The medicinal response, haematological parameters and meat sensory analysis of broilers to diets containing neem leaf meal (NLM) were studied in an 8-week trial. The experiment was in two phases: growing

chicks phase (0-3 week) and finisher phase (4-8 weeks). In phase I, a total of 400 day-old unsexed cobb hybrid

broiler chicks were randomly allotted in equal numbers to 4 treatments. Forty five chicks from each treatment

were wing tagged to form 3 replicates of 15 chicks each. In phase 2, 180 birds were allotted to the 4-treatments

which had 3 replicates made up of 15 birds each in a Completely Randomized Design (CRD). Four starter diets

and finisher diets were formulated to contain the NLM at 0%, 1.5%, 2.0% and 2.5% dietary levels and were fed

ad libitum in phases 1 and 2 respectively. Results showed that feed intake in both phases were not significantly

(P>0.05) influenced by inclusion of the NLM in the diets. Body weight gain was significantly (P<0.05) depressed

in birds fed the NLM diets when compared with the control which adversely affected the conversion efficiency

ratio. The NLM inclusion controlled coccidiosis, worm infestation and respiratory infections effectively in those

birds fed the NLM diets compared with the control. Carcass characteristics were not significantly (P>0.05)

influenced by the NLM although mild bitter taste was sensed in the 2.5% inclusion level when the meat was

not salted. The general haematological data was not significantly (P>0.05) influenced by the NLM. However,

white blood cells (WBC) were significantly (P<0.05) higher in the control compared with those birds fed the

NLM diets. Total profit was relatively higher for birds fed the NLM diets when compared with the control diet.

It was concluded that NLM can be a good herbal medicine for broiler production aside its nutritional

importance.

Key words: Antimicrobial resistance Neem leaf meal Herbal medicine Chemical- free production