

induced of Dex treatment. **Key words** : *Abortion, uterine stroma, progesterone, progesterone receptorA, estrogen receptor- $\alpha$ , dexamethasone.*

**Effect of sexual stimulation, light and bathed on physiological process (nature brood) in domestic chicken**

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**ABSTRACT**

The purpose of this study is to study the effect of sexual stimulation, sunlight and bathed with warm water on physiological processes (the nature of brooding) of domestic chicken. Experiments using 66 of domestic chicken which is divided into two groups. Group A was let to lay eggs, incubate their eggs until hatching and maintain their young until adulthood. Group B after they finish spawning, were treated using sexual stimulation, bathed with warm water and dried under the sun in the morning. Data obtained from the two treatment groups were analyzed and t test (student) was applied. The results showed that sexual stimulation, sunlight and bathed with warm water could eliminate the character of natural hatching of the domestic chicken (which in turn could lead to increase egg production of per year)

**Keywords:** domestic chicken, hatch, sexual stimulation, light

**Aircraft Noise and Hypertension in Pilots**  
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**Objective:** To investigate the association between aircraft noise and blood pressure.

**Methods:** A nested case-control study was conducted on Indonesian Air Force pilots doing annual medical check-ups at the Saryanto Institute for Aviation and Aerospace Health (LAKESPRA) from 2003 – 2008. The data extracted from medical records were age, total flight hours, type of aircraft, fasting blood glucose and cholesterol levels, waist circumference, height and weight (Body Mass Index), and blood pressure.

**Results:** There were 549 pilots, 49 were found to be hypertensive, with SBP  $\geq$  140 mmHg and/or DBP  $\geq$  90 mmHg. Pilots in the 40 – 48 years age group had almost a 2 fold risk of hypertension compared to pilots of less than 40 years. Helicopters pilots were at a almost 2 fold risk of hypertension compared to pilots of the fixed wing aircrafts. Pilots with more than 1400 hours of flight had more than 2 fold risk of being hypertensive compared to those with 1400 flight hours or less.

**Conclusions:** Aircraft noise may be a risk factor for developing hypertension. The risk of hypertension was found to be increasing with age. The type of aircraft may also be a risk factor for developing hypertension in pilots. Helicopter pilots had a greater risk of hypertension than either fixed wing airplane pilots. Increased total flight hours also increased the risk of hypertension.

**Keywords:** Aircraft noise, pilots, hypertension