SUPPLEMENTARY TABLES

Supplementary Table 1. Metabolite content in extracts of *P. vulgaris*, *C. cajan* and *V. unguiculata*, analysed by GC/MS. Relative amounts of each metabolite are referred to *Phaseolus vulgaris* content, which was set to 1.

	Phaseolus vulgaris	*Cajanus cajan*	*Vigna unguiculata*
aa and bases			
glycine	1.00	1.07	2.66
L-leucine	1.00	0.49	2.90
L-threonine	1.00	0.00	10.74
L-alanine	1.00	0.80	2.72
L-proline	1.00	34.35	3.94
L-asparagine	1.00	0.63	52.44
L-aspartic acid	1.00	1.55	1.05
hypoxanthine	absent	absent	present
D-pyroglutamic acid	1.00	3.93	3.17
methylthiouracil	1.00	1.11	2.40
glycolysis/fermentation and TCA			
citric acid	1.00	1.90	2.25
malic acid	1.00	0.11	0.17
lactic acid	1.00	0.98	4.60
fatty acids			
glycerol	1.00	0.71	3.28
linolealidic acid	1.00	5.33	8.41
linolenic acid	1.000	0.162	2.663
stearic acid	1.000	0.968	1.342
palmitic acid	1.000	0.779	1.209
other organic acids			
D-pipecolic acid	1.00	0.78	absent
2-pentenedioic acid	1.00	1.34	1.14
2-thiobarbituric acid	1.00	0.66	0.29
L-dihydroorotic acid	1.00	0.62	0.84
glycolic acid	1.00	1.13	1.01
D-pipecoli acid	1.00	0.69	0.00
hydracrylic acid	1.00	6.98	1.05
butenoic acid	1.00	2.46	9.71
2-pyrrolidinone-5-carboxylic acid	1.00	1.18	0.43
others			
methyl-amino acetate	1.000	0.013	0.218
acetamide	1.000	0.577	18.533
triazol-3-amine	1.000	0.910	2.026
maltol	1.000	1.291	1.125
2-mercaptophenol	1.000	1.108	1.276
urea	1.000	very low	3.444

Supplementary Table 2. Identified analytes by GC/MS and target ion used to measure the peak area.

Analytes	Target ion (m/z)
glycine	246
L-leucine	200
L-threonine	404
L-alanine	232
L-proline	184
L-asparagine	417
L-aspartic acid	418
hypoxanthine	307
D-pyroglutamic acid	300
methylthiouracil	313
Citric acid	459
Malic acid	419
DL-glyceraldehyde	115
Lactic acid	261
glycerol	377
Linolealidic acid	337
Linolenic acid	335
Stearic acid	341
Palmitic acid	313
D-pipecolic acid	186
2-pentendioic acid	315
2-thiobarbituric acid	429
L-dihydroorotic acid	443
Glycoli acid	247
2-pipecoli acid	186
Hydroacrylic acid	261
Butenoic acid	289
2-butenoic acid	273
2-pyrrolidinone-5-carboxylic acid	186
Methyl-amino-acetate	146
acetamide	116
Triazol-3-amine	213
maltol	183
2-mercaptophenol	297
urea	231

Supplementary Table 3. Yeast strains used in this study.

Strain	Genotype	Source
wt	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ0*	Euroscarf
snf1Δ	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ01 snf1::HPH*	This study
atg1Δ	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ01 atg1::KanMX*	This study
ras2Δ	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ01 ras2::KanMX*	This study
tor2Δ	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ01 tor2::KanMX*	This study
wt [empty]	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ0 [pYX242]*	This study
wt [αSyn]	*BY4742 MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ0 [pYX242-SNCA]*	This study

Supplementary Table 4. List of primers for real-time PCR.

Gene	5'-Forward-3'	5'-Reverse-3'
Sirt1	CATTATGCCGCATTTCGCCA	GAAGGTGTTCACTGAGGCCA
Foxo	AGGCTGACCCACACAGATAAC	GGCTCCACAAAGTTTTCGGG
Notch	CGCTTCCTGCACAAGTGTC	GCGCAGTAGGTTTTGCCATT
HO	ATGTCAGCGAGCGAAGAAACA	TGGCTTTACGCAACTCCTTTG
Trxr	TGGATCTGCGCGACAAGAAAG	GAAGGTCTGGGCGGTGATTG
RPL32	GCCCACCGGATTCAAGAAGT	CTTGCGCTTCTTGGAGGAGA