



Name:

Date:

Getting Light Right

Electric lights have greatly improved the quality of human's lives. However, scientists have discovered that artificial lights can cause a variety of health problems. (21), they can prevent people from being able to sleep properly. This happens because many body rhythms, such as the sleep cycle, are controlled by light. When it is too bright at the wrong time, the body thinks it is time to be awake rather than asleep.

Moreover, problems caused by light seem to (22). As a result, issues with sleep occur more frequently in the elderly. To solve this, a group of researchers in Europe have come together to create the ALADIN Project. They have discovered that both the brightness and color of light have an effect on body rhythms. With this knowledge, the researchers have created an indoor lighting system that helps seniors sleep better by changing the light throughout the day to match the body's natural cycle.

Furthermore, the system can be adjusted to match a specific person. By using sensors in the person's clothing, it is able to detect changes in the body. Then, it adjusts the light to match that person's needs. For example, when the person's heart rate decreases in the evening, the light levels in the room go down, allowing that person's body to prepare for sleep. The researchers believe their system could be used to (23) in the future. For example, it could be put on airplanes to help passengers sleep on long flights. Therefore, the ALADIN Project could be beneficial to people of all ages.

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| 21. | a. on average
c. In return | b. On the other hand
d. In particular |
| 22. | a. depend on the season
c. increase with age | b. improve over time
d. cause health issues |
| 23. | a. help people in other ways
c. cure heart disease | b. reduce airline accidents
d. make better clothing |