



**nutritionDay**  
WORLDWIDE

## *Country Report*

### **nutritionDay November 2015 in OMAN**

Dear participant,

Mai 2016

thank you for your participation in nutritionDay worldwide in November 2015 and for your effort. We can finally present you your country report of the following sample size:

|   |     |
|---|-----|
| Number of units on nutritionDay:        | 27  |
| Number of patients on nutritionDay:     | 418 |
| Number of patients completing Sheet 3a: | 336 |
| Number of patients completing Sheet 3b: | 332 |

The report consists of 3 parts:

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

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 November 2016. 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

Sigrid Kosak, MA

## 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 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 2015 = 20*

*Fluid status (n):*  
*dehydrated 4*

**Explanation:** 4 of 20 patients participating are reported to be dehydrated on nutritionDay 2015.

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 2015 = 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 range are displayed that way:

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

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

882 units, 18242 patients

|   | YOUR RESULTS | REFERENCE ND-15 |
|---|--------------|-----------------|
| <b>Number of beds (n):</b>                          |              |                 |
| Actual  | 24 ± 9       | 26 ± 14         |
| Maximum   | 32 ± 11      | 31 ± 15         |
| <b>Number of patients on the nutritionDay (n):</b>  |              |                 |
| Total   | 418          | 18242           |
| Did not give consent                                | 55 (13.2%)   | 1878 (10.3%)    |
| Needed help completing form                         | 188 (45.0%)  | 9572 (52.5%)    |
| Terminally ill                                      | 63 (15.1%)   | 2221 (12.2%)    |
| <b>Specialities (n):</b>                            |              |                 |
| Internal medicine / general                         | 10 (37.0%)   | 210 (23.8%)     |
| Internal medicine / gastroenterology and hepatology | -            | 71 (8.05%)      |
| Internal medicine / oncology (incl. radiotherapy)   | 3 (11.1%)    | 72 (8.16%)      |
| Internal medicine / cardiology                      | -            | 52 (5.90%)      |
| Internal medicine / infectious diseases             | -            | 8 (0.91%)       |
| Internal medicine / geriatrics                      | -            | 65 (7.37%)      |
| Internal medicine / nephrology                      | -            | 18 (2.04%)      |
| Pediatrics  | -            | 10 (1.13%)      |
| Neurology   | -            | 33 (3.74%)      |
| Psychiatry  | -            | 13 (1.47%)      |
| Ear Nose Throat (ENT)                               | 1 (3.70%)    | 20 (2.27%)      |
| General surgery                                     | 6 (22.2%)    | 120 (13.6%)     |
| Cardiothoracic surgery                              | -            | 10 (1.13%)      |
| Orthopedic surgery                                  | 1 (3.70%)    | 52 (5.90%)      |
| Trauma  | -            | 14 (1.59%)      |
| Neurosurgery  | -            | 3 (0.34%)       |
| Gynecology  | 4 (14.8%)    | 15 (1.70%)      |
| Long-term-care                                      | -            | 11 (1.25%)      |
| Others  | 2 (7.41%)    | 85 (9.64%)      |
| <b>Staff /Staff per patient (n):</b>                |              |                 |
| Physicians  | 7.88 ± 5.79  | 5.42 ± 5.91     |
| Physicians per patient                              | 0.27 ± 0.22  | 0.18 ± 0.18     |
| Consultants   | 4.15 ± 4.04  | 2.49 ± 4.49     |
| Consultants per patient                             | 0.14 ± 0.16  | 0.08 ± 0.16     |
| Registrars  | 4.06 ± 5.38  | 1.47 ± 2.99     |
| Registrars per patient                              | 0.15 ± 0.21  | 0.05 ± 0.10     |
| Nurses  | 12.30 ± 8.80 | 7.55 ± 7.10     |
| Nurses per patient                                  | 0.42 ± 0.35  | 0.24 ± 0.21     |
| Nursing aides                                       | 1.56 ± 2.20  | 2.84 ± 3.63     |

|   |             |             |
|---|-------------|-------------|
| Nursing aides per patient                   | 0.05 ± 0.08 | 0.09 ± 0.10 |
| Dieticians and dietetic assistants          | 1.31 ± 1.49 | 1.24 ± 1.44 |
| Dieticians and dietetic assistants per pat. | 0.05 ± 0.06 | 0.04 ± 0.05 |

**Nutrition Care:**

|                    |                    |                     |
|--------------------|--------------------|---------------------|
| Nutrition Team     | 26 units (96%) Yes | 724 units (82%) Yes |
| Written procedures |                    |                     |
| - individual       | 18 units (67%) Yes | 605 units (69%) Yes |
| - local            | 10 units (37%) Yes | 418 units (47%) Yes |
| - national         | 6 units (22%) Yes  | 429 units (49%) Yes |
| - other            | 2 units (07%) Yes  | 124 units (14%) Yes |

**Patients' weight assessed:**

|                |                    |                     |
|----------------|--------------------|---------------------|
| On admission   | 19 units (70%) Yes | 679 units (77%) Yes |
| When requested | 14 units (52%) Yes | 486 units (55%) Yes |
| Once a week    | 2 units (07%) Yes  | 343 units (39%) Yes |
| Occasionally   | - units (00%) Yes  | 105 units (12%) Yes |
| Never          | 1 units (04%) Yes  | 13 units (01%) Yes  |

## II. YOUR PATIENTS ("Sheet 2"):

882 units, 18242 patients

|   | YOUR RESULTS | REFERENCE ND-15 |
|---|--------------|-----------------|
| <b>Number of patients (n):</b>            |              |                 |
| Total                                     | 418          | 18242           |
| Patients who completed sheet 3a           | 336 (80.4%)  | 15848 (86.9%)   |
| Patients who completed sheet 3b           | 332 (79.4%)  | 15415 (84.5%)   |
| <b>Demographic data:</b>                  |              |                 |
| Age (years)                               | 40 [14-96]   | 68 [1-116]      |
| Female gender                             | 223 (53.3%)  | 9222 (50.6%)    |
| Weight (kg)                               | 68.0 ± 17.9  | 71.9 ± 20.0     |
| Height (cm)                               | 159.8 ± 12.7 | 165.7 ± 11.7    |
| BMI (kg/m <sup>2</sup> )                  | 26.3 ± 6.5   | 26.0 ± 6.4      |
| <b>ICU-stay:</b>                          |              |                 |
| Any ICU-stay                              | 31 (7.42%)   | 1880 (10.3%)    |
| <b>Surgery (n):</b>                       |              |                 |
| Preoperative patients                     | 59 (14.1%)   | 1385 (7.59%)    |
| Postoperative patients                    | 62 (14.8%)   | 4159 (22.8%)    |
| <b>Length of stay in Hospital (days):</b> | 8 [1-117]    | 11 [1-151]      |
| <b>Outcome after 30 days (n):</b>         |              |                 |
| Still in hospital                         | 53 (12.7%)   | 1628 (8.92%)    |
| Transferred to another hospital           | 7 (1.67%)    | 383 (2.10%)     |
| Transferred to long-term care             | 24 (5.74%)   | 1046 (5.73%)    |
| Rehabilitation                            | 2 (0.48%)    | 730 (4.00%)     |
| Discharge home                            | 308 (73.7%)  | 12413 (68.0%)   |
| Death                                     | 15 (3.59%)   | 666 (3.65%)     |
| Others                                    | 8 (1.91%)    | 797 (4.37%)     |
| Missing                                   | 1 (0.24%)    | 579 (3.17%)     |
| <b>Readmitted (n):</b>                    | 69 (16.5%)   | 2068 (11.3%)    |

Results in percent referring to the total number of patients

## II. YOUR PATIENTS ("Sheet 2"):

882 units, 18242 patients

|   | YOUR RESULTS | REFERENCE ND-15 |
|---|--------------|-----------------|
| <b>Nutrition therapy (n)*:</b>              |              |                 |
| Enteral nutrition                           | 22 (5.26%)   | 1150 (6.30%)    |
| Parenteral nutrition                        | 25 (5.98%)   | 618 (3.39%)     |
| Enteral + parenteral nutrition              | 4 (0.96%)    | 131 (0.72%)     |
| Special diet                                | 65 (15.6%)   | 4436 (24.3%)    |
| Protein supplement                          | 26 (6.22%)   | 1913 (10.5%)    |
| Hospital food                               | 297 (71.1%)  | 10834 (59.4%)   |
| Others                                      | 33 (7.89%)   | 835 (4.58%)     |
| Missing                                     | 4 (0.96%)    | 1115 (6.11%)    |
| <b>Lines &amp; tubes (n)*:</b>              |              |                 |
| None  | 58 (13.9%)   | 11305 (62.0%)   |
| Centralvenous                               | 32 (7.66%)   | 1299 (7.12%)    |
| Nasogastric tube                            | 14 (3.35%)   | 335 (1.84%)     |
| Any other (PEG, PEJ, ...)                   | 314 (75.1%)  | 5303 (29.1%)    |
| <b>Affected organs (n)*:</b>                |              |                 |
| Brain, nerves                               | 64 (15.3%)   | 2365 (13.0%)    |
| Eye, ear                                    | 28 (6.70%)   | 359 (1.97%)     |
| Nose, throat                                | 18 (4.31%)   | 400 (2.19%)     |
| Heart, circulation                          | 43 (10.3%)   | 3905 (21.4%)    |
| Lung  | 50 (12.0%)   | 2587 (14.2%)    |
| Liver                                       | 23 (5.50%)   | 1061 (5.82%)    |
| Gastrointestinal tract                      | 39 (9.33%)   | 3713 (20.4%)    |
| Kidney, urinary tract, female genital tract | 40 (9.57%)   | 2618 (14.4%)    |
| Endocrine system                            | 34 (8.13%)   | 1561 (8.56%)    |
| Skeleton, bone, muscle                      | 47 (11.2%)   | 3235 (17.7%)    |
| Blood, bone marrow                          | 62 (14.8%)   | 842 (4.62%)     |
| Skin  | 7 (1.67%)    | 711 (3.90%)     |
| Ischaemia                                   | 2 (0.48%)    | 271 (1.49%)     |
| Cancer                                      | 39 (9.33%)   | 2381 (13.1%)    |
| Infection                                   | 37 (8.85%)   | 1096 (6.01%)    |
| Pregnancy                                   | 55 (13.2%)   | 134 (0.73%)     |
| Others                                      | 28 (6.70%)   | 1167 (6.40%)    |
| No affected organ                           | 12 (2.87%)   | 1075 (5.89%)    |
| <b>Comorbidities (n)*:</b>                  |              |                 |
| Diabetes I/II                               | 77 (18.4%)   | 3788 (20.8%)    |
| Stroke                                      | 16 (3.83%)   | 1084 (5.94%)    |
| COPD  | 5 (1.20%)    | 1290 (7.07%)    |
| Myocardial infarction                       | 5 (1.20%)    | 615 (3.37%)     |
| Cardiac insufficiency                       | 23 (5.50%)   | 2373 (13.0%)    |
| Others                                      | 318 (76.1%)  | 7888 (43.2%)    |
| No comorbidity                              | 36 (8.61%)   | 5897 (32.3%)    |

Results in percent referring to the total number of patients





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

882 units, 18242 patients

|  | YOUR RESULTS | REFERENCE ND-15 |
|--|--------------|-----------------|
| <b>Weight loss within the last 3 months (n):</b>                       |              |                 |
| Total of patients answering  | 330 (98.2%)  | 15261 (96.3%)   |
| Yes  | 134 (39.9%)  | 6612 (41.7%)    |
| No   | 88 (26.2%)   | 6290 (39.7%)    |
| No, I've gained weight   | 57 (17.0%)   | 1189 (7.50%)    |
| I don't know   | 51 (15.2%)   | 1170 (7.38%)    |
| <b>Category of weight decrease (n):</b>                                |              |                 |
| Patients reporting weight loss   | 134 (39.9%)  | 6612 (41.7%)    |
| 0-4 kg   | 54 (16.1%)   | 2966 (18.7%)    |
| 5-8 kg   | 21 (6.25%)   | 1210 (7.64%)    |
| > 8 kg   | 23 (6.85%)   | 1665 (10.5%)    |
| Not sure   | 33 (9.82%)   | 696 (4.39%)     |
| Missing  | 3 (0.89%)    | 75 (0.47%)      |
| <b>"How well have you eaten during the last week?"(n):</b>             |              |                 |
| Normal   | 180 (53.6%)  | 7491 (47.3%)    |
| A bit less than normal   | 86 (25.6%)   | 3584 (22.6%)    |
| Less than half of normal   | 39 (11.6%)   | 2302 (14.5%)    |
| Less than a quarter to nearly nothing                                  | 24 (7.14%)   | 1782 (11.2%)    |
| Missing  | 5 (1.49%)    | 556 (3.51%)     |
| <b>"I ate less because"(n)*:</b>                                       |              |                 |
| Total of patients answering  | 181 (53.9%)  | 7679 (48.5%)    |
| Loss of appetite   | 103 (30.7%)  | 4361 (27.5%)    |
| Problems with swallowing, mastication                                  | 13 (3.87%)   | 708 (4.47%)     |
| Nausea   | 33 (9.82%)   | 1215 (7.67%)    |
| Other reasons  | 45 (13.4%)   | 2616 (16.5%)    |
| <b>"Can you walk without assistance?"(n):</b>                          |              |                 |
| Yes  | 221 (65.8%)  | 9574 (60.4%)    |
| No, only with assistance   | 58 (17.3%)   | 4110 (25.9%)    |
| No, I stay in bed  | 48 (14.3%)   | 1589 (10.0%)    |
| Missing  | 7 (2.08%)    | 504 (3.18%)     |
| <b>"In general would you say your health is" (n):</b>                  |              |                 |
| Excellent  | 35 (10.4%)   | 529 (3.34%)     |
| Very good  | 66 (19.6%)   | 1343 (8.47%)    |
| Good   | 163 (48.5%)  | 4726 (29.8%)    |
| Fair   | 41 (12.2%)   | 5561 (35.1%)    |
| Poor   | 24 (7.14%)   | 2997 (18.9%)    |
| Missing  | 7 (2.08%)    | 692 (4.37%)     |
| Results in percent referring to the total number of patients answering |              |                 |

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

882 units, 18242 patients

|   | YOUR RESULTS | REFERENCE ND-15 |
|---|--------------|-----------------|
| <b>Hospital food intake:</b>  |              |                 |
| <b>„Is your appetite normal?“ (n):</b>  |              |                 |
| Yes   | 190 (56.5%)  | 9474 (59.8%)    |
| No  | 105 (31.3%)  | 4730 (29.8%)    |
| - I was not hungry  | 16 (15.2%)   | 2568 (54.3%)    |
| - Problems with swallowing / mastication  | 12 (11.4%)   | 346 (7.32%)     |
| - Nausea  | 32 (30.5%)   | 722 (15.3%)     |
| - Others  | 31 (29.5%)   | 1174 (24.8%)    |
| No answer   | 37 (11.0%)   | 1211 (7.64%)    |
| <b>Fluid and supplement intake (n):</b>   |              |                 |
| Patients with fluid intake  | 269 (81.0%)  | 11895 (77.2%)   |
| Drinks per patient & day (l)  | 0.51         | 0.43            |
| Patients with supplements   | 41 (12.3%)   | 1566 (10.2%)    |
| Supplements per patient & day (l)   | 0.09         | 0.03            |
| <b>„What kind of drinks did you consume?“ (n)*:</b>   |              |                 |
| Water   | 280 (84.3%)  | 9843 (63.9%)    |
| Milk  | 123 (37.0%)  | 2050 (13.3%)    |
| Fruit juice   | 132 (39.8%)  | 3313 (21.5%)    |
| Tea, coffee   | 88 (26.5%)   | 6515 (42.3%)    |
| Soft drinks   | 11 (3.31%)   | 1406 (9.12%)    |
| <b>Lunch intake (n):</b>  |              |                 |
|  All     | 50 (15.1%)   | 6329 (41.1%)    |
|  1/2     | 110 (33.1%)  | 4364 (28.3%)    |
|  1/4     | 97 (29.2%)   | 2363 (15.3%)    |
|  Nothing | 58 (17.5%)   | 1984 (12.9%)    |
| ? No answer   | 17 (5.12%)   | 375 (2.43%)     |
| <b>„I did not eat everything because“ (n)*:</b>   |              |                 |
| I was not hungry  | 35 (12.4%)   | 2743 (30.2%)    |
| I had nausea / vomiting   | 26 (9.22%)   | 678 (7.46%)     |
| I was not allowed to eat  | 22 (7.80%)   | 850 (9.36%)     |
| I can not eat without help  | 3 (1.06%)    | 125 (1.38%)     |
| I had an examination / surgery  | 7 (2.48%)    | 564 (6.21%)     |
| I ordered a smaller portion   | 10 (3.55%)   | 201 (2.21%)     |
| I was tired   | 43 (15.2%)   | 439 (4.83%)     |
| I normally eat less   | 26 (9.22%)   | 853 (9.39%)     |
| I did not like the smell  | 8 (2.84%)    | 258 (2.84%)     |
| I did not like the taste  | 39 (13.8%)   | 1127 (12.4%)    |



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**„Do you eat any food apart from hospital food?“ (n):**

|           |             |              |
|-----------|-------------|--------------|
| Yes       | 159 (47.3%) | 5109 (32.2%) |
| No        | 147 (43.8%) | 9242 (58.3%) |
| No answer | 26 (7.74%)  | 1064 (6.71%) |

**„What do you eat?“ (n)\*:**

|                 |            |              |
|-----------------|------------|--------------|
| Cakes, biscuits | 33 (20.8%) | 1581 (30.9%) |
| Fresh fruits    | 61 (38.4%) | 2214 (43.3%) |
| Sandwiches      | 23 (14.5%) | 456 (8.93%)  |
| Dairy products  | 42 (26.4%) | 690 (13.5%)  |
| Preferred dish  | 30 (18.9%) | 504 (9.86%)  |
| Sweets          | 24 (15.1%) | 849 (16.6%)  |
| Fruit Juice     | 37 (23.3%) | 691 (13.5%)  |
| Others          | 24 (15.1%) | 840 (16.4%)  |

**“Did you need help to complete the questionnaire?“(according to patient) (n):**

|     |             |               |
|-----|-------------|---------------|
| Yes | 212 (63.1%) | 10372 (65.4%) |
|-----|-------------|---------------|

Results referring to the total number of completed questionnaires