

Supplementary Table 1A Differentially expressed genes after cocoa intake

Log Ratio	p-value	ID	Symbol	Entrez Gene Name	Location	Type(s)
0.33	3.83E-03	FAM108C1	ABHD17C	abhydrolase domain containing 17C	Other	enzyme
0.347	6.54E-03	ADRB2	ADRB2	adrenoreceptor beta 2	Plasma Membrane	G-protein coupled receptor
1.885	1.37E-06	AHSP	AHSP	alpha hemoglobin stabilizing protein	Cytoplasm	other
3.182	7.9E-07	ALAS2	ALAS2	5'-aminolevulinatase synthase 2	Cytoplasm	enzyme
-0.312	5.99E-03	ANKRD54	ANKRD54	ankyrin repeat domain 54	Nucleus	transcription regulator
0.359	7.7E-03	ARHGAP17	ARHGAP17	Rho GTPase activating protein 17	Cytoplasm	other
1.099	6.95E-05	CA1	CA1	carbonic anhydrase 1	Cytoplasm	enzyme
-0.508	6.9E-03	CAPG	CAPG	capping actin protein, gelsolin like	Nucleus	other
-0.396	5.09E-03	CD36	CD36	CD36 molecule	Plasma Membrane	transmembrane receptor
0.306	7.88E-03	CETN1	CETN1	centrin 1	Nucleus	enzyme
-0.319	4.57E-03	CKAP4	CKAP4	cytoskeleton associated protein 4	Cytoplasm	other
-0.41	2.38E-03	CLK1	CLK1	CDC like kinase 1	Nucleus	kinase
-0.455	9.52E-03	COTL1	COTL1	coactosin like F-actin binding protein 1	Cytoplasm	other
-0.688	7.36E-03	IL8	CXCL8	C-X-C motif chemokine ligand 8	Extracellular Space	cytokine
0.734	6.84E-03	CXCR1	CXCR1	C-X-C motif chemokine receptor 1	Plasma Membrane	G-protein coupled receptor
0.869	6.13E-04	IL8RB	CXCR2	C-X-C motif chemokine receptor 2	Plasma Membrane	G-protein coupled receptor
0.49	2.77E-03	WDR40A	DCAF12	DDB1 and CUL4 associated factor 12	Cytoplasm	other
0.401	7.85E-03	DDR1	DDR1	discoidin domain receptor tyrosine kinase 1	Plasma Membrane	kinase
1.214	4.36E-06	EPB42	EPB42	erythrocyte membrane protein band 4.2	Plasma Membrane	transporter
0.557	8.72E-04	FAM46C	FAM46C	family with sequence similarity 46 member C	Extracellular Space	other
-0.396	8.07E-03	FPR1	FPR1	formyl peptide receptor 1	Plasma Membrane	G-protein coupled receptor
0.316	9.34E-03	GFI1	GFI1	growth factor independent 1 transcriptional repressor	Nucleus	transcription regulator
0.436	4.11E-03	GYPE	GYPE	glycophorin E (MNS blood group)	Plasma Membrane	other
3.707	2.24E-05	HBA1	HBA1/HBA2	hemoglobin subunit alpha 2	Extracellular Space	transporter
1.729	1.34E-03	HBA2	HBA1/HBA2	hemoglobin subunit alpha 2	Extracellular Space	transporter
1.581	5.9E-04	HBA2	HBA1/HBA2	hemoglobin subunit alpha 2	Extracellular Space	transporter
2.202	3.99E-06	HBD	HBD	hemoglobin subunit delta	Other	transporter
2.137	5.48E-05	HBE1	HBE1	hemoglobin subunit epsilon 1	Cytoplasm	transporter
1.582	3.43E-04	HBM	HBM	hemoglobin subunit mu	Cytoplasm	other
0.73	3.78E-03	IFT11L	IFT11B	interferon induced protein with tetratricopeptide repeats 1B	Cytoplasm	other
-0.436	2.08E-03	HS.552896	KCNC1	potassium voltage-gated channel subfamily C member 1	Plasma Membrane	ion channel
0.748	1.37E-03	KCNG1	KCNG1	potassium voltage-gated channel modifier subfamily G member 1	Plasma Membrane	ion channel
-0.395	3.67E-03	KREMEN2	KREMEN2	kringle containing transmembrane protein 2	Other	other
0.323	5.3E-03	KRTAP9-5	KRTAP9-9	keratin associated protein 9-9	Cytoplasm	other
0.396	7.87E-03	LARGE	LARGE1	LARGE xylosyl- and glucuronyltransferase 1	Cytoplasm	enzyme
0.798	8.36E-03	LOC440313	LOC440313	protein enabled homolog	Other	other
-0.405	1.45E-03	LRRN3	LRRN3	leucine rich repeat neuronal 3	Extracellular Space	other
-0.428	2.39E-03	MGST1	MGST1	microsomal glutathione S-transferase 1	Cytoplasm	enzyme
-0.42	1.47E-03	MIIIP	MIIIP	migration and invasion inhibitory protein	Other	other
-0.448	3.68E-03	MPZL2	MPZL2	myelin protein zero like 2	Plasma Membrane	other
-0.364	9.08E-03	MS4A6A	MS4A6A	membrane spanning 4-domains A6A	Other	other
0.805	3.37E-04	MUC6	MUC6	mucin 6, oligomeric mucus/gel-forming	Extracellular Space	other
0.422	3.05E-03	MYO1B	MYO1B	myosin 1B	Cytoplasm	enzyme
0.338	4.98E-03	NIPAL4	NIPAL4	NIPA like domain containing 4	Other	other
0.311	9.24E-03	NUAK2	NUAK2	NUAK family kinase 2	Other	kinase
0.466	2.38E-03	ORM1	ORM1	orosomucoid 1	Extracellular Space	other
-0.398	1.76E-03	OSBPL8	OSBPL8	oxysterol binding protein like 8	Plasma Membrane	transporter
-0.506	3.06E-03	PFDN6	PFDN6	prefoldin subunit 6	Cytoplasm	other
0.432	6.36E-03	PKHD1	PKHD1	PKHD1, fibrocystin/polyductin	Plasma Membrane	other
0.407	3.61E-03	PPAPDC1B	PLPP5	phospholipid phosphatase 5	Other	phosphatase
-0.314	4.55E-03	A26C3	POTEG (includes others)	POTE ankyrin domain family member G	Other	other
-0.372	7.35E-03	PTPRC	PTPRC	protein tyrosine phosphatase, receptor type C	Plasma Membrane	phosphatase
0.46	8.2E-03	RAP1GAP	RAP1GAP	RAP1 GTPase activating protein	Cytoplasm	other
1.019	1.22E-03	RNF213	RNF213	ring finger protein 213	Cytoplasm	enzyme
-0.905	9.09E-03	RNU1G2	RNU1-4	RNA, U1 small nuclear 4	Other	other
-0.582	6.15E-03	RPPH1	RPPH1	ribonuclease P RNA component H1	Other	other
0.644	2.31E-04	SELENBP1	SELENBP1	selenium binding protein 1	Cytoplasm	other
1.161	1.66E-03	SERPINA13	SERPINA13P	serpin family A member 13, pseudogene	Extracellular Space	other
0.428	3.99E-03	SESN3	SESN3	sestrin 3	Extracellular Space	other
0.933	6.73E-03	SLC25A37	SLC25A37	solute carrier family 25 member 37	Cytoplasm	transporter
0.635	3.67E-03	SLC25A39	SLC25A39	solute carrier family 25 member 39	Cytoplasm	other
0.421	7.25E-03	RUNDC2C	SNX29P2	sorting nexin 29 pseudogene 2	Other	other
0.676	4.15E-04	STRADB	STRADB	STE20-related kinase adaptor beta	Cytoplasm	kinase
0.376	7.26E-03	TGFBR3	TGFBR3	transforming growth factor beta receptor 3	Plasma Membrane	kinase
0.35	5.64E-03	TIGIT	TIGIT	T-cell immunoreceptor with Ig and ITIM domains	Plasma Membrane	other

-0.32	8.1E-03	TMEM165	TMEM165	transmembrane protein 165	Plasma Membrane	other
0.714	8.4E-03	GPR175	TPRA1	transmembrane protein adipocyte associated 1	Plasma Membrane	G-protein coupled receptor
-0.35	9.36E-03	TPT1	TPT1	tumor protein, translationally-controlled 1	Cytoplasm	other
-0.541	5.43E-03	TRIM44	TRIM44	tripartite motif containing 44	Cytoplasm	other
0.512	7.14E-03	TSPAN5	TSPAN5	tetraspanin 5	Plasma Membrane	other
-0.389	6.43E-03	UGCG	UGCG	UDP-glucose ceramide glucosyltransferase	Cytoplasm	enzyme
-0.501	6.5E-03	UIMC1	UIMC1	ubiquitin interaction motif containing 1	Nucleus	other
-0.315	5.18E-03	UTY	UTY	ubiquitously transcribed tetratricopeptide repeat containing, Y-linked	Nucleus	enzyme
-0.734	1.75E-03	ZADH2	ZADH2	zinc binding alcohol dehydrogenase domain containing 2	Cytoplasm	enzyme
-1.054	4.12E-04	ZNF573	ZNF573	zinc finger protein 573	Nucleus	other
1.181	1.94E-05	LOC100131164		<i>Not identified</i>		
0.95	9.81E-04	LOC644852		<i>Not identified</i>		
0.652	2.16E-03	LOC389599		<i>Not identified</i>		
0.609	1.97E-03	LOC283663		<i>Not identified</i>		
-0.599	8.25E-03	LOC100129882		<i>Not identified</i>		
0.576	3.12E-03	LOC100131391		<i>Not identified</i>		
0.56	8.3E-03	LOC642469		<i>Not identified</i>		
-0.375	3.57E-03	LOC399804		<i>Not identified</i>		
-0.357	8.91E-03	LOC645351		<i>Not identified</i>		
0.348	8.6E-03	LOC644012		<i>Not identified</i>		
0.322	8.73E-03	HS.527387		<i>Not identified</i>		
0.315	5.22E-03	C1ORF183		<i>Not identified</i>		
0.315	9.78E-03	LOC374491		<i>Not identified</i>		
-0.311	4.8E-03	HS.545536		<i>Not identified</i>		
-0.306	7.07E-03	HS.578383		<i>Not identified</i>		
0.306	4.19E-03	LOC391347		<i>Not identified</i>		
-1.045	4.37E-03	RNU1-5		<i>Not identified</i>		
0.393	1.92E-03	LOC649185		<i>Not identified</i>		
0.351	9.59E-03	LOC100132506		<i>Not identified</i>		
0.343	2.56E-03	C1ORF21		<i>Not identified</i>		
0.331	5.06E-03	LOC648879		<i>Not identified</i>		
-0.304	4.73E-03	LOC728505		<i>Not identified</i>		
-0.303	5.83E-03	LOC729992		<i>Not identified</i>		

Supplementary Table 1B Differentially expressed genes after placebo intake

Log Ratio	p-value	ID	Symbol	Entrez Gene Name	Location	Type(s)
0.467	7.9E-03	AP2B1	AP2B1	adaptor related protein complex 2 beta 1 subunit	Plasma Membrane	transporter
0.343	9.22E-03	CACNA2D3	CACNA2D3	calcium voltage-gated channel auxiliary subunit alpha2delta 3	Plasma Membrane	ion channel
0.63	2.53E-03	CTSZ	CTSZ	cathepsin Z	Cytoplasm	peptidase
-0.364	7.08E-03	CXCR4	CXCR4	C-X-C motif chemokine receptor 4	Plasma Membrane	G-protein coupled receptor
0.374	5.34E-03	DLG4	DLG4	discs large MAGUK scaffold protein 4	Plasma Membrane	kinase
0.404	8.73E-03	ERH	ERH	enhancer of rudimentary homolog (Drosophila)	Nucleus	other
0.472	7.26E-04	G6PD	G6PD	glucose-6-phosphate dehydrogenase	Cytoplasm	enzyme
0.407	5.77E-03	GTF2H4	GTF2H4	general transcription factor IIH subunit 4	Nucleus	transcription regulator
0.391	5.68E-03	MEPCE	MEPCE	methylphosphate capping enzyme	Other	enzyme
-0.422	6.13E-03	PRR13	PRR13	proline rich 13	Nucleus	other
-0.318	4.61E-03	RBM3	RBM3	RNA binding motif (RNP1, RRM) protein 3	Cytoplasm	other
0.62	6.15E-03	UBE2E1	UBE2E1	ubiquitin conjugating enzyme E2 E1	Cytoplasm	enzyme
-0.455	4.29E-03	LOC389049		<i>Not identified</i>		
0.519	5.21E-03	DKFZP781G0119		<i>Not identified</i>		
-0.38	7.43E-03	LOC643452		<i>Not identified</i>		
0.312	8.37E-03	LOC554208		<i>Not identified</i>		
-0.31	5.25E-03	LOC653257		<i>Not identified</i>		
0.335	3.94E-03	LOC100130884		<i>Not identified</i>		

#### Gene Expression Changes by High-Polyphenols Cocoa Powder Intake. A Randomized Crossover Clinical Study.

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Barrera-Reyes PK<sup>1</sup>, Hernández-Ramírez N<sup>1</sup>, Cortés J<sup>1</sup>, Poquet L<sup>2</sup>, Meisser Redeuil K<sup>2</sup>, Rangel-Escareño C<sup>3</sup>, Kussmann M<sup>4</sup>, Silva-Zolezzi I<sup>5</sup>, Tejero ME<sup>1\*</sup>

<sup>1</sup>Nutrigenomics and Nutrigenetics, National Institute of Genomic Medicine, 14610 Mexico City, Mexico

<sup>2</sup>Vitamins & Phytonutrients, Nestlé Research Centre, CH-1000 Lausanne, Switzerland.

<sup>3</sup>Computational Genomics, National Institute of Genomic Medicine, 14610 Mexico City, Mexico.

<sup>4</sup>Systems Nutrition, Metabonomics and Proteomics, Nestlé Institute of Health Sciences, 1015 Lausanne, Switzerland; Current affiliation: Liggins Institute, 1142 Auckland, New Zealand.

<sup>5</sup>Metabolic Programming, Nestlé Research Centre, CH-1000 Lausanne, Switzerland.

\* Correspondence: etejero@inmegen.gob.mx; Tel.: +52 (55) 5350-1145.