**Table 2. Relative Organ Weight (Percent Body Weight) or Tissue Volume for Beef Cattle**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Mean** | **SD** | **Number of Animals** | **Number of Studies** | **References** |
| Adrenal Glands | 0.004 | 0.001 | 20 | 2 | 1,2 |
| Adipose Tissue | 12.18 | 5.06 | 276 | 7 | 3,4,5-9,10-12 |
| Blood | 3.99 | 0.68 | 105 | 7 | 13,14,16-21 |
| Bone | 8.66 | 1.49 | 40 | 2 | 12, 22 |
| GI Tract | 5.17 | 0.73 | 90 | 5 | 4,16,23-27 |
| Reticulorumen | 1.81 | 0.53 | 215 | 5 | 17,23,24,27,28 |
| Omasum | 0.65 | 0.17 | 128 | 3 | 17,23,27 |
| Abomasum | 0.28 | 0.13 | 128 | 3 | 17,23,27 |
| Intestines |  |  |  |  |  |
| Small Intestine | 1.00 | 0.19 | 318 | 6 | 14,16,17,19,23,27,29 |
| Large Intestine | 0.87 | 0.29 | 79 | 4 | 14,16, 17,19,23 |
| Caecum | 0.08 | 0.03 | 132 | 2 | 19,27 |
| Colon | 0.39 | 0.07 | 93 | 1 | 27 |
| Heart | 0.43 | 0.08 | 1012 | 24 | 2-4,14,16,17,19,20,23,24,26-30,32-41 |
| Kidneys | 0.21 | 0.05 | 1282 | 23 | 2-4,14,16,17,19-21,23,24,26-30,32,33,35,37,40,42-44 |
| Liver | 1.22 | 0.18 | 1379 | 27 | 2-4,14,16,17,19-30,32,35,36,39,40,42-45 |
| Lungs | 0.85 | 0.25 | 977 | 19 | 2,4,14,17,19,20,23,24,26-30,32,33,36-38,41 |
| Muscle | 36.10 | 11.73 | 83 | 2 | 12,46 |
| Pancreas | 0.09 | 0.02 | 611 | 11 | 14,17,19,23,24,26,27,30,37,38,42 |
| Spleen | 0.19 | 0.06 | 810 | 19 | 3,4,11,14,16,17,19,20,23,24,26-28,30,32,33,38,40,44 |
| Thymus | 0.09 | 0.02 | 20 | 1 | 24 |
| Testes | 0.10 | 0.02 | 104 | 3 | 47-49 |
| Rest of Body | 30.72 |  |  |  |  |

Note: The studies involved in the relative organ weight calculations are: 1. Matthews et al. (1975); 2. Buntyn et al. (2017); 3. Garrett et al. (1968); 4. DiCostanzo et al. (1991); 5. Velazco et al. (1997); 6. Andrew et al. (1994); 7. Robelin et al. (1981); 8. De Paula et al. (2013); 9. Fernades et al. (1996); 10. Fonseca et al. (2017); 11. Sainz et al. (1995); 12. Keane (2011); 13. Hansard et al. (1953); 14. Terry et al. (1990); 15. Larsen et al. (2017); 16. Rumsey et al. (1996); 17. Long et al. (2010); 18. Rotta et al. (2015); 19. McCurdy et al. (2010); 20. Hansard (1956); 21. Swett et al. (1933); 22. Faulkner et al. (1989); 23. Sharman et al. (2013); 24. Remling et al. (2017); 25. Sprinkle et al. (1998); 26. Schumann et al., (2007); 27. Mader et al. (2009); 28. Fitzsimons et al. (2014); 29. Jenkins and Ferrell, (1997); 30. Wood et al. (2013); 31. Scheaffer et al. (2001); 32. Early et al. (1990); 33. Schlegel et al. (2006); 34. Olivares et al. (2019); 35. McEvoy et al. (1998); 36. Fiems et al. (1993); 37. Long et al. (2012); 38. Talton et al. (2014); 39. Murphy and Loerch (1994); 40. Bourg et al. 2012 (2012); 41. Sainz and Bentley (1997); 42. Burciaga-Robles et al. (2010); 43. Moseley et al. (1992); 44. Lawler et al. (2004); 45. Robertson et al. (1967); 46. Shahin and Berg, (1985a); 47. Weisgold and Almquist (1979); 48. Unruh et al. (1986); 49. Killian and Amann, (1972).

**Table 3. Relative Organ Weight (Percent Body Weight) or Tissue Volume for Dairy Cows**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Mean** | **SD** | **Number of Animals** | **Number of Studies** | **References** |
| Adrenal Glands | 0.006 | 0.002 | 696 | 1 | 1 |
| Adipose Tissue | 13.21 | 6.64 | 25 | 1 | 2 |
| Blood | 4.35 | 0.90 | 788 | 3 | 1,4,5 |
| Brain | 0.08 | 0.01 | 696 | 1 | 1 |
| GI Tract | 8.20 | 2.28 | 25 | 1 | 2 |
| Reticulorumen | 1.68 | 0.25 | 124 | 1 | 5 |
| Reticulum | 0.26 | 0.07 | 696 | 1 | 1 |
| Rumen | 1.55 | 0.33 | 696 | 1 | 1 |
| Omasum | 0.89 | 0.23 | 820 | 3 | 1,3,5 |
| Abomasum | 0.38 | 0.09 | 820 | 3 | 1,3,5 |
| Intestines |  |  |  |  |  |
| Small Intestine | 1.09 | 0.25 | 840 | 4 | 1,3,5,6 |
| Large Intestine | 0.77 | 0.20 | 840 | 4 | 1,3,5,6 |
| Caecum | 0.08 | 0.01 | 36 | 1 | 3 |
| Heart | 0.37 | 0.06 | 804 | 3 | 1,5,6 |
| Kidneys | 0.22 | 0.05 | 865 | 5 | 1-3,5,6 |
| Liver | 1.25 | 0.25 | 865 | 5 | 1-3,5,6 |
| Lungs | 0.68 | 0.15 | 784 | 2 | 1,5 |
| Pancreas | 0.08 | 0.02 | 696 | 1 | 1 |
| Spleen | 0.17 | 0.04 | 820 | 3 | 1,3,5 |
| Thyroid | 0.006 | 0.002 | 696 | 1 | 1 |
| Thymus | 0.03 | 0.02 | 696 | 1 | 1 |
| Mammary Gland (non-lactating) | 1.68 | 0.81 | 55 | 3 | 7,8,9 |
| Mammary Gland (lactating) | 3.18 | 0.71 | 22 | 1 | 7 |
| Mammary Gland (pregnancy) | 2.29 | 0.54 | 7 | 1 | 7 |
| Uterus | 1.09 | 0.24 | 40 | 1 | 10 |
| Ovary | 0.003 | 0.001 | 187 | 3 | 11-13 |
| Corpora Lutea | 0.0008 | 0.0003 | 187 | 3 | 11-13 |
| Rest of Body | 67.06 |  |  |  |  |

Note: The studies involved in the relative organ weight calculations are: 1. Matthews et al. (1975); 2. Andrew et al. (1994); 3. Reynolds et al. (2004); 4. Larsen et al. (2017); 5. Rotta et al. (2015); 6. Scheaffer et al. (2001); 7. Smith and Baldwin, (1974); 8. Harrison et al. (1983); 9. Swanson and Poffenbarger, (1979); 10. Rotta et al. (2015), 11. Segerson et al. (1984); 12. Ireland et al. (1979); 13. Freetly et al. (2014).