

## We The People

Program 156

Daylight Robbery



Sleep glorious sleep and for those who have it each night are truly blessed. Many people have trouble sleeping and spend part of the night counting sheep or listening to the radio. There is however something quite remarkable and healthy about sleep and its linked to a person's complex circadian rhythm. Circadian rhythms are important in determining human sleep patterns and indeed how we function and deal with life's routine changes. The body's master clock, controls the production of melatonin, a hormone that makes you sleepy. Since our master control sensor is located just above the optic nerve it relays information from the eyes to the brain. When there is less light the brain makes more melatonin so you get drowsy. A person's circadian rhythm is a mysterious but essential part of us and regulates much of the way we act according to the complexities of our society and environment. I think you would agree we should not tamper with our circadian metronome but we do.

The trouble starts when we introduce daylight saving or daylight robbery as I call it. First up daylight saving interferes with cross border business and we feel forced to accept it because we blindly follow others which is a trait we humans suffer from. So the poor folk who live at Coolangatta and Tweed heads struggle with time shift while the rest of the Gold Coast and Queensland are affected in other significant ways as well. First introduced in WW1 by the Germans to save coal during war time some of the rest of the civilised world has also picked it up here and there. Today some argue its saves energy but it doesn't. Maybe we use less electricity at night but where there is air conditioning it more than snuffs out any savings as the summer days linger on far too long. Some argue that there is more useable leisure time but try being a shift worker and that myth soon becomes apparent. Children play on until much later in reality but kid's body clocks suffer the most as their circadian rhythms are still developing.

Till Roenneberg, a chronobiologist at the University in Munich, Germany, studies less dramatic but cumulative and possibly critical impacts to our body's natural relationship with light and dark. His research suggests that the human body's circadian clock, kept in tune by light and darkness, never adjusts to the changing chronology of daylight saving time. In 2010 Roenneberg told the National Geographic that "the consequence of daylight saving time is that the majority of the population has drastically decreased productivity, decreased quality of life, increasing susceptibility to illness and is just plain tired". Light doesn't do the same things to the body in the morning and the evening. More light in the morning would advance the body clock, and that may be good. But more light in the evening would even further delay the body clock and our circadian rhythms are abruptly and adversely impacted.

Time has also shown that country folk and farmers reject daylight saving because of the impact on farming routines. In America the Utah State University stated the simple but inconvenient act of changing America's clocks and devices back and forth represents an annual \$1.7 billion of lost opportunity cost. It will be no different here in Australia. The confusion of changing time plus international time zones just adds another layer of complexity to the world and travel and global business and it changes twice a year and for what. It suits some and not others and in general is one of the big furphies of life. Swedish researchers examined heart attack rates in Sweden since 1987 and found that the number of heart attacks rose about 5 percent during the first week of daylight saving time. Many other studies put it at a massive 10%.

Apart from all the cogent arguments the damage it creates to our deep circadian rhythm is the overarching factor and put simply daylight saving changes are paid for with unsettled and complex health problems and especially in the young. It's just a silly creation of man to fiddle with the day and perhaps Shakespeare was right after all. In King Henry VI, Part 1, he says, "Defer no time, delays have dangerous ends". Now let's shed some real light on daylight saving and look after our circadian rhythms.

Until next time this is Kent Bayley