



# *FT124*

## Çocukluk Çağı Obezitesini Önlemek İçin Bebeklik Dönemine Yönelik Öneriler Recommendations for Infants to Prevent Childhood Obesity

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#### Amaç:

Bu derlemenin amacı, çocukluk çağı obezitesini önlemek için bebeklik dönemine yönelik önerilere bir bakış açısı kazandırmaktadır.

#### Yöntem:

Google Akademik ve PubMed veri tabanları kullanılarak "çocukluk çağı obezitesi", "bebek", "önlemek" ve "hemşire" primer anahtar kelimeleri ile literatür incelemesi yapılmıştır.

#### **Bulgular:**

Dünya'da beş yaş altı 41 milyon çocuğun aşırı kilolu ya da obez olduğu belirtilmektedir. Tıp Enstitüsü (IOM) obezitenin önlemesine yönelik raporunda, bebeklik dönemini (0-2 yaş) obezitenin önlenmesi için kritik bir zaman olarak tanımlamaktadır. IOM' un rehberinde büyümenin izlenmesi, sağlıklı beslenme, uyku ve fiziksel aktivite konularına odaklanılmıştır. Büyümenin izlenmesi ile ilgili olarak; bebeklik döneminde uzunluk-ağırlık değişimlerinin bir yıl boyunca Dünya Sağlık Örgütü büyüme eğrilerine göre izlenmesi gerektiği belirtilmektedir. Bebek beslenmesi ile ilgili olarak emzirme ve ilk altı ay sadece anne sütü verme, altıncı ayda katı gıdaya geçiş ile birlikte emzirmenin sürdürülmesi gerektiği üzerinde durmaktadır. Obezitenin önlenmesinde bebeğin yaşa uygun uyku süresi kadar uyumanın da önemli olduğu belirtilmektedir. Bununla birlikte fiziksel aktiviteyi arttırmak ve sedanter davranışı azaltmak için, bebeklerin ev içi ve dışında daha bağımsız hareket etmesi, ebeveyn-bebek etkileşimleriyle yerde birlikte zaman geçirmesi ve altı ay altındaki bebeklerin daha fazla yüzüstü pozisyonda aktivitesi yapması önerilmektedir. Bebek oto koltukları, bebek arabaları, sallanan ana kucakları ve bebek oyun havuzu gibi bebek malzemelerinin uzun süreli kullanımının sınırlandırılması önemli olduğu belirtilmektedir.

#### Sonuç:

Hemşireler, annelerin obezite ile ilgili algılarını bebek beslenmesine yönelik tutum ve bilgileri değerlendirmeli, varsa bilgi eksikliğinin giderilmesine yönelik eğitim ve danışmanlık verilmelidir. Annelerin uygun olmayan beslenme yaklaşımlarını düzeltmelerine yardımcı olunmalıdır.

Anahtar Kelimeler: Bebeklik, Çocukluk, Hemşire, Obezite, Önleme.

# ABSTRACT

## Aim:

The aim of this review is to provide an insight into the recommendations for infancy to prevent childhood obesity.













#### Method:

In the literature search; PubMed, Google Scholar databases were searched for relevant articles that met the review objective. The terms "childhood obesity", "infant" and "prevention" and "nursing" were used as the primary keywords.

#### **Results:**

World Health Organization (WHO) is reported that 41 million children under the age of five were overweight or obese. By Institute of Medicine (IOM), infancy (0-2 years) is defined as a critical time for obesity prevention. IOM's guideline focuses on growth monitoring, healthy feeding, sleep and physical activity. Growth monitoring in infants, it is suggested that weightfor-length changes in infancy should be monitored according to the WHO growth curves throughout the first year. In relation to infant feeding, infants should be exclusive breastfeeding for first six months of life, introduction of solid foods at six months together with continued breastfeeding. In addition, it is stated that the age-appropriate sleep duration for infants is important for the prevention of obesity. in order to increase physical activity and reduce sedentary behavior, it is recommended that infants move more independently at indoors and outdoors, spend time together on the ground with parent-infant interactions, and infants under the age of six months perform more prone position. It is important to note that the use of baby equipment such as baby car seats, strollers, bouncer seats and playpens should be limited.

#### **Conclusion:**

Nurses should evaluate mothers' perceptions about obesity, attitudes and information about baby nutrition, and education and counseling should be provided to eliminate any lack of knowledge. They should help mothers correct inappropriate feeding approaches.

Keywords: Infant, Childhood, Nursing, Obesity, Prevention.

### **INTRODUCTION**

Childhood obesity is a multifaceted problem caused by biological, behavioral, and socioenvironmental factors (1). It is reported that 41 million children under the age of five were overweight or obese in the world (2). The 2018 Turkey Demographic and Health Survey (2018 TDHS) report states that 8.1% of children under five are obese (3).

Obesity is one of the most serious public health problems of the 21st century in both developing and developed countries (4). It increases the risk of diseases such as hypertension, diabetes, cardiovascular diseases, musculoskeletal disorders and psychological problems in children (4, 5). Overweight and obesity in childhood are reported to be associated with short-term adverse outcomes such as reduced quality of life and increased health care costs (6).

Current studies show that overweight children from early childhood to the age of two can predict overweight or obese after 10 years (7). In a study with infants, a positive correlation was found between rapid weight gain in the first four months of life and overweight at age seven (8). Most of intervention studies for childhood obesity have focused on school age. However, once the child develops obesity, the risk of persistence is likely. Therefore, earlier stages of the life should be focused on the prevention of obesity (9). Nowadays, obesity is seen in all age groups, but it is more common in the age of physiologically rapid fat storage. These ages are most commonly in the first year of life, between the ages of five and six and adolescence. Obesity that begins before the age of five and after the age of 15 is more dangerous (10). This study aims to provide an insight into the recommendations for infants to prevent childhood obesity.











#### **Prevention of Obesity in Infants**

In the *Early Childhood Obesity Prevention Policies* report of the Institute of Medicine (IOM, 2011), infancy (0-2 years) is defined as a critical time for obesity prevention (11). The IOM's infancy related guideline focuses on growth monitoring, healthy feeding, sleep and physical activity (12).

Growth monitoring in infants; identifying infants at risk for overweight (84.1-97.7 percentile) and overweight (>97.7 percentile) and, weight-for-length changes should be monitored according to the World Health Organization (WHO) growth curves throughout the first year. WHO recommends the use of growth charts as a standard for clinical evaluation of infant growth from birth to 24 months (9). In a systematic review, it was found that overweight in infancy increases the risk of obesity in early childhood (13). Nurses in primary health care have the opportunity to follow-up a child at least twelve times before the age of five. During these follow-up visits, nurses should evaluate the perceptions of mothers about obesity. Nurses can help parents to overcome any lack of information about what obesity is and how it relates to growth curves and help them to correct inappropriate feeding approaches. This should be started when the child is born and maintained during healthy child follow up (10).

There are many interventions to prevent the risk of obesity. The most important is that child health professionals encourage families to breastfeeding and responsive feeding (recognize and respond to infant hunger and fullness cues) practices. Also in relation to infant feeding, it is also emphasized that infants should be exclusive breastfeeding for first six months of life, introduction of solid foods at six months together with continued breastfeeding. It is important for parents to recognize symptoms that show signs of hunger and satiety of infants and to seek support from health professionals in responding to these symptoms (11, 12). In the meta-analysis studies, it is stated that exclusive breastfeeding in the first six months of life reduces the risk of overweight in childhood (14, 15). In a systematic review study, there is some evidence that the early introduction of solid food ( $\leq 4$  or > 6 months) may increase the risk of overweight for the child (16).

In addition, it is stated that the age-appropriate sleep duration for infants is important for the prevention of obesity. Most studies showing the relationship between sleep and childhood obesity have been conducted with older children, and two studies have shown that sleep duration in infancy is associated with weight gain (17, 18). Prolonged sleep duration in children before the age of three is reported to be an important factor in reducing the risk of obesity (19). In order for nurses to effectively guide parents, more infant sleep studies are needed to provide peaceful environments that help regulate sleep and reduce the risk of obesity (12).

However, in order to increase physical activity and reduce sedentary behavior, the IOM (2011) guide recommends more independent, free movement of infants at indoors and outdoors, spending time together on the ground with parent-infant interactions, and provide more daily opportunities with "tummy time" (in prone position) activities for infants under six months (11). Tummy time, it is a term used to allow infants to spend time in the prone position. It helps to strengthen the musculo-motor movement of the infants' neck and back, which is essential for more complex motor movements such as sitting, rolling, crawling and standing, as well as increased motor movement of the infants (20). It is emphasized that limiting the long term use of baby equipment such as car seats, strollers, bouncer seats and playpens is important (12).

#### CONCLUSION

Nurses should evaluate mothers' perceptions about obesity, attitudes and information about baby nutrition, and education and counseling should be provided to eliminate any lack of knowledge. They should help mothers correct inappropriate feeding approaches. Increasing the number of early intervention studies for the recognition and prevention of obesity risk will make a significant contribution to the field.

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