



# FeedUtiliGene: Poultry Model



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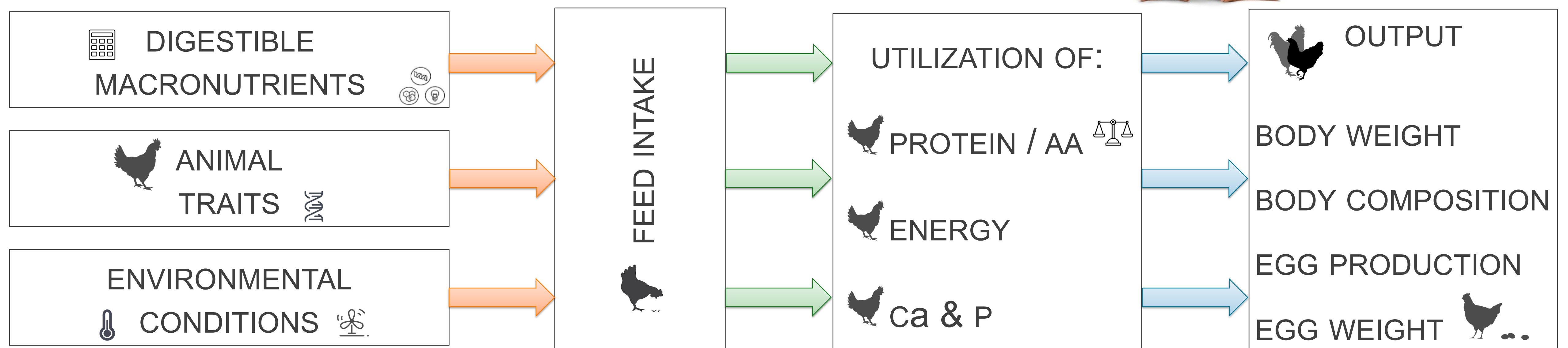
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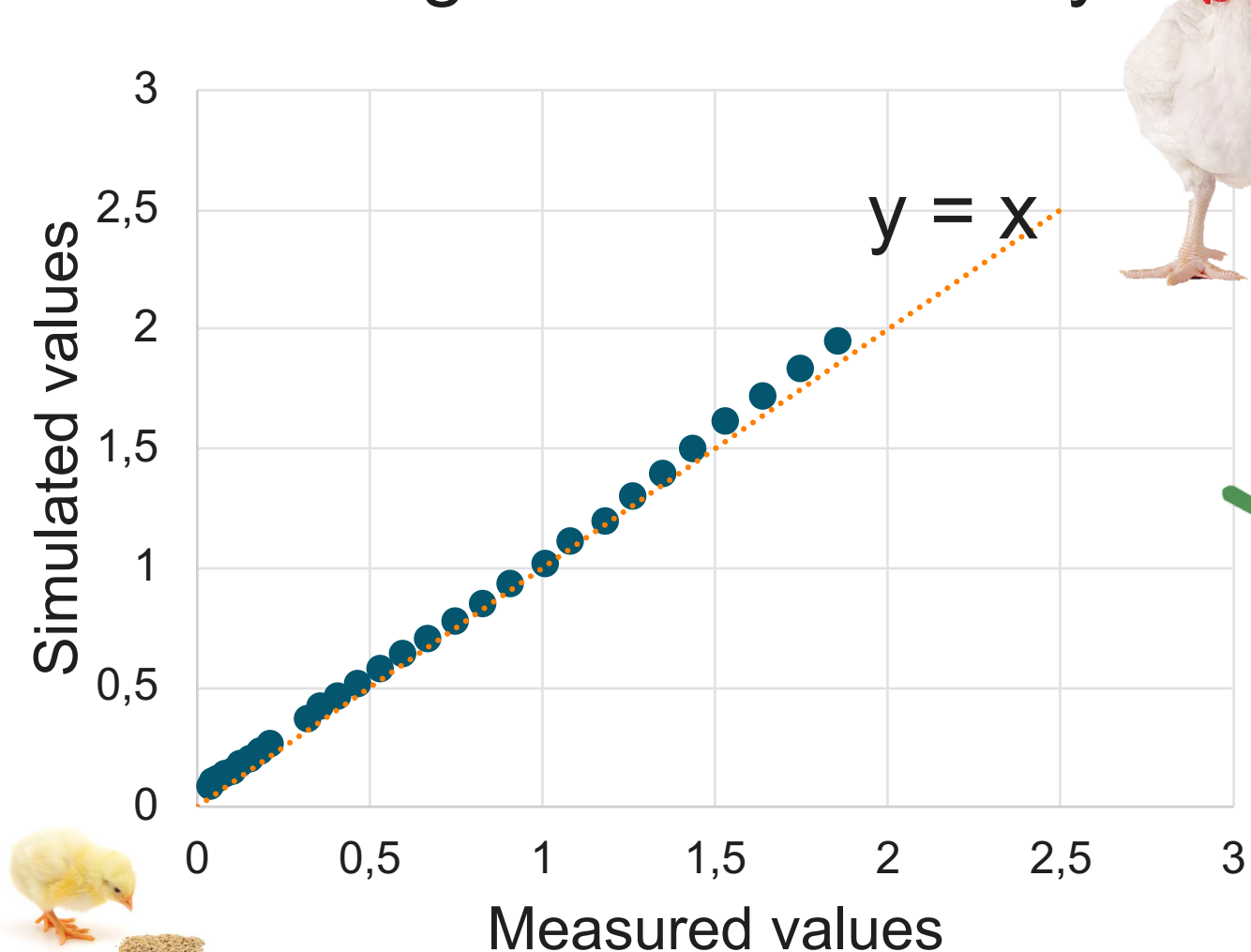
Modelling of digestible nutrient utilization is mainly based on concepts used in net energy and ideal protein systems

FI prediction as multiples of maintenance function based on BW can be used to estimate precisely the FI pattern of broilers during growth

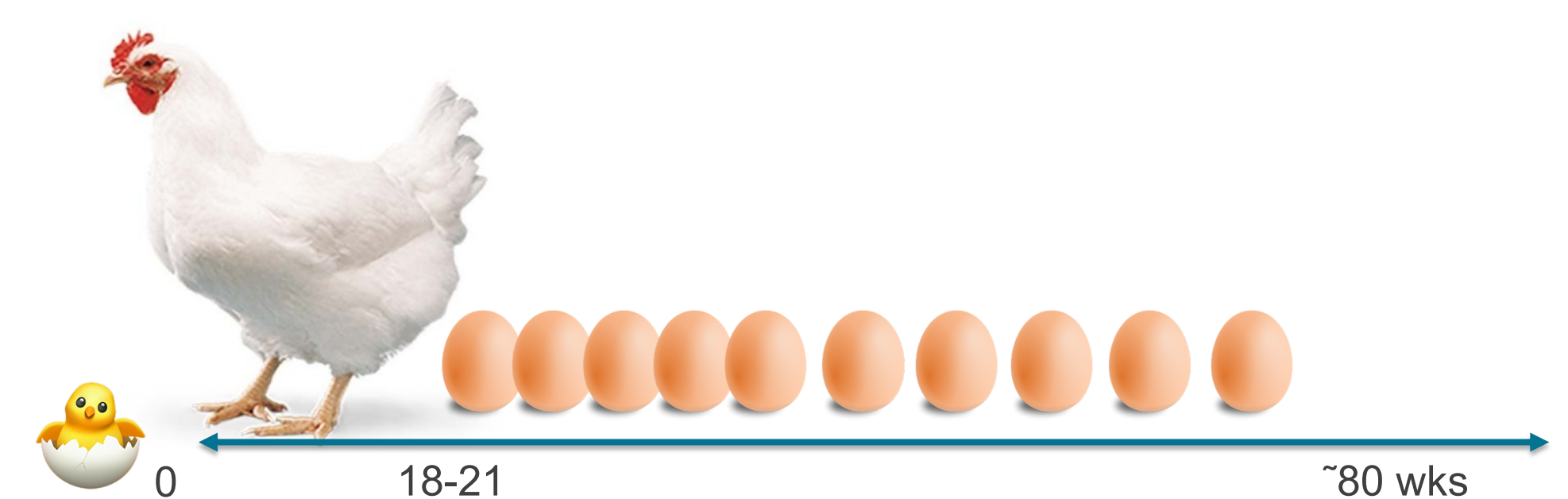
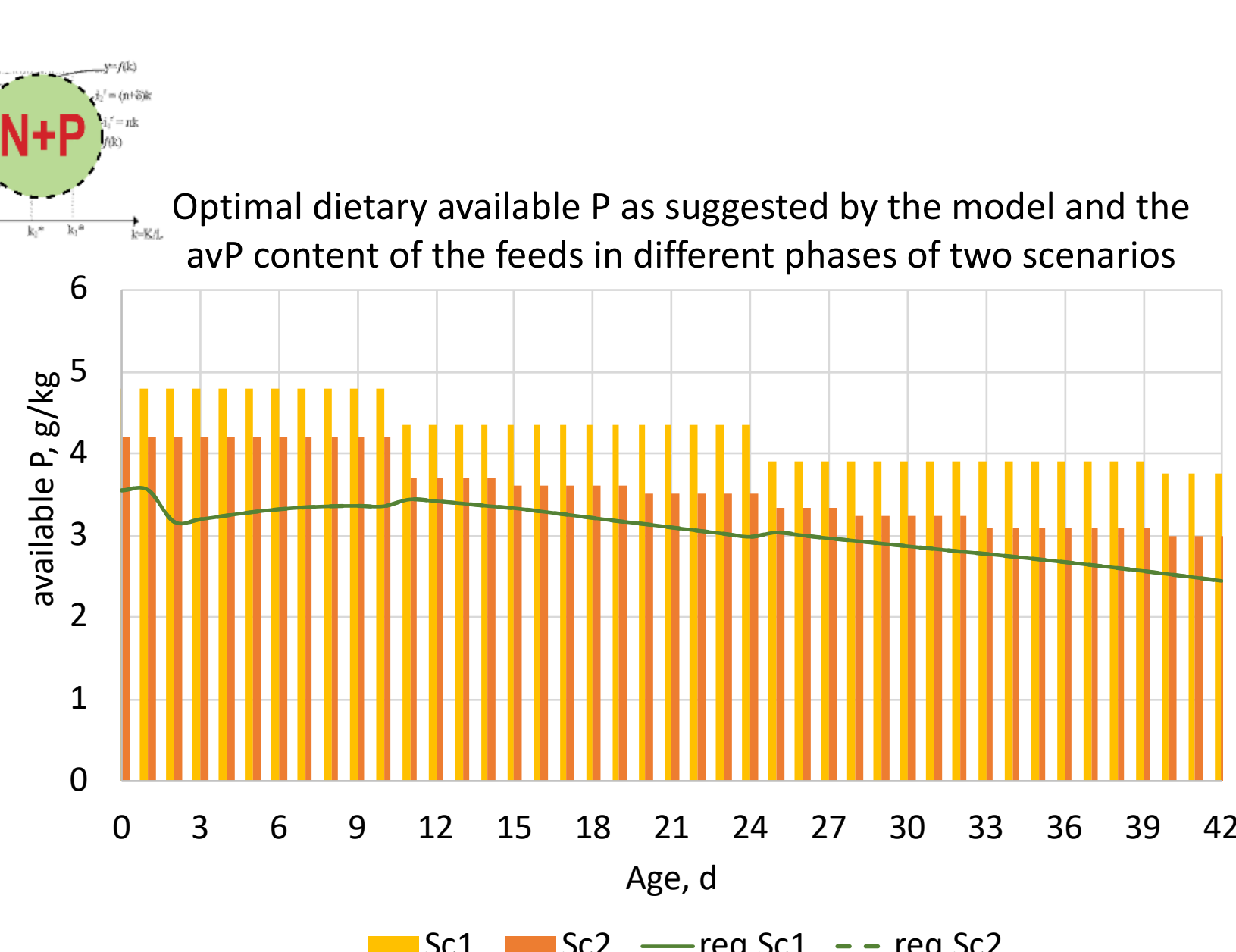
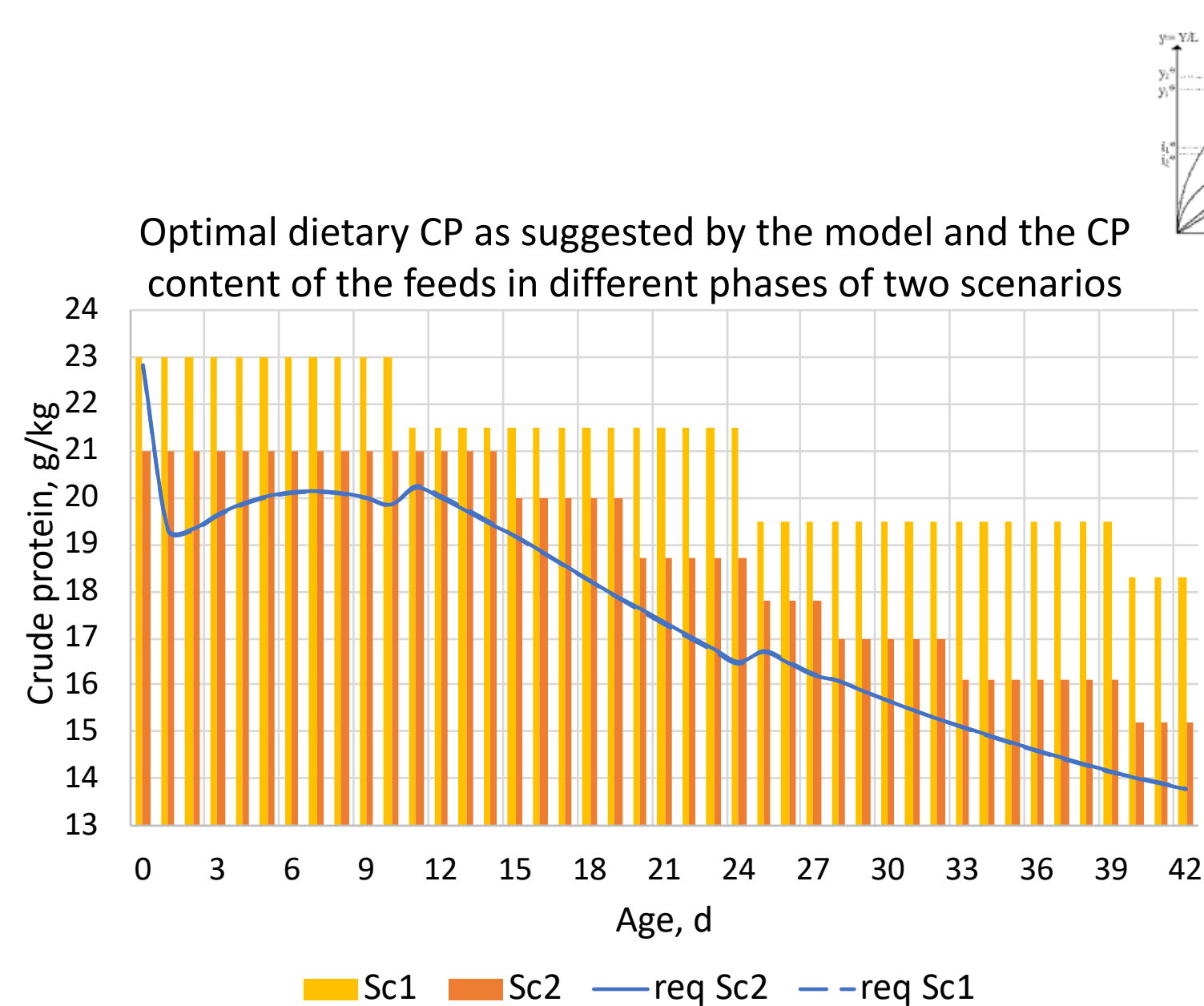
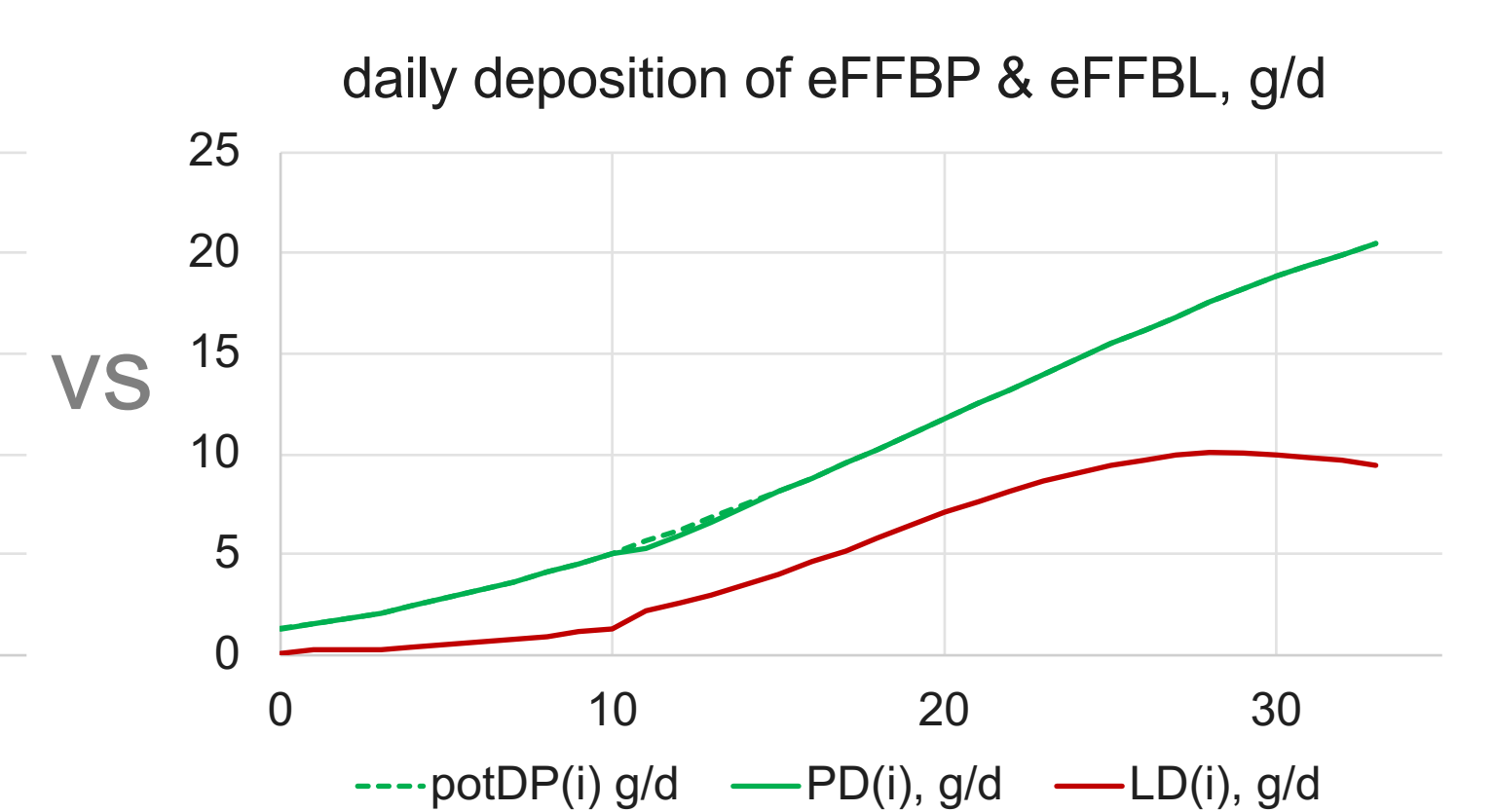
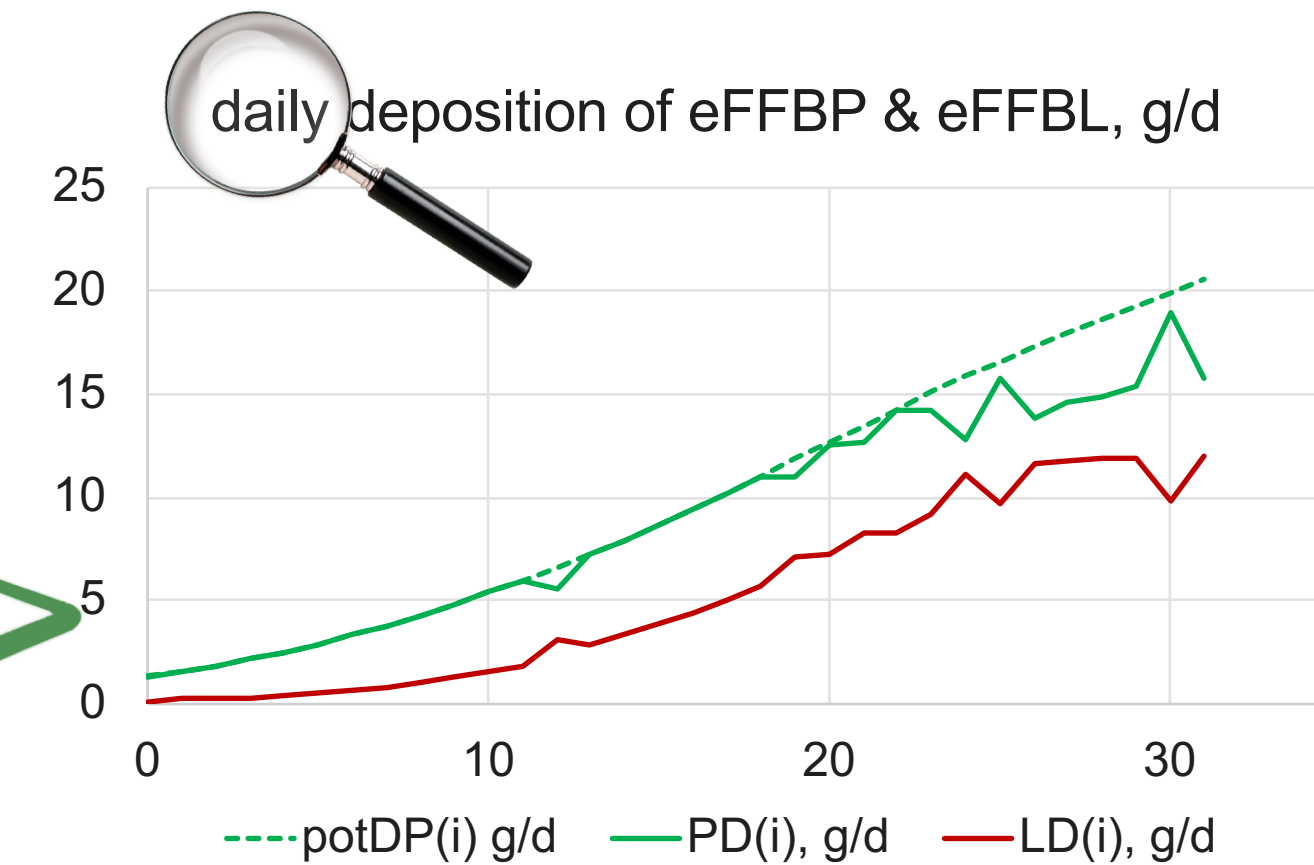
The developed model works for broilers and it has an egg production module as well



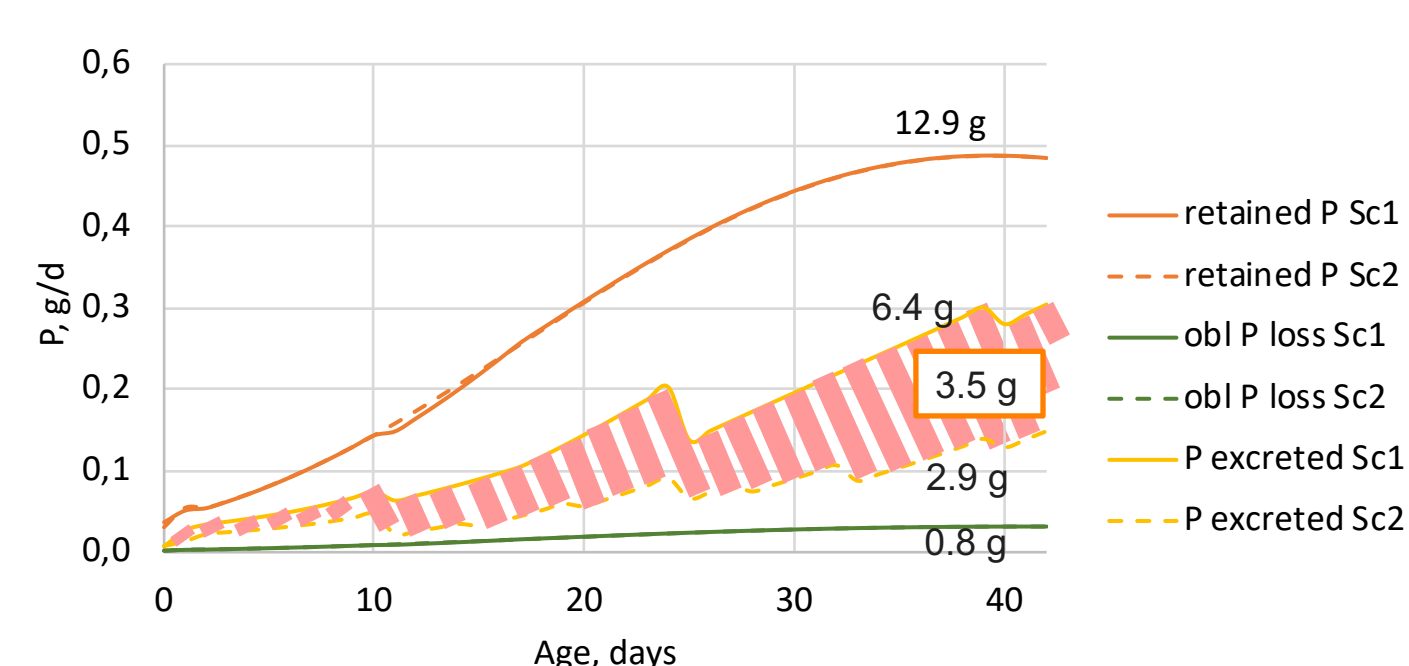
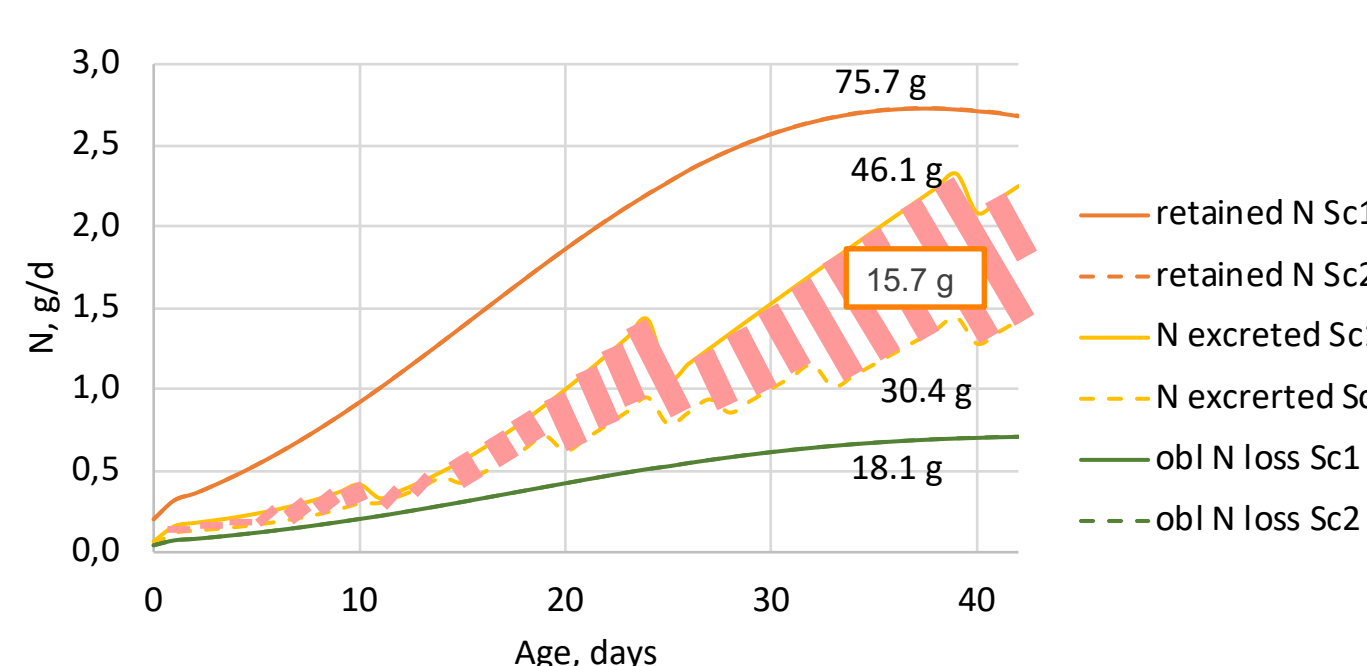
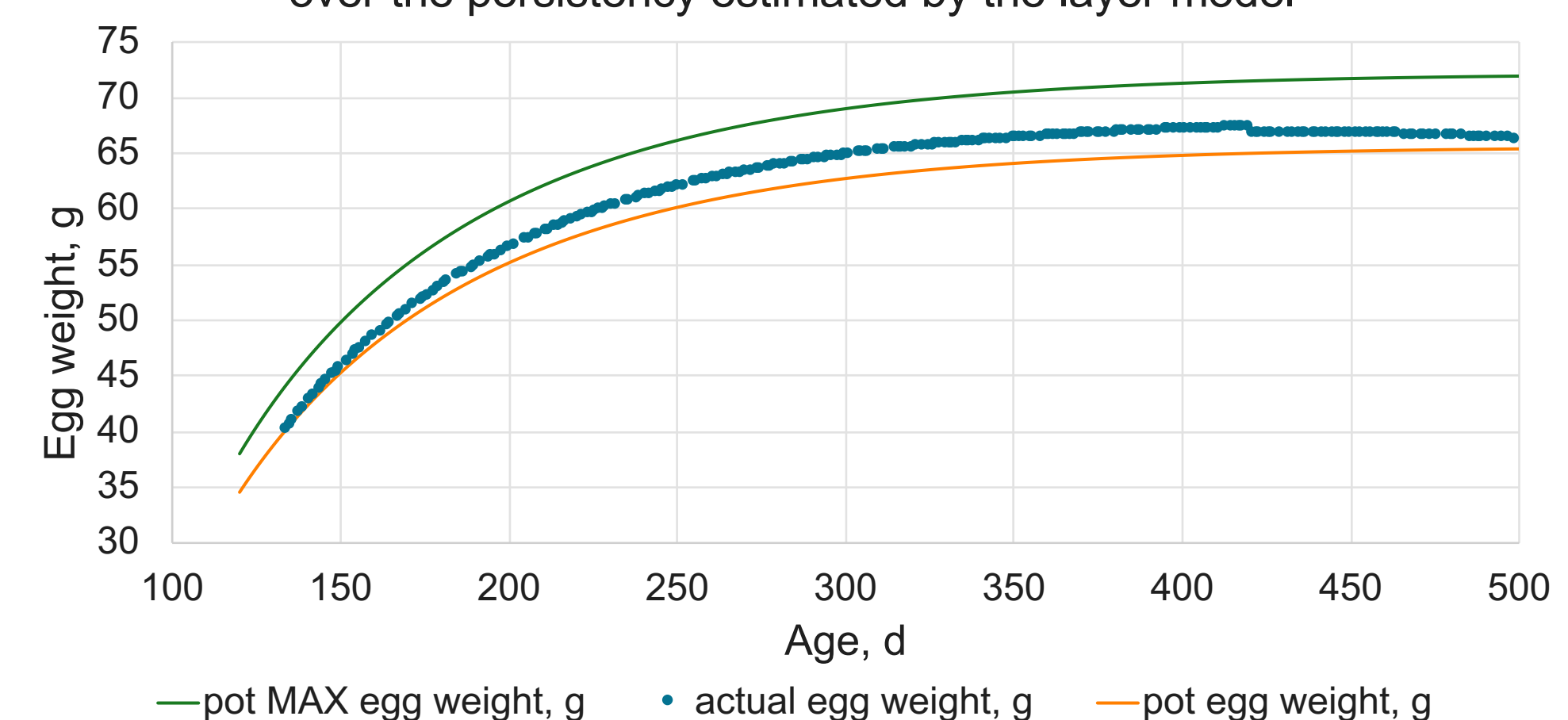
Simulated vs observed BW of an average bird over 31 days



Evaluation of the feeding strategies



Simulated egg weight limited by the feed (actual egg weight) and potential maximum egg weight (pot MAX egg weight) over the persistency estimated by the layer model



**To conclude:** our model simulates the response of an average chick to a certain diet, and it estimates the nutrient requirement as well. The model core, feed use mechanism and nutrients partitioning pathways could be extended with new equations or modules, thus, additional approaches might be applied.

