



# Scientists link gene to time spent sleeping

## 基因影響每日睡眠長短

The amount of sleep needed each night may depend less on fluffy pillows than a single **genetic** mutation, according to recently published research.

A team of scientists claim they have identified a gene that regulates the optimum amount of human sleep each individual needs, explaining why after six hours in **the land of nod** one person may awake reborn, while another is like the living dead.

The study, published in the journal *Science*, identified a mother and daughter pair who needed well below the eight-and-a-half hours a night that doctors say is a must for long-term well being.

Blood tests from the easily-rested pair showed a mutation in their DEC2 gene, which has previously been **implicated** in the control of circadian rhythms — the cycles that regulate the daily patterns of human behavior.

Lead scientist Fu Ying-hui, a professor of neurology at the University of California, said her team then tested their find-

ings on genetically modified mice and fruit flies.

The animals were observed **scampering** around in the dark more and sleeping less.

Fu said the observations “could provide an explanation for why human subjects with the mutation are able to live unaffected by short amounts of sleep throughout their lives.”

But it is still unclear whether the mutation affects sleep quantity alone or also wakefulness. (AFP)

### 最

近公佈的一項研究報告指出，影響人類每晚所需睡眠時間長短的關鍵，並非鬆軟的枕頭，而可能是單一基因突變。

一組科學家宣稱，他們已找出一種專門控制每個人所需最佳睡眠時間的基因，這可以解釋為什麼同樣睡了六小時，有些人醒來後生龍活虎，有些人卻像行屍走肉。

刊登在《科學》雜誌的這項研究，以一對每天睡眠需求遠少於八個半小時的母女為研究對象；八個半小時是醫生建議長期保持健康所需的每日睡眠時間。

這對容易入眠的母女血液檢驗顯示，她們的DEC2基因發生突變，先前曾有科學家認為這基因和控制晝夜節律有關；晝夜節律就是規範人類每日生活作息的循環。

加州大學神經病學教授，同時也是該研究主持人的傅彥惠教授表示，她的研究團隊隨後將這項發現用來測試基因改造過的白老鼠和果蠅。

結果這些動物在黑暗中活蹦亂跳，睡眠時間也減少了。

傅教授表示，這些觀察結果「可以解釋為何該基因突變的人，終其一生都睡得比別人少，但生活卻不受影響的理由」。

研究團隊目前還不清楚該突變基因影響的只有睡眠需求，還是也會影響失眠。 (法新社/翻譯：袁星豐)

**Top: Barbie's bedroom, by interior designer Jonathan Adler, is pictured at Barbie's 50th birthday party at the Barbie real-life Malibu Dream House in Malibu, California, on March 9, 2009.** PHOTO: REUTERS

上圖：三月九日在芭比娃娃五十歲的生日派對上，由室內設計師強納森·艾德勒設計的芭比臥房，在加州馬里布的真寶版馬里布芭比夢幻之家亮相。 照片：路透社

### TODAY'S WORDS

#### 今日單字

#### 1. **genetic** /dʒəˈnetɪk/ adj.

基因的 (jī1 yīn1 de5)，遺傳的 (yí2 chuán2 de5)

**例：**The doctors believe that Farley may be suffering from a genetic disorder. (醫生認為，法利可能是患有某種遺傳疾病。)

#### 2. **implicate** /ˈɪmplɪ,keɪ/ v.

牽連 (qiān1 lián2)

**例：**Despite being implicated in the robbery, Ian was never charged with anything. (雖然被那起搶案所牽連，但易安始終沒有被起訴。)

#### 3. **scamper** /ˈskæmpə/ v.

蹦跳 (bèng4 tiào4)，奔跑 (bēn1 pǎo3)

**例：**I almost fainted when I spotted a mouse scampering across the floor. (我看到一隻老鼠跑過地板時差點沒昏倒。)

### IDIOM POINT

#### 片語要點

#### the land of nod

##### 進入夢鄉

Somebody who has gone to **the land of nod** has fallen asleep. The idiom is closely related to the expression **nodding off**, which also means to fall asleep.

若說某人「go to the land of nod」，意思就是他們睡著了。這個片語和「nodding off」意思十分相似，後者也是睡著的意思。