

**Supplemental table 7: List of genes regulated by caloric restriction, classified by biological functions**

**A- Anterior Pituitary**

Category	# of genes	P value	Genes
Cell Death	35	5,22E-03-4,71E-02	<i>Snca, Prr13, Camk2d, Taf10, Dnaja1, Klif6, Asns, Pvr12, Glrx, Laptm4b, Dnajb1, Rbm3, Adamts14, Jph3, F2r, Bag6, Shbg, Tfr, Aqp1, Hspa1a/Hspa1b, Hla-E, Dnase1, Tpsab1/Tpsb2, Wee1, Birc3, Lgals3bp, Pigf, Cacybp, Flnb, Nupr1, Xdh, Thy1, Usp2, Igfbp3, Atp5s</i>
Cellular Function and Maintenance	21	9,35E-04-4,71E-02	<i>F2r, Myh14, Hspa1a/Hspa1b, Aqp1, Sorcs2, Tfr, Hla-E, Chmb4, Aqp4, Dnase1, Camk2d, Syn2, Dnaja1, Slc20a2, Myh6, Dnajb1, Gaa, Cd151, Nupr1, Xdh, Arst</i>
Cell-To-Cell Signaling and Interaction	18	2,6E-04-4,71E-02	<i>F2r, Serping1, Hspa1a/Hspa1b, Tfr, Snca, Chmb4, Syn2, Jam2, Pvr12, Birc3, Lgals3bp, Dfnb31, Tfp1, Cd151, Xdh, Thy1, Ptp4a3, Igfbp3</i>
Cellular Assembly and Organization	16	3,34E-03-4,71E-02	<i>F2r, Myh14, Hspa1a/Hspa1b, Snca, Dnase1, Camk2d, Syn2, Dnaja1, Klc1, Pvr12, Myh6, Dnajb1, Gaa, Flnb, Xdh, Arst</i>
Small Molecule Biochemistry	14	1,47E-04-4,71E-02	<i>F2r, Slco3a1, Serping1, Aqp1, Snca, Tef, Csgalnact1, Dnaja1, Asns, Dnajb1, Tfp1, Xdh, Arsb, Igfbp3</i>
Cell Morphology	13	3,78E-04-4,71E-02	<i>F2r, Aqp1, Snca, Aqp4, Cenpb, Klc1, Pvr12, Elmo2, Cd151, Flnb, Xdh, Nupr1, Igfbp3</i>
Cellular Compromise	11	3,34E-03-4,71E-02	<i>Pvr12, Hspa1a/Hspa1b, Aqp1, Snca, Dnajb1, Aqp4, Dnase1, Flnb, Dnaja1, Xdh, Klc1</i>
Cellular Growth and Proliferation	11	8,01E-03-4,71E-02	<i>F2r, Shbg, Hspa1a/Hspa1b, Tfr, Hla-E, Tpsab1/Tpsb2, Thy1, Klif6, Ptp4a3, Armt, Igfbp3</i>
Molecular Transport	10	3,78E-04-4,71E-02	<i>Ppp1r10, Slco3a1, Tfr, Aqp1, Cry2, Aqp4, Dnaja1, Xdh, Igfbp3, Arst</i>
Cellular Development	9	8,01E-03-4,07E-02	<i>Pvr12, Shbg, Hspa1a/Hspa1b, Tfr, Aloxe3, Klif6, Thy1, Ptp4a3, Igfbp3</i>
Cellular Movement	9	8,01E-03-3,94E-02	<i>Pvr12, F2r, Myh14, Tfr, Snca, Cd151, Xdh, Ptp4a3, Igfbp3</i>
Lipid Metabolism	8	1,47E-04-4,71E-02	<i>F2r, Slco3a1, Serping1, Snca, Dnajb1, Tef, Dnaja1, Xdh</i>
Carbohydrate Metabolism	7	8,01E-03-4,71E-02	<i>F2r, Aqp1, Tfp1, Csgalnact1, Xdh, Pfkp, Arsb</i>
Drug Metabolism	6	1,73E-03-4,71E-02	<i>Glrx, Snca, Dnajb1, Tfp1, Dnaja1, Xdh</i>
Protein Synthesis	5	3,78E-04-4,71E-02	<i>Tfr, Aqp4, Taf10, Ehd3, Igfbp3</i>
Protein Trafficking	5	3,78E-04-9,24E-03	<i>Ppp1r10, Tfr, Cry2, Dnaja1, Igfbp3</i>
DNA Replication, Recombination, and Repair	4	3,34E-03-4,71E-02	<i>Hspa1a/Hspa1b, Dnajb1, Dnase1, Dnaja1</i>
Cell Cycle	4	8,01E-03-4,71E-02	<i>Myh14, Hspa1a/Hspa1b, Wee1, Igfbp3</i>
Post-Translational Modification	3	5,44E-03-3,94E-02	<i>Hspa1a/Hspa1b, Dnaja1, Xdh</i>
Gene Expression	3	8,01E-03-4,71E-02	<i>Dnajb1, Taf10, Igfbp3</i>
Protein Folding	2	5,44E-03-5,44E-03	<i>Hspa1a/Hspa1b, Dnaja1</i>
Amino Acid Metabolism	2	8,01E-03-4,71E-02	<i>Asns, Igfbp3</i>
Nucleic Acid Metabolism	2	8,01E-03-1,6E-02	<i>Csgalnact1, Xdh</i>
Cell Signaling	2	2,1E-02-3,94E-02	<i>Xdh, Igfbp3</i>

**B- Hypothalamus**

Category	# of genes	P value	Genes
Cellular Growth and Proliferation	19	3,18E-04-4,79E-02	<i>Dnaja3, Nov, Apoa1, Irf2, Hspa1a/Hspa1b, Yy1, Nr1d1, Fkbp5, Cd1d, Cartpt, Tpr, Egr2, Vcan, Casp8, Calcr1, Rbm3, Nr4a3, Tgm2, Pla2g3</i>
Cell Death	19	1,43E-03-4,93E-02	<i>Dnaja3, Otud7b, Hspa1a/Hspa1b, Irf2, Apoa1, Yy1, Nr1d1, Fkbp5, Cd1d, Egr2, Camk1g, Vcan, Casp8, Calcr1, Rbm3, Nr4a3, Tgm2, Ppp1r15b, Gas2</i>
Cellular Development	15	3,66E-04-4,54E-02	<i>Dnaja3, Nov, Apoa1, Hspa1a/Hspa1b, Irf2, Yy1, Nr1d1, Cd1d, Cartpt, Egr2, Kat6a, Vcan, Casp8, Nr4a3, Tgm2</i>
Cellular Movement	15	3,26E-03-4,79E-02	<i>Dnaja3, Nov, Hspa1a/Hspa1b, Apoa1, Yy1, Nr1d1, Cd1d, Tpr, Cartpt, Egr2, Vcan, Casp8, Calcr1, Nr4a3, Tgm2</i>
Cell-To-Cell Signaling and Interaction	12	5,62E-04-4,79E-02	<i>Dnaja3, Egr2, Hspa1a/Hspa1b, Vcan, Apoa1, Irf2, Casp8, Calcr1, Tgm2, Cd1d, Cartpt, Gas2</i>
Cellular Function and Maintenance	11	3,66E-04-4,47E-02	<i>Dnaja3, Egr2, Hspa1a/Hspa1b, Apoa1, Irf2, Casp8, Syt6, Ppp1r15b, Tgm2, Cartpt, Cd1d</i>
Small Molecule Biochemistry	11	1,13E-03-4,79E-02	<i>Irf2, Vcan, Apoa1, Casp8, Calcr1, Nr4a3, Fkbp5, Pla2g3, Tgm2, Cd1d, Cartpt</i>
Gene Expression	11	9,76E-03-4,13E-02	<i>Egr2, Kat6a, Irf2, Yy1, Casp8, Nr4a3, Nr1d1, Rbm3, Per2, Tgm2, Tle1</i>
Cellular Assembly and Organization	10	1,37E-03-4,47E-02	<i>Egr2, Dnaja3, Vcan, Apoa1, Hspa1a/Hspa1b, Casp8, Syt6, Fkbp5, Tgm2, Gas2</i>
DNA Replication, Recombination, and Repair	10	3,26E-03-3,78E-02	<i>Dnaja3, Nov, Zbtb20, Kat6a, Hspa1a/Hspa1b, Irf2, Yy1, Casp8, Nr4a3, Tgm2</i>
Lipid Metabolism	8	1,13E-03-4,79E-02	<i>Irf2, Apoa1, Casp8, Nr4a3, Fkbp5, Pla2g3, Cd1d, Cartpt</i>
Cell Signaling	8	3,26E-03-3,53E-02	<i>Dnaja3, Otud7b, Apoa1, Irf2, Casp8, Calcr1, Tgm2, Cartpt</i>
Cellular Compromise	7	3,26E-03-4,47E-02	<i>Hspa1a/Hspa1b, Irf2, Yy1, Casp8, Nr4a3, Tgm2, Gas2</i>
Molecular Transport	7	3,26E-03-4,79E-02	<i>Irf2, Apoa1, Syt6, Pla2g3, Tgm2, Tpr, Cartpt</i>
Cell Morphology	6	1,66E-02-4,47E-02	<i>Egr2, Dnaja3, Vcan, Casp8, Fkbp5, Tgm2</i>
Carbohydrate Metabolism	4	3,26E-03-3,85E-02	<i>Apoa1, Pla2g3, Cd1d, Cartpt</i>
Cell Cycle	4	3,26E-03-2,58E-02	<i>Hspa1a/Hspa1b, Yy1, Nr4a3, Tpr</i>
Protein Degradation	4	1,69E-02-4,51E-02	<i>Dnaja3, Apoa1, Casp8, Tgm2</i>
Protein Synthesis	4	1,69E-02-4,51E-02	<i>Dnaja3, Apoa1, Casp8, Tgm2</i>
Antigen Presentation	3	5,62E-04-4,47E-02	<i>Apoa1, Irf2, Tgm2</i>
Energy Production	3	4,56E-03-1,63E-02	<i>Apoa1, Nr4a3, Cartpt</i>
Nucleic Acid Metabolism	3	1,96E-02-1,96E-02	<i>Apoa1, Casp8, Calcr1</i>
Vitamin and Mineral Metabolism	2	6,51E-03-3,53E-02	<i>Apoa1, Tgm2</i>
Drug Metabolism	2	1,3E-02-4,47E-02	<i>Fkbp5, Cartpt</i>
Post-Translational Modification	2	1,74E-02-4,47E-02	<i>Dnaja3, Hspa1a/Hspa1b</i>
Protein Folding	2	1,74E-02-4,47E-02	<i>Dnaja3, Hspa1a/Hspa1b</i>
Amino Acid Metabolism	2	1,94E-02-4,79E-02	<i>Vcan, Cartpt</i>