Appendix: Influence of sodium intake and change in sodium intake on plasma-renin in man.

Niels Graudal, Thorbjørn Hubeck-Graudal, Gesche Jürgens

Methods

Search string for identification of studies

1 sodium chloride, dietary/

2 sodium, dietary/

3 sodium/

4 (sodium or salt?).tw,kf.

5 or/1-4

6 diet, sodium-restricted/

7 ((salt? or sodium) adj5 (chang$ or curb$ or diet$ or free or intake or limit$ or load$ or low$ or minimi$ or reduc$ or restrict$ or supplement$)).tw,kf.

8 dash diet?.tw,kf.

9 or/6-8

10 hypertension/

11 essential hypertension/

12 (antihypertens$ or hypertens$ or normotens$ or prehypertens$).tw,kf.

13 exp blood pressure/

14 (blood pressure or bloodpressure or bp or dbp or hbp or mbp or sbp).tw,kf.

15 or/10-14

16 renin/

17 renin.tw,kf.

18 aldosterone/

19 aldosterone.tw,kf.

20 exp catecholamines/

21 (catecholamine$ or sympathin$ or dopamine$ or hydroxytyramine$ or dihydroxyphenethylamine or intropin or epinephrine or adrenaline or epitrate or vaponefrin or medihaler-epi or micronefrin or micronephrine or racepinephrine or epifrin or lyophrin or norepinephrin$ or noradrenaline or levarterenol or levonorepinephrine or levophed or arterenol or levonor or orciprenaline or metaproterenol or alupent or metaprel or alotec or astmopent).tw,kf.

22 exp cholesterol/

23 (cholesterol$ or epicholesterol$ or azacosterol$ or diazacholesterol$ or hydroxycholesterol$ or 19-iodocholesterol$ or iodocholesterol$ or ketocholesterol$ or oxocholesterol$ or lipid$ or glyceride$ or triglyceride$ or glycolipid$ or lipoprotein$ or ldl or hdl).tw,kf.

24 or/16-23

25 randomized controlled trial.pt.

26 controlled clinical trial.pt.

27 randomized.ab.

28 placebo.ab.

29 clinical trials as topic/

30 randomly.ab.

31 trial.ti.

32 or/25-31

33 animals/ not (humans/ and animals/)

34 32 not 33

35 5 and 9 and (15 or 24) and 34

Results

Study selection: The primary search was performed March 10, 2016. This search revealed 6831 articles and after de-duplication 3269 remained. After a screening based on reading of abstracts 2983 were eliminated. Thus 291 full-text articles were reviewed and of these 204 were included and 87 excluded. In addition, we included 3 studies from our 1998 version[1], one from our 2011 version[2], and one from another meta-analysis[3]. Thus, a total of 209 references were included based on the March 2016 search. The secondary search was performed April 11, 2018. This search revealed 8335 articles and after de-duplication 4014 remained. Of these, 877 were new compared with the primary search. After a primary screening 561 were eliminated. Based on a screening of abstracts 277 of the remaining 316 articles were excluded. Thus 39 full-text articles were reviewed and of these 10 were included. Thus, by April 11 2018, 219 articles were included. The last search was performed on March 18. 2020. This search covered the period from March 2016 to March 18 2020 and revealed 2222 references and after de-duplication 1448 remained. Compared with the April 11, 2018 search 843 were new. After a primary screening 271 were eliminated. Based on a screening of abstracts, 537 of the remaining 572 articles were excluded. Thus 35 full-text articles were reviewed and of these 12 fulfilled criteria for inclusion. Thus, by March 18 2020, 231 articles were included. From this pool we selected 105 studies, which measured renin as outcome.

Reasons for exclusion of studies: Four studies[4-7] were excluded due to use of anti-hypertensive medications. Four parallel trials were excluded[8-11]. As the large majority of cross-over studies reported separate data for each intervention period instead of overall estimates of effect, the continuous data type was used in the separate analyses of the cross-over studies. We transformed the outcomes of 14 studies which reported renin as concentrations (mU/L) to renin as activities (ng/ml/h) by division with 8.2, which is the

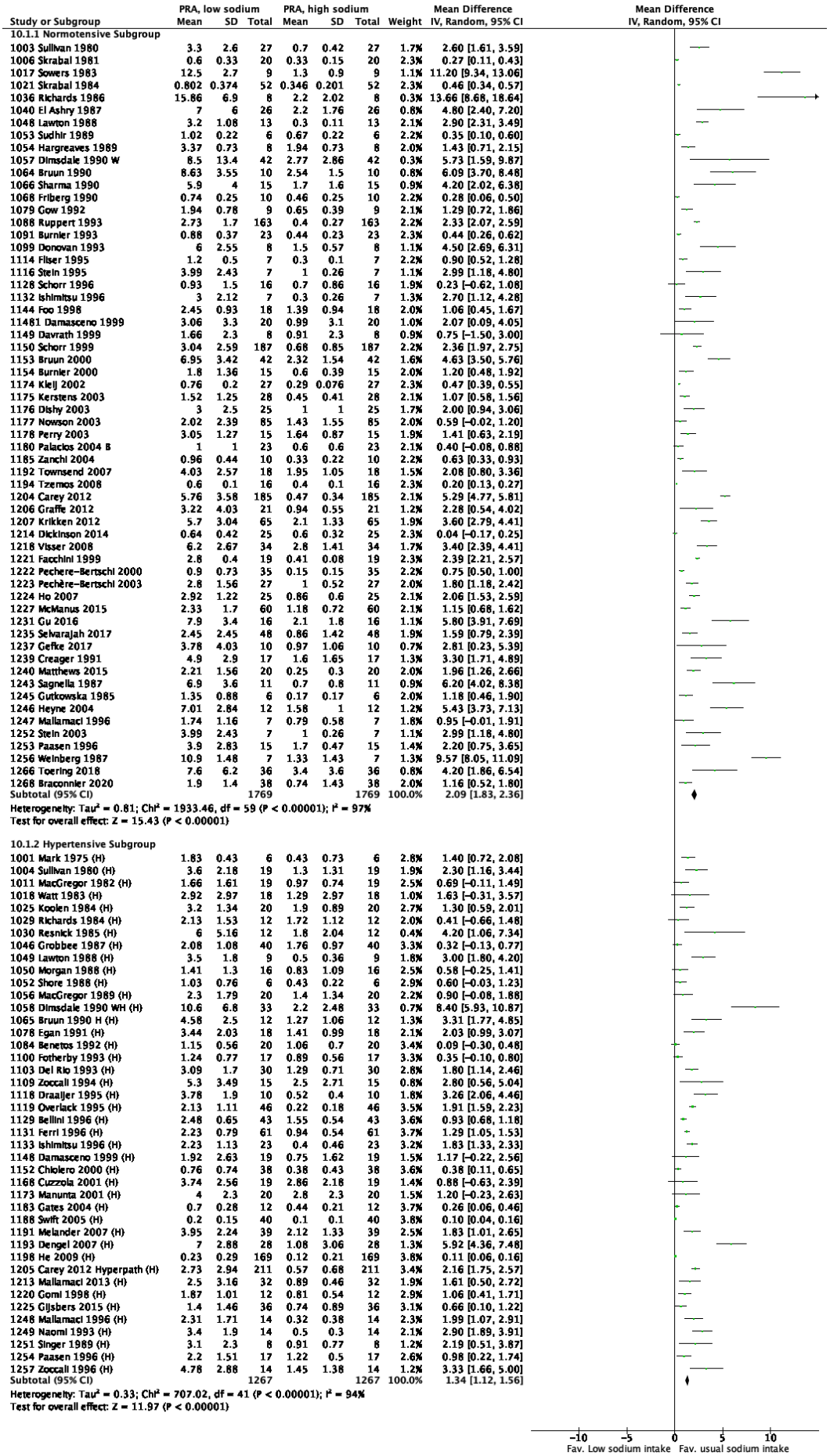
regression coefficient assessed from the regression line associating renin concentration (mU/L) with renin activity (ng/ml/h) in figure 2 in the study by De Bruin et al.[12]. Three studies with no information to decide the unit of the outcome[13-15] were excluded from the statistical analysis. One outlier study did not reduce sodium intake from a high level to a low level but from a very high level (357 mmol) to another very high level (310 mmol) and was therefore also excluded from the analysis[16]. Thus 93 references[17-109] were integrated in the statistical analyses.

Final search: On January 21st, 2021, we performed a last additional search to record potentially eligible studies, which might have been published during the preparation of our manuscript and therefore not included in the present analysis.

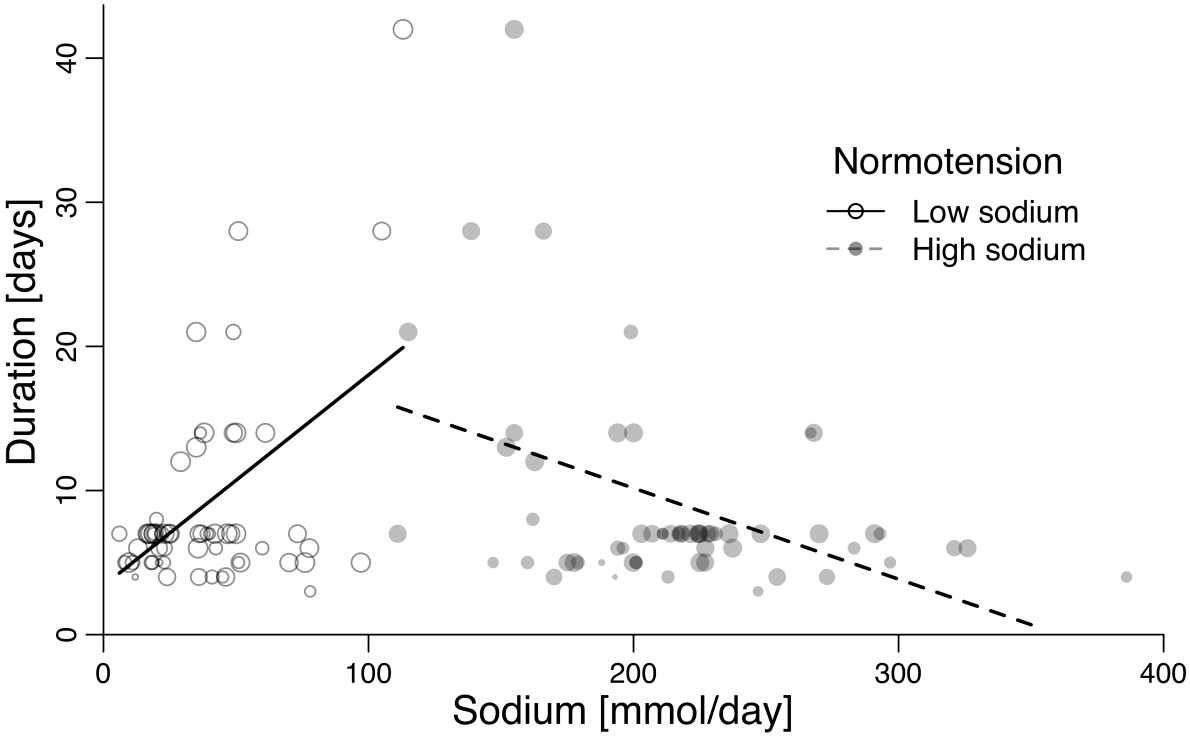
We used a broad search term in PubMed (Medline and additional databases), "sodium and renin" giving 13484 results, then using publication date 1 year (overlapping our official search date, March 18 2020) as a filter to cover the period January 21st 2020 - January 21st 2021, giving 231 results. We identified four RCTs from this pool, of which two were in patients with chronic kidney disease[110-111] and one was in patients with diabetes[112]. In the last study, the strategy to reduce sodium intake did not succeed in one treatment arm and the other treatment arm included an unbalanced concomitant intervention[113]. As none of these 4 studies were eligible, we believe that the present analysis is up-to-date per January 21st 2021.

Risk of bias across studies: In populations with usual/high sodium intake there was significant inverse collinearity and in populations with low sodium intake there was a significant direct collinearity between sodium intake and duration of sodium intake (appendix figures 2-3). In populations with usual/high sodium intake there was an inverse collinearity between sodium reduction and duration of sodium intake in normotensive and hypertensive studies (appendix figure 4).

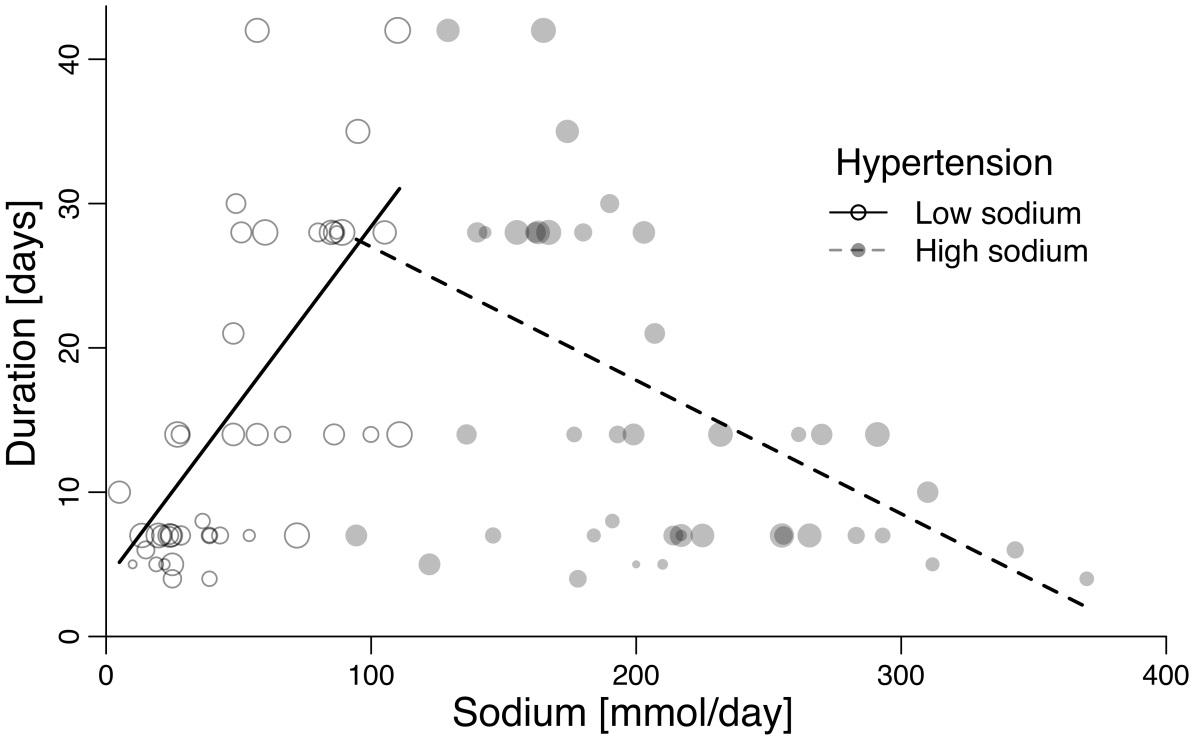
In study populations with a usual/high sodium intake the level of pl-renin and sodium intake did not differ between studies with low and high/unclear risks of bias or between studies with sodium tablet intervention and diet intervention (appendix table 3 A, lines 1-2, and 3B, lines 1-2). In study populations with a low sodium intake the level of pl-renin was lower in studies with low risk of bias and studies with sodium tablet intervention, but associated with correspondingly higher sodium intakes (Appendix Table 3 A, lines 3-4 and 3B, lines 3-4). The difference in pl-renin between usual/high sodium intake and low sodium intake was smaller in studies with low risk of bias and studies with sodium tablet intervention, but concurrently associated with a smaller change in sodium intake (Appendix Table 3 A, lines 5-6 and 3B, lines 5-6)).



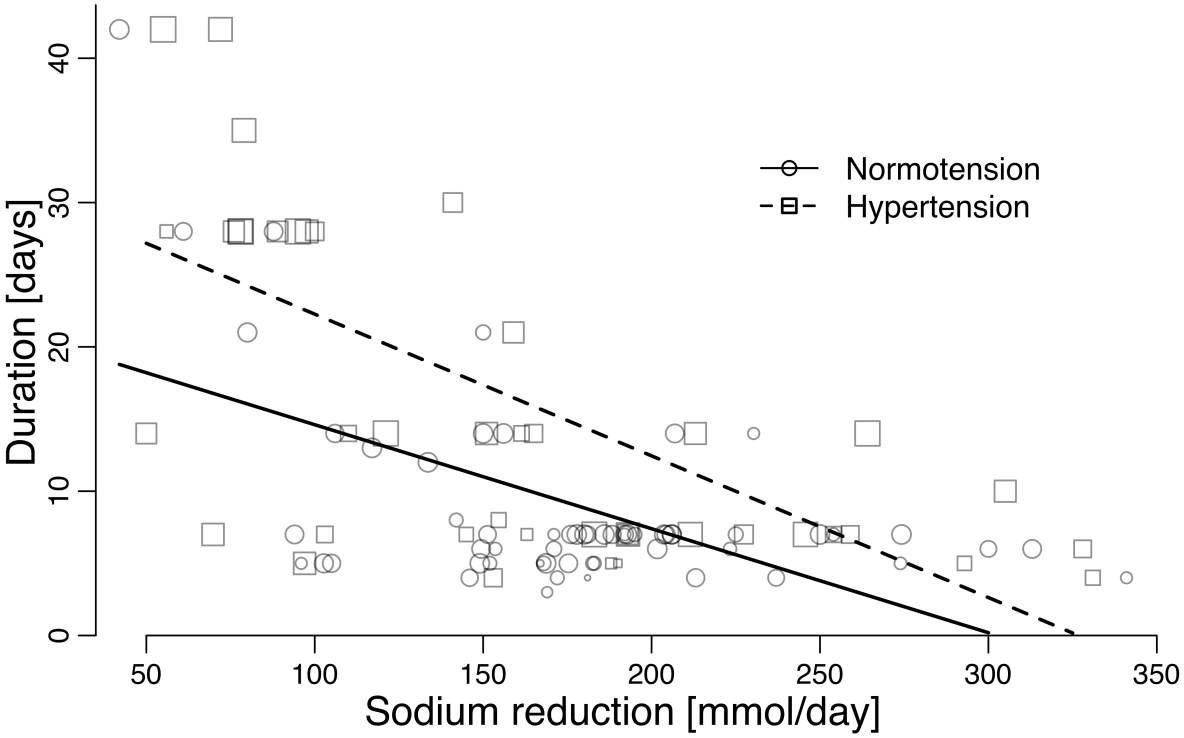
Appendix Figure 1: Forrest plot of conventional meta-analysis of the effect of sodium reduction on PRA in normotensive and hypertensive individuals



Appendix Figure 2: Association between sodium intake and study duration in normotensive studies at low sodium intake (solid line) and high sodium intake (dotted line)



Appendix Figure 3: Association between sodium intake and study duration in hypertensive studies at low sodium intake (solid line) and high sodium intake (dotted line)



Appendix Figure 4: Association between change in sodium intake (sodium reduction) and study duration in normotensive studies (solid line) and hypertensive studies (dotted line)

Appendix Table 1: Characteristics of included studies

Ref no	Study ID	First Author	Dur. (Days)	Restriction	BP	No	Age	Weight kg	S (Hi)	S (L)	SR	SBP (Hi)	DBP (Hi)	SBP (L)	DBP (L)
17	1001	Mark	10	diet	H	6	28	80,3	310	5	305	132,8	79,8	119,7	72,8
18	1003	Sullivan	4	diet	N	27	28,8	68,1	170	24	146	107,0	59,6	113,9	60,7
19	1004	Sullivan H	4	diet	H	19	27	76,8	178	25	153	120,3	74,7	121,5	73,5
20	1006	Skrabal	14	diet	N	20	23	75,8	200	50	150	125,0	73,1	122,3	70,1
20	1011	Mcgregor	28	SS	H	19	49	80,1	162	86	76	156,0	98,0	146,0	93,0
21	1017	Sowers	6	diet	N	9	39		196	42	154				
22	1018	Watt	28	SS	H	18	52	77,4	143	87	56	149,9	91,3	149,4	91,0
23	1021	Skrabal	14	diet	N	52	23	76,5	194	38	156	121,1	63,6	118,0	61,8
24	1025	Koolen	14	SS	H	20	40,8	76,9	270	57	213	147,7	95,4	141,5	90,5
25	1029	Richards	28	SS	H	12	36	74,3	180	80	100	149,9	92,4	145,9	89,4
26	1030	Resnick	5	SS	H	12	51,9		200	10	190	159,0	105,0	156,0	104,0
27	1036	Richards	4	diet	N	8	36		193	12	181	110,0	56,0	108,0	63,0
28	1040	El Ashry	14	SS	N	26	25,5	70,0	267	37	230	128,1	67,1	128,1	64,5
29	1046	Grobee	42	SS	H	40	24	74,7	129	57	72	143,0	78,0	142,2	77,2
30	1048	Lawton	6	diet	N	13	24,3		326	13	313	109,0	70,0	107,0	72,0
31	1049	Lawton H	6	diet	H	9	24,8		343	15	328	125,0	82,0	124,0	86,0
32	1050	Morgan	14	SS	H	16	63	81,0	136	86	50	173,0	102,0	170,0	98,0
32	1052	Shore	5	SS	H	6	51,9	77,3	122	25	97	157,0	101,0	148,0	95,4
33	1053	Sudhir	12	SS	N	6	34,7		163	29	134	128,9	80,7	121,0	75,7
34	1054	Hargreaves	14	SS	N	8	23,4	71,4	155	49	106	129,0	66,0	123,0	63,0
35	1056	McGregor	30	SS	H	20	57	73,6	190	49	141	163,0	100,0	147,0	91,0
36	1057	Dimsdale	5	SS	N	42	32		188	21	167	122,0	76,0	123,2	80,2
37	1058	Dimsdale H	5	SS	H	33	34		210	22	188	149,0	96,5	146,0	97,9
38	1064	Eske Brun	4	SS	N	10	46	72,2	386	45	341	116,0	69,0	111,0	68,0
38	1065	Eske Brun H	4	SS	H	12	47	77,2	370	39	331	150,0	96,0	142,0	92,0
39	1066	Sharma	7	SS	N	15	24	74,4	211	19	192	106,5	68,3	105,6	64,6
39	1068	Friberg	13	SS	N	10	33,3	76,3	152	35	117	114,0	69,0	114,0	68,0
40	1078	Egan H	7	SS	H	18	35	79,5	214	21	193	124,4	77,8	121,7	76,1
41	1079	Gow	7	diet	N	9	30,3		111	17	94	120,0	68,0	112,0	65,0
42	1084	Benetos	28	SS	H	20	41,5	71,6	163	85	78	149,1	93,2	142,6	89,5
43	1088	Ruppert	7	SS	N	163	38	70,7	291	17	274	113,2	71,5	111,0	72,5
44	1091	Burnier	6	diet	N	23	29		237	36	202	111,7	72,2	110,7	73,0
45	1099	Donovan	5	diet	N	8	36	67,0	160	8	152	116,0	63,0	114,0	64,0
46	1100	Fotherby	35	SS	H	17	73	67,4	174	95	79	176,0	96,0	168,0	97,0
47	1103	Del Rio	14	SS	H	30	49,2	72,4	199	48	151	156,1	95,5	154,7	95,0
48	1109	Zoccali	7	SS	H	15	45	79,6	217	54	163	144,0	92,0	130,0	84,0
49	1114	Fliser	7	diet	N	7	25,5	71,4	203	23	180	114,2	71,3	113,1	70,6
50	1116	Stein	5	diet	N	7	33,7		201	18	183	122,9	70,9	124,3	69,7
51	1118	Draaijer	7	SS	H	10	41	90,3	283	24	259	159,0	92,0	153,6	92,8
52	1119	Overlack	7	SS	H	46	45,3	80,5	265	20	246	138,0	90,2	134,1	87,7
53	1128	Schorr	28	SS	N	16	64,1	73,9	166	105	61	140,0	84,0	139,0	84,0
54	1129	Bellini	14	SS	H	43	45,4	78,0	232	111	121	159,8	103,6	155,9	98,7
55	1131	Ferri	14	SS	H	61	47,1	78,2	291	27	264	168,7	107,7	161,3	104,2
56	1132	Ishimitsu A	7	Diet	N	7	53	56,8	217	22	195	116,0	77,0	114,0	75,0
57	1133	Ishimitsu AH	7	Diet	H	23	55	59,7	217	24	193	157,2	94,5	141,5	89,0
58	1144	Foo	6	SS	N	18	51,1	71,9	227	78	149	122,8	76,9	115,1	79,3
58	1148	Damasceno	7	SS	N	20	37,5	73,0	293	39	254	108,5	67,7	109,0	68,0
59	1148	Damasceno H	7	SS	H	19	42,5	75,0	293	39	254	144,7	90,8	136,2	85,4
60	1149	Davrath	5	diet	N	8	25,1	74,5	147	51	96	124,0	70,0	132,0	75,0
60	1150	Schorr	7	SS	N	187	25	73,0	225	19	206	110,7	58,0	110,5	58,3
61	1152	Chiolero H	7	SS	H	38	43	75,4	255	72	183	143,1	89,8	136,6	85,6
62	1153	Bruun	4	diet	N	42	26	72,6	273	36	237	117,0	70,0	117,0	71,0
63	1154	Burnier	7	SS	N	15	22,7	72,3	207	19	188	126,0	75,0	125,0	80,0
64	1168	Cuzzola	14	SS	H	19	47	77,1	261	100	161	153,8	97,8	148,7	97,9
65	1173	Manunta	14	SS	H	20	48,3	79,6	177	67	110	152,4	99,2	147,2	95,9
66	1174	Kleij	7	Diet	N	27	23,7	74,1	236	50	186	118,5	74,1	118,7	74,2
67	1175	Kerstens	7	Diet	N	28	23,3	73,6	248	42	206	114,5	71,5	117,6	73,5

68	1176	Dishy	6	diet	N	25	34	78,9	321	21	300	112,0	59,0	114,0	60,0
69	1177	Nowson	28	SS	N	92	45	69,6	139	51	88	123,0	75,4	122,3	75,4
70	1178	Perry	5	SS	N	15	26	74,0	175	70	105	115,0	60,0	115,0	58,0
71	1180	Palacios B	21	diet	N	23	12,8	56,0	115	35	80	112,7	56,5	115,1	57,9
72	1183	Gates	28	SS	H	12	63,5	72,0	155	60	95	140,0	84,0	137,0	82,8
73	1185	Zanchi	7	diet	N	9	25	70,6	270	20	250	117,0	72,0	114,0	72,0
74	1188	Swift	28	SS	H	40	50	79,0	167	89	78	156,0	100,0	148,0	97,0
75	1191	Melander	28	SS	H	39	53	77,4	140	51	89	144,0	90,6	138,0	88,3
76	1192	Townsend	6	SS	N	18	30	69,6	194	23	171	117,0	69,0	111,0	65,0
77	1193	Dengel	8	diet	H	28	63	81,3	191	36	155	152,0	79,0	142,0	75,0
78	1194	Tzemos	5	SS	N	16	27	76,8	225	76	149	121,0	71,0	117,0	70,0
79	1198	He W	42	SS	H	169	50	85,3	165	110	55	146,0	90,0	141,2	87,8
80	1204	Carey	7	Diet	N	185	47	70,3	221	18	204	124,0	74,2	119,9	73,3
80	1205	Hyperpath	7	Diet	H	211	49,2	76,2	225	14	212	147,5	88,8	131,5	79,5
81	1206	Graffe	4	Diet	N	21	26	77,8	213	41	172	124,0	76,0	126,0	77,0
82	1207	Krikken	7	Diet	N	65	23	81,0	228	36	192	114,5	71,5	113,2	70,7
83	1213	Mallamaci	14	SS	H	32	48	74,0	193	28	165	143,1	91,0	135,1	88,0
84	1214	Dickinson	42	Diet	N	25	35,1	91,0	155	113	42	123,0	72,0	121,0	70,0
85	1218	Visser	7	diet	N	34	26,5	80,7	218	37	181	122,0	70,0	117,0	69,0
86	1220	Gomi A	7	Diet	H	12	51,8	59,3	94	25	70	145,7	93,3	144,6	93,6
87	1221	Facchini	5	SS	N	19	43	79,4	178	10	169	109,2	68,1	108,9	67,9
88	1222	Pechere-Bertchi	7	Diet	N	35	28,9	60,0	225	47	178	109,2	75,2	106,8	74,5
89	1223	Pechere-Bertchi	7	diet	N	27	26	59,7	218	25	193	108,0	71,0	107,0	73,0
90	1224	Ho	14	SS	N	25	48,8	85,7	268	61	207	127,0	77,0	122,0	75,2
91	1225	Gijsbers	28	SS	H	36	65,8	82,5	203	105	98	145,3	80,6	137,8	77,9
92	1227	McManus	5	SS	N	60	50,1	NA	200	97	103	126,7	76,0		
93	1231	Gu	6	Diet	N	16	28,8	69,3	283	60	223	117,7	70,8	118,1	73,9
94	1235	Selvarajah	7	SS	N	48	30	68,9	225	73	151	120,0	73,0	116,9	71,4
95	1237	Gefke	3	Diet	N	10	25	69	247	78	169	114,0	68,0	113,0	68,0
96	1257	Zoccali	7	Diet	H	14	47	NA	184	39	145	156,0	101,0	141,0	94,0
97	1243	Sagnella	5	SS	N	11	22	69	297	23	274	118,4	73,0	117,8	74,2
98	1256	Weinberg	7	Diet	N	7		NA	231	6	225	116,0	72,0	116,0	76,0
99	1253	Paasen	21	Diet	N	15	39	72,6	199	49	150	115,8	72,3	118,4	74,0
99	1254	Paasen H	21	Diet	H	17	51	82,5	207	48	159	149,6	94,1	143,0	91,5
100	1252	Stein	5	Diet	N	7	33,7	NA	201	18	183	122,9	70,9	124,3	69,7
101	1251	Singer	5	SS	H	8	52,4	NA	312	19	293	164,0	106,0	163,0	106,0
102	1249	Naomi	7	SS	H	9	46,9	60,2	256	28	227	145,1	86,9	130,3	80,2
103	1247	Mallamci	7	Diet	N	7	34	81,3	214	48	176	121,0		118,0	
103	1248	Mallamaci H	7	Diet	H	14	47	76,4	146	43	103	138,0		127,0	
104	1246	Heyne	8	Diet	N	12	25,5	NA	162	20	142	127,5	79,8	126,2	79,0
105	1245	Gutkowska	4	Diet	N	6	29,3	68,2	254	46	213				
106	1239	Creager	5	Diet	N	17	30	74	179	11	168	122,0	60,0	124,0	62,0
107	1240	Matthews	7	Diet	N	20	40,5	79,5	229	25	204	120,0	74,5	115,0	71,6
108	1268	Braconnier	5	SS	N	38	33,5	66,2	227	52	175	113,6	69,6	112,9	69,4
109	1266	Toering	7	Diet	N	36	33,5	NA	211	40	171	119,5	72,0	116,0	69,5

Dur: Study duration; SS: Slow sodium tablet; BP: Blood pressure; H: Hypertension;
N: Normotension; No: Number; S: Sodium; Hi: High; L: Low; SR: Sodium reduction

Appendix Table 2: Bias Assessment (L: Low risk of bias; H: High risk of bias, U: Unclear risk of bias)

Ref no	1st Author	Selection	Performance	Attrition	Over-all Bias *
17	Mark	U	H	L	U
18	Sullivan	H	H	L	H
19	Sullivan H	H	H	L	H
20	Skrabal	U	H	L	U
20	Mcgregor	U	L	L	L
21	Sowers	U	H	L	U
22	Watt	U	L	U	U
23	Skrabal	U	H	L	U
24	Koolen	U	H	L	U
25	Richards	U	H	H	H
26	Resnick	U	H	L	U
27	Richards	U	H	L	U
28	El Ashry	U	H	L	U
29	Grobee	U	L	L	L
30	Lawton	U	H	L	U
31	Lawton H	U	H	L	U
32	Morgan	U	H	L	U
32	Shore	U	H	L	U
33	Sudhir	U	H	L	U
34	Hargreaves	U	L	L	L
35	McGregor	U	L	L	L
36	Dimsdale	U	H	L	U
37	Dimsdale H	U	H	L	U
38	Eske Brun	U	H	L	U
38	Eske Brun H	U	H	L	U
39	Sharma	U	H	U	U
39	Friberg	U	H	H	H
40	Egan	L	L	L	L
41	Gow	U	H	L	U
42	Benetos	U	L	L	L
43	Ruppert/Overlack	U	H	L	U
44	Burnier	U	H	L	U
45	Donovan	U	H	L	U
46	Fotherby	U	L	L	L
47	Del Rio	U	L	H	U
48	Zoccali	U	H	L	U
49	Fliser	U	H	L	U
50	Stein	U	H	L	U
51	Draaijer	U	H	L	U
52	Overlack	U	L	L	L
53	Schorr	U	L	H	U
54	Bellini	U	L	H	U
55	Ferri	U	L	L	L
56	Ishimitsu	U	H	L	U
57	Ishimitsu H	U	H	L	U
58	Foo	U	L	L	L
58	Damasceno	U	L	L	L
59	Damasceno H	U	L	L	L
60	Davrath	U	H	L	U
60	Schorr	U	H	L	U
61	Chiolero	U	H	L	U
62	Bruun	U	H	L	U
63	Burnier	U	H	L	U
64	Cuzzola	U	L	H	U
65	Manunta	U	H	L	U
66	Kleij	U	H	L	U
67	Kerstens	U	H	L	U
68	Dishy	U	H	L	U
69	Nowson	U	H	U	U
70	Perry	U	H	L	U
71	Palacios	U	H	H	H
72	Gates	U	L	L	L
73	Zanchi	U	L	L	L
74	Swift	U	L	U	U
75	Melander	U	L	U	U
76	Townsend	U	H	L	U

77	Dengel	U	L	L	L
78	Tzemos	U	L	L	L
79	He	L	L	L	L
80	Carey	U	H	U	U
81	Carey H	U	H	U	U
82	Graffe	L	L	L	L
82	Krikken	U	H	U	U
83	Mallamaci	U	H	L	U
84	Dickinson	U	U	L	U
85	Visser	U	H	U	U
86	Gomi	U	H	L	U
87	Facchini	U	H	L	U
88	Pechere-Bertchi	U	H	L	U
89	Pechere-Bertchi	U	H	L	U
90	Ho	U	H	L	U
91	Gijsbers	L	L	L	L
92	McManus	U	H	L	U
93	Gu	U	H	H	H
94	Selvarajah	U	L	U	U
95	Gefke	U	H	U	U
96	Zoccali	U	H	U	U
97	Sagnella	U	H	U	U
98	Weinberg	U	H	U	U
99	Paasen	U	H	U	U
100	Paasen H	U	H	U	U
101	Stein	U	H	U	U
101	Singer	U	H	U	U
102	Naomi	U	H	U	U
103	Mallamci	L	H	U	U
104	Mallamaci H	L	H	U	U
105	Heyne	U	H	U	U
105	Gutkowska	U	H	U	U
106	Creager	U	H	U	U
107	Matthews	U	H	U	U
108	Braconnier	U	H	U	U
109	Toering	U	H	U	U

Over-all bias was defined by two or three identical assessments of L (low risk of bias), H (high risk of bias) or U (unclear risk of bias). Three different assessments (1L,1H, 1U) were assessed as U. As renin was measured blindly, detection bias was assumed to be low in all studies

Appendix Table 3: Impact of bias (low versus high/unclear) and type of sodium intake (diet or tablet) on plasma renin.

A: Bias	Low (n = 19)	High/Unclear (n =83)	p
1) Renin (high sodium)	0.94	1.14	0.28
2) High sodium intake	209	214	0.72
3) Renin (low sodium)	2.17	3.89	0.02
4) Low sodium intake	57	40	0.013
5) Renin Change	1.23	2.57	0.023
6) Change sodium intake	152	174	0.22
B: Type of sodium intake	Diet (n = 47)	Sodium Tablet (n = 55)	p
1) Renin (high sodium)	0.99	1.2	0.14
2) High sodium intake	213	214	0.9
3) Renin (low sodium)	3.87	3	0.11
4) Low sodium intake	33	52,5	0.0002
5) Renin Change	2.88	1.84	0.023
6) Change sodium intake	180	162	0.17

References

1) Graudal NA, Galløe AM, Garred P. Effects of sodium restriction on blood pressure, renin, aldosterone, catecholamines, cholesterols, and triglyceride: a meta-analysis. JAMA 1998; 279: 1383-91.
2) Graudal N, Hubeck-Graudal T, Jürgens G. Effects of low sodium diet versus high sodium diet on blood pressure, renin, aldosterone, catecholamines, cholesterol, and triglyceride. Cochrane Database of Systematic Reviews 2011, Issue 11. Art. No.: CD004022.
3) Patel SM, Cobb P, Saydah S, Zhang X, de Jesus JM, Cogswell ME. Dietary sodium reduction does not affect circulating glucose concentrations in fasting children or adults: findings from a systematic review and meta-analysis. J Nutr 2015; 145: 505-13
4) Carney SL, Gillies AH, Smith AJ, Smitham S. Increased dietary sodium chloride in patients treated with antihypertensive drugs. Clinical and Experimental Hypertension. Part A, Theory and Practice 1991;13:401-7.
5) Singer DR, Markandu ND, Sugden AL, Miller MA, MacGregor GA. Sodium restriction in hypertensive patients treated with a converting enzyme inhibitor and a thiazide. Hypertension 1991; 17: 798-803.
6) Wing LMH, Arnolda LF, Harvey PJ, Upton J, Molloy D, Gabb GM, et al. Low-dose diuretic and/or dieatary sodium restriction when blood pressure is resistant to ACE inhibitor. Blood Pressure 1998; 7: 299-307.
7) Pimenta E, Gaddam KK, Oparil S, Aban I, Husain S, Dell'Italia LJ, et al. Effects of dietary sodium reduction on blood pressure in subjects with resistant hypertension: results from a randomized trial. Hypertension 2009; 54: 475-81.
8) Jula AM, Karanko HM. Effects on left ventricular hypertrophy of long-term nonpharmacological treatment with sodium restriction in mild to moderate essential hypertension. Circulation 1994; 89: 1023-31.
9) Heer M, Baisch F, Kropp J, Gerzer R, Drummer C. High dietary sodium chloride consumption may not induce body fluid retention in humans. Am J Physiol 2000; 278: 585-95.
10) Cavka A, Cosic A, Jukic I, Jelakovic B, Lombard JH, Phillips SA. The role of cyclo-oxygenase-1 in high-salt diet-induced microvascular dysfunction in humans. J Physiol 2015; 593: 5313–24.
11) Jablonski KL, Racine ML, Geolfos CJ, Gates PE, Chonchol M, McQueen MB, et al. Dietary sodium restriction reverses vascular endothelial dysfunction in middle-aged/older adults with moderately elevated systolic blood pressure. J Am Coll Cardiol 2013; 61: 335-43.
12) De Bruin RA, Bouhuizen A, Diederich S, Perschel FH, Boomsma F, Deinum J. Validation of a new automated renin assay. Clin Chem. 2004; 50: 2111-6.
13) Huggins RL, Di Nicolantonio R, Morgan, TO. Preferred salt levels and salt taste acuity in human subjects after ingestion of untasted salt. Appetite 1992; 18: 111-9.
14) Herlitz H, Dahlöf B, Jonsson O, Friberg P. Relationship between salt and blood pressure in hypertensive patients on chronic ACE-inhibition. Blood Pressure 1998; 7: 47-52.
15) Van Twist DJ, Houben AJ, de Leeuw PW, Kroon AA. Acute eprosartan-induced intrarenal vasodilation in hypertensive humans is notinfluenced by dietary sodium intake or angiotensin II co-infusion. J Hypertens 2016; 34: 1607-14.

16) Paulsen L, Holst LM, Bech JN, Starklint J, Pedersen EB. Glomerular filtration rate and blood pressure are unchanged by increased sodium intake in atorvastatin-treated healthy men. Scand J Clin Lab Invest 2009; 69: 323-9.
17) Mark AL, Lawton WJ, Abboud FM, Fitz AE, Connor WE, Heistad DD. Effects of high and low sodium intake on arterial pressure and forearm vascular resistance in borderline hypertension. Circulation Research 1975; 36(6 Suppl 1): 194-8.
18) Sullivan JM, Ratts TE, Taylor JC, Kraus DH, Barton BR, Patrick DR, et al. Hemodynamic effects of dietary sodium in man. Hypertension 1980; 2: 506-14.
19) Skrabal F, Auböck J, Hörtnagel H. Low sodium/high potassium diet for prevention of hypertension: probable mechanisms of action. Lancet 1981; 2(8252): 895-900.
20) MacGregor GA, Markandu ND, Best FE, Elder DM, Cam JM, Sagnella GA, et al. Double-blind randomised crossover trial of moderate sodium restriction in essential hypertension. Lancet 1982; 1(8268): 351-5
21) Sowers JR, Martin VI, Beck FW. Effects of dietary sodium on circadian rhythm and physiological responses of 18-hydroxycorticosterone. Clin Sci 1983; 64: 295-301.
22) Watt GCM, Edwards C, Hart JT, Hart M, Walton P, Foy CJW. Dietary sodium restriction for mild hypertension in general practice. BMJ 1983; 286(6363): 432-6.
23) Skrabal F, Herholz H, Neumayr M, Hamberger L, Ledochowski M, Sporer H, et al. Salt sensitivity in humans is linked to enhanced sympathetic responsiveness and to enhanced proximal tubular reabsorption. Hypertension 1984; 6: 152-8.
24) Koolen MI, Brummelen P. Sodium sensitivity in essential hypertension: Role of the renin-angiotensin-aldosterone system and the predictive value of an intravenous frusemide test. J Hypertens 1984; 2: 55-9.
25) Richards AM, Nicholls MG, Espiner EA, Ikram H, Maslowski AH, Hamilton EJ, Wells JE. Blood pressure response to moderate sodium restriction and to potassium supplementation in mild essential hypertension. Lancet 1984; 1(8380): 757-61.
26) Resnick LM, Nicholson JP, Laragh JH. Alterations in calcium metabolism mediate dietary salt sensitivity in essential hypertension. Trans Assoc Am Phys 1985; 98: 313-21.
27) Richards AM, Tonolo G, Cleland JG, Leckie BJ, McIntyre GD, Ingram M, et al. Plasma atrial natriuretic peptide: responses to modest and severe sodium restriction. J Hypertens Suppl 1986; 4: S559-63.
28) El Ashry A, Heagerty AM, Alton SM, Bing RF, Swales JD, Thurston H. Effects of manipulation of sodium balance on erythrocyte sodium transport. J Hum Hypertens 1987; 1: 105-11.
29) Grobbee DE, Hofman A, Roelandt JT, Boomsma F, Schalekamp MA, Valkenburg HA. Sodium restriction and potassium supplementation in young people with mildly elevated blood pressure. J Hypertens 1987; 5: 115-9.
30) Lawton WJ, Sinkey CA, Fitz AE, Mark AL. Dietary salt produces abnormal renal vasoconstrictor responses to upright posture in borderline hypertensive subjects. Hypertension 1988; 11: 529-36.
31) Morgan T, Anderson A. Interaction in hypertensive men between sodium intake, converting enzyme inhibitor (enalapril), plasma renin and blood pressure control. Journal of Human Hypertension 1988; 1: 311-5.
32) Shore AC, Markandu ND, McGregor GA. A randomised cross-over study to compare the blood pressure response to sodium loading with and without chloride in patients with essential hypertension. J Hypertens 1988; 6: 613-7.
33) Sudhir K, Friberg P, Meredith IT, Woods RL, Esler MD, Jennings GL. Cardiac secretion and renal clearance of atrial natriuretic peptide in normal man: effect of salt restriction. Clin Sci 1989; 77: 605-10.

34) Hargreaves M, Morgan TO, Snow R, Guerin M. Exercise tolerance in the heat on low and normal salt intake. Clin Sci 1989; 76: 553-7.
35) McGregor GA, Markandu ND, Sagnella GA, Singer DRJ, Cappucio FP. Double-blind study of three sodium intakes and long-term effects of sodium restriction in essential hypertension. Lancet 1989; 2(8674): 1244-7.
36) Dimsdale JE, Ziegler M, Mills P, Berry C. Prediction of salt sensitivity. Am J Hypertens 1990; 3: 429-35.
37) Bruun NE, Skøtt P, Nielsen MD, Rasmussen S, Schütten HJ, Leth A, et al. Normal renal tubular response to changes of sodium intake in hypertensive man. J Hypertens1990; 8: 219-27.
38) Sharma AM, Kribben A, Schattenfroh S, Cetto C, Distler A. Salt sensitivity in humans is associated with abnormal acid-base regulation. Hypertension 1990; 16: 407-13.
39) Friberg P, Meredith I, Jennings G, Lambert G, Fazio V, Esler M. Evidence for increased renal norepinephrine overflow during sodium restriction in humans. Hypertension 1990; 16: 121-30.
40) Egan BM, Weder AB, Petrin J, Hoffman RG. Neurohumoral and metabolic effects of short-term dietary NaCl restriction in men: relationship to salt-sensitivity status. Am J Hypertens 1991; 4: 416-21.
41) Gow IF, Dockrell M, Edwards CRW, Elder A, Grieve J, Kane G, et al. The sensitivity of human blood platelets to the aggregation agent ADP during different dietary sodium intakes in healthy men. Eur J Clin Pharm 1992; 43: 635-8.
42) Benetos A, Xiao YY, Cuche JL, Hannaert P, Safar M. Arterial effects of salt restriction in hypertensive patients. A 9-week, randomized, double-blind, crossover study. J Hypertens 1992; 10: 355-60.
43) Ruppert M, Overlack A, Kolloch R, Kraft K, Göbel B, Stumpe KO. Neurohormonal and metabolic effects of severe and moderate salt restriction in non-obese normotensive adults. Hypertension 1993; 11: 743-9.
44) Burnier M, Rutschmann B, Nussberger J, Versaggi J, Shahinfar S, Waeber B, et al. Salt dependent renal effects of an angiotensin II antagonist in healthy subjects. Hypertension 1993; 22: 339-47.
45) Donovan DS, Solomon CG, Seely EW, Williams GH, Simonson DC. Effect of sodium intake on insulin sensitivity. Am J Physiol 1993; 264: E730-4
46) Fotherby MD, Potter JF. Effects of moderate sodium restriction on clinic and twenty-four-hour ambulatory blood pressure in elderly hypertensive subjects. J Hypertens 1993; 11: 657-63.
47) Del Rio A, Rodriguez Villamil JL. Metabolic effects of strict salt restriction in essential hypertensive patients. JIM 1993; 233: 409-14.
48) Zoccali C, Mallamaci F, Parlongo S. The influence of salt intake on plasma calcitonin gene-related peptide in subjects with mild essential hypertension. J Hypertens 1994; 12: 1249-53
49) Fliser D, Fode P, Arnold U, Nowicki M, Kohl B, Ritz E. The effect of dietary salt on insulin sensitivity. Eur J Clin Invest 1995; 25: 39-43
50) Stein CM, Nelson R, Brown M, He H, Wood M, Wood AJ. Dietary sodium intake modulates systemic but not forearm norepinephrine release. Clin Pharm Ther 1995; 58: 425-33.
51) Draaijer P, De Leeuw P, Maessen J, Van Hooff J, Leunissen K. Salt-sensitivity testing in patients with borderline hypertension: Reproducibility and potential mechanisms. J Hum Hypertens 1995; 9: 263-9.
52) Overlack A, Ruppert M, Kolloch R, Kraft K, Stumpe KO. Age is a major determinant of the divergent blood pressure responses to varying salt intake in essential hypertension. Am J Hypertens 1995; 8: 829-36.

53) Schorr U, Distler A, Sharma AM. Effect of sodium chloride- and sodium bicarbonate-rich mineral water on blood pressure and metabolic parameters in elderly normotensive individuals: a randomized double-blind crossover trial. J Hypertens 1996; 14: 131-5.
54) Bellini C, Ferri C, Carlomagno A, Necozione S, Lepore A, Desideri G, et al. Impaired inactive to active kallikrein conversion in human salt-sensitive hypertension. JASN 1996; 7: 2565-77
55) Ferri C, Bellini C, Carlomagno A, Desideri G, Santucci A. Active kallikrein response to changes in sodium-chloride intake in essential hypertensive patients. JASN 1996; 7: 443-53.
56) Ishimitsu T, Nishikimi T, Matsuoka H, Kangawa K, Kitamura K, Minami J, et al. Behaviour of adrenomedullin during acute and chronic salt loading in normotensive and hypertensive subjects. Clin Sci 1996; 91: 293-8.
57) Foo M, Denver AE, Coppack SW, Yudkin JS. Effect of salt-loading on blood pressure, insulin sensitivity and limb blood flow in normal subjects. Clin Sci (London) 1998; 95: 157-64
58) Damasceno A, Santos A, Serrao P, Caupers P, Soares-da-Silva P, Polonia J. Deficiency of renal dopaminergic-dependent natriuretic response to acute sodium load in black salt-sensitive subjects in contrast to salt-resistant subjects. J Hypertens 1999; 17: 1995-2001.
59) Davrath LR, Gotshall RW, Tucker A, Sadeh WZ, Luckasen GJ, Downes TR, et al. Moderate sodium restriction does not alter lower body negative pressure tolerance. Aviat, Space, Envir MD 1999; 70: 577-82.
60) Schorr U, Blaschke K, Beige J, Distler A, Sharma AM. Angiotensinogen M235T variant and salt sensitivity in young normotensive Caucasians. J Hypertens 1999; 17: 475-9.
61) Chiolero, A, Maillard, M, Nussberger, J, Brunner HR. Proximal sodium reabsorption: An independent determinant of blood pressure response to salt. J Hypertens 2000; 36: 631-7.
62) Bruun NE, Dige-Pedersen H, Skott P. Normal responses of atrial natriuretic factor and renal tubular function to sodium loading in hypertension-prone humans. Blood Pressure 2000; 9: 206-13.
63) Burnier M, Monod M, Chiolero A, Maillard M, Nussberger J, Brunner HR. Renal sodium handling in acute and chronic salt loading/depletion protocols: the confounding influence of acute water loading. J Hypertens 2000; 18: 1657-64.
64) Cuzzola F, Mallamaci F, Tripepi G, Parlongo S, Cutrupi S, Cataliotti A, et al. Urinary adrenomedullin is related to ET-1 and salt intake in patients with mild essential hypertension. Am J Hypertens 2001; 14: 224-30
65) Manunta P, Messaggio E, Ballabeni C, Sciarrone MT, Lanzani C, Ferrandi M, et al. Plasma ouabain-like factor during acute and chronic changes in sodium balance in essential hypertension. Plasma ouabain-like factor during acute and chronic changes in sodium balance in essential hypertension. Hypertension 2001; 38: 198-203
66) van der Kleij FGH, de Jong PE, Henning RH, de Zeeuw D, Navis G. Enhanced responses of blood pressure, renal function, and aldosterone to angiotensin I in the DD genotype are blunted by low sodium intake. JASN 2002; 13: 1025-33.
67) Kerstens MN, van der Kleij FG, Boonstra AH, Sluiter WJ, Koerts J, Navis G, et al. Salt loading affects cortisol metabolism in normotensive subjects: relationships with salt sensitivity. JCEM 2003; 88: 4180-5.
68) Dishy V, Sofowora GG, Imamura H, Nishimi Y, Xie HG, Wood AJ, et al. Nitric oxide production decreases after salt loading but is not related to blood pressure changes or nitric oxide-mediated vascular responses. J Hypertens 2003; 21: 153-7.
69) Nowson CA, Morgan TO, Gibbons C. Decreasing dietary sodium while following a self-selected potassium-rich diet reduces blood pressure. J Nutr 2003; 133: 4118-23.

70) Perry CG, Palmer T, Cleland SJ, Morton IJ, Salt IP, Petrie JR, et al. Decreased insulin sensitivity during dietary sodium restriction is not mediated by effects of angiotensin II on insulin action. Clin Sci 2003; 105: 187-94.
71) Palacios C, Wigertz K, Martin BR, Jackman L, Pratt JH, Peacock M, et al. Sodium retention in black and white female adolescents in response to salt intake. JCEM 2004; 89: 1858-63.
72) Gates PE, Tanaka H, Hiatt WR, Seals DR. Dietary sodium restriction rapidly improves large elastic artery compliance in older adults with systolic hypertension. Hypertension 2004; 44: 35-41.
73) Zanchi A, Chiolero A, Maillard M, Nussberger J, Brunner HR, Burnier M. Effects of the peroxisomal proliferator-activated receptor-gamma agonist pioglitazone on renal and hormonal responses to salt in healthy men. JCEM 2004; 89: 1140-5.
74) Swift P, Markandu N, Sagnella G, He F, MacGregor GA. Modest salt reduction reduces blood pressure and urine protein excretion in black hypertensives: a randomized control trial. Hypertension 2005; 46: 308-12
75) Melander O, von Wowern F, Frandsen E, Burri P, Willsteen G, Aurell M, et al. Moderate salt restriction effectively lowers blood pressure and degree of salt sensitivity is related to baseline concentration of renin and N-terminal atrial natriuretic peptide in plasma. J Hypertens 2007; 25: 619-27.
76) Townsend RR, Kapoor S, McFadden CB. Salt intake and insulin sensitivity in healthy human volunteers. Clin Sci (London) 2007; 113: 141-8.
77) Dengel DR, Brown MD, Ferrell RE, Reynolds TH, Supiano MA. A preliminary study on T-786C endothelial nitric oxide synthase gene and renal hemodynamic and blood pressure responses to dietary sodium. Physiol Res 2007; 56: 393-401
78) Tzemos N, Lim PO, Wong S, Struthers AD, MacDonald TM. Adverse cardiovascular effects of acute salt loading in young normotensive individuals. Hypertension 2008; 51:1525-35.
79) He FJ, Marciniak M, Visagie E, Markandu ND, Anand V, Dalton RN, et al. Effect of modest salt reduction on blood pressure, urinary albumin, and pulse wave velocity in white, black, and Asian mild hypertensives. Hypertension 2009; 54: 482-8
80) Carey RM, Schoeffel CD, Gildea JJ, Jones JE, McGrath HE, Gordon LN, et al. Salt sensitivity of blood pressure is associated with polymorphisms in the sodium-bicarbonate cotransporter. Hypertension 2012; 60: 1359-66.
81) Graffe CC, Bech JN, Pedersen EB. Effect of high and low sodium intake on urinary aquaporin-2 excretion in healthy humans. Am J Physiol. Ren Physiol. 2012; 15: F264-75.
82) Krikken JA, Dallinga-Thie GM, Navis G, Dullaart RP. Short term dietary sodium restriction decreases HDL cholesterol, apolipoproteinA-I and high molecular weight adiponectin in healthy young men: relationships with renal hemodynamics and RAAS activation. NMCD 2012; 22: 35-41.
83) Mallamaci F, Leonardis D, Pizzini P, Cutrupi S, Tripepi G, Zoccali C. Procalcitonin and the inflammatory response to salt in essential hypertension: a randomized cross-over clinical trial. J Hypertens 2013; 31: 1424-30.
84) Dickinson KM, Clifton PM, Keogh JB. A reduction of 3 g/day from a usual 9g/day salt diet improves endothelial function and decreases endothelin-1 in a randomised cross over study in normotensive overweight and obese subjects. Atherosclerosis 2014; 233: 32-8.
85) Visser FW, Boonstra AH, Titia Lely A, Boomsma F, Navis G. Renal response to angiotensin II is blunted in sodium-sensitive normotensive men. Am J Hypertens 2008; 21: 323-8.
86) Gomi T, Shibuya Y, Sakurai J, Hirawa N, Hasegawa K, Ikeda T. Strict dietary sodium reduction worsens insulin sensitivity by increasing sympathetic nervous activity in patients with primary hypertension. Am J Hypertens 1998; 11: 1048-55.

87) Facchini FS, Do Nascimento C, Reaven GM, Yip JW, Ni XP, Humphreys MH. Blood pressure, sodium intake, insulin resistance, and urinary nitrate excretion. Hypertension 1999; 33: 1008-12
88) Pechère-Bertschi A, Maillard M, Stalder H, Brunner HR, Burnier M. Blood pressure and renal haemodynamic response to salt during the normal menstrual cycle. Clin Sci (London) 2000; 98: 697-702.
89) Pechère-Bertschi A, Maillard M, Stalder H, Bischof P, Fathi M, Brunner HR, et al. Renal hemodynamic and tubular responses to salt in women using oral contraceptives. KI 2003; 64: 1374-80.
90) Ho JT, Keogh JB, Bornstein SR, Ehrhart-Bornstein M, Lewis JG, Clifton PM, et al. Moderate weight loss reduces renin and aldosterone but does not influence basal or stimulated pituitary-adrenal axis function. Hormone and Metabolic Research 2007; 39: 694-9.
91) Gijsbers L, Dower JI, Schalkwijk CG, Kusters YH, Bakker SJ, Hollman PC, et al. Effects of sodium and potassium supplementation on endothelial function: a fully controlled dietary intervention study. BJN 2015; 114: 1419-26
92) McManus F, Fraser R, Davies E, Connell JMC, Freel EM. Plasma steroid profiling and response to trophins to illustrate intra-adrenal dynamics. Clin Endocrinol (Oxford) 2015; 82: 149-57
93) Gu N, Cho JY, Shin KH, Jang IJ, Rhee MY. The influence of dietary sodium content on the pharmacokinetics and pharmacodynamics of fimasartan. Drug Des Devel Ther 2016; 10: 1525-31.
94) Selvarajah V, Mäki-Petäjä KM, Pedro L, Bruggraber SFA, Burling K, Goodhart AK, Brown MJ, McEniery CM, Wilkinson IB. Novel Mechanism for Buffering Dietary Salt in Humans: Effects of Salt Loading on Skin Sodium, Vascular Endothelial Growth Factor C, and Blood Pressure. Hypertension 2017; 70: 930-937.
95) Gefke M, Christensen NJ, Bech P, Frandsen E, Damgaard M, Asmar A, et al. Hemodynamic responses to mental stress during salt loading. Clin Physiol Funct Imaging 2017; 37: 688-694.
96) Zoccali C, Mallamaci F, Cuzzola F, Leonardis D. Reproducibility of the response to short-term low salt intake in essential hypertension. J Hypertens 1996; 14: 1455-9.
97) Sagnella GA, Markandu ND, Shore AC, Forsling ML, MacGregor GA. Plasma atrial natriuretic peptide: its relationship to changes in sodium intake, plasma renin activity and aldosterone in man. Clin Sci (London) 1987; 72: 25-30.
98) Weinberg M, Belknap S, Trebbin W, Solomon RJ. Effects of changing salt and water balance on renal kallikrein, kininogen and kinin. KI 1987; 31: 836-41.
99) Van Paassen P, de Zeeuw D, Navis G, de Jong PE. Does the renin-angiotensin system determine the renal and systemic hemodynamic response to sodium in patients with essential hypertension? Hypertension 1996; 27: 202-8.
100) Stein CM, Nelson R, Brown M, Wood M, Wood AJ. Dietary sodium intake modulates vasodilation mediated by nitroprusside but not by methacholine in the human forearm. Hypertension 1995; 25: 1220-3.
101) Singer DR, Markandu ND, Buckley MG, Miller MA, Sugden AL, Sagnella GA, et al. Prolonged decrease in blood pressure after atrial natriuretic peptide infusion in essential hypertension: a new anti-pressor mechanism? Clin Sci (Lond). 1989; 77: 253-8.
102) Naomi S, Umeda T, Iwaoka T, Yamauchi J, Ideguchi Y, Fujimoto Y, et al. Endogenous erythropoietin and salt sensitivity of blood pressure in patients with essential hypertension. Am J Hypertens 1993; 6: 15-20.
103) Mallamaci F, Leonardis D, Bellizzi V, Zoccali C. Does high salt intake cause hyperfiltration in patients with essential hypertension? J Hum Hypertens 1996; 10: 157-61.

104) Heyne N, Benöhr P, Mühlbauer B, Delabar U, Risler T, Osswald H. Regulation of renal adenosine excretion in humans--role of sodium and fluid homeostasis. NDT 2004; 19: 2737-41.
105) Gutkowska J, Schiffrin EL, Cantin M, Genest J. Effect of dietary sodium on plasma concentration of immunoreactive atrial natriuretic factor in normal humans. Clin Invest Med. 1986; 9: 222-4.
106) Creager MA, Roddy MA, Holland KM, Hirsch AT, Dzau VJ. Sodium depresses arterial baroreceptor reflex function in normotensive humans. Hypertension 1991; 17: 989-96.
107) Matthews EL, Brian MS, Ramick MG, Lennon-Edwards S, Edwards DG, Farquhar WB. High dietary sodium reduces brachial artery flow-mediated dilation in humans with salt-sensitive and salt-resistant blood pressure. J Appl Physiol 2015; 118: 1510-5.
108) Braconnier P, Milani B, Loncle N, Lourenco JM, Brito W, Delacoste J, et al. Short-term changes in dietary sodium intake influence sweat sodium concentration and muscle sodium content in healthy individuals. J Hypertens 2020; 38: 159-166.
109) Toering TJ, Gant CM, Visser FW, van der Graaf AM, Laverman GD, Danser AHJ, et al. Sex differences in renin-angiotensin-aldosterone system affect extracellular volume in healthy subjects. Am J Physiol Renal Physiol 2018; 314: F873-F878.
110) Bovée DM, Visser WJ, Middel I, De Mik-van Egmond A, Greupink R, Masereeuw R, et al. A Randomized Trial of Distal Diuretics versus Dietary Sodium Restriction for Hypertension in Chronic Kidney Disease. JASN 2020; 31:650-662.
111) Bovée DM, Roksnoer LCW, van Kooten C, Rotmans JI, Vogt L, de Borst MH, et al. Effect of sodium bicarbonate supplementation on the renin- angiotensin system in patients with chronic kidney disease and acidosis: a randomized clinical trial. J Nephrol 2020 Dec 31. doi:10.1007/s40620-020-00944-5. Epub ahead of print.
112) Baqar S, Kong YW, Chen AX, O'Callaghan C, MacIsaac RJ, Bouterakos M, et al. Effect of Salt Supplementation on Sympathetic Activity and Endothelial Function in Salt-Sensitive Type 2 Diabetes. JCEM 2020; 105: dgz219.
113) Toft U, Riis NL, Lassen AD, Trolle E, Andreasen AH, Frederiksen AKS, et al. The Effects of Two Intervention Strategies to Reduce the Intake of Salt and the Sodium-To-Potassium Ratio on Cardiovascular Risk Factors. A 4-Month Randomised Controlled Study among Healthy Families. Nutrients 2020; 12: 1467.