Supplemental Table 1. Daily frequency of consumption of rice dishes, other staple and common foods a

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|  | **Frequency of intakes per day (Mean, *SD*)**  |
|  | **Pregnant women** | **Mothers-in-law** | **Household heads** | **Average** |
|  | Mean | *SD* | Mean | *SD* | Mean | *SD* | Mean | *SD* |
| **Dishes made with polished white rice** |  |  |  |  |  |  |  |  |
| Boiled white rice | 2.03 | *0.6* | 1.74 | *0.54* | 1.72 | *0.67* | 1.83 | *0.62* |
| Fried rice | 0.01 | *0.05* | 0.01 | *0.05* | 0 | *0.04* | 0.01 | *0.04* |
| Rice pudding (*kir*) | 0.03 | *0.12* | 0.05 | *0.14* | 0.02 | *0.08* | 0.03 | *0.11* |
| Rice gruel (*jaulo* /*khichadi*) b | 0.03 | *0.14* | 0.04 | *0.2* | 0.04 | *0.19* | 0.04 | *0.18* |
| **Other rice-based foods** |  |  |  |  |  |  |  |  |
| Puffed rice | 0.1 | *0.24* | 0.09 | *0.21* | 0.14 | *0.31* | 0.11 | *0.26* |
| Beaten rice | 0.08 | *0.2* | 0.05 | *0.14* | 0.16 | *0.29* | 0.1 | *0.22* |
| Rice flour-based snacks c | 0.04 | *0.13* | 0.04 | *0.16* | 0.04 | *0.15* | 0.04 | *0.15* |
| **Other starchy staples** |  |  |  |  |  |  |  |  |
| Fresh corn on the cob/ roasted  | 0.02 | *0.12* | 0.01 | *0.09* | 0.01 | *0.09* | 0.01 | *0.1* |
| Breads, including flatbreads d | 1.03 | *0.59* | 0.95 | *0.58* | 0.99 | *0.64* | 0.99 | *0.61* |
| *Haluwa* stiff porridge e | 0.04 | *0.12* | 0.04 | *0.12* | 0.04 | *0.13* | 0.04 | *0.12* |
| Snacks f | 0.16 | *0.38* | 0.15 | *0.33* | 0.18 | *0.4* | 0.16 | *0.37* |
| Tubers g  | 0.52 | *0.51* | 0.42 | *0.48* | 0.43 | *0.45* | 0.46 | *0.48* |
| **Other common foods** |  |  |  |  |  |  |  |  |
| Spiced lentil soup - *dal* | 1.06 | *0.64* | 0.9 | *0.55* | 0.92 | *0.55* | 0.96 | *0.59* |
| Tea with sugar and milk | 0.16 | *0.37* | 0.3 | *0.54* | 0.49 | *0.64* | 0.32 | *0.54* |
| Pointed gourd curry | 0.41 | *0.56* | 0.37 | *0.53* | 0.39 | *0.5* | 0.39 | *0.53* |
| Mango h | 0.3 | *0.48* | 0.33 | *0.45* | 0.28 | *0.41* | 0.3 | *0.45* |
| Buffalo milk | 0.28 | *0.43* | 0.1 | *0.23* | 0.21 | *0.45* | 0.19 | *0.39* |

a *n*=150 from LBWSAT (Low Birth Weight South Asia Trial) sample

b *jaulo* made with rice; *khichadi* made with rice, dal and sometimes vegetables

c Rice flour-based snacks including *sel roti,* *malpuwa* and *bagiya*

d Breads, including flatbreads without oil *roti*, flatbreads made with oil (*puri, paratha, naan*) and risen bread (*pau roti*)

e *haluwa* stiff porridge made with flour (various types of staples), oil, and sugar

f Snacks: starchy fried &/or sweet snacks

g Tubers: boiled, fried, in curry or in chutney

h Data were collected during June – September. Peak mango season is June to July.

**Supplemental Table 2. Mean dietary intakes of micronutrients in Bangladesh rice premix**a **after fortification of purchased rice**

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| --- | --- | --- | --- | --- |
|   | **National AHS III** |  | **LBWSAT** |  |
|  | Women 15-49y | Children 5-12y | Pregnant women | Mothers-in-law | Male HH heads |
| **Sample size**  | ***n*** |  | ***n*** |  | ***n*** |  | ***n*** |  | ***n*** |  |
| Fortified (all)b | 5443 |  | 3346 |  | 128 |  | 128 |  | 128 |  |
| Fortified (buyers)c | 3007 |  | 1882 |  | 97 |  | 97 |  | 97 |  |
| **Nutrient intakes** | mean  |  *SD* | mean  |  *SD* | mean  |  *SD* | mean  |  *SD* | mean  |  *SD* |
| Vitamin A (RE/d) |  |  |  |  |  |  |  |  |  |  |
| Fortified (all) | 615 | *576* | 490 | *444* | 779 | *525* | 824 | *771* | 860 | *489* |
| Fortified (buyers) | 859 | *537* | 677 | *413* | 865 | *549* | 903 | *834* | 936 | *485* |
| Vitamin B1 (mg/d) |  |  |  |  |  |  |  |  |  |  |
| Fortified (all) | 2.5 | *1.2* | 2 | *1.1* | 2.6 | *1* | 2.6 | *1.1* | 3.3 | *1.2* |
| Fortified (buyers) | 3.2 | *1.3* | 2.6 | *1.1* | 2.9 | *1.1* | 2.9 | *1.1* | 3.6 | *1.2* |
| Vitamin B9 (μg/d) |  |  |  |  |  |  |  |  |  |  |
| Fortified (all) | 685 | *528* | 562 | *450* | 768 | *409* | 770 | *400* | 912 | *426* |
| Fortified (buyers) | 1086 | *454* | 885 | *396* | 904 | *373* | 894 | *367* | 1056 | *374* |
| Vitamin B12 (μg/d) |  |  |  |  |  |  |  |  |  |
| Fortified (all) | 2.4 | *2.4* | 2 | *2* | 2.7 | *1.9* | 2.6 | *3.1* | 3.1 | *2.1* |
| Fortified (buyers) | 4.2 | *2* | 3.5 | *1.7* | 3.3 | *1.7* | 3.3 | *3.2* | 3.9 | *1.8* |
| Iron (mg/d) |  |  |  |  |  |  |  |  |  |  |
| Fortified (all) | 21.1 | *12.7* | 17.4 | *10.9* | 24.9 | *10.4* | 24.9 | *11.6* | 31.3 | *11.4* |
| Fortified (buyers) | 29.9 | *11.8* | 24.5 | *10.1* | 27.7 | *10.1* | 27.9 | *11.3* | 34.7 | *10.5* |
| Zinc (mg/d) |  |  |  |  |  |  |  |  |  |  |
| Fortified (all) | 15.8 | *8.8* | 13 | *7.7* | 16.7 | *7.2* | 16.5 | *7.7* | 20.6 | *8* |
| Fortified (buyers) | 21.7 | *8.6* | 17.8 | *7.4* | 18.6 | *7.1* | 18.5 | *7.5* | 23 | *7.3* |

Male HH heads: male household heads

a using Bangladesh standards

b Fortified (all): intakes of total population when bought rice is fortified with Bangladesh premix (mid-values of household fortificant levels rather than factory levels);

c Fortified (buyers): intakes of rice-buying households only, when bought rice is fortified with Bangladesh premix (mid-values of household fortificant levels rather than factory levels)

**Supplemental Table 3. Agreement between observed and predicted daily energy intakes**1

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|   | **Agreement between observed and predicted daily energy (kJ) intakes from LBWSAT** |
|  | **Pregnant women2** | **Mothers-in-law2** | **Male household head2** |
| **Adult male equivalents assumptions** | Mean kJ differ-ence  | (95% CI) | LOA | Mean kJ differ-ence  | (95% CI) | LOA | Mean kJ differ-ence  | (95% CI) | LOA |
| Moderate PAL no adjustment 3 | -351 | (-649, | -54) | -4050 | 3347 | 75 | (-180, | 335) | -3130 | 3284 | 276 | (-63, | 611) | -3916 | 4464 |
| Moderate PAL with adjustment 4 | -1301 | (-1607, | -996) | 0 | 2477 | 498 | (234, | 761) | -2766 | 3761 | 803 | (469, | 1142) | -3368 | 4975 |
| Self-reported PAL5 no adjustment3 | -33 | (-322, | 259) | -3623 | 3561 | -138 | (-397, | 121) | -3364 | 3088 | 172 | (-163, | 502) | -3929 | 4272 |
| Self-reported PAL5 with adjustment4 | -1004 | (-1301,  | -711) | 0 | 2632 | 297 | (33, | 561) | -2946 | 3540 | 707 | (381, | 1038) | -3360 | 4774 |
| LOA = Limits of agreement, calculated as the mean difference ± 1·96 SD; PAL = Physical Activity Levels.1 from LBWSAT data, intakes in kJ; 2 n=150; 3 no adjustment for pregnancy; 4 with adjustment for pregnancy;5 Based on self-reported activity levels from 24-h recall period, categorised as sedentary (PAL=1.6); moderate (PAL=1.9); strenuous (PAL=2.2) and weight (kg) |