

of the glenoid cavity; he writes: "The form of the glenoid cavity . . . bears an intimate relation to the dentition of the animal and the nature and extent of the movement of the jaws. Thus in a child it is nearly flat with no well marked surrounding elevations, its axis is transverse and little rotary motion is made use of. In the adult it is deeply sunk, the axis of the condyle is oblique and rotary movements are largely made use of in triturating food. In the felidae it is strictly transverse, their teeth adapted for slicing but not grinding, would gain nothing by lateral motion, which is rendered quite impossible by the manner in which the long transverse condyles are locked into the glenoid cavity by strong processes in front and behind . . . in *Herbivora* the condyle is roundish, the ascending ramus long, the pterygoid muscles large and the glenoid cavity shallow. In the whale, which of course does not masticate at all . . . the articulation is reduced to a mere ligamentous attachment." Here, then, I think we have the key to our problem, and that we shall find that it is to some differences in the method and extent of mastication that is due the distinction in the form of the glenoid fossae between civilized and primitive man. Since, therefore, in the Eskimo we have a race which seems most uniform in the display of glenoid flattening, we will take them as the champions of the "shallow-glenoid" type, and examine, first, the conditions of their life and the nature of the food they have to masticate, and, secondly, the form of the masticatory apparatus presented in their skulls.

Now it is well known that the staple diet of the Eskimo is of a more or less purely animal nature, fish, flesh, and fowl being their main means of subsistence, while, to judge from all accounts, much of the meat they eat must be of a very tough nature; so that, on the whole, we could not find any other race of the present day in which there would be so much need for strong jaws, and so much need too to use them in such a manner that their food should be thoroughly triturated before being swallowed. A few extracts from the writings of authors who have lived among and studied the Eskimos will perhaps be of use to emphasize my point, and give confirmation to my statement as to the nature of the Eskimo's food.