Supplemental Methods

Quantification of nucleotides

Clear supernatants were analyzed by means of LC-MS/MS with a 4000 QTrap (AB Sciex, Darmstadt, Germany) and a Dionex UHPLC UltiMate 3000 (Thermo Fisher) or Prominence HPLC (Shimadzu, Germany). The cell pellet was used for the quantitation of free fatty acids (see below).

For chromatographic separation of nucleotides, a ZIC pHILIC 5 µM, 150 x 4.6 mm (Merck)was used with acetonitrile/water with 5 mM ammonium acetate (95/5, v/v, pH 9.5) as solvent A and 5mM ammonium acetate (pH 9.5) as solvent B. The separation of nucleotides was performed using a 500 µL/min flowrate and a linear gradient from 85% A which was maintained for 5 min to 50% A in 15 min. Afterward the column was flushed and equilibrated to starting conditions. Ions were analyzed by MS in the negative mode. The spray voltage was set to -4500 V at a source temperature of 450°C and using nitrogen as collision gas. The parameters for the collision activated dissociation (CAD) were: -2, curtain gas: 35 psi, ion source gas 1: 55 psi, ion source gas 2: 65 psi, entrance potential (EP) -10 V. The MRM (multiple reaction monitoring) transition for each compound are listed in Table S1. The first MRM-transition was used as quantifier the second as qualifier.

Table S1: MRM-transitions for quantitation of nucleotides.

Compound	**Quantifier/ Qualifier**	**Q_1 (*m/z*)**	**Q_3 (*m/z*)**	**Dwell Time (msec)**	**Declustering potential (V)**	**Collision Energy (V)**	**Cell Exit Potential (V)**
ATP	Quantifier $[M-H]^-$	506.01	79.0	30	-70	-106	-7
	Qualifier $[M-H]^-$	506.01	158.9	30	-70	-50	
AMP	Quantifier $[M-H]^-$	346.02	78.9	30	-60	-56	-1
	Qualifier $[M-H]^-$	346.02	97.1	30	-60	-36	-5
ADP	Quantifier $[M-H]^-$	426.21	78.8	30	-50	-98	-1
	Qualifier $[M-H]^-$	426.21	133.9	30	-50	-36	-7
IMP	Quantifier $[M-H]^-$	347.03	78.9	30	-50	-66	-1
	Qualifier $[M-H]^-$	347.03	96.9	30	-50	-34	-5
Adenosin	Quantifier $[M-H]^-$	266.07	133.9	30	-35	-16	-1
	Qualifier $[M-H]^-$	266.07	106.8	30	-35	-52	-7
Guanosine	Quantifier $[M-H]^-$	282.05	150.0	30	-60	-26	-7
	Qualifier	282.05	132.9	30	-60	-44	-7

	$[M-H]^-$						
GMP	Quantifier $[M-H]^-$	362.07	78.8	30	-45	-60	-1
	Qualifier $[M-H]^-$	362.07	210.9	30	-45	-26	-3
GDP	Quantifier $[M-H]^-$	442.07	78.9	30	-50	-80	-1
	Qualifier $[M-H]^-$	442.07	149.9	30	-50	-36	-1
GTP	Quantifier $[M-H]^-$	522.02	78.9	30	-80	-118	-1
	Qualifier $[M-H]^-$	522.02	158.7	30	-80	-48	-1
Guanin	Quantifier [M-H]-	149.96	132.9	30	-45	-20	-9
	Qualifier [M-H]-	149.96	65.9	30	-45	-42	-3
Adenin	Quantifier [M-H]-	134.05	106.9	30	-60	-24	-5
	Qualifier [M-H]-	134.05	92	30	-60	-28	-5
Hypoxanthin	Quantifier [M-H]-	134.97	91.8	30	-45	-24	-11
	Qualifier [M-H]-	134.97	64.8	30	-45	-40	-3
Xanthin	Quantifier [M-H]-	151.00	107.9	30	-55	-24	-7
	Qualifier [M-H]-	151.00	65.8	30	-55	-46	-3
Inosin	Quantifier [M-H]-	267.04	135	30	-70	-30	-5
	Qualifier [M-H]-	267.04	107.9	30	-70	-56	-4
^{15}N-AMP	IS [M-H]-	350.9	79.0	30	-60	-56	-1
^{15}N-ATP	IS [M-H]-	511.02	78.8	30	-70	-106	-3
^{15}N-GMP	IS [M-H]-	367.02	78.8	30	-45	-60	-1
^{15}N-GTP	IS [M-H]-	527.00	78.9	30	-80	-118	-1
^{13}C-Adenosin	IS [M-H]-	271.06	133.9	30	-35	-16	-1

Quantification of free fatty acids

The cell pellets were extracted with 1 mL acetonitrile/isopropanol/ammonium acetate buffer (55/45/5, v/v/v) and 50 µL of internal standard solution. After vortexing, the samples were incubated overnight and centrifuged. The supernatant was dried under a nitrogen stream and dissolved in 50 µL of extraction solution. Samples were subjected to LC-MS/MS using the setup above. Separation was performed using a 100 x 2.0 mm inner diameter, 2.5 µm Synergi Polar-RP 100 A column (Phenomenex, Aschaffenburg, Germany) with a 400 µL/min flowrate and a linear gradient from 50% A (A: acetonitrile/isopropanol/water with 5 mM ammonia acetate (55/40/5, v/v/v, pH 5), B: 5 mM ammonia acetate (pH 5)) for 3 min to 100% A in 9 min which was maintained for 3 min. Afterward the column was equilibrated to starting conditions. Ions were analyzed by MS in the ESI negative mode. The ion spray voltage was set to -4500 V at a source temperature of 550°C and using nitrogen as collision gas. The parameters for the collision activated dissociation (CAD) were: medium, curtain gas: 25 psi, ion source gas 1: 55 psi, ion source gas 2: 65, entrance potential (EP) -10 V. The MRM (multiple reaction monitoring) transition for each compound are listed in Table S2. The first MRM-transition was used as quantifier the second as qualifier.

Table S2: MRM-transitions for quantitation of fatty acids.

Compound	Quantifier/ Qualifier	Q_1 (*m/z*)	Q_3 (*m/z*)	Dwell Time (msec)	Declustering Potential (DP)	Collision Energy (CE)	Cell Exit Potential (CXP)
C12:0	Quantifier $[M-H]^-$	199.2	199.1	10	-70	-14	-1
	Qualifier $[M-H]^-$	199.1	154.9	10	-70	-16	-11
C14:0	Quantifier $[M-H]^-$	227.2	227.1	10	-85	-12	-15
	Qualifier $[M-H]^-$	227.2	138.8	10	-85	-20	-9
C15:0	Quantifier $[M-H]^-$	241.2	241.1	10	-80	-12	-15
	Qualifier $[M-H]^-$	241.2	197.0	10	-80	-20	-11
C16:0	Quantifier $[M-H]^-$	255.3	255.0	10	-80	-30	-9
	Qualifier $[M-H]^-$	255.3	166.7	10	-80	-26	-9
C16:1	Quantifier $[M-H]^-$	253.3	253.0	10	-85	-14	-17
	Qualifier $[M-H]^-$	253.3	208.9	10	-85	-34	-17
C18:0	Quantifier $[M-H]^-$	283.2	283.2	20	-60	-12	-13
	Qualifier $[M-H]^-$	283.1	283.1	20	-60	-22	-13
C18:1	Quantifier $[M-H]^-$	281.4	281.1	10	-100	-14	-17
	Qualifier $[M-H]^-$	281.4	96.8	10	-100	-38	-15
C18:2	Quantifier $[M-H]^-$	279.4	279.1	10	-85	-14	-7
	Qualifier $[M-H]^-$	279.4	96.7	10	-85	-36	-7
C18:3	Quantifier $[M-H]^-$	277.4	277.3	10	-80	-14	-7
	Qualifier	277.4	58.7	10	-80	-24	-1

	$[M-H]^-$						
C20:0	Quantifier $[M-H]^-$ Qualifier $[M-H]^-$	311.4 311.4	311.3 182.8	10 10	-90 -90	-14 -50	-9 -11
C20:4	Quantifier $[M-H]^-$ Qualifier $[M-H]^-$	303.4 303.4	303.2 259.2	10 10	-80 -80	-12 -20	-11 -7
d_5-C3:0	IS [M-H]	78.1	78.0	10	-55	-6	-5
$^{13}C_2$-C6:0	IS $[M-H]^-$	117.0	116.6	10	-45	-6	-19
d_3-C12:0	IS $[M-H]^-$	202.3	202.3	10	-85	-26	-11
d_2-C18:1	IS $[M-H]^-$	283.4	283.3	10	-110	-18	-9
d_3-C18:0	IS $[M-H]^-$	286.3	286.3	10	-115	-16	-19
d_3-C20:0	IS $[M-H]^-$	314.5	314.3	10	-130	-16	-15