

partly to man breeding the pig for one sole purpose, namely, for the greatest amount of flesh and fat; so that selection has always tended towards one and the same end. With most domestic animals the result of selection has been divergence of character, here it has been convergence.<sup>19</sup>

The nature of the food supplied during many generations has apparently affected the length of the intestines; for, according to Cuvier,<sup>20</sup> their length to that of the body in the wild boar is as 9 to 1,—in the common domestic boar as 13·5 to 1,—and in the Siam breed as 16 to 1. In this latter breed the greater length may be due either to descent from a distinct species or to more ancient domestication. The number of mammæ vary, as does the period of gestation. The latest authority says<sup>21</sup> that “the period averages from 17 to 20 weeks,” but I think there must be some error in this statement: in M. Tessier’s observations on 25 sows it varied from 109 to 123 days. The Rev. W. D. Fox has given me ten carefully recorded cases with well-bred pigs, in which the period varied from 101 to 116 days. According to Nathusius the period is shortest in the races which come early to maturity; but the course of their development does not appear to be actually shortened, for the young animal is born, judging from the state of the skull, less fully developed, or in a more embryonic condition,<sup>22</sup> than in the case of common swine. In the highly cultivated and early matured races the teeth, also, are developed earlier.

The difference in the number of the vertebræ and ribs in different kinds of pigs, as observed by Mr. Eyton,<sup>23</sup> and as given in the following table, has often been quoted. The African sow probably belongs to the *S. scrofa* type; and Mr.

<sup>19</sup> ‘Die Racen des Schweines,’ s. 47. ‘Schweineschädel,’ s. 104. Compare, also, the figures of the old Irish and the improved Irish breeds in Richardson on ‘The Pig,’ 1847.

<sup>20</sup> Quoted by Isid. Geoffroy, ‘Hist. Nat. Gén.,’ tom. iii. p. 441.

<sup>21</sup> S. Sidney, ‘The Pig,’ p. 61.

<sup>22</sup> ‘Schweineschädel,’ s. 2, 20.

<sup>23</sup> ‘Proc. Zool. Soc.,’ 1837, p. 23. I have not given the caudal vertebræ, as Mr. Eyton says some might possibly

have been lost. I have added together the dorsal and lumbar vertebræ, owing to Prof. Owen’s remarks (‘Journal Linn. Soc. vol. ii. p. 28) on the difference between dorsal and lumbar vertebræ depending only on the development of the ribs. Nevertheless the difference in the number of the ribs in pigs deserves notice. M. Sanson gives the number of lumbar vertebræ in various pigs; ‘Comptes Rendus,’ lxiii. p. 843.