SUMMARY

Food requirements are likely to increase over time due to the population growth, economic development, changes in lifestyle and increasing of nutrition awareness, thus increasing demand for food of animal origin one of them is egg. Eggs are a product of animal origin that has a complete nutritional content such as carbohydrates, fats, proteins, vitamins, and minerals.

Turmeric efficacious as stimulus secretion bile liquid (kalagoga), antidote (antidota), reinforcing the stomach and appetite enhancer. Curcumin also has a good effect on the intestinal organs which can increase the activity of the enzyme lipase, sucrose and maltase.

Papaya leaf contained lipase enzyme moreover it contained lysine and arginine that could lower fat of meat. Papain and kimopapain papaya leaf contained proteolytic enzyme that helped increase digestibility and absorption of protein and lipase enzyme that hydrolyzed fat to fatty acid and glycerol so increasing digestibility of protein and fat and it gave effect to increasing metabolize energy.

The aim of the research was to examine the effect of turmeric (Curcuma domestica) and papaya leaf (Carica papaya) on decreasing total fat content of quail egg layer (Coturnix-coturnix japonica). Experimental animal that used were 24 quails layer 12 weeks old. Treatment feed were feed without turmeric and papaya leaf powder (P0), feed with turmeric powder 0.6% (P1), feed with papaya leaf powder 0.25% (P2), and feed with turmeric powder 0.6% and papaya
leaf powder 0.25% (P3). This research used completely randomized design with 4 treatments and 6 replications. Collections of egg was done every day in 1 week and at the end of week the egg were examined for total fat with soxhlet method and then data analyzed.

Research results showed that adding of turmeric powder 0.6% (P1) and papaya leaf powder 0.25% (P2) significant difference (p<0.05) on total fat content of quail egg layer. Lowest total fat content of egg is on adding of papaya leaf powder 0.25% and highest total fat content of egg is on feed without turmeric and papaya leaf powder.

Based on this research result, turmeric powder 0.6% can be added to quail feed in order to make total fat content of quail egg decrease, papaya leaf powder 0.25% can be added to quail feed in order to make total fat content of quail egg decrease, need continuation research use other feed additives in order to digestibility process more efficient and to know other nutrition on egg, such as protein, carbohydrate, etc.