

but for us it now plays the major role in body cleaning in most communities.

Despite its obvious advantages, frequent cleansing with water nevertheless puts a severe strain on the production of antiseptic and protective oils and salts by the skin glands, and to some extent it is bound to make the body surface more susceptible to diseases. It survives this disadvantage only because, at the same time that it eliminates the natural oils and salts, it removes the dirt that is the source of these diseases.

In addition to problems of keeping clean, the general category of comfort behaviour also includes those patterns of activity concerned with the task of maintaining a suitable body temperature. Like all mammals and birds, we have evolved a constant, high body temperature, giving us greatly increased physiological efficiency. If we are healthy, our deep body temperature varies no more than 3° Fahrenheit, regardless of the outside temperature. This internal temperature fluctuates with a daily rhythm, the highest level occurring in the late afternoon and the lowest at around 4 a.m. If the external environment becomes too hot or too cold we quickly experience acute discomfort. The unpleasant sensations we receive act as an early warning system, alerting us to the urgent need to take action to prevent the internal body organs from becoming disastrously chilled or overheated. In addition to encouraging intelligent, voluntary responses, the body also takes certain automatic steps to stabilise its heat level. If the environment becomes too hot, vasodilation occurs. This gives a hotter body surface and encourages heat loss from the skin. Profuse sweating also takes place. We each possess approximately two million sweat glands. Under conditions of intense heat these are capable of secreting a maximum of one litre of sweat per hour. The evaporation of this liquid from the body surface provides another valuable form of heat loss. During the process of acclimatisation to a generally hotter environment, we undergo a marked increase in sweating efficiency. This is vitally important because, even in the hottest climates, our internal body temperature can only stand an upward shift of 0-4° Fahrenheit, regardless of our racial origin.