

Supplement to:

Enhanced nitric oxide (NO) and decreased ADMA synthesis in pediatric ADHD and selective potentiation of NO synthesis by methylphenidate

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Table S1 Plasma concentrations (median [25th – 75th interquartile range]) of ADMA, arginine (Arg), nitrate, and nitrite of controls (Co) and ADHD children without (-MPH) and with (+MPH) methylphenidate (MPH) medication

	Control	-MPH	+MPH	Statistics	P
ADMA (μM)	0.57 [0.51-0.66]	0.50 [0.46-0.54]	0.49 [0.46-0.54]	Co/-MPH: z = -18.9 Co/+MPH: z = -19.4 -MPH/+MPH: z = 0.60	.008 .01 .99
Arg (μM)	73.8 ± 17.3	68.1 ± 14.3	65.2 ± 14.1	F(2,78) = 2.16	.12
Nitrate (μM)	30.8 [27.0-37.6]	49.9 [44.8-53.5]	53.0 [44.1-55.4]	Co/-MPH: z = 23.1 Co/+MPH: z = 25.2 -MPH/+MPH: z = -2.17	< .001 < .001 .99
Nitrite (μM)	2.12 [0.83-2.32]	2.44 [2.13-2.8]	3.1 [2.78-3.5]	Co/-MPH: z = 16.7 Co/+MPH: z = 35.8 -MPH/+MPH: z = -19.1	.01 < .001 < .001

Normally distributed data (mean ± SDstandard deviation) were calculated with one-way ANOVA; non-normally distributed data (median [25th – 75th interquartile range]) with Kruskal-Wallis test; corresponding test statistics: F-value (between group df, within-group df), z-score. Arg, Arginine; ADMA, Asymmetric dimethylarginine.

Table S2 Age-corrected ADMA and nitrite plasma concentrations in ADHD children without (-MPH) and with (+MPH) methylphenidate (MPH) medication

	-MPH		+MPH			
	Mean _{adj} ± SEM	95% CI	Mean _{adj} ± SEM	95% CI	Statistics	P
ADMA (μM)	0.50 ± 0.01	[0.48; 0.53]	0.51 ± 0.01	[0.48; 0.54]	F(1,37) = 0.82	.77
Nitrite (μM)	2.67 ± 0.15	[2.38; 2.97]	3.16 ± 0.16	[2.84; 3.48]	F(1,39) = 5.15	.03

One-way ANCOVA adjusted for age. ADMA, Asymmetric dimethylarginine; Mean_{adj}, adjusted mean; SEM, standard error of the mean; F-value (between group df, within-group df).

Table S3 Age-corrected ADMA and nitrite plasma concentration (mean_{adj} (SEM) in ADHD children without (-MPH) and with (+MPH) methylphenidate (MPH) medication according to the IQ range of 50 – 100 and above 100 (>100)

IQ	-MPH		+MPH		Statistics	P
	50-100 (n = 3)	>100 (n = 8)	50-100 (n = 9)	>100 (n = 5)		
ADMA (μM)	0.46 (0.02)	0.51 (0.01)	0.53 (0.01)	0.46 (0.02)	MPH: F(1,20) = 0.41 IQ: F(1,20) = 0.17 MPH×IQ: F(1,20) = 12.4	.53 .68 .002
Nitrite (μM)	2.45 (0.40)	3.01 (0.24)	3.10 (0.22)	3.22 (0.27)	MPH: F(1,21) = 2.14 IQ: F(1,21) = 1.12 MPH×IQ: F(1,21) = 0.53	.16 .30 .47

Two-way ANCOVA adjusted for age. ADMA, Asymmetric dimethylarginine; Mean_{adj}, adjusted mean; SEM, standard error of the mean; F-value (between group df, within-group df).