

"native pastures, when the flesh retains all its natural juices and sweetness. The flesh of all mammalia becomes almost worthless, and even poisonous, if confined for a length of time, as they generally are, *in transitu* to market.

"Vegetable substances alone will not sustain life for a great length of time in any climate; but, as has been shown, there is a vast difference in the wants of man at the Equator and his actual necessities at the Pole. Nature requires for her existence materials of different kinds. Neither oil nor sugar will sustain life alone. There must be a combination of these to complete the process of digestion and assimilation. To feed a patient on arrow-root, tapioca and sago would be to consign him to a speedy death. Brown bread is the most nutritious of all the forms of the "staff of life." It has been proven that dogs fed exclusively on white bread made from sifted flour died in forty days, but when fed on black bread (flour with the bran) they lived without disturbance of health.

"Mayer has shown that in discarding the commercial bran we throw away fourteen times as much phosphoric acid as there is in superfine flour. In this bran are lodged the phosphates and nitrogenous compounds—the source of living tissues. The nutritious Graham bread, the coarse oatmeal of Scotland, and the black bread of Russia and Germany are examples. They contain all the gluten, all the phosphates and nitrogenous compounds, as well as the starch of the grain. We find that the British soldier receives in home service, of solid food 40 ounces; the seamen of the Royal Navy 39 ounces. The full diet of the London hospitals ranges from 25 to 31 ounces of solid food, besides from 1 to 5 pints of beer daily. The Russian soldier receives 50 ounces, the Turkish about 40 ounces, the French nearly 50 ounces, the Yorkshire laborer 50 ounces, and the United States Navy and Army about 50 ounces per diem. In all the diet tables from which these data are taken we find no mention made of fish, salted or dried; and in one instance only do we find the article of salt beef mentioned, and that is in the case of the English Navy, when the troops are on duty in the torrid zone.

"That the climate of the British Provinces is not favorable for the consumptive, I will admit; and I would not recommend a patient suffering with Phthisis to remove from a more temperate climate to this latitude. But, nevertheless, the atmosphere of this country is remarkable for its purity, especially in the Maritime Provinces. This is proven by the character of the sickness that predominates here. We never witness those malarial fevers and those complicated diseases, in some form, of the stomach, liver and bowels,—such as are produced by the highly vitiated air in the paludal districts of Europe, or in the swamps and jungles of the southern portion of the United States. Scrofula, in its various forms, and consumption are the prevailing diseases of this country,—maladies that are evidently produced by defective nutrition, and the neglecting of sanitary regulations.

"The presence of oxygen in the blood gives it its vivifying properties, aerated as it is through the respiratory apparatus; but to complete the great principles of excitation, impulsion and motive power, it must receive combustible and organizable material. Oxygen then unites with the carbon of the food in the blood of animals; carbonic acid is formed and heat evolved. Animal life is also sustained by respiration; and the blood owes its vivifying properties in a great measure to the oxygen which it receives from the respiratory organs. An unhealthy atmosphere manifests itself at once in the diminished nutritive powers of the

"vital current; and the more feeble the respiration the less rich the blood. Thus oxygen enters by the lungs into the blood; and it also enters partly into the composition of the tissues; so that it is real food, and it is as necessary to the construction of the human body as the other forms of food which are taken into the stomach.

"The air must contain the vivifying properties at their normal standard or it loses its force, and death is inevitably the result. About one hundred gallons of pure air per hour are received into the lungs, of which about one-twentieth of the volume inspired is oxygen.

"Dumas asserts that oxygen is necessary to the conservation of the vitality and proper structure of the globules of the blood; and that the integrity of these organisms is one of the essential conditions to the arterialization of the pabulum of life.

"Milne Edwards asserts that the great absorbing powers of the blood exists in the globules. The number of these globules in healthy blood is one hundred and twenty-seven out of one thousand component parts; but sometimes they are observed in disease to descend to sixty-five.

"Simon and other physiologists have shown how a careful and nutritious regimen may increase these globules in the consumptive, bringing them up from sixty-four to even one hundred and forty-four.

"It is unnecessary in this paper to dwell on the advantages to health from the use of pure water, as this theme has been the subject of careful investigation, coëval with the science of medicine. Suffice to say that potable water to be fit for use should contain no traces of vegetable or animal matter, neither should the sulphates, chlorides and salts of lime, iron and magnesia exist to any great extent.

"Having shown how necessary wholesome food, pure air and pure water are to the preservation of life and health, and that defective nutrition tends to debility, and hence lays the foundation for Tuberculosis; and having pointed out some of the means to prevent it, yet to rid ourselves more fully of this scourge we must view it in the same light as other contagious diseases.

"Pure tubercular matter constitutes the true material (whether from man or an inferior animal) by which Phthisis is propagated; and this morbid matter or germ (by a slower process) is as capable of communicating consumption, from one person to another, as is the specific contagious matter of small pox, measles or scarlet fever. That its dissemination through society has not been regarded with the same degree of fear and distrust is true; that it has proven more fatal than other acknowledged self-propagating maladies, is a melancholy fact too true to be denied. Why is this? Because the teachings of our time-honored profession have been in collision with the truth in regard to the real nature of the disease, and the remedies and means of prevention have been consequently impotent for good.

"In support of this startling view I may mention that the late Dr. Rush, of Philadelphia, states, that Phthisis was unknown among the North-American Indians, prior to the discovery of America by the Europeans; and Dr. Livingston informs us that consumption does not exist in the interior of Africa; and only along the coast, where the natives come in contact with the whites, do they suffer with it. Dr. Hayes, in his celebrated account of the Arctic regions, informs us that he saw no case of consumption amongst the Esquimaux Indians. The South Sea Islanders knew nothing of this disease until they came in contact with the European, although its ravages are such now that it threatens to exterminate them. It prevails to