



塗氟填溝有保障 潔牙少糖好口腔  
107-108學年度學童口腔保健計畫



# 學校推動口腔保健實證 支持性環境策略



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中華民國108年1月22日

# 大綱

- 生命週期口腔健康問題
- 缺牙與咀嚼能力
- 口腔健康與全身健康關係
- 臺灣學童口腔健康現況
- 牙科醫療費用負擔
- 具科學實證有效的口腔預防保健策略
- 近三年口腔保健計畫輔導成效
- 總結

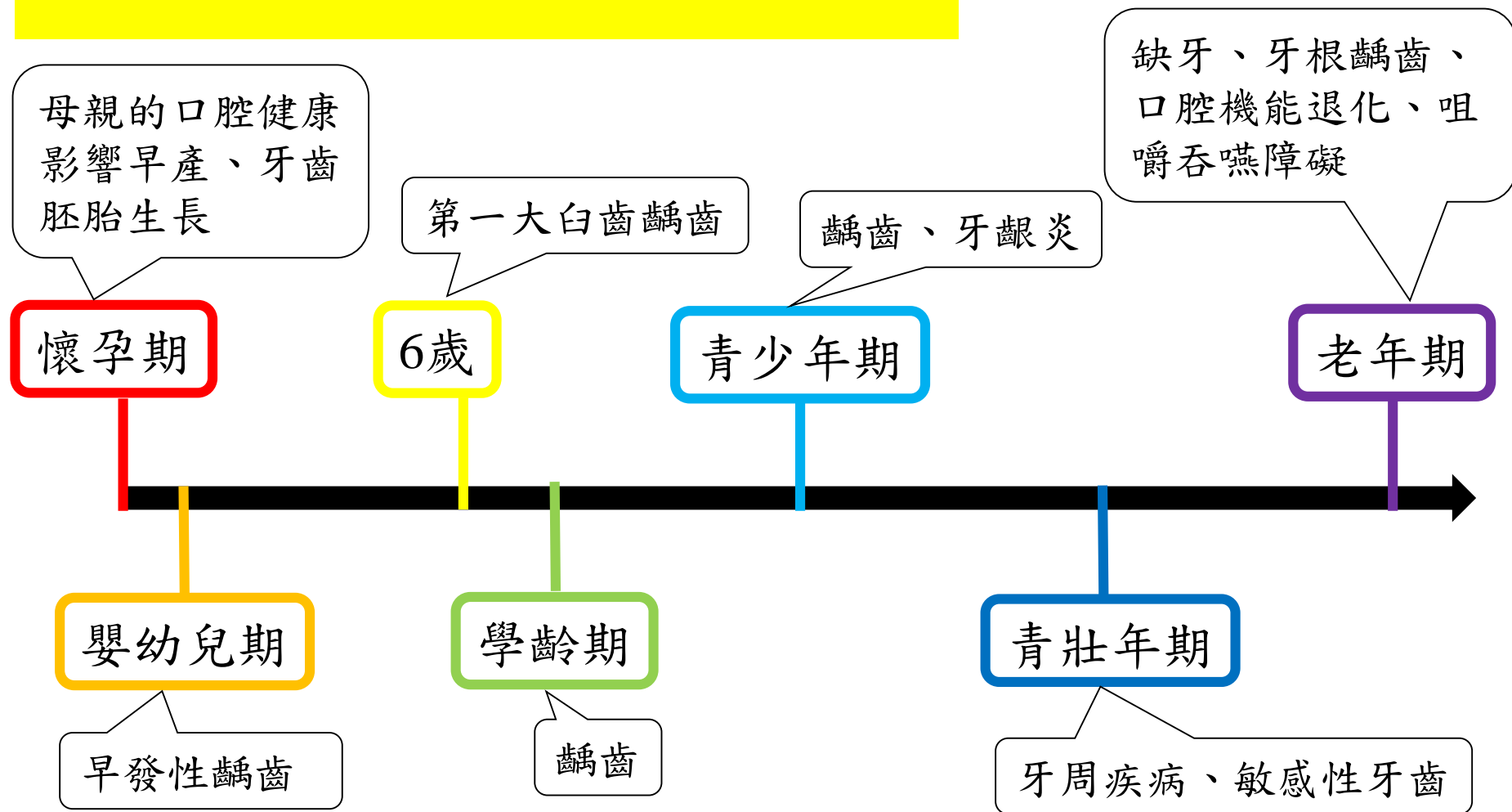
# 健保花費前十大疾病排名

## 口腔唾液腺疾病位居第二

表／健保花費前十大疾病排名

疾病別	醫療費用	就醫人數
急慢性腎病	503.63 億元	35.8 萬人
口腔唾液腺疾病	443.23 億元	1148.6 萬人
糖尿病	296.87 億元	149.2 萬人
急性上呼吸道感染	253.66 億元	1395.2 萬人
高血壓	237.72 億元	239 萬人
消化器官癌症	191.48 億元	16.9 萬人
腦血管疾病	182.59 億元	40.6 萬人
缺血性心臟病	179.80 億元	55.1 萬人
流行性感冒及肺炎	146.03 億元	164.6 萬人
思覺失調症及妄想性疾患	127.04 億元	13.4 萬人
註：106 年門、住診醫療費用統計，醫療費用為申請點數+部分負擔。		
資料來源／健保署		
製表／鄧桂芬		

# 生命週期的口腔問題



# 迷思

## 老人=假牙？

8020=80歲，擁有20顆真牙

到老還能擁有真牙，從年輕就要開始保養

# 8020

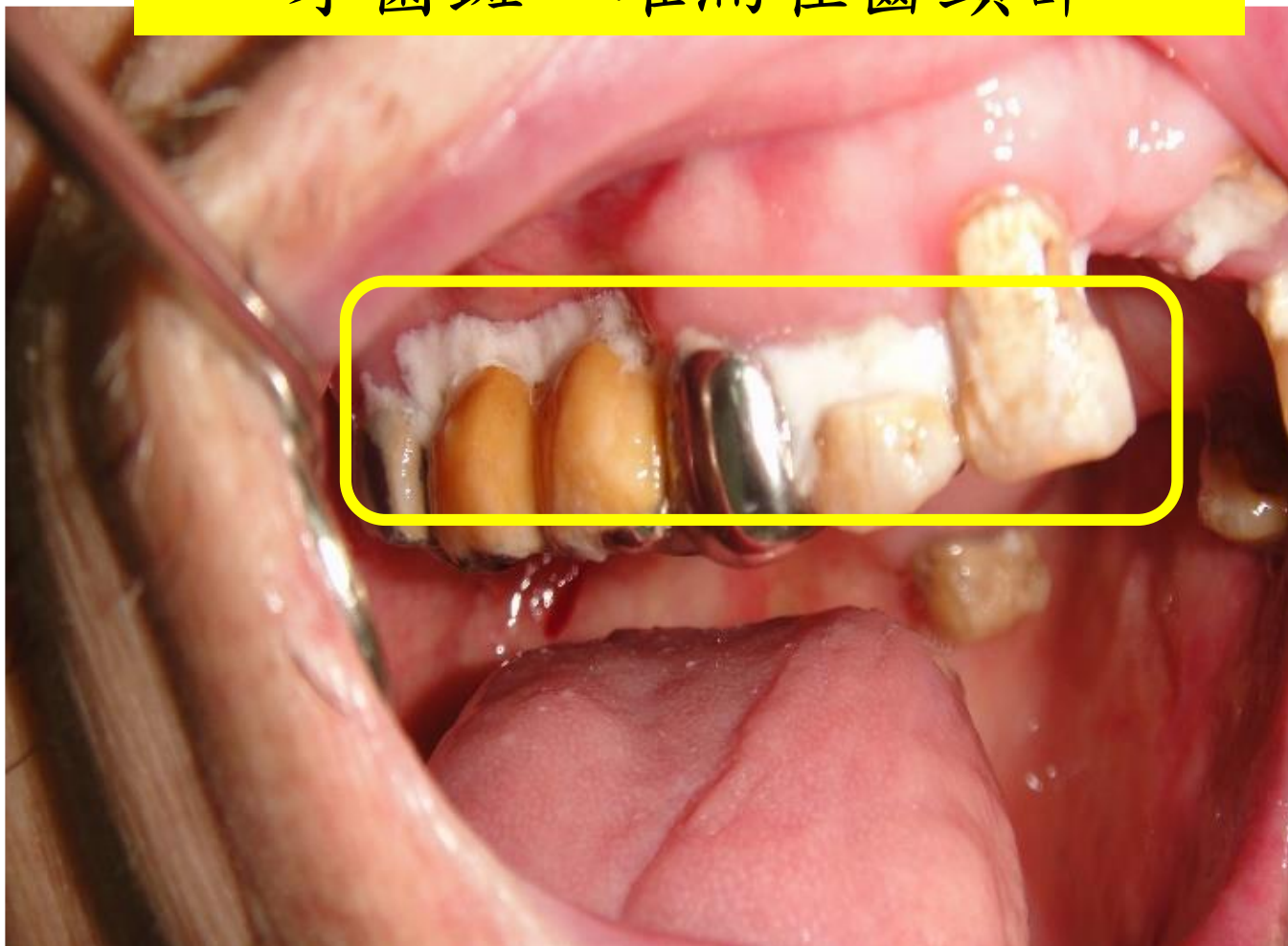
- 日本近二十年來，提倡「8020」口腔保健運動。

**80→80歲**

**20→20顆自然牙，可保有最基本的咀嚼力**

# 嚴重牙菌斑堆積

沒有好好刷牙，食物殘渣形成  
牙菌斑，堆滿在齒頸部



# 牙周疾病分期

牙齦炎



輕度牙周炎



中度牙周炎



重度牙周炎





# 齒頸部或牙根齲齒 (cervical/root caries)

不良的口腔衛生習慣及分法  
倒置牙菌斑堆積在齒頸部

## 風險因素

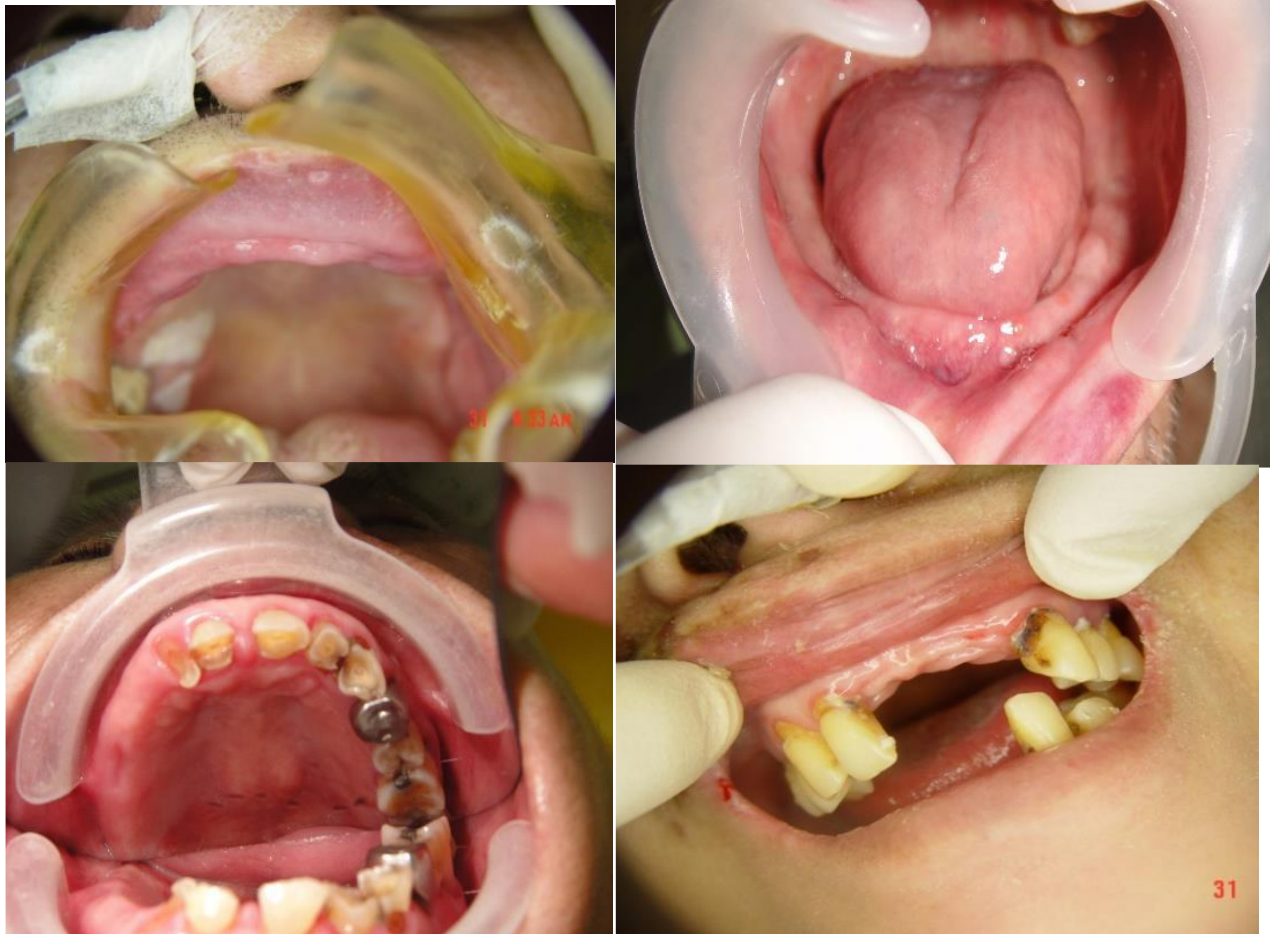
- 飲食習慣不好、食物含在口中
- 活動假牙的掛鉤處
- 口乾症、口水不多
- 不常看牙醫

高齡長者中最常見的牙科問題，  
失智老人、中風病人更為常見



# 全口無牙

常造成無法咀嚼，營養不夠，免疫力低下  
(80歲高齡也希望能有20顆功能牙)



由黃純德教授提供

# 咀嚼能力測試

- ✓ 檢測工具：變色口香糖(XYLITOL)
- ✓ 咀嚼能力：依顏色變化分為五等級，顏色越紅表示咀嚼力越佳。
  - 1 ( 非常差 )
  - 2 ( 差 )
  - 3 ( 一般 )
  - 4 ( 好 )
  - 5 ( 非常好 )
- ✓ 資料收集方式：口香糖咀嚼2分鐘後，吐至白紙上依比色卡進行顏色分辨。

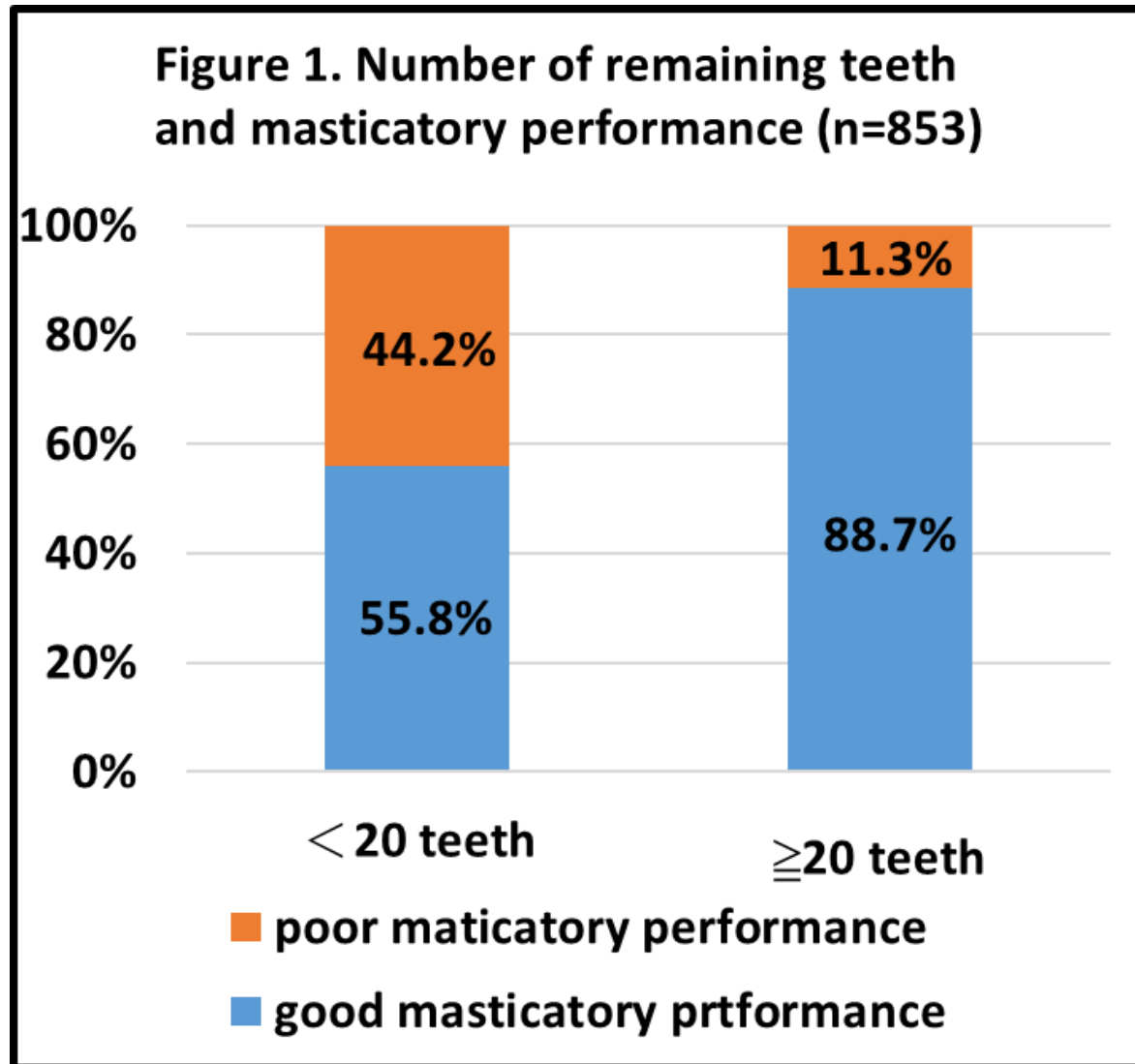


圖片來源:日本樂天商場

# 咀嚼功能測試結果



# 牙齒顆數小於20顆與咀嚼能力



# 口腔機能與衰弱症及肌少症

Table A-2. Logistic regression model for frailty and sarcopenia related to oral function				
Variables	Frailty		Sarcopenia	
	aOR (95 % CI)	P value	aOR (95 % CI)	P value
Denture wearer	0.95(0.67, 1.35)	0.782	1.57(0.82, 2.99)	0.177
Functional teeth	0.99(0.97, 1.01)	0.368	0.98(0.95, 1.02)	0.330
Dry mouth	<b>2.86(1.70, 4.83)</b>	<b>&lt;0.001</b>	<b>3.04(1.41, 6.55)</b>	<b>0.005</b>
Dysphagia	<b>2.79(1.83, 4.26)</b>	<b>&lt;0.001</b>	<b>3.52(1.80, 6.90)</b>	<b>&lt;0.001</b>
Masticatory efficiency				
Normal vs. good	1.02(0.68, 1.53)	0.929	1.78(0.70, 4.51)	0.222
Poor vs. good	1.29(0.83, 2.02)	0.257	<b>2.65(1.07, 6.57)</b>	<b>0.035</b>
Oral diadochokinesis				
(< 6 times/sec vs. ≥ 6 times/sec)				
pa	1.00(0.68, 1.49)	0.966	1.68(0.88, 3.23)	0.117
ta	0.96(0.66, 1.42)	0.855	<b>2.25(1.18, 4.30)</b>	<b>0.014</b>
ka	1.17(0.81, 1.70)	0.405	<b>2.50(1.31, 4.75)</b>	<b>0.005</b>
Model adjusted for age, gender, education level.				

# 口腔健康與全身健康的關係



# Tooth Loss Increases the Risk of Diminished Cognitive Function: A Systematic Review and Meta-analysis

D. Cerutti-Kopplin<sup>1</sup>, J. Feine<sup>2</sup>, D.M. Padilha<sup>1</sup>, R.F. de Souza<sup>3</sup>, M. Ahmadi<sup>4</sup>, P. Rompré<sup>4</sup>, L. Booij<sup>5</sup>, and E. Emami<sup>4</sup>

Results: Random effects analysis showed, with statistically low heterogeneity, that individuals with **suboptimal dentition (<20 teeth)** were at **a 20% higher risk for developing cognitive decline** (HR = 1.26, 95% CI = 1.14 to 1.40) **and dementia** (HR = 1.22, 95% CI = 1.04 to 1.43) than those with optimal dentition ( $\geq 20$  teeth).

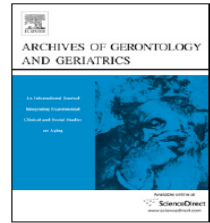




Contents lists available at ScienceDirect

## Archives of Gerontology and Geriatrics

journal homepage: [www.elsevier.com/locate/archger](http://www.elsevier.com/locate/archger)



### Review

## Association between mastication and cognitive status: A systematic review



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<sup>a</sup> Department of Health Science, Hyogo University, 2301 Shinzaike Hiraoka-cho, Kakogawa, Hyogo 675-0195, Japan

<sup>b</sup> Department of International Health and Collaboration, National Institute of Public Health, 2-3-6, Minami, Wako, Saitama 351-0197, Japan

Results: A total of 33 articles (22 cross-sectional, and 11 prospective cohort studies) were evaluated.

**Poorer mastication** was associated with **lower cognitive function** in 15 of the 17 cross-sectional studies and steeper decline in 5 of the 6 prospective studies. **Poorer mastication** was **one of significant risk factors for having dementia or mild memory impairment (MMI)** in 4 of 5 cross-sectional studies and for the incidence of dementia or MMI in 4 of 5 prospective studies.

# An Expanded Look at Rheumatoid Arthritis and the Periodontal Link

By Katie Melko, RDH, MSDH - November 17, 2018


類風濕性關節炎與牙周疾病的關係



This is what we do know about the two diseases: RA and periodontal disease both cause inflammation. **Studies show people who have RA are eight times more likely to have periodontal disease and to be missing teeth.** Research also shows patients who receive professional dental cleanings, and who are taking RA medication, had more significant pain relief and RA became more manageable than those who were on medication alone.

資料來源：[https://www.todaysrdh.com/an-expanded-look-at-rheumatoid-arthritis-and-the-periodontal-link/?fbclid=IwAR0I2WPFT4fN2w5K7eKTm3kSl56Zb\\_ATpvnNXXCUnTsDJqn\\_PIWxVaLz7ts](https://www.todaysrdh.com/an-expanded-look-at-rheumatoid-arthritis-and-the-periodontal-link/?fbclid=IwAR0I2WPFT4fN2w5K7eKTm3kSl56Zb_ATpvnNXXCUnTsDJqn_PIWxVaLz7ts)

# Association between poor oral health and gastric cancer: A prospective cohort study

Nelson Ndegwa <sup>1</sup>, Alexander Ploner<sup>1</sup>, Zhiwei Liu<sup>1</sup>, Ann Roosaar<sup>2</sup>, Tony Axéll<sup>3</sup> and Weimin Ye <sup>1</sup>

<sup>1</sup> Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden

<sup>2</sup> Department of Dental Medicine, Karolinska Institutet, Stockholm, Sweden

<sup>3</sup> Maxillofacial Unit, Halmstad Hospital Halland, Halmstad, Sweden

不良口腔衛生與胃癌

In conclusion, **tooth-loss** and **denture-associated lesions** are associated with **increased risks of gastric cancer**. Previous conflicting findings of tooth-loss and gastric cancer risk may partly be explained by the age-varying relative risk of gastric cancer.

# 電子煙不上癮又無害？WHO：錯得離譜！

健康醫療網 · 3,502人追蹤

健康醫療網 / 記者黃心瑩報導 · 12 天前

追蹤

 健康醫療網

電子煙有這些危險性哩甘知？



爆炸



致癌



成癮



中毒

資料來源: 美國FDA 美國CDC

# E-cigarettes May Increase Rate of Caries in Youth

By Today's RDH - November 9, 2018



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- 甜味電子菸液香料會透過促進變種鏈球菌生長及黏附到牙齒表面而增加病患發生齲齒的可能性
- 研究發現電子菸的香料會與口腔發生反應，方式非常類似於糖果或高酸性飲料。





董氏基金會 菸害防制中心

1月9日下午1:47 · 🌐



據香港牙醫學會、香港牙周病學及植齒學會指出，👤老菸槍罹患牙周病的機率比非吸菸者高達5倍。

【造成牙周病兩大原因】

1. 菸品中的化學成分如尼古丁會使微細血管收縮，讓牙齦發炎，刷牙時容易出血，且不易察覺，牙周病就會不知不覺地惡化。
2. 吸菸降低身體的抵抗力，同時也會削弱牙周組織癒合能力，使組織復原緩慢，導致愈趨嚴重



HK01.COM

【電子煙】長期吸煙致牙周病 血管收縮 難察覺牙齦出血發炎

# Research Links Poor Dental Hygiene to Low Birth Weight & Preterm Babies

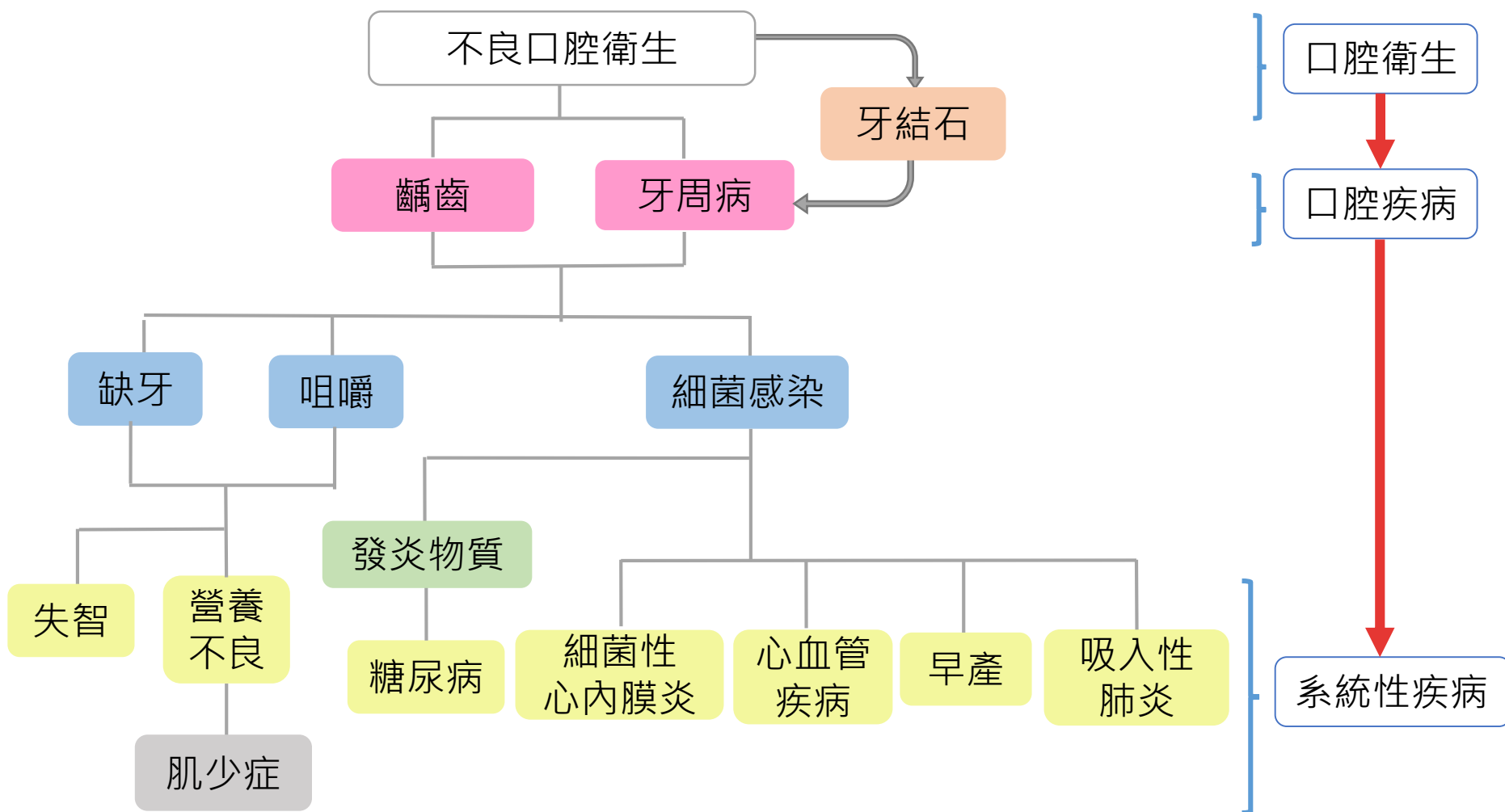
By Today's RDH - December 14, 2018



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- 母親的**牙周健康狀況不佳**與胎兒發育遲緩，死胎、早產和低出生體重相關。
- 牙周疾病的致病機制會干擾胎盤在母體中的**免疫炎症反應**，導致**胎兒早產**。

# 口腔健康與與全身健康的關係





# 臺灣學童口腔健康現況

# 口腔健康指標意義

- **Basic Screening Survey(BSS)**

- 未治療齲齒(untreated decay)、已治療齲齒(treated decay)
- 檢查方便快捷，**適合用於學校篩檢**

- **齲齒經驗指數**(Decayed, Missing and Filled Teeth , DMFT Index)

- 學童有齲齒或因齲齒而拔除、脫落或矯治(填補)的牙齒平均數目
- 世界衛生組織**比較各國12歲學童**口腔健康指標
- 檢查時需要使用牙科探針確診因此較耗時，**大多做為研究使用**

# 口腔健康指標意義(續)

- 學童齲齒盛行率

- 有齲齒的學童人數比率
- 分子是有齲齒的兒童人數，分母為所有受檢兒童人數
- 學校或社區需求評估，作為政府單位研擬保健計畫參考

# World Health Organization

## 兒童口腔健康目標

2000年

- 5歲兒童50%以上沒有齲齒
- 12歲兒童DMFT index小於3顆

2010年

- 5歲兒童90%以上沒有齲齒
- 12歲兒童DMFT index小於2顆

**2020年**

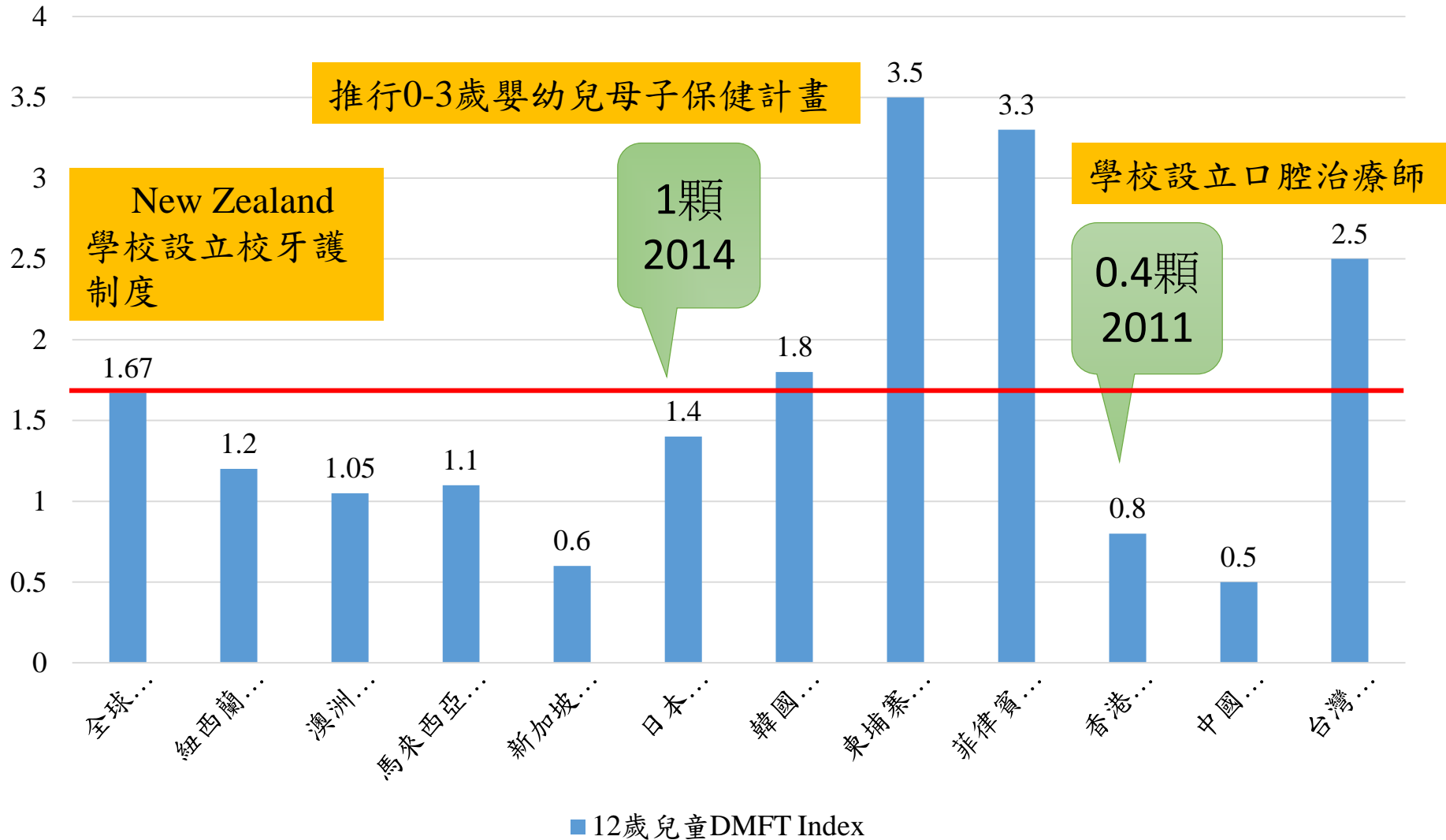
- **5歲兒童90%以上沒有齲齒**
- **12歲兒童DMFT index小於1顆**

註1. 恆齒齲蝕指數 (DMFT index):Decayed, Missing and Filled Teeth

資料來源:World Health Organization\_Oral health information systems

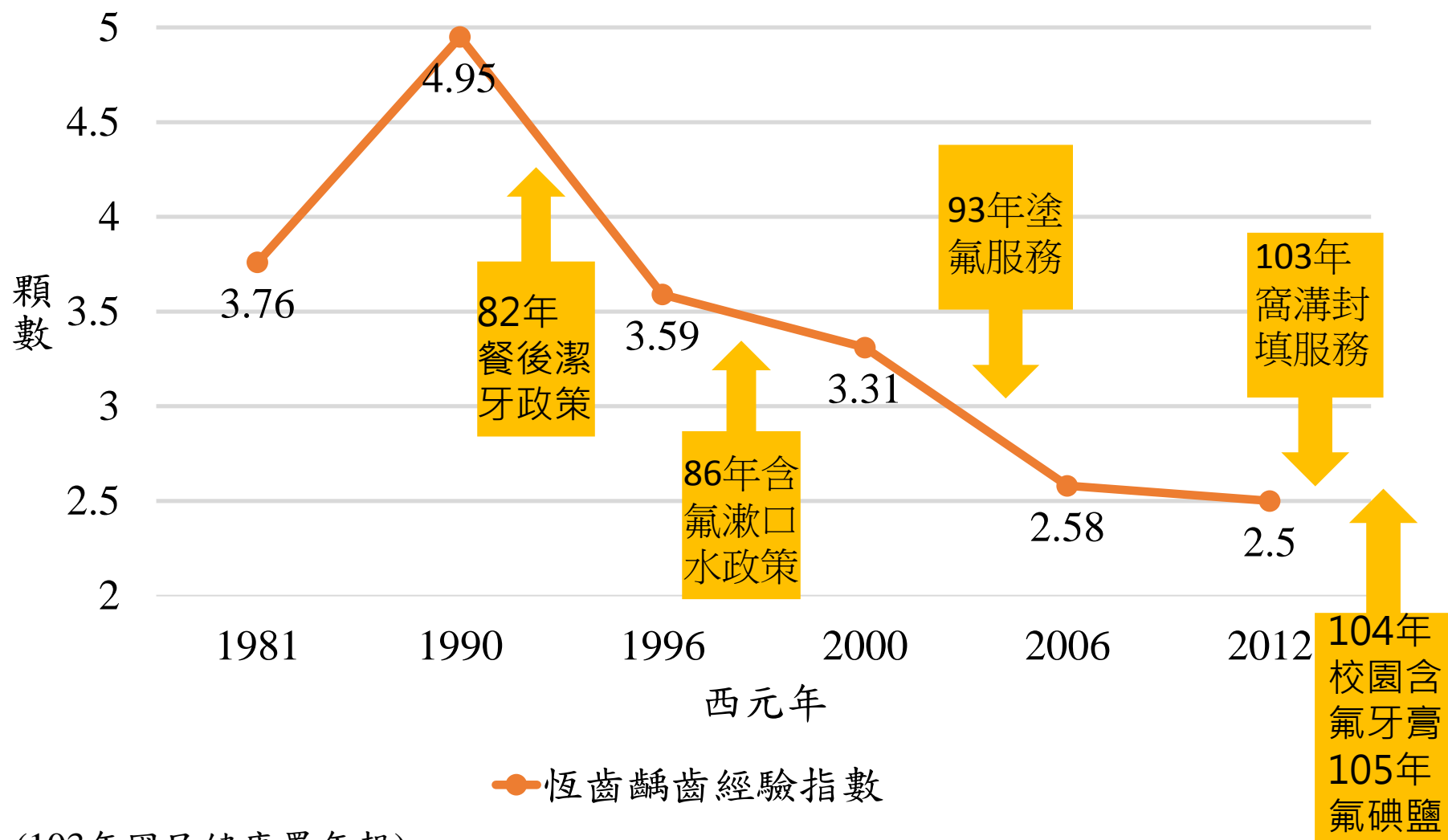
[http://www.who.int/oral\\_health/action/information/surveillance/en/](http://www.who.int/oral_health/action/information/surveillance/en/)

# 台灣12歲DMFT與西環太平洋各國比較



(WHO委托瑞典馬爾默大學(Malmö University, Sweden)所統整之全球12歲兒童DMFT Index調查資料與本國國健署調查資料)

# 12歲學童恆齒齲齒經驗指數趨勢



(103年國民健康署年報)

# 各縣市學童1年級未治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	46.48%	46.95%	44.16%	↓2.32%
基隆市	56.30%	45.47%	40.75%	↓15.55%
新北市	47.88%	46.08%	43.11%	↓4.77%
臺北市	29.71%	28.17%	28.98%	↓0.73%
宜蘭縣	59.85%	57.00%	59.52%	↓0.33%
桃園市	52.15%	52.81%	49.38%	↓2.77%
新竹縣	21.38%	39.75%	40.22%	↑18.84%
新竹市	35.13%	41.43%	40.23%	↑5.10%
苗栗縣	55.14%	56.50%	51.64%	↓3.50%
臺中市	51.65%	57.01%	45.75%	↓5.90%
彰化縣	50.96%	54.28%	32.90%	↓18.06%
南投縣	49.39%	48.65%	43.96%	↓5.43%

# 各縣市學童1年級未治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	50.11%	46.86%	54.51%	↑4.40%
嘉義縣	57.25%	52.79%	51.45%	↓5.80%
嘉義市	43.76%	41.43%	36.81%	↓6.95%
臺南市	20.26%	39.16%	35.41%	↑15.15%
高雄市	33.38%	44.24%	40.31%	↑6.93%
屏東縣	60.74%	63.22%	58.53%	↓2.21%
花蓮縣	63.97%	69.91%	59.73%	↓4.24%
臺東縣	70.96%	67.72%	67.24%	↓3.72%
澎湖縣	57.42%	24.95%	64.47%	↑7.05%
金門縣	65.88%	55.40%	73.11%	↑7.23%
連江縣	62.34%	69.23%	54.17%	↓8.17%



# 各縣市學童7年級未治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	29.57%	31.23%	29.89%	↑0.32%
基隆市	39.42%	36.51%	28.93%	↓10.49%
新北市	29.08%	26.28%	27.44%	↓1.64%
臺北市	16.50%	14.65%	18.13%	↑1.63%
宜蘭縣	35.27%	49.18%	40.68%	↑5.41%
桃園市	33.05%	36.83%	37.48%	↑4.43%
新竹縣	13.23%	34.68%	27.99%	↑14.76%
新竹市	4.52%	3.69%	6.46%	↑1.94%
苗栗縣	33.30%	38.75%	35.19%	↑1.89%
臺中市	33.13%	48.31%	35.73%	↑2.60%
彰化縣	36.29%	39.71%	32.90%	↓3.39%
南投縣	29.27%	33.05%	31.15%	↑1.88%

# 各縣市學童7年級未治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	37.17%	22.65%	29.02%	↓8.15%
嘉義縣	33.36%	29.92%	38.74%	↑5.38%
嘉義市	25.63%	28.79%	23.76%	↓1.87%
臺南市	20.26%	13.59%	17.34%	↓2.92%
高雄市	33.38%	31.54%	34.26%	↑0.88%
屏東縣	42.00%	43.92%	37.36%	↓4.64%
花蓮縣	47.89%	59.25%	38.38%	↓9.51%
臺東縣	47.76%	45.28%	42.53%	↓5.23%
澎湖縣	30.05%	9.41%	33.51%	↑3.46%
金門縣	29.52%	36.79%	52.12%	↑22.60%
連江縣	36.63%	43.86%	40.00%	↑3.37%

# 各縣市學童1年級已治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	63.97%	62.86%	20.93%	↓43.04%
基隆市	64.27%	60.77%	24.83%	↓39.44%
新北市	68.23%	68.24%	22.67%	↓45.56%
臺北市	58.19%	48.30%	24.09%	↓34.10%
宜蘭縣	69.12%	69.68%	11.00%	↓58.12%
桃園市	69.79%	71.11%	21.60%	↓48.19%
新竹縣	35.63%	55.19%	27.92%	↓7.71%
新竹市	55.56%	51.58%	17.17%	↓38.39%
苗栗縣	62.28%	59.61%	4.45%	↓57.83%
臺中市	71.64%	67.56%	12.21%	↓59.43%
彰化縣	71.44%	73.09%	19.71%	↓51.73%
南投縣	66.99%	63.78%	31.16%	↓35.83%

# 各縣市學童1年級已治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	53.29%	59.79%	25.60%	↓27.69%
嘉義縣	68.39%	59.37%	15.15%	↓53.24%
嘉義市	65.95%	56.25%	26.70%	↓39.25%
臺南市	55.07%	57.50%	23.47%	↓31.60%
高雄市	60.03%	60.35%	30.51%	↓29.52%
屏東縣	65.31%	61.57%	10.91%	↓54.40%
花蓮縣	71.86%	68.02%	6.03%	↓65.83%
臺東縣	69.87%	65.99%	10.08%	↓59.79%
澎湖縣	60.42%	42.72%	94.34%	↑33.92%
金門縣	62.35%	53.26%	25.48%	↓36.87%
連江縣	66.23%	84.62%	20.83%	↓45.40%

# 各縣市學童7年級已治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	60.75%	58.73%	28.40%	↓32.35%
基隆市	54.45%	52.50%	29.09%	↓25.36%
新北市	61.33%	60.21%	27.11%	↓34.22%
臺北市	53.25%	44.64%	22.40%	↓30.85%
宜蘭縣	55.73%	73.18%	11.00%	↓44.73%
桃園市	60.17%	67.16%	21.60%	↓38.57%
新竹縣	34.77%	62.04%	34.41%	↓0.36%
新竹市	83.07%	88.44%	77.95%	↓5.12%
苗栗縣	53.48%	51.90%	16.53%	↓36.95%
臺中市	72.25%	67.12%	21.36%	↓50.89%
彰化縣	70.72%	73.93%	36.30%	↓34.42%
南投縣	66.26%	58.22%	42.93%	↓23.33%

# 各縣市學童7年級已治療齲齒率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	73.54%	53.78%	47.58%	↓25.96%
嘉義縣	61.99%	48.05%	18.92%	↓43.07%
嘉義市	52.75%	50.88%	38.08%	↓14.67%
臺南市	51.31%	46.12%	29.44%	↓21.87%
高雄市	56.14%	55.71%	31.98%	↓24.16%
屏東縣	55.98%	54.34%	10.91%	↓45.07%
花蓮縣	63.95%	59.02%	18.61%	↓45.34%
臺東縣	76.43%	68.32%	9.75%	↓66.68%
澎湖縣	63.94%	18.56%	33.78%	↓30.16%
金門縣	54.63%	54.25%	8.50%	↓46.13%
連江縣	53.47%	82.46%	23.08%	↓30.39%

# 各縣市學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	65.27%	63.56%	61.07%	↓4.2%
基隆市	65.74%	56.79%	60.95%	↓4.79%
新北市	67.74%	66.03%	60.82%	↓6.92%
臺北市	59.09%	51.64%	47.99%	↓11.1%
宜蘭縣	59.15%	71.88%	70.03%	↑10.88%
桃園市	68.24%	71.34%	68.41%	↑0.17%
新竹縣	38.07%	61.36%	62.89%	↑24.82%
新竹市	65.05%	68.20%	71.34%	↑6.29%
苗栗縣	55.04%	54.97%	51.49%	↓3.55%
臺中市	74.48%	68.47%	57.99%	↓16.49%
彰化縣	73.30%	75.22%	73.41%	↑0.11%
南投縣	72.15%	67.95%	74.98%	↑2.86%

# 各縣市學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	65.09%	56.69%	76.69%	↑11.60%
嘉義縣	69.95%	55.47%	61.00%	↓8.95%
嘉義市	61.24%	55.28%	60.81%	↓0.43%
台南市	57.03%	55.06%	53.74%	↓3.29%
高雄市	62.05%	61.28%	59.11%	↓2.94%
屏東縣	65.74%	62.95%	62.07%	↓3.67%
花蓮縣	69.93%	68.26%	58.02%	↓11.91%
臺東縣	81.98%	75.51%	68.75%	↓13.23%
澎湖縣	64.88%	34.15%	70.42%	↑5.54%
金門縣	68.69%	62.85%	72.26%	↑3.57%
連江縣	67.78%	82.61%	72.38%	↑4.60%



# 各縣市1年級學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	66.39%	64.93%	63.29%	↓3.1%
基隆市	71.31%	65.71%	64.37%	↓6.94%
新北市	69.19%	69.43%	65.42%	↓3.77%
臺北市	59.36%	49.83%	53.05%	↓6.31%
宜蘭縣	69.73%	70.16%	70.43%	↑0.70%
桃園市	71.35%	72.87%	69.69%	↓1.66%
新竹縣	36.58%	55.31%	64.44%	↑27.86%
新竹市	55.86%	52.29%	54.93%	↓0.93%
苗栗縣	62.57%	60.02%	56.09%	↓6.48%
臺中市	73.76%	69.81%	57.29%	↓16.47%
彰化縣	73.33%	74.72%	75.91%	↑2.58%
南投縣	74.49%	71.38%	75.13%	↑0.64%

# 各縣市1年級學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	55.86%	59.16%	76.73%	↑20.87%
嘉義縣	71.69%	64.50%	66.56%	↓5.13%
嘉義市	68.34%	56.63%	62.98%	↓5.36%
台南市	59.36%	59.87%	58.58%	↓0.78%
高雄市	63.41%	61.76%	60.63%	↓2.78%
屏東縣	71.70%	69.78%	68.06%	↓3.64%
花蓮縣	75.52%	73.50%	65.73%	↓9.79%
臺東縣	83.23%	80.24%	77.35%	↓5.88%
澎湖縣	67.49%	45.47%	73.85%	↑6.36%
金門縣	76.64%	62.83%	78.21%	↑1.57%
連江縣	70.13%	84.62%	75.00%	↑4.87%

# 各縣市4年級學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	68.63%	67.70%	63.23%	↓5.40%
基隆市	74.56%	64.21%	61.91%	↓12.65%
新北市	71.89%	68.64%	63.27%	↓8.62%
臺北市	65.50%	60.82%	51.33%	↓14.17%
宜蘭縣	53.47%	70.83%	74.11%	↑20.64%
桃園市	73.63%	75.06%	69.07%	↓4.56%
新竹縣	42.43%	69.48%	66.42%	↑23.99%
新竹市	54.99%	67.71%	64.60%	↑9.61%
苗栗縣	49.71%	53.95%	49.12%	↓0.59%
臺中市	77.49%	72.32%	61.35%	↓16.14%
彰化縣	75.97%	76.95%	75.73%	↓0.24%
南投縣	75.87%	74.67%	78.77%	↑2.90%

# 各縣市4年級學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	62.45%	59.40%	79.91%	↑17.46%
嘉義縣	76.48%	55.20%	60.04%	↓16.44%
嘉義市	65.88%	58.99%	60.32%	↓5.56%
台南市	60.67%	60.27%	57.13%	↓3.54%
高雄市	65.92%	66.48%	60.41%	↓5.51%
屏東縣	70.85%	66.47%	65.73%	↓5.12%
花蓮縣	72.02%	71.38%	62.34%	↓9.68%
臺東縣	84.04%	77.37%	72.90%	↓11.14%
澎湖縣	60.15%	43.31%	71.76%	↑11.61%
金門縣	75.91%	70.99%	79.97%	↑4.06%
連江縣	79.35%	81.18%	79.45%	↑0.10%

# 各縣市7年級學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
全國	61.40%	58.62%	57.07%	↓4.33%
基隆市	54.54%	43.11%	57.45%	↑2.91%
新北市	62.49%	60.36%	53.71%	↓8.78%
臺北市	53.58%	44.97%	40.44%	↓9.58%
宜蘭縣	55.83%	73.93%	66.47%	↑10.64%
桃園市	60.67%	66.53%	66.59%	↑1.67%
新竹縣	35.29%	58.78%	57.45%	↑22.16%
新竹市	83.09%	83.74%	94.09%	↑11.0%
苗栗縣	53.56%	51.96%	49.76%	↓3.8%
臺中市	72.44%	63.72%	55.38%	↓17.06%
彰化縣	70.96%	74.07%	69.20%	↓1.76%
南投縣	67.40%	59.68%	71.53%	↑4.13%

# 各縣市7年級學童齲齒盛行率比較

縣市	104 學年度	105 學年度	106 學年度	齲齒盛行率 比較
雲林縣	73.76%	52.76%	73.91%	↑0.15%
嘉義縣	62.84%	49.36%	57.60%	↓5.24%
嘉義市	53.00%	51.42%	59.55%	↑6.22%
台南市	51.92%	46.66%	46.46%	↓5.46%
高雄市	57.48%	56.05%	56.65%	↓0.83%
屏東縣	56.99%	55.06%	54.43%	↓2.56%
花蓮縣	64.09%	61.92%	48.15%	↓15.94%
臺東縣	79.29%	70.39%	58.38%	↓20.91%
澎湖縣	66.83%	18.69%	67.03%	↑0.2%
金門縣	55.36%	55.02%	58.99%	↑3.63%
連江縣	55.45%	82.46%	61.54%	↑6.09%

# 兒童齲齒健保醫療支出/每年(預估)

年齡	人口數	乳齒 / 恆齒 齲齒盛行率	dmft / DMFT	乳齒 / 恆齒 總齲齒顆數	單顆齲齒平均治療費用	乳齒 / 恆齒 齲齒治療總金額
3	227,319	58.11%	3.18	420062.3255		4億2,006萬元
4	246,269	72.59%	4.98	890258.0022		8億9,026萬元
5	257,231	73.65%	5.58	1057134.524		10億5,713萬元
6	306,404	78.08%	6.26	1497643.922		14億9,764萬元
<b>3-6歲</b>					診察費 <b>313</b> 元+複合樹脂 填補750元 (個人負擔掛號費100元)	<b>(乳齒)38億6,510萬元</b>
7	282,866	12.50%	0.4	14143.3		1,414萬元
8	267,352	19.90%	0.62	32985.88976		3,299萬元
9	323,307	20.44%	1.07	70709.82736		7,071萬元
10	322,466	21.77%	1.5	105301.2723	<b>其他自費項目支出? (假牙、空間維持器等)</b>	1億530萬元
11	324,429	28.84%	1.85	173095.8487		1億7,310萬元
12	322,381	37.30%	2.58	310240.1315		3億1,024萬元
<b>7-12歲</b>						<b>(恆齒)7億648萬元</b>
13	326,249	52.17%	3.78	643371.5105		6億4,337萬元
14	320,004	54.12%	4.23	732577.4771		7億3,258萬元
15	318,074	57.80%	4.52	830987.4094		8億3,099萬元
16	334,118	51.94%	4.72	819112.997		8億1,911萬
17	309,358	50.69%	5.14	806021.7508		8億602萬元
<b>13-17歲</b>						<b>(恆齒)38億3,207萬元</b>
<b>3-18歲</b>					<b>總支出</b>	<b>84億428萬元</b>

資料來源：  
 1. 衛生福利部\_93~94年台灣地區六歲以下口腔狀況調查成果報告  
 2. 衛生福利部\_94~95年台灣地區兒童及青少年口腔狀況調查成果報告  
 3. 內政部統計年報\_人口年齡分布  
 4. 全民健康保險醫療服務給付項目及支付標準

# 恆牙齲齒治療及衍生費用

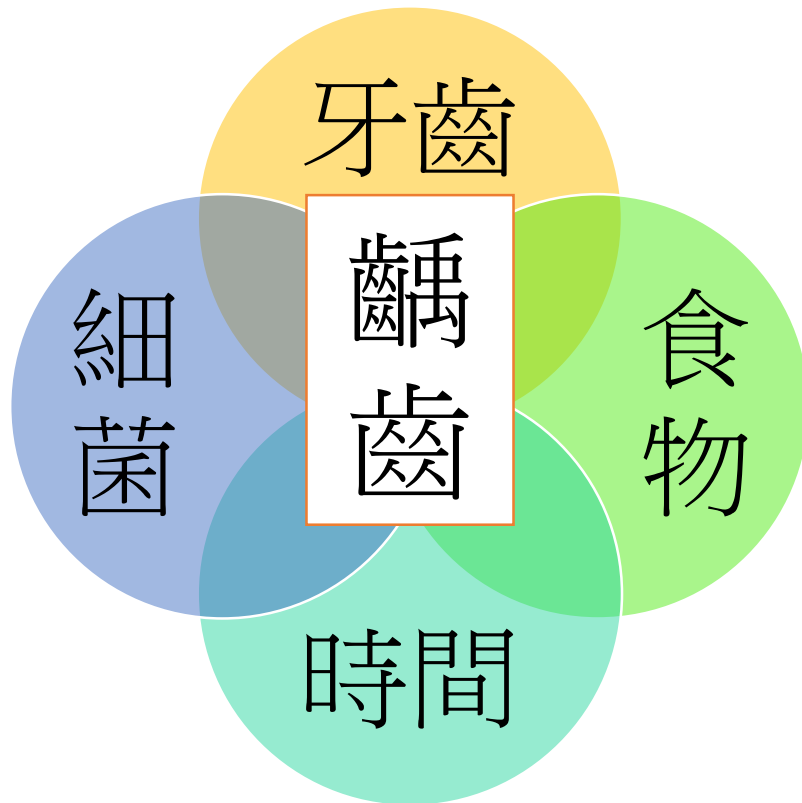
項目(健保給付)	金額
填補	個人負擔掛號費100元(自付) 診察費200元+複合樹脂填補750元
恆牙根管治療	個人負擔掛號費100元(自付) 診察費 <b>313</b> 元+恆牙根管治療（三根以上） <b>3000元</b> 診察費 <b>313</b> 元+恆牙根管治療（雙根以上） <b>2000元</b>

項目(需 <b>自費</b> )	金額		
牙套			
金屬牙冠	4,000~38,000		
金屬陶瓷複合冠	5,000~30,000		
全瓷牙冠	<b>12,000~35,000</b>		
單顆活動假牙	<b>5,000~7,000</b>		
牙橋	以單顆與材質計算， <b>4,000~30,000元</b> 若以3顆牙齒之牙套為例= <b>12,000~90,000</b>		



# 齲齒的成因

# 齲齒四因素



- 牙齒：有牙齒才有齲齒
- 食物：只要飲食就有食物殘渣留於口中
- 細菌：利用食物殘渣增生，混合成**牙菌斑**，使口腔環境**酸化**
- 時間：經過足夠的時間後，**酸使牙齒脫鈣速度大於再礦化**，而後產生窩洞

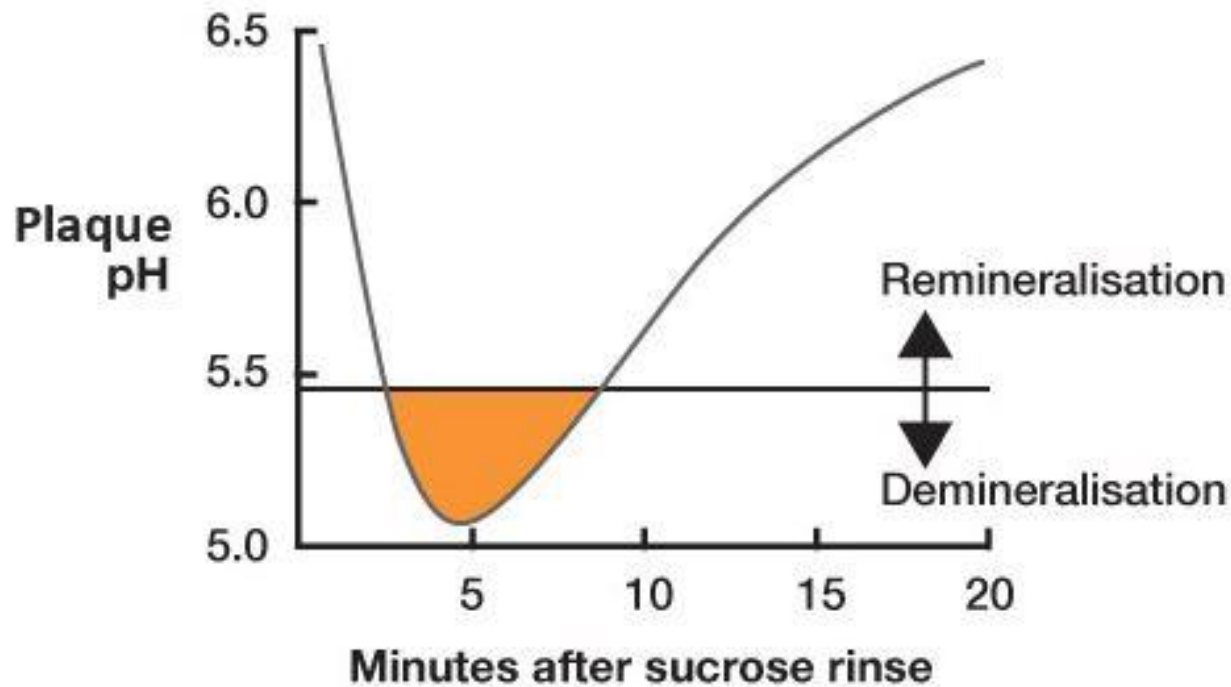
# 牙菌斑

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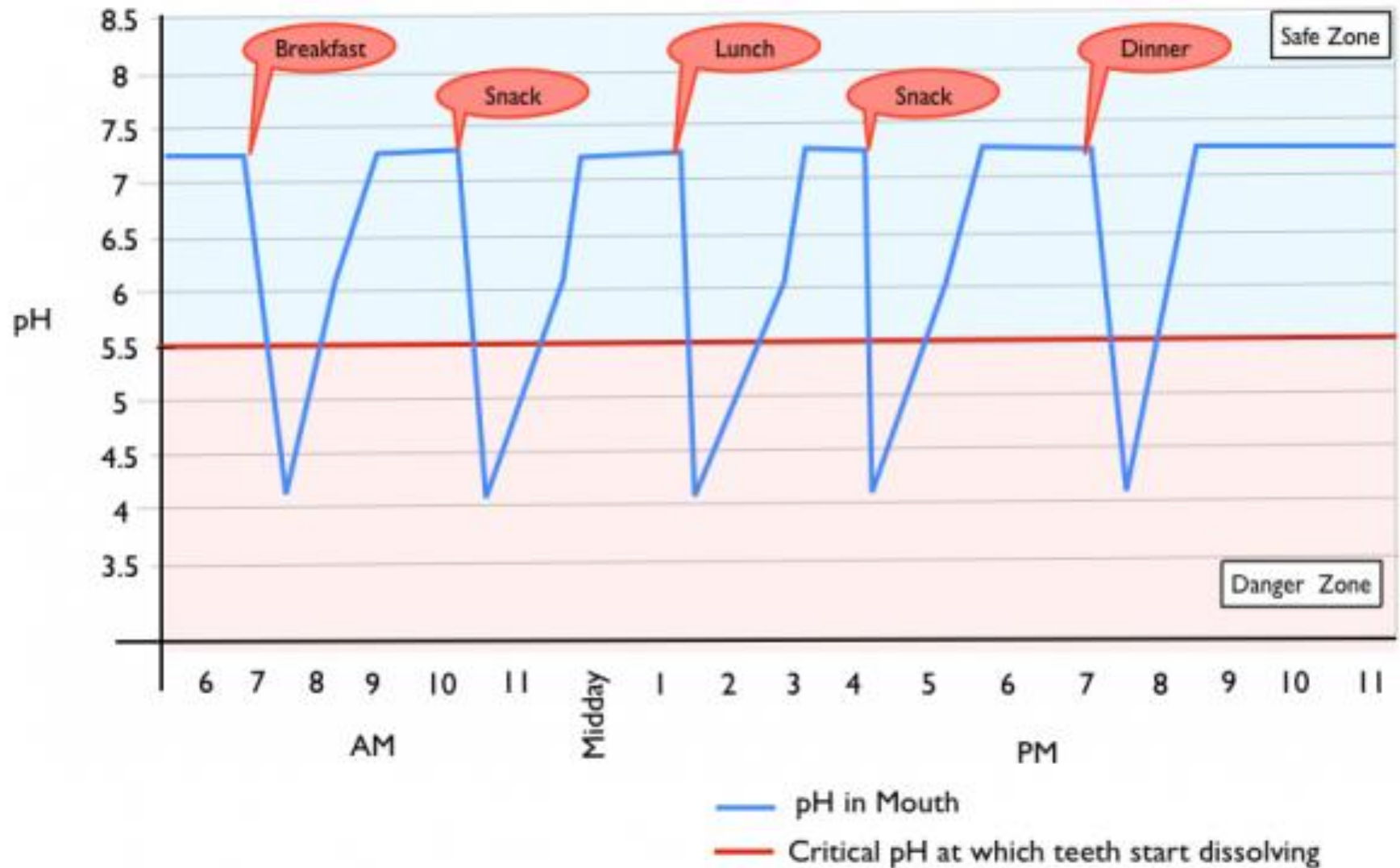


資料提供：陳日生

# 進食後口中酸性變化: Stephen Curve



# A Healthy Stephan Curve



## Oral Health Disparities of Children among Southeast Asian Immigrant Women in Arranged Transnational Marriages in Taiwan

Y.C. Lin<sup>a</sup> Y.Y. Yen<sup>b</sup> C.S. Chang<sup>c</sup> C.C. Ting<sup>a</sup> P.H. Chen<sup>a</sup> C.C. Chen<sup>b</sup>  
W.D. Peng<sup>d</sup> F.L. Chen<sup>e</sup> C.Y. Hu<sup>f</sup> H.L. Huang<sup>b</sup>

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### Key Words

Enamel caries · Epidemiology · Oral hygiene · Public dental health · Tooth brushing

### Abstract

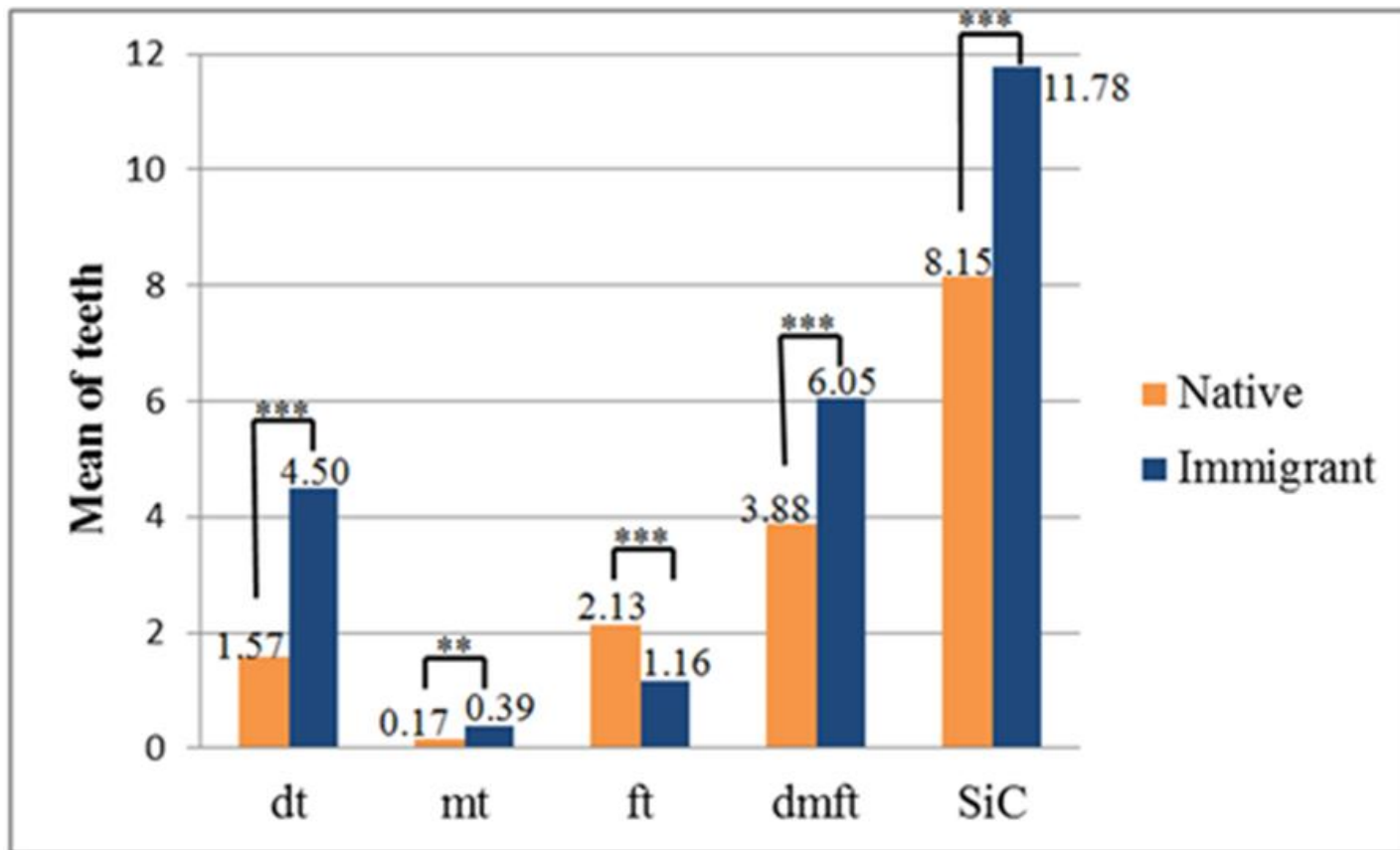
This study assessed the oral health disparities and oral health care needs of children whose parents are Southeast Asian immigrant women in arranged transnational marriages. We used the baseline data of the Lay Health Advisor Approach to Promote Oral Health Program (LHA-POHP) to explore the disparities in oral health between immigrant and native children, and the factors associated with their oral health. A cross-sectional community-based study was conducted to collect data from mothers and their preschool children in Southern Taiwan in 2011. A total of 590 (440 natives, 150 immigrants) children aged 4–6 years and their mothers completed the questionnaire and oral examination. Multiple regression models were used to analyze the association between children's oral health and their related factors. The caries index was 6.05 in immigrant children and 3.88 in native children ( $p < 0.001$ ). The caries prevalence of maxillary anterior teeth in the labial surfaces was higher among immigrants, ranging from 14.7 to 22%. The factor associated with children's caries index was maternal tooth brushing fre-

quency (adjusted odds ratio [aOR] = 8.95, 95% confidence interval [CI] 1.95–41.05). When the mothers did not direct children to brush teeth after eating sweets, their children were more likely to have decayed teeth (aOR = 3.54, 95% CI 1.04–12.03). Children's filled teeth were related to their dental regular check-ups (aOR = 2.28, 95% CI 1.26–4.10). Disparities in oral health among immigrant and native children were observed. The findings suggest that culturally adequate oral health promotion intervention programs should be implemented for immigrants.

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Recently, Taiwan has been faced with the migration of large numbers of women from Southeast Asian countries. These women are colloquially called 'foreign brides' or 'alien brides' because their marriages were arranged by marriage brokers. The importation of Southeast Asian brides began in 1987 in rural areas of Taiwan. This form of arranged transnational marriages has created a special phenomenon of 'marriage trades' that is popular among the lower middle classes. Arranged intermarriage is one type of cross-border migration flow of women. The majority are from Vietnam and Indonesia. The aggregate number of Southeast Asian wives was estimated at more

# 台灣本籍與外籍兒童dmft Index比較



圖一、本籍與外籍兒童之dmft index(Lin, et al., 2014)



# Significant caries and the interactive effects of maternal-related oral hygiene factors in urban preschool children

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## Keywords

dental caries; primary dentition; preschool children; significant caries (SiC); maternal oral hygiene; dental checkups; sugar-sweetened beverages (SSBs).

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## Abstract

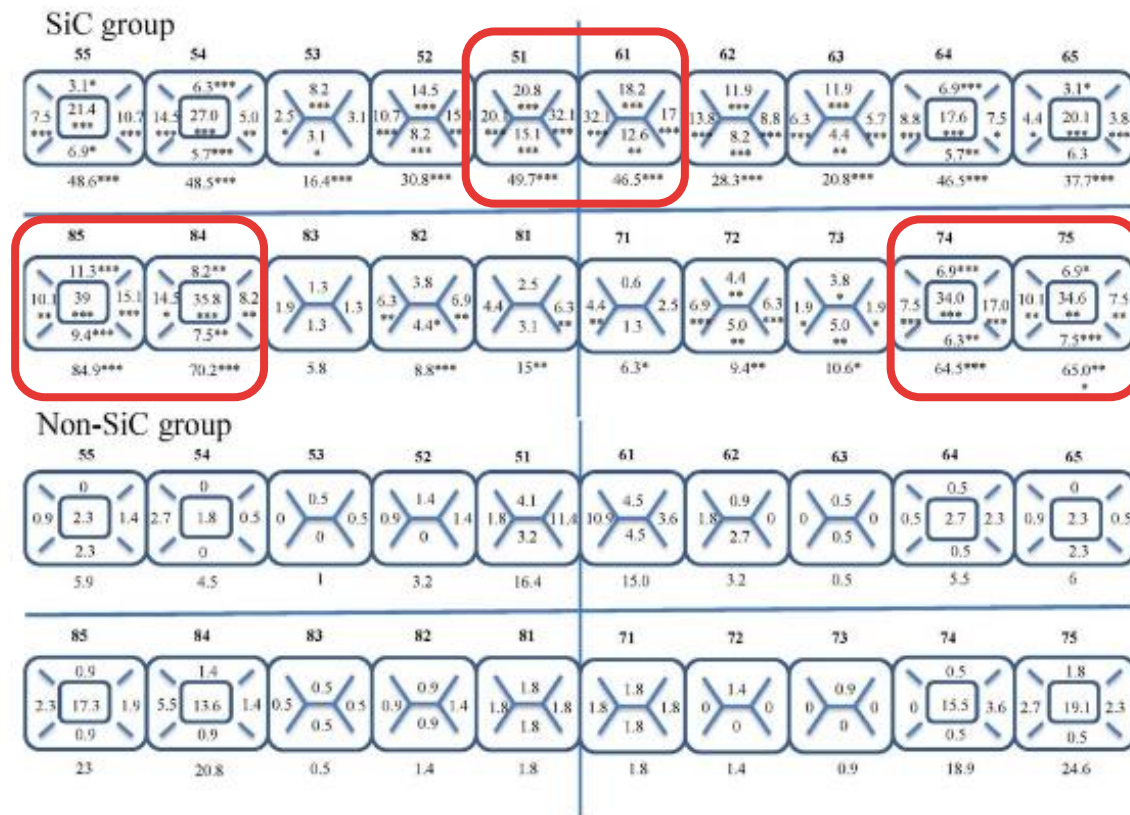
**Objectives:** This study examined significant caries (SiC) and the interactive effects of maternal-related oral hygiene factors in urban preschool children.

**Methods:** A cross-sectional study was designed to collect data from a cluster of randomly selected samples in 2011. A total of 495 child-mother pairs from the San-Ming District of Kaohsiung City, Taiwan, participated in the study. Children aged 4–6 years received dental examinations, and their mothers completed a self-administered questionnaire. The SiC Index indicated the highest caries values in participants. The association between 3 groups – dmft (decayed, missing, and filled teeth)-free, non-SiC, and SiC – and the mothers' and their children's factors were examined using polytomous logistic regression analysis.

**Results:** Among the SiC children, caries experience was most frequent in the mandibular molars (64.5–84.9 percent), and almost 50 percent of these children had central incisor caries. The significant factors associated with the SiC children were lower maternal self-efficacy in oral hygiene [adjusted odds ratio (aOR) = 2.04], child's intake of sugar-sweetened beverages (SSBs) more than once per day (aOR = 2.27), and irregular child dental checkups (aOR = 2.32). Significant interaction effects were detected among children who received irregular dental checkups and whose SSBs intake was more than once per day and whose mothers had lower self-efficacy in oral hygiene (*P* for interaction term = 0.034 and 0.004, respectively).

**Conclusions:** Caries prevention programs should prioritize enhancing maternal self-efficacy in oral hygiene and emphasize childhood SSBs intake management and regular dental checkups to mothers to prevent severe caries in preschool-aged children.





**Figure 1** The proportions (%) of tooth and surface with caries between SiC and non-SiC group. Note: SiC group = children with 6 or above dmft; Non-SiC group = children with 1 to 5 dmft. [Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$

**Table 3** The Combined Effects of Child Regular Dental Checkups and Maternal Health Behavior and on Children's Caries Status among Preschool Children

		No. of participants			non-SiC vs. dmft-free		SiC vs. dmft-free	
		dmft-free	Non-SiC	SiC	aOR*	(95% CI)	aOR*	(95% CI)
Child regular dental checkups	Child SSBs intake (time/day)							
Yes	<1	57	94	35	1.00		1.00	
Yes	≥1	13	9	27	0.53	(0.18-1.54)	2.63	(1.02-6.79)
No	<1	35	96	66	0.87	(0.45-43.40)	0.98	(0.46-2.06)
No	≥1	11	21	31	3.55	(0.71-17.76)	4.84	(1.12-25.59)
<i>P</i> for interaction					0.096		0.034	
Child regular dental checkups	Maternal self-efficacy in oral hygiene							
Yes	High	54	90	33	1.00		1.00	
Yes	Low	16	13	29	0.82	(0.37-1.79)	1.26	(0.57-2.80)
No	High	39	92	48	0.94	(0.48-1.85)	0.65	(0.31-1.38)
No	Low	7	25	49	3.14	(0.64-15.30)	6.93	(1.38-34.70)
<i>P</i> for interaction					0.089		0.004	

Note: SSBs, sugar-sweetened beverages; non-SiC group, children with 1 to 5 dmft; SiC group, children with 6 to 19 dmft.

\*Polytomous logistic regression models were adjusted for children's age and monthly household income level.

# 兒童照護者對口腔保健重要性

- 許多研究指出，**家長本身**對口腔保健的信念與態度和孩童的齲齒、牙齒清潔、甜食攝取習慣具有強大的關聯性。  
(Skeie, Riordan, Klock, & Espelid, 2006)
- Children's dental health relies especially on parental participation and the support of dental services.  
(Pine et al., 2004)
- Children with a history or evidence of caries or whose primary caregiver has severe caries should be regarded as at increased risk for the disease.  
(Krol, 2003)

表1.臺北市學齡前3-5歲兒童齲齒與決定因子

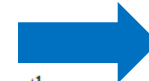
	SECC aOR(95%CI)	Non-SECC aOR(95%CI)
<b>父母協助兒童睡覺前刷牙</b>		
無	1.00	1.00
有	0.79(0.75-0.84)	<b>0.76(0.71-0.81)</b>
<b>定期塗氟</b>		
否	1.00	1.00
是	0.86(0.80-0.92)	<b>0.74(0.68-0.81)</b>
<b>飲食習慣</b>		
點心攝取頻率(0-14次)	1.03(1.02-1.04)	<b>1.06(1.05-1.06)</b>
含糖飲料攝取頻率(0-21次)	1.05(1.04-1.06)	<b>1.10(1.08-1.11)</b>

# 含糖飲料與口腔保健行為的交互作用

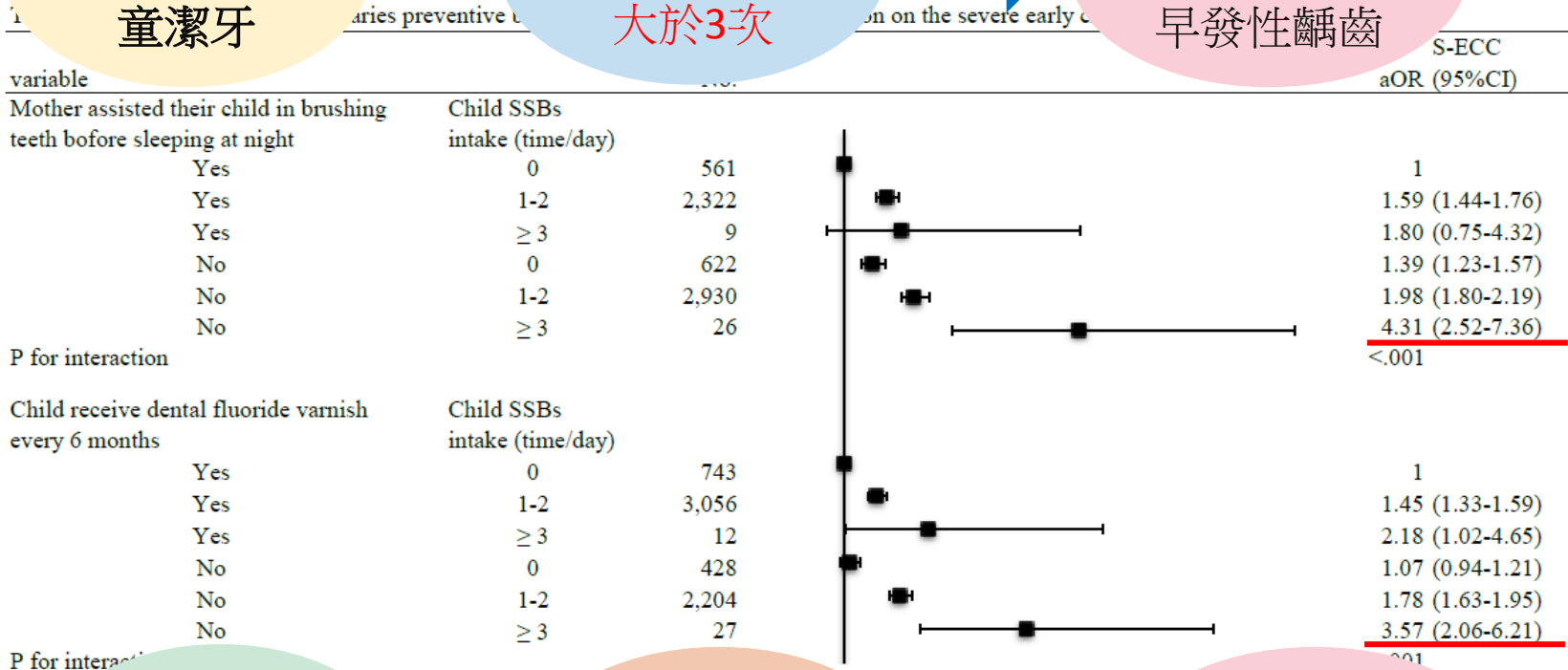
母親**未**在  
睡前幫孩  
童潔牙

+

孩童攝取含  
糖飲料一天  
大於3次



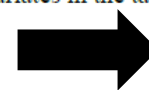
有**4.3倍**的可  
能發生嚴重  
早發性齲齒



孩童**沒有**  
定期塗氟

+

孩童攝取含  
糖飲料一天  
大於3次



有**3.5倍**的可  
能發生嚴重  
早發性齲齒

表2. 臺北市學齡前3-5歲兒童齲齒與飲食習慣之關係 (個案數=34,941)

變項	Non-SECC	SECC
	aOR (95% CI)	aOR (95% CI)
<b>糖果、巧克力、甜味餅乾等甜食</b>		
幾乎不吃	1.00	1.00
每星期1-3次	1.46(1.34-1.59)	<b>2.02</b> (1.79-2.28)
每星期4-6次	1.61(1.47-1.78)	<b>2.54</b> (2.23-2.90)
每星期7次以上	1.62(1.43-4.83)	<b>2.91</b> (2.49-3.40)
<i>p</i> for trend	<0.001	<0.001
<b>洋芋片、乖乖、蝦味先、科學麵、鹹味餅乾等鹹味零食食品</b>		
幾乎不吃	1.00	1.00
每星期1-3次	1.26(1.20-1.33)	1.62(1.51-1.72)
每星期4-6次	1.37(1.21-1.54)	1.77(1.53-2.04)
每星期7次以上	1.19(0.92-1.53)	<b>2.09</b> (1.59-2.75)
<i>p</i> for trend	<0.001	<0.001

表2.(續) 臺北市學齡前3-5歲兒童齲齒與飲食習慣之關係 (個案數=34,941)

變項	Non-SECC	SECC
	aOR (95% CI)	aOR (95% CI)
<b>汽水、可樂等含氣泡飲料</b>		
幾乎不喝	1.00	1.00
每星期1-3次	1.41(1.33-1.50)	<b>1.82</b> (1.69-1.95)
<b>每星期4-6次</b>	1.56(1.16-2.11)	<b>2.60</b> (1.91-3.55)
<b>每星期7次以上</b>	1.43(0.75-2.71)	<b>3.33</b> (1.80-6.19)
<i>p</i> for trend	<0.001	<0.001
<b>養樂多等乳酸飲料</b>		
幾乎不喝	1.00	1.00
每星期1-3次	1.16(1.10-1.23)	1.40(1.30-1.50)
每星期4-6次	1.16(1.04-1.29)	1.50(1.32-1.70)
每星期7次以上	0.93(0.67-1.27)	1.26(0.88-1.81)
<i>p</i> for trend	<0.001	<0.001
<b>珍珠奶茶、紅茶等含糖飲料</b>		
幾乎不喝	1.00	1.00
每星期1-3次	1.35(1.27-1.43)	<b>1.83</b> (1.71-1.95)
<b>每星期4-6次</b>	1.45(1.16-1.82)	<b>2.50</b> (1.98-3.17)
<b>每星期7次以上</b>	1.65(1.00-2.74)	<b>2.45</b> (1.42-4.23)
<i>p</i> for trend	<0.001	<0.001

# 具科學實證有效的 口腔預防保健策略

- 初段預防: 健康促進與特殊防護
- 次段預防: 定期口腔檢查
- 末段預防: 齲齒治療



# 科學實證等級與實證強度

實證等級	科學實證強度
I,A	強有力的實證，來自至少一個系統性評論，此評論乃針對多個設計妥善之隨機對照試驗(RCT)
II,B	強有力的實證，來自至少一個設計妥善且樣本數適當的隨機對照試驗(RCT)
III,C	實證來自設計妥善但非隨機的試驗、介入單一族群之前後測、世代追蹤研究、配對病例對照之時間序列研究
IV,D	實證來自二個以上的中心或研究團隊的設計妥善但非實驗性質之研究
V	受尊敬的權威人士，根據臨床實證、描述性研究、或專家委員會報告，所提出之意見
GP✓,GPP	無實證但實務可行

因不同政府單位與機構認定方式稍有差異，且使用不同符號，但大致遵守上述規則

# 兒童具科學實證之防齲措施

## 初段預防:健康促進與特殊防護

項次	自我防齲措施	證據等級
1	牙膏氟離子濃度應在 <b>1,350-1,500 ppm</b>	<b>I, A</b>
2	每天用 <b>含氟牙膏</b> 至少刷2次牙	<b>I, B</b>
3	刷完牙吐出即可，不再漱口，以保持氟離子濃度	III, B
4	應減少含糖飲食之次數與用量。	III, I, D
5	<b>睡前刷牙</b> ，選另外時機至少1次	<b>III, GPP</b>

項次	專業人員施作	證據等級
1	每半年 <b>塗氟漆</b> 1次(2.2% NaF <sup>-</sup> )	<b>I, A</b>
2	白齒 <b>窩溝封填</b>	<b>I, A</b>

RESEARCH ARTICLE

Open Access



# The decline in dental caries among Korean children aged 8 and 12 years from 2000 to 2012 focusing SiC Index and DMFT

Han-Na Kim<sup>1</sup>, Dong-Hun Han<sup>2</sup>, Eun-Joo Jun<sup>3</sup>, Se-Yeon Kim<sup>3,4</sup>, Seung-Hwa Jeong<sup>3,4</sup> and Jin-Bom Kim<sup>3,4\*</sup>

## Abstract

**Background:** The aim of this study was to analyse the prevalence and severity of dental caries among Korean children aged 8 and 12 years over a period of 12 years by determining the number of decayed, missing, and filled teeth (DMFT) and the Significant Caries index (SiC index).

**Methods:** Stratified cluster-sampled data from the National Oral Health Survey conducted from 2000 to 2012 were analysed. In 2000, 2006, and 2012, a total of 2397, 2650, and 9601 children aged 8 and 12 years were examined, respectively. The children's oral health status, including the number of DMFT and fissures sealed teeth, was examined and recorded. The SiC index was calculated according to the child's residential district.

**Results:** Over the 12-year period, the percentages of caries-free children aged 8 and 12 years increased from 26.0 to 42.7 % and from 53.4 to 69.6 %, respectively. The percentages of children aged 8 and 12 years with sealed teeth in 2012 were 62.1 and 62.5 %, respectively, more than triple the rates in 2000. The mean DMFT values of children aged 8 and 12 years decreased from 1.04 to 0.67 and from 2.86 to 1.84, respectively. The SiC index of children aged 8 and 12 years also decreased from 2.73 to 1.97 and from 6.13 to 4.51, respectively. The rate of reduction in DMFT among 8- and 12-year-old children in the second 6 years of the observation period was lower than that in the first 6 years.

**Conclusions:** A remarkable decline in dental caries of 8- and 12-year-old Korean children was observed over the 12-year study period. The mean DMFT values and SiC index of children aged 8 and 12 years decreased. The reduction rate between 2000 and 2006 was higher than that between 2006 and 2012.

**Keywords:** Children, Dental caries, Decayed, missing, and filled teeth, Significant caries index

# 無齲齒率與窩溝封填

**Table 2** Prevalence of caries experience and fissure sealant in Korea 2000–2012 by age

Year	Living region	Age 8					Age 12				
		N	DMFT=0, %	P*	Sealed, %	P*	N	DMFT=0, %	P*	Sealed, %	P*
2000	Total	1194	53.4	0.67	19.2	0.877	1203	26.0	0.006	14.8	0.011
	Urban	780	52.9		19.4		784	28.6		16.7	
	Rural	414	54.3		18.8		419	21.2		11.2	
2006	Total	875	69.5	1.00	38.6	<0.001	1775	39.1	0.041	33.0	0.237
	Urban	694	69.5		35.3		1386	40.4		33.8	
	Rural	181	69.6		51.4		369	34.1		30.4	
2012	Total	4379	69.6	0.559	62.1	0.367	5222	42.7	0.612	62.5	0.438
	Urban	3781	69.2		62.3		4565	42.8		63.0	
	Rural	598	76.3		58.3		657	41.0		55.4	
P-value**											

## Conclusions

Go to: 

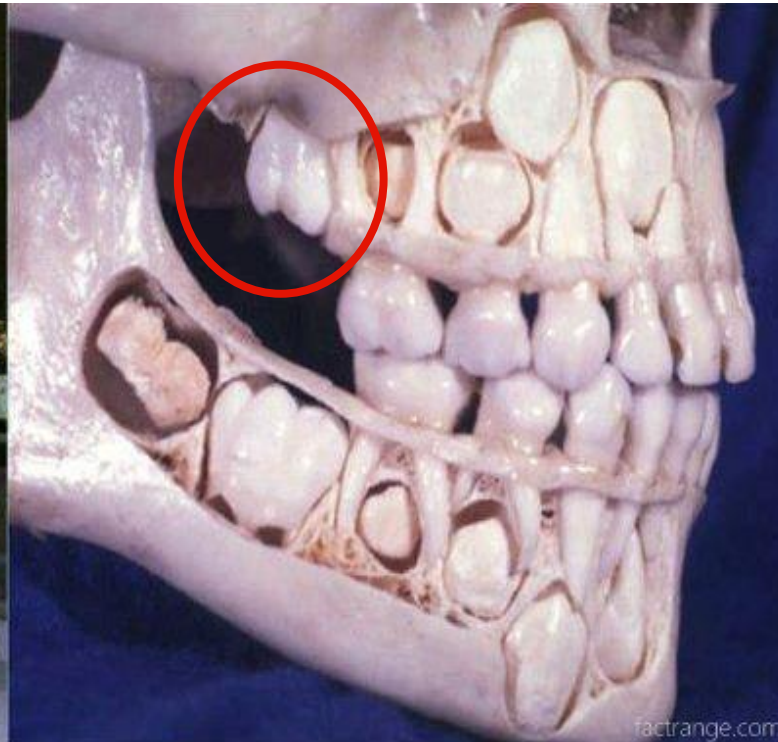
Although this study lacked information on children's SES and detailed data on individual oral health and diet conditions, a remarkable decline in dental caries for 8- and 12-year-old children was observed during the 12-year study period. Public oral health programmes using fluoride and fissure sealants and the common use of fluoridated toothpaste may have contributed to the improved oral health of 8- and 12-year-old Korean children. To continue oral health promotion, strategies that support current programmes and coverage for populations with severe dental caries should be considered.

窩溝封填

Pit and Fissure  
Sealant

# 兒童的頭骨(Skull of child)

- **六歲牙(第一大臼齒)**，沒有相對的乳牙位置，是直接從最後方萌出
- **恆牙**等候換牙的時間，會**推擠乳牙而萌發**





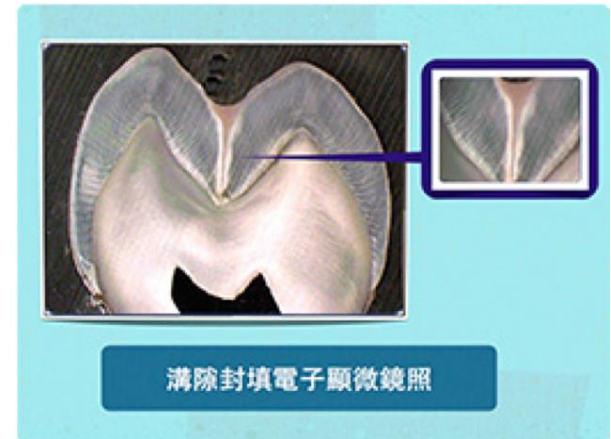
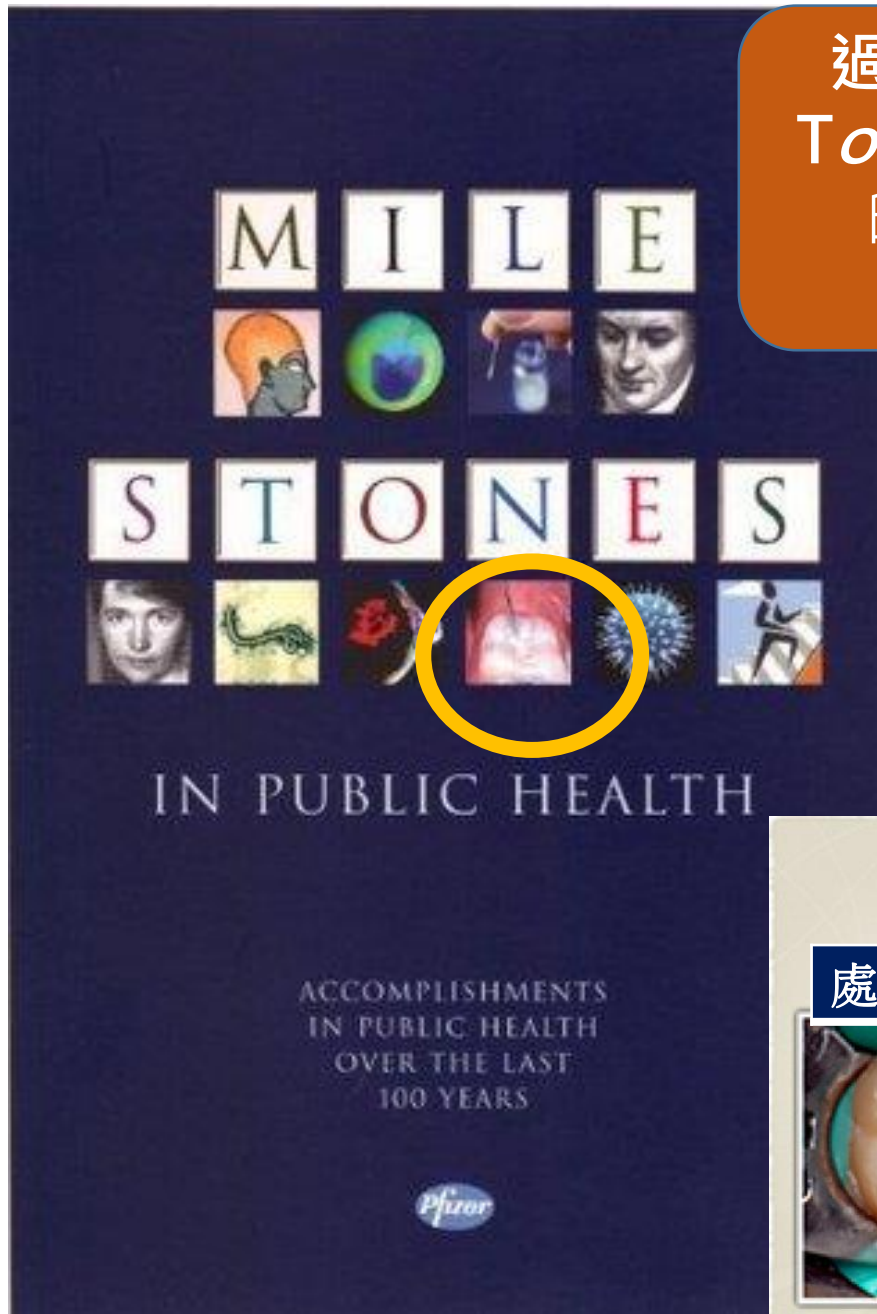
# 『第一大臼齒』齲齒

- **臼齒咬合面**非常容易發生齲齒
- 國小一年級恆牙**第一大臼齒**占有齲齒近**50%**
- 台灣1~2年級大學生**第一大臼齒拔除率**為日本的**13.1倍**(CS Chang, 2010)





過去100年來公共衛生里程碑：  
*Tooth with protective sealant*  
臼齒窩溝封填 (Buonocore, 1955)



溝隙封填

處置前



處置後



# 學童「窩溝封填」補助服務

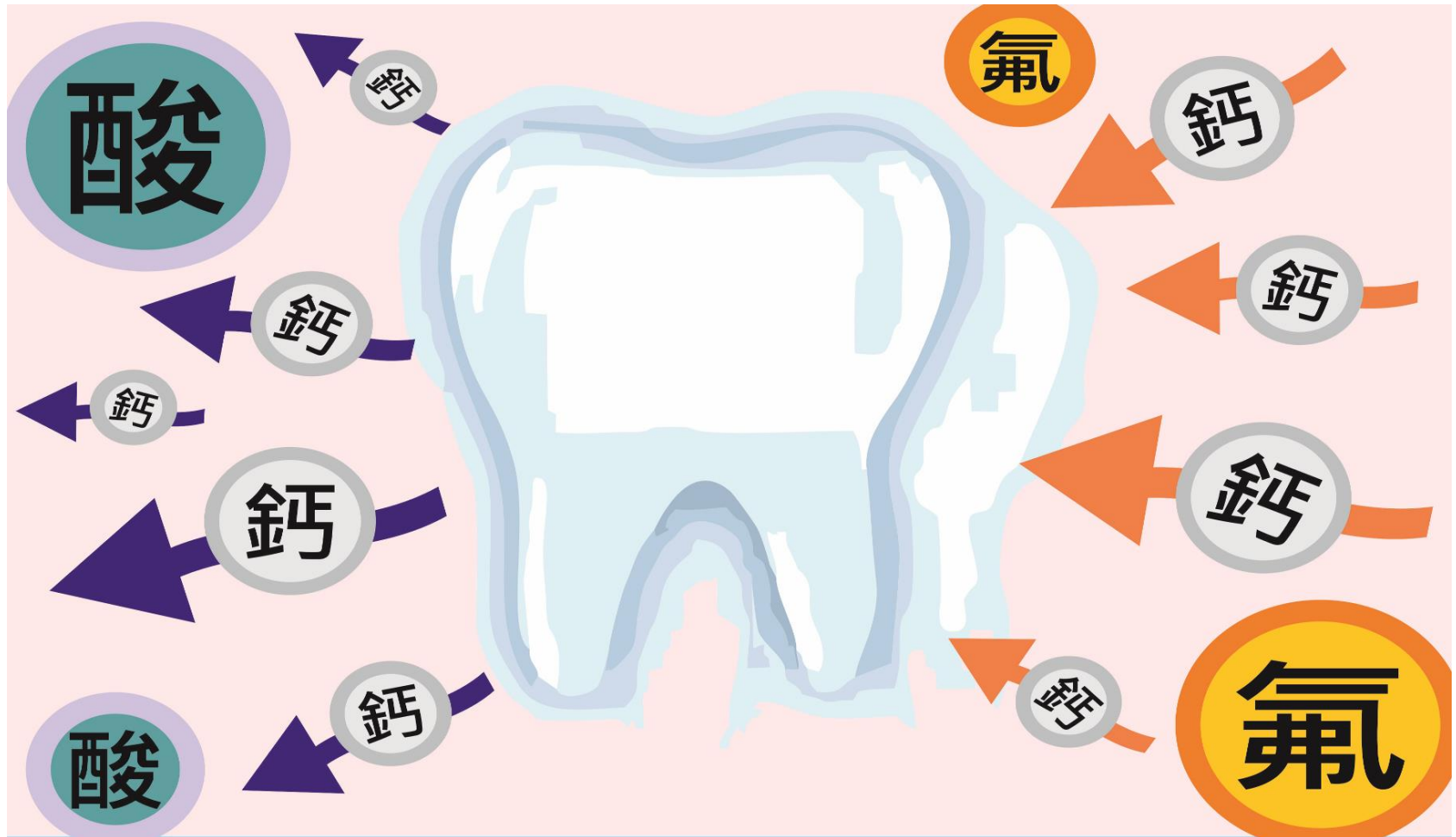
- 99年公告補助「弱勢兒童臼齒窩溝封劑服務補助」
  - 低收入、中低收入、身心障礙者、原住民山地鄉及離島地區國小一、二年級學童
- 102年9月台北市衛生局「學童窩溝封填防齲計畫」，針對國小一年級學童
- **103年9月全國執行「國小學童窩溝封填補助服務」**

# 氟化物的作用

系統性使用

局部性使用

口中的酸會使牙齒脫鈣  
「氟化物」則把鈣拉回牙齒表面



# 『氟化物』防齲機轉<sub>(WHO,2005)</sub>

- 經由**加速牙齒再礦化**速率，發揮修復初期齲齒病灶之能力。
- 經由改善**琺瑯質**化學結構，提升其**抗酸性**之作用。
- 經由**干擾致齲菌**新陳代謝與生長，**降低**致齲菌**產酸能力**之功效。

# 氟化物之種類及防齲效果

## • 系統性使用

種類	使用方法	防蛀效率	優點	缺點	備註
自來水加氟	添加適當氟	齲齒率下降 50~70%	全人口自然食用	需注意水氟量測定	全球近3億5仟萬人口使用。
食鹽加氟	添加適當氟	齲齒率下降 50~70%	全人口或選擇自然食用	需了解人口食鹽攝取量及氟量作添加依據	全球近2億5仟萬人口使用，近年來WHO推薦代替飲用水加氟， <b>為安全、低廉又有效的防齲措施。</b>

新包裝



# 氟化物之種類及防齲效果(續)

## • 系統性使用

種類	使用方法	防蛀效率	優點	缺點	備註
氟錠	睡前及刷完牙後使用，置於齒齦和臉頰之間緩慢地溶解，須每日使用。	齲齒率下降 30~40%	有系統性氟化物效果	費用較高，需定時測定氟攝取量， <b>長期使用配合有問題。</b>	於過去二十年前推動，由於操作方法冗長，配合度有問題，也較不適用於身心障礙者。

# 氟化物之種類及防齲效果

## • 局部性使用

氟化物類別	使用方法	防蛀效率	優點	缺點	備註
氟漆	由專業人員操作，每半年塗一次	齲齒率下降46%	使用方便 安全性與牙膏一樣		美、歐洲已推行二、三十年，成效良好。
氟膠	由專業人員操作，三個月或四個月塗一次	齲齒率下降28%	局部效果	需特製牙托並隨時抽取口水，以避免吞入。	需於診間由專業人員配合抽吸裝置及牙托使用，故不適合大量的公共衛生使用。



# 氟化物之種類及防齲效果(續)

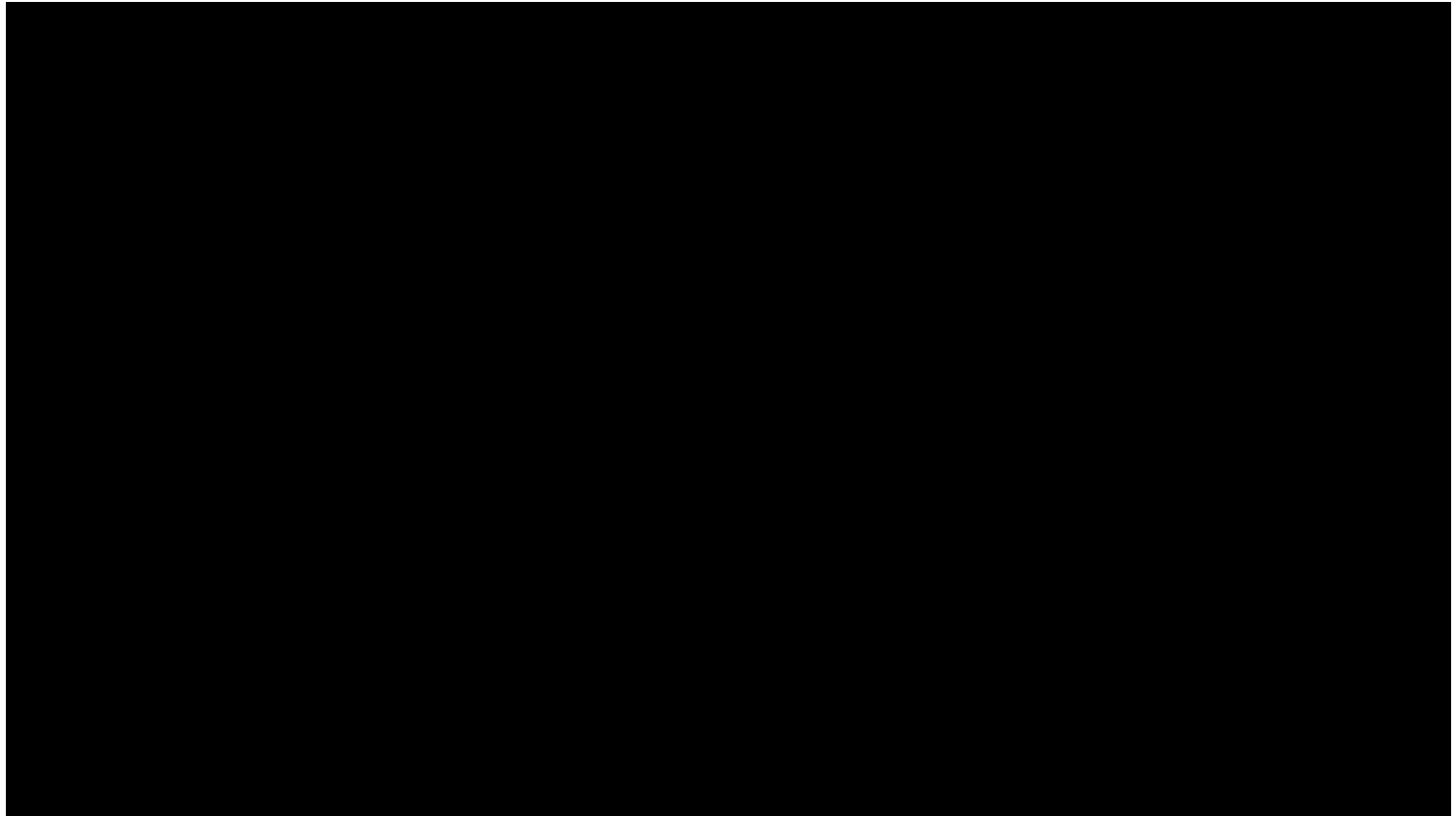
## • 局部性使用

氟化物類別	使用方法	防蛀效率	優點	缺點	備註
含氟牙膏	成人 1500ppm 小孩 1000ppm	齲齒率 下降4%	方便		由於使用方便，全球均主張刷牙時一定要搭配含氟牙膏使用。
含氟漱口水	每週一次	齲齒率 下降26%	局部效果		效果與含氟牙膏相仿，但牙膏自備即可。

# 7-12歲兒童口腔保健

- 潔牙搭配含氟牙膏
  - 一天潔牙**2**次，**睡前潔牙**最重要
  - 搭配**含氟牙膏**(1000ppm以上)
  - 低年級:**睡前由照護者協助潔牙**
  - 中高年級:**牙線**使用
- 潔牙方式
  - 低年級: 馮尼式刷牙法或水平橫刷牙法
  - 中高年級: 貝氏刷牙法
- **每半年**定期牙科檢查
- 氟化物使用: **塗氟、含氟鹽**

猩猩也會用牙線!?



# 近三年口腔保健計畫輔導成效

# 計畫口號

- 此口號呼應本次計畫中的**主要推動項目**

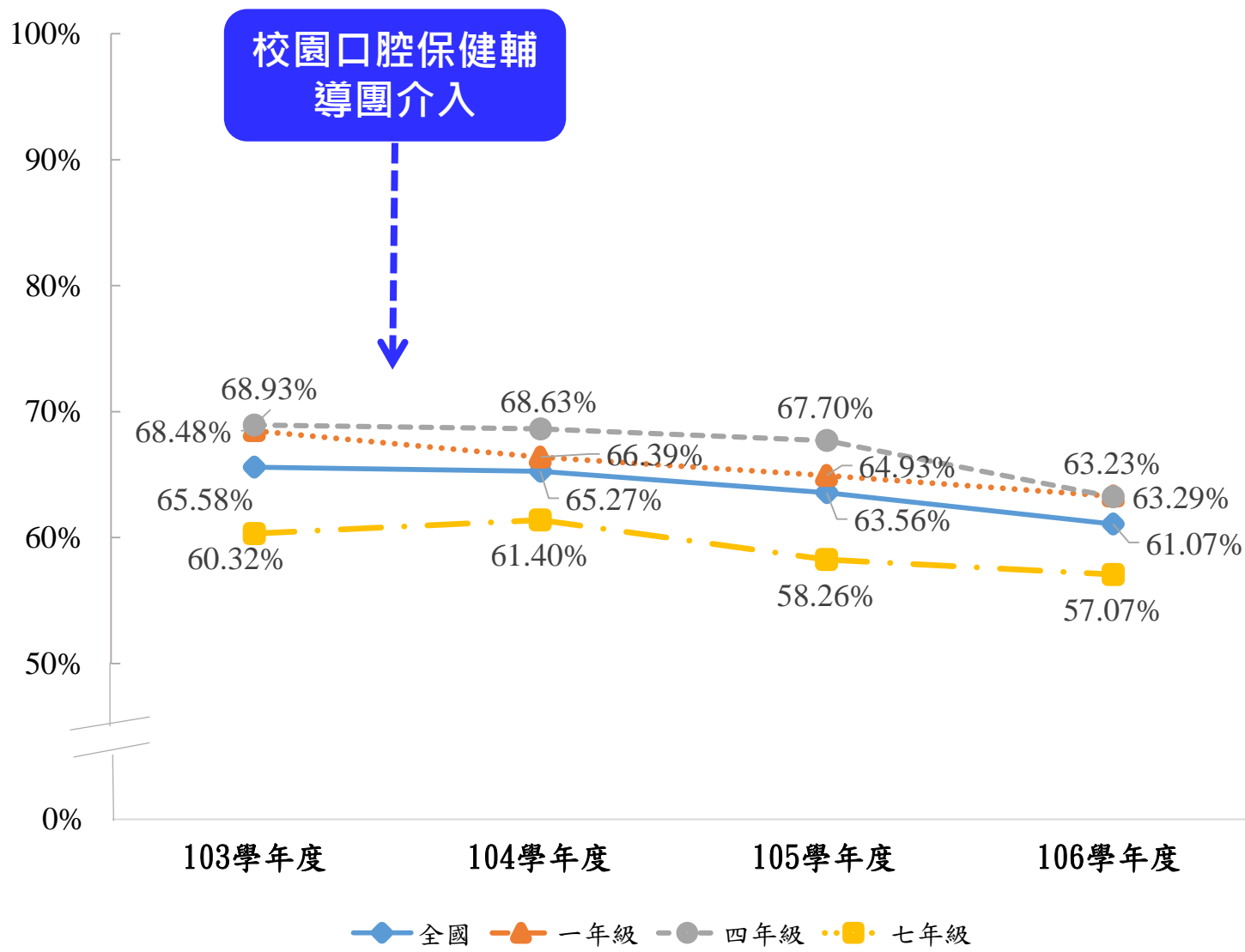
《**Protection:** 專業口腔保護》  
氟漆與第一大白齒窩溝封填

塗氟填溝有保障

潔牙少糖好口腔

《**Prevention:** 預防保健行為》  
正確潔牙與含糖飲食控制

# 我國學童近四年齲齒盛行率分佈



# 近四年學童齲齒下降對健保醫療支出影響

年級	學童數	齲齒盛行率	單顆齲齒平均治療費用	齲齒治療總金額	學童齲齒下降比率/影響人數	節省健保費用
一年級			診察費 <b>313</b> 元+ 複合樹脂填補 750元 (個人負擔掛號 費100元)		↓ <b>5.19%</b>  9450人	944萬元
103學年度	197214	68.48%		1億3505萬元		
104學年度	189871	66.39%		1億2605萬元		
105學年度	173089	64.93%		1億1238萬元		
106學年度	180146	63.29%		1億1401萬元		
四年級					↓ <b>5.7%</b>  1萬1224人	1122萬元
103學年度	207734	68.93%		1億4319萬元		
104學年度	200117	68.63%		1億3734萬元		
105學年度	197286	67.70%		1億3356萬元		
106學年度	196626	63.23%		1億2432萬元		
七年級					↓ <b>3.25%</b>  6672人	667萬元
103學年度	241114	60.32%		1億4543萬元		
104學年度	228027	61.40%		1億4000萬元		
105學年度	213339	58.62%		1億2505萬元		
106學年度	206685	57.07%		1億1795萬元		
總計					<b>2萬7345人</b>	<b>2734萬元</b>

資料來源：

1. 103-106學年度教育部學生健康資訊系統 2. 全民健康保險醫療服務給付項目及支付標準

# 總結

- 生命週期各階段的口腔問題都是重要的。
- 預防每個階段的口腔疾病的發生，選擇適合口腔照護方式。
- 8020目標，需從幼兒的口腔健康做起。



# 每日 健口操



養顏美容  
預防失智



舌下腺 顎下腺



耳下腺



顎下腺



舌下腺



## 為什麼要做健口操？

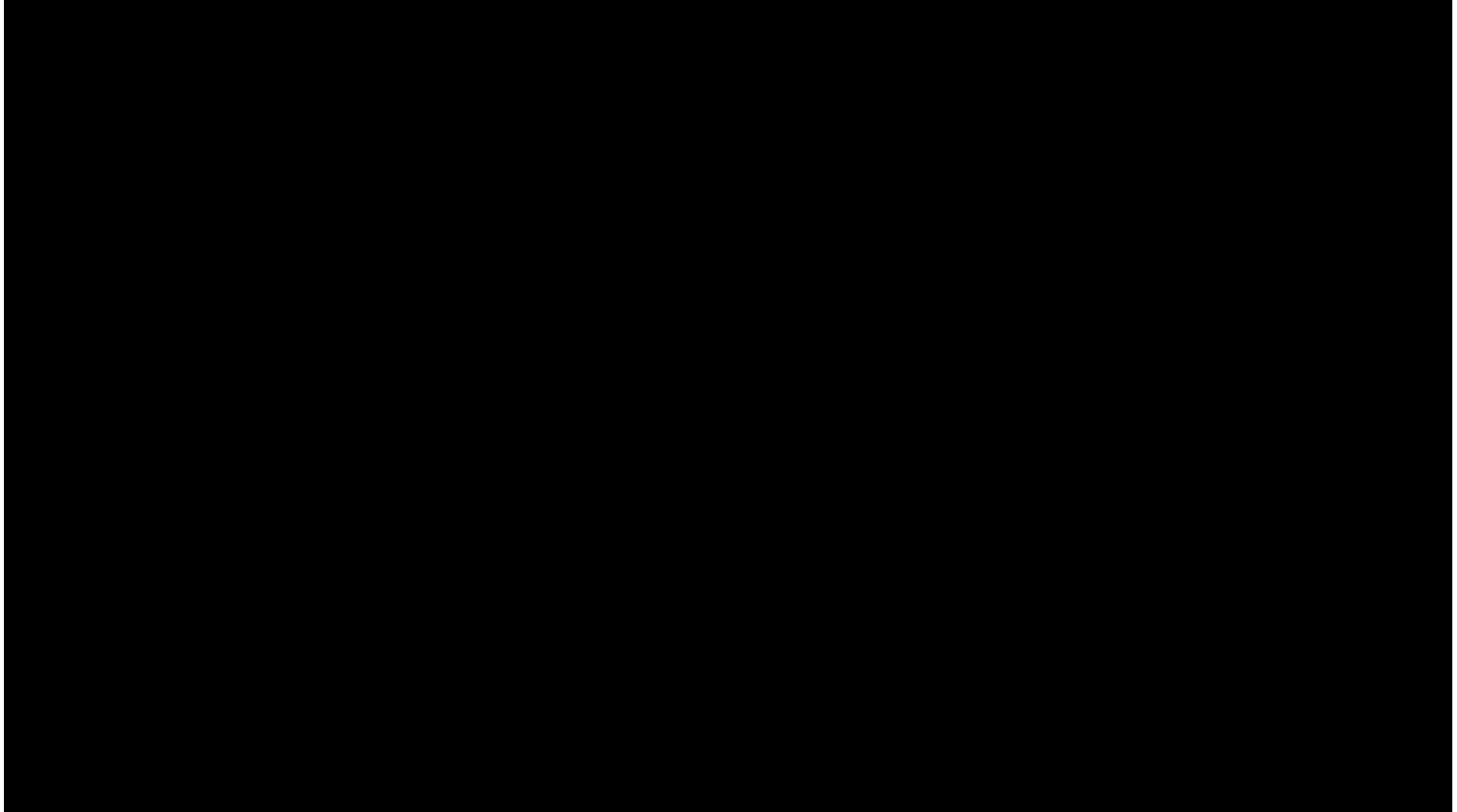
用餐前做健口操可以增加唾液分泌、改善口腔機能，  
享受美食，避免被食物噎到、增加肺炎的風險。

欲索取光碟請洽專線：高雄醫學大學 口腔衛生學系 (07) 312-1101轉2159

107年度銀髮族口腔照護與口腔機能促進衛生教育宣導

指導單位：國家衛生研究院補助 執行單位：高雄醫學大學口腔衛生學系執行

# 健口操影片



# 校園口腔保健資訊網

- 網站首頁<http://ohpc.kmu.edu.tw/>

教育部國民及學前教育署  
校園口腔保健資訊網

塗氟填溝有保障，潔牙少糖好口腔

首頁 教師專區 學齡前兒童 國小學童 國高中生 衛教教材下載 口腔保健新知識

主選單

- 計畫緣由
- 計畫目標
- 計畫人員介紹
- 輔導委員專區
- 績優學校專區
- 相關資源連結
- 活動照片
- 聯絡方式

學童口腔保健計畫 塗氟填溝有保障・潔牙少糖好口腔  
學校教師口腔保健研習

主辦單位：教育部國民及學前教育署 | 承辦單位：高雄醫學大學口腔衛生學系

最新消息 活動快報 健康資訊 學校選選 其他公告

- 2018-12-12：【其他公告】新聞資訊：106年兒童口腔預防保健講座(台東新聞-台東所在)
- 2018-09-28：【健康資訊】基隆首創牙醫入校 進行國小學童窩溝封填
- 2018-06-19：【學校選選】106學年度口腔保健績優學校分享-嘉義縣東榮國民小學
- 2018-06-19：【學校選選】106學年度口腔保健績優學校分享-嘉義縣大南國民小學
- 2018-06-19：【學校選選】106學年度口腔保健績優學校分享-花蓮縣富源國民小學
- 2018-06-19：【學校選選】106學年度口腔保健績優學校分享-桃園市楊梅國民小學
- 2018-06-19：【學校選選】106學年度口腔保健績優學校分享-臺中市塗城國民小學



# 謝謝各位專心聆聽

敬請提問與指教！