Table S1 Study characteristics for iron fortification in children

Iron Fortification									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Abizari[1]	2012	Ghana	RCT	5 -17 year old children	Targeted	Cowpea flour with NaFeEDTA	10 mg Fe/meal as NaFeEDTA	7 months	Not mentioned
Andang'o[2]	2007	Kenya	RCT	3-8 year old children	Targeted	NaFeEDTA or electrolytic iron fortified maize flour	Not mentioned	20 weeks	Not mentioned
Arcanjo[3]	2010	Brazil	RCT	2 to 5 year old children	Targeted	Iron fortified drinking water	10mg/L	16 weeks	Not mentioned
Daly Williams[4]	1996/1999	UK	RCT	Infants 6-8 months age	Targeted	Formula milk	12 mg/L	24 months	52 µg/100 mL unmodified cow's milk
Barbosa[5]	2012	Brazil	RCT	2 to 6 year old children	Targeted	Wheat rolls with microencapsulated iron	4mg/20g	24 weeks	Not mentioned
Beinner[6]	2005	Brazil	Before-After	Preschool children ages 6-59 months	Targeted	iron sulfatein Drinking water 5d/week	12 g elemental iron	8 months	Not mentioned
Beinner[7]	2010	Brazil	RCT	Anemic children 6-24 months age	Targeted	micronized ferric pyrophosphate in Rice	23.4g/kg	5 months	Not mentioned
Chen[8]	2005	China	RCT	Children above the age of 3 years	Targeted	NaFeEDTA in Soy sauce	296mg/L	18 months	Not mentioned
De Almeida[9]	2005	Brazil	RCT	Children at day care center (5 years and less)	Targeted	Water fortified with elemental iron	10mg elemental iron per LL	Six months	Not mentioned
Gill[10]	1997	UK and Ireland	RCT	6 months old infants	Targeted	Formula milk	12.3 mg/L	9 months	Not mentioned
Giorgini[11]	2001	Brazil	Before-After	Preschool children (12-72 months old)	Targeted	Sweet rolls	80mg/kg	6 months	Not mentioned
Haschke[12]	1988	Austria	RCT	Infants (less than 24 months old)	Targeted	Ferrous sulphate in Formula milk and Meat-containing baby food	20 mg/kg	8 months	Not mentioned
Huo[13]	2002	China	RCT	Anemic children 11-17 years of age	Targeted	NaFeEDTA in Soy sauce	Low: 1 g/L High 4g/L	3 months	Not mentioned
Iost[14]	1998	Brazil	Before-	Infants 6- 24 month old	Targeted	iron amino acid chelate in Butterfat	3mg/L	32 weeks	Not mentioned

			After			milk			
Thi Le[15]	2006	Vietnam	RCT	Anemic children of ages 5 to 12 years	Targeted	Instant noodles 5d/week	205.8 mg/kg	6 months	Not mentioned
Longfils[16]	2008	Cambodia	RCT	Students age 6-21 years	Targeted	NaFeEDTA and $FeSO_4$+citrate in fish sauce 6d/week	1.09 g/L	21 weeks	Not mentioned
Marsh[17]	1959	USA	RCT	Infants (less than 24 months)	Targeted	Formula milk with $FeSo_4$	12mg Fe in 32 ounces of milk	9 months	Not mentioned
Miglioranza[18]	2008	Brazil	Before-After	Children age 7-14 years	Mass	H2-reduced Fe in corn-flour	98 mg/kg	6 months	Not mentioned
Morley[19]	1999	UK	RCT	Infants (less than 24 months)	Targeted	ferrous sulphate in Formula milk	1.2 mg/L	9 months	Not mentioned
Moretti[20]	2006	India	RCT	Iron-depleted 6-13 year old children	Mass	ferric pyrophosphate in Rice-based meal 6d/week	200 mg/kg	7 month	Not mentioned
Muthayya[21]	2012	India	RCT	6 to 15 years old iron depleted children	Targeted	Wheat based lunch with NaFeEDTA fortification	6mg Fe/100g flour	28 weeks	Not mentioned
Nogueria[22]	2012	Brazil	RCT	Infants (less than 24 months)	Targeted	Rice with micronized ferric pyrophosphate	56.5mg/50g	18 weeks	Not mentioned
Nogueria[23]	2012	Brazil	RCT	Infants (less than 24 months)	Targeted	$FeSO_4$ in porridge	10mg per portion	14 weeks	Not mentioned
Rim[24]	2008	Korea	RCT	Infants 6-12 months age	Targeted	ferrous sulphate in Water in which rice porridge cooked	0.5g/kg	6 months	Not mentioned
Rohner[25]	2010	Cotˆ de ’Ivoire	RCT	6-14 year old school children	Targeted	Electrolytic iron in Biscuits 4 times/week	Not mentioned	6 month	Not mentioned
Sari[26]	2001	Indonesia	RCT	children age 4-6 years	Targeted	Elemental iron in candies (10/week over 3d)	1 g/kg	12 week	Not mentioned
Stevens[27]	1995	UK	RCT	Infants (less than 12 months)	Targeted	Ferrous Sulphate in Formula milk	12 mg/L	1 year	Not mentioned
Sketel[28]	1988	Chile	RCT	3 to 15 months old healthy infants	Targeted	full-fat acidified milk fortified with $FeS0_4$	15 mg of elemental Fe as ferrous sulfate/100g powder	1 year	Not mentioned
Singhal[29]	2000	UK	RCT	Infants (less than 12 months)	Targeted	Ferrous Sulphate in Formula milk	12 mg/L	1 year	69 µg/L
Shamah-Levy[30]	2008	Mexico	RCT	Toddlers 12-30 months	Targeted	Baby food	227.3 mg/kg	6 months	9090µg/kg
Semba[31]	2010	Indonesia	Survey	Children age 6-59 months	Mass	Milk and instant noodles	Not mentioned	Variable	Not mentioned

Schu¨mann[32]	2005	Guatemala	RCT	Children age 12-36 months	Targeted	Iron sulphate in refried black beans 5d/week	224 mg/kg	10 weeks	Not mentioned
Walter[33]	1993	Chile	RCT	Children of ages 2 to 15 years	Mass	Hb concentrate cookies	Not mentioned	3 years	Not mentioned
Walter[34]	1993	USA	RCT	4 months old infants	Targeted	Iron fortified infant cereal	Not mentioned	44 weeks	Not mentioned
Van Stuijvenberg [35]	2008	South Africa	RCT	Children age 6-11 years with Hb< 125 g/L	Targeted	Brown bread	Not mentioned	34 weeks	1196.6 µg/kg
Sun[36]	2007	China	RCT	anemic students 11-18 years old	Targeted	sodium iron ethylenediaminetra acetic acid (NaFeEDTA) in Wheat flour	Not mentioned	6 months	Not mentioned
Tuthill[37]	2002	UK	RCT	Infants (less than 12 months)	Targeted	formula milk	5 mg/L	3 months	Not mentioned
Virtanen[38]	2001	Sweden	RCT	Healthy 12 months old infants	Targeted	ferrous gluconate or ferrous lactate in cow's milk	7 mg/L, 14.9 mg/L	6 months	Not mentioned
Ziegler[39]	2009	USA	RCT	Infants (less than 12 months)	Targeted	Ferrous sulphate in cereal	61.9 mg/kg	2 years	Not mentioned
Zimmerman [40]	2010	Ivory	RCT	6 to 14 year old children	Targeted	Elemental Iron fortified biscuits	20mg Fe/day	24 weeks	Not mentioned
Zimmerman [41]	2006	India	RCT	5-9 year old children	Targeted	Iron fortified rice meal (ferric pyrophosphate)	15mg Fe/day	16 weeks	Not mentioned

Table S2 Study characteristics for zinc fortification in children

Zinc									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Brown[42]	2007	Peru	RCT	Infants aged 6 to 8 months with risk of stunting	Targeted	Zinc Sulphate in Porridge	150 mg/kg dry weight	6 months	Not mentioned
Diaz Gomez[43]	2003	Spain	RCT	VLBW Preterm infants	Targeted	Zinc sulphate in Formula feed	10 mg/L (5 mg/L)	6 months	Not mentioned
Friel[44]	2003	Canada	RCT	VLBW Newborns	Targeted	Zinc Sulphate in Formula feed	11 mg/L (6.7 mg/L)	6 months	Not mentioned
Hambidge[45]	1979	USA	RCT	2-7 year old children	Targeted	Zinc oxide in cereals	3.75 mg/ounce	9 months	Not mentioned
Kilic[46]	1998	Turkey	RCT	7-11 year old school going children with asymptomatic zinc deficiency	Targeted	Zinc acetate in Bread	400 mg/ loaf	3 months	Not mentioned
Matsuda[47]	1984	Japan	Quasi	full term newborns	Targeted	Formula feed	3.2 mg/L (1.0 mg/L)	5 months	Not mentioned
Ohiokpehai[48]	2009	Kenya	Quasi	6-9 years old school going children	Targeted	Porridge	5 mg/100g	3 months	Not mentioned
Salmenpera[49]	1994	Finland	RCT	Full term Newborns	Targeted	Formula feed	1. 1.1 mg/L	12 months	Not mentioned
Schlesinger[50]	1992	Chile	RCT	Malnourished Infants	Targeted	Zinc chloride in Formula feed	15 mg/L (3.2 mg/L)	3.5 months	Not mentioned
Walravens[51]	1976	USA	RCT	Full term Newborns	Targeted	Zinc sulphate in Formula feed	5.8 mg/L (1.8 mg/L)	6 months	Not mentioned

Table S3 Study characteristics for Vitamin A fortification in children

Vitamin A									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Arroyave[52]	1981	Guatemala	Before-After	Children aged 1 to 5 years	Targeted	Sugar	Not mentioned	2 years	Not mentioned
Chen[53]	2008	China	RCT	2-6 year old preschool children	Targeted	Vitamin A acetate in Seasoning powder	500 µg / 2.5g of powder	6 months	Not mentioned
Mejia[54] .	1982	Guatemala	Before-After	Preschool Children (ages less than 6 years)	Targeted	Sugar	Not mentioned	2 years	Not mentioned
Muhilal[55].	1988	Indonesia	Before-After	Children (0-5 years)	Targeted	MSG (Mono sodium glutamate)	810 µg /g MSG	1 year	Not mentioned
Ribaya-Mercado[56]	2004	Nicaragua	Before-After	Children aged 5 to 9 years	Targeted	Vitamin A acetate in Sugar	Not mentioned	1 year	Not mentioned
Solon[57]	2000	Philippines	RCT	Children aged 6 to 13 years	Targeted	Vitamin A palmitate n Flour (pandesal)	133 µg /pandesal (33% of RDA)	30 weeks	Not mentioned
Solon[58]	1979	Philippines	Quasi	Children 1-16 years	Targeted	MSG	15000 IU/packet	2 years	Not mentioned
Zhang[59]	2010	China	RCT	Children aged 3 to 6 years,	Targeted	Biscuits	Group 1: 500 IU / piece (30%,RDA) Group 2: 1666 IU/piece (100% RDA)	9 months	Not mentioned

Table S4 Study characteristics for Vitamin D and Calcium fortification in children

Vitamin D and calcium									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Bonjour[60]	1997	Geneva	RCT	Pre-pubertal Girls (Range 6.6-9.4 years)	Targeted	cakes, biscuits, fruit juices, chocolate bars	Not mentioned	48 weeks	850 mg of calcium
Du[61]	2004	China	RCT	Children 10-12 years old	Targeted	Milk	560mg Calcium and 5-8 micrograms Vitamin D/500ml	2 year	245 mg Calcium and 3·33 mg cholecalciferol/day
Ganmaa [62]	2008	Mongolia	Before-After	Children (9-11 years)	Targeted	Milk	100 IU of Vitamin D/236ml of milk	1 month	300IU or 7.5 Vitamin D
Graham [63]	2008	New Zealand.	RCT	Children of ages 6 to 9 years	Targeted	Milk	Vitamin D3 1.5 µg Ca 480 mg	Not mentioned	Ca 60% RDA
Ho[64]	2005	China	Quasi	Adolescent girls (14-16 years)	Targeted	Soy milk	600 mg Ca / 375 ml	1years	600 mg of Calcium
Koo [65]	2006	USA	RCT	Preterm infants	Targeted	Formula Milk	105 mg Ca, 80 IU Vit D	1 year	Not mentioned
Rich-Edwards [66]	2011	Mongolia	RCT	Children (9-11 years)	Targeted	Milk	Not mentioned	2 months	Not mentioned
Veromaa [67]	2008	Finland	Before-After	Adolescent girls (12-18 years)	Targeted	Fluid milk and margarine	Not mentioned	4 years	73% of the participants consumed at least 800 mg Ca/d 16% consumed 7·5 µg vitamin D/d.
Zhu[68]	2005	China	RCT	Girls (10-12 years)	Targeted	Milk	1.7 mg/ml	24 months	245mgCa and, 3.33 µg vitamin D.
Zhu[69]	2008	China	RCT	Girls (10-12 years)	Targeted	Milk	Calcium 560mg/330ml Vit D 5-8 µg	24 months	245 mg calcium, 3.33 µg vit D

Table S5 Study characteristics for folate fortification in children

Folate									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Grupp[70]	2011	Canada	Before-After	children aged 9 and below	Mass	Flour	Not mentioned	9 years	Not mentioned
Wiltshire[71]	2004	Australia	Before-After	Children (10 to 14 years)	Mass	cereal and bread products	Not mentioned	1 year	Not mentioned

Table S6 Study characteristics for iodine fortification in children

Iodine								
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Target population daily micronutrient Intake**
Delange [72]	1999	Africa	Before-After	Children of ages 6 to 14 years	Mass	Salt	Not Mentioned	Not mentioned
Guttikonda [73]	2002	Australia	Before-After	Children of ages 4 to 17 years	Mass	Salt	Not Mentioned	Not mentioned
Jooste [74]	2000	South africa	Before-After	Children of ages 8 to 16 years	Mass	Salt	40–60 mg/g	Not mentioned
Pongpaew [75]	1998	Thailand	Before-After	Children of ages 5 to 17 years	Mass	Salt	50 g/100 kg 200µg 80µg	Not mentioned
Yamamah [76]	2003	Egypt	Before-After	Girls of ages 8 to 16 years	Mass	Salt	50-80 ppm	Not mentioned
Zimmermann[77]	2003	Côte d 'ivoire	Before-After	Children of ages 5 to 17 years	Mass	Salt	30–50 ppm	Not mentioned
Zimmermann [78]	2006	Morocco Albania South Africa	Before-After	Children of ages 5 to 17 years	Mass	Salt	25ppm	Not mentioned

Table S7 Study characteristics for dual fortification in children

Dual Fortification									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification Vehicle**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Micronutrients used**
Andersson[79]	2008	India	RCT	Children(5-15 years)	Targeted	Salt	both at 2 mg/g salt	1 year	Iodine, iron
Nugroho[80]	2010	Indonesia	RCT	Children (7-9 year old)	Targeted	Milk	Iron 12.15 mg Zn 4.4 mg	3 months	Fe,Zn
Sivakumar[81]	2002	India	RCT	Children (14-17 years)	Targeted	Salt	Not mentioned	2 years	Iodine, iron
Vinodkumar[82]	2009	India	RCT	Children(7-11 years)	Targeted	Salt	28 mg of elemental iron 1 mg of riboflavin	1 year	Iron Riboflavin
Wegmuller[83]	2006	Coˆ te d'Ivoire	QUASI	Children (5-15 years)	Targeted	Salt	3 mg Fe/g 53.8 6 18.2 mg I /g salt	6 months	Iodine, iron
Zimmermann[84]	2003	Morocco	RCT	Children (6-15 years)	Targeted	Salt	25 µg/g salt. 1 mg Fe/g salt	40 weeks	Iodine, iron
Zimmermann[85]	2004	Morocco	RCT	Children (6-15 years)	Targeted	Salt	25 g I (as potassium iodate)/g salt and 2 mg Fe/g salt	10 months	Iodine, iron
Zimmermann[86]	2002	Morocco	RCT	Children (6-15 years)	Targeted	Salt	25 mg iodine/g salt (1 mg Fe/g salt	10 months	Iodine, iron
Zlotkin[87]	2001	Ghana	RCT	Infants (less than 24 months)	Targeted	Meals	Not mentioned	2months	Fe, Ascorbic Acid
Zlotkin[88]	2003	Ghana	RCT	Infants (less than 24 months)	Targeted	Weaning foods	(80 mg of elemental iron 10 mg of zinc)	2 Months	Fe,Zn

Table S8 Study characteristics for multiple-micronutrient fortification in children

Multiple Micronutrients									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Number of micronutrients used**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Chen[89]	2011	China	RCT	Children (2-6 years)	Targeted	Food	8	6 months	Not mentioned
Chen[90]	2008	China	RCT	Children (2-6 years)	Targeted	Food	8	6 months	Not mentioned
Faber[91]	2005	South Africa.	RCT	Children (6-12 months)	Targeted	maize meal	10	6 months	Not mentioned
Gershoff[92]	1977	Thailand	Quasi	Children (1.5-9 years)	Targeted	Rice	6	4 years	Not mentioned
Gibson[93]	2011	Zambia	RCT	Children (6 months)	Targeted	Porridge	19	12 months	Not mentioned
Goyle[94]	2010	India	Before-After	adolescent girls (10-16 years)	Targeted	Biscuits	5	4 months	Not mentioned
Kumar[95]	2007	India	Quasi	Children(7-11 years)	Targeted	Salt	10	1 year	Not mentioned
Kuusipalo[96]	2006	Malawi	RCT	6-17 months underweight infants	Targeted	fortified spread	20	12 weeks	Not mentioned
Lartey[97]	1999	Ghana	RCT	Infants (6-12 month)	Targeted	maize corn	16	1 year	Not mentioned
Layrisse[98]	1996	Venezuela	Before-After	Children (7-15 years)	Targeted	Maize	3	1 year	Not mentioned
Lien[99]	2009	Vietnam	RCT	Children (7-8 years)	Targeted	Milk	19	6 months	Not mentioned
Lin[100]	2008	Malawi	RCT	Children (6 months)	Targeted	peanut-/soy-based fortified spread vs corn porridge	14	1 year	Not mentioned
Liu[101]	1993	China	RCT	Children (6-13 months)	Targeted	Rusk	10	3 months	Not mentioned
Lopriore[102]	2004	Algeria	RCT	Children (3-6 years)	Targeted	Spread	18	6 months	Not mentioned
Loui[103]	2004	Germany	RCT	Preterm infants (<33 weeks)	Targeted	human milk	7	6 weeks	Not mentioned
Lucas[104]	1996	United kingdom	RCT	Preterm infants (23-36 weeks)	Targeted	human milk	20	18 months	Not mentioned
Lutter[105]	2007	Santo Domingo	quasi	Children (9-14 months)	Targeted	Milk	18	1 year	Not mentioned
Manger[106]	2008	Thailand	RCT	Children (5.5-13.4 years)	Targeted	Food	4	31 week	Not mentioned

Manno[107]	2011	Zambia	RCT	Children (6 months)	Targeted	Porridge	18	1 year	Not mentioned
Morgan[108]	2010	New Zealand	RCT	Infants (12-20 months)	Targeted	red meat and milk	5	20 weeks	Not mentioned
Nesamvuni[109]	2005	Africa	RCT	Children (1-3 years)	Targeted	maize meal	4	12months	Not mentioned
Nga[110]	2009	Vietnam	quasi	Children (6-8year)	Targeted	Biscuits	11	4 months	Not mentioned
Osei[111]	2010	India	RCT	Children (6-10 year)	Targeted	Meal	5	10 months	Not mentioned
Oue´draogo[112]	2010	Burkina Faso	RCT	Children (6-23 months)	Targeted	ingredient-based gruel	5	6 months	Not mentioned
Phu[113]	2010	Vietnam	RCT	Infants (5 month old)	Targeted	flour (FF) or a food complement (FC)	6	6 months	Not mentioned
Rivera[114]	2010	Mexico	RCT	Children(12-30 months)	Targeted	Milk	9	12 months	Not mentioned
Sazawal[115]	2010	India	RCT	Children (1-3 years)	Targeted	Milk	24	1 year	Not mentioned
Seal [116]	2007	Zambia	Before-After	Adolescents (10-18 years)	Targeted	maize meal	9	12 months	Not mentioned
Stekel[117]	1988	Chile	RCT	Children (3-15 months)	Targeted	Milk	4	3-15 months	Not mentioned
Stuijvenberg[118]	1999	South Africa	RCT	Children (6-11 years)	Targeted	Biscuits	3	43 weeks over a 12 months	Not mentioned
Torrejo´n[119]	2004	Chile	RCT	Infants (< 6 months)	Targeted	Milk	3	12 months	Not mentioned
Varma[120]	2007	India	RCT	Children (36-66 months)	Targeted	Khichdi	3	24 weeks	Not mentioned
Villalpando,[121]	2006	Mexico	RCT	Children (10-30 months)	Targeted	Milk	5	6 months	Not mentioned
Winichagoon[122]	2006	Thailand	RCT	Children (5.5-14 years)	Targeted	Lunch	4	31 weeks	Not mentioned

Table S9 Study characteristics for iron fortification in women

Author	Year	Country	Study design	Target population	Fortification strategy	Fortification compound and Carrier	Amount of micronutrient used for fortification	Duration of intervention period evaluated	Target population daily micronutrient Intake
Iron									
Andersson[123]	2010	Switzerland	RCT	18-40 year old females with low serum ferritin	Targeted	Microionised pyrophosphate or NaFeEDTA in margarine	Not mentioned	32 weeks	Not mentioned
Biebinger[124]	2009	Kuwait	RCT	College women ages 18-35	Targeted	Ferrous sulphate in Wheat-flour biscuits	800 mg/kg	22 weeks	Not mentioned
Blanco-Rojo[125]	2012	Spain	RCT	18-35 year old females with Fe deficiency	Targeted	Iron phoshate in Fruit juice	Not mentioned	16 weeks	Not mentioned
Blanco-Rojo[126]	2011	Spain	RCT	Women aged 18–35 years	Targeted	Iron phoshate in Fruit juice	36mg/L	16 weeks	Not mentioned
Chen[8]	2005	China	RCT	Male and female above the age of 3 years	Targeted	NaFeEDTA in Soy sauce	296mg/l	18 months	NR- baseline and final plasma retinol reported
Hoa[127]	2005	Vietnam	Cluster (communes)	Pregnant women ages 20-32 years	Targeted	Ferrous Fumarate in Milk	37.5 mg/L	16 weeks	Not mentioned
Hotz[128]	2008	Mexico	RCT	Women 18-49 years of age	Targeted	micronized ferric pyrophosphate in Rice 5d/week	266.7 mg/Kg	6 months	Not mentioned
Karl[129]	2010	USA	RCT	Female army recruits	Targeted	ferrous sulfate in Food bars	797 mg/kg	9 week	Not mentioned
Sadighi[130]	2008	Iran	Survey	Women age 15-49 years	Targeted	Ferros sulphate in Wheat flour	Not mentioned	3 years	Not mentioned
Sadighi[131]	2009	Iran	Before-After	Women age 15-49 years	Targeted	Ferrous sulphate in Wheat flour	Not mentioned	8 years	Not mentioned
Thuy[132]	2003	Vietnam	RCT	17-49 year old non-pregnant women > 80 but < 120 g/L	Targeted	NaFeEDTA in Fish sauce 6d/week	1 g/L	6 months	Not mentioned
Thuy[133]	2005	Vietnam	RCT	Non-pregnant woman between 16 and 49 y of age	Targeted	NaFeEDTA in fish sauce	500 mg/L	18 months	0.1 mg/d
Zimermman[134]	2005	Thailand	RCT	18-50 year old women	Targeted	Fortified snacks with $FeSO_4$, Electrolytic iron and hydrogen based iron	Not mentioned	35 weeks	NR

Table S10 Study characteristics for zinc fortification in women

Zinc									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Badii[135]	2012	Iran	RCT	Zinc-deficient women aged 19 to 49 years	Targeted	Zinc sulfate in bread	50 and 100 mg/Kg	1 month	Not mentioned

Table S11 Study characteristics for folate fortification in women

Folate									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Alasfoor[136]	2008	Oman	Before-After	Pregnant women	Mass	Flour	5mg/kg	10 years	Not mentioned
Amarin[137]	2010	Jordon	Before-After	WRA*	Mass	grain products	Not mentioned	3 years	Not mentioned
Bar-oz[138]	2008	Canada	Before-After	WRA (14-45)	Mass	Flour	0.15mg/100gm	8 years	Not mentioned
Bol[139]	2006	US	Before-After	WRA	Mass	Flour	40 µg /100 g	3 years	Not mentioned
Boulet[140]	2008	US	Before-After	WRA	Mass	cereal grain products	40 µg /100 g	5 years	Not mentioned
Canfield[141]	2005	US	Before-After	WRA	Mass	Flour	40 µg /100 g	2 years	Not mentioned
Chen[142]	2004	Costa Rica	Before-After	WRA (15-44 years)	Mass	wheat and corn flour	1.8mg/kg	3 years	108 µg / day
Chen[143]	2008	US	Before-After	WRA	Mass	cereal grain products	40 µg /100 g	7 years	Not mentioned
Hertrampf[144]	2003	Chile	Before-After	WRA	Mass	Wheat Flour	2.2 mg/kg	1 year	400 µg / day
Honein[145]	2001	USA	Before-After	WRA	Mass	Flour	40 µg /100 g	1 year	Not mentioned
Ionescu-ittu[146]	2009	Canada	Before-After	WRA	Mass	Flour & Pasta products	Not mentioned	7 years	Not mentioned
Kucik[147]	2004	USA	Before-After	WRA	Mass	Cereal products	40 µg /100 g	Not mentioned	Not mentioned

Lawrence[148]	2004	USA	Before-After	WRA	Mass	cereal grain products	40 µg /100 g	2 years	Not mentioned
Liu[149]	2004	Canada	Before-After	WRA	Mass	Grain products	Not mentioned	1 years	Not mentioned
Lopez-Comello[150]	2005	Chile	Before-After	WRA	Mass	Wheat Flour	Not mentioned	5 years	Not mentioned
Modjadji[151]	2007	South Africa	Before-After	WRA (18-44)	Mass	Staple Food	Not mentioned	1 year	250 µg / day
Murphy[152]	2000	UK	Before-After	WRA	Mass	cereal and bread	Not mentioned	Not mentioned	Not mentioned
Orioli[153]	2011	Brazil	Before-After	WRA	Mass	wheat and maize flour	150 µg /100g	2 years	Not mentioned
Pacheco[154]	2009	Brazil	Before-After	WRA	Mass	Wheat	150 µg /100g	2 years	Not mentioned
Persad[155]	2002	Canada	Before-After	WRA	Mass	Grains	0.15mg/100g	3 years	Not mentioned
Ray[156]	2004	Canada	Before-After	WRA	Mass	cereal grains	0.15mg/100g	3 years	Not mentioned
Ray[157]	2003	Canada	Before-After	WRA	Mass	cereal grains	0.15mg/100g	3 years	Not mentioned
Robbins[158]	2006	USA	Before-After	WRA	Mass	cereal grains	40 µg /100 g	4 years	Not mentioned
Safdar[159]	2007	Saudi Arabia	Before-After	WRA	Mass	Flour	16.53 g of folic in 1000g	4 years	Not mentioned
Sayed[160]	2008	South Africa	Before-After	WRA	Mass	Staple foods	Not mentioned	1 year	Not mentioned
Shaw[161]	2003	USA	Before-After	WRA	Mass	grain products	40 µg /100 g	1 year	Not mentioned
Signore[162]	2005	USA	Before-After	WRA	Mass	grain product s	40 µg /100 g	2 years	Not mentioned
Simmons[163]	2004	USA	Before-After	WRA	Mass	grain products	40 µg /100 g	2 years	Not mentioned
Waller[164]	2003	USA	Before-After	WRA	Mass	Grains	40 µg /100 g	1 year	Not mentioned
Williams[165]	2002	USA	Before-After	WRA	Mass	Grains	40 µg /100 g	1 year	Not mentioned

*WRA: Women of reproductive age

Table S12 Study characteristics for Vitamin D and calcium fortification in women

Vitamin D and calcium									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Adolphi [166]	2009	Germany	RCT	Post-Menopausal (48-67 years)	Targeted	fermented milk	Control 210 mg Ca and Intervention 510 mg Ca	2 weeks	Not mentioned
Bonjour [167]	2009	France	Before-After	Elderly Women (Mean Age 84.8 years)	Targeted	Soft plain cheese	Calcium: 151 mg/100g of cheese	30 days	2·5 µg vitamin D, 302 mg Ca (7-45% RDA)
Chee [168]	2003	Malaysia	RCT	Post Menopausal (55-65 years)	Targeted	Milk	24 mg/g of skimmed milk	24 months	1200 mg calcium/ day
Ferrar [169]	2010	UK	RCT	WRA* (20-39 years)	Targeted	Ice cream	Group 1: Ca 244 mg Group 2: 459 mg Group 3: 676 mg	28 days	Group 1: Ca 244mg Group 2: 459mg Group 3: 676 mg
Green [170]	2010	New Zealand.	RCT	Women (18-47 years)	Targeted	Milk	vitamin D (5+)	12 weeks	5ug of Vitamin D
Kruger[171]	2006	New Zealand	RCT	Pre-Menopausal Women (20-35 years)	Targeted	Skimmed milk	1000 mg of calcium, 5 g of vitamin D3	16 weeks	Not mentioned
Kruger[172]	2010	Indonesia Philippines	Quasi	Postmenopausal women (>55 years of age)	Targeted	Milk	1200 mg calcium and 9.6 µg vit D per 60 g serving	16 weeks	Not mentioned
Lau[173]	2001	China	RCT	Postmenopausal women (55-59 years)	Targeted	Milk	40mg/g	2 years	800 mg
Manios [174]	2009	Greece	Quasi	Post-menopausal women (55-65 years)	Targeted	Dairy products	Not mentioned	3 months	1200 mg of calcium and 7.5 µg of vitamin D3
Moschonis [175]	2006	Greece	RCT	post-menopausal women (55-65 years)	Targeted	Dairy products	Not mentioned	12 months	1200 mg calcium/d and 7·5 mg vitamin D3/d
Natri [176]	2006	Denmark	RCT	Women (25- 45 years)	Targeted	Bread	10 µg/100g	3 weeks	10 µg Vit D
Recker [177]	1985	USA	RCT	Postmenopausal women (45-70years)	Targeted	Milk	Not mentioned	24 months	Not mentioned
Storm [178]	1998	USA	RCT	Elderly women (>65years)	Targeted	Milk	Not mentioned	2 years	(CaCO3-1000 mg/day
Tenta [179]	2010	Greece	RCT	Postmenopausal women (55-65 years)	Targeted	Dairy products	Not mentioned	30 months	1,200 mg of calcium and 7.5 µg of vitamin D

*WRA: Women of reproductive age

Table S13 Study characteristics for iodine fortification in women

Iodine								
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Target population daily micronutrient Intake**
Burgees [180]	2007	Australia	Before-After	Women	Mass	Salt in bread	Not Mentioned	Not mentioned
Camargo [181]	2008	Brazil	RCT	Women	Mass	Salt	Not Mentioned	Not mentioned
Carle[182]	2006	Denmark	Before-After	Women	Mass	Salt and salt in bread	13ppm	Not mentioned
Cerqueira [183]	2009	Denmark	Before-After	Women	Mass	Salt	13ppm	Not mentioned
Cerqueira [184]	2011	Denmark	Before-After	Women	Mass	Salt	Not Mentioned	Not mentioned
Laurberg [185]	2006	Denmark	Before-After	Women	Mass	Salt	8ppm	Not mentioned
Moleti [186]	2008	Italy	Before-After	Pregnant women	Mass	Salt	Not Mentioned	Not mentioned
Moleti [187]	2011	Italy	Before-After	Pregnant women	Mass	Salt	150µg	Not mentioned
Pedersen [188]	2007	Denmark	Before-After	Women	Mass	Salt	8ppm than 13ppm	Not mentioned
Pedersen [189]	2011	Denmark	Before-After	Women	Mass	Salt	Not Mentioned	Not mentioned
Rasmussen [190]	2008	Denmark	Before-After	Women	Mass	Salt and bread	Not Mentioned	Not mentioned
Seal [191]	2007	Australia	Before-After	General	Mass	Bread	Not Mentioned	Not mentioned
Sebotsa [192]	2005	Lesotho	Before-After	General	Mass	Salt	40 to 60 ppm	Not mentioned
Sultanalieva [193]	2009	Kyrgyzstan	RCT	General	Mass	Salt	25–55 mg/kg	Not mentioned
Vejbjerg [194]	2007	Denmark	Before-After	Women	Mass	Salt	13ppm	Not mentioned
Vejbjerg [195]	2009	Denmark	Before-After	Women	Mass	Salt	13ppm	Not mentioned

Table S14 Study characteristics for dual fortification in women

Dual Fortification									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Amount of micronutrient used for fortification**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Viteri[196]	1995	Guatemala	RCT	General Population	Mass	sugar	Iron Vit A	32 month	Not mentioned

Table S15 Study characteristics for multiple-micronutrient fortification in women

Multiple Micronutrients									
Author	**Year**	**Country**	**Study design**	**Target population**	**Fortification strategy**	**Fortification compound and Carrier**	**Number of micronutrients**	**Duration of intervention period evaluated**	**Target population daily micronutrient Intake**
Adu-Afarwuah[197]	2007	Ghana	RCT	General	Targeted	Homemade food	19	1.5 years	Not mentioned
Huo[198]	2011	China	Quasi	Female (20-60 years)	Targeted	Flour	7	3 years	Not mentioned
Mardones[199]	2007	Chile	RCT	Pregnant women	Targeted	Food	20	9 months	Not mentioned
Tapola[200]	2004	Finland	RCT	Men & Women (26-65 years)	Targeted	Mineral Water	5	8 weeks	Not mentioned
Tucker[201]	2004	US	RCT	Volunteers (50-85 years)	Targeted	Breakfast	3	14 weeks	Not mentioned

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