**A role for pro-inflammatory cytokines, but not prostaglandin $E_2$ in avian fever**

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Studies with birds have, thus far, failed to find a persuasive correlation between pro-inflammatory cytokines and avian fever. We were the first to investigate a role for pro-inflammatory cytokines in the central component of the avian febrile mechanism using avian cytokines. We injected avian interleukin (IL)-1β and avian IL-6 into the third cerebral ventricle of Pekin ducks ($n$ = 8), and then recorded their core body temperature to determine whether these cytokines are pyrogenic in these birds. We established that both IL-1β and IL-6 mediate fever in ducks, and we therefore treated birds with antibodies to avian IL-6 (anti-IL-6) and a prostaglandin (PG) synthesis-inhibitor (diclofenac) to ascertain, first of all, if IL-1β is a precursor for IL-6, and secondly, whether brain-derived PGs are involved in the IL-1β induced avian febrile mechanism. The febrile responses to IL-1β were abolished in the anti-IL-6 and diclofenac treated ducks. In addition, we investigated a role for endogenous IL-6 and prostaglandin $E_2$ ($PGE_2$) in lipopolysaccharide (LPS)-induced fevers in ducks. We found that the LPS-induced fever was attenuated by anti-IL-6, but it was not associated with an increase in brain derived $PGE_2$ concentrations.