



nutritionDay
IN EUROPE

National report

nutritionDay 2009 in POLAND

Dear participant,

July 2009

Thank you for your participation in nutritionDay 2009 and for your effort. We can finally present you your country report of the following sample size:

| | |
|---|-----|
| Number of units on nutritionDay: | 32 |
| Number of patients on nutritionDay: | 521 |
| Number of patients completing Sheet 3a: | 460 |
| Number of patients completing Sheet 3b: | 443 |

The report consists of 3 parts:

Part I reflects the organisation and the structure of the units.

Part II describes the patients according to questionnaire "sheet 2".

Part III is the summary of information on nutrition given by the patients according to sheet 3a and 3b.

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

Next year's nutritionDay will take place in January 2010. 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!

Prof. Dr. Michael Hiesmayr

Dr. Karin Schindler

Mag. Johanna Tripamer

How to read the results?

Your report is configured as table with 3 columns. The first column contains the name of the result, possibly with a short description. In the second column you will find your country results and in the third column you can see the reference values from the total cohort.

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 country.

For example: *number of patients on nutritionDay 2009 = 20*

Fluid status (n):
dehydrated 4

...

Explanation: 4 of 20 patients participating are reported to be dehydrated on nutritionDay 2009.

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

For example: *number of patients on nutritionDay 2009 = 20*

Weight loss within 3 months (n)

Yes 10

Category of weight decrease (n):

| | |
|----------|---|
| 0-4 kg | 4 |
| 5-8 kg | 2 |
| > 8 kg | 1 |
| not sure | 2 |
| missing | 1 |

Explanation: 10 of 20 patients reported a weight loss within the last 3 months. The category of weight decrease is only referring to these 10 patients having lost weight.

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: affected organs (n)*

Mean and standard deviation are displayed as follows:

For example: Weight (kg) 75 ± 15

Median and [min - max] are displayed that way:

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

I. DESCRIPTION OF THE UNIT ("Sheet 1"):

Total cohort: 526 units, 11296 patients

| | YOUR COUNTRY RESULTS | REFERENCE ND-09 |
|--|-----------------------------|------------------------|
| Number of beds: | | |
| Actual | 29 ± 21 | 27 ± 16 |
| Maximum | 33 ± 20 | 30 ± 17 |
| Number of patients on the nutritionDay (n): | | |
| Total | 521 | 11296 |
| Did not give consent | 52 (9.98%) | 1580 (14.0%) |
| Needed help | 158 (30.3%) | 4779 (42.3%) |
| Specialities (n): | | |
| Internal medicine/general | 4 (12.5%) | 65 (12.4%) |
| Internal medicine/gastroenterology and hepatology | 2 (6.25%) | 37 (7.03%) |
| Internal medicine/oncology (incl. Radiotherapy) | 3 (9.38%) | 49 (9.32%) |
| Internal medicine/cardiology | 3 (9.38%) | 14 (2.66%) |
| Internal medicine/infectious diseases | - | 10 (1.90%) |
| Internal medicine/geriatrics | - | 73 (13.9%) |
| Internal medicine/nephrology | 2 (6.25%) | 15 (2.85%) |
| Pediatrics | - | 2 (0.38%) |
| Neurology | - | 16 (3.04%) |
| Psychiatry | - | 7 (1.33%) |
| Ear Nose Throat (ENT) | 1 (3.13%) | 15 (2.85%) |
| General surgery | 7 (21.9%) | 76 (14.4%) |
| Cardiothoracic surgery | - | 8 (1.52%) |
| Orthopedic surgery | - | 19 (3.61%) |
| Trauma | - | 12 (2.28%) |
| Neurosurgery | - | 7 (1.33%) |
| Gynecology | 1 (3.13%) | 9 (1.71%) |
| Long-term-care | - | - |
| Others | 9 (28.1%) | 92 (17.5%) |
| Staff/Staff per patient: | | |
| Physicians | 7.67 ± 4.90 | 4.48 ± 5.05 |
| Physicians per patient | 0.28 ± 0.25 | 0.16 ± 0.14 |
| Consultants | 2.74 ± 3.03 | 1.87 ± 3.40 |
| Consultants per patient | 0.13 ± 0.22 | 0.07 ± 0.10 |
| Registrars | 3.79 ± 3.62 | 2.43 ± 3.58 |
| Registrars per patient | 0.13 ± 0.15 | 0.08 ± 0.10 |
| Nurses | 9.28 ± 6.45 | 6.06 ± 8.15 |
| Nurses per patient | 0.39 ± 0.55 | 0.22 ± 0.19 |
| Nursing aides | 0.57 ± 0.81 | 2.39 ± 2.30 |
| Nursing aides per patient | 0.03 ± 0.05 | 0.09 ± 0.09 |

| | | |
|---|-------------|-------------|
| Student nurses | 0.05 ± 0.22 | 1.30 ± 1.46 |
| Student nurses per patient | 0.00 ± 0.01 | 0.05 ± 0.05 |
| Dieticians and dietetic assistants | 0.40 ± 0.68 | 0.78 ± 0.76 |
| Dieticians and dietetic assistants per pat. | 0.02 ± 0.03 | 0.03 ± 0.04 |

Nutrition Care:

| | | |
|--------------------|--------------------|---------------------|
| Nutrition Team | 29 units (91%) Yes | 372 units (71%) Yes |
| Written procedures | | |
| - individual | 15 units (47%) Yes | 330 units (63%) Yes |
| - local | 9 units (28%) Yes | 219 units (42%) Yes |
| - national | 6 units (19%) Yes | 188 units (36%) Yes |

Patients' weight assessed:

| | | |
|----------------|--------------------|---------------------|
| On admission | 18 units (56%) Yes | 366 units (70%) Yes |
| When requested | 14 units (44%) Yes | 304 units (58%) Yes |
| Once a week | 9 units (28%) Yes | 199 units (38%) Yes |
| Occasionally | 8 units (25%) Yes | 67 units (13%) Yes |
| Never | 1 units (03%) Yes | 8 units (02%) Yes |

II. YOUR PATIENTS ("Sheet 2"):

Total cohort: 526 units, 11296 patients

| | YOUR COUNTRY RESULTS | REFERENCE ND-09 |
|-----------------------------------|----------------------|-----------------|
| Number of patients (n): | | |
| Total | 521 | 11296 |
| Patients who completed sheet 3a | 460 (88.3%) | 8934 (79.1%) |
| Patients who completed sheet 3b | 443 (85.0%) | 8589 (76.0%) |
| Demographic data: | | |
| Age (years) | 61 [16-94] | 69 [4-109] |
| Female gender | 251 (48.2%) | 5544 (49.1%) |
| Weight (kg) | 73.9 ± 16.1 | 71.4 ± 17.6 |
| Height (cm) | 167.5 ± 8.7 | 166.9 ± 10.2 |
| BMI (kg/m ²) | 26.3 ± 5.2 | 25.6 ± 5.7 |
| Fluid status (n): | | |
| Normal | 354 (67.9%) | 7326 (64.9%) |
| Dehydrated | 30 (5.76%) | 902 (7.99%) |
| Fluid overload | 88 (16.9%) | 1036 (9.17%) |
| Missing | 49 (9.40%) | 2032 (18.0%) |
| ICU-stay (n): | | |
| Any ICU-stay | 40 (7.68%) | 1253 (11.1%) |
| Surgery (n): | | |
| Preoperative patients | 84 (16.1%) | 1104 (9.77%) |
| Postoperative patients | 136 (26.1%) | 2659 (23.5%) |
| Length of stay (days): | | |
| Hospital | 12 [2-96] | 15 [2-393] |
| Unit | 12 [2-76] | 14 [1-280] |
| Outcome after 30 days (n): | | |
| Still in hospital | 10 (1.92%) | 720 (6.37%) |
| Transferred to another hospital | 10 (1.92%) | 319 (2.82%) |
| Transferred to long-term care | - | 331 (2.93%) |
| Rehabilitation | 1 (0.19%) | 294 (2.60%) |
| Discharge home | 233 (44.7%) | 6449 (57.1%) |
| Death | 12 (2.30%) | 337 (2.98%) |
| Others | 3 (0.58%) | 230 (2.04%) |
| Missing | 252 (48.4%) | 2616 (23.2%) |
| Readmitted (n): | 8 (1.54%) | 892 (7.90%) |

Results in percent referring to the total number of patients

II. YOUR PATIENTS ("Sheet 2"):

Total cohort: 526 units, 11296 patients

| | YOUR COUNTRY RESULTS | REFERENCE ND-09 |
|--|----------------------|-----------------|
| Nutrition therapy (n)*: | | |
| Enteral nutrition | 81 (15.5%) | 970 (8.59%) |
| Parenteral nutrition | 30 (5.76%) | 523 (4.63%) |
| Enteral + parenteral nutrition | 8 (1.54%) | 166 (1.47%) |
| Special diet | 120 (23.0%) | 1427 (12.6%) |
| Protein/energy supplement | 5 (0.96%) | 864 (7.65%) |
| Hospital food | 293 (56.2%) | 6753 (59.8%) |
| Others | 37 (7.10%) | 507 (4.49%) |
| Missing | 26 (4.99%) | 1547 (13.7%) |
| Lines & tubes (n)*: | | |
| None | 423 (81.2%) | 8425 (74.6%) |
| One line | 68 (13.1%) | 2427 (21.5%) |
| More than one | 30 (5.76%) | 444 (3.93%) |
| Centralvenous | 58 (11.1%) | 845 (7.48%) |
| Nasogastric tube | 27 (5.18%) | 191 (1.69%) |
| Any other (PEG, PEJ, ...) | 41 (7.87%) | 2029 (18.0%) |
| Affected organs (n)*: | | |
| Brain, nerves | 35 (6.72%) | 1325 (11.7%) |
| Eye, ear | 19 (3.65%) | 250 (2.21%) |
| Nose, throat | 5 (0.96%) | 385 (3.41%) |
| Heart, circulation | 133 (25.5%) | 1940 (17.2%) |
| Lung | 62 (11.9%) | 1280 (11.3%) |
| Liver | 53 (10.2%) | 654 (5.79%) |
| Gastrointestinal tract | 106 (20.3%) | 2259 (20.0%) |
| Kidney, urinary tract, femal genital tract | 65 (12.5%) | 1200 (10.6%) |
| Endocrine system | 67 (12.9%) | 706 (6.25%) |
| Skeleton, bone, muscle | 29 (5.57%) | 1601 (14.2%) |
| Blood, bone marrow | 35 (6.72%) | 491 (4.35%) |
| Skin | 20 (3.84%) | 273 (2.42%) |
| Ischaemia | 13 (2.50%) | 185 (1.64%) |
| Cancer | 125 (24.0%) | 2067 (18.3%) |
| Infection | 28 (5.37%) | 737 (6.52%) |
| Pregnancy | - | 37 (0.33%) |
| Others | 47 (9.02%) | 613 (5.43%) |
| No affected organ | 58 (11.1%) | 1524 (13.5%) |
| Comorbidities (n)*: | | |
| Diabetes I/II | 91 (17.5%) | 1861 (16.5%) |
| Stroke | 16 (3.07%) | 514 (4.55%) |
| COPD | 35 (6.72%) | 647 (5.73%) |
| Myocardial infarction | 36 (6.91%) | 456 (4.04%) |
| Cardiac insufficiency | 95 (18.2%) | 1269 (11.2%) |
| Others | 195 (37.4%) | 3681 (32.6%) |
| No comorbidity | 198 (38.0%) | 5019 (44.4%) |

Results in percent referring to the total number of patients

III. YOUR PATIENTS ("Sheet 3a"):

Total cohort: 526 units, 11296 patients

| | YOUR COUNTRY RESULTS | REFERENCE ND-09 |
|--|----------------------|-----------------|
| Weight loss within the last 3 months (n): | | |
| Total of patients answering | 441 (95.9%) | 8518 (95.3%) |
| Yes | 145 (31.5%) | 3864 (43.3%) |
| No | 235 (51.1%) | 3141 (35.2%) |
| No, I've gained weight | 37 (8.04%) | 801 (8.97%) |
| I don't know | 24 (5.22%) | 712 (7.97%) |
| Category of weight decrease (n): | | |
| Patients reporting weight loss | 145 (31.5%) | 3864 (43.3%) |
| 0-4 kg | 48 (10.4%) | 1796 (20.1%) |
| 5-8 kg | 38 (8.26%) | 774 (8.66%) |
| > 8 kg | 57 (12.4%) | 932 (10.4%) |
| Not sure | 2 (0.43%) | 299 (3.35%) |
| Missing | - | 63 (0.71%) |
| "How well have you eaten during the last week?"(n): | | |
| Normal | 223 (48.5%) | 4208 (47.1%) |
| A bit less than normal | 109 (23.7%) | 2043 (22.9%) |
| Less than half of normal | 74 (16.1%) | 1223 (13.7%) |
| Less than a quarter to nearly nothing | 37 (8.04%) | 1042 (11.7%) |
| Missing | 17 (3.70%) | 418 (4.68%) |
| "I ate less because"(n)*: | | |
| Total of patients answering | 223 (48.5%) | 4263 (47.7%) |
| Loss of appetite | 125 (27.2%) | 2505 (28.0%) |
| Problems with swallowing/chewing | 15 (3.26%) | 523 (5.85%) |
| Nausea | 29 (6.30%) | 719 (8.05%) |
| Other reasons | 92 (20.0%) | 1359 (15.2%) |
| "Can you walk without assistance?"(n): | | |
| Yes | 358 (77.8%) | 5518 (61.8%) |
| No, only with assistance | 56 (12.2%) | 1991 (22.3%) |
| No, I stay in bed | 30 (6.52%) | 980 (11.0%) |
| Missing | 16 (3.48%) | 445 (4.98%) |
| "Did you need help to complete the questionnaire?"(according to patient) (n): | | |
| Yes | 202 (43.9%) | 5347 (59.9%) |

Results in percent referring to the total number of patients answering

III. YOUR PATIENTS ("Sheet 3b"):

Total cohort: 526 units, 11296 patients

| YOUR COUNTRY RESULTS | REFERENCE ND-09 |
|----------------------|-----------------|
|----------------------|-----------------|

Fluid and supplement intake (n):

| | | |
|-----------------------------------|-------------|--------------|
| Patients with fluid intake | 397 (89.6%) | 7104 (82.7%) |
| Drinks per patient & day (l) | 0.84 | 0.85 |
| Patients with supplements | 62 (14.0%) | 1644 (19.1%) |
| Supplements per patient & day (l) | 0.06 | 0.09 |

Results referring to the total number of completed questionnaires

Hospital food intake:

| Your country results (referring to the total number of completed questionnaires=443) | | | | | |
|--|-------------|-------------|------------|------------|------------|
| n (%) | all | 1/2 | 1/4 | nothing | no answer |
| Breakfast | 183 (41.3%) | 112 (25.3%) | 49 (11.1%) | 83 (18.7%) | 16 (3.61%) |
| Lunch | 180 (40.6%) | 124 (28.0%) | 35 (7.90%) | 77 (17.4%) | 27 (6.09%) |
| Dinner | 187 (42.2%) | 97 (21.9%) | 46 (10.4%) | 83 (18.7%) | 30 (6.77%) |

| Reference results (referring to the total number of completed questionnaires=8589) | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|
| n (%) | all | 1/2 | 1/4 | nothing | no answer |
| Breakfast | 4164 (48.5%) | 1649 (19.2%) | 779 (9.07%) | 1286 (15.0%) | 711 (8.28%) |
| Lunch | 3560 (41.4%) | 2273 (26.5%) | 1130 (13.2%) | 1179 (13.7%) | 447 (5.20%) |
| Dinner | 3394 (39.5%) | 1922 (22.4%) | 986 (11.5%) | 1063 (12.4%) | 1224 (14.3%) |

| Your country results (referring to the total number of completed questionnaires=443) | | | |
|--|-------------|-------------|-------------|
| n (%) | Snack 1 | Snack 2 | Snack 3 |
| Cakes, sweets, biscuits | 51 (11.5%) | 56 (12.6%) | 37 (8.35%) |
| Fresh fruits | 83 (18.7%) | 79 (17.8%) | 62 (14.0%) |
| Sandwiches | 44 (9.93%) | 27 (6.09%) | 35 (7.90%) |
| Dairy products | 31 (7.00%) | 26 (5.87%) | 22 (4.97%) |
| Others | 9 (2.03%) | 12 (2.71%) | 20 (4.51%) |
| Nothing | 186 (42.0%) | 173 (39.1%) | 196 (44.2%) |
| Missing | 94 (21.2%) | 123 (27.8%) | 105 (23.7%) |

| Reference results (referring to the total number of completed questionnaires=8589) | | | |
|--|--------------|--------------|--------------|
| n (%) | Snack 1 | Snack 2 | Snack 3 |
| Cakes, sweets, biscuits | 651 (7.58%) | 1447 (16.8%) | 742 (8.64%) |
| Fresh fruits | 988 (11.5%) | 941 (11.0%) | 798 (9.29%) |
| Sandwiches | 185 (2.15%) | 327 (3.81%) | 511 (5.95%) |
| Dairy products | 584 (6.80%) | 718 (8.36%) | 723 (8.42%) |
| Others | 304 (3.54%) | 420 (4.89%) | 335 (3.90%) |
| Nothing | 2966 (34.5%) | 2178 (25.4%) | 2576 (30.0%) |
| Missing | 3384 (39.4%) | 3277 (38.2%) | 3501 (40.8%) |