

Online Appendix Table A: Inclusion criteria

1. Informed consent (the protocol was approved by the Research Ethics Board at the Hospital for Sick Children, Toronto, Canada)
2. Duration of type 1 DM ≥ 5 years, age ≥ 16 years
3. Tanner Stage 4–5 puberty
4. Normoalbuminuria [albumin excretion rate (AER) < 20 $\mu\text{g}/\text{min}$ on 2/3 overnight urine collections obtained during the month before study]
5. Normal clinic blood pressure
6. No microvascular disease
7. Non-smokers
8. No regular medication
9. Dietary sodium (> 150 mmol/day) and protein (< 1.5 gm/kg/day) within the desired range
10. Follicular phase of the menstrual cycle (determined by counting days and by measuring 17β -estradiol levels – see electronic Table B)
11. Not currently using hormonal contraceptive agents
12. Absence of chronic illness

Online Appendix Table B: Clinical Characteristics by Filtration Status (mean \pm SD)

Parameter	Hyperfilterers	Normofilterers
Number of subject	13	11
Gender (males/females)	7/6	6/5
Age (years)	18.4 \pm 1.8	19.6 \pm 2.5
Diabetes duration (years)	14.2 \pm 2.1	15.8 \pm 2.5
Weight (kg)	75.9 \pm 12.5	75.0 \pm 11.8
Body mass index (kg/m ²)	26.3 \pm 4.2	25.5 \pm 2.4
Albumin excretion rate (mg/day)	4.4 \pm 2.6	3.5 \pm 2.5
Glomerular filtration rate (ml/min/1.73m ²)	148 \pm 12	125 \pm 9*
Effective renal plasma flow ((ml/min/1.73m ²)	676 \pm 86	671 \pm 57
Renal vascular resistance (mmHg/ml/min)	0.066 \pm 0.013	0.068 \pm 0.014
Hemoglobin A _{1c} (%)	8.9 \pm 1.6	8.4 \pm 0.7
Sodium intake (mmol/24 h)	295 \pm 55	286 \pm 90
Protein intake (g/kg/day)	0.84 \pm 0.37	0.83 \pm 0.40
17β -estradiol (pmol/L)	113 \pm 30	159 \pm 57
Ambulatory blood pressure:		
Pre-celecoxib		
24-hour SBP (mmHg)	117 \pm 9	116 \pm 7
24-hour DBP (mmHg)	67 \pm 6	66 \pm 5
24-hour heart rate (bpm)	77 \pm 8	74 \pm 8
Post-celecoxib		
24-hour SBP (mmHg)	117 \pm 9	117 \pm 6
24-hour DBP (mmHg)	67 \pm 6	68 \pm 4
24-hour heart rate (bpm)	75 \pm 10	74 \pm 9

Values are means \pm SD; n = no. of subjects; Glomerular filtration rate was determined by inulin clearance; Effective renal plasma flow was determined by paraaminohippurate clearance; renal vascular resistance was determined by mean arterial pressure divided by [effective renal plasma flow/(1-hematocrit)]

* p=0.0001 for glomerular filtration rate in hyperfilterers vs. normofilterers at baseline