

Mitos y verdades en Odp

BASADA EN LA EVIDENCIA

Ana Arroyo B. - Odontopediatra

**28ª JORNADAS DE LA ASOCIACIÓN ANDALUZA
DE PEDIATRÍA DE ATENCIÓN PRIMARIA**



CÓRDOBA

*14 y 15 de marzo 2025
Palacio de Congresos*



PALACIO DE
CONGRESOS
DE CÓRDOBA

¿Quién soy?

Ana Arroyo



- **Máster odontopediatría - UB**
- **Mención especial en odontopediatría y pacientes especiales - HSJD**
- **Experto universitario en Lactancia Materna con énfasis en anquiloglosia - UR.LL**

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BASADA EN LA EVIDENCIA

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“el diente ya salió así”

“el diente ya salió así”



“el diente ya salió así”



“el diente ya salió así”

¿traumatismo?

¿salió así?

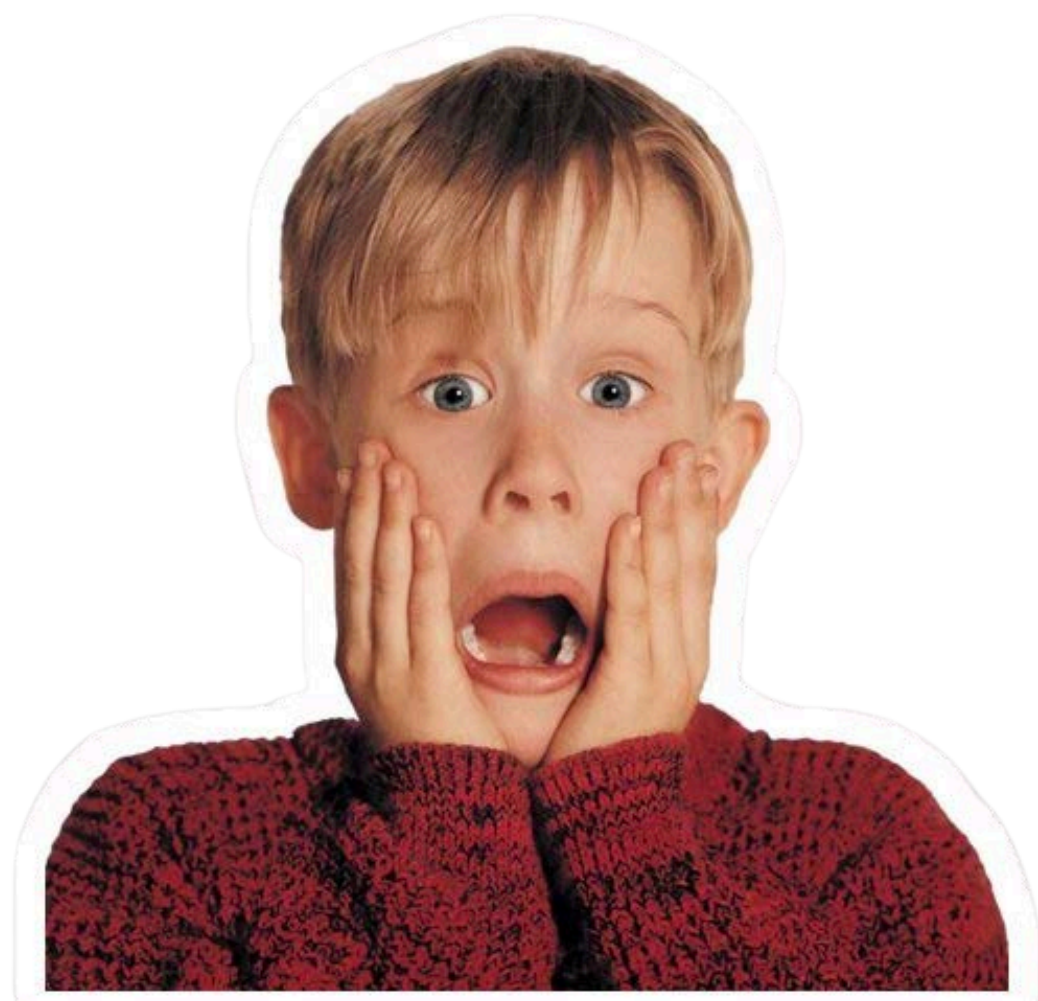
¿caries?

**¿defecto del
esmalte?**

“el diente ya salió así”

¿caries?

!!?? CAAARIEES??!!



Los niveles de salud oral mundial NO HAN MEJORADO EN LOS ÚLTIMOS 25 AÑOS

Received: 21 October 2020 | Revised: 7 February 2021 | Accepted: 1 March 2021

DOI: 10.1111/ipd.12783

SYSTEMATIC REVIEW

INTERNATIONAL JOURNAL OF
PAEDIATRIC DENTISTRY

WILEY

The global prevalence of early childhood caries: A systematic review with meta-analysis using the WHO diagnostic criteria

Sergio E. Uribe^{1,2,3}  | Nicola Innes⁴ 

Although dental caries is essentially a preventable chronic health problem,¹ recent global reports show that oral health has not improved over the past 25 years² with 573 million children estimated to have untreated dental caries in primary teeth in 2015.² Early childhood caries (ECC) has been used to

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SYSTEMATIC REVIEW

INTERNATIONAL JOURNAL OF
PEDIATRIC DENTISTRY WILEY

Using the WHO criteria, we found that early childhood caries affects 48%, almost half, of preschool children and its distribution is global, with geographical variations. Africa has a lower prevalence than the global pooled prevalence, whereas children estimated to have untreated dental caries in primary teeth in 2015.² Early childhood caries (ECC) has been used to



Risk Factors for Early Childhood Caries: A Systematic Review and Meta-Analysis of Case Control and Cohort Studies

Kirthiga M, MDS¹ • Muthu Murugan, MDS, PhD² • Ankita Saikia, MDS³ • Richard Kirubakaran, MSc⁴

Early Childhood Caries (**ECC**) remains the most prevalent chronic disease in children, with significant impact on society.^{1,2}





Risk Factors for Early Childhood Caries: A Systematic Review and Meta-Analysis of Case Control and Cohort Studies

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Early Childhood Caries (**ECC**) remains the most prevalent chronic disease in children, with significant impact on society.^{1,2}

PREVENIBLE



¿TAN IMPORTANTE ES?

La caries de primera infancia (CPI) impacta de forma directa en el bienestar psicosocial y el funcionamiento físico del niño en edad preescolar y en el de su familia

Zaror C, Matamala-Santander A, Ferrer M, Rivera-Mendoza F, Espinoza-Espinoza G, Martínez-Zapata MJ. Impact of early childhood caries on oral health-related quality of life: A systematic review and meta-analysis. Vol. 20, International Journal of Dental Hygiene. 2022. 120-135 p.

Barbosa TS, Gaviao MBD. Oral health-related quality of life in children: part I. How well do children know themselves? A systematic review. Int J Dent Hyg. 2008;6(2):95-9.



¿TAN IMPORTANTE ES?

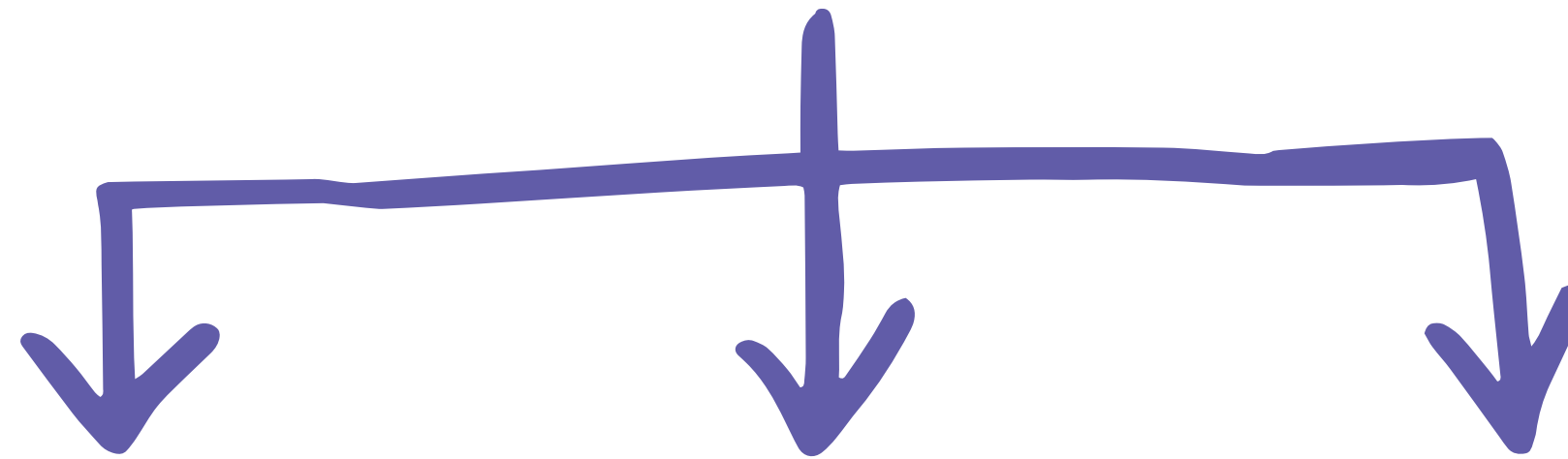
cavitated lesions), missing (due to caries), or filled surfaces in a child under the age of six years.⁴ The consequences of ECC include negative impacts on growth, development, nutritional problems, and oral health-related quality of life issues, from the child and his or her family.³ Children with dental caries experience poor school performance and poor school attendance.⁵ Also, ECC poses significant social and economic

Zaror C, Matamala-Santander A, Ferrer M, Rivera-Mendoza F, Espinoza-Espinoza G, Martínez-Zapata MJ. Impact of early childhood caries on oral health-related quality of life: A systematic meta-analysis. Vol. 20, International Journal of Dental Hygiene. 2022. 120-135 p.

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CARIES DE PRIMERA INFANCIA



Balance Nutricional

Crecimiento y
desarrollo

Menor rendimiento y
aprendizaje escolar

SEPSIS

CARIES DE PRIMERA

INFANCIA

HOSPITALIZACIÓN

ATB SISTÉMICOS

DOLOR

Balance Nutricional

Crecimiento y
desarrollo

Mejoramiento y
aprendizaje escolar

A > severidad de CPI < calidad de vida

Received: 28 July 2020 | Revised: 22 February 2021 | Accepted: 16 March 2021

DOI: 10.1111/idh.12494

REVIEW ARTICLE

International Journal of
Dental Hygiene



WILEY

Impact of early childhood caries on oral health-related quality of life: A systematic review and meta-analysis

Carlos Zaror^{1,2}  | Andrea Matamala-Santander^{3,4} | Montse Ferrer^{5,6} |

domains were the most affected. The articles analysed also indicated that patients with severe ECC (dmft > 5) showed a greater impact in the OHRQoL.

Severe ECC increased the impact of OHRQoL in preschoolers and their families by nearly two times, compared with ECC that is not severe, since parents recognize an oral health problem when it



Impact of early childhood caries on oral health-related quality of life: A systematic review and meta-analysis

Carlos Zaror^{1,2}  | Andrea Matamala-Santander^{3,4} | Montse Ferrer^{5,6} |
Fernando Rivera-Mendoza⁷ | Gerardo Espinoza-Espinoza^{2,8} |
María José Martínez-Zapata^{6,9}

5 | CONCLUSION

Early childhood caries has a negative impact on oral health-related quality of life (OHRQoL) of both preschoolers and their families, being greater in children with severe ECC. The symptom and psychological domains were the most affected. However, there is uncertainty around the real effect on OHRQoL due to the very low quality of the evidence. In addition, the results showed that the impact of ECC on OHRQoL is diluted when it is evaluated at population level.

data stratified by severity of caries (Figure 5). The likelihood of OHRQoL being affected increased considerably according to the severity of ECC. When compared with patients showing not severe ECC (OR: 2.43; 95%CI: 1.90–3.10; $I^2 = 65\%$), the negative effect on OHRQoL is twice as serious for those with severe ECC (OR:

Patrón acumulativo que NO cesa

Aquellos niños con caries que no reciben información y un tratamiento adecuado, van a tener **mayor riesgo de caries en su vida adolescente y adulta**

Hummel R, Akveld NAE, Bruers JJM, van der Sanden WJM, Su N, van der Heijden GJMG. Caries Progression Rates Revisited: A Systematic Review. J Dent Res. 2019;98(7):746-54
Moynihan P. Sugars and Dental Caries: Evidence for Setting a Recommended Threshold for Intake. Adv Nutr. 2016;7(1):149-56



Factor predictor de caries

Los niños con caries en la infancia tiene un riesgo 5-6 superior de presentar **nuevas lesiones en dentición temporal y 3 veces mayor en dentición permanente**



P.J. Moynihan^{1*} and S.A.M. Kelly²

¹WHO Collaborating Centre for Nutrition and Oral Health, Centre for Oral Health Research, Institute for Ageing and Health, Newcastle University, UK; and ²Institute of Public Health, University of Cambridge, UK; *corresponding author, paula.moynihan@ncl.ac.uk

J Dent Res 93(1):8-18, 2014

Effect on Caries of Restricting Sugars Intake: Systematic Review to Inform WHO Guidelines

Dental caries progresses with age, and the effects of sugars on the dentition are lifelong. Even low levels of caries in childhood are of significance to levels of caries throughout the life-course. Analysis of the data suggests that there may be benefit throughout the life course. Even small reductions in risk of dental caries in childhood are significant to later life.



¿QUÉ ES LA CARIES?



CARIES

”Desequilibrio multifactorial crónico en la desmineralización de la superficie dental causado por la acumulación de flora oral cariogénica o biofilm, azúcar-dependiente”

Walsh T, Hv W, Am G, Vcc M, Jeroncic A, Walsh T, et al. Fluoride toothpastes of different concentrations for preventing dental caries (Review). Cochrane Database Syst Rev. 2019;3(3):1–245
Paes Leme AF, Koo H, Bellato CM, Bedi G, Cury JA. The role of sucrose in cariogenic dental biofilm formation - New insight. J Dent Res. 2006;85(10):878–87.

Biofilm

**Azúcar
dependiente**



Policy on Early Childhood Caries (ECC): Classifications, Consequences, and Preventive Strategies

Latest Revision

2016

How to Cite: American Academy of Pediatric Dentistry. Policy on early childhood caries (ECC): Classifications, consequences, and preventive strategies. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2020:79-81.

ECC is defined as the presence of one or more decayed (noncavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces in any primary tooth in a child under the age of six. The definition of severe early childhood caries (S-ECC) is any sign of smooth-surface caries in a child younger than three years of age, and from ages three through five, one or more cavitated, missing (due to caries), or filled smooth surfaces in primary maxillary anterior teeth or a decayed, missing, or filled score of greater than or equal to four (age 3), greater than or equal to five (age 4), or greater than or equal to six (age 5).⁴



CARIES DE PRIMERA INFANCIA

La Caries de Primera Infancia (CPI) es la “presencia de uno o más dientes temporales cariados (cavitados o no), perdidos (debido a caries) u obturados en niños menores de 6 años”

CARIES DE PRIMERA INFANCIA - SEVERA

Término aplicado a los “niños menores de 3 años con cualquier signo de caries, y para los niños con dientes cariados, ausentes u obturados en un número igual o superior a 4 para niños de 3 años, 5 para niños de 4 años, o 6 para niños de 5 años”

CPI - PATRÓN CLÍNICO

Hasta los **3 años**, probablemente asociada a alimentación por succión, los dientes más afectados son los **anterosuperiores**

CPI - PATRÓN CLÍNICO



MANCHA BLANCA



Primera lesión

REVERSIBLE

MANCHA MARRÓN



El diente comienza a romperse y deshacerse

NO REVERSIBLE

DESTRUCCIÓN DEL DIENTE



El diente se destruye y puede aparecer dolor e infección

NO REVERSIBLE

CPI - PATRÓN CLÍNICO



He S, Yon MJY, Liu F, Lo ECM, Yiu CKY, Chu CH, et al. PREVALENCE OF CARIES PATTERNS IN THE 21ST CENTURY PRESCHOOL CHILDREN: A SYSTEMATIC REVIEW AND META-ANALYSIS. Vol. 24, Journal of Evidence-Based Dental Practice. Elsevier Inc.; 2024.

CPI - PATRÓN CLÍNICO

Hasta los **3 años**, probablemente asociada a alimentación por succión, los dientes más afectados son los **anterosuperiores**

Hacia los **5 años** la mayoría de las lesiones se observan en **molares** (especialmente los segundos)

CPI - PATRÓN CLÍNICO



He S, Yon MJY, Liu F, Lo ECM, Yiu CKY, Chu CH, et al. PREVALENCE OF CARIES PATTERNS IN THE 21ST CENTURY PRESCHOOL CHILDREN: A SYSTEMATIC REVIEW AND META-ANALYSIS. Vol. 24, Journal of Evidence-Based Dental Practice. Elsevier Inc.; 2024.

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Hacia los **5 años** la mayoría de las lesiones se observan en **molares** (especialmente los segundos)

Los **incisivos inferiores** serán los **últimos en afectarse** gracias al papel protector de la lengua y la saliva

CPI - PATRÓN CLÍNICO



CPI - PATRÓN CLÍNICO





La **progresión de la CPI
avanza hacia los sectores
posteriores y, si no se
detiene, también a los
dientes inferiores**

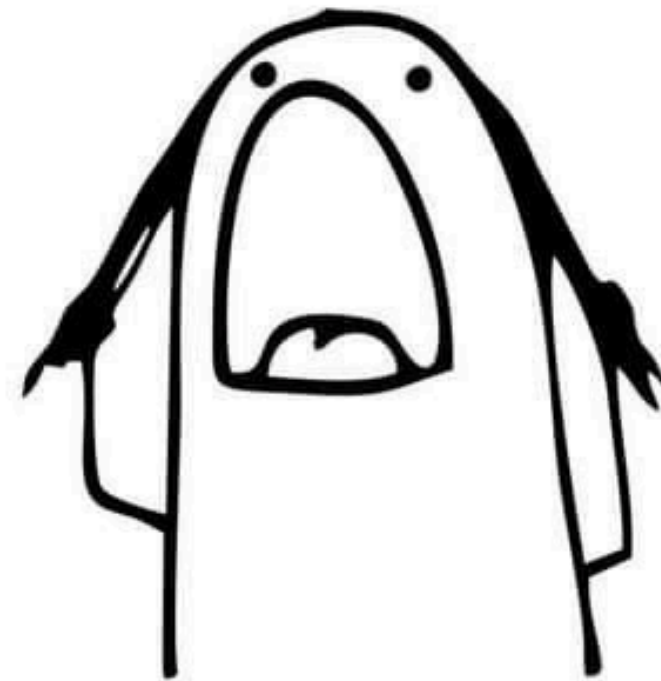


“ha heredado mi boca”

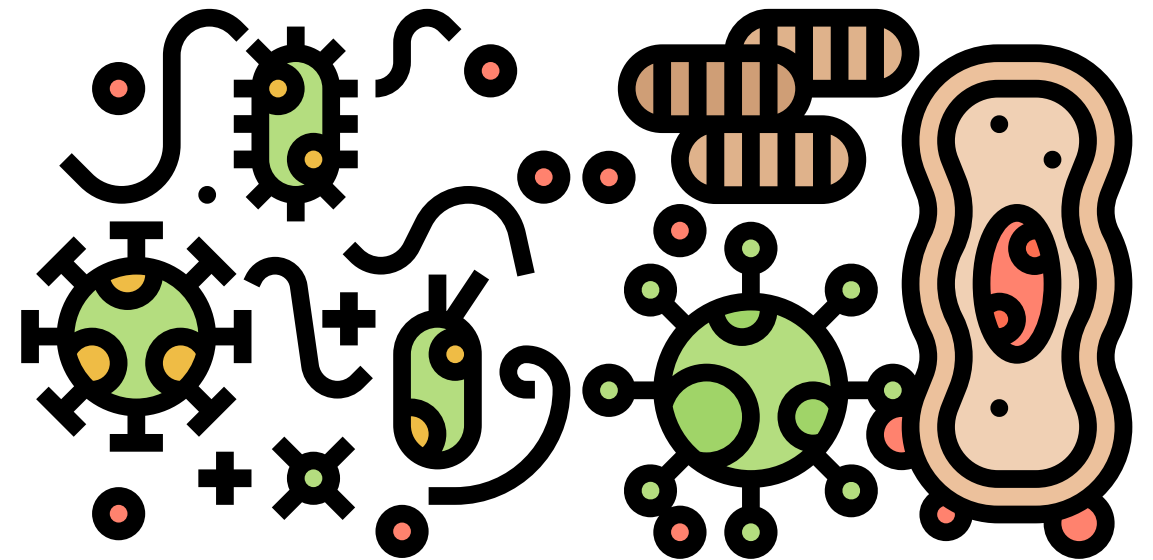
“ha heredado mi boca”



“ha heredado mi boca”



FLORA BACTERIANA



FLORA BACTERIANA

Los marcadores fundamentales dentro de la microbiota oral para el desarrollo de caries son la presencia de **Streptococcus Mutans y Lactobacillus**

En los últimos años se ha demostrado que son numerosas especies las implicadas en la aparición y desarrollo de la caries



Transmisión vertical - horizontal

Se observa que los niños cuyas madres tienen altos niveles de bacterias cariogénicas tienen más probabilidad de adquirirlas de forma temprana

Se recomienda que madres y cuidadores reduzcan la carga bacteriana oral durante el periodo pre y post-natal del bebé

sion of these bacteria occurs. Notably, in studies where bacterial transmission was investigated, the timing of reducing maternal bacterial levels to achieve a delayed or reduced level of infant bacterial colonization was important.





Risk Factors for Early Childhood Caries: A Systematic Review and Meta-Analysis of Case Control and Cohort Studies

Kirthiga M, MDS¹ • Muthu Murugan, MDS, PhD² • Ankita Saikia, MDS³ • Richard Kirubakaran, MSc⁴

REVIEW

A systematic review of risk factors during first year of life for early childhood caries

PAMELA MARGARET LEONG^{1,2*}, MARK GREGORY GUSSY³, SU-YAN L. BARROW⁴, ANDREA DE SILVA-SANIGORSKI^{1,5} & ELIZABETH WATERS¹

¹Jack Brockoff Child Health & Wellbeing Program & McCaughey Centre, School Population Health, University of Melbourne, Carlton, Vic., Australia, ²Department of Dentistry, Royal Children's Hospital, Parkville, Vic., ³Department of Dentistry & Oral Health, La Trobe Rural Health School, La Trobe University, Bendigo, Vic., ⁴Melbourne Dental School, University of Melbourne, Carlton, Vic., and ⁵Dental Health Services Victoria, Melbourne, Vic., Australia

Policy on Early Childhood Caries (ECC): Consequences and Preventive Strategies

Latest Revision

2021

How to Cite: American Academy of Pediatric Dentistry. Policy on early childhood caries (ECC): Consequences and preventive strategies. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American



Risk Factors for Early Childhood Caries: A Systematic Review and Meta-Analysis of Case Control and Cohort Studies

Kirthiga M, MDS¹ • Muthu Murugan, MDS, PhD² • Ankita Saikia, MDS³ • Richard Kirubakaran, MSc⁴

REVIEW

with increased salivary flow rate during first year of life for

However, whatever the ethnic group may be, if MS is present in the oral cavity, it appears to be an important indicator of caries risk. Ethnic differences in

W⁴, ANDREA

versity of
³Department of
Dental School,

University of Melbourne, Carlton, Vic., and ⁵Dental Health Services Victoria, Melbourne, Vic., Australia

Policy on Early Childhood Caries (ECC): Consequences and Preventive Strategies

Latest Revision

2021

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A systematic review of risk factors during first year of life for early childhood caries

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ECC is shown (Table 7). In all cases where infant caries experience was reported, bacterial acquisition and colonization was present, and the likelihood of colonization increased with the age of the infant. However, not all children harbouring these bacteria developed caries during the study periods. This feature is



**No todos los niños en los que se observa
dicha colonización bacteriana temprana
tiene lugar desarrollo y progresión de caries**

La caries tiene una **naturaleza multifactorial
más determinada por la presencia de pobres
hábitos higiénico-dietéticos**



Leong PM, Gussy MG, Barrow SL. A systematic review of risk factors during first year of life for early childhood caries. Int J Paediatr Dent. 2013;23(4):235–50.
Sheiham A, James WPT. Diet and dental caries: The pivotal role of free sugars reemphasized. J Dent Res. 2015;94(10):1341–7.

The Role of Sucrose in Cariogenic Dental Biofilm Formation— New Insight

A.F. Paes Leme¹, H. Koo², C.M. Bellato³,
G. Bedi², and J.A. Cury^{1*}

¹Faculty of Dentistry of Piracicaba, UNICAMP, Av. Limeira, 901, CEP 13414-903, Piracicaba, SP, Brazil; ²University of Rochester Medical Center, Rochester, NY, USA; and ³Center for Nuclear Energy in Agriculture, University of São Paulo-CENA/USP; *corresponding author, jcury@fop.unicamp.br

Critical Reviews in Oral Biology & Medicine

Diet and Dental Caries: The Pivotal Role of Free Sugars Reemphasized

INTRODUCTION

Dental caries results from the interaction of specific bacteria with constituents of the diet within a biofilm termed 'dental plaque' (Bowen, 2002). Sucrose is considered the most cariogenic dietary carbohydrate, because it is fermentable, and also serves as a substrate for the synthesis of extracellular (EPS) and intracellular (IPS) polysaccharides in dental plaque (Newbrun, 1967; Bowen, 2002).

the speed of the cariogenic properties of sucrose. Without sugars, the chain of causation is broken, so the disease does not occur (Sheiham 1967). So, it is clear that sugars start the process and set off a causal chain; the only crucial factor that determines the caries process in practice is sugars. The other

The Role of Sucrose in Cariogenic Dental Biofilm Formation— New Insights

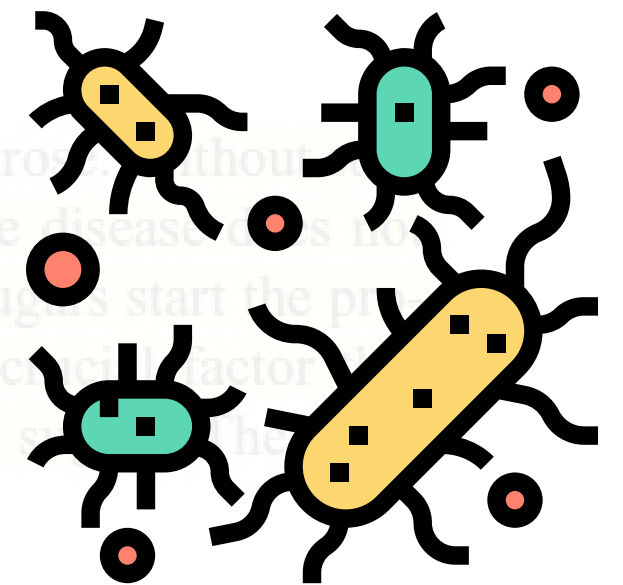
El azúcar de la dieta es el principal precursor de la multiplicación y proliferación de bacterias cariogénicas, haciéndolas más resistentes y patológicas para el sustrato dental

A.F. Paes Leme¹, H. Roca², C.M. Bellato³,
G. Bedi², and J.A. Cury^{1*}
¹Faculty of Dentistry of Piracicaba, UNICAMP, Av. Limeira, 901,
CEP 13414-003, Piracicaba, SP, Brazil; ²University of Rochester
Institute of Medicine and Biometrics, 660 Thurston Avenue, Rochester,
NY 14642, USA; ³Energy in Agriculture, University of São Paulo-CENA/USP,
*corresponding author, jcury@fop.unicamp.br

Critical Reviews in Oral Biology & Medicine

**Diet and Dental Caries: The Pivotal
Role of Free Sugars Reemphasized**

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cess and set off a causal chain; the only critical factor that
determines the caries process in practice is sucrose.



Desequilibrio $\neq$ infección

NO SE PEGA

NO SE HEREDA



**SIN LA PRESENCIA DE AZÚCAR, LA
CADENA DE CAUSALIDAD SE ROMPE Y LA
ENFERMEDAD NO TIENE LUGAR**



“mi hijo no come azúcar”

“mi hijo no come azúcar”



¿Qué es azúcar?



Tipos de azúcar en los alimentos

01

Azúcar naturalmente presente en los alimentos

02

Azúcar añadido o azúcar libre

03

Zumos naturales, miel, concentrado de fruta y siropes



Tipos de azúcar en los alimentos

01

**Azúcar naturalmente
presente en los
alimentos**

Fibra, agua y otros
factores protectores
como el calcio



Masticación y
estimulación del flujo
salival

**Poca implicación en el
desarrollo de caries**

Tipos de azúcar en los alimentos

02

**Azúcar añadido
o azúcar libre**

Fácilmente
metabolizados por las
bacterias orales

03

**Zumos naturales,
miel, concentrado
de fruta y siropes**

Fácil adherencia y
retención a las
superficies dentales
y gran caída de pH

**Implicación
determinante en el
desarrollo de caries**

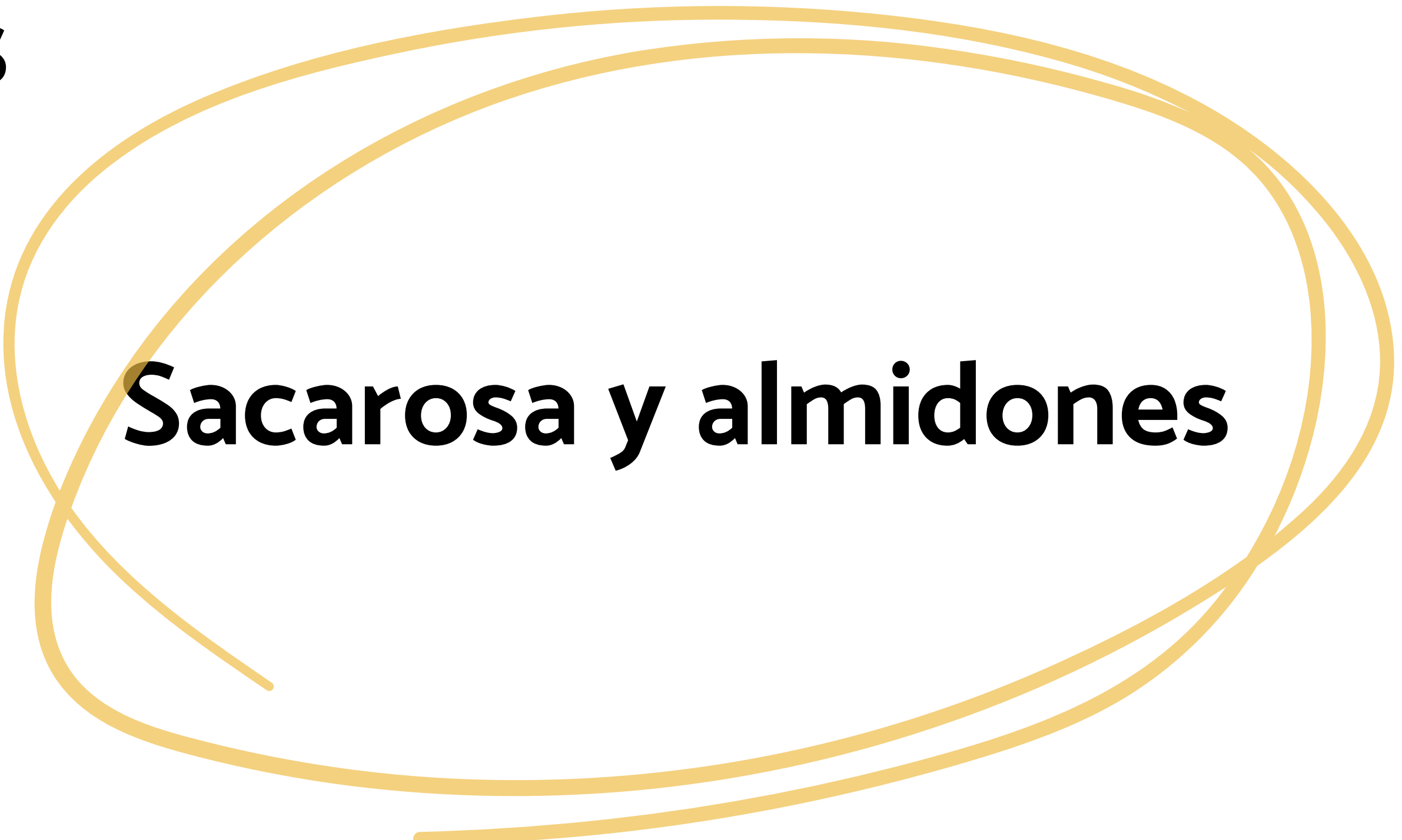
Tipos de azúcar en los alimentos

02

Azúcar añadido
o azúcar libre

03

Zumos naturales,
miel, concentrado
de fruta y siropes



Sacarosa y almidones

Diet and Dental Caries: The Pivotal Role of Free Sugars Reemphasized

A. Sheiham¹ and W.P.T. James²

Journal of Dental Research
1-7

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for Dental Research 2015

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DOI: 10.1177/0022034515590377

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La **sacarosa** es el azúcar de preferencia para las bacterias cariogénicas

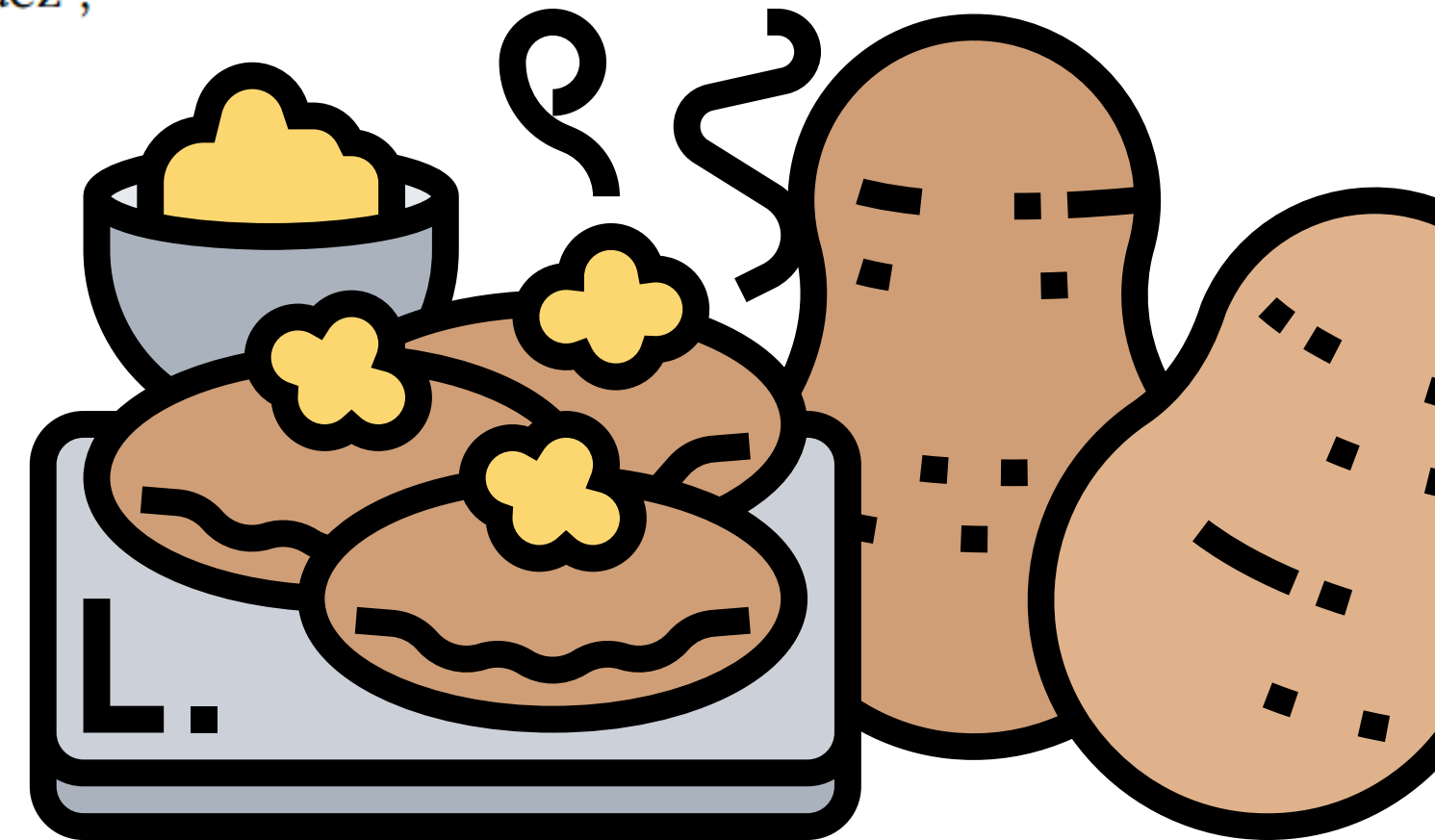
La **cantidad**, la **frecuencia** de consumo, o el **momento** en que se consume sus condicionantes fundamentales



Los **almidones**, en sí mismos, cuando son naturales y poco procesados, presentan bajo riesgo de caries

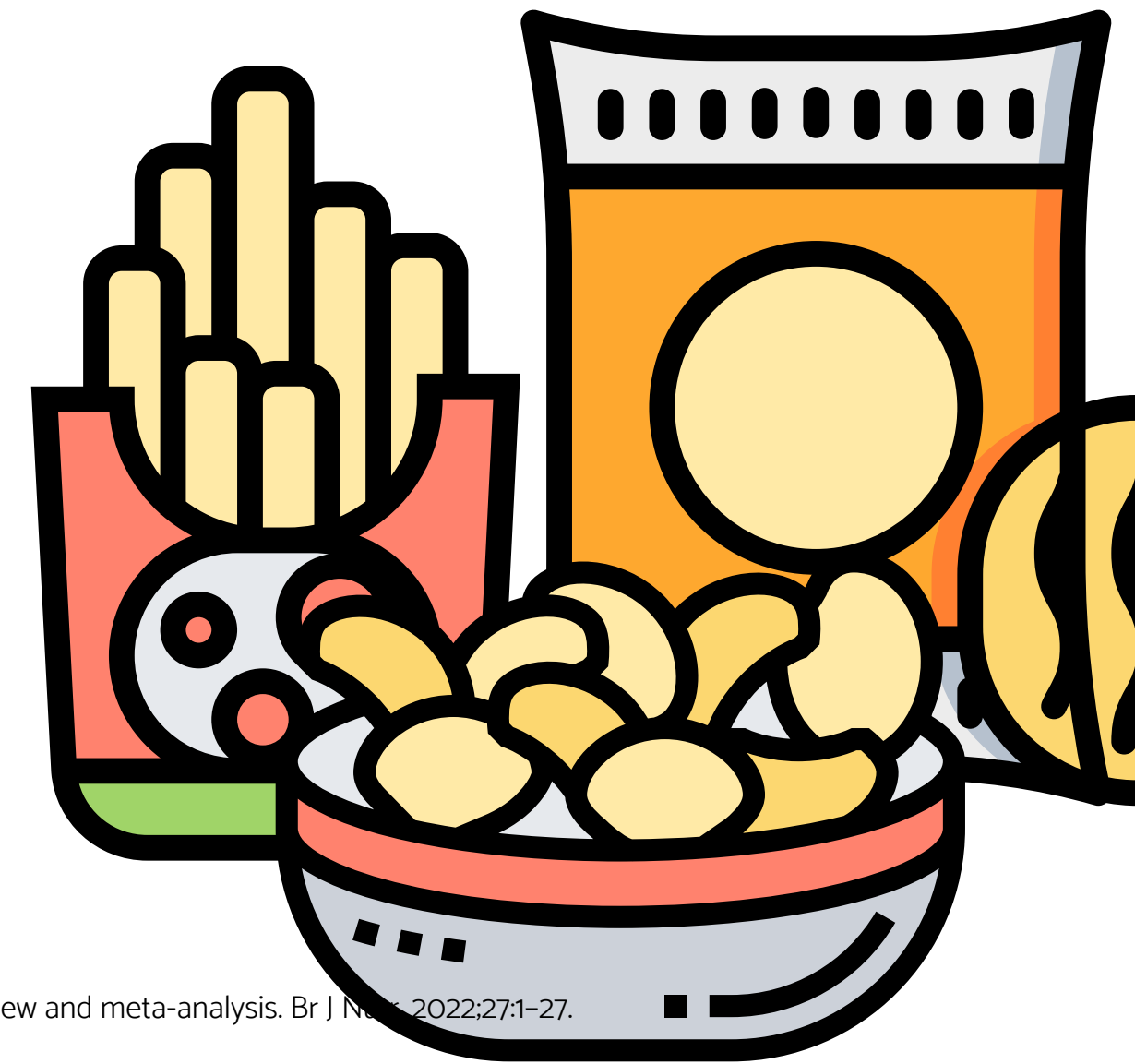
Ultra-processed food consumption and dental caries in children and adolescents: a systematic review and meta-analysis

Andreia Morales Cascaes^{1*}, Nathalia Ribeiro Jorge da Silva², Matheus dos Santos Fernandez³, Rafael Aiello Bomfim⁴ and Juliana dos Santos Vaz⁵



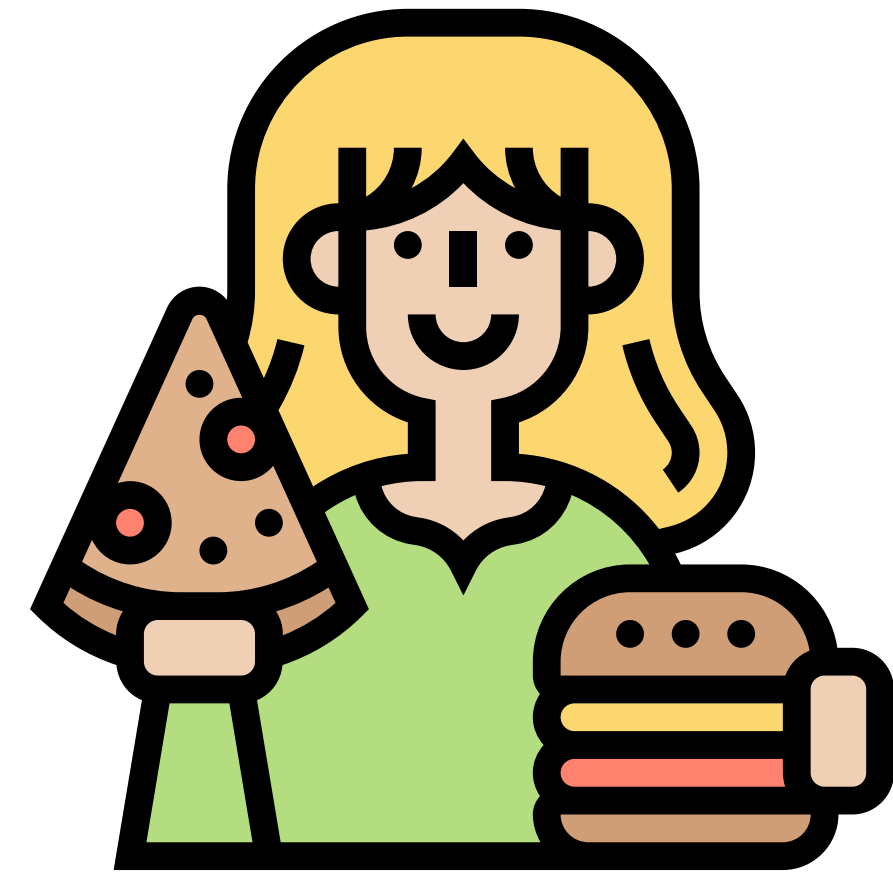
Los **almidones**, cuando son refinados y procesados presentan riesgo de desarrollar caries

Además, la literatura muestra que su consumo **se relaciona con un mayor consumo de otros azúcares libres**



Ultra-processed food consumption and dental caries in children and adolescents: a systematic review and meta-analysis

Andreia Morales Cascaes^{1*}, Nathalia Ribeiro Jorge da Silva², Matheus dos Santos Fernandez³, Rafael Aiello Bomfim⁴ and Juliana dos Santos Vaz⁵



Presentan gran capacidad de **bajar el pH oral**, son altamente **retentivos y son fácilmente metabolizables** en azúcares simples
Además, pueden ser subestimados por su **aspecto "no dulce"**

Dieta a partir de los 2 años



1.Cantidad

La OMS recomienda consumir una **cantidad de azúcar inferior al 5-10%** (8-16 gramos) del total energético diario en niños de 4-8 años



Revision L. Policy on Dietary Recommendations for Infants , Children , and Adolescents. Am Acad Pediatr Dent. 2020;76-8.

WHO. Sugars intake for adults and children. Geneva. WHO. 2015;

Vercammen KA, Frelief J, Lowery C, McGlone M, Ebbeling C. A systematic review of strategies to reduce sugar-sweetened beverage consumption among 0- year to 5-year olds. Obes Rev. 2018;19(11):1504-24.

azúcar: consumo máximo diario recomendado

consumo mínimo recomendado: 0 terrones. 1 terrón = 4 gramos. Fuente: OMS



bebés



niños



adultos



sinazúcar.org



1.Cantidad

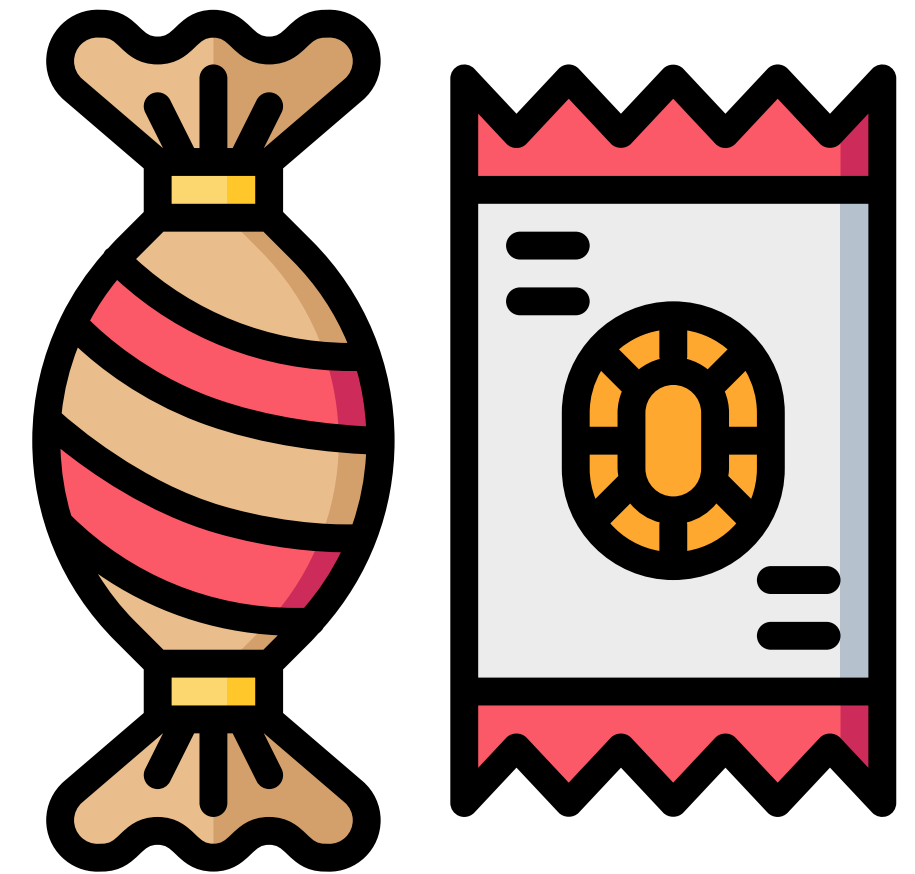
P.J. Moynihan^{1*} and S.A.M. Kelly²

¹WHO Collaborating Centre for Nutrition and Oral Health, Centre for Oral Health Research, Institute for Ageing and Health, Newcastle University, UK; and ²Institute of Public Health, University of Cambridge, UK; *corresponding author, paula.moynihan@ncl.ac.uk

J Dent Res 93(1):8-18, 2014

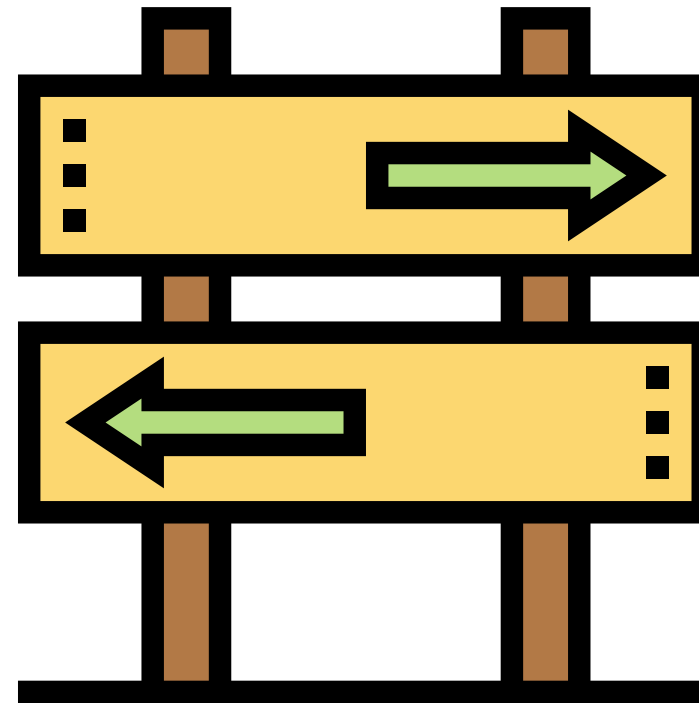
Effect on Caries of Restricting Sugars Intake: Systematic Review to Inform WHO Guidelines

classified as of very low quality, to show lower risk of dental caries with sugars intake $< 5\%$ E compared with $> 5 - < 10\%$ energy. Analysis of these data, in addition to evidence showing the progressive nature of dental caries and the lifelong impact of sugars on dental health, suggests further benefits from limiting free sugars intake to $< 5\%$ E.



2.Frecuencia

A > F de consumo
< pH oral



A > F de consumo
> alteración bacteriana

Los cambios en el biofilm se observan en 4 o más exposiciones/día al azúcar, con independencia de la presencia de flúor

Cantidad y Frecuencia



EFFECTO DOSIS-DEPENDIENTE

3.Momento de consumo

Perinatal and Infant Oral Health Care

Latest Revision

2021

information to promote primary care preventive messages that include: limiting sugar intake in foods and drink; avoiding night-time bottle feeding with milk or drinks containing sugars; avoiding baby bottle usage and breastfeeding beyond 12 months, especially if frequent and/or nocturnal; and

La alimentación nocturna debe ser limitada y/o regulada a partir del primer año de vida

MANCHA BLANCA



Primera lesión

REVERSIBLE

MANCHA MARRÓN



El diente comienza a romperse y deshacerse

NO REVERSIBLE

DESTRUCCIÓN DEL DIENTE



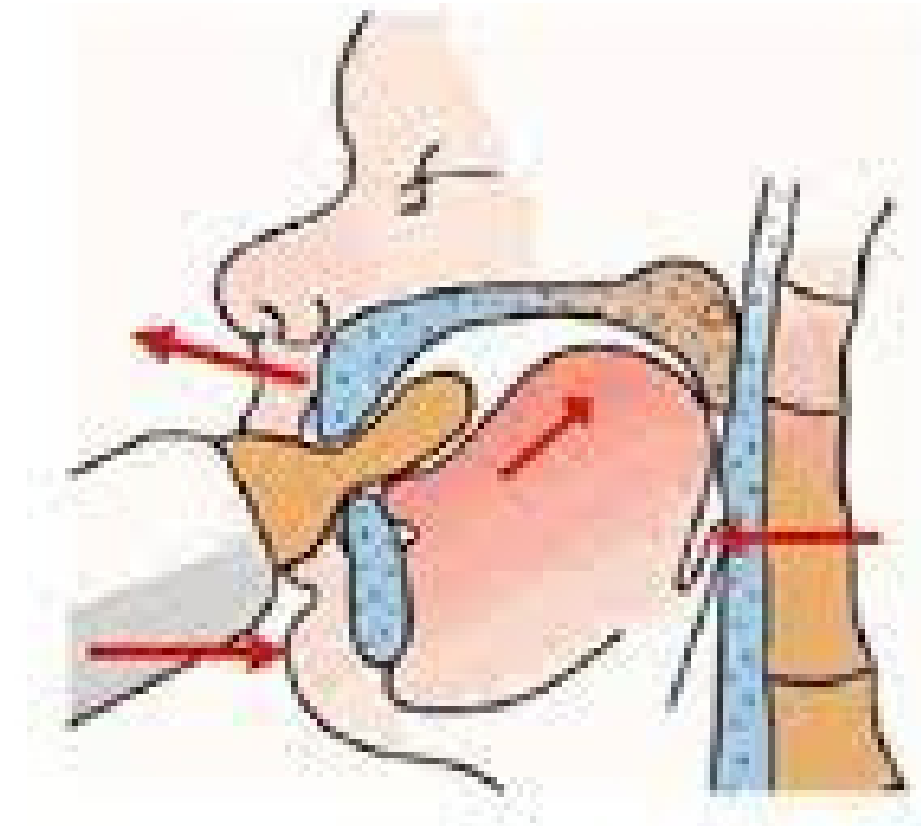
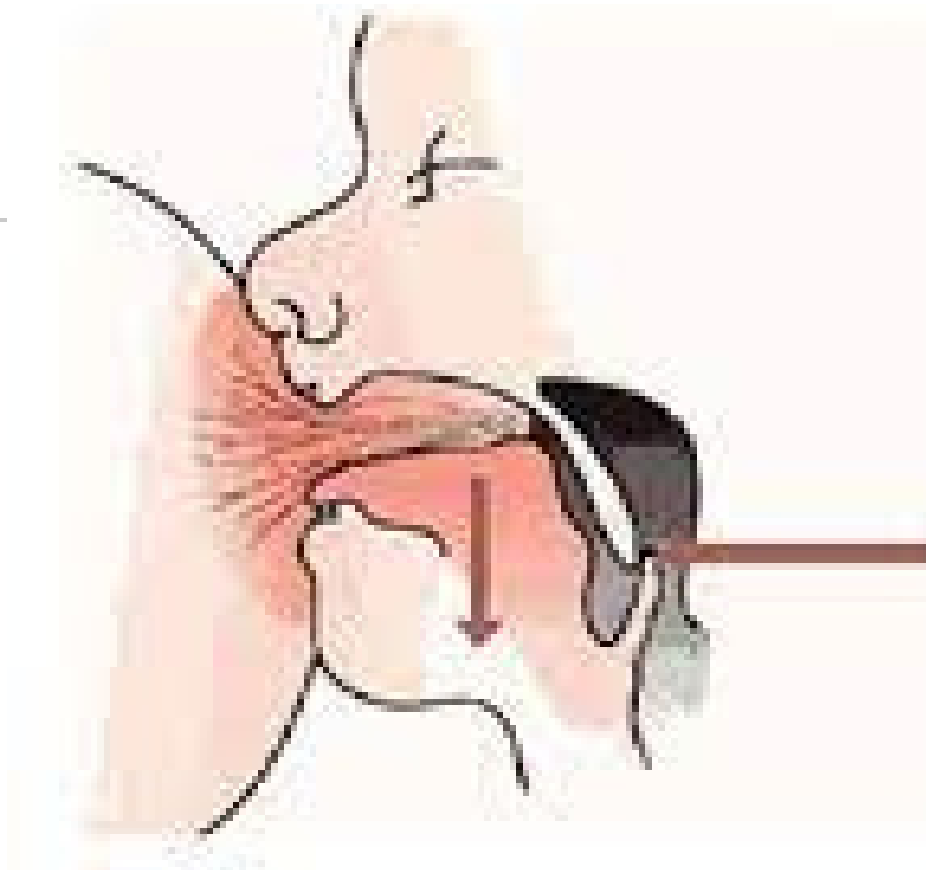
El diente se destruye y puede aparecer dolor e infección

NO REVERSIBLE

Momento de consumo (T)

Perinatal and

Latest Revision
2021



ages that
avoiding
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beyond
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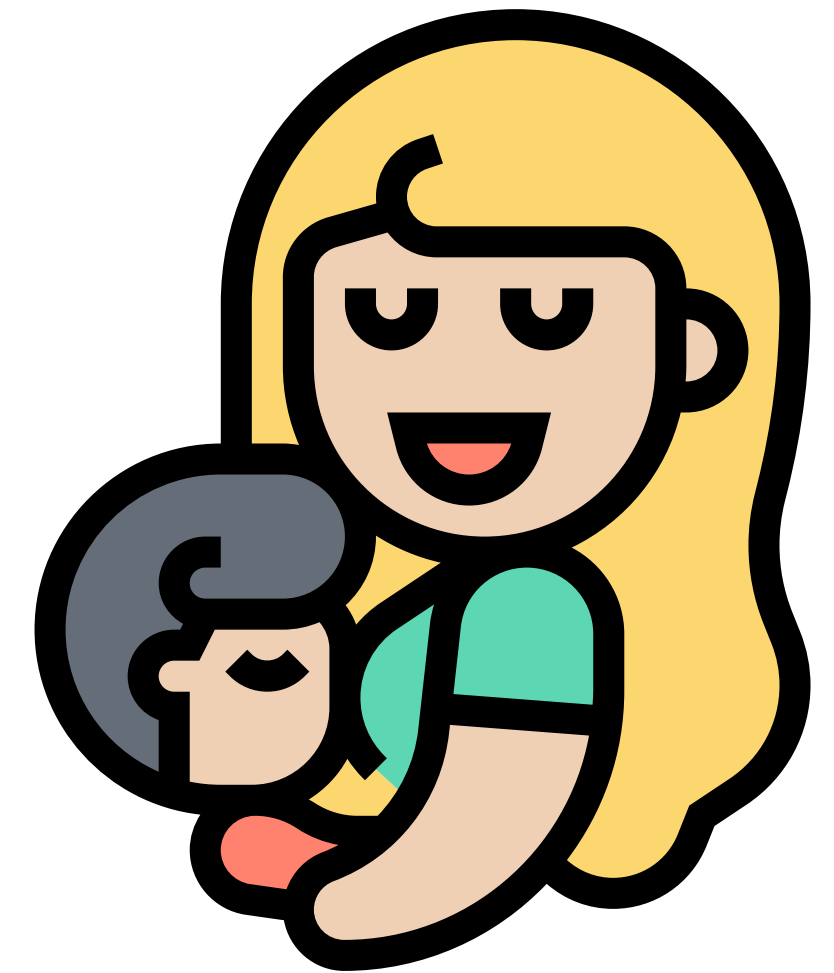
La **alimentación nocturna** en alta frecuencia aumenta sustancialmente el riesgo de caries a partir del primer año de vida

Dieta antes de los 2 años



Dieta los 2 primeros años de vida

La OMS recomienda e insta la **lactancia materna (LM) exclusiva y a demanda hasta los 6 meses de vida**; y su continuación como alimentación complementaria (AC) hasta los 2 años, **evitando introducir el azúcar**



Dieta los 2 primeros años de vida

Se lleve a cabo LM o LA, se recomienda **evitar la introducción de azúcares** para evitar el condicionamiento temprano de las preferencias alimenticias



***“la lactancia materna
produce caries”***

***“la lactancia materna
produce caries”***

Del tema no voy
a hablar.
Porque es un tema
que me da oscuridad
y yo soy luz.

@paraguayita_01

11:15 ✓

Lactancia Materna (LM) y ..¿caries?

REVIEW ARTICLE

Breastfeeding and the risk of dental caries: a systematic review and meta-analysis

R Tham¹, G Bowatte¹, SC Dharmage^{1,2}, DJ Tan^{1,3}, MXZ Lau¹, X Dai¹, KJ Allen^{2,4}, CJ Lodge (clodge@unimelb.edu.au)^{1,2}

1.Allergy and Lung Health Unit, Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Carlton, Vic., Australia

2.Murdoch Childrens Research Institute and University of Melbourne Department of Paediatrics, Royal Children's Hospital, Parkville, Vic., Australia

3.NHMRC Centre of Research Excellence for Chronic Re

4.Institute of Inflammation and Repair, University of Mar

86.8%) (Fig. 2). There were not enough studies to perform metaregression for formal investigation of this heterogeneity. There appeared to be differences, however, based on the

No existe una conclusión unánime



Breastfeeding and the risk of dental caries: a systematic review and meta-analysis

R Tham¹, G Bowatte¹, SC Dharmage^{1,2}, DJ Tan^{1,3}, MXZ Lau¹, X Dai¹, KJ Allen^{2,4}, CJ Lodge (clodge@unimelb.edu.au)^{1,2}

1. Allergy and Lung Health Unit, Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Carlton, V

Qualitative assessment of studies investigating breastfeeding up to 12 months of age suggested that children who were exposed to more breastfeeding (longer duration) compared to less or no breastfeeding were protected from dental caries. Meta-analysis of five studies also found reduced risk of dental caries in children breastfed more versus less up to 12 months, however, the heterogeneity between studies was too high to make the estimate reliable.

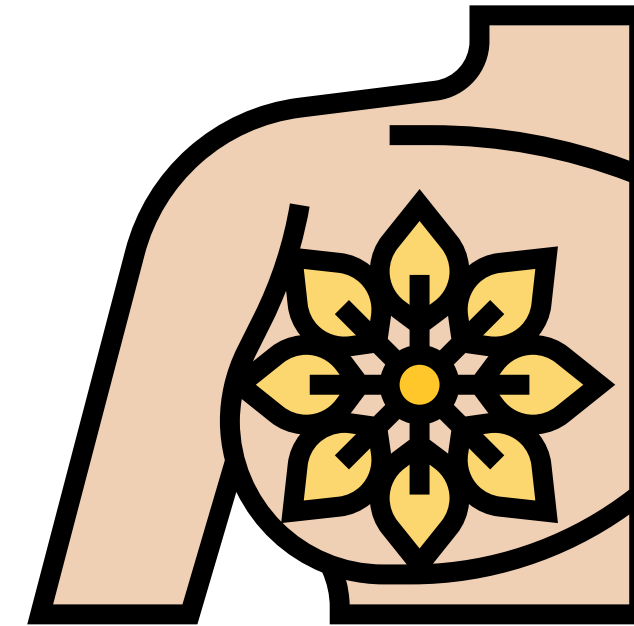
La LM hasta los 12m es un **factor protector de caries** cuando se compara con lactancias más cortas o no haber amamantado



Acquisition and establishment of the oral microbiota

A. M. (Marije) Kaan | Dono Kahharova | Egija Zaura

general health. Based on the current literature, we can conclude that the oral microbial ecosystem is shaped in utero, by, most likely, exposure of maternal antigens to the immune system of the infant, in this way preparing the infant for postnatal microbial encounters.



**La LM mejora la integridad de la barrera
inmunológica oral y evita la colonización
oportunista**

NIH Public Access

Author Manuscript

J Pediatr Gastroenterol Nutr. Author manuscript; available in PMC 2014 February 01.

Published in final edited form as:

J Pediatr Gastroenterol Nutr. 2013 February ; 56(2): 127–136. doi:10.1097/MPG.0b013e31826f2bc6.

Oral Microbial Profile Discriminates Breastfed from Formula-Fed Infants

In conclusion, the present findings demonstrate that the observed differences in the gastrointestinal tract microbiota composition due to feeding mode extend to the oral cavity, and that viable lactobacilli detected in saliva from breastfed, but not formula-fed infants had an inhibitory effect on oral streptococci. A limitation of the present study is the low number



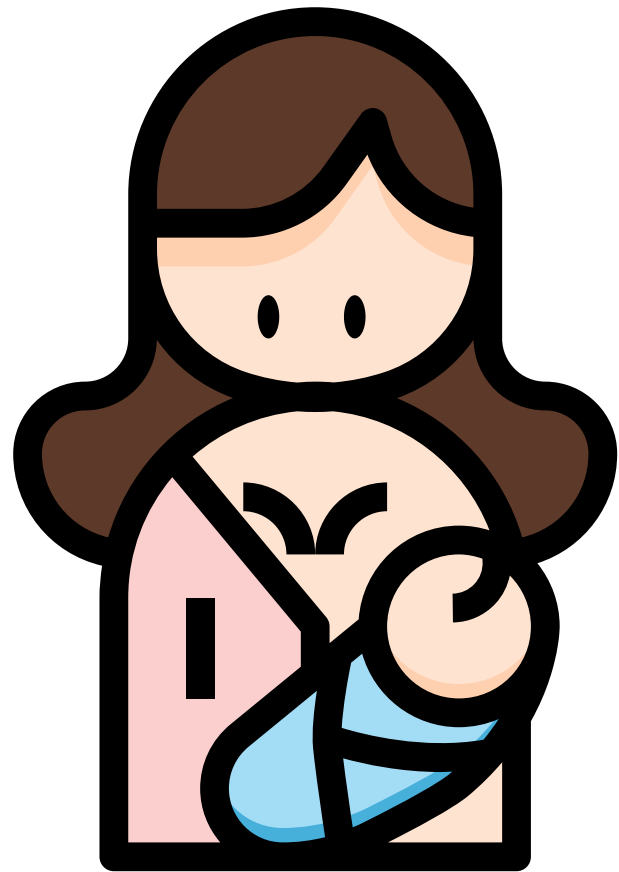
Article

Diet Influences the Oral Microbiota of Infants during the First Six Months of Life

Patrícia M. Oba ¹, Hannah D. Holscher ^{2,3}, Rose Ann Mathai ⁴, Juhee Kim ⁵ and Kelly S. Swanson ^{1,3,*}

the older infants had a higher frequency of oral yeasts, namely, *Candida* spp. In addition, breast-fed and mixed-fed infants had a lower frequency of *Candida* spp. than those fed solids foods. Our data suggest that environmental exposures early in life are more influential than delivery mode.

**Los bebés amamantados muestran menor
variabilidad bacteriana y mayor proporción de
especies protectoras**



La LM **incrementa el pH oral
y gástrico, provee al bebé
de **bacterias específicas** y
compuestos bioactivos**

LM y ..¿caries? - Condicionantes



DIENTE

A > edad > nº de dientes y
> riesgo de CPI



DIETA - AZÚCAR

No incorporar de azúcar a la AC

Control de la frecuencia y
momento de consumo



HIGIENE

Remoción mecánica del biofilm

Cepillado complejo y tardío

REVIEW ARTICLE **OPEN**

Expert consensus on early childhood caries management

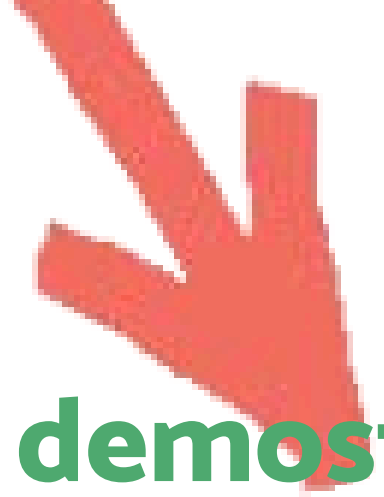
Jing Zou¹, Qin Du², Lihong Ge³, Jun Wang⁴, Xiaojing Wang⁵, Yuqing Li⁶, Guangtai Song⁷, Wei Zhao⁸, Xu Chen⁹, Beizhan Jiang¹⁰, Yufeng Mei¹¹, Yang Huang¹², Shuli Deng¹³, Hongmei Zhang¹⁴, Yanhong Li¹⁵ and Xuedong Zhou¹⁶✉

effective than infant formula.⁸¹ ECC may not be caused solely by breastfeeding. However, frequent feeding will elevate the cariogenic potential due to reduced salivary flow during sleep.^{82,83} Breastfeeding combined with other carbohydrates was shown to be significantly cariogenic in an in vitro study.⁸⁴

The protective effect of breastfeeding during infancy has been revealed, which may be correlated with decreased carbohydrate intake and delay in the use of the bottle.⁸⁵ Some

breastfeeding time is over 24 min.⁸⁶ However, reducing frequent and nocturnal breastfeeding^{82,89} from the second year may decrease caries risk. The recommended duration of



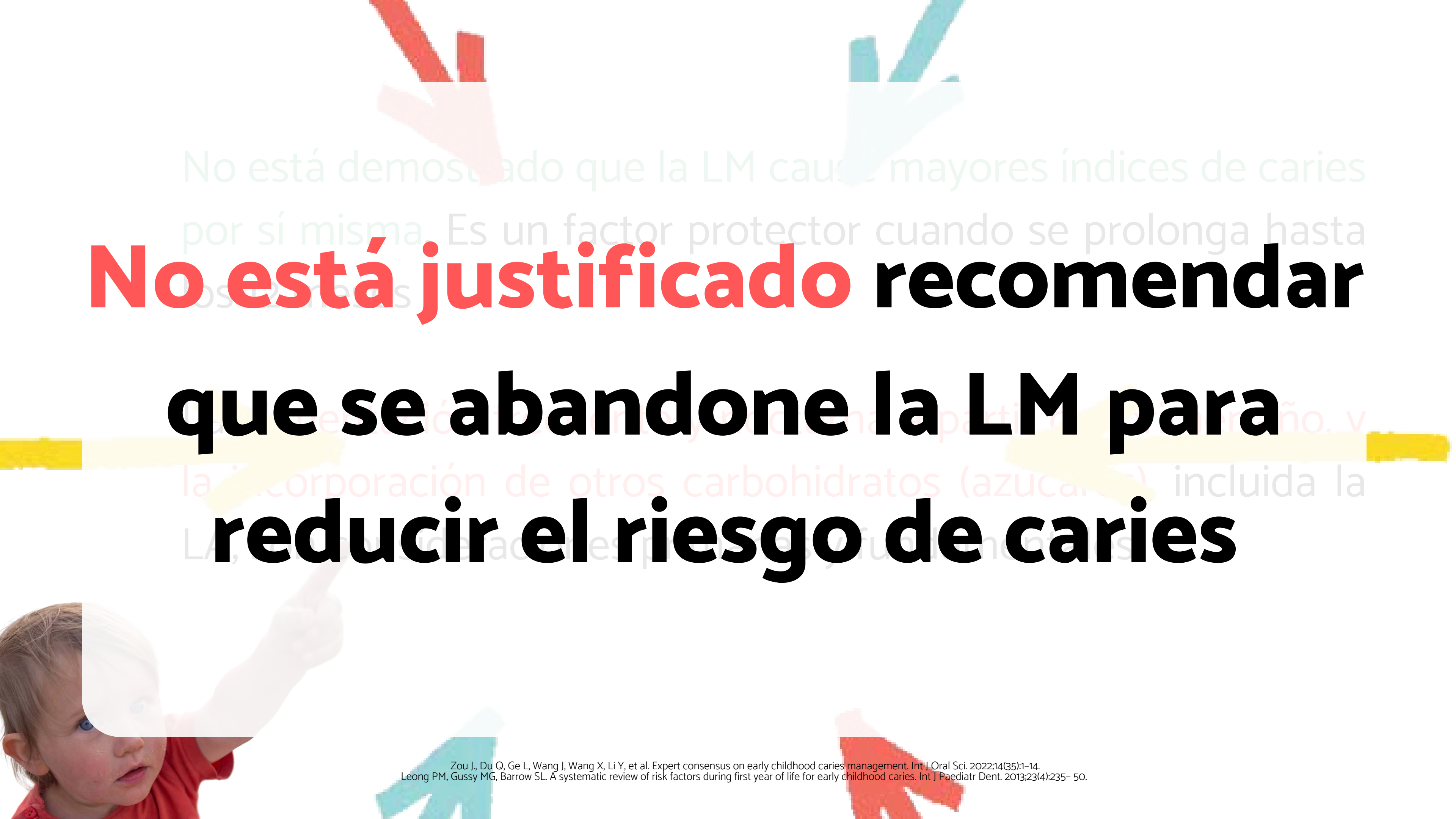


No está demostrado que la LM cause mayores índices de caries por sí misma. Es un factor protector cuando se prolonga hasta los 12 meses



La falta de higiene oral y la incorporación de azúcares, incluida la LA, son consideraciones primarias y fundamentales





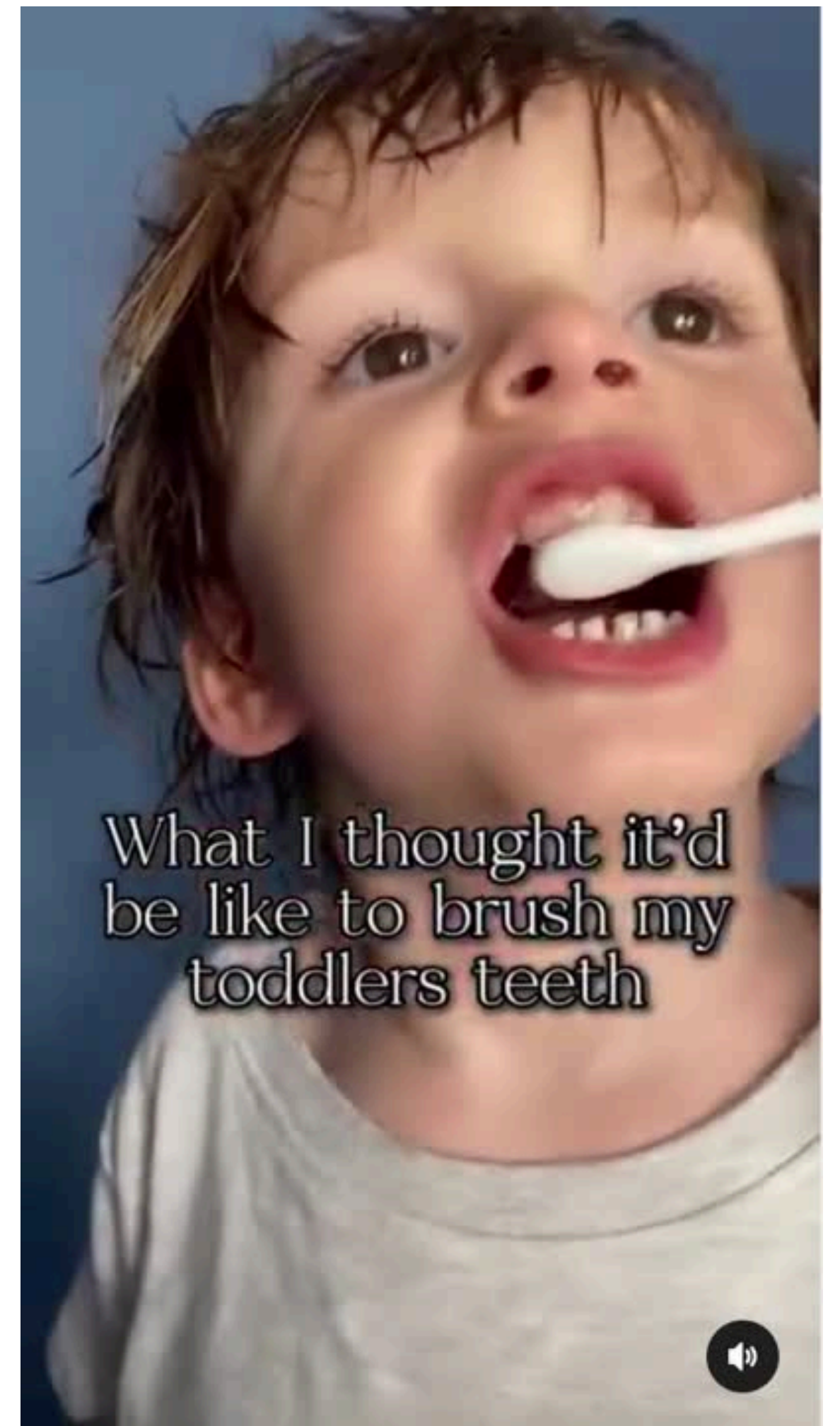
No está demostrado que la LM cause mayores índices de caries por sí misma. Es un factor protector cuando se prolonga hasta los 12 meses.

No está justificado recomendar que se abandone la LM para reducir el riesgo de caries



***“mi hijo no se
deja cepillar”***

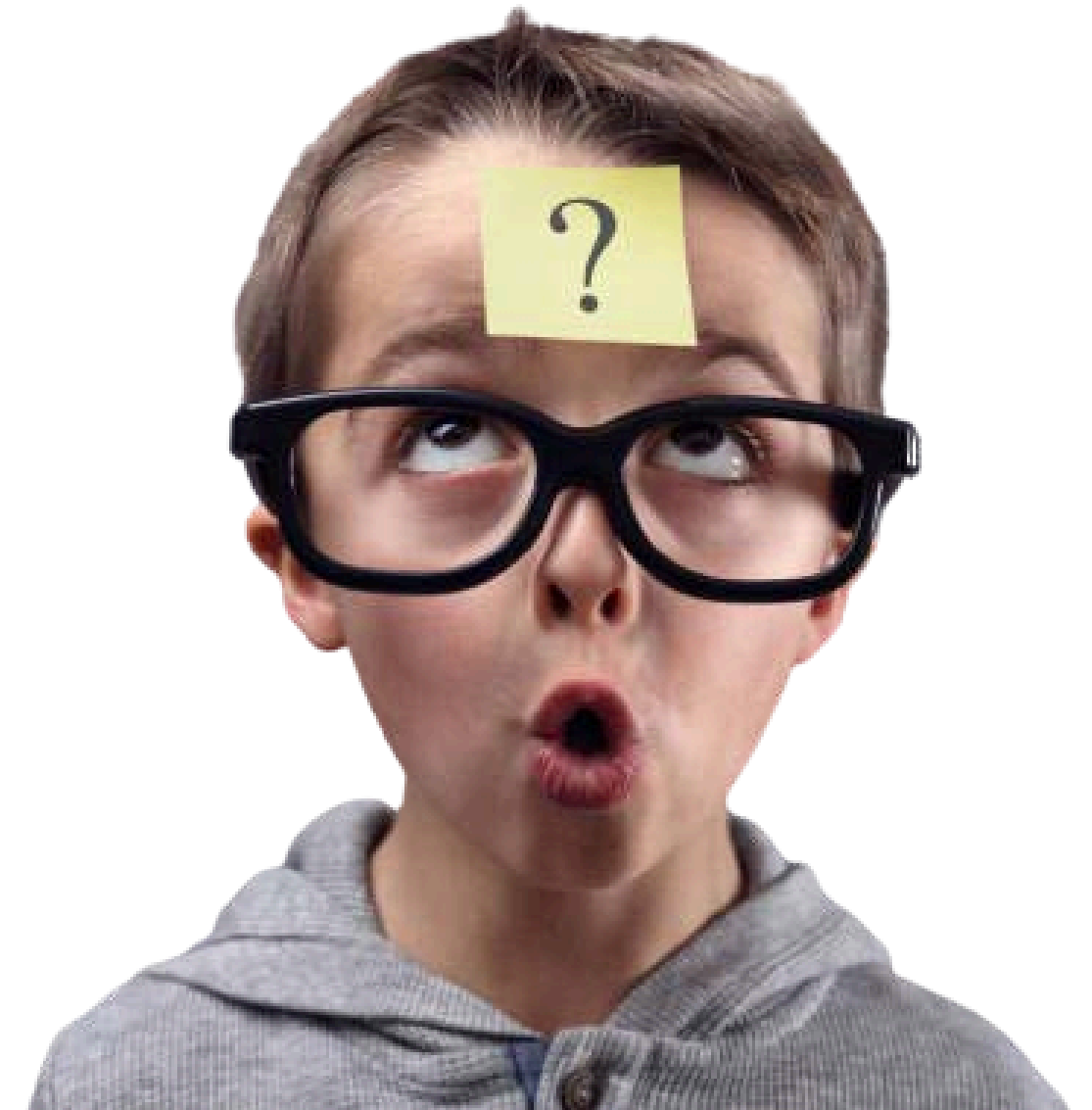
***“mi hijo no se
deja cepillar”***



What I thought it'd
be like to brush my
toddlers teeth



Condicionantes:



Condicionantes:

1. ¿Cómo?

Condicionantes:

1. ¿Cómo?

2. ¿Cuánto y cuándo?

Condicionantes:

1. ¿Cómo?

2. ¿Cuánto y cuándo?

3. ¿Con qué?

¿Cómo?

CEPILLADO ASISTIDO Y SUPERVISADO

Asistencia y supervisión del cepillado hasta que el niño muestre comprensión y habilidad motriz madura para cepillar por sí solo



¿Cómo?

CEPILLADO ASISTIDO Y SUPERVISADO

A systematic review of the effects of supervised toothbrushing on caries incidence in children and adolescents

ANA PAULA PIRES DOS SANTOS ¹, BRANCA HELOISA DE OLIVEIRA¹ & PAULO NADANOVSKY^{2,3}

¹Department of Community and Preventive Dentistry, Faculty of Dentistry, Rio de Janeiro State University, Rio de Janeiro, Brazil, ²Department of Epidemiology, Institute of Social Medicine, Rio de Janeiro State University, Rio de Janeiro, Brazil, and ³Department of Epidemiology, National School of Public Health, Oswaldo Cruz Foundation (Fiocruz), Rio de Janeiro, Brazil

ingested¹¹. Thus, this age group should be closely supervised by an adult when toothbrushing is performed, irrespective of the setting, at least to make sure that the amount of toothpaste put on the toothbrush is appropriate.

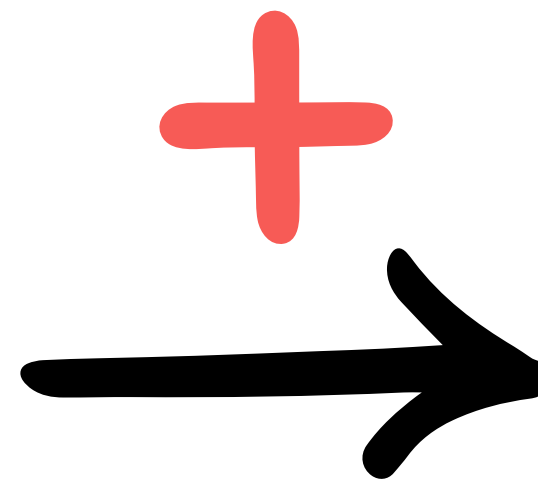
daily⁹. There could also be educational indirect effects. With supervision, children may learn better how to brush their teeth properly¹¹. Children may increase the value they

La "falta de tiempo" o negarse a asistir el cepillado se considera **INDULGENCIA PARENTAL**

¿Cómo?

CEPILLADO ASISTIDO Y SUPERVISADO

**Temperamento
complejo**



Riesgo de caries

¿Cómo?

CEPILLADO ASISTIDO Y SUPERVISADO

Cansancio “No, yo”

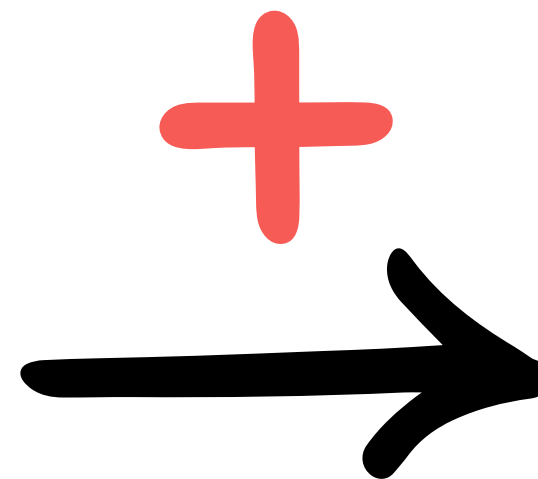
Edad

**Temperamento
complejo**

Frustración

Grado de madurez

Atención



Riesgo de caries

¿Cómo?

CEPILLADO ASISTIDO Y SUPERVISADO

NO IDEALIZAR



¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

Clinical Review

Effect of Toothbrushing Frequency on Incidence and Increment of Dental Caries: A Systematic Review and Meta-Analysis

Journal of Dental Research
1-7
© International & American Association
for Dental Research 2016
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/0022034516655315
jdr.sagepub.com

Conclusion

Individuals who state that they brush their teeth infrequently are at greater risk for the incidence or increment of new carious lesions than those brushing more frequently. The effect is more pronounced in the deciduous than in the permanent dentition. A few studies indicate that this effect is independent of the presence of fluoride in toothpaste. It is also possible that other factors



A > F de cepillado < riesgo de caries

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

1 vez
al día



2 veces
al día

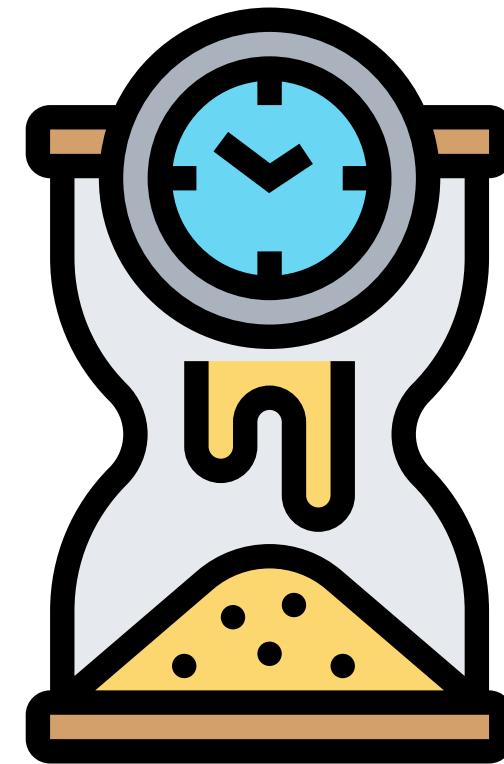
Menor riesgo de caries cuando se cepilla **2 veces** al día con **flúor**

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

How much toothpaste should a child under the age of 6 years use?

salivary stimulation and thus potentially dilution. Also longer brushing might be expected to produce a more homogeneous solution and greater contact time with the teeth that should help to ensure greater F uptake.



La duración del cepillado podría relacionarse con la **disolución de la pasta y el tiempo de contacto** con la superficie dental

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

Fluoride toothpastes of different concentrations for preventing dental caries (Review)

Walsh T, Worthington HV, Glenny AM, Marinho VCC, Jeroncic A

Toothbrushing is usually carried out using a manual or powered toothbrush and a fluoride toothpaste, for 2 minutes twice daily.

Effect of toothbrushing duration and dentifrice quantity on enamel remineralisation: An *in situ* randomized clinical trial



J.E. Creeth^{a,*}, S.A. Kelly^b, C. González-Cabezas^b, R. Karwal^c, E.A. Martinez-Mier^b, R.J.M. Lynch^a, M.L. Bosma^a, D.T. Zero^b

some point toothbrushing duration must influence fluoride effectiveness, but it is not clear whether there is any benefit from increasing brushing time from the typical value of about 45 s [23]

2 minutos en adultos

POCA EVIDENCIA

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

2 minutos en adultos

POCA EVIDENCIA

¿Cuánto y cuándo?

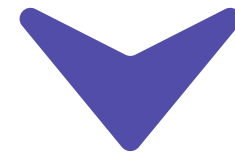
FRECUENCIA Y DURACIÓN

La duración es UTÓPICA en niños

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

La duración es **UTÓPICA** en niños

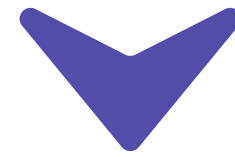


Cepillado **EFFECTIVO**

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

La duración es **UTÓPICA** en niños



Cepillado **EFFECTIVO**



SIN ENJUAGAR

¿Cuánto y cuándo?

FRECUENCIA Y DURACIÓN

**Maximizar el efecto del flúor con
concentraciones bien reguladas y evitando
enjuagar, comer o beber después**

ORAL HEALTH POLICIES: ECC: CONSEQUENCES & PREVENTIVE STRATEGIES

Policy on Early Childhood Caries (ECC): Consequences
and Preventive Strategies

Latest Revision
2021

How to Cite: American Academy of Pediatric Dentistry. Policy on early childhood caries (ECC): Consequences and preventive strategies. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2022:90-3.

sized toothbrush and perform or assist with toothbrushing of preschool-aged children. To maximize the beneficial effect of fluoride in the toothpaste, rinsing after brushing should be kept to a minimum or eliminated altogether.³⁸ Less than twice

¿Con qué?

¿Con qué?

CEPILLO

¿Con qué?

CEPILLO 

¿Con qué?

CEPILLO + PASTA

¿Con qué?

CEPILLO + PASTA



¿Con qué?

CEPILLO



Jordan infantil

¿Con qué?

CEPILLO



Jordan infantil



Jordan junior

¿Con qué?

CEPILLO



Jordan infantil



Jordan junior



MAM

¿Con qué?

CEPILLO



Jordan infantil



Jordan junior



MAM



Curaprox Kids

¿Con qué?

CEPILLO



Jordan infantil



Jordan junior



MAM



Curaprox Kids



Dr. Brown's

¿Con qué?

CEPILLO



Jordan infantil



Jordan junior



MAM



Curaprox Kids



Dr. Brown's



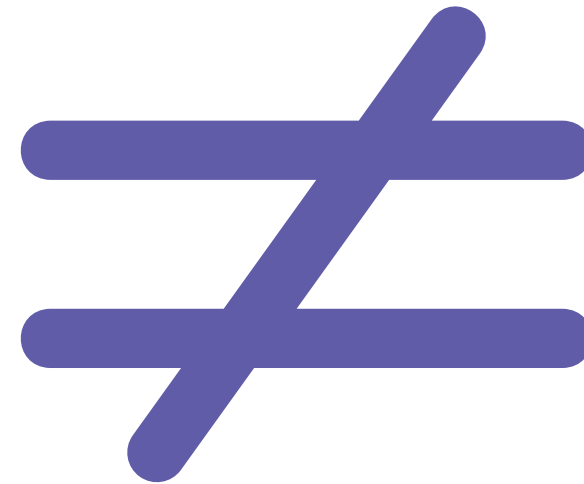
OralB

¿Con qué?

CEPILLO



Jordan infantil



¿Con qué?

CEPILLO

**La remoción mecánica y
periódica de placa **reduce la
acumulación y formación del
biofilm bacteriano oral****



¿Con qué?

CEPILLO Y PASTA

¿Con qué?

CEPILLO Y PASTA

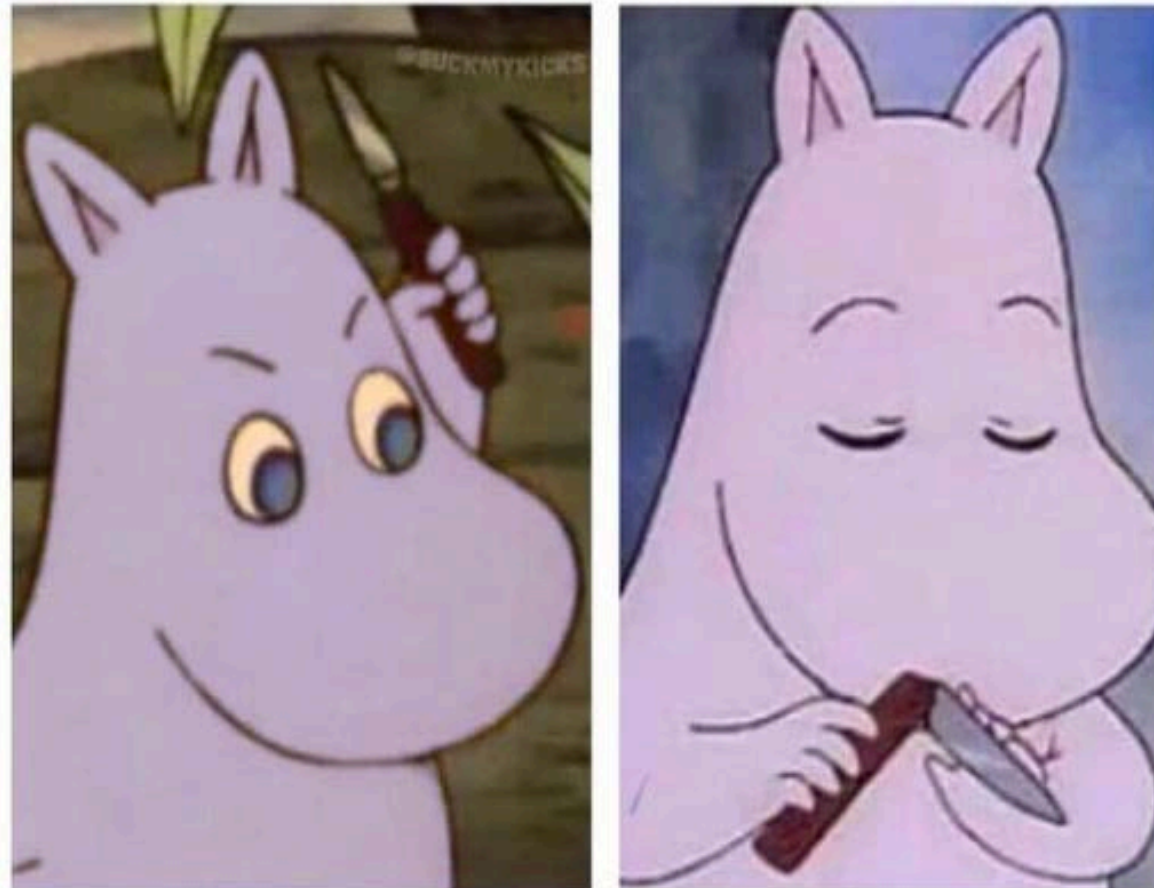
CON FLÚOR



“el flúor es tóxico”

“el flúor es tóxico”

CUANDO ESCRIBES UN
LARGO ARGUMENTO
PERO DECIDES NO ENVIARLO



¿Y si se traga la pasta?

How much toothpaste should a child under the age of 6 years use?

R P Ellwood, JA Cury**,*

**Dental Health Unit, University of Manchester, England.*

*** Piracicaba Dental School, University of Campinas, SP, Brazil.*



**La ingestión de grandes cantidades y/o
concentraciones de flúor a edades tempranas
condiciona un mayor riesgo de fluorosis dental**

¿Y si se traga la pasta?

Fluorosis

Cantidad - Concentración - Peso -
Biodisponibilidad - Estadío de
desarrollo dental - Supervisión
paterna - Sabor de la pasta - Edad de
inicio del cepillado

2-4
años



It has been suggested that a dose of 0.1 mg of F per kg of body weight ingestion is required to risk the development of potentially “noticeable” fluorosis [Ellwood et al., 2008].

Ellwood RP, Cury JA. How much toothpaste should a child under the age of 6 years use? Eur Arch Paediatr Dent. 2009;10(3):168-74.

Wright JT, Hanson N, Ristic H, Whall CW, Estrich CG, Zentz RR. Fluoride toothpaste efficacy and safety in children younger than 6 years. J Am Dent Assoc. 2014;145(2):182-9.

Kobayashi CAN, Belini MR, Italiani FDM, Pauleto ARC, Julianelli De Araújo J, Tessarolli V, et al. Factors influencing fluoride ingestion from dentifrice by children. Community Dent Oral Epidemiol. 2011;39(5):426-32.

¿Y si se traga la pasta?

Fluorosis **leves - moderadas**

En la gran mayoría de las ocasiones
estos defectos del esmalte
carecen de impacto estético



Ellwood RP, Cury JA. How much toothpaste should a child under the age of 6 years use? Eur Arch Paediatr Dent. 2009;10(3):168-74.

Wright JT, Hanson N, Ristic H, Whall CW, Estrich CG, Zentz RR. Fluoride toothpaste efficacy and safety in children younger than 6 years. J Am Dent Assoc. 2014;145(2):182-9.

Kobayashi CAN, Belini MR, Italiani FDM, Pauleto ARC, Julianelli De Araújo J, Tessarolli V, et al. Factors influencing fluoride ingestion from dentifrice by children. Community Dent Oral Epidemiol. 2011;39(5):426-32.

¿Y si se traga la pasta?



Cochrane Database of Systematic Reviews

Fluoride toothpastes of different concentrations for preventing dental caries (Review)

1999; Chesters 1992; Chestnutt 1998; O'Mullane 1997). Although acute toxicity is rare, young children are particularly at risk of ingesting toxic doses of fluoride from a standard toothpaste tube of 125 g, containing 1100 ppm F (1.1 mg F/g paste). As the probable toxic dose is around 5 mg F/kg body weight (Whitford 1992), the accidental swallowing of one- or two-thirds (45 g to 90 g) of a toothpaste tube is potentially life-threatening for a 1-year-old (10 kg) or for a 5 to 6-year-old (20 kg) respectively (Ellwood 1998). For

Existe riesgo de **intoxicación aguda** cuando tiene lugar una ingestión de flúor igual o superior a **5mg/Kg de flúor**, que equivale a 1/2-2/3 de un tubo de pasta con 1100 ppm

¿Y si se traga la pasta?



Fluoride toothpaste efficacy and safety in children younger than 6 years

A systematic review

Factors influencing fluoride ingestion from dentifrice by children

Claudia Ayumi Nakai Kobayashi¹, Melina Rodrigues Belini², Flávia de Moraes Italiani², Adriana Regina Colombo Pauleto¹, Juliana Julianelli de Araújo¹, Vanessa Tassarolli¹, Larissa Tercília Grizzo², Juliano Pelim Pessan², Maria Aparecida de Andrade Moreira Machado¹ and Marília Afonso Rabelo Buzalaf²

How much toothpaste should a child under the age of 6 years use?

R P Ellwood*, JA Cury**,

*Dental Health Unit, University of Manchester, England.

** Piracicaba Dental School, University of Campinas, SP, Brazil.

It is clear that the risk of fluorosis is dependent on the dose ingested. However, the anticaries efficacy of a given dose of fluoride may be maximised by using small amounts of higher fluoride toothpaste rather than greater amounts of low fluoride toothpastes. For age specific recommendations on the

Conclusion:

It is clear that the risk of fluorosis is dependent on the dose ingested. However, the anticaries efficacy of a given dose of fluoride may be maximised by using small amounts of higher fluoride toothpaste rather than greater amounts of low fluoride toothpastes. For age specific recommendations on the

¿Y si se traga la pasta?



Fluoride toothpaste efficacy and safety in children younger than 6 years

A systematic review

Factoring in children
Beneficio

How much toothpaste should a child under the age of 6 years use?

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It is clear that the risk of fluorosis is dependent on the dose ingested. However, the anticaries efficacy of a given dose of fluoride may be maximised by using small amounts of higher fluoride toothpaste rather than greater amounts of low fluoride toothpastes. For age specific recommendations on the

> Riesgo

Conclusion: It is clear that the risk of fluorosis is dependent on the dose ingested. However, the anticaries efficacy of a given dose of fluoride may be maximised by using small amounts of higher fluoride toothpaste rather than greater amounts of low fluoride toothpastes. For age specific recommendations on the

¿Con qué?

FLÚOR



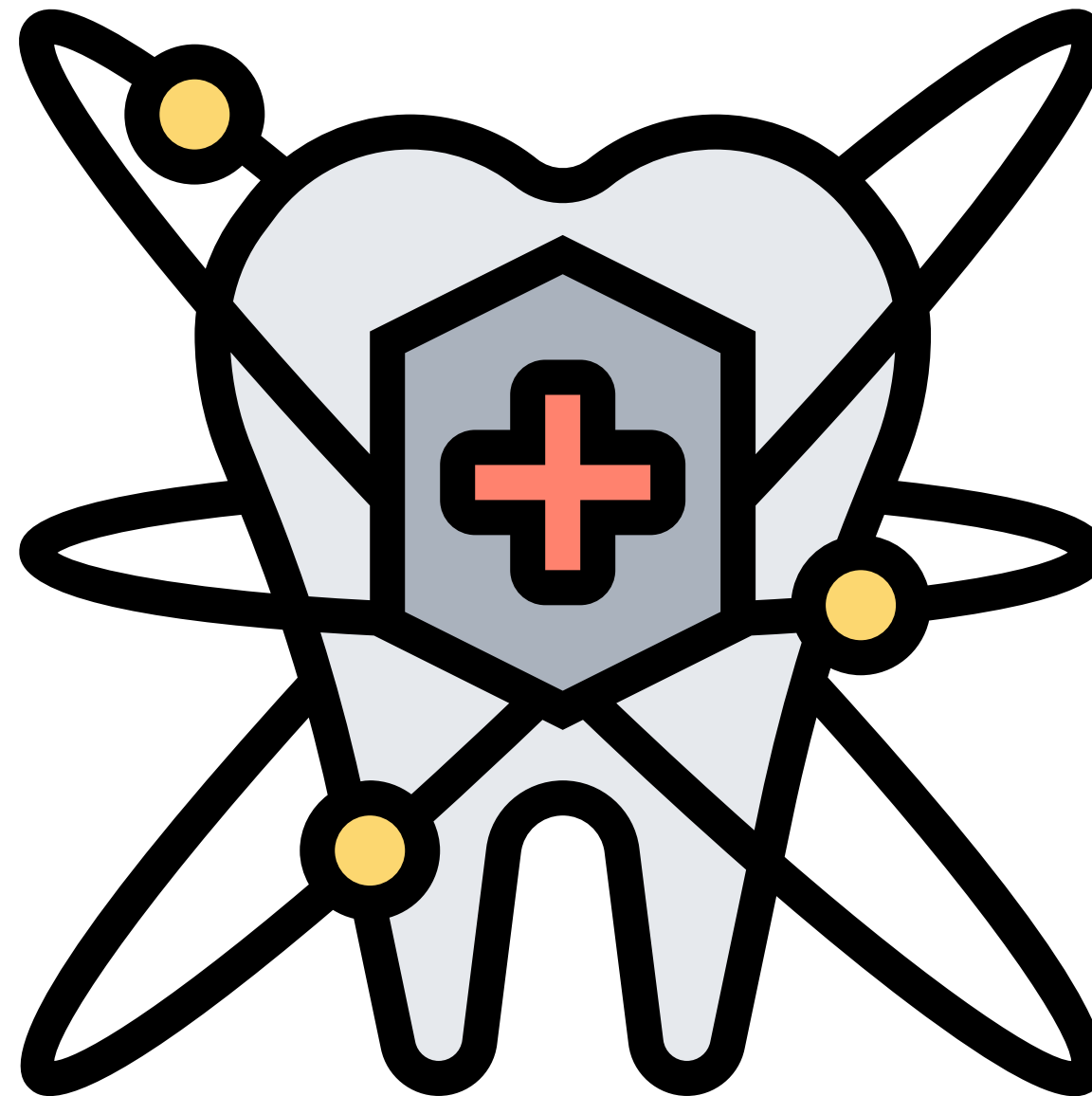
**El flúor es el único elemento costo-eficiente
que previene y ayuda a detener de forma real
la aparición y progresión de caries**



¿Con qué?

FLÚOR

Se une a la
estructura dental
formando una
estructura cristalina
más resistente al
ataque ácido



¿Con qué?

FLÚOR

Se une a la
estructura dental
formando una
estructura cristalina
más resistente al
ataque ácido

**Reduce la pérdida de
minerales y
promueve la
remineralización de
la superficie dental**



¿Con qué?

FLÚOR

Se une a la
estructura dental
formando una
estructura cristalina
más resistente al
ataque ácido

Reduce la pérdida de
minerales y
promueve la
remineralización de
la superficie dental

**Altera la
fisiología de las
bacterias
cariogénicas**

¿Con qué?

FLÚOR



Alta concentración

>2500 ppm o >0.25%

Concentración estándar

1000 ppm - 2500 ppm o 0.1-0.25%

Baja concentración

< 1000 ppm o 0.1%

¿Con qué?

FLÚOR



**Cochrane
Library**

Cochrane Database of Systematic Reviews

1. 0 (parts per million (ppm)) fluoride (F) (non-fluoride or placebo toothpaste)
2. 250 ppm F
3. 440 to 550 ppm F
4. 1000 to 1250 ppm F
5. 1450 to 1500 ppm F
6. 1700 to 2200 ppm F
7. 2400 to 2800 ppm F.

Fluoride toothpastes of different concentrations for preventing dental caries (Review)

Walsh T, Worthington HV, Glenny AM, Marinho VCC, Jeroncic A

¿Con qué?

FLÚOR



Fluoride toothpastes of different concentrations for preventing dental caries (Review)

- * 1000 to 1250 ppm or 1450 to 1500 ppm fluoride toothpaste confers a clinically meaningful caries-preventive benefit (D(M)FS/T) when compared with non-fluoride toothpaste (high- and moderate-certainty evidence);

but toothbrushing with 1450 ppm F toothpaste slightly reduces decayed, missing, filled teeth (dmft) increment when compared with 440 ppm F toothpaste (moderate-certainty evidence).

¿Con qué?

FLÚOR

A systematic review and meta-analysis of the effects of fluoride toothpastes on the prevention of dental caries in the primary dentition of preschool children

Ana Paula Pires dos Santos^{1,2}, Paulo Nadanovsky¹ and Branca Heloisa de Oliveira²

¹Department of Epidemiology, Institute of Social Medicine, University of the State of Rio de Janeiro, Brazil. ²Department of Community and Preventive Dentistry, School of Dentistry, University of the State of Rio de Janeiro, Brazil

standard F toothpastes on the reduction of caries in the primary teeth of preschool children showed that using low F toothpastes increased the risk of developing caries when compared with standard F toothpastes (37, 38). Regarding

Existe una mayor reducción del riesgo de caries a medida que aumenta la concentración de flúor



¿Con qué?

FLÚOR

How much toothpaste should a child under the age of 6 years use?

R P Ellwood, JA Cury**,*

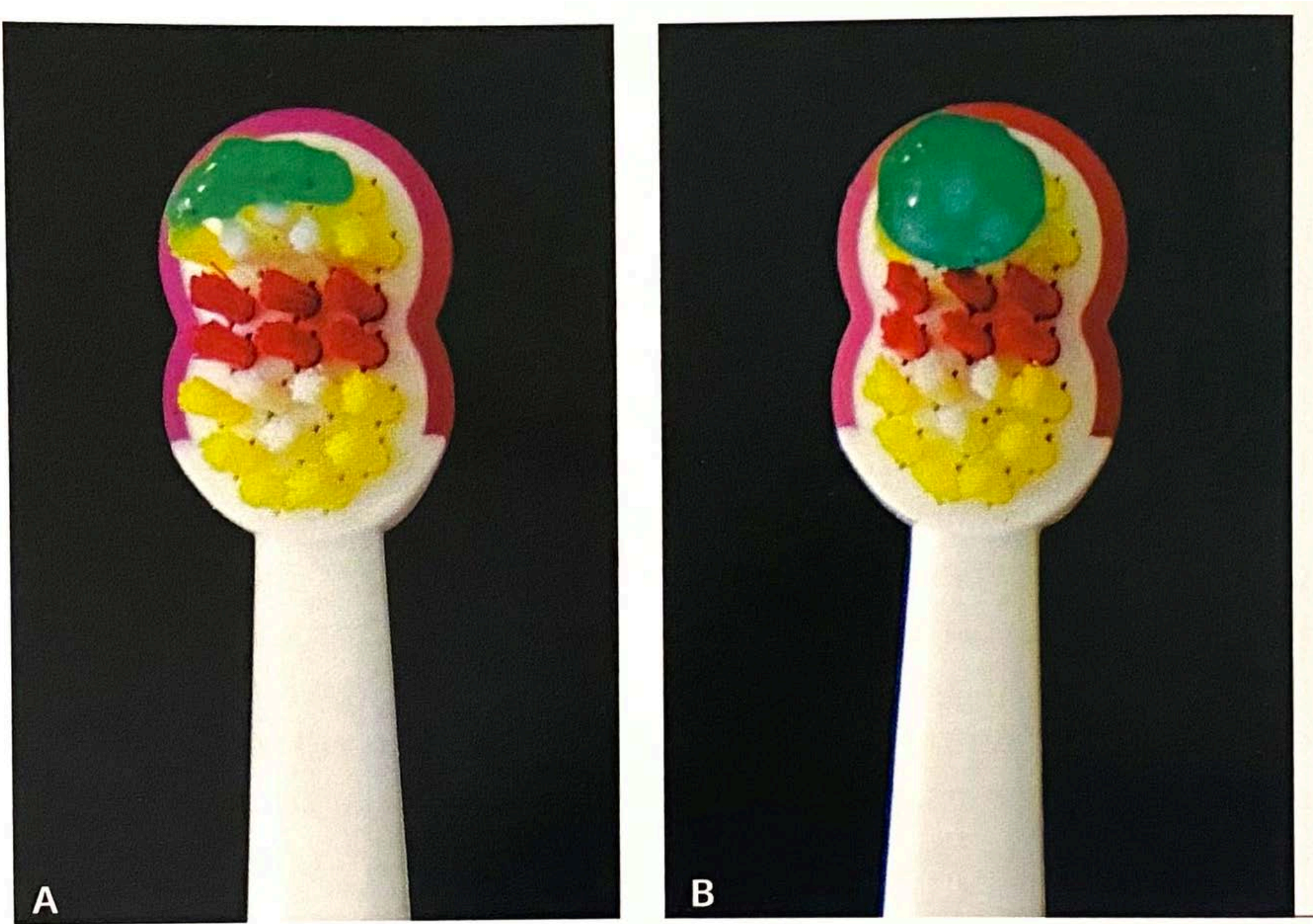
**Dental Health Unit, University of Manchester, England.*

*** Piracicaba Dental School, University of Campinas, SP, Brazil.*

use. It was concluded that applied F concentration is a more important factor than applied F amount, per se in determining the elevation of oral F levels following toothpaste use. This

**Efecto concentración-dependiente,
no cantidad-dependiente**





How much toothpaste should a child under the age of 6 years use?

R P Ellwood*, JA Cury**,
*Dental Health Unit, University of Manchester, England.
** Piracicaba Dental School, University of Campinas, SP, Brazil.

It has been suggested that a dose of 0.1 mg of F per kg of body weight ingestion is required to risk the development of potentially "noticeable" fluorosis [Ellwood et al., 2008].

R P Ellwood, JA Cury

Table 1. Dose of fluoride (mg F) contained in different amount of toothpastes for three commonly used fluoride toothpaste.

	Fluoride concentration of paste in ppm F		
	500 ppm F 0.5 mg F/g	1000 ppm F 1 mg F/g	1500 ppm F 1.5 mg F/g
"Thin smear" 0.125g	0.06 mg	0.13 mg	0.19 mg
"Small Pea" 0.25g	0.13 mg	0.25 mg	0.375 mg
"Half head" 0.5 g	0.25 mg	0.5 mg	0.75 mg
"Full head" 1.0 g	0.5 mg	1.0 mg	1.5 mg

Abanto J. Odontopediatría. Evidencias científicas para la conducta clínica

**Grano de arroz hasta los 2-4 años,
concentración estándar y cepillado asistido**

¿Con qué?

FLÚOR



+6 meses



+6 años

1000 ppm

¿Con qué?

FLÚOR



+6 meses



+2 años

1000 ppm

Aún así...

**Effect of Frequency of Sucrose Exposure
on Dental Biofilm Composition and
Enamel Demineralization in the Presence
of Fluoride**

R.A. Ccahuana-Vásquez C.P.M. Tabchoury L.M.A. Tenuta A.A. Del Bel Cury
G.C. Vale J.A. Cury

Faculty of Dentistry of Piracicaba, UNICAMP, Piracicaba, SP, Brazil

In conclusion, although enamel demineralization in the presence of fluoride is found only when sucrose is used >6 times/day, biochemical and microbiological changes in biofilm formed are observed with lower frequencies of exposure.

El cepillado con Flúor no tiene efecto en >4 exposiciones/día al azúcar



Por lo tanto:

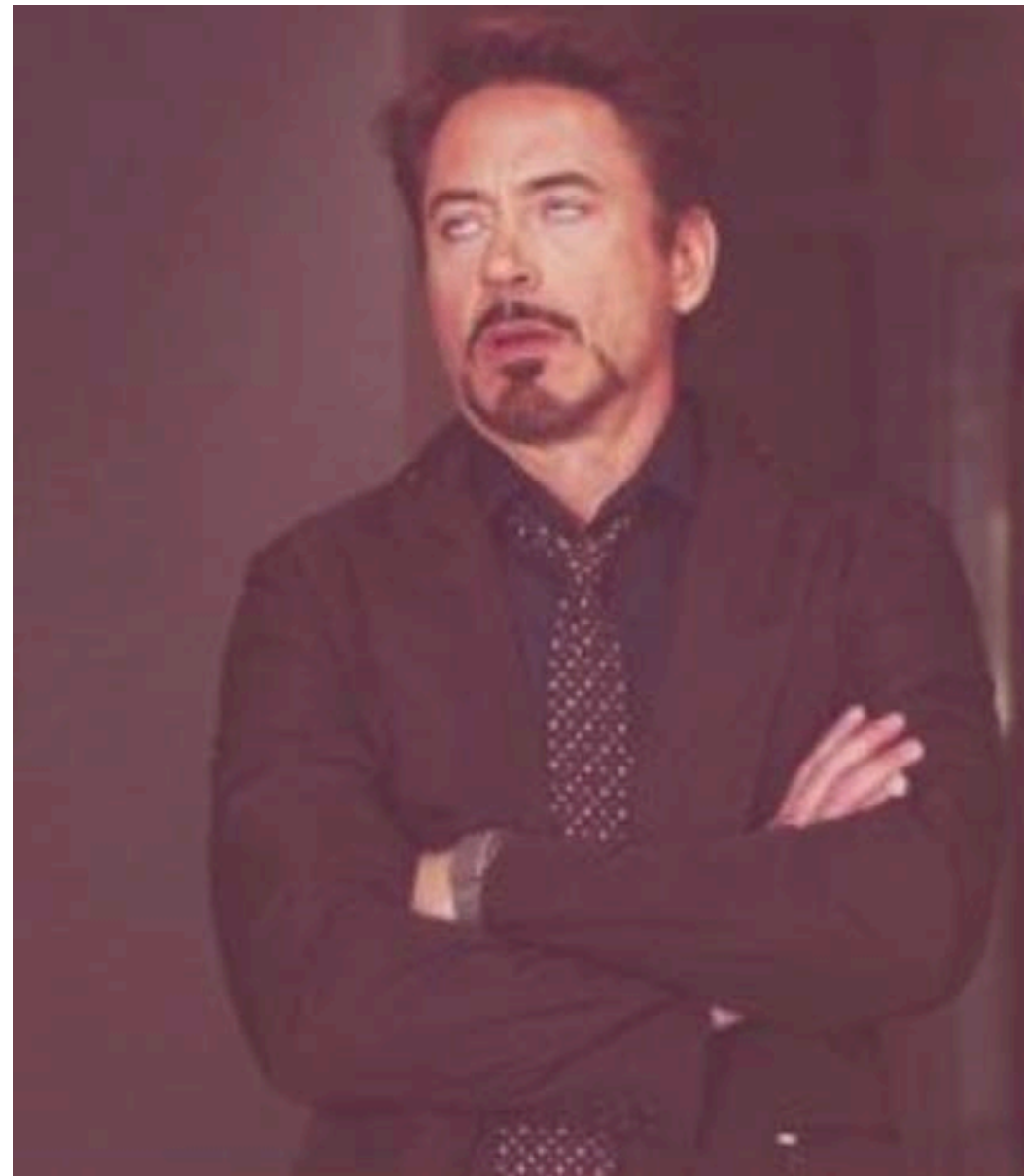
En presencia de azúcar, el **flúor**
carece de un efecto preventivo total

La principal medida preventiva de
caries la **reducción del azúcar**



“la caries la trata el dentista”

“la caries la trata el dentista”



La CPI es un **problema actual y mundial con repercusiones** odontológicas, médicas, psicológicas, sociales, políticas y económicas



EDUCACIÓN TEMPRANA

ETAPA PRENATAL Y PERINATAL

BEST PRACTICES: PERINATAL AND INFANT OHC

Perinatal and Infant Oral Health Care

Latest Revision

2021

How to Cite: American Academy of Pediatric Dentistry. Perinatal and infant oral health care. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2021:262-6.

care.¹² A systematic review has shown the efficacy of prenatal dental education and preventive therapies in reducing Mutans streptococci (MS) in children.¹³ Physicians, nurses, and other

REVIEW ARTICLE

OPEN

Expert consensus on early childhood caries management

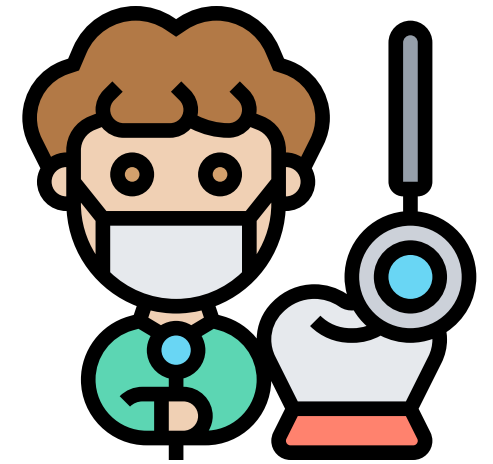
Jing Zou¹, Qin Du², Lihong Ge³, Jun Wang⁴, Xiaojing Wang⁵, Yuqing Li⁶, Guangtai Song⁷, Wei Zhao⁸, Xu Chen⁹, Beizhan Jiang¹⁰, Yufeng Mei¹¹, Yang Huang¹², Shuli Deng¹³, Hongmei Zhang¹⁴, Yanhong Li¹⁵ and Xuedong Zhou¹⁶

There is a close relationship between prenatal oral health care and children's ECC. By giving prenatal oral health education or intervention, a positive ECC prevention outcome was achieved.^{72,73}

La educación temprana de madres y familias en la etapa prenatal y/o perinatal se relaciona con una **reducción significativa** de los factores de riesgo de la CPI

EDUCACIÓN TEMPRANA

ETAPA PRENATAL Y PERINATAL



La creación de un “hogar dental” que informe de forma temprana en salud, no más tarde del primer año de vida ayuda a reducir el riesgo de CPI

REVIEW ARTICLE OPEN

Expert consensus on early childhood caries management

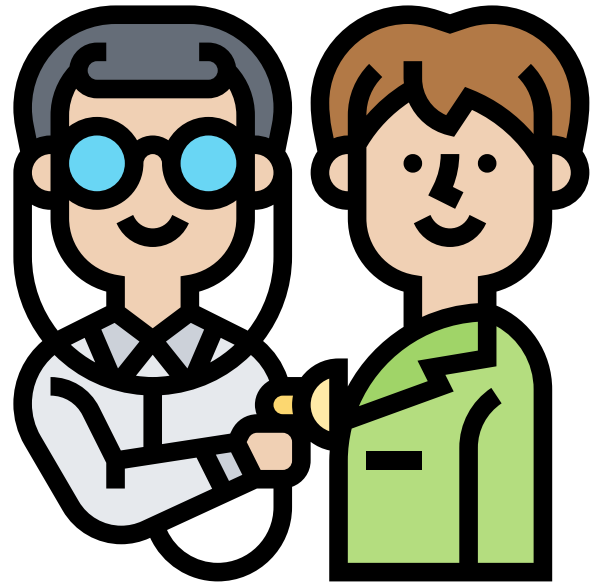
Jing Zou¹, Qin Du², Lihong Ge³, Jun Wang⁴, Xiaojing Wang⁵, Yuqing Li⁶, Guangtai Song⁷, Wei Zhao⁸, Xu Chen⁹, Beizhan Jiang¹⁰, Yufeng Mei¹¹, Yang Huang¹², Shuli Deng¹³, Hongmei Zhang¹⁴, Yanhong Li¹⁵ and Xuedong Zhou¹⁶✉

Dental visit: Infants may have their first dental examination following the growth of their first tooth, and establish a personal dental health file, which should not exceed 1 year of age at the latest(Dental Home);⁹² after that, routine dental examinations are carried out every 3 to 6 months, including

¿Y CÓMO NOS COORDINAMOS?



TRABAJO MULTIDISCIPLINAR



Atención pediátrica

- Identificación de prácticas e individuos de riesgo
- Información y evaluación temprana
- Derivación



Odontopediatría

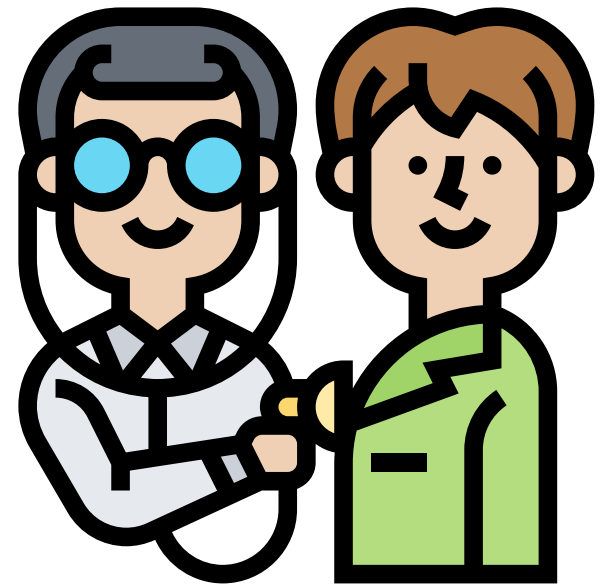
- Creación del "hogar dental" antes del primer año de vida
- Instauración de planes de control y tratamiento individualizados



Atención socio-educativa

- Apoyo de las medidas preventivas básicas comunitarias
- Enseñanza de valores higiénico-dietéticos

TRABAJO **TRANS**DISCIPLINAR



Atención pediátrica

- Identificación de prácticas e individuos de riesgo
- Información y evaluación temprana
- Derivación



Odontopediatría

- Creación del "hogar dental" antes del primer año de vida
- Instauración de planes de control y tratamiento individualizados



Atención socio-educativa

- Apoyo de las medidas preventivas básicas comunitarias
- Enseñanza de valores higiénico-dietéticos

“el dentista da miedo”

“el dentista da miedo”



Miedo y ansiedad dental:

01

El **miedo dental** es una respuesta emocional adaptativa que se inicia en el ámbito odontológico

02

La **ansiedad dental** es un estado de aprehensión intensa mediada por el miedo al dentista



Miedo y ansiedad dental:

01

El **miedo dental** es una respuesta emocional adaptativa que se inicia en el ámbito odontológico

02

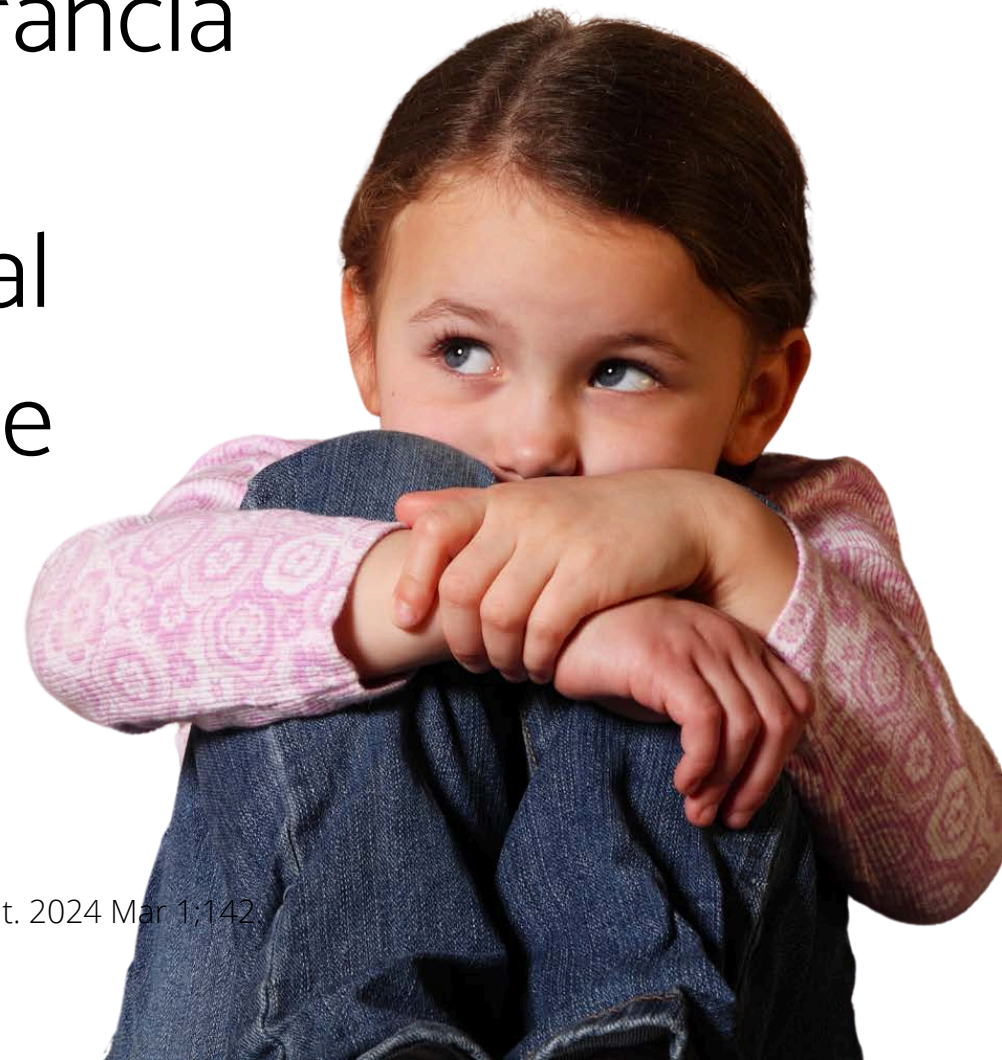
La **ansiedad dental** es un estado de aprehensión intensa mediada por el miedo al dentista



Miedo y ansiedad dental:

El **50%** de los adultos que tienen miedo o ansiedad al dentista refieren experiencias negativas durante la infancia

En niños, menos del **30%** experimenta rechazo al dentista, siendo más frecuente entre aquellos niños que **MENOS** han ido al dentista



Miedo y ansiedad dental:

El **número** de tratamientos y la **complejidad** de los mismos aumenta el miedo y la ansiedad dental



Sun IG, Chu CH, Lo ECM, Duangthip D. Global prevalence of early childhood dental fear and anxiety: A systematic review and meta-analysis. J Dent. 2024 Mar 1;142.

Abanto J, Tsakos G, Olegário IC, Paiva SM, Mendes FM, Ardenghi TM, et al. Impact of pulpectomy versus tooth extraction in children's oral health-related quality of life: A randomized clinical trial. Community Dent Oral Epidemiol. 2024 Feb 1;52(1):13–23.

Da miedo



No da miedo



No da miedo



No da miedo



No da miedo



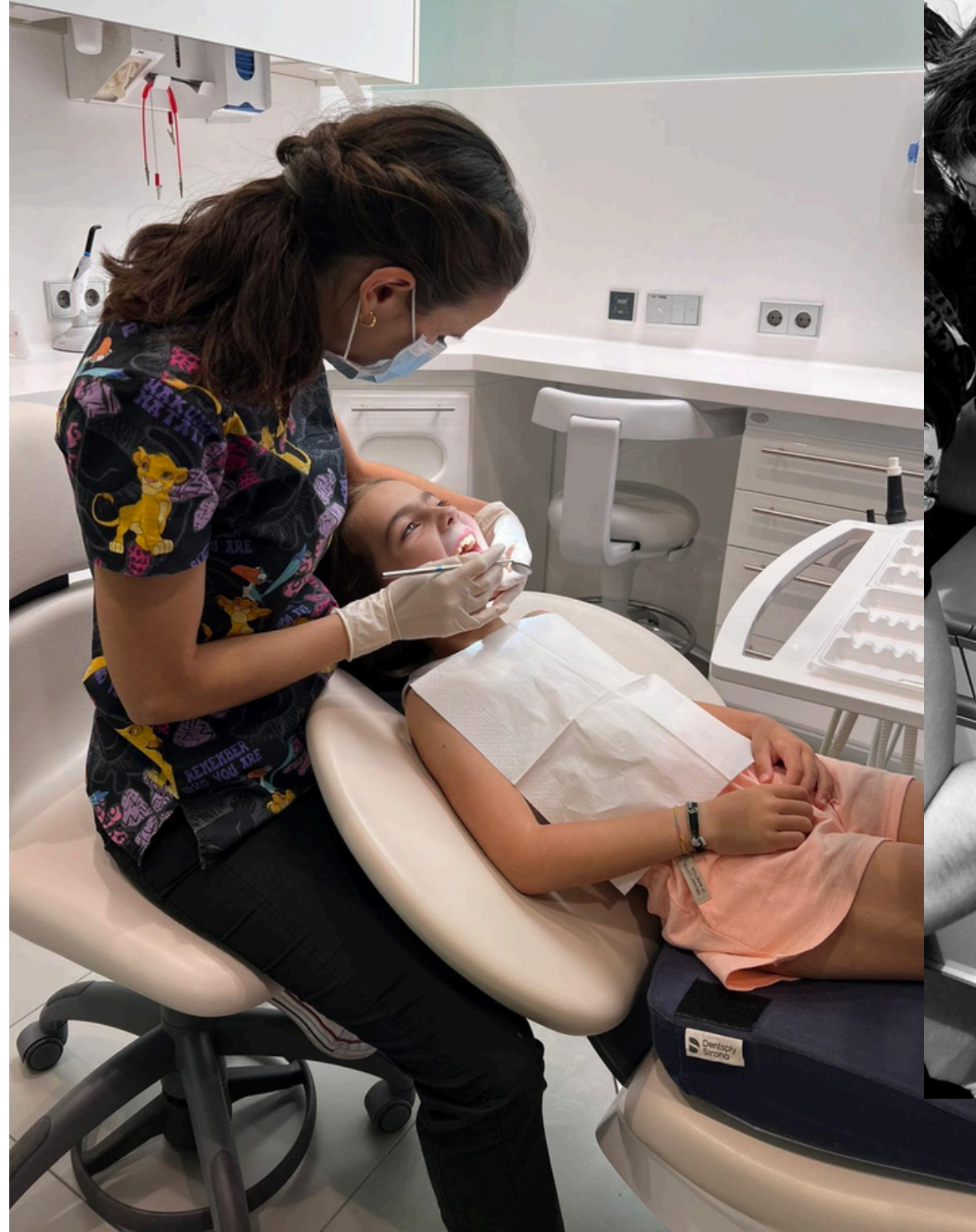
No da miedo



No da miedo



No da miedo



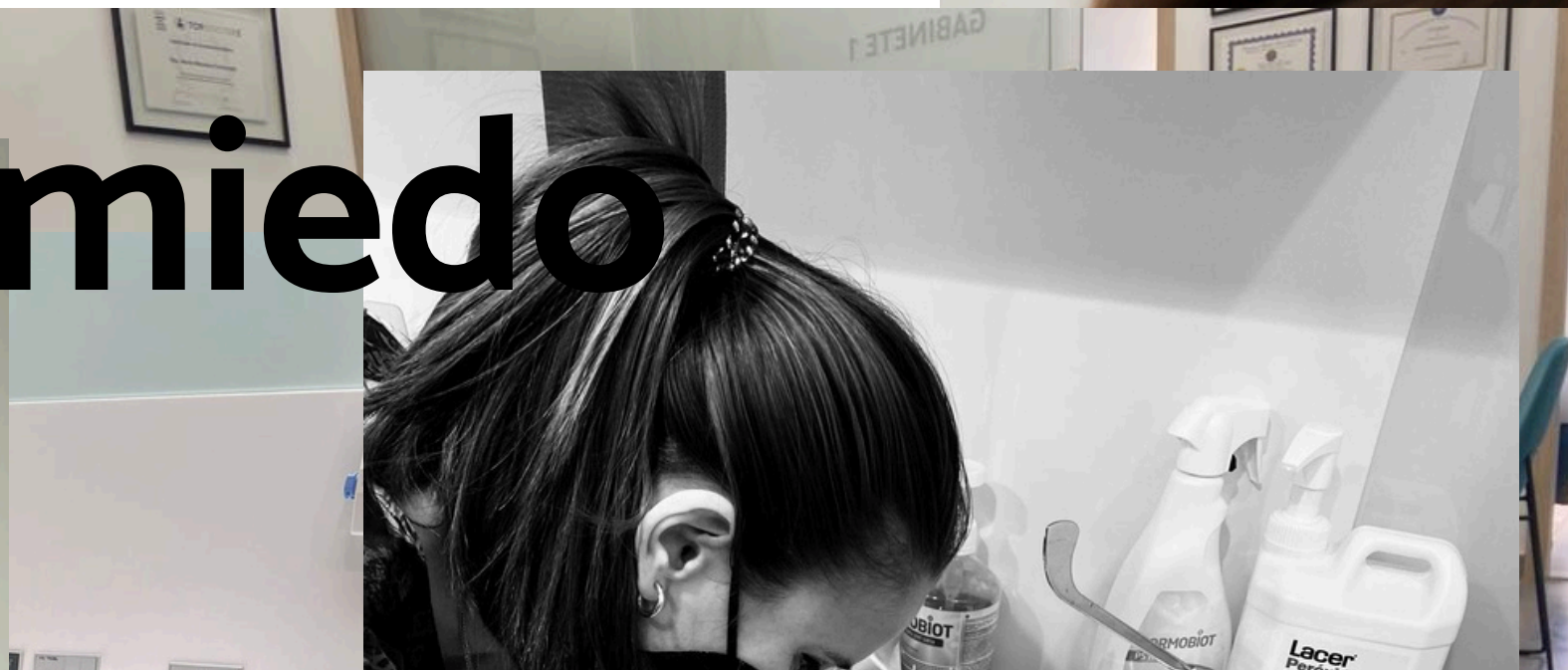
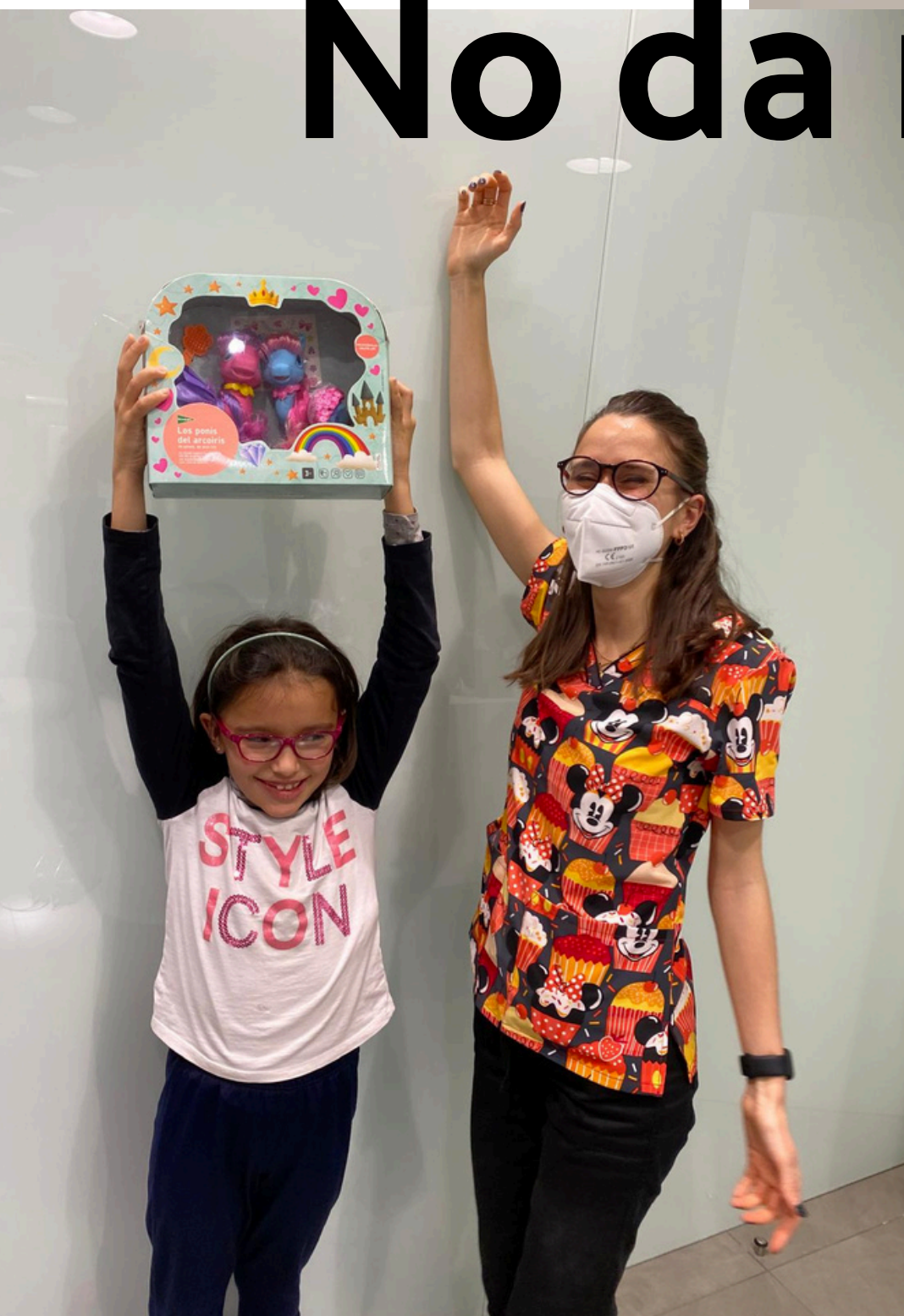
No da miedo



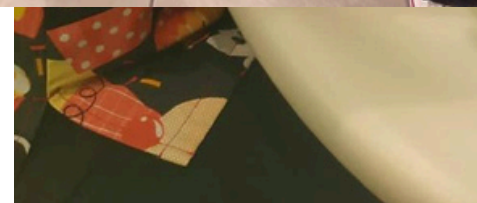
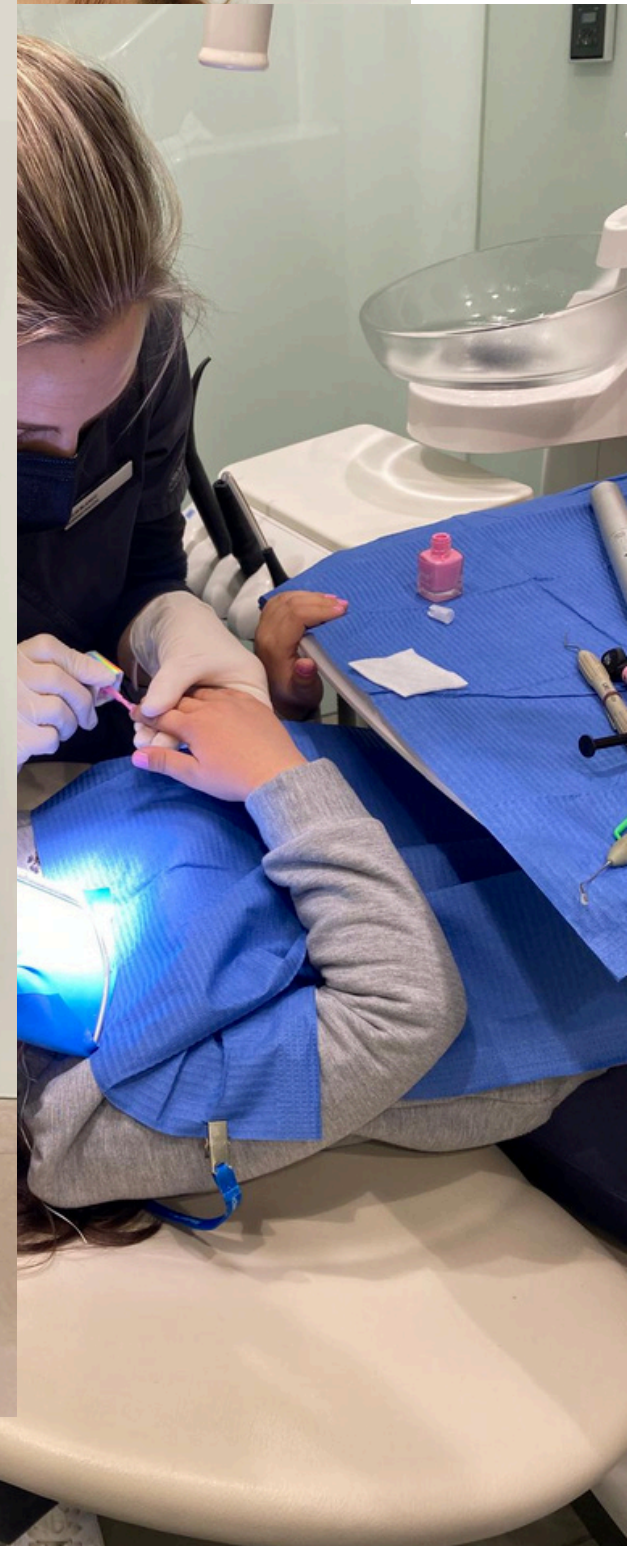
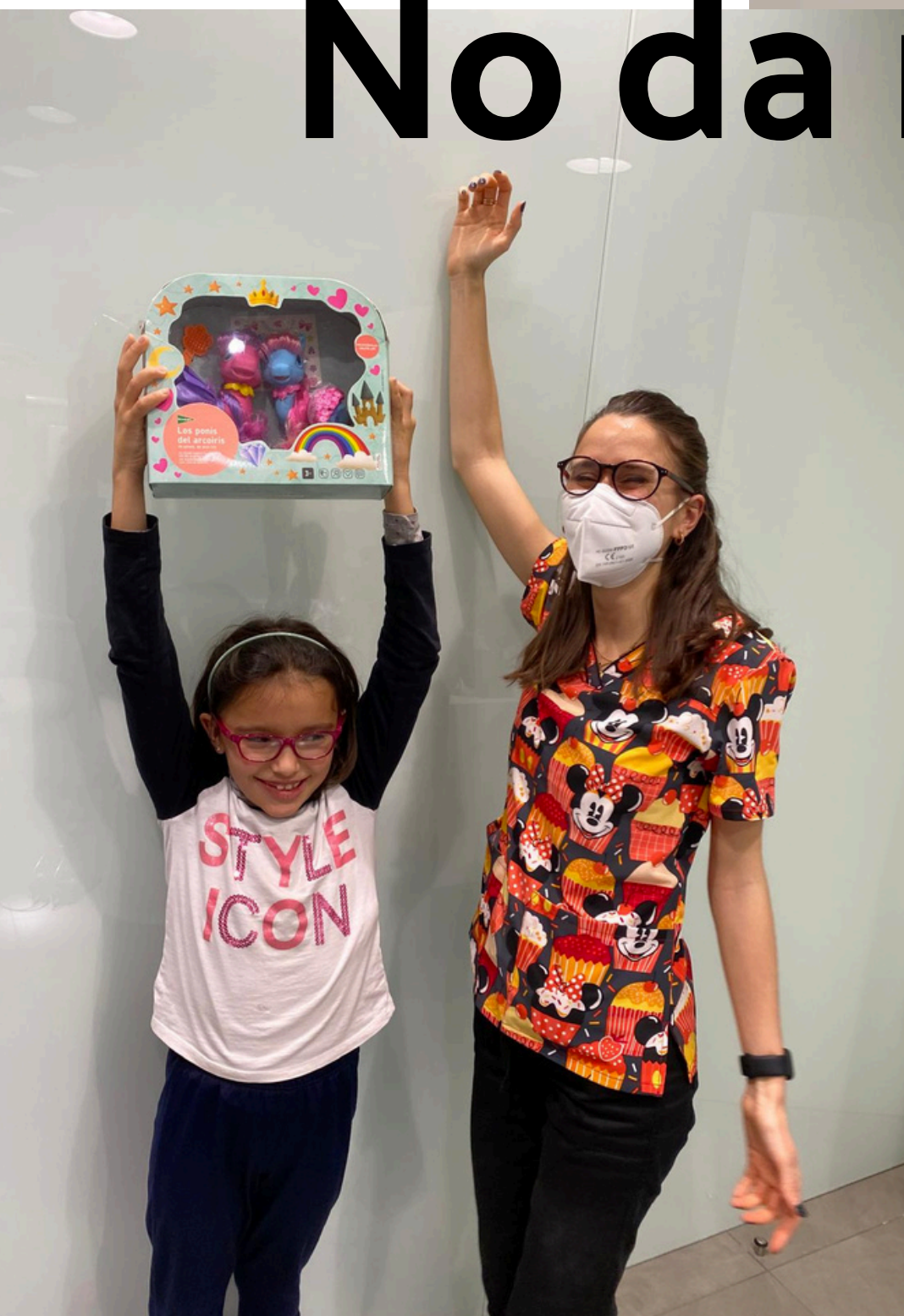
No da miedo



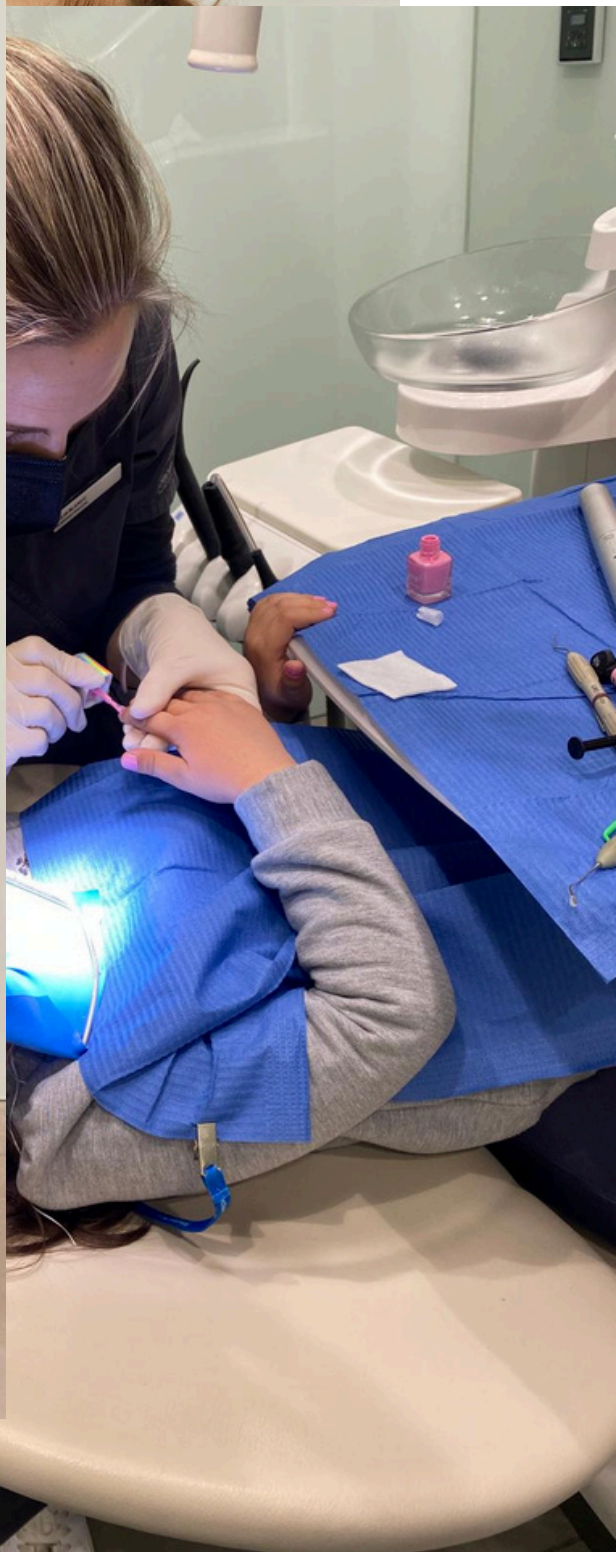
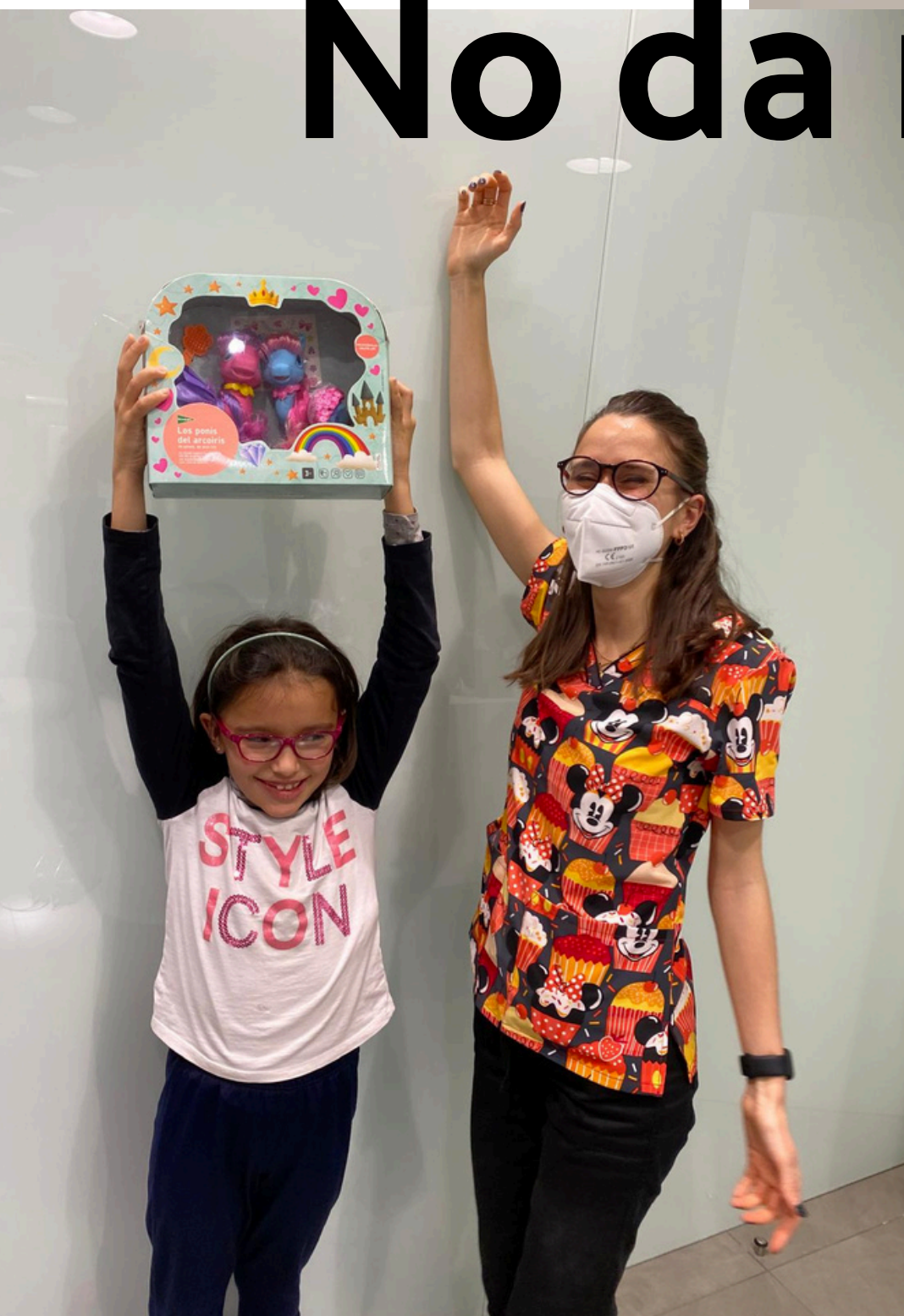
No da miedo



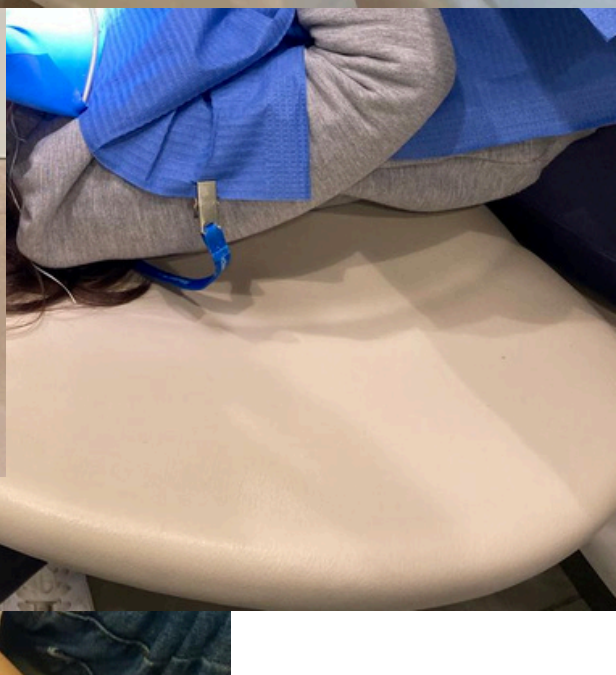
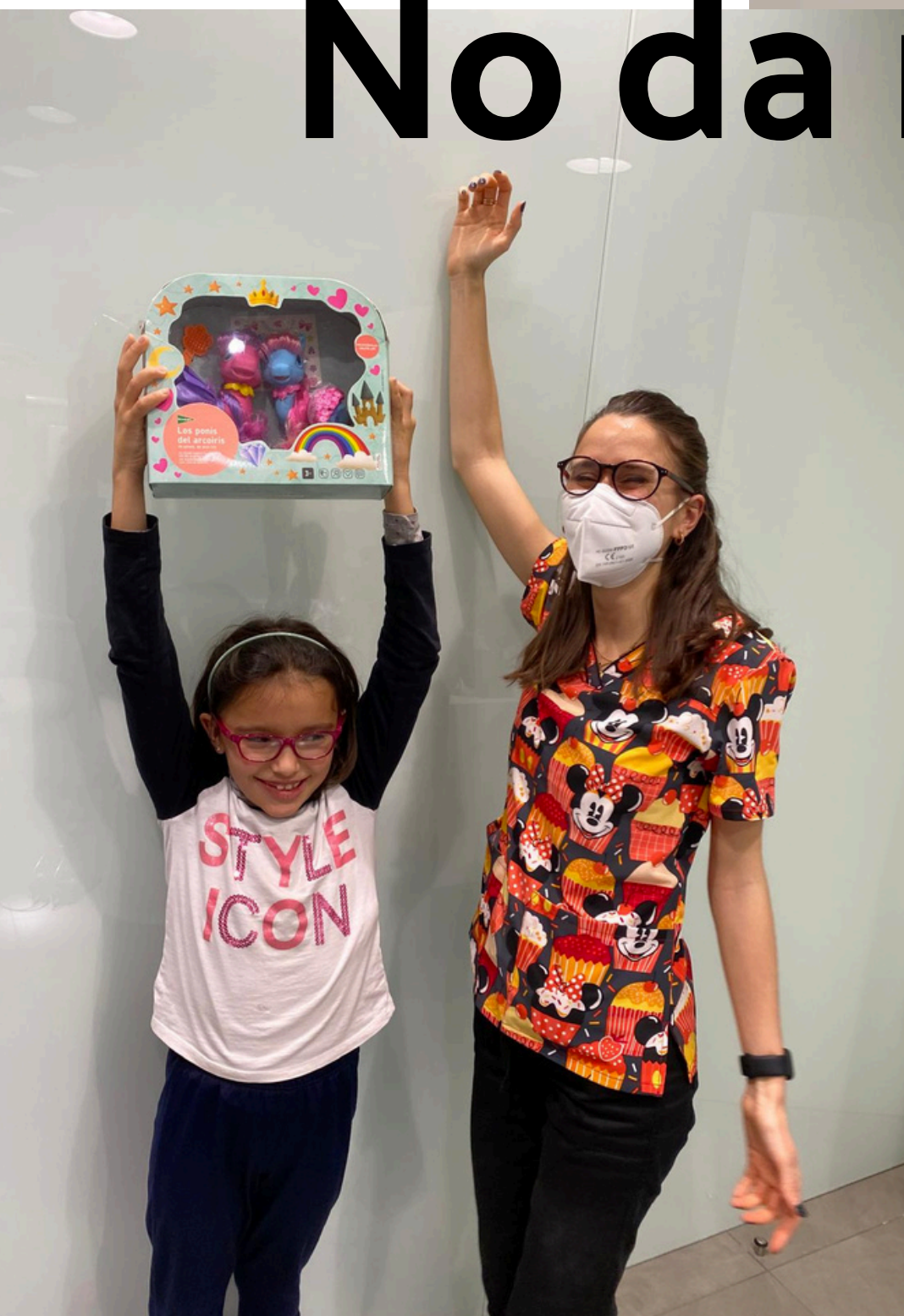
No da miedo



No da miedo



No da miedo



No da medo



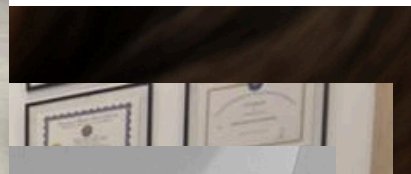
No da miedo



No da miedo



No da miedo



Para terminar...



ESPAÑA

2022



International Journal of
*Environmental Research
and Public Health*



Article

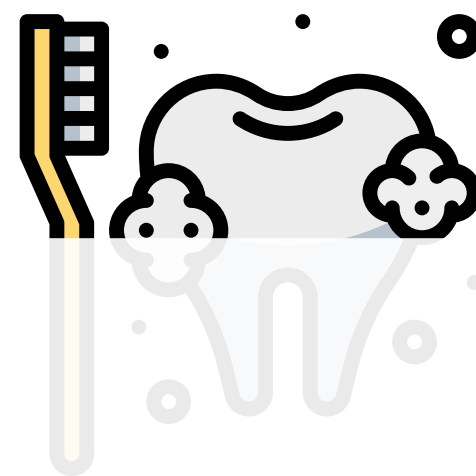
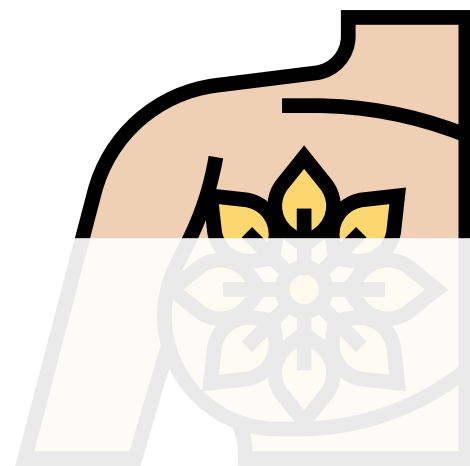
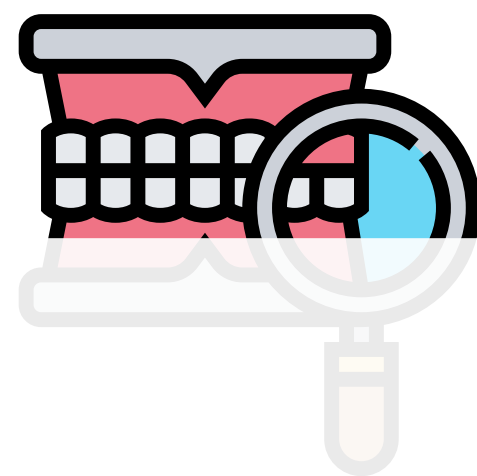
Spanish Paediatricians' Knowledge, Attitudes and Practices Regarding Oral Health of Children under 6 Years of Age: A Cross-Sectional Study

- 2580 pediatras consultados, de los cuáles **sólo responde un 14%**
- 50% sabía que deben iniciarse medidas preventivas antes del 1er año
- 70% conoce la implicación de la dieta y la higiene en el desarrollo de CPI, pero sólo un 35% recomienda un cepillado asistido
- **80% reconoce no tener información actualizada sobre CPI**

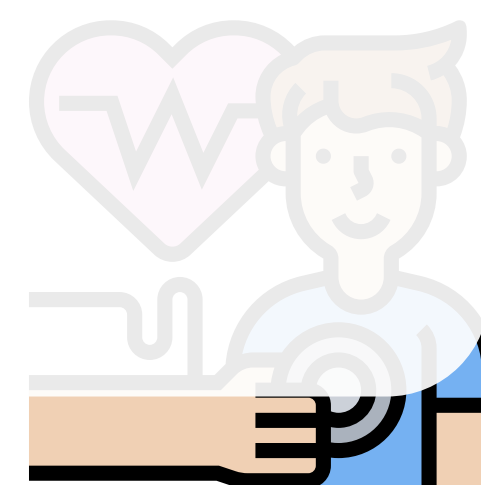
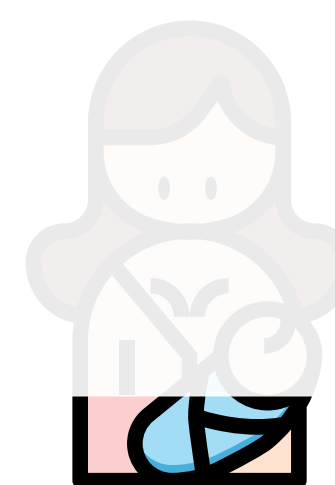
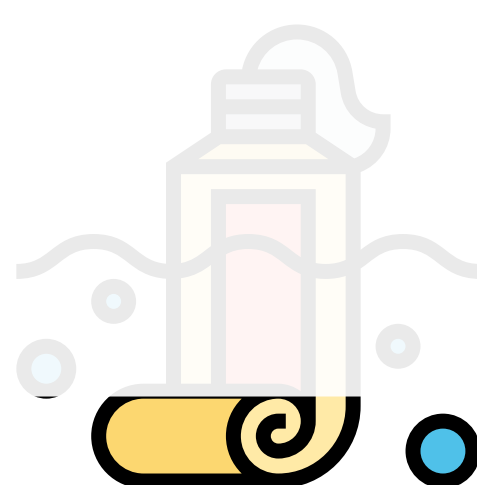
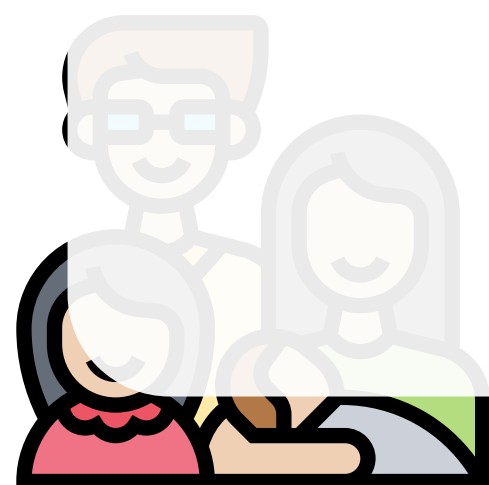
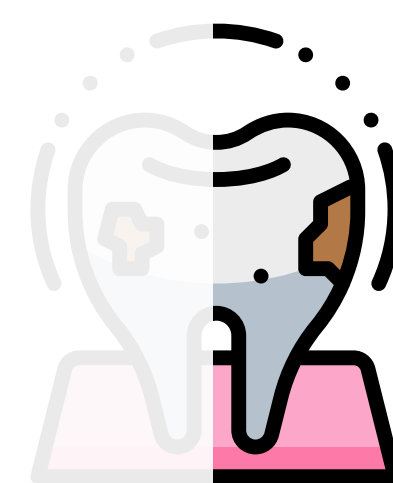
¿QUÉ ME LLEVO HOY A CASA?



- 1 .La CPI es una enfermedad crónica que afecta a **>50% de la población pediátrica mundial**, siendo más prevalente en bajos estratos socio-económicos-culturales
- 2 .No se pega ni se hereda. Está causada por un **desequilibrio bacteriano crónico debido al azúcar**. El **flúor** es el elemento más efectivo para su prevención y control
- 3 .**No está justificado retirar la LM para reducir el riesgo de caries**
- 4 .La creación de estrategias preventivas tempranas debe estar **coordinada entre los diferentes profesionales** que trabajan con la población pediátrica



MUCHAS GRACIAS



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- **Clínica Lozano - Córdoba**
- **Clínica Maria Isabel Rordíguez - Pozoblanco**

Mitos y verdades en Odp

BASADA EN LA EVIDENCIA

Ana Arroyo B. - Odontopediatra

