

	Hyperthyroidism	Primary hypothyroidism	Fasting (fa) and food restriction (fr)	Short term (se) and long term (le) exercise	Cold stress	Lactation (la) and suckling (su)	Infection
PVN pro-TRH biosynthesis	↓ (1, 2, 50, 53)	↑ (1, 2, 48, 49)	(fa) ↓ (8, 11, 37, 38) (fr) ↓ (13)	(se) ↑ (19-21) ↓ (23) (le)	↑ 19, 20	(su) ↑ (32, 19) (la) ↑ (32)	↓ (41)
PVN pro-TRH processing	↓ (3)	↑ (62)	↓ (58)		↑ (44)		
MBH TRH	↓ (53) ↔ (54)	↓ (54)	(fa) ↓ (38) (fr) ↑ (13)		↓ (19)		
MBH extracellular or portal blood TRH	↓ (4)	↑ (54)	(fa) ↓ (8, 9, 38)		↑ (51)	(su) ↑ (31-34) (su) ↑ (28, 52)	
ME D2	↑ (expression but not activity) (15)	↔ (15)	(fa) ↑ (15)				↑ (40, 42, 43)
ME MCT8		↔ (46)					↓ (mRNA) ↔ (protein) in brain vessels (60)
ME OATP1C1		↑ (in brain vessels) (61)					↓ in brain vessels (60)
ME PPII	↑ (5, 6)	↓ (7)	(fa) ↑ (5) (fr) ↔ (36)				
Serum PPII	↑ (55, 57)	↓ (55)	(fa) ↑ (5)				
AP D1		↑ (65, 66)					
AP D2		↓ (65, 66)	(fa) ↓ (14)				↑ (42)
AP THR occupancy		↓ (14)	(fa) ↔ ↑ (14)				
AP TRH R1	↑ (63)	↔ ↑ (63)	(fr) ↑ (13)				
AP PPII	↑ (56, 57, 63)	↓ (56, 57)	(fa) ↔ (5)				
AP TSH α	↔ (63)						

AP TSH β	↓ (17, 63)	↑ (17, 59)	(fa) ↓ (11)				
AP TSH α glycosylation		↑ (59)					
AP TSH β glycosylation		↑ (59)					
Serum TSH	↓(4)	↑ (4, 14)	(fa) ↔ (9*, 12) or ↓(9*, 11, 13, 14, 16) *Sex dependent	↑ (19-21) (se) ↓ (23) (le)	↑ (19-22) ↑ (51)	↔ (19, 32)	↔ or ↓ (17) ↓ (41)
Serum PRL			(fa) ↔ (8) (fr) ↓ (13)			↑ (19, 32)	

Supplementary Table: Multilevel impact of physio-pathological inputs on the central arm of the HPT axis in adult male (or female) rodents.

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