COLD-BLOODED PERSONALITIES: VITAMIN D AND FOOD SHORTAGE AFFECTS RISK-TAKING BEHAVIOUR OF MALE CARPETAN ROCK-LIZARDS (*Iberolacerta cyreni*)

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Behavioural consistency is expected to affect fitness in a negative way intuitively by constraining the individual behavioural repertoire. In contrast to this, consistency both within (animal personality) and across behaviours (behavioural syndrome) is observed in a wide variety of taxa. Hence, one of the main goals in behavioural ecology is to understand the evolutionary and developmental factors underlying consistent between-individual differences in behaviour. One possibility is that individual state and behaviour are linked, and thus state-behaviour feedback loops can explain the emergence of behavioural consistency. Stable state variables (i.e. life-history traits) are known to create long-lasting behavioural strategies, however, recently many research focused on the role of labile state variables in the emergence of stable behavioural differences. For instance, body condition is expected to have a strong effect on individual behavioural strategies in animals. It is known that the vitamin D component in the femoral secretion of male Carpetan rock-lizards (*Iberolacerta cyreni*) act as an honest sexual signal, since only males with better body condition can afford secreting vitamin D at a high rate. Hence, vitamin D and available energy are both expected to affect their behavioural consistency. In our present work, we studied the effects of food and vitamin D manipulation on the activity and risk-taking of 60 male *I. cyreni* during the mating season of 2014. We applied a full factorial experimental design with high vs. low food treatments and vitamin D supplementation vs. placebo treatments. We discuss the treatment effects on lizard behaviour based on eight (activity) and seven (risk-taking) repeated assays. We did not find any effect of the treatments on activity, however, our results suggests that vitamin D combined with insufficient energy intake results higher risk-taking in males compared to other treatment groups.