

Table I. Comparing nutrient requirements as proposed by Golden [1] to the nutrient content of 3 kinds of daily diet of a 13-15 mo old, breastfed, moderately malnourished Bangladeshi child (7.4 kg, 851 kcal/d) to which fixed amounts of different complementary food supplements are added (see also [3]).

a. MNP with fixed amounts of breast milk & rice, choice of fish, spinach, dhal, small fish with bones, potato, onion, oil, sugar, all with max intake

	% of nutrient intake recommendations proposed by Golden [1]					
	DIET – no CFS	DIET + MNP 5 MNs	DIET + MNP 16 MNs	DIET + soy MNP	DIET + MixMe Plus	DIET + TopNutri
PROTEIN	136	171	173	179	175	199
VITA	73	111	123	74	122	115
VITE	29	47	98	53	89	100
VITC	53	101	100	43	137	112
THIA	77	87	185	93	180	175
RIBF	62	63	137	90	140	168
NIA	140	177	260	153	248	266
VITB6	87	83	156	60	144	153
FOL	139	159	157	100	187	149
VITB12	278	530	636	408	564	658
PANTAC	117	127	127	122	208	249
CA	100	100	100	124	191	182
P	103	122	123	104	129	176
MG	81	78	78	68	82	131
K	98	104	103	91	129	115
FE - 10%	67	203	172	125	100	152
ZN - moderate	32	73	66	61	57	66
CU	111	88	184	68	154	139
Mn	483	452	453	425	483	556
Diet	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>
Breast milk, 530 g	530	530	530	530	530	530
Rice, plain, boiled – min 150g	150	150	150	150	150	150
Potato, cooked	56	62	58	0	0	0
Spinach, cooked, max	40	40	40	40	40	40



Breast milk	530	530	530	530	530	530
Rice, plained, boiled	150	150	150	150	150	150
Potato, cooked	61	51	62	62	18	13
Spinach, cooked	40	40	40	40	40	40
Onion	0	20	20	0	20	0
Lentil-dhal	80	80	80	41	80	80
Egg chicken	30	30	24	30	50	46
Soybean oil	12	12	12	12	12	12
Gur-cane sugar	0	0	0	0	0	0
Supplement		sachet	sachet	sachet	5	8

c. MNP with fixed amounts of breast milk & rice, choice of spinach, dhal, potato, onion, oil, sugar, all with max intake

	% of nutrient intake recommendations proposed by Golden [1]					
	DIET – no CFS	DIET + MNP 5 MNs	DIET + MNP 16 MNs	DIET + soy MNP	DIET + MixMe Plus	DIET + TopNutri
PROTEIN	97	97	97	109	97	107
VITA	73	109	122	73	122	114
VITE	28	28	79	28	79	91
VITC	56	103	103	56	150	118
THIA	78	78	176	75	176	166
RIBF	57	57	131	85	131	158
NIA	106	106	189	100	189	186
VITB6	87	87	160	83	160	154
FOL	139	225	219	133	187	184
VITB12	60	60	166	60	166	166
PANTAC	114	114	114	108	201	230
CA	50	50	50	125	129	111
P	67	67	67	63	67	106
MG	72	72	72	69	72	117
K	91	91	91	89	125	100
FE - 10%	64	227	194	139	96	161
ZN - moderate	27	72	64	62	49	59
CU	108	108	204	103	166	149
Mn	466	466	466	452	466	535

Diet	Grams	Grams	Grams	Grams	Grams	Grams
Breast milk	530	530	530	530	530	530
Rice, plained, boiled	178	178	178	150	178	150
Potato, cooked	62	62	62	62	62	28
Spinach, cooked	40	40	40	40	40	40
Onion	20	20	20	20	20	0
Lentil-dhal	80	80	80	74	80	80
Soybean oil	12	12	12	12	12	19
Sugar	0	0	0	0	0	0
Supplement		sachet	sachet	sachet	5	8

d. LNS with fixed amounts of breast milk & rice, choice of fish, spinach, dhal, small fish with bones, potato, onion, oil, sugar, all with max intake

	% of nutrient intake recommendations proposed by Golden [1]				
	DIET + Nutributter (20 g)	DIET + Plumpy Doz (45 g)	DIET + Indian RUFIC (50 g)	DIET + Suppl Plumpy (90 g)	DIET + Plumpy Nut (90 g)
PROTEIN	135	127	111	89	89
VITA	122	122	85	138	138
VITE	39	91	54	197	197
VITC	89	88	87	109	109
THIA	118	157	97	129	129
RIBF	114	125	87	268	268
NIA	178	183	140	100	100
VITB6	93	115	76	89	89
FOL	104	145	100	129	129
VITB12	421	346	326	256	256
PANTAC	176	179	106	165	165
CA	100	122	100	84	84
P	100	115	71	69	69
MG	69	87	74	63	63
K	82	87	81	68	109
FE - 10%	148	145	159	140	140
ZN - moderate	58	98	55	121	121

CU	92	100	102	296	296
Mn	435	422	493	321	321
Diet	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>
Breast milk, 530 g	530	530	530	530	530
Rice, plain, boiled – min 150g	150	150	150	13	13
Potato, cooked	6	0	0	0	0
Spinach, cooked, max 40 g	40	40	40	5	5
Onion	0	0	0	0	0
Lentil-dhal	0	0	1	0	0
Anchovy	10	0	5	0	0
Fish	57	66	31	0	0
Soybean oil	12	0	0	0	0
Gur-cane sugar	0	0	0	0	0
Supplement	20	46	50	90	90

e. LNS with fixed amounts of breast milk & rice, choice of egg, spinach, dhal, potato, onion, oil, sugar, all with max intake

	% of nutrient intake recommendations proposed by Golden [1]				
	DIET + Nutributter (20 g)	DIET + Plumpy Doz (45 g)	DIET + Indian RUFC (50 g)	DIET + Suppl Plumpy (90 g)	DIET + Plumpy Nut (90 g)
PROTEIN	97	100	91	89	89
VITA	122	122	85	138	138
VITE	28	79	48	197	197
VITC	89	88	88	109	109
THIA	120	149	97	129	129
RIBF	112	124	86	268	268
NIA	138	156	121	100	100
VITB6	97	119	79	89	89
FOL	173	187	132	129	129
VITB12	119	166	178	256	256
PANTAC	170	171	103	165	165

CA	67	123	86	84	84
P	73	100	57	69	69
MG	68	88	74	63	63
K	79	84	80	68	109
FE - 10%	175	162	171	140	140
ZN - moderate	59	101	55	121	121
CU	112	118	113	296	296
Mn	448	443	500	321	321
Diet	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>
Breast milk	530	530	530	530	530
Rice, plained, boiled	150	150	150	13	13
Potato, cooked	6	3	0	0	0
Spinach, cooked	40	40	40	5	5
Onion	0	0	0	0	0
Lentil-dhal	0	46	36	0	0
Egg chicken	10	0	0	0	0
Soybean oil	57	0	0	0	0
Gur-cane sugar	12	0	0	0	0
Supplement	0	46	50	90	90

f. LNS with fixed amounts of breast milk & rice, choice of spinach, dal, potato, onion, oil, sugar, all with max intake

	<b>% of nutrient intake recommendations proposed by Golden [1]</b>				
	<b>DIET + Nutributter (20 g)</b>	<b>DIET + Plumpy Doz (45 g)</b>	<b>DIET + Indian RUFC (50 g)</b>	<b>DIET + Suppl Plumpy (90 g)</b>	<b>DIET + Plumpy Nut (90 g)</b>
PROTEIN	97	100	91	89	89
VITA	122	122	85	138	138
VITE	28	79	48	197	197
VITC	89	88	88	109	109
THIA	120	149	97	129	129
RIBF	112	124	86	268	268
NIA	138	156	121	100	100
VITB6	97	119	79	89	89

FOL	173	187	132	129	129
VITB12	119	166	178	256	256
PANTAC	170	171	103	165	165
CA	67	123	86	84	84
P	73	100	57	69	69
MG	68	88	74	63	63
K	79	84	80	68	109
FE - 10%	175	162	171	140	140
ZN - moderate	59	101	55	121	121
CU	112	118	113	296	296
Mn	448	443	500	321	321
Diet	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>	<b>Grams</b>
Breast milk	530	530	530	530	530
Rice, plained, boiled	150	150	150	13	13
Potato, cooked	6	3	0	0	0
Spinash, cooked	40	40	40	5	5
Onion	0	0	0	0	0
Lentil-dhal	0	46	36	0	0
Soybean oil	10	0	0	0	0
Sugar	57	0	0	0	0
Supplement	12	46	50	90	90

Table II. Nutrient requirements proposed by Golden [1] compared to nutrients provided by CSB (USDA composition, appendix 1) with oil and sugar (3 times per day 35+3.5+3.5 g/d) combined with different CFS, consumed by 13-15 mo old, breastfed, moderately malnourished child (7.4 kg, 851 kcal/d).

	% of nutrient intake recommendations proposed by Golden [1]					
	DIET – no CFS	DIET + MNP 5 MNs	DIET + MNP 16 MNs	DIET + soy MNP	DIET + MixMe Plus	DIET + TopNutri
	%RDA	%RDA	%RDA	%RDA	%RDA	%RDA
PROTEIN	112	112	112	123	112	127
VITA	140	176	189	130	189	177
VITE	110	110	161	102	161	164
VITC	96	143	143	91	190	164
THIA	126	126	224	117	224	220
RIBF	98	98	172	121	172	198
NIA	170	170	253	158	253	258
VITB6	81	81	155	75	155	166
FOL	185	271	266	171	233	227
VITB12	179	179	284	168	284	280
PANTAC	190	190	190	178	278	315
CA	195	195	195	256	273	251
P	56	56	56	52	56	99
MG	13	13	13	13	13	66
K	24	24	24	24	58	48
FE - 10%	233	396	363	291	266	324
ZN - moderate	51	96	88	84	74	84
CU	179	179	276	166	238	232
Mn	382	382	382	376	382	468
Diet	Grams	Grams	Grams	Grams	Grams	Grams
Breast milk	530	530	530	530	530	530
Soybean oil	10	10	10	9	10	10
Gur-cane sugar	10	10	10	9	10	10
CSB	101	101	101	92	101	97

Supplement		1	1	5	5	8
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	% of nutrient intake recommendations proposed by Golden [1]				
	DIET + Nutributter (20 g)	DIET + Plumpy Doz (45 g)	DIET + Indian RUFC (50 g)	DIET + Suppl Plumpy (90 g)	DIET + Plumpy Nut (90 g)
PROTEIN	106	100	93	90	90
VITA	166	136	97	137	137
VITE	90	124	91	200	200
VITC	130	112	111	110	110
THIA	163	172	122	131	131
RIBF	142	136	99	268	268
NIA	195	185	150	102	102
VITB6	109	118	80	89	89
FOL	194	192	143	130	130
VITB12	212	225	235	260	260
PANTAC	237	204	136	168	168
CA	179	190	149	88	88
P	63	88	49	69	69
MG	22	46	35	60	60
K	37	49	50	65	107
FE - 10%	301	238	245	145	145
ZN - moderate	78	109	65	121	121
CU	181	156	151	299	299
Mn	375	365	424	314	314
Diet	Grams	Grams	Grams	Grams	Grams
Breast milk	530	530	530	530	530
Soybean oil	8	5	5	0	0
Gur-cane sugar	8	5	5	0	0
CSB	79	53	49	3	3
Supplement	20	45	50	90	90