

it has also acquired an environment, a *milieu intérieur* for its cells, — like the blood and lymph, — which serves the same purpose as stability of the external environment, and exercises the further function of supplying food.

It is through this structure, in the process of metabolism, that matter and energy flow. Entering in various forms and quantities, they are temporarily shaped exactly to the form and condition of the organism; they conform to the characteristics of the kingdom, class, order, family, genus, species, and variety to which it belongs, and they assume even the characteristics of the individual itself.¹ Then they depart through the various channels of excretion.

When these ideas are reduced to their very simplest forms, it appears that life must be highly complex in structure and function; that the conditions of the environment must be regulated, and that there must be very exact regulation of conditions, both structural and functional within the organism, and finally, that, while life is active, there must be exchange of both matter and energy with the environment. Complexity, regulation, and food are essential to life as we know it, and

¹ Science is, of course, still at a loss for an adequate general explanation of such processes.