

## DUMMY AND DIGIT SUCKING

These guidelines are intended to provide advice for health professionals involved in the care of children with dummy (pacifier) or digit-sucking habits. They are based on the current evidence available, which is predominantly observational in nature, as there are no controlled clinical trials at present.

### **Racial factors**

80-90% of children in the Western world have sucking habits. These habits are not universal across the world and the incidence varies in different populations.

### **Gender**

Sucking habits are equivalent for males and females until the age of 1 year. After this they are more common in females.

### **Socio-economic factors**

Dummy sucking is more common in lower socio-economic groups.  
Digit sucking is more common in higher socio-economic groups.

### **Age**

Most habits begin in the first 3 months and are so common as to be considered normal. Dummy-sucking declines rapidly after this and is almost non-existent after the age of 7 years. Digit-sucking tends to decline at a slower rate and more habits persist into the permanent dentition.

### **Frequency of habit**

Significant effects on the teeth are only likely to occur if the habit exceeds 6 hours a day.

### **Type of feeding (breast or bottle-fed)**

The method of feeding has no effect on the prevalence or type of habit.

### **Aetiology**

**There are two theories:**

1. Habit is a sign of underlying emotional disturbance.
2. Habit is a learned behaviour. Infants have a natural suckling urge that encourages feeding. Sometimes this urge persists after feeding. This surplus urge is satisfied with dummy or digit-sucking, and may last from a few minutes to a few hours.

Current opinion favours the second theory.

## **Dental effects of Dummy-sucking**

- Effects are primarily in the deciduous dentition, as the habit usually stops before the permanent teeth erupt.
- Reduction in overbite, producing an anterior open bite. This effect is minimised using “orthodontic” dummies, whose teats are flatter in cross-section and collapse in the mouth.
- Reduction in maxillary arch width, which may cause a posterior cross-bite.
- Long-term effects (i.e. in the permanent dentition) are negligible.

## **Dental effects of Digit-sucking**

- The effects are determined by the nature and intensity of the habit.
- Reduced overbite or anterior open-bite, which is often asymmetrical.
- Upper incisors are proclined and lower incisors may be retroclined.
- Maxillary arch may be narrowed, producing a cross-bite and displacement.
- Effects are often seen in the permanent dentition due to the continuation of the habit.

## **Possible effects of dummy sucking on infant health**

Recent evidence suggests that the use of a dummy may reduce the risk of sudden infant death syndrome (SIDS) and possibly reduces the influence of known risk factors in the sleep environment.

## **References**

**Li DK, Willinger M, Petitti DB, Oduli R, Lui L, Hoffman HJ (2005)**  
Use of a dummy (pacifier) during sleep and risk of sudden infant death syndrome (SIDS); population based case-control study.  
BMJ, 332: 18-22.

**Adair SM (2003)**  
Pacifier use in children: a review of recent literature.  
Pediatr Dent, 25(5): 449-58.

**Warren JJ, Bishara SE (2002)**  
Duration of nutritive and nonnutritive sucking behaviors and their effects on the dental arches in the primary dentition.  
Am J Orthod Dentofacial Orthop, 121(4): 347-56.

**Warren JJ, Levy SM, Nowak AJ, Tang S (2000)**  
Non-nutritive sucking behaviors in preschool children: a longitudinal study.  
Pediatr Dent, 22(3): 187-91.

Revised by the Development and Standards Committee of the British Orthodontic Society 2006.  
Recommendations may change in the light of new evidence.