive Support (>1 hour/day)	Vasodilator / Vasopressor / Inotropes / No	Type of circulatory medication used.	
3	13	Vasopressor Dose	Low Noradrenaline (<0.1 µg/kg/h) / High Noradrenaline (>0.1 µg/kg/h)	Quantifies dosage of blood pressure support drugs.	
3	14	Insulin Therapy	IU/day / Intermittent / Continuous / Pen / None	Method and dosage of insulin therapy.	
3	15	Diuretics	Yes / No / I don't know	Checks if medications for urine production are used.	
3	16	Renal Replacement Therapy	Hemodiafiltration / Hemofiltration / Hemodialysis / Peritoneal Dialysis / No	If and what form of dialysis is used.	
3	17	IV Fluids	Crystalloid Solution / Glucose Solution	Type of fluids administered IV.	Includes maintenance and bolus fluid.
3	18	Antibiotic Treatment	Yes / No / I don't know	Indicate if patient is receiving antibiotics.	
3	19	Mobilization Level Today	Physiotherapy / Resistance Exercise / Respiratory Therapy / Ergotherapy / In-bed Cycling / Electrical Stimulation / Passive / Active in Bed / Sitting / Standing / Ambulation / No Mobilization (Allowed) / No Mobilization (Not Allowed)	Level and type of physical activity performed.	
3	20	Duration of Mobilization Session	(number, minutes in number eg. 60mins)	Duration of patient's physical therapy session.	
3	21	Who Helped During Mobilization?	Nurse/Nurse Aid / Physiotherapist / Relatives / Other / NA	Identifies who supported the mobilization activity.	Use NA if nobody helped during physical activity, mobilization.
3	22	Patient's Reaction to Mobilization	Shortness of Breath / Fatigue / High Respiratory Rate / High Heart Rate / Sweating / No Reaction / NA	Symptoms/signs observed during or after mobilization.	



3	23	MRC Muscle Strength Today	0–5 scale	Muscle strength grading (0 = no contraction, 5 = full strength).	https://en.wikipedia.org/wiki/Hand_strength
3	24	Laboratory Values Today	(Free text in numbers: pCO ₂ , PaO ₂ , FiO ₂ , ScvO ₂ , Lactate, Glucose, Urine Output, WBC, etc.)	Captures relevant blood and urine lab values.	see page 3 for detailed explanation on each item. Insert here values referring to “TODAY values”, values measured at nutritionDay
3	25	Delirium	No / CAM-ICU Positive / Suspected Delirium	Whether the patient shows signs of acute confusion or delirium.	CAM-ICU: Confusion Assessment Method for the ICU. Ely, E. Wesley et al (2001-12-05). "Delirium in Mechanically Ventilated Patients". <i>JAMA</i> . 286 (21): 2703–2710.
3	26	RASS (Richmond Agitation Sedation Scale)	(Numeric scale from +4 to -5)	Sedation/agitation scoring tool.	Ranges from +4 (combative) to -5 (unconscious). https://en.wikipedia.org/wiki/Richmond_Agitation-Sedation_Scale
3	27	NEMS (Nursing Evaluation Monitoring Score)	(Numeric scale from 1 to 9)	Quantifies nursing workload.	Based on intensity of care provided. https://www.researchgate.net/publication/13930172_Nine_equivalents_of_Nursing_Manpower_Use_Score_NEMS

Explanation file: nutritionDay ICU Questionnaire – Sheet 4

sheet n	NO	QUESTION	ANSWER OPTIONS	QUESTION EXPLANATION	ANSWER EXPLANATION
4	1	Which lines and tubes does the patient have?	Central Venous / Nasogastric / Nasojejunal / PEG / PEJ / PICC / Peripheral Venous / Pulmonary Artery Catheter / Other	Identifies access devices for nutrition or monitoring.	
4	2	Nutritional approaches	Oral / Enteral / Parenteral / No nutrition	Feeding methods used. Indicate all methods used	
4	3	Number of days of parenteral feeding in ICU	number(days) entered in numbers eg. 3; 4; ...	Duration of parenteral feeding. Glucose 5% is not considered parenteral nutrition.	Each day is counted. Parenteral nutrition starting on nutritionDay is 1 day. Typically calculate: (date of nutritionDay - date of PN start) +1
4	4	Number of days of enteral feeding in ICU	number(days) entered in numbers eg. 3; 4; ...	Duration of enteral nutrition.	Each day is counted. Enteral nutrition starting on nutritionDay is 1 day. Typically calculate:



					(date of nutritionDay - date of EN start) +1
4	5	Duration of enteral nutrition in last 24h	Hours entered in numbers eg. 3; 4; .../ Intermittent / Continuous	Feeding schedule.	
4	6	Reasons for interrupting nutritional support	Intolerance / Surgery / Transport / Testing gastric reflux / Other / NA	Why feeding was paused if applicable.	
4	7	Calories planned per kg for next 24h	<500 / 500–999 / 1000– 1499 / 1500–2000 / 2000+ OR enter kcal/kg in numbers	Planned caloric intake.	
4	8	Volume of a single gastric reflux (max)	number entered eg. 50, 100, 250 ; ... (mL)	Monitors GI tolerance. If GRV is monitored several times indicate largest single volume.	
4	9	Prokinetic therapy	Erythromycin / Metoclopramide / No	Use of drugs aiding gastric emptying.	
4	10	Constipation >3 days	Yes / No / I don't know	Digestive tolerance.	
4	11	Diarrhea	Yes / No / I don't know	Presence of loose stools.	
4	12	Vomiting	Yes / No / I don't know	Feeding tolerance marker.	
4	13	Intra-abdominal pressure measured	number entered in numbers eg. 5; 10; 15; mmHg / Not measured	Monitors intra- abdominal pressure.	
4	14a	Is oral feeding possible?	Yes / No / I don't know	Indicates whether patient can eat by mouth.	
4	14b	If Yes, what does the patient eat/drink?	Normal hospital food / Mush or yogurt / Oral supplements / Thickened fluids / Fluids / Other	Specifies oral intake.	
4	14c	If No, why is oral feeding not possible?	Patient sedated / Not allowed / Cannot swallow / Aspiration / Dental prosthesis problem / Other	Identifies barrier to oral feeding.	
4	15	Oral nutrition – Amount eaten at one meal	About all / 1/2 / 1/4 / Nothing / NA	Quantifies oral intake if applicable.	



4	16	Does the patient receive an enteral nutrition product?	Yes / No / I don't know	If commercial/mixed tube feed used.	Code allows access to a list of known products.
4	16	This product is	Industrial / mixed in hospital	Mixed in hospital could be produced in the hospital pharmacy or in the kitchen if it is blenderized food.	
4	16	This product has	Number Kcal/L and g protein/L	Indicate the amount of calories and protein in 1000 ml of the used enteral nutrition product.	
4	17	Does the patient receive protein powder?	Yes / No / I don't know	Protein supplementation added to the enteral nutrition solution	
4	18	Does the patient receive parenteral nutrition product?	Yes / No / I don't know	parenteral nutrition formula.	Code allows access to a list of known products.
4	16	This product is	Industrial (2-in-1)/ industrial (3-in-1)/ mixed in hospital	Mixed in hospital could be produced in the hospital pharmacy or by the nursing staff of the ICU.	(2-in-1) is glucose and amino acids, (3-in-1) is glucose, amino acids and lipids
4	16	This product has	Number Kcal/L and g protein/L	Indicate the amount of calories and protein in 1000 ml of the used parenteral nutrition product.	
4	19	Does patient receive additional nutrition product?	Parenteral / Enteral / No	Extra nutrition provided?	
4	20 (a-f)	Supplements	Multivitamins / Trace elements / Vit B1 / Omega-3 / Glutamine / Amino acids	Micronutrient supplementation?	
4	21 (a-h)	Patient-reported symptoms	Hunger / Desire to eat / Thirst / Dry mouth / Nausea / Abdominal pain / Anxiety / Depression (Yes/No)	Ask directly the Patient about his/her subjective experience.	



SHEET: PATIENTS OVERVIEW and 60 Days OUTCOME

Use this sheet to have an overview of the patients interviewed at nutritionDay and to collect the relative outcome for each patient. You can add in the first column patient name or an hospital sticker for easier back track. This information is only for internal use and it is not collected in the nutritionDay database. Assign a chosen **patient number** to each patient for entering data in the nutritionDay website. (only the patient number is recorded in the nDay database)

60 days after nutritionDay, collect patients' outcome from patient chart. See detailed explanations below.

Date of Hospital Discharge

The date (*day/month/year dd/mm/yyyy*) the patient was officially discharged from the hospital, marking the transition from inpatient care to outpatient or home care.

Date of ICU Discharge

The date (*day/month/year dd/mm/yyyy*) the patient was officially discharged from the ICU, indicating the end of intensive care unit treatment.

ICU Discharge Diagnosis

The diagnosis made at the time of discharge from the ICU, using predefined ICD10 codes (**see box 1 for codes**) to categorize the diagnosis.

Outcome Code (see box2)

This code categorizes the patient's outcome based on their status after ICU discharge. The code is selected based on the patient's condition and discharge status 60 days after nutritionDay.

- **1 = Still in the hospital:** The patient is still receiving care in the hospital after 60 days.
- **2 = Transferred to another hospital:** The patient was transferred to another hospital for continued care.
- **3 = Transferred to long-term care:** The patient was transferred to a long-term care facility, which may include nursing homes or extended rehabilitation centers.
- **4 = Rehabilitation:** The patient was transferred to a rehabilitation center for further recovery, focusing on physical or mental rehabilitation.
- **5 = Discharged home:** The patient was discharged from the hospital and is now home, recovering with outpatient follow-up care.





- **6 = Death:** The patient passed away within 60 days of ICU discharge.
- **7 = Others:** Any other outcome not covered by the predefined categories above (e.g., other forms of discharge or recovery).

Date of Hospital Readmission

The date (*day/month/year dd/mm/yyyy*) when the patient was readmitted to the hospital after being discharged. This is important to track if complications or health issues occurred after discharge.

Date of ICU Readmission

The date (*day/month/year dd/mm/yyyy*) the patient was readmitted to the ICU after being discharged, if applicable.

Operated after nutritionDay?

Indicates whether the patient underwent surgery (under general anesthesia) after nutritionDay.

How many days after surgery?

Please indicate the number of days passed after surgery at 60 days after nutritionDay

For more questions, please contact the nutritionDay office at **office@nutritionDay.org**