Electronic Supplementary Material (ESI) for Analyst.

Table 1S : Nucleotidic sequence of primers used for PCR.

Gène	Forward 5'3'	Reverse 5'3'
Acyl-CoA oxidase (Aco)	TCGAAGCCAGCGTTACGAG	ATCTCCGTCTGGGCGTAGG
Carbohydrate response element- binding protein (Chreb)	CTGGGGACCTAAACAGGAGC	GAAGCCACCCTATAGCTCCC
Collagen 1α1 (col1α1)	CAACCTGGACGCCATCAAG	CAGGTCTGACCTGTCTCCATGTT
C-reactive protein (Crp)	CACAGTGCGCAGCTTCAGT	GCACCACCCACTCCAAAAG
Fatty acid synthase (Fas)	TTCGGCTGCTGTTGGAAGTCAG	ACCCACCCAGACGCCAGTGTTC
Glycerol kinase (Gk)	AGGAGATGCCAGAGGATAG	ACGGATGTGAGTGTTGAAG
Glutathione peroxidase 3 (Gpx3)	TTGGTCATTCTGGGCTTCC	CCACCTGGTCGAACATACTT
Hepcidin antimicrobial peptide (Hamp)	TTCCCAGTGTGGTATCTGTT	GGTCAGGATGTGGCTCTAGGC
Hypoxanthine phosphoribosyltransferase (Hprt)	GTGTTCTAGTCCTGTGGCCATCT	GGCTCATAGTGCAAATCAAAAGTCT
Interleukin 6 (Il-6)	AGTTGCCTTCTTGGGACTGA	ACAGGTCTGTTGGGAGTGGT
Liver carnitine palmitoyl-transferase I (Lcpt1)	GGAGGAGGTAAGACTACTATG	TACATGCAATGGACAGATTAG
Medium-chain acyl-CoA dehydrogenase (Mcad)	AGCAGAGAAGAAGGGTGACGAGTATGTT	TACTTTAGGATCTGGGTTAGAACGTGCC
Nuclear factor erythroid 2-related factor 2 (Nrf2)	TGAAGCTCAGCTCGCATTGA	TGCTCCAGCTCGACAATGTT
Peroxisome proliferator-activated receptor alpha (Pparα)	CATTTCCCTGTTTGTGGCTGCTATAA	CTTAAGCACGTGCACAATCCCCTC
Stearoyl-CoA desaturase-1(Scd1)	CTGTCAAAGAGAAGGGCGGAAAAC	GCAGGAGGCCGGGCTTGTAGTAC
sterol regulatory element-binding protein 1 (Srebp1-c)	ATCGGCGCGGAAGCTGTCGGGGTAGCGTC	ACTGTCTTGGTTGTTGATGAGCTGGAGCAT
Transforming growth factor β (Tgf-β)	TTGCTTCAGCTCCACAGAGA	TGGTGTTAGAGGGCAAGGAC

Table 2S: Variables corresponding to the spectral signatures of the two macrosteatosis classes.

Model below 10%		
Variables (cm^{-1})	**Vibrational mode**	**Assignment**
3073.06	νC-H	**Aromatic compounds**
3030.21		
2995.52	ν_{asym} CH_3	**Lipids**
2968.99	ν_{asym} CH_2	
1765.07	νC=O	**Lipid Esters**
1732.42		
1730.38		
1720.18		
1718.14		
1701.81	νC=O (>C = CH-CO-OH)	**Aldehydes / Ketones**
1395.73	δ_{sym} C-H_3	**Proteins/Lipids**
1248.81	δ_{sym} C-H	
1630.40	Amide I	**Proteins**
1140.66	Inter osidic links/ νC-O Ribose	**Sugars**
967.22	Complex ring vibrations	
Model above 10%		
1609.99	Asn, Gln, Lys, Arg	**Proteins**
1603.87	$\nu_{asym}COO^-$ (Glu, Asp)	
1589.58	Amide II	
1448.79	δ_{asym} CH3 / C-C (Val/ Tyr ring vibration)	
1422.26	ν_{asym} COO^- (Glu)	
1103.93	νP-O-C	**DNA**
1024.35	νC-O-C	**Sugars**