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APPENDIX

Table 1 Effects of distilled water feeding on MAP, HR, Hct, V, RPF, GFR, FF, and RVR in five dogs (group 1).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
MAP	82.67	89.00	89.00	91.00	94.00	92.33	90.00	88.33	89.33
(mmHg)	±3.45	±3.59	±5.88	±3.15	±4.55	±5.67	±5.29	±5.58	±5.44
HR	132.00	126.80	119.60	114.00	108.40	107.40	113.20	115.80	117.20
(beat/min)	±4.36	±5.04	±6.40	±6.86	±11.46	±13.75	±13.99	±15.21	±16.84
Hct	21.60	22.40	23.20	22.80	22.80	23.20	23.40	23.60	24.40
(%)	±5.97	±6.37	±6.45	±6.54	±6.54	±6.80	±6.74	±6.77	±6.66
V	11.28	13.52	13.05	13.27	12.81	13.78	13.76	13.89	14.35
(μl/min/gm-kw)	±4.95	±6.16	±4.97	±4.56	±5.22	±4.61	±4.46	±4.27	±4.40
RPF	3.71	3.07*	2.73*	2.26*	2.09*	2.11*	2.06*	2.05*	2.18*
(ml/min/gm-kw)	±0.55	±0.56	±0.56	±0.47	±0.42	±0.41	±0.42	±0.39	±0.49

Table 1 (continue)

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
GFR (ml/min/gm-kw)	0.44 ±0.10	0.47 ±0.12	0.36 ±0.08	0.35 ±0.09	0.33 ±0.07	0.33 ±0.08	0.34 ±0.08	0.31 ±0.05	0.34 ±0.12
FF (%)	14.52 ±5.68	18.34 ±6.07	15.54 ±4.65	16.20 ±3.46	15.80 ±5.07	17.88 ±5.70	18.82 ±5.91	17.00 ±4.26	16.60 ±5.44
RVR (mmHg/ml/min/ gm-kw)	18.85 ±2.71	25.40 ±4.68	28.25* ±4.99	34.82* ±5.43	38.40* ±6.41	37.67* ±15.61	38.35* ±7.86	37.18* ±7.32	36.53 ±7.73

Results are given as mean ± SEM. P-value with respect to control ; *P < 0.05. MAP = mean arterial blood pressure ; HR = heart rate ; Hct = hematocrit ; V = urine flow rate; RPF = renal plasma flow ; GFR = glomerular filtration rate ; FF = filtration fraction; RVR = renal vascular resistance.

TABLE 2 Effects of distilled water feeding on plasma concentration, urinary excretion rate and fractional excretion of sodium, potassium and chloride in five dogs (group 1).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{Na}	143.80	144.80	146.00	141.80	146.20	144.80	148.20	144.80	147.80
(mEq/l)	±1.66	±2.08	±1.82	±3.31	±2.18	±0.74	±1.32	±1.59	±1.62
P_{K}	3.27	3.33	3.35	3.21	3.39	3.43	3.58	3.54	3.54
(mEq/l)	±0.19	±0.25	±0.15	±0.13	±0.14	±0.24	±0.19	±0.26	±0.25
P_{Cl}	118.80	114.20	116.60	115.40	119.20	117.60	116.80	118.80	121.40
(mEq/l)	±3.85	±3.93	±3.44	±2.99	±3.98	±4.65	±4.32	±2.33	±3.92
$U_{Na}V$	0.88	0.83	0.75	0.67	0.62	0.62	0.75	0.81	0.94
(μEq/min/gm-kw)	±0.39	±0.54	±0.51	±0.40	±0.36	±0.30	±0.36	±0.38	±0.44
$U_{K}V$	0.24	0.24	0.23	0.26	0.25	0.28	0.34	0.39*	0.42*
(μEq/min/gm-kw)	±0.07	±0.08	±0.08	±0.09	±0.11	±0.08	±0.10	±0.11	±0.12

Table 2 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
$U_{Cl}V$	0.56	0.51	0.49	0.37	0.36	0.33	0.49	0.56	0.61
(μEq/min/gm-kw)	±0.29	±0.35	±0.35	±0.22	±0.25	±0.19	±0.26	±0.29	±0.32
FE_{Na}	1.38	0.96	1.08	0.99	1.16	1.08	1.26	1.54	1.58
(%)	±0.56	±0.50	±0.62	±0.40	±0.51	±0.41	±0.49	±0.67	±0.35
FE_K	17.83	15.71	20.55	21.56	25.39	26.19	28.92*	35.22*	45.59*
(%)	±4.02	±2.41	±4.15	±2.58	±5.51	±4.52	±5.15	±6.98	±7.68
FE_{Cl}	1.04	0.77	0.89	0.57	0.82	0.71	1.01	1.32	1.19
(%)	±0.49	±0.45	±0.54	±0.32	±0.44	±0.34	±0.45	±0.65	±0.37

Results are given as mean ± SEM. *$P < 0.05$ compare with control. P_{Na}, P_K, P_{Cl} = plasma concentration of sodium, potassium, chloride ; $U_{Na}V$, U_KV, $U_{Cl}V$ = urinary excretion rate of sodium, potassium, chloride ; FE_{Na}, FE_K, FE_{Cl} = fractional excretion rate of sodium, potassium, chloride.

TABLE 3 Effects of distilled water feeding on plasma osmolality, urinary excretion rate and fractional excretion of osmolality, osmolar clearance and free water clearance in five dogs (group 1).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{osm}	288.80	290.00	289.40	293.00	291.20	293.20	292.60	297.00	292.60
(mOsm/kg)	±3.07	±3.05	±3.16	±3.48	±2.42	±3.43	±2.11	±2.03	±1.63
$U_{osm}V$	2.79	2.63	2.86	2.36	2.18	2.32	2.61	2.79	2.96
(μOsm/min/gm-kw)	±0.99	±1.31	±1.23	±0.98	±0.95	±0.80	±0.93	±0.99	±1.08
FE_{osm}	2.27	1.69*	2.44	1.97	2.36	2.28	2.44	2.74	3.16
(%)	±0.64	±0.52	±0.59	±0.37	±0.54	±0.48	±0.52	±0.78	±0.33
C_{osm}	9.68	9.19	9.98	8.14	7.56	7.94	8.94	9.43	10.12
(μl/min/gm-kw)	±3.53	±4.68	±4.35	±3.44	±3.34	±2.78	±3.22	±3.42	±3.71
C_{H_2O}	1.60	4.33	3.07	5.13	5.25	5.83	4.82	4.46	4.23
(μl/min/gm-kw)	±3.86	±3.19	±2.84	±1.85	±2.06	±2.16	±2.18	±2.80	±3.26

Results are given as mean ± SEM. *$P < 0.05$ compare with control. P_{osm} = plasma osmolality ; $U_{osm}V$ = urinary excretion rate of osmolality ; FE_{osm} = fractional excretion rate of osmolality ; C_{osm} = osmolar clearance ; C_{H_2O}=free water clearance.

TABLE 4 Effects of decoction of C. citratus (1.25gm/kg) feeding on MAP, HR, Hct, V, RPF, GFR, FF and RVR in five dogs (group 2).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
MAP	107.17	116.00	119.00	116.00	116.00	115.33	114.33	116.00	114.67
(mmHg)	±6.23	±8.15	±9.11	±8.64	±7.72	±7.77	±8.12	±7.68	±7.77
HR	130.20	124.80	122.80	124.60	118.60	121.20	124.60	122.20	121.20
(beat/min)	±6.98	±7.12	±11.88	±9.60	±9.40	±10.70	±9.22	±8.56	±8.11
Hct	33.40	35.20	35.00	34.80	34.00	34.80	34.60	34.60	34.80
(%)	±1.81	±1.53	±2.21	±2.46	±2.49	±2.76	±2.80	±2.80	±2.69
V	13.42	10.48	11.61	9.70	7.77	8.59	6.47	6.53	7.76
(μl/min/gm-kw)	±5.09	±4.53	±6.24	±4.28	±2.84	±2.90	±1.11	±0.68	±0.88
RPF	2.47	2.08*	2.17	2.14	2.11	2.12	2.08	2.20	2.21
(ml/min/gm-kw)	±0.67	±0.72	±0.60	±0.58	±0.51	±0.48	±0.53	±0.49	±0.50
GFR	0.49	0.50	0.49	0.50	0.50	0.54	0.45	0.46	0.54
(ml/min/gm-kw)	±0.04	±0.09	±0.04	±0.04	±0.03	±0.05	±0.06	±0.05	±0.06

Table 4 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FF	27.86	38.32	35.20	37.06	28.72	29.16	27.20	24.22	28.00
(%)	±8.95	±13.96	±14.49	±15.22	±5.95	±4.69	±7.03	±3.94	±5.88
RVR	40.95	56.08	49.74	44.33	43.52	40.95	39.36	39.07	38.00
(mmHg/ml/min/ gm-kw)	±11.94	±17.10	±15.61	±12.21	±8.43	±6.59	±5.80	±6.01	±5.01

Results are given as mean ± SEM. $^{*}P < 0.05$ compare with control.

TABLE 5 Effects of decoction of C. citratus (1.25gm/kg) feeding on plasma concentration, urinary excretion rate and fractional excretion of sodium, potassium and chloride in five dogs (group 2).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{Na} (mEq/l)	147.00 ±2.41	148.20 ±4.91	146.40 ±3.98	146.60 ±4.07	149.80 ±3.65	146.40 ±4.99	144.00 ±4.47	147.80 ±3.84	147.80 ±3.98
P_{K} (mEq/l)	3.36 ±0.22	3.23 ±0.11	3.25 ±0.14	3.27 ±0.20	3.40 ±0.15	3.47 ±0.18	3.38 ±0.18	3.51 ±0.18	3.56 ±0.24
P_{Cl} (mEq/l)	121.40 ±3.08	119.20 ±4.15	115.00 ±2.81	119.40 ±3.96	118.40 ±1.29	118.00 ±0.32	119.40 ±3.14	121.60 ±3.03	119.60 ±2.94
$U_{Na}V$ (μEq/min/gm-kw)	1.13 ±0.33	0.68* ±0.27	0.61* ±0.21	0.59* ±0.19	0.61 ±0.16	0.71 ±0.09	0.75 ±0.09	0.95 ±0.12	1.09 ±0.14
$U_{K}V$ (μEq/min/gm-kw)	0.31 ±0.06	0.29 ±0.06	0.33 ±0.08	0.41 ±0.11	0.39 ±0.09	0.48 ±0.14	0.45 ±0.16	0.49 ±0.12	0.52 ±0.14

Table 5 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
$U_{Cl}V$	0.94	0.58	0.51	0.39	0.38	0.44	0.40	0.49	0.59
(μEq/min/gm-kw)	±0.37	±0.28	±0.26	±0.17	±0.18	±0.19	±0.16	±0.14	±0.14
FE_{Na}	1.51	0.91*	0.79*	0.81*	0.85*	0.96	1.20	1.39	1.39
(%)	±0.38	±0.39	±0.27	±0.24	±0.23	±0.17	±0.14	±0.15	±0.12
FE_{K}	19.62	18.96	19.69	23.32	23.09	26.02	29.54	30.96	26.12
(%)	±3.32	±3.56	±1.93	±3.73	±5.35	±8.06	±9.75	±7.87	±5.57
FE_{Cl}	1.57	0.98	0.85	0.68	0.69	0.77	0.82	0.92	0.88
(%)	±0.59	±0.52	±0.43	±0.29	±0.32	±0.32	±0.32	±0.28	±0.16

Results are given as mean ± SEM. *$P < 0.05$ compare with control.

TABLE 6 Effects of decoction of C. citratus (1.25gm/kg) feeding on plasma osmolality, urinary excretion rate and fractional excretion of osmolality, osmolar clearance and free water clearance in five dogs (group 2).

Parameter	control	after feeding							
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{osm}	309.20	316.60	305.40	310.20	311.20	299.00	298.80	325.60	320.40
(mOsm/kg)	±6.18	±6.57	±5.88	±6.10	±5.96	±5.32	±5.34	±7.13	±7.09
$U_{osm}V$	3.47	2.61*	2.71*	3.13	2.64	3.13	3.00	3.32	3.55
(μOsm/min/gm-kw)	±0.74	±0.73	±0.54	±0.28	±0.32	±0.21	±0.28	±0.59	±0.58
FE_{osm}	2.05	1.47*	1.62	1.92	1.58*	1.85	2.12	2.04	2.02
(%)	±0.08	±0.19	±0.21	±0.28	±0.14	±0.17	±0.21	±0.24	±0.32
C_{osm}	9.80	7.08	7.87	9.33	7.68	9.68	9.22	9.72	10.65
(μl/min/gm-kw)	±0.93	±1.10	±0.90	±0.64	±0.38	±0.83	±1.14	±1.98	±2.09
C_{H_2O}	3.62	3.39	3.74	0.37	0.08	-1.04	-2.75	-3.19	-2.89
(μl/min/gm-kw)	±4.64	±4.21	±5.59	±3.91	±2.72	±2.96	±1.72	±1.53	±1.86

Results are given as mean ± SEM. *$P < 0.05$ compare with control.

TABLE 7 Effect of decoction of C. citratus (2.5 gm/kg) feeding on MAP, HR, Hct, V, RPF, GFR, FF, and RVR in five dogs (group 3).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
MAP	98.33	98.00	103.33	103.99	104.67	107.33	103.33	102.33	100.00
(mmHg)	±10.11	±9.42	±11.37	±9.73	±9.79	±9.91	±12.24	±13.03	±10.63
HR	127.80	117.00	109.40	109.40	107.80	107.40	109.40	107.80	106.60
(beat/min)	±7.36	±6.25	±8.17	±9.91	±11.00	±11.55	±12.81	±11.17	±12.15
Hct	25.40	26.00	26.20	26.40	26.00	26.20	26.00	26.00	25.80
(%)	±4.06	±3.77	±3.73	±3.56	±3.65	±3.61	±3.86	±3.65	±3.18
V	9.69	8.78	8.94	8.77	7.33	7.77	7.20	6.94	6.53
(μl/min/gm-kw)	±4.58	±4.54	±4.84	±4.28	±2.65	±2.62	±2.03	±1.93	±1.90
RPF	2.86	2.12*	1.99*	2.09*	2.15*	2.33	2.33	2.52	2.50
(ml/min/gm-kw	±0.58	±0.38	±0.31	±0.41	±0.49	±0.58	±0.68	±0.71	±0.76
GFR	0.44	0.40	0.46	0.43	0.37	0.37	0.37	0.38	0.40
(ml/min/gm-kw)	±0.13	±0.10	±0.11	±0.13	±0.09	±0.09	±0.10	±0.10	±0.13

Table 7 (continue).

Parameter	control	after feeding							
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FF	15.86	17.68	22.14	19.48	16.90	16.28	16.50	16.32	16.74
(%)	±2.65	±2.57	±3.27	±3.55	±2.12	±2.90	±2.37	±3.93	±4.13
RVR	26.05	37.79**	39.74*	41.38*	43.39*	42.66	44.57	41.20	47.06
(mmHg/ml/min/gm)	±5.23	±6.16	±3.41	±7.12	±9.40	±9.78	±11.24	±11.42	±16.61

Results are given as mean ± SEM. *P < 0.05, **P < 0.01 compare with control.

TABLE 8 Effects of decoction of C. citratus (2.5 gm/kg) feeding on plasma concentration, urinary excretion rate and fractional excretion of sodium, potassium and chloride in five dogs (group 3).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{Na}	143.00	144.00	142.80	145.20	141.40	141.20	145.20	140.80	139.80
(mEq/l)	±1.30	±2.65	±1.43	±2.58	±1.75	±1.28	±3.02	±2.48	±1.02
P_{K}	3.09	3.20	3.38	3.59	3.84	3.82	3.86	3.57	3.55
(mEq/l)	±0.35	±0.33	±0.34	±0.55	±0.61	±0.54	±0.61	±0.47	±0.42
P_{Cl}	116.60	118.60	121.40	122.00	119.60	116.80	117.40	120.00	115.60
(mEq/l)	±3.75	±2.60	±2.46	±2.26	±4.53	±3.51	±3.84	±3.78	±3.50
$U_{Na}V$	1.59	1.24	0.94	0.99	0.96	1.12	1.12	1.12	1.09
(μEq/min/gm-kw)	±0.81	±0.63	±0.47	±0.48	±0.42	±0.49	±0.48	±0.46	±0.49
$U_{K}V$	0.27	0.26	0.33	0.38	0.37	0.45	0.45	0.49	0.48
(μEq/min/gm-kw)	±0.06	±0.06	±0.08	±0.11	±0.09	±0.11	±0.11	±0.12	±0.14
$U_{Cl}V$	1.54	1.09	0.77	0.84	0.78	0.89	0.89	0.87	0.89
(μEq/min/gm-kw)	±0.86	±0.61	±0.45	±0.48	±0.42	±0.49	±0.47	±0.44	±0.46

Table 8 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FE_{Na}	2.04	1.73	1.23	1.37	1.60	1.99	1.90	1.98	1.95
(%)	±0.60	±0.65	±0.40	±0.36	±0.42	±0.59	±0.52	±0.45	±0.46
FE_{K}	24.86	23.11	22.20	26.67	28.06	34.76	35.48	39.92	41.91
(%)	±4.96	±2.69	±1.51	±2.39	±2.85	±4.61	±5.11	±4.07	±6.13
FE_{Cl}	2.33	1.69	1.07	1.16	1.36	1.71	1.60	1.57	1.64
(%)	±0.86	±0.81	±0.52	±0.52	±0.60	±0.83	±0.72	±0.63	±0.62

Results are given as mean ± SEM.

TABLE 9 Effects of decoction of C. citratus (2.5 gm/kg) feeding on plasma osmolality, urinary excretion rate and fractional excretion of osmolality, osmolar clearance and free water clearance in five dogs (group 3).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{osm}	285.00	286.80	288.80	287.60	286.40	286.00	286.40	297.00	289.80
(mOsm/kg)	±2.78	±3.43	±3.68	±3.96	±3.86	±3.62	±3.01	±10.90	±5.08
$U_{osm}V$	5.17	4.31	4.02	4.03	3.75	4.28	4.03	4.09	4.50
(μOsm/min/gm-kw)	±2.30	±1.86	±1.63	±1.67	±1.42	±1.57	±1.48	±1.39	±1.79
FE_{osm}	3.55	3.32	2.72	3.03	3.30	3.94	3.68	3.75	3.58
(%)	±0.80	±0.84	±0.66	±0.72	±0.65	±0.85	±0.68	±0.67	±0.58
C_{osm}	18.34	21.29	19.47	19.68	17.93	20.66	31.44	18.98	19.01
(μl/min/gm-kw)	±8.20	±6.51	±5.63	±5.92	±5.01	±5.83	±10.79	±5.37	±5.58
C_{H_2O}	-8.66	-6.55	-5.22	-5.54	-6.06	-7.44	-6.93	-7.34	-7.26
(μ//min/gm-kw)	±4.75	±4.31	±3.78	±3.63	±3.09	±3.50	±3.55	±3.79	±3.77

Results are given as mean ± SEM.

TABLE 10 Effects of decoction of C. citratus (5 gm/kg) feeding on MAP, HR, Hct, V, RPF, GFR, FF, and RVR in five dogs (group 4).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
MAP	102.17	108.67	116.68	112.67	114.33	116.67	111.66	109.67	110.66
(mmHg)	±2.42	±4.13	±4.31	±5.29	±6.18	±7.05	±11.52	±12.63	±10.55
HR	123.80	118.00	114.60	113.00	118.00	116.20	126.80	124.80	124.60
(beat/min)	±10.09	±9.40	±9.59	±12.43	±16.65	±16.67	±15.98	±14.61	±15.59
Hct	34.20	34.40	35.00	34.80	35.20	35.20	35.00	35.60	35.40
(%)	±1.07	±0.91	±1.14	±1.39	±1.77	±1.83	±2.47	±2.29	±2.42
V	12.08	11.27	12.43	16.69	17.47	17.45	15.88	16.16	17.36
(μl/min/gm-kw)	±1.61	±3.67	±3.20	±3.92	±3.79	±3.68	±3.62	±4.15	±3.87
RPF	4.74	4.09*	3.86*	4.10	4.04	4.29	4.39	4.44	4.57
(ml/min/gm-kw)	±0.57	±0.68	±0.79	±0.83	±0.86	±1.18	±1.26	±1.32	±1.40
GFR	0.59	0.57*	0.62	0.63	0.65	0.61	0.48	0.67	0.60
(ml/min/gm-kw)	±0.08	±0.08	±0.06	±0.08	±0.08	±0.07	±0.07	±0.07	±0.09

Table 10 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FF (%)	13.58 ±3.10	15.68 ±3.66	19.58 ±4.49	16.44 ±1.72	19.24 ±4.20	17.62 ±3.46	14.72 ±3.68	22.14 ±6.77	17.34 ±5.11
RVR (mmHg/ml/min/gm-kw)	14.97 ±1.51	19.55 ±3.29	22.99* ±4.12	20.90 ±3.81	21.84 ±5.00	23.91 ±6.62	23.55 ±7.43	22.99 ±7.26	22.41 ±6.89

Results are given as mean ± SEM. *P < 0.05 compare with control.

TABLE 11 Effects of decoction of C. citratus (5 gm/kg) feeding on plasma concentration, urinary excretion rate and fractional excretion of sodium, potassium and chloride in five dogs (group 4).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{Na} (mEq/l)	141.20 ±2.31	141.40 ±1.63	143.60 ±1.60	143.40 ±1.94	142.20 ±1.93	143.00 ±1.87	142.20 ±1.72	141.40 ±2.36	144.00 ±1.73
P_{K} (mEq/l)	3.39 ±0.20	3.50 ±0.25	3.72 ±0.16	3.91 ±0.27	3.84 ±0.27	3.91 ±0.23	3.74 ±0.18	3.73 ±0.11	3.68 ±0.10
P_{Cl} (mEq//)	114.40 ±2.09	115.00 ±1.27	114.20 ±2.48	118.80 ±1.69	116.40 ±1.96	116.60 ±1.29	116.60 ±1.66	117.40 ±1.25	116.40 ±2.69
$U_{Na}V$ (μEq/min/gm-kw)	1.75 ±0.16	0.99 ±0.28	0.87* ±0.24	1.15 ±0.23	1.47 ±0.29	1.83 ±0.50	1.82 ±0.52	1.93 ±0.60	2.22 ±0.61
$U_{K}V$ (μEq/min/gm-kw)	0.61 ±0.11	0.56 ±0.13	0.69 ±0.11	1.00 ±0.21	1.10 ±0.25	1.19 ±0.33	1.07 ±0.29	1.40 ±0.27	1.05 ±0.18
$U_{Cl}V$ (μEq/min/gm-kw)	1.76 ±0.35	0.81 ±0.15	0.64 ±0.17	0.86 ±0.18	1.01 ±0.33	1.67 ±0.72	1.48 ±0.53	1.63 ±0.62	1.72 ±0.61

Table 11 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FE_{Na}	2.33	1.28	0.95*	1.46	1.66	2.12	2.56	1.87	2.85
(%)	±0.41	±0.38	±0.22	±0.37	±0.30	±0.46	±0.62	±0.48	±0.75
FE_{K}	30.74	27.74	29.57	43.46	44.31	50.01	59.61	40.47	52.34
(%)	±2.11	±5.07	±2.19	±9.14	±5.78	±9.52	±13.07	±7.26	±10.00
FE_{Cl}	3.11	1.25	0.86	1.29	1.29	2.33	2.61	1.92	0.83
(%)	±0.87	±0.18	±0.19	±0.33	±0.38	±0.83	±0.89	±0.63	±0.95

Results are given as mean ± SEM. *$P < 0.05$ compare with control.

TABLE 12 Effects of decoction of C. citratus (5 gm/kg) feeding on plasma osmolality, urinary excretion rate and fractional excretion of osmolality, osmolar clearance and free water clearance in five dogs (group 4).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{osm} (mOsm/kg)	290.40 ±2.25	293.20 ±2.67	291.20 ±1.83	290.80 ±2.18	291.40 ±2.94	290.00 ±1.52	289.60 ±1.40	292.00 ±1.82	289.20 ±1.16
$U_{osm}V$ (μOsm/min/gm-kw)	5.95 ±0.37	4.20 ±0.73	4.36 ±0.61	5.30 ±0.52	5.77 ±0.79	6.51 ±1.27	6.16 ±1.39	6.35 ±1.48	7.02 ±1.35
FE_{osm} (%)	3.74 ±0.44	2.54 ±0.35	2.37 ±0.11	3.12 ±0.51	3.13 ±0.30	3.70 ±0.53	4.35 ±0.74	3.08 ±0.49	4.43 ±0.86
C_{osm} (μl/min/gm-kw)	20.56 ±1.38	14.30 ±2.41	14.97 ±2.06	18.24 ±1.83	19.88 ±2.82	22.46 ±4.43	21.30 ±4.88	21.55 ±4.99	24.21 ±4.56
C_{H_2O} (μl/min/gm-kw)	-8.48 ±1.39	-3.03 ±2.77	-4.77 ±5.11	-1.55 ±5.03	-2.41 ±5.15	-5.01 ±4.55	-5.41 ±3.71	-5.46 ±3.60	-6.85 ±3.57

Results are given as mean ± SEM.

TABLE 13 Effects of decoction of C. citratus (10 gm/kg) feeding on MAP, HR, Hct, V, RPF, GFR, FF, and RVR in five dogs (group 5).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
MAP	91.84	87.00	95.00	105.00	105.33	109.33	103.00	98.00	99.17
(mmHg)	±4.90	±7.06	±10.08	±10.98	±10.88	±9.39	±9.29	±5.95	±5.11
HR	122.20	120.00	110.80	109.60**	103.4***	110.40*	119.00	127.20	123.00
(beat/min)	±5.51	±6.54	±6.09	±5.84	±6.98	±3.71	±5.81	±5.57	±5.97
Hct	29.40	31.20*	32.60*	33.40**	34.20*	35.00*	34.80*	34.80*	37.00
(%)	±1.99	±1.88	±1.97	±1.86	±1.93	±2.30	±2.29	±2.11	±2.42
V	12.48	4.59*	3.46*	3.26*	3.34*	3.73	3.46	3.95	5.75
(μl/min/gm-kw)	±3.19	±1.86	±1.38	±1.01	±0.89	±0.99	±0.94	±1.08	±1.80
RPF	2.99	2.13***	1.87***	1.83***	1.98**	1.94***	1.86*	1.86*	1.85**
(ml/min/gm-kw)	±0.48	±0.43	±0.41	±0.48	±0.52	±0.45	±0.35	±0.36	±0.41
GFR	0.47	0.22*	0.29*	0.31	0.42	0.42	0.30	0.33	0.35
(ml/min/gm-kw)	±0.11	±0.04	±0.07	±0.03	±0.09	±0.08	±0.07	±0.08	±0.08

Table 13 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FF (%)	16.64 ±3.12	10.92 ±1.12	16.44 ±2.28	21.30 ±4.96	24.72 ±4.60	26.74 ±6.49	19.44 ±6.26	20.26 ±6.08	21.18 ±4.94
RVR (mmHg/ml/min/gm-kw)	23.54 ±3.12	34.86* ±6.18	44.08* ±9.63	53.62 ±15.07	47.72 ±12.07	48.11 ±11.54	45.68 ±10.99	43.30 ±10.26	39.68 ±10.00

Results are given as mean ± SEM. *P < 0.05, **P < 0.01, ***P < 0.005 compare with control.

TABLE 14 Effects of decoction of *C. citratus* (10 gm/kg) feeding on plasma concentration, urinary excretion rate and fractional excretion of sodium, potassium and chloride in five dogs (group 5).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{Na}	143.00	145.60	144.80	148.40	146.60	147.80	149.00	147.00	146.00
(mEq/l)	±1.67	±0.68	±0.20	±1.69	±0.68	±1.98	±2.00	±1.38	±1.47
P_K	3.02	2.99	3.24*	3.49*	3.68*	3.85*	3.94	4.14	4.42
(mEq/l)	±0.16	±0.18	±0.19	±0.22	±0.28	±0.34	±0.37	±0.42	±0.56
P_{Cl}	113.60	117.40	117.40	116.00	118.80	115.60	116.40	121.00	114.75
(mEq/l)	±1.50	±1.60	±0.40	±2.21	±0.97	±1.21	±1.86	±1.95	±0.95
$U_{Na}V$	1.33	0.47*	0.35*	0.27*	0.33*	0.47*	0.57*	0.62*	0.81
(μEq/min/gm-kw)	±0.35	±0.26	±0.24	±0.16	±0.21	±0.24	±0.27	±0.25	±0.38
U_KV	0.41	0.15***	0.20*	0.21*	0.29	0.45	0.50	0.63	0.77
(μEq/min/gm-kw)	±0.58	±0.03	±0.07	±0.06	±0.08	±0.11	±0.15	±0.21	±0.24
$U_{Cl}V$	1.18	0.39	0.25*	0.19*	0.17*	0.25*	0.24*	0.38	0.60
(μEq/min/gm-kw)	±0.33	±0.25	±0.18	±0.12	±0.11	±0.17	±0.13	±0.17	±0.29

Table 14 (continue).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
FE_{aa}	1.99	1.21	0.61*	0.56*	0.40*	0.66*	1.07	1.09	1.37
(%)	±0.28	±0.46	±0.27	±0.30	±0.16	±0.22	±0.33	±0.24	±0.35
FE_{g}	22.49	15.75	14.44	13.13	12.95	21.38	32.88	34.98	45.46
(%)	±5.88	±4.13	±4.13	±4.75	±3.55	±5.96	±8.94	±9.79	±7.15
FE_{cl}	2.31	1.24	0.52	0.51	0.26*	0.39	0.53	0.77	1.30
(%)	±0.62	±0.59	±0.25	±0.29	±0.11	±0.19	±0.21	±0.28	±0.50

Results are given as mean ± SEM. $^{*}P < 0.05$, $^{**}P < 0.01$, $^{***}P < 0.005$ compare with control.

TABLE 15 Effects of decoction of C. citratus (10 gm/kg) feeding on plasma osmolality, urinary excretion rate and fractional excretion of osmolality, osmolar clearance and free water clearance in five dogs (group 5).

Parameter	control	after feeding						
		0.5 hr	1 hr	1.5 hr	2 hr	2.5 hr	3 hr	3.5 hr	4 hr
P_{osm} (mOsm/kg)	295.20 ±3.81	296.60 ±3.96	294.60 ±3.20	296.40 ±2.71	302.80 ±4.20	300.00 ±3.35	301.40 ±4.12	303.40 ±3.25	302.25 ±6.88
$U_{osm}V$ (μOsm/min/gm-kw)	4.42 ±0.96	1.60* ±0.65	1.69* ±0.75	1.55* ±0.45	1.98* ±0.67	2.37* ±0.71	2.34* ±0.72	2.74 ±0.81	3.68 ±1.13
FE_{osm} (%)	3.22 ±0.38	2.12 ±0.57	1.74* ±0.33	1.69* ±0.41	1.49 ±0.19	1.79 ±0.21	2.47 ±0.30	2.55 ±0.28	3.31 ±0.46
C_{osm} (μl/min/gm-kw)	14.96 ±3.24	5.15** ±2.31	5.75* ±2.55	5.26* ±1.55	6.59* ±2.28	7.95* ±2.43	7.82* ±2.45	9.05 ±2.72	12.32 ±3.85
C_{H_2O} (μl/min/gm-kw)	-2.48 ±4.27	-0.56 ±1.58	-2.20 ±1.40	-2.00 ±1.12	-3.22 ±1.57	-4.22 ±1.56	-4.36 ±1.68	-5.09 ±1.75	-6.58 ±2.19

Results are given as mean ± SEM. *P < 0.05, **P < 0.01 compare with control.

BIOGRAPHY

Miss Promsuk Jutabha was born on 12th September, 1968 at Sattahip, Chonburi. She received her high school certificate from Wat-Nongkhaem secondary school, Bangkok in 1986 and graduated with B.Sc. (Nursing and midwifery) from the faculty of Nursing, Mahidol University in 1990. At the present, she is a nurse in the critical respiratory care unit, Siriraj hospital.