

**Supplementary Table. Surveys and survey pairs used in the assessment of sodium exposure with identification of sources for published reports and of corresponding members where data was provided on request. Survey pairs, indicated by B (for Both) under Metrics, include both urine-based and diet-based surveys for the same source population.**

Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of data collection	National, Subnational	Sample size			Age range	Urine method (where applic.) <sup>1</sup>	Diet method (where applic.) <sup>2</sup>
					M	F	T <sup>3</sup>			
<b>Asia-Pacific, High Income</b>										
Japan	INTERSALT, Osaka [1]	U	1986	S	100	97		20-59	2	
Japan	INTERSALT, Tochigi [1]	U	1986	S	95	98		20-59	2	
Japan	INTERSALT, Toyama [1]	U	1986	S	100	100		20-59	2	
Japan	Liu et al. [2]	U	1991	N	484	542		48-56	2	
Japan	Kawamura et al. [3]	U	1993	S	90	50		30-65	2	
Japan	National Nutrition Survey (in Japan) [4]	D	1995	N	4,976	5,790		20-100		3
Japan	Sasaki et al. [5]	B	1996	S	308	138		20-25	4	3
Japan	The Japan Public Health Center-based Prospective Study (JPHC Study) [6]	D	1996	S	45,593	52,175		45-74		2
Japan	INTERMAP, Aito Town [7]	B	1997	S	260	258		40-59	2	3
Japan	INTERMAP, Sapporo [7]	B	1997	S	298	296		40-59	2	3
Japan	INTERMAP, Toyama [7]	B	1997	S	298	300		40-59	2	3
Japan	INTERMAP, Wakayama [7]	B	1997	S	292	288		40-59	2	3
Japan	National Nutrition Survey (in Japan) [8]	D	1998	N	5,067	5,850		20-100		3
Japan	Kimira et al. [9]	B	1999	S			438	27-84	4	3
Japan	The Japan Public Health Center-based Prospective Study (JPHC Study) [10]	D	2001	S	43,073	49,229		50-79		2
Republic of Korea	Korea National Health and Nutrition Examination	D	2005	N	2,877	3,563		20-100		3

Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of data collection	National, Subnational	Sample size			Age range	Urine method (where applicable) <sub>1</sub>	Diet method (where applicable) <sub>2</sub>
					M	F	T <sup>3</sup>			
Survey (KNHANES) III [11]										
Republic of Korea	INTERSALT, Pusan [1]	U	1986	S	100	98		20-59	2	
<b>Asia, Central</b>										
Mongolia	Yamada et al. [12]	U	1998	N	571	598		20-44	4	
<b>Asia, East</b>										
China	Zhao GS et al. (1 of 3) [13]	U	1983	S	92			40-59	4	
China	Zhao GS et al. (2 of 3) [13]	U	1983	S	82			40-59	4	
China	Zhao GS et al. (3 of 3) [13]	U	1983	S	83			40-59	4	
China	Zhou BF et al. (1 of 9) [14]	D	1983	S	342			35-59		1
China	Zhou BF et al. (2 of 9) [14]	D	1983	S	124			35-59		1
China	Zhou BF et al. (3 of 9) [14]	D	1983	S	51			35-59		1
China	Zhou BF et al. (4 of 9) [14]	D	1983	S	119			35-59		1
China	Zhou BF et al. (5 of 9) [14]	D	1983	S	181			35-59		1
China	Zhou BF et al. (6 of 9) [14]	D	1983	S	215			35-59		1
China	Zhou BF et al. (7 of 9) [14]	D	1983	S	85			35-59		1
China	Zhou BF et al. (8 of 9) [14]	D	1983	S	212			35-59		1
China	Zhou BF et al. (9 of 9) [14]	D	1983	S	195			35-59		1
China	INTERSALT, Beijing [1]	U	1986	S	100	100		20-59	2	
China	INTERSALT, Nanning [1]	U	1986	S	100	100		20-59	2	
China	INTERSALT, Tianjin [1]	U	1986	S	100	100		20-59	2	
China	Liu et al. [2]	U	1992	N	403	408		48-56	2	
China	Nan et al. [15]	D	1992	N	1133	1184		20-64		1
China	INTERMAP, Beijing [7]	B	1997	S	266	278		40-59	2	3
China	INTERMAP, Guangxi [7]	B	1997	S	280	276		40-59	2	3

Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of data collection	National, Subnational	Sample size			Age range	Urine method (where applicable) <sub>1</sub>	Diet method (where applicable) <sub>2</sub>
					M	F	T <sup>3</sup>			
China	INTERMAP, Shanxi [7]	B	1997	S	286	292		40-59	2	3
China	2002 China National Nutrition and Health Survey [16]	D	2002	N	24,020	27,109		20-101		1
Taiwan	INTERSALT, San Chilo Village [1]	U	1986	S	89	92		20-59	2	
Taiwan	2005-2008 Nutrition and Health Survey in Taiwan [17]	D	2006	N	1,446	1,462		20-100		3
<b>Asia, South</b>										
India	INTERSALT, New Delhi [1]	U	1986	S	100	99		20-59	2	
India	INTERSALT, Stok, Ladakh [1]	U	1986	S	100	100		20-59	2	
India	National Nutrition Monitoring Bureau (NNMB) Rural Surveys [18]	D	1996	S	3,863	4,160		20-100		3
India	National Nutrition Monitoring Bureau (NNMB) Rural Surveys [19]	D	2000	S	8,314	8,888		20-100		3
India	Radhika et al. [20]	D	2003	S			1902	20-79		2
India	National Nutrition Monitoring Bureau (NNMB) Rural Surveys [21]	D	2005	S	8,824	9,468		20-100		3
<b>Asia, South-East</b>										
Indonesia	Mustafa et al. [22]	U	2003	S		15		25-55	4	
Malaysia	Malaysian Adult Nutrition Survey 2002 [23]	D	2002	N	3,117	3,340		20-59		3
Malaysia	Malaysian Adults Nutrition Survey 2003 [23]	D	2003	N	3,464	3,464		20-59		3
Thailand	Calcium Status, Factors Affecting Calcium and Bone Status in Healthy Thais Living in Bangkok [24]	D	1993	S	153	243		20-80		3
Thailand	Kwanmaung et al. (1 of 2) [25]	U	1998	S			18	20-79	4	
<b>Australasia</b>										
Australia	Beard et al. [26]	U	1989	S	22	32		24-69	4	
Australia	Notowidjojo et al. [27]	U	1992	S	64	64		20-64	4	
Australia	Beard et al. [28]	U	1995	S	87	107		20-70	2	
Australia	Margerison [29] (and CM)	U	2003	S	79	65		30-74	4	



Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of data collection	National, Subnational	Sample size			Age range	Urine method (where applicable) <sub>1</sub>	Diet method (where applicable) <sub>2</sub>
					M	F	T <sup>3</sup>			
Estonia	Estonian National Dietary Survey [43]	D	1997	N	878	1,098		20-65		3
Russian Federation	INTERSALT, Moscow [1]	U	1986	S	97	97		20-59	2	
<b>Europe, West</b>										
Austria	Austrian Study on Nutritional Status 2007 [44]	D	2007	N	925	1,547		20-100		3
Belgium	Staessen et al. [45]	U	1980	S	273	255		20-88	4	
Belgium	INTERSALT, Charleroi [1]	U	1986	S	82	75		20-59	2	
Belgium	INTERSALT, Ghent [1]	U	1986	S	100	100		20-59	2	
Belgium	Zhang et al. [46]	B	1997	N	4,248	3,996		25-74	2	3
Belgium	Vandevijvere et al. [47]	U	2007	S	60	54		25-65	4	
Belgium	Vandevijvere et al. [47]	U	2009	S	66	69		25-65	4	
Denmark	INTERSALT, Glostrup [1]	U	1986	S	99	100		20-59	2	
Denmark	Dietary Habits of Denmark [48]	D	2001	N	1,448	1,486		20-100		1
Denmark	Andersen et al. [49]	U	2006	S	37	50		20-55	1	
Finland	Laatikainen et al. (2 of 11) [50]	U	1982	S	247	237		25-64	3	
Finland	Laatikainen et al. (6 of 11) [50]	U	1982	S	213	215		25-64	3	
Finland	Laatikainen et al. (8 of 11) [50]	U	1982	S	232	238		25-64	3	
Finland	INTERSALT, Turku [1]	U	1986	S	100	100		20-59	2	
Finland	Laatikainen et al. (3 of 11) [50]	U	1987	S	199	210		25-64	3	
Finland	Laatikainen et al. (7 of 11) [50]	U	1987	S	180	220		25-64	3	
Finland	Laatikainen et al. (9 of 11) [50]	U	1987	S	150	192		25-64	3	
Finland	FINDIET 1992 [51]	D	1992	N	870	991		25-64		1
Finland	Laatikainen et al. (11 of 11) [50]	U	2002	S	127	156		25-64	2	
Finland	Laatikainen et al. (4 of 11) [50]	U	2002	S	168	174		25-64	2	
Finland	Reinivuo et al. [52]	D	2002	S	168	174		25-64		1

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					M	F	T <sup>3</sup>			
Finland	Reinivuo et al. [52]	D	2002	S	128	156		25-64		1
Finland	Reinivuo et al. [52]	D	2002	S	127	156		25-64		1
Finland	FINDIET 2007 [53]	D	2007	N	959	1,080		25-74		1
France	Meneton et al. (1 of 2) [54]	D	1999	N	672	802		20-92		1
France	du Cailar et al. [55]	U	2001	S			855	20-70	4	
France	Etude nationale nutrition santé (ENNS); National Nutrition and Health survey [56]	D	2006	N	975	1,701		20-74		1
Germany	INTERSALT, Bernried [1]	U	1986	S	99	98		20-59	2	
Germany	INTERSALT, Cottbus [1]	U	1986	S	99	99		20-59	2	
Germany	INTERSALT, Heidelberg [1]	U	1986	S	97	99		20-59	2	
Germany	German Nutrition Survey 1998 [57]	D	1998	N	1,691	2,170		20-79		2
Germany	Nationale Verzehrs Studie II, Ergebnisbericht, Teil 2 [58]	D	2006	N	6381	7578		20-80		1
Iceland	INTERSALT, Reykjavik and district [1]	U	1986	S	100	100		20-59	2	
Iceland	Dietary Survey of the Icelanders [59]	D	1990	N	531	564		20-80		3
Iceland	The Diet of Icelanders, Dietary Survey of The Icelandic Nutrition Council 2002 [60]	D	2002	N	517	601		20-80		3
Iceland	Olafsdottir et al. [61]	B	2003	S		120		25-55	1	3
Ireland	Flynn et al. [62]	U	1987	S	46	48		20-60	4	
Israel	Mabat First Israeli National Health and Nutrition Survey [63]	D	2000	N	1,540	1,700		25-64		3
Israel	Mabat National Health and Nutrition Survey of the Elderly ( Zahav) [64]	D	2005	N	833	949		65-100		3
Italy	INTERSALT, Bassiano [1]	U	1986	S	99	100		20-59	2	
Italy	INTERSALT, Gubbio [1]	U	1986	S	99	100		20-59	2	
Italy	INTERSALT, Mirano [1]	U	1986	S	100	100		20-59	2	

Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of collect-ion	National, Subnational	Sample size			Age range	Urine method (where applic.) <sup>1</sup>	Diet method (where applic.) <sup>2</sup>
					M	F	T <sup>3</sup>			
Italy	INTERSALT, Naples [1]	U	1986	S	100	100		20-59	2	
Italy	Pavan et al. (1 of 4) [65]	D	1994	S			370	22-89		2
Italy	INN-CA 1994-96 [66]	D	1995	N	701	888		20-100		1
Italy	Venezia et al. [67]	U	2003	S	940			25-75	4	
Malta	INTERSALT, Dingli village [1]	U	1986	S	100	100		20-59	2	
Netherlands	INTERSALT, Zutphen [1]	U	1986	S	100	99		20-59	2	
Netherlands	Ocke et al. (CM)	U	2006	S	120	171		20-74	4	
Portugal	INTERSALT, Cartaxo Village [1]	U	1986	S	99	99		20-59	2	
Portugal	Polonia et al. [68]	U	2000	S			426	20-84	2	
Portugal	EPITeen Project [69]	D	2003	N	1,163	1,811		20-100		3
Spain	INTERSALT, Manresa [1]	U	1986	S	100	100		20-59	2	
Spain	INTERSALT, Torrejon [1]	U	1986	S	100	100		20-59	2	
Spain	Schroder et al. [70]	D	1995	S			1,567	25-54		1
Spain	The Catalan Nutrition Survey (ENCAT 2002-2003) and Serra Majem and Ribas, 2007 and Serra-Majem L et al., 2007 and Serra Majem et al., 2006 [71]	D	2003	N	869	1,054		20-100		1
Spain	Ortega et al. [72]	U	2009	N	196	222		20-60	4	
Sweden	Dietary habits and nutrient intake in Sweden 1989 [73]	D	1989	N	743	770		20-74		3
Sweden	Dietary habits and nutrient intake in Sweden 1997-98 [74]	D	1997	N	565	608		20-79		3
Switzerland	Chappuis et al. [75]	U	2010	N	663	687		20-79	2	
United Kingdom	Bingham et al. [76]	U	1985	S	71	50		25-44	1	
United Kingdom	Dietary and Nutritional Survey of British Adults 1986 [77]	B	1986	N	1,597	1,620		20-64	1	3
United Kingdom	INTERSALT, Belfast [1]	U	1986	S	99	100		20-59	2	
United Kingdom	INTERSALT, Birmingham [1]	U	1986	S	100	100		20-59	2	



Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of data collection	National, Subnational	Sample size			Age range	Urine method (where applicable) <sup>1</sup>	Diet method (where applicable) <sup>2</sup>
					M	F	T <sup>3</sup>			
<b>Tropical</b>										
Brazil	Sarno et al. [89]	D	2002	N			48000	20-79		4
Brazil	Household Health Survey (ISA-SP) [90]	D	2003	S	724	806	1530	20-100		3
<b>North Africa, Middle East</b>										
Bahrain	National Nutrition Survey [91]	D	2000	N	1,120	1,181		20-70		3
Iran	Azizi et al. (1 of 2) [92]	D	1998	S			340	20-79		2
Iran	Azizi et al. (2 of 2) [92]	D	1998	S			343	20-79		2
Iran	Rahmani et al. [93]	D	2000	S			644	20-79		2
Iran	Rafieei et al. [94]	U	2001	S	304	608		20-60		4
Kuwait	National Nutrition Survey for the State of Kuwait [95]	D	2008	N	403	517		20-100		3
Lebanon	National survey: Behavioral risk factor survey [96]	D	2008	N	1,207	1,385		20-100		2
Turkey	Dietary intake of adult population living in Ankara [97]	D	2005	S	348	1,136		20-84		3
Turkey	Erdem et al. [98]	U	2007	N	373	443		20-94		4
<b>North America, High Income</b>										
Canada	INTERSALT, Labrador [1]	U	1986	S	78	83		20-59		2
Canada	INTERSALT, St. Johns [1]	U	1986	S	100	100		20-59		2
Canada	Canadian Community Health and Nutrition Survey [99]	D	2004	N	8,768	10,960		20-101		1
Canada	Garriguet [100]	D	2004	N	2,724	2,724		20-79		3
Canada	Shi et al. [101]	D	2004	N	3690	5177		30-79		3
USA	Holbrook et al. [102]	B	1981	S	24	32		20-53		4
USA	INTERSALT, Chicago [1]	U	1986	S	97	99		20-59		2
USA	INTERSALT, Goodman, Blacks [1]	U	1986	S	93	93		20-59		2

Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of collect-ion	National, Subnational	Sample size			Age range	Urine method (where applic.) <sup>1</sup>	Diet method (where applic.) <sup>2</sup>
					M	F	T <sup>3</sup>			
USA	INTERSALT, Goodman, Whites [1]	U	1986	S	99	99		20-59	2	
USA	INTERSALT, Jackson, Blacks [1]	U	1986	S	84	100		20-59	2	
USA	INTERSALT, Jackson, Whites [1]	U	1986	S	100	99		20-59	2	
USA	INTERSALT, Molokai, Hawaii [1]	U	1986	S	94	93		20-59	2	
USA	Cooper et al. [35]	U	1992	S			708	20-75	4	
USA	Espeland et al. [103]	B	1993	S			650	60-79	4	3
USA	Taylor et al. (1 of 2) [104]	U	1996	S		330		40-75	4	
USA	INTERMAP, Chicago [7]	B	1997	S	312	318		40-59	2	3
USA	INTERMAP, City of Woodlawn, Baltimore, Maryland [7]	B	1997	S	292	268		40-59	2	3
USA	INTERMAP, Corpus Christi, Hispanic [7]	B	1997	S	270	280		40-59	2	3
USA	INTERMAP, Corpus Christi, Non-Hispanic [7]	B	1997	S	272	272		40-59	2	3
USA	INTERMAP, Honolulu [7]	B	1997	S	272	262		40-59	2	3
USA	INTERMAP, Jackson [7]	B	1997	S	264	268		40-59	2	3
USA	INTERMAP, Minneapolis [7]	B	1997	S	260	260		40-59	2	3
USA	INTERMAP, Pittsburgh [7]	B	1997	S	264	256		40-59	2	3
USA	NHANES 2003-2006 [105]	D	2004	N	9,118	9,912		20-85		1
USA	Taylor et al. (2 of 2) [104]	U	2005	S		146		40-75	4	
<b>Oceania</b>										
American Samoa	American Samoa 1990 24 hr recall diet estimates [106]	D	1990	N	235	268		25-54		3
Niue	Taylor et al. [107]	U	1980	N	19	15		20-79	4	
Samoa	Western Samoa 1990 24 hr recall diet estimates [108]	D	1991	N	230	276		25-54		3
<b>Sub-Saharan Africa, East</b>										
Kenya	INTERSALT, Rambugu and Ndori villages [1]	U	1986	S	90	86		20-59	2	

Country (with included surveys)	Survey name or report authors (CM, corresponding members – see main text)	Metrics (Urine, Diet, Both)	Mid-year of collect-ion	National, Subnational	Sample size			Age range	Urine method (where applic.) <sub>1</sub>	Diet method (where applic.) <sub>2</sub>
					M	F	T <sup>3</sup>			
Malawi	Simmons et al. (1 of 2) [109]	U	1983	S			78	20-79	4	
Malawi	Simmons et al. (2 of 2) [109]	U	1983	S			123	20-79	4	
Uganda	Pavan et al. (3 of 4) [65]	D	1994	S			138	22-89		2
United Republic of Tanzania	Pavan et al. (2 of 4) [65]	D	1994	S			232	22-85		
<b>Sub-Saharan Africa, Southern</b>										
South Africa	Barlow et al. (1 of 2) [110]	U	1982	S	150			30-50	4	
South Africa	Barlow et al. (2 of 2) [110]	U	1982	S	64			30-50	4	
South Africa	Food and nutrient availability in South African Households [111]	D	1995	N	416	502		20-99		2
South Africa	Charlton et al. (1 of 3) [112]	B	2002	S			220	20-65	4	3
South Africa	Charlton et al. (2 of 3) [112]	B	2002	S			224	20-65	4	3
South Africa	Charlton et al. (3 of 3) [112]	B	2002	S			206	20-65	4	3
South Africa	Maseko et al. [113]	U	2003	S			291	21-72	3	
Zimbabwe	INTERSALT, Harare [1]	U	1986	S	100	95		20-59	2	
<b>Sub-Saharan Africa, Western</b>										
Benin	Melse-Boonstra et al. (2 of 4) [86]	U	1996	S	13			22-55	4	
Cameroon	Cooper et al. [35]	U	1992	S			2828	25-74	4	
Cote d'Ivoire	Hess et al. (1 of 2) [114]	U	1997	S			52	20-79	3	
Cote d'Ivoire	Hess et al. (2 of 2) [114]	U	1997	S			51	20-79	3	
Ghana	Kerry et al. (1 of 2) [115]	U	2001	S			481	40-75	2	
Ghana	Kerry et al. (2 of 2) [115]	U	2001	S			532	40-75	2	
Nigeria	Cooper et al. [35]	U	1992	S			2509	45-94	3	

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<sup>1</sup> Quality control for urine collections:

1. PABA validation;
2. Exclusions based on observed/expected creatinine ratio or total urinary creatine (including Intersalt and InterMap);
3. Other strict urine collection protocols without use of PABA or creatinine;
4. Other collection protocol or not reported.

<sup>2</sup> Diet methods:

1. Multiple ( $\geq 2$ ) short-term (up to 1 week) diet recalls/ records (with or without) correction for within-person variation;
2. Food frequency questionnaires;
3. Single short-term diet records/ recalls;
4. Household availability/ budget survey.

<sup>3</sup> For surveys where sex-specific data was not available.

## References

1. The INTERSALT Co-operative Research Group (1989) Appendix tables. Centre-specific results by age and sex. *J Hum Hypertens* 3: 331-407.
2. Liu L, Mizushima S, Ikeda K, Hattori H, Miura A et al. (2000) Comparative studies of diet-related factors and blood pressure among Chinese and Japanese: results from the China-Japan Cooperative Research of the WHO-CARDIAC Study. *Cardiovascular Disease and Alimentary Comparison. Hypertension Research - Clinical & Experimental* 23: 413-420.
3. Kawamura M, Kimura Y, Takahashi K, Satoh N, Oku K et al. (1997) Relation of urinary sodium excretion to blood pressure, glucose metabolism, and lipid metabolism in residents of an area of Japan with high sodium intake. *Hypertension Research - Clinical & Experimental* 20: 287-293.
4. Matsumura, Yasuhiro. (CM) National Nutrition Survey, 1995.
5. Sasaki S, Ishihara J, Tsugane S (2003) Validity of a self-administered food frequency questionnaire in the 5-year follow-up survey of the JPHC Study Cohort I to assess sodium and potassium intake: comparison with dietary records and 24-hour urinary excretion level. *J Epidemiol* 13: S102-S105.
6. Inoue, Manami and Tsugane, Shoichiro. (CM) The Japan Public Health Center-based Prospective Study (JPHC Study) 1995-1998.
7. Stamler J, Elliott P, Chan Q (2003) INTERMAP appendix tables. *Journal of Human Hypertension* 17: 655-775.
8. Matsumura, Yasuhiro. (CM) National Nutrition Survey, 1998.

9. Kimira M, Kudo Y, Takachi R, Haba R, Watanabe S (2004) [Associations between dietary intake and urinary excretion of sodium, potassium, phosphorus, magnesium, and calcium]. *Nippon Eiseigaku Zasshi* 59: 23-30.
10. Inoue, Manami and Tsugane, Shoichiro. (CM) The Japan Public Health Center-based Prospective Study (JPHC 5-year follow-up survey) 2000-2003.
11. Kim, Cho il. (CM) The 3rd Korea National Health and Nutrition Examination Survey.
12. Yamada C, Oyunchimeg D, Erdenbat A, Enkhtuya P, Buttumur D et al. (2000) Estimation of salt intake and recommendation for iodine content in iodized salt in Mongolia. *Asia Pac J Public Health* 12: 27-31.
13. Zhao L, Stamler J, Yan LL, Zhou B, Wu Y et al. (2004) Blood pressure differences between northern and southern Chinese: role of dietary factors: the International Study on Macronutrients and Blood Pressure. *Hypertension* 43: 1332-1337.
14. Zhou BF, Yang J, Cao TX (1986) [Comparison of diets of 9 populations in China and their relation to blood pressure]. *Zhonghua Xin Xue Guan Bing Za Zhi* 14: 13-2.
15. Nan Y, Tian HG, Shao RC, Hu G, Dong QN et al. (1995) Assessment of sodium and potassium in processed foods in an urban area in China. *Eur J Clin Nutr* 49: 299-306.
16. Zhai FY, Yang XG (2006) Report of National Nutrition and Health Survey of China Residents in 2002. Part 2: diet and nutrition intake (in Chinese).
17. Pan, Wen Harn and Chang, Hsing Yi. (CM) Nutrition and Health Survey in Taiwan.
18. Ginnela, Brahmam and Nagalla, Balakrishna. (CM) Diet & Nutrition Assessment Surveys Among Rural Communities in Select States of India, by National Nutrition Monitoring Bureau, 1996.
19. Ginnela, Brahmam and Nagalla, Balakrishna. (CM) Diet & Nutrition Assessment Surveys Among Rural Communities in Select States of India, by National Nutrition Monitoring Bureau, 2000.

20. Radhika G, Sathya RM, Sudha V, Ganesan A, Mohan V (2007) Dietary salt intake and hypertension in an urban south Indian population-[CURES - 53]. *J Assoc Physicians India* 55: 405-411.
21. Ginnela, Brahmam and Nagalla, Balakrishna. (CM) Diet & Nutrition Assessment Surveys Among Rural Communities in Select States of India, by National Nutrition Monitoring Bureau, 2005.
22. Mustafa A, Muslimatun S, Untoro J, Lan MC, Kristianto Y (2006) Determination of discretionary salt intake in an iodine deficient area of East Java-Indonesia using three different methods. *Asia Pac J Clin Nutr* 15: 362-367.
23. Murnalini K, Zalilah MS, Safiah MY, Tahir A, Siti Haslinda MD et al. (2008) Energy and Nutrient Intakes: Findings from the Malaysian Adult Nutrition Survey (MANS). *Mal J Nutr* 14: 1-24.
24. Piaseu, Noppawan. (CM) Calcium Status, Factors Affecting Calcium and Bone Status in Healthy Thais Living in Bangkok.
25. Kwanmaung, S. (2001) Glomerular filtration rate, urine sodium and potassium excretions during the day and the night in young and elderly subjects (thesis) [dissertation]. Bangkok: Faculty of Graduate Studies, Mahidol University, Thailand.
26. Beard TC, Eickhoff R, Mejglo ZA, Jones M, Bennett SA et al. (1992) Population-based survey of human sodium and potassium excretion. *Clin Exp Pharmacol Physiol* 19: 327-330.
27. Notowidjojo L, Truswell AS (1993) Urinary sodium and potassium in a sample of healthy adults in Sydney, Australia. *Asia Pacific Journal of Clinical Nutrition* 2: 25-33.
28. Beard TC, Woodward DR, Ball PJ, Hornsby H, von Witt RJ et al. (1997) The Hobart Salt Study 1995: few meet national sodium intake target. *Med J Aust* 166: 404-407.
29. Margerison C, Nowson C (2006) Dietary intake and 24-hour excretion of sodium and potassium. *Asia Pacific Journal of Clinical Nutrition* 15: S37.

30. Charlton K, Yeatman H, Houweling F, Guenon S (2010) Urinary sodium excretion, dietary sources of sodium intake and knowledge and practices around salt use in a group of healthy Australian women. *Aust N Z J Public Health* 34: 356-363. AZPH566 [pii];10.1111/j.1753-6405.2010.00566.x [doi].
31. Land, M. A., Webster, J., and Neal, B. (2011) Salt intake in New South Wales, Australia - results of a 24-hour urinary sodium excretion study in a representative adult population sample. Sydney: George Institue for Global Health.
32. Simpson FO, Paulin JM, Phelan EL, Thaler BI, Waal-Manning HJ et al. (1982) Further surveys in Milton, 1978 and 1981: blood pressure, height, weight and 24-hour excretion of sodium and potassium. *N Z Med J* 95: 873-876.
33. Thomson, C. D. and Colls, A. J. (1998) Twenty-four hour urinary sodium excretion in seven hundred residents of Otago and Waikato: a report prepared for the Ministry of Health. Wellington: Ministry of Health.
34. Templeton, Robert. (CM) 1997 National Nutrition Survey.
35. Cooper R, Rotimi C, Ataman S, McGee D, Osotimehin B et al. (1997) The prevalence of hypertension in seven populations of west African origin.[see comment]. *American Journal of Public Health* 87: 160-168.
36. Leske, M. C., Hennis, A., and Nemesure, B. (CM) Identifying new genetic and obesity-related factors contributing to prostate cancer risk in persons of African descent.
37. Simmons D (1983) Blood pressure, ethnic group, and salt intake in Belize. *J Epidemiol Community Health* 37: 38-42.
38. Jackson, Maria (2000) Social and dietary determinants of body max index of adult Jamaicans.
39. Powles J, Sanz MA, Dokova K, Stoeva K, Duleva V et al. (2003) Sodium and potassium excretion in winter and summer in urban and rural Bulgarian populations heterogeneous for stroke risk [abstract]. *Gac Sanit* 17: 163.
40. Petrova, Stefka. (CM) National survey on nutrition and nutritional status of Bulgarian population.
41. Szponar, Lucjan and Oltarzewski, Maciej. (CM) National Food and Nutrition Institute.

42. Ribic CH, Zakotnik JM, Vertnik L, Vugnati M, Cappuccio FP (2010) Salt intake of the Slovene population assessed by 24 h urinary sodium excretion. *Public Health Nutr* 1-7. S136898001000025X [pii];10.1017/S136898001000025X [doi].
43. Vaask, Sirje. (CM) Baltic Nutrition Survey, the Adults Nutrition Survey in Estonia.
44. Elmadafa, Ibrahim and Verena, Nowak. (CM) Austrian Study on Nutritional Status.
45. Staessen J, Bulpitt C, Fagard R, Joossens JV, Lijnen P et al. (1983) Four urinary cations and blood pressure. A population study in two Belgian towns. *American Journal of Epidemiology* 117: 676-687.
46. Zhang J, Temme EH, Sasaki S, Kesteloot H (2000) Under- and overreporting of energy intake using urinary cations as biomarkers: relation to body mass index. *Am J Epidemiol* 152: 453-462.
47. Vandevijvere S, De KW, Chapelle JP, Jeanne D, Mouillet G et al. (2010) Estimate of total salt intake in two regions of Belgium through analysis of sodium in 24-h urine samples. *Eur J Clin Nutr* 64: 1260-1265. ejcn2010148 [pii];10.1038/ejcn.2010.148 [doi].
48. Elmadafa, Ibrahim and Verena, Nowak. (CM) Dietary Habits of Denmark.
49. Andersen L, Rasmussen LB, Larsen EH, Jakobsen J (2009) Intake of household salt in a Danish population. *Eur J Clin Nutr* 63: 598-604.
50. Laatikainen T, Pietinen P, Valsta L, Sundvall J, Reinivuo H et al. (2006) Sodium in the Finnish diet: 20-year trends in urinary sodium excretion among the adult population. *European Journal of Clinical Nutrition* 60: 965-970.
51. Ovaskainen, Marja Leena and Tapanainen, Heli. (CM) FINDIET 1992.
52. Reinivuo H, Valsta LM, Laatikainen T, Tuomilehto J, Pietinen P (2006) Sodium in the Finnish diet: II trends in dietary sodium intake and comparison between intake and 24-h excretion of sodium. *Eur J Clin Nutr* 60: 1160-1167. 1602431 [pii];10.1038/sj.ejcn.1602431 [doi].
53. Ovaskainen, Marja Leena and Tapanainen, Heli. (CM) FINDIET 2007.

54. Meneton P, Lafay L, Tard A, Dufour A, Ireland J et al. (2009) Dietary sources and correlates of sodium and potassium intakes in the French general population. *Eur J Clin Nutr* 63: 1169-1175. ejcn200957 [pii];10.1038/ejcn.2009.57 [doi].
55. du CG, Mimran A, Fesler P, Ribstein J, Blacher J et al. (2004) Dietary sodium and pulse pressure in normotensive and essential hypertensive subjects. *Journal of Hypertension* 22: 697-703.
56. Castetbon, Katia. (CM) Etude nationale nutrition santé (ENNS).
57. Mensink, Gert. (CM) German Nutrition Survey 1998.
58. Elmadafa, Ibrahim and Verena, N. (CM) Nationale Verzehrsstudie II.
59. Steingrimsdottir, Laufey and Thorgeirs dottir, Holmfridur. (CM) Icelandic National Nutrition Survey, 1990.
60. Steingrimsdottir, Laufey and Thorgeirs dottir, Holmfridur. (CM) Icelandic National Nutrition Survey, 2002.
61. Olafsdottir AS, Thorsdottir I, Gunnarsdottir I, Thorgeirs dottir H, Steingrimsdottir L (2006) Comparison of women's diet assessed by FFQs and 24-hour recalls with and without underreporters: associations with biomarkers. *Ann Nutr Metab* 50: 450-460. ANM2006050005450 [pii];10.1159/000094781 [doi].
62. Flynn A, Shortt C, Morrissey PA (1990) Sodium and potassium intakes in Ireland. *Proc Nutr Soc* 49: 323-332. S0029665190000386 [pii].
63. Keinan-Boker, Lital. (CM) Mabat First Israeli National Health and Nutrition Survey, 1999-2001.
64. Keinan-Boker, Lital (2000) Mabat First Israeli National Health and Nutrition Survey, 2005-2006.
65. Pavan L, Casiglia E, Pauletto P, Batista SL, Ginocchio G et al. (1997) Blood pressure, serum cholesterol and nutritional state in Tanzania and in the Amazon: comparison with an Italian population. *Journal of Hypertension* 15: 1083-1090.
66. Turrini, Aida. (CM) INN-CA 1994-96.

67. Venezia A, Barba G, Russo O, Capasso C, De L, V et al. (2010) Dietary sodium intake in a sample of adult male population in southern Italy: results of the Olivetti Heart Study. *Eur J Clin Nutr* 64: 518-524. ejcn201022 [pii];10.1038/ejcn.2010.22 [doi].
68. Polonia J, Maldonado J, Ramos R, Bertoquini S, Duro M et al. (2006) Estimation of salt intake by urinary sodium excretion in a Portuguese adult population and its relationship to arterial stiffness. *Rev Port Cardiol* 25: 801-817.
69. Elmadfa, Ibrahim and Verena, Nowak. (CM) EPITeen Project.
70. Schroder H, Schmelz E, Marrugat J (2002) Relationship between diet and blood pressure in a representative Mediterranean population. *European Journal of Nutrition* 41: 161-167.
71. Elmadfa, Ibrahim and Verena, Nowak. (CM) The Catalan Nutrition Survey (ENCAT 2002-2003).
72. Ortega RM, Lopez-Sobaler AM, Ballesteros JM, Perez-Farinos N, Rodriguez-Rodriguez E et al. (2010) Estimation of salt intake by 24 h urinary sodium excretion in a representative sample of Spanish adults. *Br J Nutr* 105: 787-794. S000711451000423X [pii];10.1017/S000711451000423X [doi].
73. Becker, Wulf and Barbieri, Hélène. (CM) Dietary habits and nutrient intake in Sweden 1989 (Hulk).
74. Becker, Wulf and Barbieri, Hélène. (CM) Dietary habits and nutrient intake in Sweden 1997-98 (Riksmaten).
75. Chappuis, A., Bochud, M., Glatz, N., Vuistiner, P., Paccaud, F., and Burnier, M. (2011) Swiss survey on salt intake: main results. Lausanne: Service de Nephrologie et Institut Universitaire de Médecine Sociale et Preventive, Centre Hospitalier Universitaire Vaudois (CHUV).
76. Williams DR, Bingham SA (1986) Sodium and potassium intakes in a representative population sample: estimation from 24 h urine collections known to be complete in a Cambridgeshire village. *Br J Nutr* 55: 13-22. S0007114586000065 [pii].
77. Gregory, J., Foster, K., Tyler, H., and Wiseman, M. (1990) The dietary and nutritional survey of British adults. London: HMSO.

78. Fogarty AW, Lewis SA, McKeever TM, Britton JR (2009) 24-hour urinary sodium excretion in a population-based study of 2,633 individuals in Nottingham. *Am J Clin Nutr* 89: 1901-1904. [ajcn.2008.27006 \[pii\]](https://doi.org/10.3945/ajcn.2008.27006);10.3945/ajcn.2008.27006 [doi].
79. Finch, S., Doyle, W., Lowe, C., Bates, C. J., Prentice A., Smithers, G., and Clarke, P. C. (1998) National Diet and Nutrition Survey: people aged 65 years and over. Volume 1: Report of the diet and nutrition survey . London: The Stationery Office.
80. Khaw KT, Bingham S, Welch A, Luben R, O'Brien E et al. (2004) Blood pressure and urinary sodium in men and women: the Norfolk Cohort of the European Prospective Investigation into Cancer (EPIC-Norfolk).[see comment]. *American Journal of Clinical Nutrition* 80: 1397-1403.
81. Henderson, L., Irving, K., Gregory, J., Bates, C, Prentice, A., Perks, J., Swan, G., and Farron, M. (2003) The national diet and nutrition survey: adults aged 19 to 64 years, Volume 3: Vitamin and mineral intake and urinary analytes. London: TSO.
82. Nelson, M., Erens, B., Bates, B., Church, S., and Boshier, T. (2007) Low income diet and nutrition survey: Summary of key findings: A survey carried out on behalf of the Food Standards Agency. London: Food Standards Agency.
83. National Center for Social Research and UCL (2007) A survey of 24 hour and spot urinary sodium and potassium excretion in a representative sample of the Scottish population. London: National Center for Social Research. 30 p.
84. National Centre for Social Research, MRC Human Nutrition Research (2008) An assessment of dietary sodium levels among adults (aged 19-64) in the UK general population in 2008, based on analysis of dietary sodium in 24 hour urine samples.
85. Scottish Centre for Social Research (2011) A survey of 24 hour urinary sodium excretion in a representative sample of the Scottish population as a measure of salt intake. Edinburgh: Scottish Centre for Social Research.
86. Melse-Boonstra A, Rozendaal M, Rexwinkel H, Gerichhausen MJ, van den Briel T et al. (1998) Determination of discretionary salt intake in rural Guatemala and Benin to determine the iodine fortification of salt required to control iodine deficiency disorders: studies using lithium-labeled salt. *Am J Clin Nutr* 68: 636-641.
87. Sánchez-Romero, Luz Maria and Barquera, Simon. (CM) National Health and Nutrition Survey 2006.

88. Duran, Pablo. (CM) National Nutrition and Health Survey (ENNys), 2004-2005.
89. Sarno F, Claro RM, Levy RB, Bandoni DH, Ferreira SR et al. (2009) [Estimated sodium intake by the Brazilian population, 2002-2003]. Rev Saude Publica 43: 219-225.
90. Fisberg, R. M. (CM) Household Health Survey (ISA-SP).
91. Musaiger, Abdulrahman. (CM) National Nutrition Survey.
92. Azizi F, Rahmani M, Allahverdian S, Hedayati M (2001) Effects of salted food consumption on urinary iodine and thyroid function tests in two provinces in the Islamic Republic of Iran. East Mediterr Health J 7: 115-120.
93. Rahmani M, Koohkan A, Allahverdian S, Hedayati M, Azizi F (2000) Comparison of dietary iodine intake and Urinary excretion in urban and rural Households of Ilam in 2000 (in Persian). Iranian Journal of Endocrinology and Metabolism 2.
94. Rafiei M, Boshtam M, Sarraf-Zadegan N, Seirafian S (2008) The relation between salt Intake and blood pressure among Iranians. Kuwait Medical Journal 40: 191-195.
95. Al-Hooti, Suad and Zaghloul, Sahar. (CM) National Nutrition Survey for the State of Kuwait.
96. Sibai, A. (CM) Non-communicable Diseases and Behavioral Risk Factor Survey (Lebanon).
97. Pekcan, Gulden. (CM) Dietary intake of adult population living in Ankara, 2005.
98. Erdem Y, Arici M, Altun B, Turgan C, Sindel S et al. (2010) The relationship between hypertension and salt intake in Turkish population: SALTURK study. Blood Press . 10.3109/08037051003802541 [doi].
99. Garriguet, Didier. (CM) Canadian Community Health Survey.
100. Garriguet D (2007) Sodium consumption at all ages. Health Reports (Canada) 18: 47-52.

101. Shi Y, de Groh M, Morrison H, Robinson C, Vardy L (2011) Dietary sodium intake among Canadian adults with and without hypertension. *Chronic Diseases in Canada* 31: 79-87.
102. Holbrook JT, Patterson KY, Bodner JE, Douglas LW, Veillon C et al. (1984) Sodium and potassium intake and balance in adults consuming self-selected diets. *American Journal of Clinical Nutrition* 40: 786-793.
103. Espeland MA, Kumanyika S, Wilson AC, Reboussin DM, Easter L et al. (2001) Statistical issues in analyzing 24-hour dietary recall and 24-hour urine collection data for sodium and potassium intakes. *American Journal of Epidemiology* 153: 996-1006.
104. Taylor EN, Curhan GC (2007) Differences in 24-hour urine composition between black and white women. *J Am Soc Nephrol* 18: 654-659. ASN.2006080854 [pii];10.1681/ASN.2006080854 [doi].
105. Center for Disease Control and Prevention (USA) (2010) NHANES 2003-2006.
106. McGarvey, Stephen and Ana, Baylin. (CM) American Samoa, 1990 (24 hr recall diet estimates).
107. Taylor R, Zimmet P, Levy S, Collins V (1985) Group comparisons of blood pressure and indices of obesity and salt intake in Pacific populations. *Med J Aust* 142: 499-501.
108. McGarvey, Stephen and Ana, Baylin. (CM) Western Samoa, 1990 (24 hr recall diet estimates).
109. Simmons D, Barbour G, Congleton J, Levy J, Meacher P et al. (1986) Blood pressure and salt intake in Malawi: an urban rural study. *J Epidemiol Community Health* 40: 188-192.
110. Barlow RJ, Connell MA, Milne FJ (1986) A study of 48-hour faecal and urinary electrolyte excretion in normotensive black and white South African males. *J Hypertens* 4: 197-200.
111. Bourne, Lesley. (CM) Food and nutrient availability in South African Households.
112. Charlton KE, Steyn K, Levitt NS, Zulu JV, Jonathan D et al. (2005) Diet and blood pressure in South Africa: Intake of foods containing sodium, potassium, calcium, and magnesium in three ethnic groups. *Nutrition* 21: 39-50.

113. Maseko MJ, Majane HO, Milne J, Norton GR, Woodiwiss AJ (2006) Salt intake in an urban, developing South African community. *Cardiovasc J S Afr* 17: 186-191.
114. Hess SY, Zimmermann MB, Staubli-Asobayire F, Tebi A, Hurrell RF (1999) An evaluation of salt intake and iodine nutrition in a rural and urban area of the Cote d'Ivoire. *Eur J Clin Nutr* 53: 680-686.
115. Kerry SM, Emmett L, Micah FB, Martin-Peprah R, Antwi S et al. (2005) Rural and semi-urban differences in salt intake, and its dietary sources, in Ashanti, West Africa. *Ethn Dis* 15: 33-39.