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RESEARCH ARTICLE
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Effects of Dried Local Parsley on Carcass Characteristics of Broiler Chicks (Ross 308).

Rozhgar Baiz Saeed
Dept. of Animal Sci., Coll. Agaric. Eng. SCI., Uni. Sulaimani, IRAQ.
*Corresponding Author: Rozhgar.saeed@univsul.edu.iq.

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ABSTRACT

This study aimed to investigate the effects of Dried Local Parsley with various levels on the carcass characteristics of broiler chicks. There were 224-day-old broiler chicks (Ross 308) in total. and randomly assigned to four treatments with four replicates each. In this research different levels of local parsley dried were used: T1: base diet (control), T2: base diet + 100g of Parsley, T3: base diet + 200g of Parsley, T4: base diet + 300g of Parsley. The chick groups were divided with an average body weight (mean of weight T1: 2800, T2:2945, T3: 2720 and T4:2810) of 14 chicks, one group per pen, to determine the proportion of weight for carcass cuts, from each replication, one male and one female were randomly selected based on their body weights, weighed while still alive and slaughtered. The results showed the proportion of dressing Percentage only in females rose in the quantity in T3($p>0.05$), and increase in female abdominal fat in T3, with significant improvements in both sexes for the breast proportion in T3 for females. However, the percentage of the back, wings, and legs in broiler chickens from both sexes, showed no significant ($p>0.05$) variations. The impact of treatments showed no significant differences in the chemical composition of moisture, proteins, Ash, and fat of breast, thigh, and wings of both sexes of broiler chicks except Ash of female breast, and Ash of both sexes of thigh.

***Keywords*:** Broiler, Parsley, Meat, quality, Carcass composition.

INTRODUCTION

The superb and cost-effective production of chicken meat with the highest standards of quality and safety is the result of significant advancements in modern intensive poultry agriculture. The addition of feed additives to the diet of poultry plays a significant role in enhancing this accomplishment. The majority of feed supplements that are added to poultry diets often contain antioxidants and/or antimicrobials [1, 2]. In the recent years there have been a significant reduction in the use of antibiotics in animal diets [3], Nutritional supplements incorporating indigenous antioxidants have been employed to mitigate the adverse effects on the physiological and health status of broiler chickens, alongside their storage duration and meat characteristics [4], and there has also been a significant increase in research interests in creating new natural items such as dietary supplements and extracts from medicinal plants. It has been demonstrated that these plant extracts contain anti-inflammatory, antifungal, antibacterial, and antioxidant properties. Additionally, they exert antioxidant actions that increase the oxidative stability of meat and meat products by reducing the oxidation of meat lipids [5]. Flavonoids, which are recognized as powerful compounds that significantly contribute to improving physical health, are also found in medicinal plants, lowering the risk of disease, and acting as antioxidants to combat free radicals, the parsley *Petroselinum sativum* plant is one of these herbs, and therapeutic plants [6]. Petroselinum sativum is a type of parsley plant and one of these herbs and therapeutic plants. Additionally, parsley is thought to be the source of apigenin, lutein, and other flavonoids as well as vitamins A, C, K, and folic acid [7]. One gram of dried parsley, according to the analysis's findings, includes about 6.0 micrograms of lycopene, 10.7 micrograms of alpha-carotene, 82.9 micrograms of lutein + zeaxanthin, and 80.7 micrograms of beta carotene [8]. Given the foregoing, the goal of this study was to ascertain the impacts of dried parsley leaves added to the feed, on the carcass quality of broiler chickens.

Materials and Methods

This experiment was conducted in the College of Agricultural Engineering Sciences at the University of Sulaimani in Iraq. The number of broiler chicks used was 224 (Ross 308). The chick groups were divided with an average body weight (mean of weight T1: 2800, T2:2945, T3: 2720 and T4:2810) of 14 chicks divided into 16 groups, one group per pen, and randomly assigned to four treatments with four replicates each. The following treatments were used: base diet (T1) control, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley. The experimental diets were created by the Council and Nutrition [9] recommendations for the nutritional needs of broiler chicks. From the first day of life until the 42nd day, all chicks were given a standard starter, after which they were fed the various nutritional treatments as follows: -

Table 1: Nutrition composition

Ingredient, feed base used as %	Beginning of the diet (1-14 days) %	Diet for growth (15-28 days) %	Completer diet (36-42days)-%
Wheat	23.60	23.00	27. 50
Corn	35.50	34.80	39. 70
Meat and bone meal (40%)	3.0	0.6	0. 4
Soybean meal (%44)	29.90	33.04	23.28
Sunflower seed Oil	4	5	5
Dual-calcium phosphate	2.30	1 .94	1.86
Limestone	1.15	1. 16	1.11
Salt	0.25	0. 25	0. 25
Methionine	0.20	0. 11	0.8
*Premix	0.10	0.1	0.1
Total	100	100	100
Analysis of the feed's chemicals			
Crude protein %	22.3	20.0	17.0
Metabolizable energy Kcal/kg	2919	3056	3079
Ether extract %	5.33	6.05	6.12
Crude fibre %	3.57	3.65	4.00
Calcium %	1.19	1.11	1.22
Phosphor %	0.760	0.55	0.57
Lysine %	1.19	1.2	1.01
Methionine + Cysteine %	0.89	0.92	0.89

*premixVitamins A (800.000 IU), D3(170.000 IU), E (980mg), K3(95mg), B1(1mg), B2 (220mg), B6 (75mg), B12 (800mg), Folic acid (20 mg), Choline Chloride (12.000 mg), and Antioxidant (1.900 mg) are included in the Premix. Calcium 24.00%, Sodium5.40%, Phosphorus 8.40%, Methionine 5.40%, Methionine+ Cystine 5.70%, and Lysine 5.60%. Iron 2.5 mg, Copper 400 mg, Zinc 2.600 mg, Selenium 7.5 mg.

Studied data:

The broiler chicks were raised for 42 days, and the following traits were noted: One male and one female were randomly chosen from each replication based on their body weights, weighed while still alive, and subsequently slaughtered to ascertain the amount of their weight loss.

Carcass Traits:

1- Dressing Percentage

The following carcass features were noted after the study was over:

$$\text{Dressing Percentage Percentage percentage (without edible viscera)} = \frac{\text{weight of carcass (g)}}{\text{live body weight (g)}} \times 100$$

[10]

2- Percentages for the breast, back, wings, thigh, drumstick, and legs

According to Hadmi [11], the principal components of the breast, back, wings, thigh, drumstick, leg, and abdominal fat were computed.

Evaluation of Meat chemical:

A sample of the wings, thigh, and breast meat was taken at the 42nd days of age for testing. We evaluated the following elements: moisture, protein, fat, and ash. The Agroindustriais [12] technique was used to calculate the protein content of meat samples by using Micro-Kjeldahl to calculate the percentages of all nitrogen in the meat samples. After 24 hours at 105 °C, the System Oven measured the moisture content of a substance using the Agroindustriais [12] method. The method described by [13] for computing 5–6 hours at 550 °C temperature of the Ash via Muffle Furnace system.

Analytical techniques for data:

The trial's data, an Excel program was used to analyse. Utilizing XLSTAT, data were analysed. According to Duncan [14], At a level of 5% significance, substantial treatment changes were found.

Results

The impact of different concentrations of dried local parsley on the dressing Percentage, breast, thigh, and Drumstick percentage of broiler males is shown in Table (2). There were no discernible variations in any treatments, except the breast percentage, according to all characteristic percentages. The best percentage of dressing Percentage was (76.13%) in chicken of T1 (control), while in chicken of T3 was the lowest percentage (75.00%). The highest percentage of the thigh was (15.52%) in chicken of T3. In contrast, the lowest percentage was (14.54) in the chicken of T1 (control). The better percentage of Drumstick representation in chicken of T2 reached (12.21%). The lowest percentage was in chicken of T4 (11.03%). The breast percentage has significantly differed among treatments ($P \leq 0.05$), the highest proportion was (36.81 %) in chicks of T1 (control), while the lowest was in chicks of T2 (34.68 %).

Table (2): Utilization of Various Levels of Dried Local Parsley on the dressing Percentage, breast, thigh, and Drumstick percentage of broiler male chicks (Mean ± SEM)

Treatments	Percentage			
	Dressing Percentage	Breast	Thigh	Drumstick
T1	76.13 ± 0.95^{a}	36.81 ± 3.31^{a}	14.54 ± 1.17^{a}	11.73 ± 0.81^{a}
T2	75.62 ± 0.67^{a}	34.68 ± 1.07^{b}	15.29 ± 1.09^{a}	12.21 ± 0.69^{a}
T3	75.00 ± 0.39^{a}	36.24 ± 1.87^{a}	15.52 ± 0.87^{a}	11.81 ± 0.61^{a}
T4	75.86 ± 1.21^{a}	36.85 ± 2.09^{a}	15.18 ± 0.91^{a}	11.03 ± 0.92^{a}

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

The impact of various levels of dried local parsley on the dressing Percentage, breast, thigh, and Drumstick percentage of broiler females appeared in Table (3). There were no significant ($P \leq 0.05$). effect of treatments on dressing Percentage, and Drumstick percentage. The largest proportion of dressing Percentage was in chicken of T3 (74.12%), while the lowest percentage was in chicken of T2 which was 73.82%. The highest percentage of Drumstick of T2 chicken was up to (11.68%), whereas the smallest percentage was (10.50%) in chicken of T1 (Control). The breast, and thigh percentage had significant ($P \leq 0.05$) improvement in chicken of T3 (38.77%) was visible, and thigh in chicken of T2 was 16.97%.

Table (3): Utilization of Various Levels of Dried Local Parsley on the dressing Percentage, breast, thigh, and Drumstick percentage of broiler female chicks (Mean ± SEM)

Treatments	Percentage			
	Dressing Percentage	Breast	Thigh	Drumstick
T1	73.96 ± 1.12^{a}	35.30 ± 0.62^{b}	15.89 ± 1.11^{a}	10.50 ± 0.67^{a}
T2	73.82 ± 0.76^{a}	36.54 ± 0.86^{ab}	16.97 ± 1.06^{a}	11.68 ± 0.54^{a}
T3	74.12 ± 0.83^{a}	38.77 ± 1.13^{a}	13.21 ± 0.43^{b}	11.41 ± 0.81^{a}
T4	74.00 ± 0.64^{a}	32.48 ± 0.57^{c}	13.81 ± 0.64^{b}	11.67 ± 0.59^{a}

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

The effects of different amounts of dried local parsley on the back, wings, leg, and abdominal percentage in males are shown in Table (4). Treatment outcomes did not significantly have an impact on the back, wings, leg, and abdomen. The highest percentage of back percentage in chicken T3 was 20.95%, while the lowest percentage in chicken of T4 was 20.26%. The highest percentage of wings was recorded in chicken of T2 (10.59%), whereas the smallest percentage was 9.93% in chicken of T1 (control). The largest percentage of legs was recorded in chicken of T1 (Control) (4.82%), and the lowest percentage was 3.9% in chicken of T4. For abdominal fat percentage the best percentage, was 1.3% in chicken of T1, while the worst percentage was 1.61% in chicken of T2.

Table (4): Utilization of Various Levels of Dried Local Parsley on the back, wings, leg, and abdominal fat percentage of broiler male chicks (Mean ± SEM)

Treatments	Percentage			
	Back	Wings	Leg	Abdominal fat
T1	20.64 ± 0.67[a]	9.93 ± 0.34[a]	4.82 ± 0.21[a]	1.30 ± 0.08[a]
T2	20.91 ± 0.92[a]	10.59 ± 0.41[a]	4.42 ± 0.19[a]	1.61 ± 0.05[a]
T3	20.95 ± 0.57[a]	9.33 ± 0.36[a]	4.71 ± 0.10[a]	1.43 ± 0.07[a]
T4	20.26 ± 0.94[a]	9.37 ± 0.15[a]	3.90 ± 0.17[a]	1.48 ± 0.11[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Utilization of different levels of dried local parsley on the back, wings, leg, and abdominal fat percentage in broiler females appeared in Table (5). They found no significant differences among treatments on their back, wings, or legs, except in the abdominal fat percentage that were significantly different. The highest percentage of back percentage in chicken of T1 (control) (21.66%), while the lowest percentage was 20.14% in chicken of T2. The highest percentage of wings of T1 (Control) was up to 10.73%, whereas the smallest proportion was 9.52% in chicken of T2. For leg percentage, the largest percentage was 4.41% in chicken of T4, as opposed to the lowest proportion of 3.54% in chicken of T3. The largest percentage of abdominal fat was 1.90% in chicken of T4, and the lowest percentage was 1.86% in chicken of T1.

Table (5): Utilization of Various Levels of Dried Local Parsley on the back, wings, leg, and abdominal fat percentage of broiler female chicks (Mean ± SEM)

Treatments	Percentage			
	Back	Wings	Leg	Abdominal fat
T1	21.66 ± 0.37[a]	10.73 ± 0.19[a]	4.05 ± 0.31[a]	1.86 ± 0.13[a]
T2	20.14 ± 0.54[a]	09.52± 0.24[a]	3.65 ± 0.18[a]	1.87 ± 0.09[a]
T3	20.90 ± 0.31[a]	10.14 ± 0.57[a]	3.54 ± 0.13[a]	1.79 ± 0.16[a]
T4	20.82 ± 0.78[a]	9.95 ± 0.34[a]	4.41 ± 0.21[a]	1.90 ± 0.14[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Table (6) shows the impact of different levels of dried parsley on moisture, protein, ash, and fat percentage of broiler male breast. Treatments had no discernible impact on the percentage of fat, protein, and ash, in the breast. The moisture percentage significantly differed ($P \leq 0.05$) among treatments, the greatest percentage was recorded in chicken meat of T3 (38.77%), and the lowest was recorded in chicken meat of T1 (control) (74.17%). The highest percentage of protein was 21.27% in chicken meat of T4, in contrast, chicken meat of T3 had the lowest percentage (20.04%) (Control). Ash percentage, the greatest proportion was 1.16% in chicken meat of T4, the smallest proportion was 19.51% in chicken meat of T3, and in chicken meat of T1 (control) (19.59%). Fat percentage, the highest percentage was 0.61% in chicken meat of T3, whereas the lowest percentage was 0.51% in chicken meat of T2.

Table (6): Utilization of different Levels of Dried Local Parsley on chemical composition percentage on the breast of Broiler male Chicks (Mean ± SEM)

Treatments	Percentage			
	Moisture	Protein	Ash	Fat
T1	74.17 ± 0.46[a]	20.04a ± 0.12[a]	1.14 ± 0.02[a]	0.57 ± 0.11[a]
T2	75.22 ± 0.14[a]	20.33a ± 0.19[a]	1.08 ± 0.04[a]	0.51 ± 0.17[a]
T3	74.27 ± 0.34[a]	20.07 ± 0.08[a]	1.05 ± 0.07[a]	0.61 ± 0.08[a]

T4	78.70b ± 0.76[a]	21.27a ± 0.23[a]	1.16 ± 0.01[a]	0.55 ± 0.13[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Table (7) shows the impact of different levels of dried local parsley affecting the broiler female breast's moisture, protein, ash, and fat content. The proportions of ash, fat, protein, and moisture in the breast of broiler females were not considerably impacted when dried local parsley was used. For moisture percentage, the highest percentage was 74.38% in chicken meat of T3 in contrast, the lowest percentage was 73.16% in chicken meat of T1 (control). The highest protein % was found in chicken meat of T3 (20.10%), the lowest percentage was 19.77% in chicken meat of T1 (control), Ash percentage, the greatest proportion was 1.40% in chicken meat of T3, and the lowest percentage was 1.25% in chicken meat of T2. Fat percentage, the greatest proportion was 0.64% in chicken meat of T3, while the lowest proportion was 0.56% in chicken meat of T2.

Table (7): Utilization of different Levels of Dried Local Parsley on chemical composition percentage on the breast of Broiler female Chicks (Mean ± SEM)

Treatments	Percentage			
	Moisture	Protein	Ash	Fat
T1	73.16 ± 0.76[a]	19.77a ± 0.06[a]	1.34 ± 0.06[a]	0.61 ± 0.08[a]
T2	73.77a ± 0.38[a]	19.94a ± 0.17[a]	1.25 ± 0.02[b]	0.56 ± 0.12[a]
T3	74.38a ± 0.21[a]	20.10a ± 0.23[a]	1.40 ± 0.08[a]	0.64 ± 0.17[a]
T4	73.26a ± 0.39[a]	19.80a ± 0.29[a]	1.32 ± 0.05[ab]	0.62 ± 0.11[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Table (8) shows the utilization of different levels of dried local parsley on moisture, protein, ash, and fat proportion of male thigh. The amount of protein and ash in the thigh was not considerably changed by treatments. For protein percentage, the highest proportion was 20.78% in chicken meat of T2, and the smallest percentage was 18.91% in chicken meat of T4. Ash percentage, the greatest proportion was 1.40% in chicken meat of T3, and the lowest proportion was 1.14% in chicken meat of T4. The moisture and fat percentage was significantly ($P \leq 0.05$) affected, the highest percentage of moisture was 76.90% in chicken meat of T2, and the lowest was 69.99% in chicken meat of T4, while the biggest percentage of fat (0.79%) in chicken meat of T4, and lowest was (0.66%) in chicken meat of T1 (control)

Table (8): Utilization of Various Levels of Dried Local Parsley on chemical composition Percentage on the thigh of Broiler Male Chicks (Mean ± SEM)

Treatments	Percentage			
	Moisture	Protein	Ash	Fat
T1	76.80 ± 1.03[a]	20.76 ± 0.19[a]	1.17 ± 0.03[c]	0.66 ± 0.09[a]
T2	76.90 ± 0.47[a]	20.78 ± 0.23[a]	1.28 ± 0.07[b]	0.73 ± 0.18[a]
T3	76.21 ± 0.84[a]	20.60 ± 0.07[a]	1.40 ± 0.05[a]	0.68 ± 0.13[a]
T4	69.99 ±0.21[b]	18.91 ± 0.31[a]	1.14 ± 0.02[c]	0.79 ± 0.07[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Table (9) shows the impact of different levels of dried local parsley on moisture, protein, ash, and fat percentage of female thighs. Using dried local parsley had no appreciable impact on thigh moisture, protein content, or fat percentage. The most prevalent moisture level was 76.70% in chicken meat of T4, whereas the lowest percentage was in chicken meat of T2 (75.85%). Protein percentage, the greatest proportion was 20.73% in chicken meat of T4, the smallest amount was 19.51% in chicken meat of T3, and in chicken meat of T1 (control) was 19.59%. Ash percentage, the greatest percentage was 20.50% in chicken meat of T2. Fat percentage, where the biggest percentage was 0.81% in chicken meat of T4, and the smallest percentage was 0.69% in chicken meat of T1 (control). The Ash percentage was significantly ($P \leq 0.05$) different, the highest percentage of Ash (1.35%) in chicken meat of T3, and the lowest was 1.20% in chicken meat of T4.

Table (9): Utilization of different Levels of Dried Local Parsley on chemical composition percentage on the thigh of Broiler female Chicks (Mean ± SEM)

Treatments	Percentage			
	Moisture	Protein	Ash	Fat
T1	76.11 ± 0.64[a]	20.57 ± 0.27[a]	1.25 ± 0.04[b]	0.69 ± 0.11[a]
T2	75.85 ± 0.37[a]	20.50 ± 0.19[a]	1.28 ± 0.05[b]	0.75 ± 0.16[a]
T3	76.58 ± 0.92[a]	20.70 ± 0.09[a]	1.35 ± 0.08[a]	0.72 ± 0.08[a]
T4	76.70 ± 0.21[a]	20.73 ± 0.24[a]	1.20 ± 0.02[b]	0.81 ± 0.14[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

The impact of different levels of dried local parsley on moisture, protein, ash, and fat percentage of male wings was shown in Table (10). dried local parsley was not significantly impacted on moisture, protein, ash, or fat content in wings. For moisture percentage, the biggest proportion was 75.65%, in chicken meat of T4, chicken meat of T3 had the lowest proportion (73.65%). The highest protein percentage was seen in chicken meat of T4 (20.44%), and the smallest percentage was 19.91% in chicken meat of T3. The greatest percentage of ash was 1.12% in chicken meat of T3, and the smallest percent was 1.03% in chicken meat of T2. Males' fat percentage ranged from a high (0.83%) in chicken meat of T1 (control) to the lowest percentage of 0.79% in chicken meat of T3.

Table (10): Utilization of Various Levels of Dried Local Parsley on chemical composition Percentage on the wings of Broiler male Chicks (Mean ± SEM)

Treatments	Percentage			
	Moisture	Protein	Ash	Fat
T1	74.82 ± 0.27[a]	20.22 ± 0.13[a]	1.08 ± 0.01[a]	0.83 ± 0.09[a]
T2	75.16 ± 0.56[a]	20.31 ± 0.19[a]	1.03 ± 0.05[a]	0.81 ± 0.06[a]
T3	73.65 ± 0.32[a]	19.91 ± 0.08[a]	1.12 ± 0.03[a]	0.79 ± 0.17[a]
T4	75.65 ± 1.18[a]	20.44 ± 0.11[a]	1.09 ± 0.08[a]	0.80 ± 0.12[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Table (11) shows the effect of different levels of dried local parsley on the amount of fat, protein, ash, and moisture in broiler female wings. Treatments had no appreciable impact on the moisture, protein, ash, or fat content of females' wings. For moisture percentage, the highest percentage was 74.76% in chicken meat of T2, and the lowest percentage was 72.95% in chicken meat T3. For protein percentage, chicken meat of T2 had the largest proportion (20.21%), in contrast, the lowest percentage was 19.72% in chicken meat of T3. Ash percentage, the largest proportion belonged to chicken meat of T1 (control) (1.27%), whereas chicken meat of T4 had the lowest percentage (1.15%). Fat percentage, chicken meat of T1 (control) had the highest percentage (0.86%). Comparatively, the lowest percentage was 0.80% in chicken meat of T3.

Table (11): Utilization of different Levels of Dried Local Parsley on chemical composition Percentage on the wings of Broiler female Chicks (Mean ± SEM)

Treatments	3Percentage			
	Moisture	Protein	Ash	Fat
T1	73.41 ± 0.92[a]	19.84 ± 0.10[a]	1.27 ± 0.04[a]	0.86 ± 0.14[a]
T2	74.76 ± 0.74[a]	20.21 ± 0.15[a]	1.21 ± 0.01[a]	0.81 ± 0.17[a]
T3	72.95 ± 0.32[a]	19.72 ± 0.22[a]	1.24 ± 0.07[a]	0.80 ± 0.06[a]
T4	73.40 ± 0.57[a]	19.84 ± 0.08[a]	1.15 ± 0.02[a]	0.84 ± 0.10[a]

For letters a and b, different letters in the same column significantly alter means ($P \leq 0.05$).
(T1) control base diet, (T2) base diet + 100g of parsley, (T3) base diet + 200g of parsley, and (T4) base diet + 300g of parsley.

Discussions

Herbs are simple and cheap to grow, and each of them has a unique set of health advantages. These advantages include everything from antitoxins to natural wormers or antibiotics, insect repellents to sedatives, and support for the respiratory and

immune systems. I think it's better to take several preventative measures than to wait until anything goes wrong. Since hens are known for disguising illness symptoms, it can be challenging to identify a sick chicken, tough to locate a veterinarian even if you do detect something is wrong, and then challenging to diagnose or identify the precise issue. Therefore, I believe that using herbs to help chicken flocks develop robust immune systems is essential because chickens adore eating them. In addition, they are good sources of iron, which is necessary for the production of red blood cells, parsley leaves also contain vitamin C, which aids in the absorption of iron [15]. This increases the secretion of the hormone thyroxin, which in turn speeds up the production of red blood cells, reducing the susceptibility of birds to stress [16]. The substances that make metal sheets active, such as phenols, flavonoids, turbines, sap phonic acids, and glycosides, serve as a digestive system by making the intestinal vasculature of the colon more elastic, catalysts [17], maybe the cause of the increase in female body weight and dressing Percentage [18]. Due to the high concentration of active ingredients and flavonoids in parsley leaf extract, which serve as an antioxidant and have an antibacterial impact on pathogenic bacteria and fungi, may become the cause of the increase in breast percentage [19]. Parsley contains a variety of nutrients in significant proportions, which could potentially influence the chemical composition of meat from broiler chickens fed with parsley, other studies found that adding parsley significantly influenced the chemical composition, amino acid percentages, and mineral concentrations in the breast and thigh meat of broiler chicks, indicating beneficial effects of parsley as a feed additive [20] but in our study, the effect of Dried parsley had no significant effects on the chemical composition of broiler chicks meat, and that may be due to drying of parsley that may effect on the composition of parsley also a source of plant [21]. Researcher experiments have demonstrated the antioxidant and free radical inhibitory properties of parsley antagonists, which is derived from plant oil [22]. Numerous investigations have attempted to unlock the mystery of parsley before it was discovered that the leaves contain a volatile oil called myristicin, which is crucial. This oil is made up of the most significant chemicals in the plant, including apiole, vitamins A and (B, B2, B3, B4) B, vitamin C, iron salts, calcium, and the active principle of iodine [23]. Extracts have demonstrated the excellent efficacy of parsley leaves as antibiotics for harmful bacteria, cationic dye Cram, and certain fungi [24]. The amount of dressing Percentage, the chest weight, and the wing weight did not differ significantly across treatments, but these findings are in line with those of Abbas [25], who discovered that providing 3.0 g/kg of parsley had little impact on all aspects of slaughter. The findings of Kery, Blazovics [26] and Fierascu, Fierascu [27], who reported that the addition of medicinal and aromatic plants (MAP) did not affect the features of the carcass, are also in agreement with these findings. According to Majeed, Aziz [28], parsley consumption at a rate of 9 g/kg has a substantial impact on body weight and weight growth. Throughout the trial, both feed conversion efficiency and feed intake increased numerically in comparison to the control group. There was no difference in the treatments for animal weight, percent dressing Percentage, or the wing. The maximum thigh and carcass weights were attained at a parsley feed level of 9 g/kg. Additionally, there was no statistically significant (P0≥05) difference in organ weight between the various treatments. Parsley supplementation positively impacted protein, moisture, lipid percentages in some treatments, and enhancing its overall nutritional value and quality.

Conclusion:

The utilization of desiccated indigenous parsley at varying concentrations had no notable effect on the chemical composition of broiler poultry meat concerning fat, protein, ash, and moisture. Incorporating parsley into the diet had a favourable impact on protein, moisture, and lipid levels in specific cases, thereby enhancing the overall nutritional content and excellence of the meat. The addition of dried local parsley led to enhancements in carcass traits like dressing Percentage, breast, thigh, and abdominal fat levels, particularly evident in treatment T3. There were no significant disparities observed in the proportions of back, wings, and legs in broiler chickens of both genders as a result of the interventions.

Conflict of interest:

The authors declare no conflicts of interest associated with this manuscript

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تأثير البقدونس المحلي المجفف على خصائص ذبيحة فراخ اللحم (روس 308)

روزكار بايز سعيد

قسم علوم الحيوان، كلية علوم الهندسة الزراعية، جامعة السليمانية، العراق.

الخلاصة:

هدفت هذه الدراسة إلى معرفة تأثير البقدونس المحلي المجفف بمستويات مختلفة على صفات ذبيحة فروج اللحم. تم استعمال 224 فروج لحم بعمر يوم واحد (Ross 308). قسمت عشوائياً إلى أربع معاملات بأربعة مكررات لكل منها ، استخدام مستويات مختلفة من البقدونس المجفف المحلي: المعاملة الاولى: نظام غذائي أساسي (السيطرة)، المعاملة الثانية: نظام غذائي أساسي + 100 جرام بقدونس، المعاملة الثالثة: نظام غذائي أساسي + 200 جرام بقدونس، المعاملة الرابعة: نظام غذائي أساسي + 300 جرام بقدونس، في كل قفص، تم وضع 14 فرخ في كل قفص بمتوسط وزن جسم متقارب ولتحديد نسبة الوزن لقطع الذبيحة، في كل مكرر، تم اختيار ذكر وأنثى بشكل عشوائي بناءً على أوزان أجسامهم، وتم وزنهم قبل الذبح .أظهرت النتائج ارتفاع نسبة الوزن الصافي عند الإناث عند كمية البقدونس المحلي المجفف في المعاملة الثالثة، والتحسن في دهون البطن عند الإناث في المعاملة الثالثة ، مع تحسن معنوي في كلا الجنسين بالنسبة لنسبة الصدر في إناث المعاملة الثالثة، ومع ذلك، لم تظهر نسبة الظهر والأجنحة والأرجل في الدجاج اللاحم من كلا الجنسين أي اختلافات كبيرة. أظهر تأثير المعاملات عدم وجود فروق معنوية في التركيب الكيميائي للرطوبة والبروتينات والرماد والدهون في الصدر والفخذ والأجنحة لكلا الجنسين في فروج اللحم ما عدا رماد لحم صدر الاناث ورماد الفخذ في كلا الجنسين.

الكلمات المفتاحية: فروج لحم، بقدونس، لحوم، جودة، تركيب الذبيحة.