SUPPLEMENTAL MATERIAL

Supplemental Table 1. Associations of continuous estimated glomerular filtration rate (eGFR) with individual gait variables (additional covariates included).

Supplemental Table 2. Associations of continuous estimated glomerular filtration rate (eGFR) with factor analysis gait domains (additional covariates included).

Supplemental Table 3. Rotated component loadings of eight gait variables using principal component analysis.

Supplemental Table 4. Associations of continuous estimated glomerular filtration rate (eGFR) with principal component analysis gait domains.

Supplemental Table 5. Associations of continuous estimated glomerular filtration rate (eGFR) with factor analysis gait domains after exclusion of diabetes or neuropathy.

Supplemental Table 1. Associations of continuous estimated glomerular filtration rate (eGFR) with individual gait variables (additional covariates included)

Gait variable	eGFR ≥60 (n=184) (Per 10 ml/min/1.73 m^2 lower eGFR)		eGFR <60 (n=119)	
	Coefficient (95% CI)	***P***	**Coefficient (95% CI)**	***P***
	Walking-while-talking			
Speed, cm/s	-0.6 (-3.5, 2.3)	0.69	-3.5 (-6.7, -0.3)	0.03
Cadence, steps/min	-0.9 (-3.5, 1.6)	0.45	-1.7 (-4.5, 1.1)	0.22
Step length, cm	0.3 (-0.9, 1.5)	0.63	-1.6 (-3.0, -0.2)	0.02
Swing, %	0.4 (-0.2, 0.9)	0.18	-0.9 (-1.5, -0.3)	0.006
Stance, %	-0.4 (-0.9, 0.2)	0.18	0.9 (0.3, 1.5)	0.005
Double support, %	-0.2 (-1.1, 0.7)	0.65	1.2 (0.3, 2.2)	0.01
Step time SD, s	0.02 (-0.01, 0.1)	0.28	0.003 (-0.03, 0.04)	0.87
Swing time SD, s	0.01 (-0.01, 0.02)	0.24	-0.01 (-0.02, 0.01)	0.35
	Dual-task cost			
Speed DTC, %	-0.4 (-2.9, 2.2)	0.79	-1.7 (-4.6, 1.1)	0.22
Cadence DTC, %	-0.7 (-3.0, 1.5)	0.52	-1.1 (-3.6, 1.3)	0.37
Step length DTC, %	0.0001 (-1.5, 1.5)	1.00	-0.7 (-2.4, 0.9)	0.39
Swing DTC, %	1.0 (-0.4, 2.3)	0.16	-1.5 (-3.0, -0.05)	0.04
Stance DTC, %	-0.5 (-1.1, 0.2)	0.18	0.7 (-0.002, 1.5)	0.051
Double support DTC, %	-0.7 (-2.4, 1.0)	0.43	1.6 (-0.3, 3.4)	0.10
Step time SD DTC, % (n=300)	153.7 (-87.6, 395.0)	0.21	-26.5 (-291.3, 238.3)	0.84
Swing time SD DTC, % (n=302)	71.6 (-12.0, 155.2)	0.09	-46.4 (-138.4, 45.6)	0.32

Multivariable linear regression adjusting for age, sex, race, education, body mass index, neuropathy, number of comorbidities, number of medications, diuretic use, acidosis, hemoglobin, mean arterial pressure, and performance of exercise in the past 30 days. Linear splines for eGFR were constructed with knot placed at 60 ml/min/1.73 m^2. Dual-task cost = (walking-while-talking dual-task gait variable – walking-only single-task gait variable) / (walking-only single-task gait variable) × 100%. 95% CI, 95% confidence interval. DTC, dual-task cost. SD, standard deviation.

Supplemental Table 2. Associations of continuous estimated glomerular filtration rate (eGFR) with factor analysis gait domains (additional covariates included)

Gait domain	eGFR ≥60		eGFR <60	
	(Per 10 ml/min/1.73 m^2 lower eGFR)			
	Coefficient (95% CI)	***P***	**Coefficient (95% CI)**	***P***
	Walking-while-talking			
	(n=184)		(n=119)	
Rhythm	0.1 (-0.04, 0.2)	0.24	-0.2 (-0.3, -0.1)	0.004
Pace	-0.1 (-0.2, 0.1)	0.38	-0.04 (-0.2, 0.1)	0.63
Variability	0.1 (-0.1, 0.2)	0.28	-0.04 (-0.2, 0.1)	0.64
	Dual-task cost			
	(n=181)		(n=118)	
Rhythm DTC	0.1 (-0.04, 0.2)	0.15	-0.2 (-0.3, -0.01)	0.04
Pace DTC	-0.1 (-0.2, 0.1)	0.32	-0.02 (-0.2, 0.1)	0.82
Variability DTC	0.1 (-0.05, 0.2)	0.20	-0.03 (-0.2, 0.1)	0.66

Multivariable linear regression adjusting for age, sex, race, education, body mass index, neuropathy, number of comorbidities, number of medications, diuretic use, acidosis, hemoglobin, mean arterial pressure, and performance of exercise in the past 30 days was performed. Linear splines for eGFR were constructed with knot placed at 60 ml/min/1.73 m^2. 95% CI, 95% confidence interval. DTC, dual-task cost.

Supplemental Table 3. Rotated component loadings of eight gait variables using principal component analysis

Gait variable	Gait Domain		
	Walking-while-talking (n=330)		
	Rhythm	**Pace**	**Variability**
Swing, %	**0.52**	-0.01	0.09
Step length, cm	**0.40**	-0.01	-0.33
Double support, %	**-0.45**	-0.09	0.11
Stance, %	**-0.52**	0.01	-0.09
Cadence, steps/min	-0.04	**0.73**	0.20
Speed, cm/s	0.21	**0.50**	-0.06
Swing time SD, s	0.24	**-0.45**	0.37
Step time SD, s	0.02	0.06	**0.83**
Variance Explained, %	44	27	17
	Dual-task cost (n=326)		
	Rhythm DTC	**Pace DTC**	**Variability DTC**
Swing DTC, %	**0.55**	-0.03	0.01
Double support DTC, %	**-0.42**	-0.14	0.14
Stance DTC, %	**-0.55**	0.05	-0.02
Cadence DTC, %	0.02	**0.63**	0.13
Speed DTC, %	0.14	**0.57**	-0.04
Swing time SD DTC, %	0.31	**-0.48**	0.17
Step time SD DTC, %	0.13	0.10	**0.86**
Step length DTC, %	0.29	0.10	**-0.44**
Variance Explained (%)	38	30	16

Principal component analysis was performed with varimax rotation. The highest loading variables are in bold. DTC, dual-task cost. SD, standard deviation. Step time SD DTC, n=327; swing time SD DTC, n=329.

Supplemental Table 4. Associations of continuous estimated glomerular filtration rate (eGFR) with principal component analysis gait domains

Gait domain	eGFR ≥60		eGFR <60	
	(Per 10 ml/min/1.73 m^2 lower eGFR)			
	Coefficient (95% CI)	***P***	**Coefficient (95% CI)**	***P***
	Walking-while-talking			
	(n=196)		(n=134)	
Rhythm	0.2 (-0.03, 0.4)	0.09	-0.4 (-0.6, -0.2)	<0.001
Pace	-0.04 (-0.2, 0.1)	0.63	-0.1 (-0.3, 0.1)	0.30
Variability	0.1 (-0.1, 0.2)	0.29	-0.002 (-0.2, 0.1)	0.98
	Dual-task cost			
	(n=193)		(n=133)	
Rhythm DTC	0.2 (0.01, 0.4)	0.04	-0.3 (-0.5, -0.1)	0.01
Pace DTC	-0.03 (-0.2, 0.2)	0.75	-0.1 (-0.3, 0.2)	0.60
Variability DTC	0.1 (-0.1, 0.2)	0.38	-0.01 (-0.2, 0.1)	0.86

Multivariable linear regression adjusting for age, sex, race, education, body mass index, neuropathy, number of comorbidities, and number of medications was performed. Linear splines for eGFR were constructed with knot placed at 60 ml/min/1.73 m^2. 95% CI, 95% confidence interval. DTC, dual-task cost.

Supplemental Table 5. Associations of continuous estimated glomerular filtration rate (eGFR) with factor analysis gait domains after exclusion of diabetes or neuropathy

Gait domain	EXCLUDING PARTICIPANTS WITH DIABETES				EXCLUDING PARTICIPANTS WITH NEUROPATHY			
	eGFR ≥60		eGFR <60		eGFR ≥60		eGFR <60	
	(Per 10 ml/min/1.73 m^2 lower eGFR)				(Per 10 ml/min/1.73 m^2 lower eGFR)			
	Coefficient (95% CI)	*P*	Coefficient (95% CI)	*P*	Coefficient (95% CI)	*P*	Coefficient (95% CI)	*P*
	Walking-while-talking				**Walking-while-talking**			
	(n=160)		(n=105)		(n=174)		(n=119)	
Rhythm	0.1 (0.02, 0.2)	0.02	-0.2 (-0.3, -0.1)	0.001	0.1 (-0.002, 0.2)	0.054	-0.2 (-0.3, -0.1)	0.001
Pace	-0.04 (-0.2, 0.1)	0.56	0.02 (-0.1, 0.2)	0.82	-0.04 (-0.2, 0.1)	0.54	-0.01 (-0.1, 0.1)	0.88
Variability	0.1 (-0.04, 0.3)	0.15	-0.1 (-0.2, 0.1)	0.36	0.03 (-0.1, 0.1)	0.51	-0.04 (-0.1, 0.1)	0.38
	Dual-task cost				**Dual-task cost**			
	(n=158)		(n=104)		(n=171)		(n=118)	
Rhythm DTC	0.1 (-0.003, 0.3)	0.055	-0.2 (-0.3, -0.03)	0.02	0.1 (-0.02, 0.2)	0.09	-0.1 (-0.3, -0.01)	0.03
Pace DTC	-0.05 (-0.2, 0.1)	0.51	0.01 (-0.1, 0.2)	0.85	-0.1 (-0.2, 0.1)	0.46	-0.001 (-0.1, 0.1)	0.99
Variability DTC	0.1 (-0.1, 0.2)	0.27	-0.03 (-0.2, 0.1)	0.67	0.02 (-0.05, 0.1)	0.57	-0.03 (-0.1, 0.05)	0.50

Multivariable linear regression adjusting for age, sex, race, education, body mass index, neuropathy, number of comorbidities, and number of medications was performed. Linear splines for eGFR were constructed with knot placed at 60 ml/min/1.73 m^2. 95% CI, 95% confidence interval. DTC, dual-task cost.