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Using Science to Minimize Sleep Deprivation that may reduce Train Accidents

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Recently, the U.S. House of Representatives passed a Bill to Avert a Rail Strike. The House voted to force rail companies and workers to accept a pending agreement and to add seven days of paid leave, a key demand of the employees. This need for rest and sleep is evidenced in the National Transportation Safety Board reported Tuesday that engineers falling asleep at the controls led to two recent New York City-area commuter train crashes that killed one person and injured more than 200 others. As we look to sleep and neuroscience for answers we can study flies specifically the Drosophila melanogaster we highlight in our research.

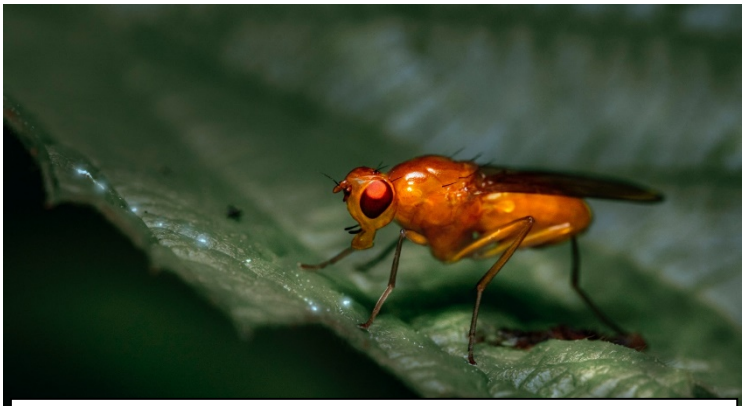

Figure1: .Picture of the Drosophila Melanogaster that was used to study sleep and whose biological sleep patterns are similar to Humans

Our recent study has the premise that both humans and flies sleep during the night and are awake during the day, and both species require a significant amount of sleep each day when their neural systems are developing in specific activities. This trait is shared by both species. An investigation was segmented into three subfields, which were titled "Life span," "Time-to-death," and "Chronological age." In D. melanogaster, there was a positive correlation between life span, the intensity of young male medflies, and the persistence of movement. Time-to-death analysis revealed that the male flies passed away two weeks after exhibiting the supine behavior. Chronological age, activity in D. melanogaster was adversely correlated with age; however, there was no correlation between chronological age and time-to-death. It is probable that the incorporation the findings of age-related health factors and increased sleep may lead to less train accidents. of these age factors when considering these options supply chain procedure for maintaining will be beneficial.

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