

are absorbed by the skin. Many experiments have been made to ascertain the truth of this statement. None of the ingredients that were added to the bath could be found either in the urine or in the other excreta. Nay, it is highly probable that even the water itself is not absorbed by the skin. Thus the effects they produce on the system must be due to their action on the skin in virtue of either their moisture, their temperature, or of the ingredients that the water may contain.

We shall first speak of the general cold bath—baths composed either of simple or of sea water, and whose temperature varies from 40° to 75° Fahr. These baths produce their effects by virtue of either their moisture or their low temperature. This latter property may act either by its influence on the cutaneous nerves, thus producing shock, or by abstracting heat from the body. It is probable that they produce their effects by means of all these properties. By their moisture they cleanse the surface of the body, and thus promote the proper functions of the skin.

But cold baths are given for other effects than these. If properly used, the cold bath becomes one of the most powerful tonics we possess. If improperly applied, it may inflict serious mischief on the person using them.

The remarks we are now about to make apply to both cold simple and cold sea baths, but especially to the latter. We shall subsequently point out in what way these two kinds of baths differ.

On entering a cold bath a feeling of depression is first experienced. The pulse is greatly quickened, but loses much in force. The respirations are hurried and irregular. There is a feeling of chillness with great diminution of the temperature of the surface of the body. This condition, however, quickly changes. The surface of the body glows; the pulse gains in force. There is a sense of increased vigour both of mind and body; the spirits are greatly exhilarated. This continues for a variable period, and is then again followed by a feeling of depression, accompanied by chillness and a feeling of languor and exhaustion.

Baths, as we have stated, are given for their tonic effects. To secure these it is necessary that the patient should leave the bath during the second stage. If left at this time the condition of that period remains during the rest of the day. Thus given, the appetite is increased and digestion and assimilation improved. There is increased vigour of the body, with a desire for exercise. The patient is cheerful, the spirits more buoyant. If, however, the bath be remained in, the depression of the last stage becomes permanent. The patient remains languid, fretful, irritable. The appetite is lessened. Much chillness may be felt during the day.