**Table 1. Relative Organ Weight (% Body Weight) in Broiler Chickens**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tissue** | **Mean** | **SD** | **Number** | | **Reference** |
| **Animals** | **Studies** |
| Adipose tissue | 13.4 (male) | N/A | 10 | 1 | 1 |
|  | 15.1 (female) | N/A | 10 | 1 | 1 |
| Abdominal Fat | 2.14 | 0.68 | 863 | 5 | 2-6 |
| Adrenal Gland | 0.014 | 0.0022 | 140 | 1 | 7 |
| Blood | 7.02 | 1.14 | 17 | 2 | 8-9 |
| Bursa of Fabricius | 0.19 | 0.05 | 489 | 9 | 3,6,10-16 |
| Gall bladder | 0.09 | N/A | 8 | 1 | 17 |
| Heart | 0.54 | 0.12 | 7459 | 16 | 2-3,5,11,14,16,18-27 |
| Kidney | 0.66 | 0.02 | 41 | 3 | 22,26,28 |
| Liver | 2.14 | 0.49 | 8650 | 21 | 3,5,6,11-12,14-16,19-20,22-27,29-33 |
| Lung | 0.72 | 0.10 | 248 | 6 | 18,22-23,27,34-35 |
| Breast Muscle | 18.1 | N/A | 18 | 1 | 6 |
| Pancreas | 0.29 | 0.21 | 501 | 7 | 3,11-12,15,22,31,33 |
| Spleen | 0.11 | 0.04 | 552 | 12 | 3,6,10,11-16,22,24 |
| Thymus | 0.50 | 0.09 | 10 | 1 | 11 |
| Stomachs | 3.50 | 0.68 | 660 | 1 | 5 |
| Crop | 0.50 | N/A | 13 | 1 | 22 |
| Proventriculus | 0.36 | 0.31 | 479 | 5 | 3,11-12,22,31 |
| Gizzard | 1.25 | 0.52 | 6629 | 10 | 3,6,11-12,15,19,22,25,29,31 |
| Intestines | 3.50 | 0.82 | 6339 | 5 | 15,18,25,27,29 |
| Small Intestine | 3.13 | 1.83 | 472 | 5 | 3,11,12,15,31 |
| Duodenum | 1.20 | 0.05 | 130 | 3 | 3,15,17 |
| Jejunum | 1.92 | 0.16 | 114 | 2 | 3,15 |
| Ileum | 1.37 | 0.17 | 114 | 2 | 3,15 |
| Large Intestine | 1.42 | 0.10 | 6 | 1 | 15 |
| Cecum | 0.50 | 0.10 | 183 | 5 | 3,11-12,22,32 |
| Colon | 0.18 | 0.03 | 10 | 1 | 11 |
| Rest of Body | 35.3 (male) |  |  |  |  |
|  | 33.6 (female) |  |  |  |  |

1. Becker et al. (1981) 2. Boostani et al. (2010), 3.Sadeghi et al. (2012), 4. Kalavathy et al. (2003), 5. Leeson and Summers (1980), 6. Park and Kim (2014), 7. Deaton et al. (1969), 8. May et al. (1971), 9. Rzasa et al. (1974), 10. Heckert et al. (2002), 11. Awad et al. (2009), 12.Ghahri et al. (2013), 13.Toghyani et al. (2010), 14. Baarendse et al. (2006), 15. Lee et al. (2003), 16. Rath et al. (2006), 17. Khosravinia (2016), 18. Bowes and Julian (1988), 19. Moraes et al. (2002), 20. Yersin et al. (1992), 21. R. F. Wideman Jr and French (1999), 22. Adeyemi et al. (2008), 23. Buys (1999), 24. Deeb (2002), 25. Gaya et al. (2006), 26. Pastuszewska et al. (2001), 27. Tickle et al. (2014), 28. Glahn, Beers, Bottje, Wideman, and Huff (1990), 29. Dyubele, Muchenje, Nkukwana, and Chimonyo (2010), 30. O'Hea and Leveille (1969), 31. Çabuk, Bozkurt, Alçiçek, Akbaþ, and Küçükyýlmaz (2006), 32. Józefiak et al. (2006), 33.Khosravinia (2016), 34. R. Wideman Jr et al. (1996), 35. R. F. Wideman Jr (1999)

N/A: not applicable or not available

**Table 2. Relative Organ Weight (% Body Weight) For Laying Hens**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tissue** | **Mean** | **SD** | **Number** | | **Reference** |
| **Animals** | **Studies** |
| Adrenal Gland | 0.0057 | 0.0038 | 28 | 1 | 1 |
| Blood | 2.36 | 3.40 | 22 | 2 | 1, 2 |
| Brain | 0.071 | 0.0038 | 7 | 1 | 3 |
| Heart | 0.30 | 0.066 | 21 | 1 | 1 |
| Kidney | 0.76 | 0.011 | 25 | 2 | 3, 4 |
| Liver | 2.49 | 0.19 | 25 | 2 | 3, 4 |
| Lung | 0.66 | 0.20 | 12 | 1 | 3 |
| Pancreas | 0.15 | 0.019 | 13 | 1 | 4 |
| Spleen | 0.14 | 0.055 | 637 | 4 | 1, 3, 5, 6 |
| Stomachs |  |  |  |  |  |
| Crop | 0.055 | N/A | 10 | 1 | 4 |
| Proventriculus | 0.19 | 0.18 | 23 | 2 | 4, 5 |
| Gizzard | 0.70 | 0.46 | 23 | 2 | 4, 5 |
| Small Intestine |  |  |  |  |  |
| Duodenum | 0.27 | 0.057 | 13 | 1 | 4 |
| Jejunum | 0.42 | 0.076 | 13 | 1 | 4 |
| Ileum | 0.26 | 0.076 | 13 | 1 | 4 |
| Large Intestine |  |  |  |  |  |
| Cecum | 0.019 | 0.0021 | 20 | 1 | 5 |
| Colon and rectum | 0.023 | N/A | 10 | 1 | 5 |
| Ovary | 1.91 | 0.28 | 34 | 2 | 1,2 |
| Infundibulum | 0.13 | 0.033 | 49 | 3 | 1,3-4 |
| Magnum | 1.24 | 0.28 | 49 | 3 | 1,3-4 |
| Isthmus | 0.29 | 0.066 | 49 | 3 | 1,3-4 |
| Uterus | 0.72 | 0.13 | 49 | 3 | 1,3-4 |
| Vagina | 0.20 | 0.028 | 24 | 1 | 1 |
| Testes | 0.05 | 0.026 | 5 | 1 | 5 |
| Rest of Body | 86.6 (female only) |  |  |  |  |

1. DeSantis et al. (1975), 2. Bond and Gilbert (1958), 3. D Wolfenson et al. (1978), 4. D. Wolfenson et al. (1981), 5. Martínez et al. (2015), 6. Norton and Wolfe (1949), 7. Niezgoda et al. (1982), 8. Leeson and Summers (1980)

N/A: not applicable or not available

**Table 3. Relative Organ Weight (% Body Weight) for Turkeys**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Tissue** | **Mean** | **SD** | **Number** | | **Range** | **Reference** |
| **Animals** | **Studies** |
| Adrenal Gland | 0.019 | 0.0045 | 1793 | 2 | 0.007-0.021 | 8, 17 |
| Bursa of Fabricius | 0.14 | 0.045 | 222 | 14 | 0.050-0.200 | 3, 4, 7, 12, 14, 19, 20, 21, 22, 24, 28, 31, 33, 41 |
| Heart | 0.51 | 0.075 | 2184 | 19 | 0.324-0.740 | 1, 3, 7, 10, 13, 17-19, 20- 22, 27, 30, 35-36, 41-43 |
| Kidney | 0.95 | 0.120 | 1042 | 8 | 0.265-1.097 | 17, 24, 25, 27, 30, 31, 39, 42 |
| Liver | 2.62 | 0.358 | 2801 | 28 | 0.830-4.270 | 3, 4, 6, 7, 10, 13, 15-17, 19-21, 23-27, 29-32, 35, 37, 39, 40-43 |
| Lungs | 0.83 | 0.122 | 939 | 3 | 0.267-0.890 | 17, 30, 35 |
| Pancreas | 0.30 | 0.078 | 1672 | 12 | 0.075-0.420 | 17, 24-27, 30, 31, 34, 35, 39, 41, 42 |
| Spleen | 0.073 | 0.023 | 1793 | 19 | 0.042-0.290 | 3, 4, 7, 9, 12, 14-17, 19-22, 27, 28, 30, 31, 35, 42 |
| Thymus | 0.26 | 0.015 | 56 | 3 | 0.142-0.299 | 5, 12, 28 |
| Stomachs |  |  |  |  |  |  |
| Crop | 0.34 | 0.071 | 298 | 2 | 0.310-0.430 | 6, 41 |
| Proventriculus | 0.43 | 0.059 | 208 | 6 | 0.113-0.740 | 5, 16, 24, 31, 35, 41 |
| Gizzard | 2.15 | 0.253 | 388 | 13 | 0.863-3.420 | 5, 13, 16, 23-27, 30, 35, 37, 41, 42 |
| Small Intestine | 4.85 | 0.431 | 144 | 5 | 2.050-7.152 | 11, 13, 15, 30, 34 |
| Duodenum | 1.68 | 0.156 | 130 | 4 | 0.690-2.010 | 2, 11, 12, 41 |
| Jejunum | 2.55 | 0.499 | 142 | 5 | 1.350-3.120 | 2, 7, 11, 12, 41 |
| Ileum | 2.13 | 0.215 | 70 | 3 | 1.070-2.278 | 11, 12, 41 |
| Testes | 0.025 | 0.073 | 501 | 4 | 0.007-0.361 | 17, 23, 33, 44 |
| Stromaa | 0.18 | 0.046 | 112 | 2 | 0.160-0.250 | 32, 38 |
| Ovaries | 0.27 | 0.304 | 596 | 4 | 0.008-1.540 | 17, 32, 37, 38 |
| Oviduct | 1.03 | 0.217 | 299 | 5 | 0.031-1.390 | 6, 29, 32, 37, 38 |
| Rest of Body | 80.1 (male) 78.7 (female) |  |  |  |  |  |

1. Ali and Czarnecki (1987), 2. TJ Applegate, Karcher, and Lilburn (2005), 3. Bayyari, Huff, Balog, et al. (1997), 4. Bayyari, Huff, Rath, et al. (1997), 5. Chang et al. (1981), 6. Crouch et al. (2002), 7. Danicke et al. (2007) 8. Davis and Siopes (1985), 9. Fadly and Nazerian (1984), 10. Fairchild and Christensen (2000), 11. Fan et al. (1997), 12. Fasina et al. (2006), 13. Ferket and Sell (1989), 14. Gore and Qureshi (1997), 15. Grimes, Rahimi, Oviedo, Sheldon, and Santos (2008), 16. Hamilton, Trenholm, Thompson, and Greenhalgh (1985), 17. Hobbs and Moreng (1976), 18. Hoffmann et al. (2016), 19. G. R. Huff et al. (1998), 20. G. R. Huff et al. (2000), 21. G. R. Huff, Huff, Balog, and Rath (2001), 22. G. R. Huff et al. (2005), 23. Hulet and Brody (1986), 24. Kubena et al. (1991), 25. Kubena et al. (1995a), 26. Kubena et al. (1995b), 27. Kubena et al. (1997), 28. Y. C. Li et al. (2000), 29. Lilburn and Nestor (1993), 30. Marsden (1940), 31. McKenzie et al. (1998), 32. Melnychuk et al. (1997), 33. Rozenboim et al. (1990), 34. Moran and McGinnis (1967), 35. Nestor et al. (2005), 36. Pierpont et al. (1985), 37. Rauber, Dilkin, Giacomini, Araujo de Almeida, and Mallmann (2007), 38. Renema et al. (1995), 39. Richards, Rosebrough, and Steele (1987), 40. Rosebrough et al. (1981), 41. Shapiro et al. (1998), 42.Tilley et al. (2017), 43. Wu, Jerome, and Nagaraj (1994), 44. Yahav et al. (2000)

aStroma: stroma was defined as the ovary without large follicles. Please refer to the text for the detailed definition.