

Can A Small Bird End Malnutrition? A Comparison of Coturnix japonica and Gallus gallus as Potential Sustainable Protein Sources for Developing Countries and Those Seeking a Quality Sustainable Source of Protein

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This research was conducted in the hopes of identifying a sustainable option for producing animal protein for developing countries and those wanting to have a sustainable food source. Developing countries like Uganda lack the resources to produce an adequate protein source. The research was designed by hatching 60 Gallus gallus (common chickens) and 60 Coturnix japonica (Japanese quail) eggs in a commercial style egg incubator. The chicks of each species were raised according to methods used by agricultural universities for feeding and care until they reached sexual maturity, producing eggs. Some of the animals were sent to the livestock producer in order to collect weights of the harvested animal. The number of eggs collected were counted and recorded. A comparison of each species was conducted. It was hypothesized that if Coturnix japonica and Gallus gallus are hatched at the same time then the Coturnix japonica will produce a more sustainable egg and meat protein source over a 36 week period of time compared to the Gallus gallus. It was expected that the Coturnix japonica chicks would develop faster, be more prolific and provide a sustainable protein source for developing and developed countries. The data shows Coturnix japonica reach maturity faster, produce more eggs and provided more grams of protein over a 36 week period of time. Coturnix japonica produced 20,009.07 grams more protein than Gallus gallus over a 36 week time period. In conclusion, the data demonstrates that Coturnix japonica raised by families is a viable sustainable protein source.

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