



Fig. S1. Experimental protocol time line

On an alternative week basis, a set of 8 fish was taken from the holding tank n°1 and transferred to a treatment tank where it stayed 3 weeks. One treatment tank corresponding to the control group (C; fed daily; blue) or corresponded to the food-deprived group (FD; starved; red). Following this period of three weeks, individuals are transferred to 8 confinement chambers set side by side on the bottom of a recovery tank. After 24 hours of habituation, fish were successively submitted to four behavioural tests rand over four consecutive days. Day 1: novel environment test; Day 2: novel object test; Day 3: conspecific test; Day 4: shelter test. At the end of the testing period fish were returned to second holding tank.