

Figure S1. *Cont.*

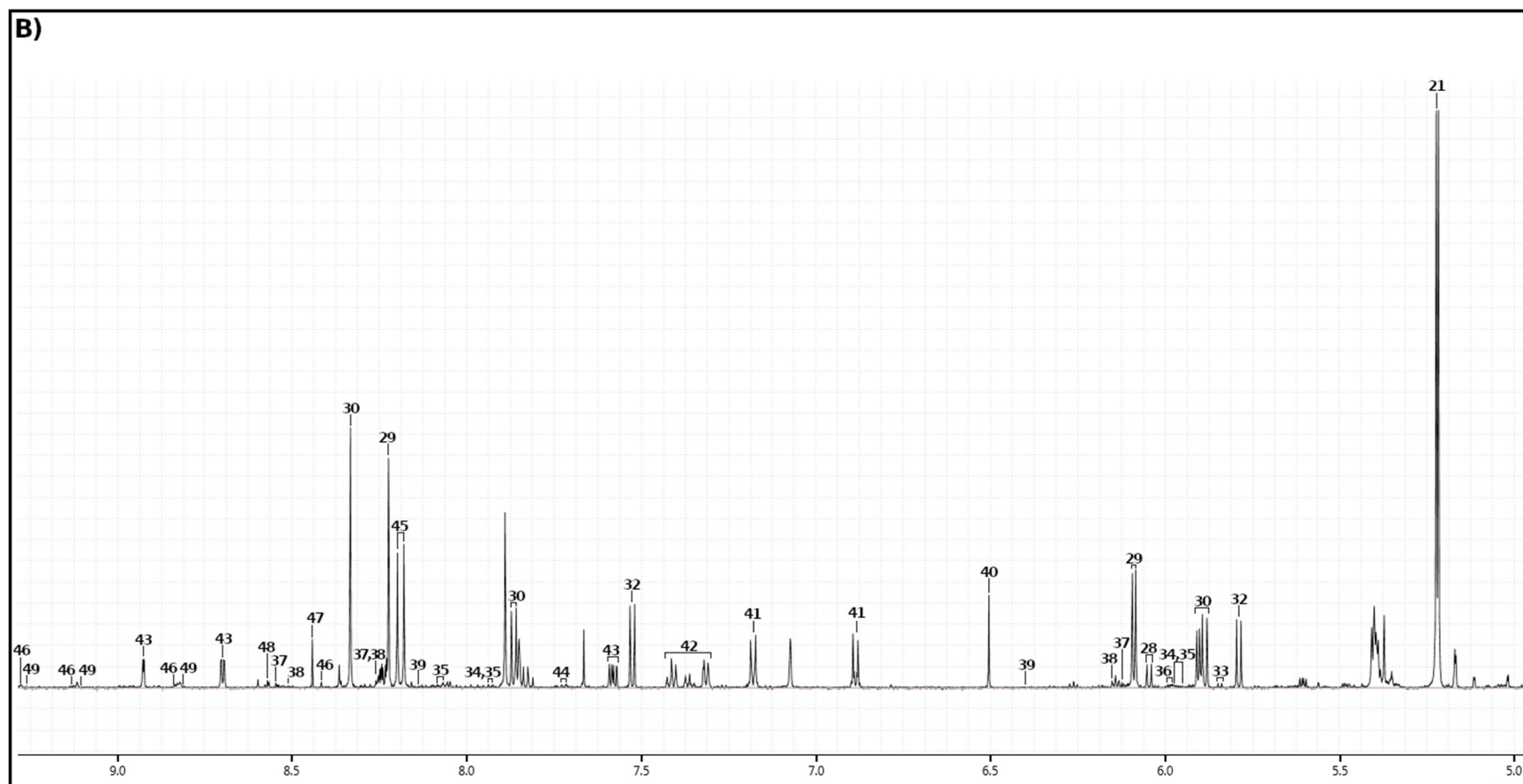


Figure S1. Representative liver ^1H NMR spectra of a control group. Amplified spectral regions from (A) 0-5 ppm (B) 5-9.5 ppm. The numbered peaks assigned were: (1) glycocholate; (2) isoleucine; (3) leucine; (4) valine; (5) 3-hydroxybutyrate; (6) lactate; (7) alanine; (8) lysine; (9) acetate; (10) glutamate; (11) pyruvate; (12) succinate; (13) carnitine; (14) glutamine; (15) beta-alanine; (16) aspartate; (17) dimethylamine; (18) asparagine; (19) creatine; (20) O-phosphocholine; (21) glucose; (22) betaine; (23) taurine; (24) glycine; (25) serine; (26) O-phosphoethanolamine; (27) choline; (28) cytidine; (29) inosine; (30) uridine; (31) glutathione; (32) uracil; (33) xanthosine; (34) UDP-N-Acetylglucosamine; (35) UDP-glucose; (36) UMP; (37) AMP; (38) ADP/ATP; (39) GTP; (40) fumarate; (41) tyrosine; (42) phenylalanine; (43) nicotinurate; (44) tryptophan; (45) hypoxanthine; (46) NAD $^{+}$; (47) formate; (48) IMP; (49) NADP $^{+}$.

Table S1. Morphometric parameters in weanling and adult control and tumour-bearing groups.

Morphometric and serological parameters	Weanling		Adult		F (DFn, DFd)			p-value		
	WC	WW	AC	AW						
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Interaction	Tumour	Age	Interaction	Tumour	Age
Initial weight (g)	76.00 \pm 8.67	72.83 \pm 9.75	273.70 \pm 11.58 a	261.10 \pm 8.75 a,c	1.2 (1.17)	3.36 (1.17)	2023 (1.17)	ns	ns	<0.0001
Carcass weight (g)	115.50 \pm 7.84	79.33 \pm 11.88 a	242.10 \pm 11.89 a,c	210.80 \pm 17.83 a,b,c	0.17 (1.17)	32.21 (1.17)	471.00 (1.17)	ns	< 0.0001	< 0.0001
Gastrocnemius muscle relative weight (g/g of initial body weight)	0.012 \pm 0.003	0.007 \pm 0.001 a	0.006 \pm 0.003 a	0.005 \pm 0.001 a	5.60 (1.17)	14.52 (1.17)	31.47 (1.17)	0.0301	0.0014	< 0.0001
Liver relative weight (g/g of initial body weight)	0.098 \pm 0.014	0.083 \pm 0.005	0.041 \pm 0.004 a,c	0.051 \pm 0.001 a,c	6.54 (1.15)	0.16 (1.15)	80.37 (1.15)	ns	ns	< 0.0001
Tumour relative weight (g/g of initial body weight)	-	0.197 \pm 0.048	-	0.143 \pm 0.031	-	-	-	-	-	-
Cachexia indexes (%)	-	50.720 \pm 5.491	-	21.390 \pm 6.007 c	-	-	-	-	-	-
Glucose (mg/dL)	115.00 \pm 17.28	58.93 \pm 20.99 a	127.10 \pm 11.64 c	89.24 \pm 8.60 a,b,c	3.05 (1.35)	80.96 (1.35)	16.54 (1.35)	ns	< 0.0001	0.0003
Total protein (g/dL)	5.22 \pm 0.28	3.88 \pm 0.25 a	5.79 \pm 0.48 a,c	5.12 \pm 0.36 b,c	9.32 (1.35)	82.84 (1.35)	67.45 (1.35)	0.0043	< 0.0001	< 0.0001
Albumin (mg/dL)	3.79 \pm 0.49	2.79 \pm 0.40 a	4.03 \pm 0.23 c	3.28 \pm 0.33 b,c	1.01 (1.35)	49.00 (1.35)	8.36 (1.35)	ns	< 0.0001	0.0065

Legend: (WC) weanling control group (n=10); (WW) weanling tumour-bearing group (n=12); (AC) adult control group (n=8); (AW) adult tumour-bearing group (n=9). The relative weight values were obtained by dividing the absolute organ weight by each animal's respective initial body weight (expressed as g/g of initial weight). Cachexia index = [(initial body mass – carcass weight + tumour weight + body weight gain of control group)/ (initial body mass + body weight gain of control group)] x 100% (expressed as %). Data were expressed as mean \pm standard deviation (SD). For the relative weights and serum dosages, data analyses were accessed by two-way ANOVA and corrected for multiple comparisons by the post hoc test Bonferroni. For tumour relative weight and cachexia indexes, a student's t test was performed. DFn and DFd: degrees of freedom for the numerator and denominator of the F ratio, respectively. Differences were significant when $p \leq 0.05$. a represents differences from the WC group; b indicates differences from AC group, and c indicates differences from the WW group.

Table S2. Liver metabolites concentration in weanling and adult control and tumour-bearing groups.

Metabolites	Weanling		Adult		F (DFn, DFd)			p-value		
	WC	WW	AC	AW						
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Interaction	Tumour	Age	Interaction	Tumour	Age
3-Hydroxybutyrate	24.19 \pm 11.63	50.63 \pm 15.72 a	29.51 \pm 10.73	40.28 \pm 21.27	1.74 (1.25)	9.85 (1.25)	0.18 (1.25)	ns	0.0043	ns
ADP/ATP	7.94 \pm 3.87	12.53 \pm 9.46	11.51 \pm 6.76	15.76 \pm 4.23	0.09 (1.27)	0.09 (1.27)	0.18 (1.27)	ns	ns	ns
AMP	5.62 \pm 3.39	9.05 \pm 5.78	12.02 \pm 7.03	11.52 \pm 5.81	0.92 (1.27)	0.51 (1.27)	4.67 (1.27)	ns	ns	0.0398
Acetate	66.94 \pm 39.99	133.00 \pm 62.22	100.70 \pm 62.70	148.3 \pm 72.61	0.17 (1.27)	6.46 (1.27)	1.21 (1.27)	ns	0.0171	ns
Alanine	454.20 \pm 361.90	678.80 \pm 281.60	265.70 \pm 162.40 c	513.10 \pm 196.30	0.01 (1.27)	5.92 (1.27)	3.33 (1.27)	ns	0.0218	ns
Asparagine	24.06 \pm 17.72	40.67 \pm 16.18	12.96 \pm 11.50 c	34.55 \pm 22.81	0.15 (1.27)	8.63 (1.27)	1.75 (1.27)	ns	0.0067	ns
Aspartate	83.13 \pm 66.26	188.30 \pm 56.36 a	117.50 \pm 56.37	145.10 \pm 68.02	2.95 (1.27)	8.63 (1.27)	0.04 (1.27)	ns	0.0067	ns
Betaine	392.00 \pm 269.60	925.60 \pm 319.90 a	192.60 \pm 218.60 c	416.50 \pm 162.50 c	2.72 (1.27)	16.28 (1.27)	14.24 (1.27)	ns	0.0004	0.0008
Carnitine	33.49 \pm 17.31	49.96 \pm 36.75	25.07 \pm 13.37	67.13 \pm 33.49	1.46 (1.27)	7.62 (1.27)	0.17 (1.27)	ns	0.0102	ns
Choline	15.72 \pm 7.69	36.12 \pm 9.45 a	12.00 \pm 4.50 c	44.64 \pm 19.41 a,b	1.64 (1.24)	30.80 (1.24)	0.25 (1.24)	ns	<0.0001	ns
Creatine	35.68 \pm 33.30	121.90 \pm 82.36 a	26.23 \pm 20.68 c	49.56 \pm 24.08 c	2.70 (1.27)	8.20 (1.27)	4.57 (1.27)	ns	0.0080	0.0417
Cytidine	8.09 \pm 7.38	16.68 \pm 8.45	3.61 \pm 0.52 c	12.72 \pm 5.85	0.01 (1.26)	11.86 (1.26)	2.69 (1.26)	ns	0.0020	ns
Dimethylamine	10.97 \pm 4.07	13.11 \pm 9.81	3.79 \pm 4.26	16.20 \pm 6.04 b	4.06 (1.27)	8.15 (1.27)	0.64 (1.27)	ns	0.0082	ns

Formate	18.78 ± 8.71	23.65 ± 4.69	17.08 ± 5.03	28.21 ± 11.48	1.11 (1.26)	7.27 (1.26)	0.23 (1.26)	ns	0.0121	ns
Fumarate	11.56 ± 7.54	19.39 ± 5.45	7.78 ± 7.04 c	16.22 ± 9.77	0.01 (1.27)	8.77 (1.27)	1.60 (1.27)	ns	0.0063	ns
GTP	5.41 ± 2.51	11.04 ± 11.13	16.77 ± 8.28	15.39 ± 7.89	1.29 (1.27)	0.47 (1.27)	6.46 (1.27)	ns	ns	0.0171
Glucose	2157 ± 718.30	2428 ± 1179	2464 ± 1085	3578 ± 1046	1.23 (1.27)	3.32 (1.27)	3.38 (1.27)	ns	ns	ns
Glutamate	210.00 ± 95.03	343.2 ± 73.02	214.7 ± 182.60	371.9 ± 153.60	0.07 (1.27)	9.81 (1.27)	0.13 (1.27)	ns	0.0041	ns
Glutamine	106.10 ± 43.34	212.4 ± 74.03 a	94.69 ± 28.90 c	204.10 ± 98.04 b	4×10 ⁻³ (1.27)	17.82 (1.27)	0.15 (1.27)	ns	0.0002	ns
Glutathione	55.16 ± 47.19	36.82 ± 31.55	120.2 ± 82.94	114.10 ± 86.82	0.07 (1.26)	0.26 (1.26)	8.90 (1.26)	ns	ns	0.0061
Glycine	174.30 ± 85.18	337.30 ± 73.37 a	215. 6 ± 91.38	378.8 ± 134.70 a,b	5×10 ⁻⁶ (1.27)	20.61 (1.27)	1.33 (1.27)	ns	0.0001	ns
Glycocholate	2.81 ± 0.89	10.20 ± 3.87 a	9.37 ± 7.51	12.30 ± 4.58 a	1.72 (1.26)	9.22 (1.26)	6.48 (1.26)	ns	0.0054	0.0172
Hypoxanthine	48.83 ± 33.52	97.90 ± 38.62 c	22.64 ± 7.83	105.00 ± 63.87 b	1.04 (1.26)	16.15 (1.26)	0.34 (1.26)	ns	0.0004	ns
IMP	3.58 ± 1.60	8.70 ± 5.80	6.76 ± 6.28	10.19 ± 6.08	0.17 (1.26)	4.42 (1.26)	1.32 (1.26)	ns	0.0455	ns
Inosine	88.33 ± 39.16	138.00 ± 31.51	66.80 ± 46.46	204.60 ± 78.36 a,b	5.46 (1.27)	24.70 (1.27)	1.43 (1.27)	0.0272	<0.0001	ns
Isoleucine	16.84 ± 11.59	31.28 ± 2.09	15.81 ± 8.62	37.90 ± 15.52 a,b	0.96 (1.26)	21.94 (1.26)	0.52 (1.26)	ns	<0.0001	ns
Lactate	1300 ± 436.30	1642 ± 506.10	955.20 ± 410.40	2100 ± 815.90 b	3.64 (1.27)	12.47 (1.27)	0.07 (1.27)	ns	0.0015	ns
Leucine	42.78 ± 21.72	66.25 ± 3.46	34.14 ± 15.97	85.57 ± 36.42 a,b	2.76 (1.26)	19.83 (1.26)	0.40 (1.26)	ns	0.0001	ns

Lysine	58.80 ± 41.56	105.20 ± 30.38	50.40 ± 35.08	108.90 ± 51.21	0.17 (1.27)	12.88 (1.27)	0.03 (1.27)	ns	0.0013	ns
NAD ⁺	8.54 ± 5.23	10.92 ± 3.33	27.60 ± 16.20 a,c	11.18 ± 4.46 b	8.31 (1.27)	4.27 (1.27)	8.83 (1.27)	0.0076	0.0486	0.0062
NADP ⁺	3.41 ± 1.55	3.88 ± 1.85	5.27 ± 2.25	6.49 ± 2.53 a	0.24 (1.26)	1.21 (1.26)	8.47 (1.26)	ns	ns	0.0073
Nicotinurate	41.52 ± 15.06	63.61 ± 7.92	44.11 ± 21.37	81.48 ± 30.81 a,b	1.09 (1.27)	16.46 (1.27)	1.95 (1.27)	ns	0.0004	ns
O-Phosphocholine	244.20 ± 75.86	291.5 ± 111.10	316.30 ± 147.60	639.90 ± 241.30 a,b,c	5.83 (1.27)	10.49 (1.27)	13.49 (1.27)	0.0229	0.0032	0.0010
O-Phosphoethanolamine	56.19 ± 36.10	154.5 ± 70.86 a	37.32 ± 11.12 c	99.02 ± 68.70	0.71 (1.26)	13.55 (1.26)	2.93 (1.26)	ns	0.0011	ns
Phenylalanine	17.73 ± 9.01	28.16 ± 2.58	14.20 ± 8.01	33.33 ± 14.38 a,b	1.56 (1.26)	18.04 (1.26)	0.06 (1.26)	ns	0.0002	ns
Pyruvate	9.26 ± 5.36	16.36 ± 5.67	8.69 ± 6.66	16.84 ± 9.92	0.04 (1.27)	8.56 (1.27)	2×10 ⁻⁴ (1.27)	ns	0.0069	ns
Serine	80.81 ± 43.94	148.00 ± 50.18	117.4 ± 74.43	269.5 ± 175.50 a	1.32 (1.27)	8.84 (1.27)	4.59 (1.27)	ns	0.0061	0.0414
Succinate	77.51 ± 49.94	100.6 ± 46.54	89.04 ± 35.06	101.5 ± 35.88	0.11 (1.27)	1.29 (1.27)	0.16 (1.27)	ns	ns	ns
Taurine	426.2 ± 358.30	426.20 ± 205.80	671.60 ± 461.30	969.00 ± 568.80	0.44 (1.27)	1.78 (1.27)	5.34 (1.27)	ns	ns	0.0287
Tryptophan	4.53 ± 2.00	8.15 ± 1.79 a	5.47 ± 1.76	9.79 ± 3.31 a,b	0.17 (1.27)	21.92 (1.27)	2.32 (1.27)	ns	<0.0001	ns
Tyrosine	21.91 ± 15.03	31.75 ± 3.52	15.83 ± 9.18	38.63 ± 15.50 a,b	2.25 (1.26)	14.27 (1.26)	0.01 (1.26)	ns	0.0008	ns
UDP-N-Acetylglucosamine	6.33 ± 3.94	15.72 ± 12.84	16.77 ± 7.36	21.72 ± 11.39 a	0.36 (1.27)	3.77 (1.27)	4.96 (1.27)	ns	ns	0.0344
UDP-glucose	14.48 ± 7.39	23.15 ± 19.46	25.93 ± 8.57	35.67 ± 16.49	0.01 (1.27)	2.85 (1.27)	4.83 (1.27)	ns	ns	0.0366

UMP	9.76 ± 10.42	4.09 ± 1.84	4.30 ± 1.88	9.39 ± 7.28	4.42 (1.24)	0.01 (1.24)	9x10 ⁻⁴ (1.24)	0.0461	ns	ns
Uracil	9.33 ± 10.81	37.88 ± 27.60	1.15 ± 0.64 c	26.62 ± 20.38	0.04 (1.25)	11.92 (1.25)	1.54 (1.25)	ns	0.0020	ns
Uridine	33.38 ± 21.13	40.17 ± 18.07	9.57 ± 2.46	76.44 ± 31.41 a,b,c	13.17 (1.26)	19.80 (1.26)	0.57 (1.26)	0.0012	0.0001	ns
Valine	32.94 ± 18.58	54.36 ± 3.47	26.32 ± 15.05 c	67.04 ± 27.00 a	2.11 (1.26)	21.89 (1.26)	0.21 (1.26)	ns	<0.0001	ns
Xanthosine	2.47 ± 1.15	2.80 ± 1.37	1.98 ± 0.91	5.66 ± 3.33 a,b,c	5.34 (1.27)	7.60 (1.27)	2.68 (1.27)	0.0287	0.0104	ns
B-Alanine	40.27 ± 23.53	75.72 ± 27.16 a	16.60 ± 3.79 c	44.47 ± 19.33 c	0.21 (1.26)	14.54 (1.26)	10.93 (1.26)	ns	0.008	0.0028

Legend: WC weanling control group n=7; WW, weanling tumour-bearing group n=10; AC, adult control group n=6; AW, adult tumour-bearing group n=8. Data were expressed as mean ± standard deviation (SD) in millimolar/milligram of liver tissue. Data were analysed by two-way ANOVA and corrected for multiple comparisons using the post hoc test Bonferroni. DFn and DFd: degrees of freedom for the numerator and denominator of the F ratio, respectively. Differences were significant when $p \leq 0.05$. a represents differences from the WC group; b indicates differences from AC group, and c indicates differences from the WW group.

Table S3. Protein expression in the liver tissue in weanling and adult control and tumour-bearing groups.

Protein	Weanling		Adult		F (DFn, DFd)			<i>p</i> -value		
	WC	WW	AC	AW						
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Interaction	Tumour	Age	Interaction	Tumour	Age
Cytrate synthase	0.86 ± 0.32	1.00 ± 0.19	1.12 ± 0.16	1.34 ± 0.18 a,c	0.23 (1.19)	3.75 (1.19)	10.93 (1.19)	ns	ns	0.0037
GADPH	1.14 ± 0.99	0.08 ± 0.09 a	0.46 ± 0.45	0.11 ± 0.07 a	3.01 (1.20)	11.8 (1.20)	2.56 (1.20)	ns	0.0026	ns
LDHA	1.07 ± 0.29	1.36 ± 0.27	1.12 ± 0.26	1.17 ± 0.23	1.19 (1.20)	2.38 (1.20)	0.35 (1.20)	ns	ns	ns
mTOR	0.72 ± 0.40	1.28 ± 0.34	1.29 ± 0.62	2.01 ± 0.77 a	0.13 (1.20)	7.30 (1.20)	7.71 (1.20)	ns	0.0137	0.0116
p mTOR	0.19 ± 0.20	0.62 ± 0.44	0.68 ± 0.52	1.50 ± 0.72 a,c	0.76 (1.19)	7.99 (1.19)	9.59 (1.19)	ns	0.0108	0.0059
AMPK	0.60 ± 0.18	0.19 ± 0.15 a	0.28 ± 0.24	0.32 ± 0.28	5.79 (1.19)	3.78 (1.19)	0.99 (1.19)	0.0264	ns	ns
p AMPK	0.75 ± 0.31	1.05 ± 0.33	0.79 ± 0.64	0.92 ± 0.59	0.20 (1.20)	1.15 (1.20)	0.05 (1.20)	ns	ns	ns
FOXO1	0.61 ± 0.49	0.59 ± 0.23	0.64 ± 0.01	0.41 ± 0.27	0.85 (1.18)	1.27 (1.18)	0.40 (1.18)	ns	ns	ns
PCG1α	0.95 ± 0.07	0.95 ± 0.35	1.03 ± 0.30	0.83 ± 0.14	0.36 (1.18)	0.41 (1.18)	0.01 (1.18)	ns	ns	ns
Mitochondrial complex I	0.18 ± 0.16	0.36 ± 0.24	0.23 ± 0.14	0.36 ± 0.27	0.06 (1.20)	2.54 (1.20)	0.06 (1.20)	ns	ns	ns
Mitochondrial complex II	1.16 ± 0.83	0.15 ± 0.25 a	0.39 ± 0.23	0.61 ± 0.51	8.62 (1.20)	3.50 (1.20)	0.55 (1.20)	0.0082	ns	ns
Mitochondrial complex III	0.97 ± 0.43	0.88 ± 0.32	0.78 ± 0.44	1.15 ± 0.56	1.49 (1.20)	0.55 (1.20)	0.06 (1.20)	ns	ns	ns
Mitochondrial complex IV	0.60 ± 0.15	0.15 ± 0.17 a	0.24 ± 0.05	0.46 ± 0.25 c	14.19 (1.18)	1.71 (1.18)	0.07 (1.18)	0.0014	ns	ns

Mitochondrial complex V	1.17 ± 0.29	1.21 ± 0.24	0.94 ± 0.23	1.09 ± 0.26	0.26 (1.19)	0.75 (1.19)	2.46 (1.19)	ns	ns	ns
-------------------------	-------------	-------------	-------------	-------------	-------------	-------------	----------------	----	----	----

Legend: WC, weanling control group n=5; WW, weanling tumour-bearing group n=8; AC, adult control group n=4; AW, adult tumour-bearing group n=7. Data were expressed as mean ± standard deviation (SD). The units used were protein/ vinculin protein expression (optical density, OD - western blot image). Data were analysed by two-way ANOVA and corrected for multiple comparisons using the post hoc test Bonferroni. DFn and DFd: degrees of freedom for the numerator and denominator of the F ratio, respectively. Differences were significant when $p \leq 0.05$. a represents differences from the WC group; b indicates differences from AC group, and c indicates differences from the WW group.

Table S4. Gene expression in the liver tissue in weanling and adult control and tumour-bearing groups.

Gene	Weanling		Adult		F (DFn, DFd)			p-value		
	WC	WW	AC	AW						
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Interaction	Tumour	Age	Interaction	Tumour	Age
<i>CREB1</i>	0.85 \pm 0.29	0.35 \pm 0.08	1.07 \pm 0.42 c	1.09 \pm 0.23 c	4.96 (1.17)	3.97 (1.17)	16.51 (1.17)	0.0397	ns	0.0008
<i>PEPCK</i>	1.38 \pm 0.90	13.79 \pm 9.57 a	1.22 \pm 0.79	1.00 \pm 0.48 c	8.98 (1.19)	8.37 (1.19)	9.45 (1.19)	0.0074	0.0093	0.0063
<i>PPAR α</i>	1.15 \pm 0.62	1.58 \pm 0.97	1.15 \pm 0.66	0.51 \pm 0.17 c	3.78 (1.19)	0.14 (1.19)	3.67 (1.19)	ns	ns	ns
<i>AMPK</i>	1.26 \pm 0.72	0.76 \pm 0.33	0.75 \pm 0.31	0.68 \pm 0.28	1.26 (1.19)	2.13 (1.19)	2.30 (1.19)	ns	ns	ns
<i>GS3K</i>	1.25 \pm 0.79	0.66 \pm 0.49	1.10 \pm 0.55	0.89 \pm 0.23	0.65 (1.19)	3.00 (1.19)	0.03 (1.19)	ns	ns	ns
<i>CRP</i>	0.87 \pm 0.48	0.27 \pm 0.11	1.07 \pm 0.42 c	0.68 \pm 0.33	0.44 (1.17)	9.97 (1.17)	3.76 (1.17)	ns	0.0058	ns
<i>mTOR</i>	0.86 \pm 0.27	0.44 \pm 0.33	1.08 \pm 0.42 c	0.93 \pm 0.29	0.93 (1.18)	4.06	6.43	ns	ns	0.0207
<i>PGC1 α</i>	1.51 \pm 1.37	1.59 \pm 0.88	1.28 \pm 0.87	0.76 \pm 0.12	0.56 (1.18)	0.31 (1.18)	1.80 (1.18)	ns	ns	ns
<i>GAPDH</i>	0.82 \pm 0.15	0.41 \pm 0.15	1.11 \pm 0.15	1.02 \pm 0.52	0.81 (1.17)	1.96 (1.17)	6.11 (1.17)	ns	ns	0.0244
<i>FOXO 1</i>	1.26 \pm 0.85	0.79 \pm 0.66	1.13 \pm 0.57	0.71 \pm 0.18	0.01 (1.19)	3.01 (1.19)	0.16 (1.19)	ns	ns	ns

Legend: WC, weanling control group n=5; WW, weanling tumour-bearing group n=8; AC, adult control group n=4; AW, adult tumour-bearing group n=7. Data were expressed as mean \pm standard deviation (SD). The units used were relative protein expression (rtPCR, expressed as arbitrary units - AU). Data were analysed by two-way ANOVA and corrected for multiple comparisons using the post hoc test Bonferroni. DFn and DFd: degrees of freedom for the numerator and denominator of the F ratio, respectively. Differences were significant when $p \leq 0.05$. a represents differences from the WC group; b indicates differences from AC group, and c indicates differences from the WW group.

Table S5. Primer sequences for gene expression in the liver tissue in weanling and adult control and tumour-bearing groups.

Genes	Primer sequences
<i>AMPK</i>	Forward: 5' CAG TTG GAC TAT GAA TGG AAG 3' Reverse: 5' CCT GAT TTG GCT TCT GTA ATC 3'
<i>PPAR α</i>	Forward: 5' GCT CTG AAC CAT TGG CGT TCG 3' Reverse: 5' TGT CAG TTC ACA GGG AAG GC 3'
<i>CRP</i>	Forward: 5' ATC ACG ATA AGC TTC TCT CAG GC 3' Reverse: 5' ACT CCG GGA AAT ACG AAG GC 3'
<i>CREB1</i>	Forward: 5' GAC CAT GGA CTC TGG AGC AG 3' Reverse: 5' TGA GCT GCT GGC ATG GAT AC 3'
<i>FOXO 1</i>	Forward: 5' CGG AGA TAC CTT GGA TTT TAA C 3' Reverse: 5' TTT AAA TGT TGC CTG CTC AC 3'
<i>GS3K</i>	Forward: 5' TTT TGA TGA ATT ACG GGA CC 3' Reverse: 5' GTT ACT TGA CAG TTC TTG AGT G 3'
<i>mTOR</i>	Forward: 5' AGA AAT TTG ATC AGG TGT GC 3' Reverse: 5' TTC CTT TTC CTT CTT GAC AC 3'
<i>PGC1 α</i>	Forward: 5' CTG GTT GCC TGC ATG AGT GT 3' Reverse: 5' GTT CGC AGG CTC ATT GTT GT 3'
<i>GAPDH</i>	Forward: 5' CCA TGG AGA AGG CTG GG 3' Reverse: 5' CAA AGT TGT CAT GGA TGA CC 3'
<i>PEPCK</i>	Forward: 5' AAA ACA CCA TCT TCA CCA AC 3' Reverse: 5' AAT AAT GGG ACA TTG GCT G 3'