

# 簡易電腦程式輔助介入對青少年口腔健康相關行為之影響

## The effect of a brief computer-assisted intervention on oral health-related behaviours among adolescents

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### 摘要

#### 研究目的

這項研究的目的為觀察一個簡易的電腦輔助介入工具是否適合青少年使用。另一個目的為評估電腦程式是否會影響青少年與口腔健康相關的行為。

### 材料和方法

#### 研究設計

為了促進學齡兒童的口腔健康，使用有個人反饋的電腦程式輔助介入。藉由參與者的回答，評估了該計劃對參與者口腔健康行為的有效性以及該計劃的可行性。此研究針對 13 至 15 歲的學齡兒童(n = 112)。此電腦程式包括 19 個有關口腔健康相關行為的問題，並提供了個人反饋和改善口腔健康的提示。此外，參與者還就計畫提出了反饋意見。四周後，再次進行介入，提出相同的問題，並評估介入對口腔健康行為的影響。

### 結果

超過一半的孩子認為電腦程式有用，女性 (56.9%) 多於男性 (44.9%) ( $p = 0.057$ )。幾乎每個人的回饋都說明他們透過該計畫學到了新的信息。大多數的新信息涉及口腔衛生以及不同飲料對牙齒健康的影響 (兩個方面都超過 40%)。兩個性別的人都回饋說他們的口腔健康行為已經向更好的習慣改變。女性的飲食質量普遍提高，而男性則減少了零食的攝入，並使用了更多的木糖醇產品。電腦程式輔助介入取得了積極的效果，該程式也似乎對於青少年和口腔保健專業人員而言都很容易使用。統計數據：有關電腦程式的結果以頻率、分布和圖形的形式描述。在比較不同問題和性別以及問題和組之間的分布時，使用卡方檢驗或費雪精確檢驗。根據參與者的總分 (根據對口腔健康相關行為問題的回答計算得出) 將他們分為三組。使用配對樣本 t 檢驗分析基線和介入後總和之間的差異。

### 結論

信息技術在激發青少年改善口腔健康行為方面似乎具有顯著的潛力。

# The effect of a brief computer-assisted intervention on oral health-related behaviours among adolescents

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## Abstract

### Aim

The aim of this study was to see if a brief, computer-assisted intervention tool could be pleasant to use for adolescents. Another aim was to evaluate if the computer programme could affect adolescents' oral health-related behaviours.

### Materials and methods

Study design: For oral health promotion on schoolchildren, a computer-assisted intervention with personal feedback was performed. The effectiveness of the programme on participants' oral health behaviours as well as the feasibility of the programme were evaluated by responses of the participants. The study was conducted on 13–15 year-old schoolchildren (n=112). The computer programme included 19 questions about oral health-related behaviours and it provided personal feedback and tips towards better oral health. Additionally, the participants gave feedback about the programme. After four weeks, the intervention was repeated, the same questions were asked again, and the effect of the intervention on oral health behaviours was evaluated.

### Results

More than half of the children considered the computer programme useful, girls (56.9%) more often than boys (44.9%) ( $p=0.057$ ). Almost everyone reported having learnt new information through the programme. Most of the new information concerned oral hygiene and the effects of different beverages on dental health (over 40% on both issues). Both genders reported having changed their oral health behaviours towards better habits. Girls generally improved their meal quality, while boys cut down on snacking and used more xylitol products. The computer-assisted intervention gave positive results and the programme seemed to be easy and pleasant to use for both adolescents and oral health professionals. Statistics: The results concerning the computer programme were described as frequencies, distributions and graphically. Chi-square test or Fisher's exact test was used when compared distributions between different questions and gender as well as questions and groups. The participants were categorised into three groups according to their sum scores (calculated from responses to the questions on oral health-related behaviours). The differences between the sum scores at baseline and after the intervention were analysed with the paired samples t-test.

### Conclusions

Information technology seems to have a remarkable potential in motivating patients towards better oral health behaviours.

文獻：

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