

**Table S1.** Number of experimental chickens that make up subgroups separated by generation and sex.

Generation	Male	Female	Total
1 <sup>st</sup> generation	-	158	158
2 <sup>nd</sup> generation	98	94	192
3 <sup>rd</sup> generation	31	65	96
4 <sup>th</sup> generation	99	92	191
<b>Total</b>	228	409	637

**Table S2.** The mean and standard deviation of subgroups' phenotypic values separated by generation and sex (unit: mM).

Traits	Generation				Sex	
	1 <sup>st</sup> generation	2 <sup>nd</sup> generation	3 <sup>rd</sup> generation	4 <sup>th</sup> generation	Male	Female
Inosine	1.303 ± 0.487	0.896 ± 0.402	1.164 ± 0.395	1.440 ± 0.356	1.226 ± 0.430	1.186 ± 0.483
IMP	3.724 ± 0.891	5.438 ± 0.602	5.880 ± 0.715	5.059 ± 0.553	5.369 ± 0.714	4.741 ± 1.102
Hypoxanthine	0.694 ± 0.224	0.288 ± 0.097	0.269 ± 0.076	0.463 ± 0.161	0.416 ± 0.166	0.451 ± 0.254