

common dress, cannot expand her waist more than one fourth of an inch when taking a deep inspiration. Expansion must occur somewhere, and the abnormal mode of dress necessitates that it shall be at the upper and lower extremities of the trunk. The greater resistance of the upper ribs, and the yielding character of the structures which form the pelvic floor, lead to a lowering of all the organs which are dependent upon the latter for support.

In natural breathing, the action is chiefly at the waist, although the entire trunk wall and every organ within the trunk participates in the movement. The action begins with expansion, first at the sides, and then in front, then a slight elevation of the upper chest, and, in forced respiration, a slight drawing in of the lower abdomen at the same time. In ordinary respiration, there is simply a lifting forward of the whole front wall of the chest and abdomen, the movement extending all along the line from the upper end of the breast bone to the pubis.

The so-called abdominal respiration is unnatural and unhealthful; indeed, it has been in many cases productive of serious injury. Teachers of elocution and vocal music often instruct their pupils to breathe abdominally; that is, to give prominence to the movements of the lower abdomen in breathing. When the waist is constricted, the inability of the chest to expand at the sides, compels an exaggerated movement downward, so that the viscera are forced down into the abdomen to an unusual extent. In natural respiration, the expansion of the waist, or increase in circumference of the trunk at its centre, prevents this excessive downward movement. It will be readily seen how by violent efforts to force the breath downward with the waist confined so as to prevent proper expansion, the supporting ligaments of the various viscera might in time be so stretched as to produce a general sag of the abdominal contents.

Correct breathing is as necessary to the health of the pelvic and abdominal viscera as to a healthy condition of the lungs; for the respiratory act not only pumps air in and out of the body, but draws blood to the heart, assisting particularly the portal circulation, and thus also aiding in the absorption of the products of digestion, and so facilitating the digestive process. It is quite possible also, that the rythmical movements imparted to all the viscera of the trunk by normal respiration, are a sort of vital gymnastics, essential to the health of each organ.

It is thus evident that, in its interference with the proper respiration, as well as from the mechanical injuries which it inflicts, the common mode of dress, which involves constriction

of the waist, is the most potent means of impairing the health and vigour of the whole body, and may justly be reckoned as perhaps the greatest of all factors in the general decadence in physical vigour so apparent among women of the present and rising generation.

That there has not been a general rebellion against this unnatural and mischief-making mode of dress on the part of the intelligent women of this enlightened age, is probably due to the popular but fallacious idea which seems to be so thoroughly fixed in the minds of both men and women, that woman is "the weaker vessel," and naturally subject to ailments and weaknesses and general physical inefficiency from which men enjoy immunity. Anyone, who has made himself familiar with the activity of the women of savage nations, or even the women of the peasant classes in civilised countries, must have recognised the fallaciousness of this popular idea, which had its birth in the age of chivalry, and has come down to us along with numerous other fancies and superstitions, which have no foundation either in natural experience or physiological science.

The average civilised woman is certainly very much inferior to the average civilised man in physical vigour. The constancy of this observation has led both the profession and the laity to regard women as naturally weaker than men. But that this is not necessarily so, is shown by the constant experience and observation of travellers among uncivilised tribes. Travellers in China are often astonished at the immense loads which Chinese women carry upon their shoulders. Some years ago, I saw a woman in the market place at Naples, Italy, carrying off upon her head an immense load of vegetables, which required two men to lift it into position. De Saussure relates that when he had finished his observations in the valley of Zermatt, he packed a collection of mineralogical specimens in a box, and called for a porter to carry it out of the valley, as the mountain roads were too steep to be travelled by four-footed animals of any sort. After a fruitless search for a man who was able to transport his box of specimens, he was finally told if he wished a porter to carry his package he must employ a woman, as no man could be found who was able to even lift the box. He accordingly engaged a woman who offered herself for the service, and stated that she carried the heavy box of minerals over the steep mountain roads without the slightest injury either to it or to herself. Stanley reports that the two hundred women porters whom he employed on one of his expeditions proved to be the best porters he ever had in Africa.

When in England, a few years ago, I made an expedition into the "black country" for the

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