

Supplementary material

Table S1: Table overview of sample sizes for total amount of individuals and samples, and how many samples were used in the glucocorticoid and total triiodothyronine assay.

	Total N = 140	
	Blue	White
Individuals	n=40	n=100
Faecal samples	n=120 (n ₂₀₁₉ =43, n ₂₀₂₀ =77)	n=307 (n ₂₀₁₉ =97, n ₂₀₂₀ =210)
Gc analysed samples	n _{female} =50, n _{male} =70	n _{female} =180, n _{male} =127
Tt3 analysed samples	n _{female} =13, n _{male} =22	n _{female} =17, n _{male} =18

Table S2: Summary of the tested models, along with statistical output. Response values are marked in bold.

Model	Random factor	Estimated variance	Residual variance	numDF	denDF	F-values	p-values
log TT3~ sex * colour + sample year + subpopulat ion	-	-	-	sex*colour: 1	sex*colour:5 9	sex*colour: 1.6436	sex*colour: 0.20485
				sex: 1	sex: 68	sex: 0.0014	sex: 0.96977
				colour:1	colour: 67	colour: 0.1158	colour: 0.73482
				sample year: 1	sample year: 66	sample year: 0.6387	sample year: 0.42739
				subpopulatio n: 6	subpopulatio n: 60	subpopulation: 2.3343	subpopulation: 0.04334
log TT3~ sex + colour + sample year + subpopulat ion	-	-	-	sex: 1	sex: 67	sex: 0.0059	sex: 0.93913
				colour: 1	colour: 68	colour: 0.1101	colour: 0.74113
				sample year: 1	sample year: 66	sample year: 0.6319	sample year: 0.42979
				subpopulatio n: 6	subpopulatio n: 60	subpopulation: 2.3095	subpopulation: 0.04513
log GC~ sex * colour + sample date + sample year + subpopulat ion	individua l	0.27633	0.32497	sex*colour: 1	sex*colour:1 36	sex*colour: 0.555	sex*colour: 0.4576
				sex: 1	sex: 136	sex: 0.171	sex: 0.6796
				colour:1	colour: 136	colour: 0.185	colour: 0.6676
				sample date: 1	sample date: 278	sample date: 17.206	sample date: <.0001
				sample year: 1	sample year: 278	sample year: 4.569	sample year: 0.0334
				subpopulatio n: 7	subpopulatio n: 278	subpopulation: 2.034	subpopulation: 0.0510
log GC~ sex + colour + sample date + sample year + subpopulat ion	individua l	0.27447	0.32496	sex: 1	sex: 137	sex: 0.172	sex: 0.6788
				colour: 1	colour: 137	colour: 0.186	colour: 0.6667
				sample year: 1	sample year: 278	sample year: 4.613	sample year: 0.0326
				sample date: 1	sample date: 278	sample date: 17.248	sample date: <.0001
				subpopulatio n: 7	subpopulatio n: 278	subpopulation: 2.045	subpopulation: 0.0498

