APPENDIX 1. Mean estimated weight (MEW) – mean real weight (MRW) (g) and percentage error estimation, according to method.

		Maan rool	Album (n=	=163 foods)‡	Cups (n=	84 foods)‡	Models (n	=30 foods);
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Fats								
Avocado (whole)	60	147.5	-9.9 (22.7)	-7.6 (15.5)				
Avocado (slices)	64	24.0	1.2 (8.6)	7.4 (33.9)				
Bacon (cooked)	60	35.0	-20.1 (2.1)	-62.0 (6.6)			7.5 (15.5)	-5.6 (30.4)***
Bacon (raw)	58	77.0	-0.5 (15.3)	-0.9 (20.6)				
Chorizo (grilled)	64	394.0	-40.0 (74.2)	-9.9 (19.4)				
Olives	58	225.0	-79.3 (32.1)	-35.9 (14.2)	-18.4 (94.7)	-8.6 (42.6)***		
Philadelphia	60	112.5	17.5 (30.6)	27.2 (33.3)				
Soy chorizo	62	112.5	-52.8 (17.7)	-46.6 (15.5)***	130.8 (75.5)	117.3 (65.9)		
"Longaniza"	62	112.5	-33.7 (15.6)	-31.0 (10.7)***	70.2 (64.7)	57.0 (53.1)		
Animal foods								
Beef (cubes)	64	180.0	-76.0 (21.0)	-42.1 (12.0)				
"Charales"	60	172.5	-4.6 (18.6)	-1.3 (12.1)*	9.5 (41.3)	6.9 (24.2)		
Chicken "fajitas"	62	60.5	4.0 (21.1)	6.3 (37.5)***	89.4 (52.5)	147.2 (84.3)		
Chicken fried steak	80	56.0	-20.6 (7.0)	-26.3 (17.5)				
Chicken breast (with skin)	62/31§	146.5/238.0§	35.0 (50.5)	48.1 (24.7)			29.1 (101.2)	12.2 (42.5)***

		Maan maal	Album (n=	=163 foods)‡	Cups (n=	84 foods)‡	Models (n=	=30 foods)‡
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Chicken heart	60	7.5	2.0 (0.8)	41.8 (12.7)				
Chicken leg (with skin)	80	70.5	6.0 (9.4)	14.3 (19.8)			4.7 (11.4)	6.4 (18.5)**
Chicken liver	64	27.0	9.7 (6.2)	50.1 (20.9)***	28.0 (15.3)	119.8 (55.9)		
Chicken thighs (with skin)	60/30§	82.5/110.0§	3.1 (11.8)	8.5 (19.7)			-9.2 (23.4)	-8.3 (21.2)***
Chicken's sweetbreads	80	15.0	0.1 (2.8)	3.4 (23.8)***	31.9 (16.4)	241.2 (102.9)		
Devil ham	60	51.0	-8.3 (9.6)	-11.3 (24.6)***	30.0 (18.1)	65.2 (34.2)		
Egg (boiled)	64	107.0	-25.3 (13.2)	-24.2 (13.2)				
Egg (scrambled)	58	81.0	3.6 (15.4)	7.4 (22.0)***	87.1 (41.6)	104.6 (52.4)		
Fish fillet	60	59.0	0.9 (13.8)	1.5 (23.2)***			45.3 (20.3)	76.4 (33.9)
Ham	58/29§	61.5/48.0§	-12.4 (13.7)	-17.2 (21.8)			5.0 (31.6)	10.4 (65.8)*
Hamburger meat	60	63.0	-21.5 (12.8)	-30.7 (16.0)***			23.5 (36.2)	44.5 (74.4)
Head cheese	54	67.5	12.5 (35.7)	17.0 (50.6)				
Meatball	58	109.0	-35.8 (14.3)	-30.7 (13.7)				
"Menudo"	62	238.5	2.9 (47.2)	1.3 (17.1)	115.7 (202.4)	46.3 (76.9)		
Minced meat	60	276.5	-30.4 (43.8)	-6.1 (14.7)***	303.0 (149.8)	113.5 (60.7)		
Mortadella	62	39.5	-10.2 (10.5)	-9.6 (23.3)				
Pig trotters	58	112.5	79.3 (42.9)	79.9 (39.7)				
Pork chop	62/30	163.0/89.0	-36.4 (29.8)	-19.7 (22.6)***			13.6 (20.4)	15.3 (22.9)

		Maan maal	Album (n=	=163 foods)‡	Cups (n=8	34 foods)‡	Models (n	=30 foods)‡
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Pork loin	60	279.0	-95.8 (52.0)	-33.8 (18.9)				
Pork ribs	60	154.5	12.0 (42.7)	10.9 (33.4)				
Red snapper	58	276.0	-50.1 (43.8)	-18.7 (16.2)				
Salami	60	17.5	-11.2 (1.9)	-54.6 (18.9)				
Sardines	60	224.0	-31.7 (34.3)	3.4 (24.6)***	154.6 (128.4)	64.0 (54.2)		
Shredded chicken	62	110.0	-21.1 (12.0)	-18.8 (11.0)***	123.3 (67.9)	112.3 (62.1)		
Shrimp (cooked, with peel)	64	190.5	-3.1 (29.4)	-1.7 (15.6)***			-54.8 (33.0)	-28.4 (18.2)
Shrimp (cooked, peeled)	60	28.0	33.0 (8.4)	123.3 (30.3)			10.5 (9.4)	42.0 (35.4)***
Steak (grilled)	54/27§	80.5/46.0§	21.5 (16.4)	29.7 (24.8)***			163.6 (64.4)	355.7 (139.9)
Steak (grilled, cubes)	60	42.0	11.1 (11.7)	29.2 (30.1)				
Tuna	54	70.5	-8.7 (9.8)	1.6 (13.8)***	28.4 (20.1)	53.7 (25.7)		
Sugars								
Chocolate chips	54	88.5	-27.8 (10.6)	-20.6 (17.5)***	45.1 (63.5)	59.8 (53.3)		
Guava roll	58	62.0	17.1 (9.5)	-29.0 (20.0)				
M & M's	60	31.5	-0.5 (7.5)	8.3 (31.6)***	23.0 (15.8)	92.2 (45.8)		
"Palanqueta de								
cacahuate"	62	43.0	-9.3 (6.7)	-23.2 (19.2)				

		M	Album (n=	=163 foods);	Cups (n=8	34 foods)‡	Models (n=3	30 foods)‡
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Cereals and tubers								
"Alegría"	54	54.0	19.5 (9.6)	44.1 (22.4)				
Amaranth	58	47.5	-15.3 (9.3)	-29.5 (23.4)***	25.4 (44.9)	49.4 (79.0)		
Baguette (slices)	54	70.0	20.6 (16.2)	32.4 (25.4)				
Bread (bolillo)	64	72.5	16.5 (15.8)	33.7 (29.6)				
Bread sticks	60	48.5	2.2 (8.0)	45.0 (21.4)				
Bun	60	43.5	2.9 (5.6)	5.9 (13.6)				
Cambray potato	80	300.0	-78.6 (30.8)	-30.4 (16.2)				
Canned yellow corn	60	57.0	57.0 (5.6)	99.3 (9.9)				
Cheerios cereal	62	117.0	-8.2 (16.4)	7.7 (13.5)***	22.4 (44.9)	17.5 (37.6)		
Cheetos	60	35.0	4.3 (7.3)	13.6 (23.7)	4.5 (13.2)	13.6 (38.6)		
Choco Krispis cereal	60	47.0	-2.3 (7.0)	-4.7 (14.6)***	25.6 (22.5)	55.1 (47.6)		
Corn tortillas	64	32.0	-12.7 (2.7)	-41.1 (9.7)				
Croutons	60	69.0	-7.5 (9.6)	-10.4 (14.1)***	16.4 (31.5)	25.7 (46.3)		
Flour tortillas (big size)	60	163.5	-25.4 (33.6)	-6.3 (20.9)				
Flour tortillas (normal								
size)	58	18.0	2.0 (4.3)	13.3 (28.1)				
Flour tortillas (packaged)	62	29.5	-10.1 (1.8)	-30.7 (5.8)				

		Mean real	Album (n=	=163 foods);	Cups (n=	84 foods)‡	Models (n=	=30 foods)‡
Food groups / Foods	n		MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Flour tortillas (small size)	80	60.0	36.4 (9.1)	70.3 (12.0)				
Flour tortillas (whole								
wheat flour)	62	21.0	3.4 (4.6)	13.3 (15.5)				
French fries	62	223.0	104.1 (55.0)	48.5 (25.0)	62.9 (68.5)	28.5 (30.4)***		
Fussili	60	300.0	-52.4 (53.2)	0.3 (22.5)	9.4 (121.5)	9.0 (33.6)		
Granola	58	70.0	16.5 (32.5)	23.4 (47.6)	27.1 (39.6)	41.2 (55.6)		
Hot cakes	64	97.5	-14.3 (16.6)	-18.3 (12.9)***			87.9 (88.6)	88.1 (87.5)
Hot dog bun	62	42.0	-2.5 (2.7)	-4.5 (6.8)				
Little toasts	62	13.0	3.2 (1.7)	20.4 (12.3)				
Macaroni	60	168.5	5.9 (30.1)	4.5 (18.9)**	46.2 (76.4)	27.6 (45.9)		
Mashed potato	58/28§	307.5/540.0§	9.9 (36.3)	19.6 (18.1)***	222.9 (300.9)	69.7 (64.6)	374.6 (577.5)	69.4 (107.0)
Nesquick cereal	62	35.0	-10.4 (6.3)	-30.4 (15.8)***	20.9 (17.3)	59.3 (47.5)		
Oats	58	89.0	-3.4 (32.1)	5.3 (36.7)	22.2 (65.9)	16.8 (56.8)		
Popcorn (with butter)	62	34.0	13.4 (9.9)	40.3 (32.8)	-6.3 (15.4)	-14.5 (46.8)***		
Potato chips	62	35.0	3.9 (9.6)	11.5 (28.7)**	12.2 (18.3)	35.6 (53.5)		
Quaker Stars cereal	58	101.5	11.3 (3.0)	45.2 (11.9)	2.1 (41.5)	19.7 (31.5)***		
Rice (boiled)	58	198	-50.2 (57.4)	-17.0 (20.7)	22.5 (88.4)	17.9 (41.4)	3.6 (53.8)	14.8 (26.4)***
"Sabritones" (spicy flour	80	40.0	12.3 (11.0)	46.8 (27.5)	3.6 (13.3)	-6.5 (34.1)***		

		M	Album (n=	=163 foods)‡	Cups (n=	84 foods)‡	Models (n=	=30 foods)‡
Food groups / Foods	n	Mean real weight	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
"chicharrones")								
Spaguetti	54	101.5	13.3 (13.2)	15.4 (15.2)***	48.9 (39.6)	45.5 (37.2)	16.4 (25.5)	29.5 (26.4)
Special K cereal	64	31.5	2.0 (5.0)	17.8 (20.3)	5.3 (10.3)	15.2 (31.0)		
Sweet potato (boiled)	60	176.0	15.3 (40.4)	-10.5 (22.6)				
Sweet potato (with honey)	62	768.5	-109.9 (95.8)	-14.3 (12.5)			45.9 (199.7)	6.5 (26.0)***
Wheat bran	58	7.5	-1.7 (2.3)	-3.1 (75.1)***	14.1 (4.1)	431.2 (164.2)		
"Tamal"	58	99.0	0.4 (11.1)	-1.5 (12.2)				
"Tostadas" (dehydrated)	60	25.5	9.2 (5.1)	41.6 (19.7)				
Tortilla chips	60	98.5	-13.9 (15.9)	-16.6 (17.7)				
Fruits								
Apple Red Delicious	62	121.5	-1.9 (8.4)	-0.2 (7.3)				
Baby banana	60	37.5	8.9 (8.0)	25.9 (22.4)				
Banana (whole)	60/30§	129.0/172.0§	29.5 (19.9)	26.9 (17.8)***			-68.4 (48.0)	-39.7 (27.9)
Banana (sweetened slices)	64	21.0	1.4 (5.1)	13.0 (27.9)***	12.1 (10.1)	67.6 (42.0)		
Cantaloupe (cubes)	58	269.5	-24.0 (29.9)	5.4 (6.9)***	74.2 (140.3)	31.8 (40.0)		
Cocktail (with juice)	60	237.0	-57.9 (23.5)	-23.2 (10.6)***	134.2 (125.8)	60.4 (54.0)		
Cocktail (without juice)	62	235.5	-70.2 (25.3)	-18.4 (9.5)***	59.5 (89.8)	26.6 (39.5)		
Dried apple	62	36.0	-1.0 (5.6)	-1.1 (16.4)***	39.7 (25.5)	110.7 (67.5)		

		M	Album (n=	=163 foods)‡	Cups (n=8	84 foods)‡	Models (n=	30 foods)‡
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Grapes	62	62.5	-4.6 (9.7)	-6.2 (13.2)***	18.7 (26.2)	29.6 (41.4)		
Guava (whole)	58	139.5	-67.4 (15.8)	-45.7 (11.7)				
Guava (slices)	60	143.0	-32.4 (23.0)	-5.6 (27.4)***	62.2 (65.8)	46.3 (51.4)		
Papaya (cubes)	60	181.5	1.2 (33.3)	8.4 (25.1)	6.3 (64.9)	5.2 (34.7)		
Papaya (slices)	60	462.0	-131.5 (72.5)	-29.2 (15.3)				
Pear	62/31§	142.5/190.0§	11.2 (20.5)	13.1 (21.0)			77.6 (145.0)	40.8 (76.3)
Peach	62	47	-0.2 (7.2)	2.7 (17.4)			2.2 (14.3)	-3.1 (31.5)
Pinneapple (slices)	80	430.0	60.6 (58.7)	23.6 (21.2)				
Plantain	60	216.0	36.6 (40.7)	27.6 (26.7)				
Plum	60	430.0	97.7 (76.7)	19.7 (13.5)				
Prune	62	13.0	-0.8 (3.4)	12.1 (43.7)				
Star fruit or "carambola"								
(whole)	58	91.0	11.4 (12.2)	31.7 (20.9)				
Star fruit or "carambola"								
(slices)	54	156.0	-24.9 (27.3)	-16.6 (17.7)	-4.0 (46.0)	-3.6 (28.4)**		
Soursop	64	116.0	-7.4 (28.1)	-7.7 (24.9)***	101.2 (61.5)	84.7 (52.1)		
Strawberry	54	119.0	0.9 (16.6)	0.5 (12.7)***	27.8 (39.6)	24.3 (33.9)		
Sweet lime	62	95.5	-9.1 (22.0)	5.9 (34.8)				

		Maan waal	Album (n=	=163 foods);	Cups (n=	84 foods)‡	Models (n	=30 foods)‡
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Tangerine (whole)	60	244.5	55.1 (53.2)	22.7 (20.9)				
Tangerine (wedges)	80	129.0	32.4 (26.5)	28.3 (19.6)*	53.1 (59.7)	41.7 (46.0)		
Nuts/oilseeds								
Almonds	58	179.5	-47.2 (29.8)	-15.7 (10.0)	-0.8 (74.1)	11.3 (43.9)***		
Peanuts	58	175.0	-37.6 (14.1)	-20.4 (12.5)***	69.4 (97.9)	51.3 (46.3)		
Nuts	60	135.5	-21.6 (42.0)	-19.7 (26.7)	6.9 (49.8)	6.4 (34.9)***		
Dairy products								
Butter milk	54	513.0	-114.7 (60.5)	-22.3 (12.5)	51.2 (156.9)	10.4 (30.8)***		
Curd	62	95.5	16.5 (36.0)	16.1 (36.0)***	82.3 (59.3)	85.6 (63.2)		
Goat cheese	58	112.5	-34.0 (15.9)	-20.0 (10.0)				
Manchego cheese	58/29	40.5/27.0	65.8 (58.9)	172.5 (150.2)	24.9 (24.1)	71.9 (58.8)	2.3 (3.7)	8.6 (13.8)***
Oaxaca cheese	64	150.0	7.4 (31.6)	6.6 (30.5)***	57.1 (57.8)	38.4 (44.3)		
Panela cheese	60/30§	337.5/55.0§	-69.6 (90.6)	-12.6 (15.4)***	13.7 (97.7)	28.7 (39.0)	27.4 (23.2)	49.9 (42.2)
Parmesan cheese	58	36.5	-0.2 (8.4)	0.2 (21.1)***	19.0 (19.9)	57.4 (49.1)		
Yogurt	60	94	2.0 (14.3)	24.5 (13.3)	39.0 (40.1)	77.4 (57.7)	-30.6 (13.9)	-15.2 (18.0)***

Legumes

		M	Album (n=	=163 foods);	Cups (n=	84 foods)‡	Models (n	=30 foods)‡
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Beans (boiled)	58	254.5	-40.8 (46.5)	-17.2 (18.7)***	64.0 (120.9)	25.6 (47.7)	74.8 (77.1)	30.1 (30.1)
Beans (re-fried)	62/31§	34.0/15.0§	-4.7 (6.9)	-3.4 (17.8)***	59.7 (89.3)	296.4 (600.7)	5.5 (7.2)	37.0 (48.2)
Chickpea (boiled)	60	225.5	-32.6 (33.5)	-14.4 (15.0)***	89.5 (99.1)	40.3 (44.4)		
Lentils (boiled)	62	101.5	-55.6 (18.2)	-48.9 (23.0)***	50.9 (33.4)	53.4 (29.9)		
Lima beans (boiled)	64	152.5	58.2 (29.9)	38.3 (19.9)	41.5 (59.7)	28.6 (39.0)		
Textured soy (boiled)	60	259.0	22.5 (52.8)	16.1 (22.1)***	137.6 (139.7)	59.7 (58.0)		
Vegetables								
Alfalfa sprouts	62	72.0	-21.9 (15.3)	-22.4 (23.8)***	36.9 (40.6)	56.9 (59.0)		
Broccoli	60/30§	174.0/70.0§	-25.6 (24.6)	-11.8 (13.0)	97.4 (104.4)	54.1 (45.8)	-12.2 (11.0)	-17.5 (15.7)***
Cambray onions	58	256.5	33.3 (48.5)	12.7 (19.2)				
Coriander (chopped)	62	99.0	-18.7 (8.8)	-18.5 (8.9)***	99.7 (74.2)	101.7 (76.6)		
Cucumber (cubes)	60	317.5	-3.3 (33.5)	1.9 (13.7)	17.1 (109.8)	7.4 (33.2)		
Green beans (boiled)	54/27§	225.5/246.0§	0.2 (37.7)	1.7 (16.8)**	147.3 (122.2)	67.1 (55.8)	119.6 (543.6)	48.6 (221.0)
Green beans (chopped)	60	251.0	-18.7 (8.8)	-18.5 (12.4)	16.7 (91.1)	10.1 (37.8)***		
Green pepper (slices)	60	187.5	-32.8 (31.9)	-14.8 (17.8)***	53.5 (86.6)	28.0 (46.4)		
Lettuce (chopped)	60	184.5	5.9 (38.4)	4.2 (26.3)***	51.2 (78.1)	37.5 (49.8)		
Lettuce (leafes)	60	112.5	6.8 (29.3)	2.5 (29.3)				
Mushrooms (boiled)	62	55.5	24.9 (9.1)	-47.1 (15.4)***	42.2 (36.2)	76.1 (65.6)		

		M	Album (n=	=163 foods);	Cups (n=	84 foods)‡	Models (n=30 foods);	
Food groups / Foods	n	Mean real	MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Nopal (boiled)	58	156.5	6.0 (24.4)	4.5 (16.0)				
Nopal (chooped, boiled)	62	403.0	-44.7 (58.3)	-10.6 (14.1)***	261.9 (168.5)	65.6 (42.0)		
Onion (slices)	58	133.0	-59.3 (18.7)	-45.4 (14.2)	51.9 (51.2)	39.3 (39.6)***		
Palm heart	60	292.5	39.9 (59.6)	13.3 (20.3)				
Peas with carrots (canned)	58	282.0	-62.3 (46.7)	-22.7 (18.5)	23.0 (145.3)	8.6 (55.7)***	33.5 (116.6)	14.9 (38.1)
Poblano chile pepper								
(roasted)	62	103.5	-15.3 (32.8)	-13.8 (32.7)				
Poblano chile pepper								
(sliced)	80	212.0	-66.1 (26.4)	-29.9 (13.3)***	143.4 (170.3)	69.8 (81.5)		
Radish	62	430.0	-144.8 (42.7)	-33.1 (10.5)				
Spinach (boiled)	64	121.5	28.5 (25.8)	22.8 (25.3)***	64.3 (40.1)	51.6 (35.2)	114.3 (50.5)	97.4 (52.7)
Spinach (raw)	62	98.0	-33.5 (10.5)	-38.1 (11.5)***	84.3 (82.2)	81.6 (73.2)		
Sugar beet (cubes, boiled)	58	179.0	-7.1 (30.5)	-0.8 (18.0)*	15.0 (50.7)	8.3 (27.6)		
Sugar beet (slices, boiled)	80/40§	129.0/207.0§	-6.0 (23.8)	28.2 (24.4)	95.2 (71.3)	85.4 (52.9)	-5.8 (60.5)	-2.8 (29.2)***
Sugar beet (grated, boiled)	60	93.5	-38.6 (11.0)	-41.0 (11.9)***	85.2 (69.1)	92.9 (75.5)		
Tomato (cherry)	60	144.0	60.0 (27.8)	64.3 (27.7)	42.8 (68.7)	34.1 (53.3)***		
Tomato (saladette, cubes)	62	137.5	-29.2 (19.1)	-15.7 (10.4)***	-69.9 (25.1)	-52.7 (17.8)		
Tomato (saladette, slices)	54	139.0	3.2 (26.0)	3.8 (19.3)***	84.6 (52.1)	60.2 (34.3)		

		Mean real	Album (n=163 foods);		Cups (n=8	34 foods)‡	Models (n=	=30 foods)‡
Food groups / Foods	n		MEW-MRW	PE (%)	MEW-MRW	PE (%)	MEW-MRW	PE (%)
		weight	(g)		(g)		(g)	
Tomato sauce	62	346.5	50.8 (33.3)	23.2 (13.8)**	144.1 (219.2)	48.1 (66.7)		
White asparagus	62/31§	97.5/54.0§	15.7 (32.4)	24.1 (378.8)***			63.1 (42.9)	116.8 (79.4)
Yellow hot chile (pickled)	60	85.5	-21.6 (18.8)	-18.6 (24.1)				
Zucchini (julienne)	64	106.5	10.2 (18.5)	10.6 (22.1)				
Zucchini (slices)	58	98.0	9.8 (17.1)	10.3 (18.2)**	28.0 (48.4)	28.4 (48.2)		

MEW, mean estimated weight; MRW, mean real weight; PE percentage error.

§We only performed evaluation with models with portion 1.

|We only performed evaluation with models with portion 2.

*Non paired t-test (album vs cups; album vs models) or ANOVA (between the three methods); we highlight the method with lower mean percentage error: p<0.05; **p<0.01; ***p<0.001.

[‡]Data are presented as mean (standard deviation).