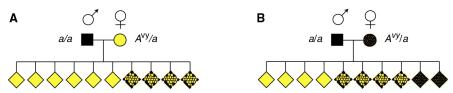
Mothers with the same genotype but different epigenotype, hence phenotype



Distinct patterns of transgenerational inheritance: a different spectrum of phenotypes are observed based on the epigenotype of the mother

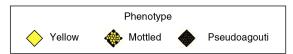


Figure 7. Transgenerational epigenetic inheritance at the *Agouti viable yellow* allele. Pedigrees showing the proportion of yellow, mottled, and pseudoagouti animals following transmission of the allele from an A^{vy} heterozygous mother with a yellow (A) or pseudoagouti (B) phenotype. The a/a offspring have been excluded from these pedigrees for simplicity. Yellow mothers, with an IAP promoter in an open chromatin configuration making the locus constitutively active in all cells, produce more yellow offspring (60%) than pseudoagouti mothers do (40%), in which the IAP promoter is in a repressive chromatin configuration and the promoter is consistently off. This difference is the visual result of transgenerational epigenetic inheritance, in which somehow the epigenetic configuration of the *Agouti* IAP LTR affects the ratio of phenotypes obtained in the next generation.

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