Web Table 1: Spearman Correlations of Sedentary Tasks, the CARDIA Study (2010-2011), N=3211

	Total	Television	Computer	Paperwork	Reading	Phone
Sedentary Tasks						
Television	**0.633**					
Computer	**0.467**	0.068				
Paperwork	**0.456**	0.078	**0.395**			
Reading	**0.465**	**0.130**	**0.121**	**0.240**		
Phone	**0.527**	**0.217**	**0.187**	**0.307**	**0.268**	
Car	**0.458**	**0.117**	**0.123**	**0.200**	**0.123**	**0.276**

Bolded values are statistically significant ($P < 0.05$).

Web Table 2: Single-Variable, Partition, and Isotemporal Substitution Models per 2-Hour/Day Increase in Six Sedentary Tasks and Waist Circumference, the CARDIA Study (2010-2011)

Analysis Method	Television		Computer		Paperwork		Reading		Phone		Car	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Single[b]	**0.05**	**0.03, 0.08**	**0.02**	**0.00, 0.05**	0.02	-0.02, 0.05	0.01	-0.01, 0.04	0.01	-0.02, 0.04	0.01	-0.02, 0.03
Partition[c]	**0.05**	**0.03, 0.07**	0.02	-0.01, 0.04	0.00	-0.04, 0.04	0.00	-0.03, 0.03	-0.01	-0.05, 0.02	-0.00	-0.03, 0.03
Isotemporal[d]												
Replace Television	Omit		**-0.03**	**-0.07, -0.00**	**-0.05**	**-0.09, -0.01**	**-0.05**	**-0.09, -0.01**	**-0.06**	**-0.11, -0.02**	**-0.05**	**-0.09, -0.02**
Replace Computer	**0.03**	**0.00, 0.07**	Omit		-0.02	-0.07, 0.03	-0.02	-0.05, 0.02	-0.03	-0.07, 0.01	-0.02	-0.06, 0.02
Replace Paperwork	**0.05**	**0.01, 0.09**	0.02	-0.03, 0.07	Omit		0.00	-0.05, 0.05	-0.01	-0.07, 0.04	-0.00	-0.05, 0.04
Replace Reading	**0.05**	**0.01, 0.09**	-0.02	-0.02, 0.05	-0.00	-0.05, 0.05	Omit		-0.01	-0.06, 0.04	-0.00	-0.04, 0.04
Replace Phone	**0.06**	**0.02, 0.11**	0.03	-0.01, 0.07	0.01	-0.04, 0.07	0.01	-0.04, 0.06	Omit		-0.02	-0.08, 0.04
Replace Car	**0.05**	**0.02, 0.09**	0.02	-0.02, 0.06	0.00	-0.04, 0.05	0.00	-0.04, 0.04	0.02	-0.04, 0.08	Omit	

Data are standardized β-coefficients (95% CI), N=3211. Models adjusted for center, age, sex, race, education, unemployment, health insurance, smoking, alcohol consumption, physical activity, fast food and sugar sweetened beverage consumption, depressive symptoms and body mass index. Bolded values are statistically significant ($P < 0.05$).

Web Table 3: Single-Variable, Partition, and Isotemporal Substitution Models per 2-Hour/Day Increase in Six Sedentary Tasks and Average Blood Pressure, the CARDIA Study (2010-2011)

Analysis Method	Television		Computer		Paperwork		Reading		Phone		Car	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Single[b]	**0.05**	**0.00, 0.10**	**-0.07**	**-0.13, -0.02**	0.03	-0.05, 0.12	0.03	-0.04, 0.09	0.03	-0.04, 0.11	0.01	-0.05, 0.07
Partition[c]	**0.05**	**0.03, 0.07**	0.02	-0.01, 0.04	0.00	-0.04, 0.04	0.00	-0.03, 0.03	-0.01	-0.05, 0.02	-0.00	-0.03, 0.03
Isotemporal[d]												
Replace Television	Omit		**-0.12**	**-0.20, -0.05**	**-0.02**	**-0.11, -0.08**	**-0.02**	**-0.11, -0.06**	**-0.02**	**-0.11, -0.08**	**-0.04**	**-0.12, -0.04**
Replace Computer	**0.12**	**0.05, 0.20**	Omit		0.11	-0.01, 0.22	**0.10**	**0.02, 0.19**	**0.11**	**0.00, 0.21**	0.08	-0.00, 0.16
Replace Paperwork	**0.02**	**0.08, 0.11**	-0.11	-0.22, 0.01	Omit		-0.00	-0.12, 0.11	0.00	-0.12, 0.12	-0.03	-0.13, 0.08
Replace Reading	**0.02**	**0.06, 0.11**	**-0.10**	**-0.19, -0.02**	0.00	-0.11, 0.12	Omit		0.01	-0.11, 0.12	-0.02	-0.11, 0.07
Replace Phone	**0.02**	**0.08, 0.11**	**-0.11**	**-0.21, 0.00**	-0.00	-0.12, 0.12	-0.01	-0.12, 0.11	Omit		-0.03	-0.14, 0.08
Replace Car	**0.04**	**0.04, 0.12**	-0.08	-0.16, 0.00	0.03	-0.08, 0.13	0.02	-0.07, 0.11	0.03	-0.08, 0.14	Omit	

Data are standardized β-coefficients (95% CI), N=3211. Models adjusted for center, age, sex, race, education, unemployment, health insurance, smoking, alcohol consumption, physical activity, fast food and sugar sweetened beverage consumption, depressive symptoms and body mass index. Bolded values are statistically significant ($P < 0.05$).

Web Table 4: Single-Variable, Partition, and Isotemporal Substitution Models per 2-Hour/Day Increase in Six Sedentary Tasks and Fasting Glucose, the CARDIA Study (2010-2011)

Analysis Method	Television		Computer		Paperwork		Reading		Phone		Car	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Single[b]	**0.10**	**0.05, 0.15**	-0.00	-0.06, 0.05	0.00	-0.08, 0.08	0.03	-0.03, 0.09	0.05	-0.02, 0.12	0.02	-0.04, 0.08
Partition[c]	**0.10**	**0.05, 0.15**	-0.02	-0.08, 0.04	-0.02	-0.11, 0.06	0.01	-0.06, 0.08	0.03	-0.05, 0.11	0.01	-0.06, 0.07
Isotemporal[d]												
Replace Television	Omit		**-0.12**	**-0.20, -0.04**	**-0.13**	**-0.23, -0.02**	**-0.09**	**-0.18, -0.00**	**-0.08**	**-0.18, -0.03**	**-0.09**	**-0.18, -0.01**
Replace Computer	**0.12**	**0.04, 0.20**	Omit		-0.00	-0.12, 0.11	0.03	-0.06, 0.12	0.05	-0.06, 0.15	0.03	-0.06, 0.11
Replace Paperwork	**0.13**	**0.02, 0.23**	0.00	-0.11, 0.12	Omit		0.03	-0.08, 0.15	0.05	-0.08, 0.17	0.03	-0.08, 0.14
Replace Reading	**0.09**	**0.00, 0.18**	-0.03	-0.12, 0.06	-0.03	-0.15, 0.08	Omit		0.02	-0.10, 0.13	-0.00	-0.10, 0.09
Replace Phone	**0.08**	**0.03, 0.18**	-0.05	-0.15, 0.06	-0.05	-0.17, 0.08	-0.02	-0.13, 0.10	Omit		-0.02	-0.13, 0.09
Replace Car	**0.09**	**0.01, 0.18**	-0.03	-0.11, 0.06	-0.03	-0.14, 0.08	0.00	-0.09, 0.10	0.02	-0.09, 0.13	Omit	

Data are log transformed standardized β-coefficients (95% CI), N=3211. Models adjusted for center, age, sex, race, education, unemployment, health insurance, smoking, alcohol consumption, physical activity, fast food and sugar sweetened beverage consumption, depressive symptoms and body mass index. Bolded values are statistically significant ($P < 0.05$).

Web Table 5: Single-Variable, Partition, and Isotemporal Substitution Models per 2-Hour/Day Increase in Six Sedentary Tasks and Fasting Insulin, the CARDIA Study (2010-2011)

Analysis Method	Television		Computer		Paperwork		Reading		Phone		Car	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Single[b]	**0.13**	**0.09, 0.17**	**0.08**	**0.04, 0.13**	**0.08**	**0.01, 0.14**	**0.08**	**0.02, 0.13**	**0.10**	**0.05, 0.16**	0.05	-0.00, 0.10
Partition[c]	**0.11**	**0.07, 0.15**	**0.06**	**0.01, 0.10**	0.01	-0.06, 0.08	0.03	-0.02, 0.09	0.04	-0.03, 0.10	0.01	-0.04, 0.06
Isotemporal[d]												
Replace Television	Omit		-0.05	-0.12, 0.01	**-0.10**	**-0.18, -0.02**	**-0.08**	**-0.15, -0.00**	-0.07	-0.15, 0.01	**-0.10**	**-0.17, -0.03**
Replace Computer	0.05	-0.01, 0.12	Omit		-0.05	-0.14, 0.05	-0.02	-0.09, 0.05	-0.02	-0.10, 0.07	-0.05	-0.12, 0.02
Replace Paperwork	**0.10**	**0.02, 0.18**	0.05	-0.05, 0.14	Omit		0.03	-0.07, 0.12	0.03	-0.07, 0.13	0.00	-0.09, 0.09
Replace Reading	**0.08**	**0.00, 0.15**	0.02	-0.05, 0.09	-0.03	-0.12, 0.07	Omit		0.00	-0.09, 0.10	-0.03	-0.10, 0.05
Replace Phone	0.07	-0.01, 0.15	0.02	-0.07, 0.10	-0.03	-0.13, 0.07	-0.00	-0.10, 0.09	Omit		-0.03	-0.12, 0.06
Replace Car	**0.10**	**0.03, 0.17**	0.05	-0.02, 0.12	-0.00	-0.09, 0.09	0.03	-0.05, 0.10	0.03	-0.06, 0.12	Omit	

Data are log transformed standardized β-coefficients (95% CI), N=3211. Models adjusted for center, age, sex, race, education, unemployment, health insurance, smoking, alcohol consumption, physical activity, fast food and sugar sweetened beverage consumption, depressive symptoms and body mass index. Bolded values are statistically significant ($P < 0.05$).

Web Table 6: Single-Variable, Partition, and Isotemporal Substitution Models per 2-Hour/Day Increase in Six Sedentary Tasks and Triglycerides, the CARDIA Study (2010-2011)

Analysis Method	Television		Computer		Paperwork		Reading		Phone		Car	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Single[b]	**0.15**	**0.10, 0.20**	0.04	-0.01, 0.10	0.04	-0.04, 0.12	0.05	-0.02, 0.11	0.04	-0.03, 0.11	-0.02	-0.08, 0.04
Partition[c]	**0.15**	**0.10, 0.20**	0.02	-0.03, 0.08	0.01	-0.08, 0.10	0.03	-0.04, 0.09	-0.00	-0.09, 0.08	-0.05	-0.11, 0.01
Isotemporal[d]												
Replace Television	Omit		**-0.12**	**-0.20, -0.04**	**-0.14**	**-0.24, -0.04**	**-0.12**	**-0.21, -0.03**	**-0.15**	**-0.26, -0.05**	**-0.20**	**-0.28, -0.11**
Replace Computer	**0.12**	**0.04, 0.20**	Omit		-0.02	-0.13, 0.10	0.00	-0.09, 0.09	-0.03	-0.13, 0.08	-0.07	-0.16, 0.01
Replace Paperwork	**0.14**	**0.04, 0.24**	0.02	-0.10, 0.13	Omit		0.02	-0.10, 0.14	-0.02	-0.14, 0.11	-0.06	-0.17, 0.05
Replace Reading	**0.12**	**0.03, 0.21**	-0.00	-0.09, 0.09	-0.02	0.14, 0.10	Omit		-0.03	-0.15, 0.09	-0.08	-0.17, 0.02
Replace Phone	**0.15**	**0.05, 0.26**	0.03	-0.08, 0.13	0.02	-0.11, 0.14	0.03	-0.09, 0.15	Omit		-0.05	-0.16, 0.07
Replace Car	**0.20**	**0.11, 0.28**	0.07	-0.01 0.16	0.06	-0.05, 0.17	0.08	-0.02, 0.17	0.05	-0.07, 0.16	Omit	

Data are log transformed standardized β-coefficients (95% CI), N=3211. Models adjusted for center, age, sex, race, education, unemployment, health insurance, smoking, alcohol consumption, physical activity, fast food and sugar sweetened beverage consumption, depressive symptoms and body mass index. Bolded values are statistically significant ($P < 0.05$).

Web Table 7: Single-Variable, Partition, and Isotemporal Substitution Models per 2-Hour/Day Increase in Six Sedentary Tasks and Negative HDL-Cholesterol, the CARDIA Study (2010-2011)

Analysis Method	Television		Computer		Paperwork		Reading		Phone		Car	
	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI	β	95% CI
Single[b]	**0.05**	**0.01, 0.10**	**0.08**	**0.03, 0.12**	**0.09**	**0.03, 0.16**	0.04	-0.02, 0.09	0.03	-0.03, 0.09	0.01	-0.04, 0.06
Partition[c]	0.04	-0.00, 0.09	**0.06**	**0.01, 0.11**	0.06	-0.02, 0.13	0.02	-0.04, 0.08	-0.02	-0.09, 0.06	-0.01	-0.07, 0.04
Isotemporal[d]												
Replace Television	Omit		0.02	-0.05, 0.09	0.01	-0.07, 0.10	-0.02	-0.10, 0.05	-0.06	-0.14, 0.03	-0.06	-0.13, 0.01
Replace Computer	-0.02	-0.09, 0.05	Omit		-0.01	-0.11, 0.09	-0.05	-0.12, 0.03	-0.08	-0.17, 0.01	**-0.08**	**-0.15, -0.00**
Replace Paperwork	-0.01	-0.10, 0.07	0.01	-0.09, 0.11	Omit		-0.04	-0.14, 0.06	-0.07	-0.18, 0.04	-0.07	-0.17, 0.02
Replace Reading	0.02	-0.05, 0.10	0.05	-0.03, 0.12	0.04	-0.06, 0.14	Omit		-0.03	-0.13, 0.07	-0.03	-0.12, 0.05
Replace Phone	0.06	-0.03, 0.14	0.08	-0.01, 0.17	0.07	-0.04, 0.18	0.03	-0.07, 0.13	Omit		0.00	-0.10, 0.10
Replace Car	0.06	-0.01, 0.13	**0.08**	**0.00, 0.15**	0.07	-0.02, 0.17	0.03	-0.05, 0.12	-0.00	-0.10, 0.10	Omit	

Data are log transformed standardized β-coefficients (95% CI), N=3211. Models adjusted for center, age, sex, race, education, unemployment, health insurance, smoking, alcohol consumption, physical activity, fast food and sugar sweetened beverage consumption, depressive symptoms and body mass index. Bolded values are statistically significant (P< 0.05).