

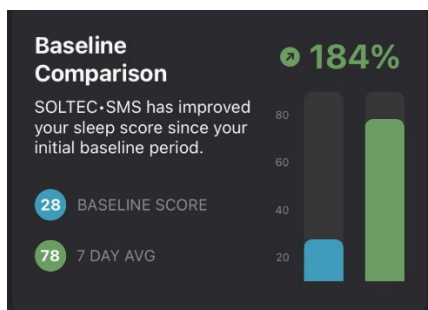
## The Z•TEST™ Sleep Score and What You Can Do to Improve Your Sleep

The Z•TEST Sleep Score can be thought of as a number or percent that ranges from 0 to 100. This score is a very meaningful value associated with well-established sleep metrics. It is a comparison of how well you slept, as compared to what is considered to be Ideal Normal Sleep. Most individuals, particularly if they are middle age or older, are surprised by how low their Sleep Score is. This is because our sleep very gradually deteriorates over time, and it is difficult to notice how much it has deteriorated.

The Sleep Score is a composite of 5 weighted, sub scores (Sleep Time, Depth, REM, Onset, and Efficiency). Your Sleep Score is derived by aggregating these specific sub-scores, which are determined from analysis of your sleep compared to known metrics associated with Ideal Normal Sleep. In this way, your Sleep Score demonstrates how well or poorly you are sleeping, compared to how well you can potentially sleep.



At the top of the dashboard of the SOLTEC•Z™ App the Z•TEST Sleep Score is displayed and beneath it, all of the sub scores that are used to create the Sleep Score.



Underneath the sub scores, you can see a comparison between your baseline Z•TEST Sleep Score and the average of the last 7 nights.

Ideal Normal Sleep or INS is defined by the sleep metrics and statistics associated with the sleep of a normal 20 year old, with perfect or ideal sleep. Therefore, to expect a Sleep Score of 100 is reasonable, only if you are sleeping like a healthy young adult. This means being asleep for at least 7 ½ hours, including at least 2 hours of deep or Delta sleep and 2 hours of REM or dream sleep, that you fall asleep within 20 minutes from the time you begin your sleep recording, and sleep in hours-long blocks of relatively uninterrupted sleep. If you are a child, adolescent, or young adult, you may sleep like this, but unfortunately, as we age, our sleep tends to become less and less ideal in a variety of ways. The various ways in which your sleep can deteriorate, are quantifiable and more importantly, correctable.

Many people like to think that they can get by with less sleep without negative consequences. That certainly may be the case for short periods of time, however routinely sleeping less than 6 hours per night often creates significant health problems. Numerous, long term, medical studies on thousands of subjects, have demonstrated that there is a significantly increased risk of developing cancer, dementia, diabetes, obesity, and cardiovascular disease when you routinely sleep less than 6 hours per night.

However, as we age and suffer the daily pressures of life, it becomes more and more difficult to get 6 or more hours of reasonable sleep, not just time spent in bed, but actual time asleep. Many of us will remain in bed for 7 hours, but only be asleep for 5 hours. Why? Gaining an understanding of the details of our sleep is necessary to understand what is truly occurring, so that the situation can be corrected.

Are you getting less sleep than you need because you cannot fall asleep or because you cannot stay asleep? These two broad issues have a number of different causations that can easily be measured and understood so that they can be remedied. Please read the information about the specific sub-scores (Sleep Time, Depth, REM, Onset, and Efficiency) to understand how important each metric is, how they relate to one another, and what you can do to improve each of them and thus, your overall Sleep Score. Your health, wellness, and longevity depend upon getting enough, high quality sleep, and sleep can be improved at any age.