

Supplementary material for the manuscript

Annurca Apple Polyphenols ignite Keratin production in Hair Follicles by inhibiting Pentose Phosphate Pathway and Amino Acid Oxidation.

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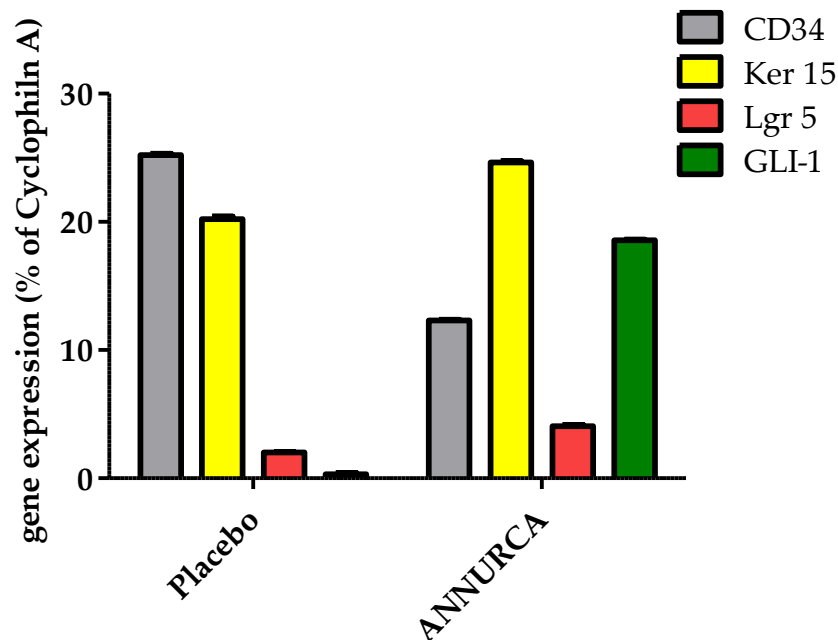


Figure S1. Effect of AAE on HF s measured by qPCR. Effect exerted by AAE on the expression of HF stem cell markers *CD34*, *Keratin 15* (K15), *Lgr5* and *GLI-1* in HF s treated with Placebo or with ANNURCA analyzed by qPCR. Values are expressed as % of mRNA compared to those of internal standard *cyclophilin A*. Experimental procedures and statistics as described in the Methods Section and in Figure 2.

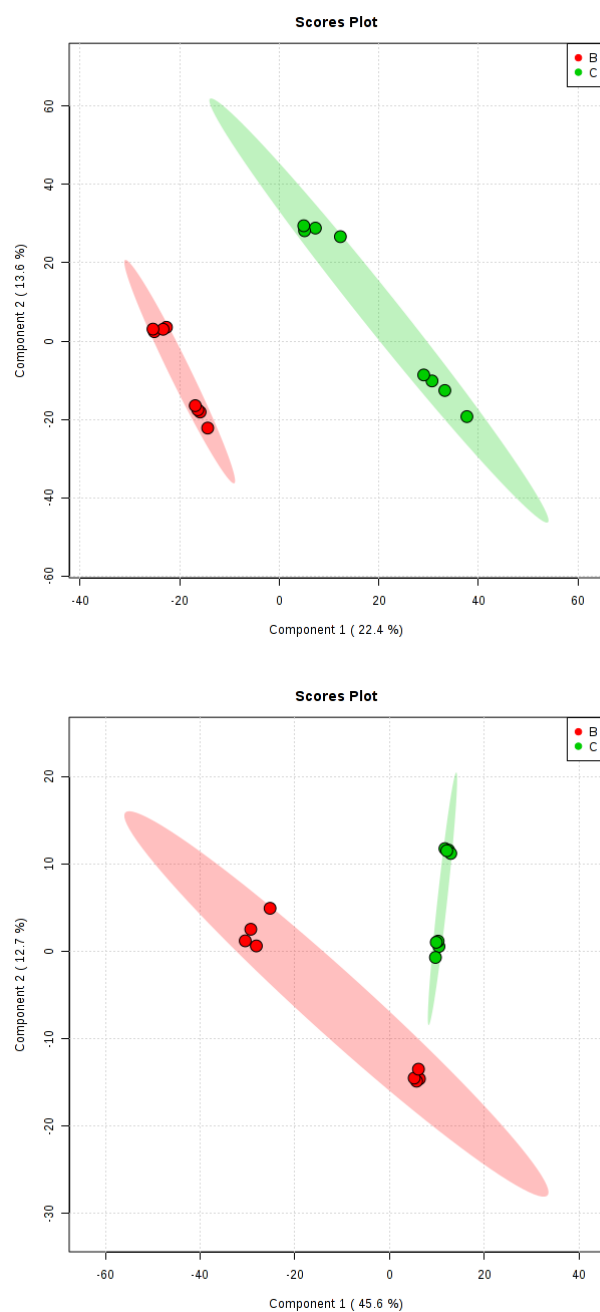


Figure S2 a (top), b (bottom): Partial least squares-discriminant analysis (PLS-DA) of HF's metabolites determined by FT-ICR-MS, the two dimensional score plots show clustering and separation between AAE treated mice (green symbols) and Placebo (red symbols). Ellipses represent 95% confidence intervals.

Metabolite	m/z	Ionization	Error (ppm)
Glucose	203.05265	[M+Na] ⁺	0.404
Lactic acid	113.02091	[M+Na] ⁺	-0.176
Maltose	365.10543	[M+Na] ⁺	-0.045
Sorbitol	205.06834	[M+Na] ⁺	0.395
Glutamine	169.05836	[M+Na] ⁺	0.001
Glycine	113.99511	[M+K] ⁺	-0.682
Arginine	197.10090	[M+Na] ⁺	0.029
Serine	144.00584	[M+K] ⁺	0.607
Lysine	147.11288	[M+H] ⁺	0.515
GSH	306.07675	[M-H] ⁻	0.719
Citrulline	198.08495	[M+Na] ⁺	0.072
Ribulose-5-P	233.04228	[M+H] ⁺	0.856
Adenosine	290.08596	[M+Na] ⁺	-0.063
Cytidine	266.07476	[M+Na] ⁺	0.100
Deoxy-Cytidine	250.07984	[M+Na] ⁺	0.044
Deoxy-Inosine	275.07507	[M+Na] ⁺	-0.091
Palmitoyl-carnitine	422.32404	[M+Na] ⁺	0.148
Acetyl-carnitine	226.10501	[M+Na] ⁺	0.211

Table S1: Identification of metabolites in HFs determined by DI- FT-ICR-MS