nutritionDay in ICU November 2010

Centre:
Unit: ███   **Number of Patients: 32**

Dear participant,   August 2010

Thank you for your participation in nutritionDay in ICU November 2010 and for your effort. We can finally present you your preliminary unit report.

Your results are presented as compared to the mean results of all participating units of nutritionDay in ICU November 2010.

You will find some explanations how to read and interpret the data on the next page.

Next year's nutritionDay will take place on November 10th 2011. Again, we would very much appreciate your participation. You will be provided with further information on a regular basis.

Best regards from the nutritionDay-Team!

Michael Hiesmayr   Karin Schindler   Bruno Mora

How to read the results

Your report is configured as a table with 3 columns. The first contains the name of the result, possibly with a short description. In the second column you will find your unit's results and in the third column you can see the reference values from units comparable to your patients.

You will find "(n)" in brackets indicating that results are referring to a certain number of patients. Generally the patients' results are based on the number of patients participating at your unit.

For example: *Number of patients on nutritionDay in ICU November 2010 = 20*

ICU dependency (n):

Abdominal   4

...

Explanation: 4 of 20 patients participating are reported to be admitted to ICU for abdominal reasons.

If results are refering to an "n" different to the number of patients participating, a short explanation will be given.

For example: Oral feeding not possible (n):   17

because: Patient is sedated   10

Not allowed to eat   6

Can not swallow   1

Recent aspiration   0

Explanation: For 17 of 20 patients oral feeding was not possible on nutritionDay. The categories why feeding was not possible are only referring to these 17 patients.

Be careful! - There are some multiple choice questions in the questionnaires. In this case the total number of answers exceeds the number of patients. These results are marked with an asterisk.

For example: Nutrition care (n)*

Mean and standard deviation are displayed as follows:

For example: Weight (kg)   75 ± 15

Median and range are displayed as follows:

For example: LOS (days)   8 [5-15]

Results in percent referring to the total number of patients from units with >=75 % outcome data.

	YOUR RESULTS	REFERENCE
Nutrition care (n (%))*:		
Oral	7 (23.3%)	126 (29.8%)
Enteral	19 (63.3%)	247 (58.4%)
Parenteral	-	70 (16.5%)
Energy <u>planned</u> per patient (kcal/day)#		
Enteral	908 ± 225	1469 ± 689
Parenteral	-	1462 ± 612
Other	27 ± 15	494 ± 484
Total	790 ± 394	1681 ± 802
Energy <u>given</u> per patient (kcal/day) #		
Enteral	908 ± 225	1256 ± 713
Parenteral	-	1315 ± 606
Other	27 ± 15	436 ± 509
Total	790 ± 394	1437 ± 831
Duration of enteral nutrition (days)	7 [2-40]	7 [1-109]
Duration of parenteral nutrition (days)	-	6 [1-135]
Start of enteral nutrition (day)	0 [0-0]	2 [0-338]
Start of parenteral nutrition (day)	-	2 [0-337]
Duration of enteral nutrition within the last 24h (hours)	18 [18-24]	24 [1-99]
Individually composed products <u>planned</u> (g/day)		
Aminoacids	-	50 ± 75
Carbohydrates	-	132 ± 132
Lipids	-	44 ± 115
Individually composed products <u>given</u> (g/day)		
Aminoacids	-	52 ± 91
Carbohydrates	-	138 ± 130
Lipids	-	53 ± 129
Oral feeding not possible (n (%))	21 (70.0%)	1852 (58.2%)
Reasons (n (%))*:		
▪ Patient is sedated	-	817 (44.1%)
▪ Not allowed to eat	5 (23.8%)	126 (44.5%)
▪ Cannot swallow	17 (81.0%)	91 (32.2%)
▪ Recent aspiration	-	4 (1.41%)
Patient feeling (n (%))*:	13 (43.3%)	134 (31.7%)
Total of patients answering	9 (30.0%)	48 (11.3%)
Hunger	7 (23.3%)	81 (19.1%)
Thirst	-	18 (4.26%)
Nausea	2 (6.67%)	18 (4.26%)
Abdominal pain		

Side effects (n (%)):

Constipation	-	47 (11.0%)
Diarrhoea	-	31 (7.28%)
Gastric reflux	-	67 (15.8%)
Gastric reflux volume (ml)	-	236 ± 289

Blood glucose (mg/dl)

	-	158 ± 52
Glucose max >180 mg/dl (n(%))	-	76 (17.8%)
Glucose max >125 mg/dl (n(%))	-	215 (50.5%)

Insulin therapy (n (%)):

Intermittent	4 (13.3%)	97 (22.8%)
Continuous	-	84 (19.7%)
Pen	-	12 (2.82%)

Reasons for interrupting nutritional support (n (%))*:

Surgery	1 (3.33%)	26 (6.15%)
Transport	-	4 (0.95%)
Intolerance	-	125 (3.93%)
Other	-	382 (12.0%)

Demographic data:

Number of patients (n)	32	437
Patients with completed sheets 3 u. 4 (n)	30/30	426/423
Age (years)	58 [20-89]	60 [8-92]
Female gender (n(%))	15 (46.9%)	168 (38.4%)
Height (cm)	165 ± 6	169 ± 10
Weight (kg)	-	79 ± 22
BMI (kg/m^2)	-	27 ± 7

Mean severity & resource utilisation scores:

SOFA	6 ± 4	5 ± 4
SAPS2	37 ± 15	39 ± 15
SAPS2-Predicted mortality	26 ± 24	28 ± 24
NEMS	25 ± 9	25 ± 10

ICU dependency (n(%))*:

Abdominal	1 (3.13%)	70 (16.0%)
Burns	-	7 (1.60%)
Cardiac	-	58 (13.3%)
Neurological	16 (50.0%)	145 (33.2%)
Pulmonary	9 (28.1%)	131 (30.0%)
Septic	-	43 (9.84%)
Trauma	-	35 (8.01%)
Others	6 (18.8%)	51 (11.7%)

Type of admission (n(%)):

Surgical	1 (3.13%)	197 (45.1%)
Emergency	1 (3.13%)	168 (38.4%)

Ventilated (n(%)):

	17 (56.7%)	246 (57.7%)

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Outcome:

Outcome reported (n(%))	31 (96.9%)	434 (99.3%)
Death (n(%))	10 (31.3%)	99 (22.7%)

Length of stay (days):

ICU	19 [3-57]	16 [1-398]
Hospital	28 [8-57]	26 [1-307]

Unit structure:

Actual beds		
Maximum beds	32	14 ± 8
Nurses	33	15 ± 9
Sum NEMS	20	8 ± 5
NEMS/Nurse	747	290 ± 196
	37	38 ± 17

Nutrition intake at lunch or dinner (n):

	All	6 (20.0%)	93 (2.92%)
	½	-	68 (2.14%)
	¼	-	38 (1.19%)
	Nothing	-	64 (2.01%)
?	No answer	24 (80.0%)	544 (17.1%)

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Unit summary
Items values (%) = (Unit-ND)/ND * 100

Legend:
- Parenteral %
- Total Kcal given
- Diarrhoe %
- BG>180mg %
- NEMS/patient
- SAPS2/patient

Axis: 100% 80% 60% 40% 20% ND 20% 40% 60% 80% 100%
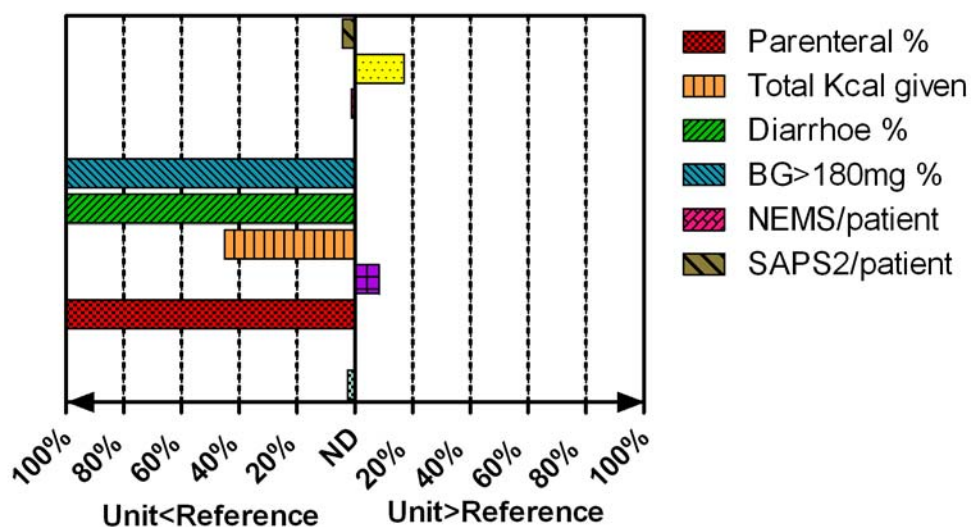
Unit<Reference   Unit>Reference

„**Unit summary**" shows 8 dimensions that are key elements to compare your unit with reference ICUs. Reference ICUs have fulfilled data quality criteria, especially an excellent patient follow-up for outcome 2 month after nutritionDay ICU. The middle of the graph represents the reference ICUs. Deviation to the right indicates a higher value for your ICU and deviation to the left lower values than the reference. All bars are relative deviation from the reference. Very large deviations can be real or may originate from missing or wrong data entry.

SAPS2/patient determines the "admission" severity of illness during the first 24 hours in the ICU.

SOFA/patient determines how many organ failures were present at nutritionDay ICU and give a measure of the actual severity of your patients.

NEMS/patient is a measure of the nursing workload and as displayed shows how adapted your nursing resources are for their workload. Of course you will prefer to be in the middle.

Blood glucose > 180 mg is considered as a very rough process indicator for your treatment of hyperglycemia. Check your proportion of patients treated with insulin in the report. You may consider moving towards the left.

Diarrhea is a patient oriented measure that is related to suffering, nutrition care and nursing workload. You would prefer to be at the left.

Total Kcal given indicates whether your energy supply is near the usual or not. Please note that the usual is 20% below the planned. Try to be on the right.

Parenteral and enteral indicate the proportion of patients that are on either type of artificial nutrition. Two bars on one side indicate general deviation from the usual nutrition care. These indicators need to be seen also together severity and length of stay in the ICU.

Outcome reported refers to the completeness and thus quality of your data. We suggest that you should aim slightly at the right.

Individual patients caloric intake (given) #
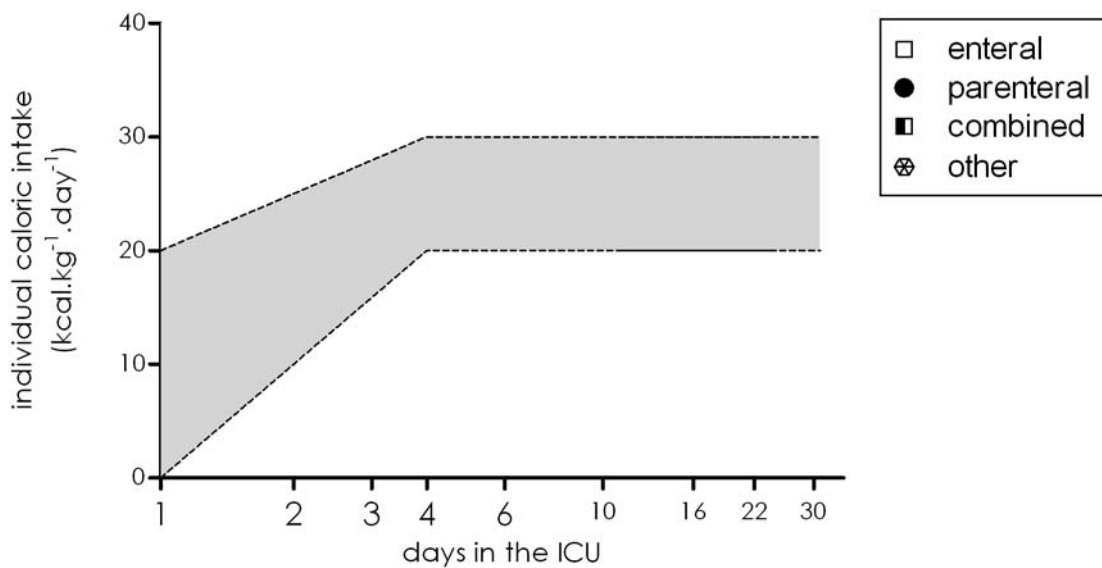
Individual patients caloric plan & intake #
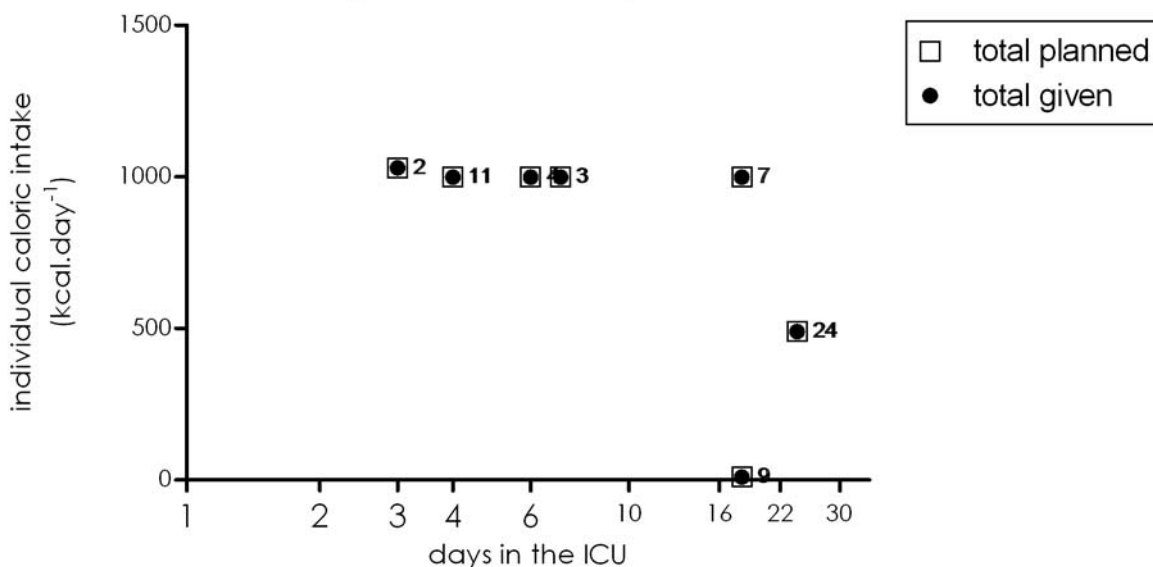
Individual patient's caloric intake (given):
The graph shows caloric intake normalized for actual body weight on the y axis versus length of stay in the ICU at nutritionDay. The symbols refer to all patients with exclusive nutrition care or combined nutrition approaches. The numbers refer to the patient number from your nutritionDay data entry. The grey zone symbolizes the actual recommendations from the ESPEN guidelines and allows for a short period of increasing energy intake during the first 3 days. Please take the cumulative deficit into account.

Individual patient's caloric plan & intake:
The graph shows absolute caloric intake planned and given on the y axis and length of stay in the ICU on nutritionDay ICU on the x axis. The small numbers refer to the patient number from your data entry. Ideally all points should overlap. In case all symbols are on one horizontal line all patients receive the same amount of energy regardless of their body weight, BMI and disease status.

For all nutrition products with unclear specifications we assumed that the caloric content is 1kcal/ml

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