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ANALYSIS OF THE CONCEPT OF RESPONSIVE FEEDING BASED ON CULTURE

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ABSTRACT

Responsive feeding is an essential component of child nutrition and responsive caregiving; however, the concept remains inconsistently defined across disciplines and cultural contexts, limiting its application in nursing practice and stunting prevention. This concept analysis aimed to clarify the meaning, defining attributes, antecedents, consequences, and empirical referents of culturally based *responsive feeding* among children aged 6–24 months. Walker and Avant's concept analysis approach was used through the identification of concept use, defining attributes, model cases, antecedents, consequences, and empirical referents. Literature from WHO/UNICEF guidelines, empirical studies, and cross-cultural research related to *responsive feeding* was comprehensively reviewed. Six defining attributes were identified: caregiver sensitivity to child cues, warm reciprocal interaction, non-coercive and supportive feeding approaches, support for child autonomy and self-regulation, family cultural sensitivity, and orientation towards the feeding process and eating experience. Antecedents included caregiver knowledge of child development, psychological readiness, safe caregiver–child relationships, family support, socioeconomic conditions, family cultural values, access to nutrition education, culturally sensitive healthcare services, and WHO/UNICEF guidelines. Consequences included positive eating experiences, improved diet quality and child self-regulation, more harmonious family relationships, reduced feeding difficulties and caregiver stress, and contributions to stunting prevention. Culturally based *responsive feeding* is a multidimensional concept integrating nutritional, emotional, relational, and cultural aspects as a foundation for culturally sensitive nursing practice in stunting prevention.

Keywords: child nutrition; cultural adaptation; responsive feeding; stunting prevention; nursing practice

INTRODUCTION

The complementary feeding period, particularly during the first two years of life, is recognised as a critical stage in the development of children's eating behaviors, nutritional status, self-regulation, and long-term health outcomes. During the age of 6–24 months, children experience rapid physical growth and developmental changes that require not only adequate nutritional intake but also supportive caregiving practices during feeding. Evidence has shown that children's dietary quality and nutritional outcomes are influenced not only by food availability and nutrient adequacy, but also by the quality of caregiver–child interactions during mealtimes (UNICEF, 2020; Young et al., 2021). Therefore, feeding is increasingly understood as a relational and behavioral process rather than merely an activity of providing food.

Responsive feeding has emerged as an important concept within child nutrition, responsive caregiving, and early childhood development. UNICEF defines responsive feeding as a feeding practice in which caregivers encourage children to eat, respond appropriately to hunger and satiety

cues, and provide feeding with attention, patience, and emotional support (UNICEF, 2020). Similarly, the World Health Organization emphasizes responsive feeding within the Infant and Young Child Feeding (IYCF) counselling framework and the *Nurturing Care Framework*, highlighting that feeding interactions should support children's developmental readiness, autonomy, and emotional wellbeing (World Health Organization, 2023; Nurturing Care for Early Childhood Development, 2023). This perspective expands feeding beyond nutritional adequacy to include emotional, social, and relational dimensions that contribute to healthy growth and development.

Responsive feeding is also closely associated with responsive caregiving and reciprocal caregiver–child interaction. Recent literature conceptualizes responsive feeding as a reciprocal and nurturing process in which caregivers recognize and respond to children's verbal and non-verbal cues while supporting the development of healthy food preferences and self-regulation (Perez-Escamilla et al., 2021). Through responsive feeding practices, children are encouraged to actively participate in the feeding process, develop autonomy in eating, and regulate their food intake according to internal hunger and satiety signals. Conversely, non-responsive feeding practices, such as coercive feeding, pressure to eat, or neglectful feeding, may disrupt children's self-regulation and contribute to unhealthy eating behaviours and poor nutritional outcomes (Killion et al., 2024; Black et al., 2022).

Despite growing recognition of responsive feeding as an essential component of child nutrition and development, studies have reported that the implementation of responsive feeding practices remains suboptimal in many countries. Cross-cultural studies in low- and middle-income countries have demonstrated that many caregivers still rely on controlling or non-responsive feeding behaviours, particularly when caregivers are concerned about children's food intake or growth (Robert et al., 2021). In Indonesia, the prevalence of optimal responsive feeding practices has been reported to be relatively low compared with several other countries, suggesting that feeding challenges are influenced not only by food insecurity but also by caregiving quality and interaction during mealtimes. These findings are particularly relevant in the context of persistent childhood malnutrition and stunting, which remain significant public health concerns in Indonesia and other developing countries (Young et al., 2021; World Health Organization, 2023).

The literature further indicates that responsive feeding is a multidimensional and culturally embedded concept. Feeding practices are strongly influenced by family values, cultural norms, traditional beliefs, caregiving structures, and socioeconomic conditions. Qualitative studies among migrant families and culturally diverse communities have shown that caregivers interpret children's feeding cues and mealtime practices differently according to cultural expectations and parenting beliefs (Jawad et al., 2024; Marshall et al., 2021). In some cultures, practices such as encouraging children to finish meals, feeding according to strict schedules, or involving grandparents in feeding decisions are considered appropriate caregiving behaviors. Consequently, responsive feeding cannot be universally implemented without considering the cultural context in which feeding behaviors occur (Athavale et al., 2020; Widiastuti & Susanto, 2025).

Within nursing practice, particularly pediatric, family, and community nursing, culturally based responsive feeding has important implications for health promotion and malnutrition prevention. Nurses play significant roles not only as nutrition educators but also as facilitators of behavioural change and family-centered caregiving support. However, inconsistent conceptualization of responsive feeding may limit the effectiveness of nursing assessment, counselling, and intervention

strategies. Without a clear conceptual understanding, nursing interventions may focus primarily on food quantity and dietary recommendations while overlooking emotional interaction, caregiver responsiveness, and sociocultural influences during feeding (Perez-Escamilla et al., 2021; Killion et al., 2024).

Therefore, a concept analysis of culturally based responsive feeding is needed to clarify the meaning and defining characteristics of the concept. Concept analysis may help identify the essential attributes, antecedents, consequences, and empirical referents of responsive feeding within diverse cultural contexts. Clarifying the concept is important for strengthening theoretical understanding, improving consistency in nursing practice, and supporting the development of culturally sensitive feeding interventions and observational assessment instruments (Walker & Avant, 2019). Ultimately, a clearer conceptual foundation for culturally based responsive feeding may contribute to better nursing care, healthier feeding experiences, and improved nutritional outcomes for young children (Killion et al., 2024; Widiastuti & Susanto, 2025).

RESULT AND DISCUSSION

Concept Analysis of Culturally Based Responsive Feeding

A concept analysis approach was applied to examine the concept of culturally based *responsive feeding* within nursing, child health, and family caregiving contexts. Concepts are essential in nursing science because they help clarify meanings, organize knowledge, guide clinical practice, and support the development of theory and research. Concept analysis enables researchers to identify the defining characteristics of a concept and distinguish it from related concepts used across disciplines. In the context of child nutrition and caregiving, concept analysis is important to clarify the meaning of *responsive feeding*, which is often interpreted and operationalized differently in research and practice settings (Perez-Escamilla et al., 2021).

This analysis aimed to provide a clearer understanding of culturally based *responsive feeding* by identifying its defining attributes, antecedents, consequences, and empirical referents. Since feeding practices are strongly influenced by family values, cultural norms, and caregiving experiences, analyzing the concept within sociocultural contexts is important for strengthening nursing interventions and family-centered care approaches. The analysis was conducted using Walker and Avant's concept analysis method (Walker & Avant, 2019), which provides a systematic framework for exploring and refining nursing concepts.

Selecting the Concept

The concept of culturally based *responsive feeding* was selected because of its strong relevance to child, family, and community nursing. According to Walker and Avant (2019), concept selection is based on the importance of the concept for the development of nursing knowledge and practice. In this analysis, the concept of *responsive feeding* was examined to clarify its meaning and application within the sociocultural context of family caregiving.

Unlike feeding approaches that mainly focus on nutritional adequacy, *responsive feeding* emphasizes reciprocal interaction between caregivers and children during mealtimes. The concept includes sensitivity to children's hunger and satiety cues, emotional support, non-coercive approaches, and support for child autonomy (Perez-Escamilla et al., 2021). Responsive feeding practices also contribute to healthy eating behaviors, self-regulation, and the prevention of stunting in early childhood (Killion et al., 2024; World Health Organization, 2023).

This concept was specifically explored from a cultural perspective because feeding practices are influenced by family values, cultural norms, and caregiving experiences. Studies have shown that caregivers from different cultural backgrounds interpret children's feeding cues and feeding

practices differently (Jawad et al., 2024; Marshall et al., 2021). Therefore, analyzing culturally based *responsive feeding* is important to support culturally sensitive and family-centered nursing practice.

Determining All Uses of the Concept

An integrative literature review was conducted to explore how the concept of culturally based *responsive feeding* has been defined and applied across different disciplines. Relevant literature was retrieved from electronic databases including Scopus, PubMed, ScienceDirect, ProQuest, and Google Scholar. The search focused on publications related to *responsive feeding*, *responsive caregiving*, feeding interaction, cultural feeding practices, and child nutrition among children aged 6–24 months.

In accordance with Walker and Avant's concept analysis framework (Walker & Avant, 2019), the review was not restricted to nursing literature alone but also included studies from nutrition, public health, psychology, pediatrics, and early childhood development. Keywords used in the search process included "responsive feeding," "responsive caregiving," "feeding interaction," "culture," "caregiver," "child feeding," and "stunting prevention."

The literature review demonstrated that the concept of *responsive feeding* has been used in various contexts and perspectives. Existing studies describe responsive feeding as a reciprocal interaction between caregivers and children that involves recognizing and responding appropriately to children's hunger and satiety cues, supporting emotional interaction during meals, and promoting children's autonomy in eating. Several studies also emphasized the influence of sociocultural values, family beliefs, and caregiving traditions on feeding practices. Therefore, the concept was identified through definitions, theoretical explanations, observational studies, and culturally related feeding practices reported in previous research.

Determining the Defining Attributes

Walker and Avant stated that defining attributes are characteristics that appear repeatedly in the literature and distinguish a concept from other related concepts (Walker & Avant, 2019). In this stage, the literature related to culturally based *responsive feeding* was reviewed to identify the most frequently occurring characteristics across definitions, theoretical perspectives, and empirical studies. Similar concepts and terms were grouped into thematic clusters, and the defining attributes representing the core meaning of the concept were identified. Based on the literature review, six defining attributes of culturally based *responsive feeding* were identified: caregiver sensitivity to child cues, warm reciprocal interaction, non-coercive and supportive feeding, support for child autonomy and self-regulation, cultural sensitivity and family adaptation, and orientation towards the feeding process and eating experience.

Caregiver Sensitivity to Child Cues

Caregiver sensitivity refers to the ability of caregivers to recognize, interpret, and respond appropriately to children's hunger, satiety, interest, and feeding cues during mealtimes. In responsive feeding, caregivers pay attention to verbal and non-verbal signals shown by children and adjust feeding behaviors according to the child's developmental needs and responses (Perez-Escamilla et al., 2021). Sensitive responsiveness is considered important because it supports healthy eating patterns, emotional security, and children's self-regulation of food intake (Killion et al., 2024).

Warm Reciprocal Interaction

Warm reciprocal interaction refers to positive emotional engagement between caregivers and children during feeding activities. This interaction includes eye contact, verbal encouragement, affectionate communication, emotional responsiveness, and supportive caregiver behavior throughout mealtimes. Responsive feeding emphasizes feeding as a relational process that strengthens emotional bonding and promotes positive social interaction between caregivers and children (World Health Organization, 2023; UNICEF, 2020). Positive feeding interaction is also associated with children's emotional wellbeing and healthy developmental outcomes.

Non-Coercive and Supportive Feeding

Non-coercive feeding refers to feeding practices that avoid pressure, force, threats, punishment, or controlling behaviors during meals. Instead, caregivers provide encouragement, patience, and supportive guidance while respecting children's appetite and readiness to eat. Studies have shown that coercive feeding practices may negatively affect children's eating behavior and interfere with internal hunger and satiety regulation (Black et al., 2022; Jawad et al., 2024). Therefore, supportive and non-coercive feeding is considered a key attribute of responsive feeding.

Support for Child Autonomy and Self-Regulation

Support for autonomy refers to providing opportunities for children to actively participate in feeding according to their developmental abilities. This includes allowing children to self-feed, determine eating pace, explore foods independently, and stop eating when full. Responsive feeding encourages the development of children's self-regulation and independent eating skills through caregiver support rather than control (Whitfield et al., 2019; Perez-Escamilla et al., 2021). Supporting autonomy is important for promoting healthy eating behaviors and long-term dietary self-regulation.

Cultural Sensitivity and Family Adaptation

Cultural sensitivity refers to caregivers' ability to adapt feeding practices according to family values, cultural beliefs, traditions, and social norms. Feeding practices are shaped by sociocultural contexts, including family roles, food traditions, religious beliefs, and caregiving structures. Studies have demonstrated that caregivers from different cultural backgrounds may interpret children's feeding behaviors differently and apply culturally specific feeding practices during mealtimes (Marshall et al., 2021; Athavale et al., 2020). Therefore, culturally responsive adaptation is considered an essential attribute of culturally based responsive feeding.

Orientation Towards the Feeding Process and Eating Experience

This attribute emphasizes that responsive feeding focuses not only on the quantity of food consumed but also on the quality of the feeding experience. A positive feeding experience involves calm mealtime environments, positive communication, emotional comfort, and enjoyable interaction during meals. Responsive feeding views eating as a meaningful developmental and relational experience that supports children's emotional wellbeing, social development, and healthy eating habits (World Health Organization, 2023; Killion et al., 2024).

Table 1.
Definitions of Culturally Based Responsive Feeding Concepts

Number	Source	Title	Field	Use of Meaning/Concept
1	Aboud et al. (2008)	Community-Based Responsive Feeding Trial	Maternal & Child Nutrition	Responsive Feeding was used as a community-based behavioral intervention to improve feeding practices, emphasizing responses to child cues and managing food refusal without coercion.
2	Black & Aboud (2011)	Responsive Feeding within Responsive Parenting	Parenting Theory / Nutrition	Responsive Feeding was defined as caregivers recognizing and appropriately responding to children's hunger, satiety, and emotional cues, emphasizing reciprocity and the development of child self-regulation.
3	Bentley, Wasser, & Creed-Kanashiro (2011)	Responsive Feeding and Child Undernutrition in Low- and Middle-Income Countries	Public Health Nutrition	Responsive Feeding was positioned as a feeding behaviors/style influencing food acceptance and dietary intake, highlighting how, why, and when children are fed within behavioral and contextual dimensions.
4	Disantis et al. (2011)	The role of responsive feeding in overweight during infancy and toddlerhood: a systematic review	Systematic review (RF & overweight)	Responsive Feeding was described as a construct related to appetite regulation and overweight risk, emphasizing contingent caregiver responses to child cues as a behavioral mechanism.
5	Affleck & Pelto (2012)	Caregivers' Responses to Feeding Intervention	Health Anthropology	Responsive Feeding was understood as a practice that must negotiate cultural norms, family roles, and multi-caregiver structures.
6	WHO (2023)	Infant and young child feeding	WHO (guideline/fact sheet)	Responsive Feeding practices include directly feeding or assisting self-feeding, feeding slowly and patiently, encouraging but not forcing children to eat, and engaging children through talking and eye contact.
7	Vazir, et.al (2012)	Cluster-randomized trial on complementary and responsive feeding education to caregivers found improved dietary intake, growth and development among rural Indian toddlers	Maternal & Child Nutrition	Responsive Feeding was defined as a reciprocal caregiver–child interaction involving three stages: child signaling, caregiver response, and the child experiencing that response.
8	Flax et al. (2013)	Responsive feeding and child interest in food vary when rural Malawian children are fed lipid-based nutrient supplements or local complementary food	Maternal & Child Nutrition	Responsive Feeding was influenced by mealtime situations, where caregivers were more responsive with local foods and more controlling with certain foods..

Number	Source	Title	Field	Use of Meaning/Concept
9	Whitfield et al. (2019)	Exploration of Responsive Feeding During Breastfeeding Versus Bottle Feeding of Human Milk: A Within-Subject Pilot Study	Lactation and Feeding Behavior	Responsive Feeding was associated with breastfeeding as a learning process through which caregivers interpret infant cues, supporting infant growth and eating regulation.
10	UNICEF (2020)	Programming Guidance: Improving Young Children's Diets During the Complementary Feeding Period	Public Health Nut	Responsive Feeding was defined as feeding practices that respond to children's hunger and satiety cues while encouraging independent eating with full caregiver attention.
11	Pook, *et al* (2026)	Feeding frontlines: A descriptive qualitative study exploring the experiences and perceptions of caregivers feeding typically developing children	Maternal & child	Responsive Feeding was defined as caregiver behaviors that is sensitive to child cues, while also shaped by real-world household and service-related constraints influencing responsive practices.
12	Athavale, P., et al. (2020)	A qualitative assessment of barriers and facilitators to implementing recommended infant nutrition practices in India	Health Anthropology	Responsive Feeding was interpreted within local cultural contexts, including the influence of grandmothers, gadget distraction, and social pressure related to child feeding practices.
13	Pedroso et al. (2021)	Cross-cultural adaptation and validation of the Infant Feeding Style Questionnaire (IFSQ)	Cross-cultural Instrument Adaptation	Responsive Feeding style was described as reciprocal and cue-responsive feeding behaviors, highlighting the need for cross-cultural adaptation to maintain conceptual relevance across populations.
14	Black, M. M., et al. (2022)	Rethinking Responsive Feeding: Insights from Bangladesh	Nutrition / Culture	Responsive Feeding was understood as balancing proximal responsiveness (food intake) and distal responsiveness (emotional interaction), while supporting child autonomy and self-regulation.
15	Perez-Escamilla, R., Segura-Pérez, S., & Lott, M. (2021)	Responsive feeding in dietary guidelines for infants and young children	Child Nutrition Policy	Responsive Feeding was defined as a reciprocal caregiver–child practice that encourages children to eat independently and develop healthy food preferences through active feeding interaction.
16	Nurturing Care Thematic Brief (2023)	Nurturing Young Children Through Responsive Feeding	ECD / Nurturing Care	Responsive Feeding was defined as a practice that supports eating self-regulation and children's cognitive and emotional development through attentive

Number	Source	Title	Field	Use of Meaning/Concept
	– (evidence brief			and emotionally supportive feeding experiences.
17	Schwedler, T. R., *et al.* (2023**)**	A comparison of observed feeding practices to national responsive feeding recommendations in Sri Lanka	Child Nutrition Policy	Responsive Feeding was used as a normative standard, although actual feeding practices often deviated because of social pressure, beliefs that children should eat more, and concerns about child growth.
18	Jawad, *et al*, (2024)	Responsive feeding practices among Arabic and Mongolian-speaking migrant mothers in Australia: A qualitative study	Qualitative, Migration, and Culture	Responsive Feeding was portrayed as culturally variable across migrant groups, particularly in how caregivers interpret child cues, soothe children, and define culturally appropriate feeding practices.
19	Julianti, E., Elni, E., Azmi, R. A., & Zamziri, Z. (2025)	Mothers' Experiences in Implementing Responsive Feeding for Stunted Toddlers	Nursing	Responsive Feeding was interpreted through mothers' experiences, including children's eating independence, responses to food refusal, recognition of hunger–satiety cues, and emotional interaction.
20	Widiastuti, S. M., & Susanto, T. (2025)	Viewpoint Framework for Cultural Interventions in Stunting	Health / Policy	Responsive Feeding was positioned within a transcultural nursing framework as a culturally sensitive intervention for stunting management.
21	Prabowo, B., Wardani, R., Dian, A., & Suharto, S. (2025)	Determinants of Family Empowerment and Complementary Feeding Quality	Transcultural Nursing	Responsive Feeding was viewed as part of culturally based family empowerment, including father involvement and family mealtime practices.
22	Were (2018)	Complementary Feeding	Child Nutrition / Conceptual Overview	Responsive Feeding was described as an effective feeding approach in which caregivers respond to children's hunger and satiety cues while supporting child self-regulation.
23	Young et al. (2021)	Responsive Feeding & Dietary Diversity	Global Nutrition / Culture	Responsive Feeding was operationalized across cultures and associated with dietary quality rather than only food quantity.
24	Seminar, R., Fatimah, S., & Karim, F. (2024).	Culture of Complementary Feeding among Stunted Toddlers	Health Sciences	Feeding culture was described as shaping Responsive Feeding practices, where food taboos, beliefs, and complementary feeding timing influence stunting risk.
25	Meiyenti, S., et al. (2025)	Cultural Barriers in Stunting Prevention Policy Implementation	Health Social Sciences	Cultural and communication barriers were described as influencing stunting policy implementation, indicating that Responsive Feeding requires culturally and community-sensitive approaches.

Tabel 2

Attributes of Culturally Based Responsive Feeding

Keywords	Sources	Attributes
- Responses to children's hunger and satiety cues - Recognition of child cues - Contingent responses to children's feeding/emotional cues (behavioural mechanism) - Caregiver reading infant cues - Caregiver interpretation of child cues - Sensitive caregiver behaviors towards child cues - Appropriate feeding practices	Aboud *et.al* (2008); Black & Aboud (2011); Disantis *et al*. (2011) UNICEF (2020); Vazir, et.al (2012); Whitfield et al. (2019**);** Pook, *et al* (2026); Pedroso *et al.* (2021); Julianti, E., Elni, E., Azmi, R. A., & Zamziri, Z. (2025); Were (2018); Jawad, *et al,* (2024)	Caregiver sensitivity to child cues
- Reciprocal caregiver–child interaction - Talking and eye contact - Full attention during feeding - Reciprocal feeding practices - Balance between proximal responsiveness (intake) and distal responsiveness (emotion)	Black & Aboud (2011**);** Perez-Escamilla, R., Segura-Pérez, S., & Lott, M. (2021) : WHO (2023);UNICEF (2020); Pedroso *et al;* Black M. M., *et al*. (2022) ; Vazir et.al (2012)	Warm reciprocal interaction
- Responding to food refusal without coercion - Feeding slowly and patiently; encouraging but not forcing - Choosing appropriate soothing strategies for children - Responses to food refusal	Black & Aboud (2011**);** Perez-Escamilla, R., Segura-Pérez, S., & Lott, M. (2021) : WHO (2023);UNICEF (2020); Pedroso *et al;* Black M. M., *et al*. (2022) ; Vazir et.al (2012)	Non-coercive and supportive feeding approach
- Child self-regulation - Appetite regulation - Infant feeding regulation - Encouraging independent eating - Supporting autonomy and eating self-regulation - Eating self-regulation and children's cognitive-emotional development - Emotional interaction	Black & Aboud (2011**)** Disantis *et al*. (2011); Whitfield *et al*. (2019**);**UNICEF, (2020); Pérez-Escamilla *et al*. (2021); Black M. M., *et al*. (2022**);** Nurturing Care Thematic Brief (2023**)** – (evidence brief); Julianti, E., Elni, E., Azmi, R. A., & Zamziri, Z. (2025); Were (2018)	Support for child autonomy and self-regulation
- Negotiating cultural norms, family roles, and multi-caregiver structures - Local cultural contexts, including grandmother involvement, gadget distraction, and social pressure on child feeding practices- Beliefs that "children should eat a lot" and concerns about child growth - Adaptation of feeding practices according to cultural norms and values - Culturally sensitive interventions for stunting management - The role of family members/grandmothers/fathers - Responsiveness to local foods and more controlling practices toward certain foods - Father involvement and family mealtimes	Affleck & Pelto (2012) ; Pelto & Armar-Klemesu (2011); Jawad et al. (2024); Marshall et al. (2021);Flax *et.al*, (2013); Athavale,P,et al.(2020); Schwedler, T. R., *et al*. (2023**);** Widiastuti, S. M., & Susanto, T. (2025); Prabowo, B., Wardani, R., Dian, A., & Suwarto, S. (2025) **;** Young et al. (2021); Suminar, R., Fatimah, S., & Karim, F. (2024); Meiyenti, S., et al. (2025)	Cultural sensitivity and family adaptation

Keywords	Sources	Attributes
- Cross-cultural feeding practices associated with child dietary quality rather than only food quantity - Food taboos, beliefs, and timing of complementary feeding - Culturally and community-sensitive approaches		
- Focus on the feeding process (how, when, and why children are fed) - Focus on child dietary quality rather than only food quantity - Feeding as an attentive and meaningful experience	Bentley et al. (2011); Young et al. (2021); Nurturing Care Thematic Brief (2023)	Orientation towards the feeding process and eating experience

Model Case

Mrs. S, a mother of a 14-month-old boy, attended a nutrition counselling session at the community health center. During mealtime, she recognized her child's hunger cues and provided age-appropriate food while maintaining eye contact and speaking gently. When the child showed signs of fullness and refused food, Mrs. S stopped feeding without forcing and praised the child's effort to eat independently.

Throughout the meal, Mrs. S created a warm and positive feeding atmosphere by interacting with the child, encouraging self-feeding, and allowing the child to determine the eating pace. When the child became frustrated with certain foods, she calmly comforted the child and offered alternative foods without pressure. The feeding practices also reflected family and cultural eating habits commonly used at home.

The community nurse provided guidance and reinforcement regarding responsive feeding practices, helping Mrs. S understand the importance of responding to children's hunger and satiety cues while respecting family cultural values. This case reflects all defining attributes of culturally based *responsive feeding*, including caregiver sensitivity, warm reciprocal interaction, non-coercive feeding, support for child autonomy and self-regulation, cultural adaptation, and positive feeding experiences.

Borderline Case

Mrs. R, a mother of a 16-month-old girl, prepares age-appropriate food and responds when her child shows hunger cues. However, during mealtime, her attention is often distracted by her mobile phone, resulting in limited interaction and eye contact. When the child refuses food, Mrs. R sometimes continues feeding because she worries the child has not eaten enough. The child is also rarely allowed to eat independently.

This case demonstrates some attributes of culturally based *responsive feeding*, such as responding to hunger cues and providing suitable food. However, the practice does not fully reflect warm interaction, non-coercive feeding, and support for child autonomy and self-regulation.

Contrary Case

Mrs. T, a mother of a 15-month-old boy, strictly controls her child's mealtime schedule and portions without considering the child's hunger or satiety cues. During feeding, she frequently forces the child to eat, gives commands such as "finish your food," and continues feeding even when the child turns away or cries. The child is not allowed to eat independently, and mealtimes occur in a tense atmosphere with minimal interaction or emotional support.

This case does not reflect the defining attributes of culturally based *responsive feeding*. There is no caregiver sensitivity to child cues, warm reciprocal interaction, support for autonomy, or non-coercive feeding approach. Instead, the feeding practice is highly controlling and may negatively affect the child's eating behavior and caregiver–child relationship.

Antecedents

Antecedents are conditions that must exist before culturally based *responsive feeding* practices can occur. According to Walker and Avant (2019), antecedents explain the factors that facilitate or influence the emergence of a concept. Based on recent literature, *responsive feeding* is influenced by caregiver factors, family relationships, feeding environments, and sociocultural contexts.

At the individual level, caregiver knowledge regarding child development and the ability to recognize children's hunger and satiety cues are important prerequisites for responsive feeding practices. Caregiver emotional readiness, stress management, and previous caregiving experiences also affect the ability to provide warm and supportive feeding interactions (Killion et al., 2024; Perez-Escamilla et al., 2021).

At the relational level, positive caregiver–child relationships, supportive family communication, and a comfortable mealtime environment contribute to warm reciprocal feeding interactions. In contrast, family conflict, time pressure, and distractions during meals may hinder responsive feeding practices (Jawad et al., 2024; Marshall et al., 2021).

In addition, culturally based responsive feeding is influenced by family values, cultural norms, local feeding traditions, and social support within families and communities. Culturally sensitive health services and caregiver education are important in supporting families to implement feeding practices that are appropriate to their sociocultural context (Athavale et al., 2020; Widiastuti & Susanto, 2025).

Consequences

Consequences are the outcomes or effects resulting from the implementation of *responsive feeding*. In the context of culturally based *responsive feeding*, consequences are reflected in children's feeding experiences, the quality of caregiver–child interactions, and children's health and nutritional development.

At the child level, responsive feeding practices support the development of eating self-regulation, the ability to recognize hunger and satiety cues, and healthier eating behaviors. Children are also more likely to have positive feeding experiences, better food acceptance, and a lower risk of feeding difficulties (Perez-Escamilla et al., 2021; Killion et al., 2024).

In the long term, *responsive feeding* contributes to the development of healthy eating habits, better psychosocial development, and a reduced risk of malnutrition and obesity among children (Black & Aboud, 2011; Vaughn et al., 2016).

At the caregiver and family level, *responsive feeding* improves caregiver confidence, strengthens caregiver–child emotional relationships, and creates a warmer and more supportive mealtime environment. In addition, adapting feeding practices to family cultural values may improve the acceptance and sustainability of healthy caregiving practices within families and communities (Athavale et al., 2020; Jawad et al., 2024).

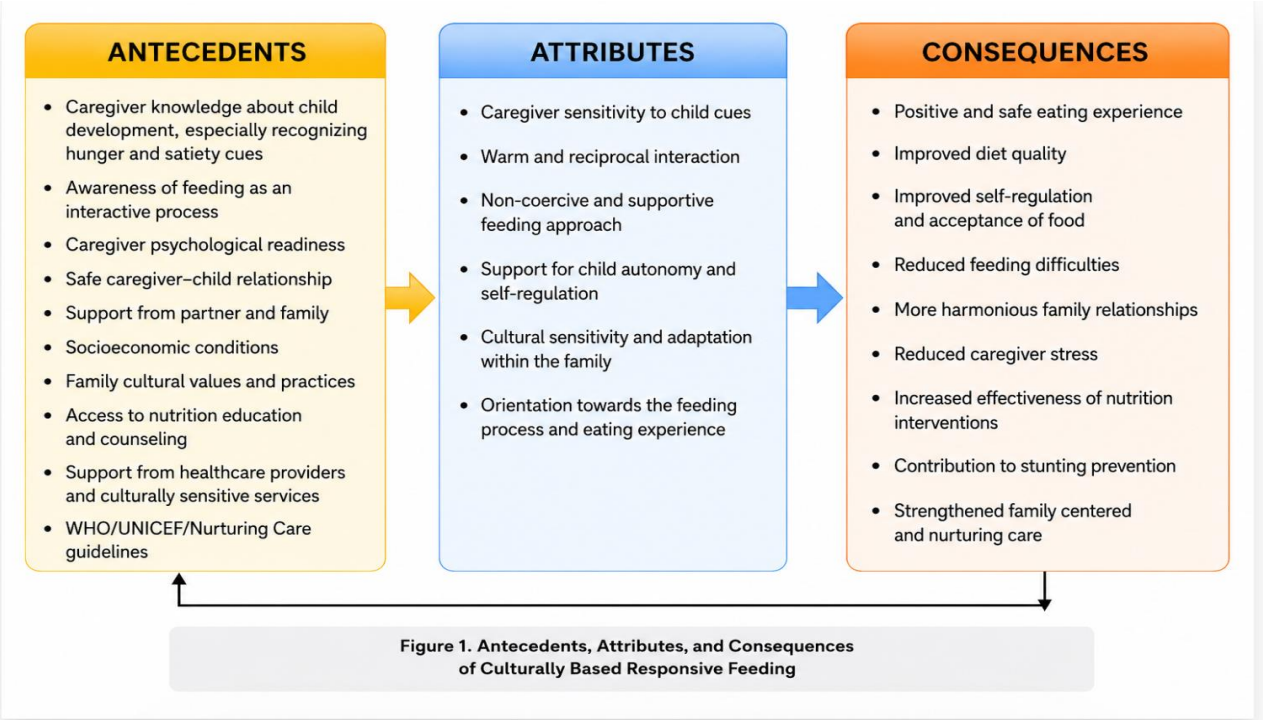

Figure 1. Antecedents, Attributes, and Consequences of Culturally Based Responsive Feeding

Empirical Referents

The selection of *empirical referents* represents the final stage of concept analysis used to identify how the attributes of a concept can be observed in real practice. Empirical referents are not intended to measure the concept directly, but rather to identify observable indicators related to the defining attributes of the concept (Walker & Avant, 2019). In culturally based *responsive feeding* among children aged 6–24 months, the attributes of the concept are reflected in studies and instruments related to responsive feeding practices, caregiver–child interaction, and responsive caregiving. The attribute of caregiver sensitivity to child cues is reflected in studies assessing caregivers' ability to recognize hunger, satiety, and food refusal cues, as well as their responsiveness during feeding interactions (Perez-Escamilla et al., 2021; Killion et al., 2024). Warm reciprocal interaction is identified through positive communication, eye contact, emotional support, and responsive interaction during mealtimes (WHO, 2023; UNICEF, 2020).

Non-coercive and supportive feeding is reflected in feeding practices that avoid pressure, force, or punishment during meals, while supporting children according to their developmental readiness

(Jawad et al., 2024). Support for child autonomy and self-regulation can be observed through opportunities for self-feeding, regulating eating pace, and recognizing hunger–satiety signals independently (Whitfield et al., 2019; UNICEF, 2020).

Cultural sensitivity and family adaptation are reflected in feeding practices influenced by family values, local food traditions, and the involvement of family members in child feeding (Marshall et al., 2021; Widiastuti & Susanto, 2025). Meanwhile, orientation towards the feeding process and eating experience is identified through positive mealtime environments, enjoyable feeding interaction, and nurturing care approaches that support children's emotional and social development (WHO, 2023; Black et al., 2022).

Overall, the attributes of culturally based *responsive feeding* can be identified in concepts and instruments related to *responsive feeding*, *responsive caregiving*, feeding interaction, and self-regulation eating. However, there is still limited observational instrumentation that comprehensively integrates these attributes within the Indonesian cultural context for children aged 6–24 months. Therefore, the development of a culturally based responsive feeding observational instrument remains important for providing more contextual and comprehensive assessment.

Implications for Nursing Knowledge and Practice

The concept of culturally based *responsive feeding* broadens pediatric nursing knowledge from an outcome-focused approach toward a relational and process-oriented understanding of child feeding. The defining attributes of *responsive feeding* highlight the importance of caregiver sensitivity, warm interaction, non-coercive feeding, support for child autonomy, and cultural sensitivity during mealtimes. In nursing practice, this concept encourages nurses to conduct more comprehensive assessments of feeding interactions, not only focusing on food intake and nutritional status. Nurses also play an important role in educating and guiding caregivers to apply responsive and culturally sensitive feeding practices that support healthy child growth, development, and stunting prevention.

Conclusion

Culturally based *responsive feeding* is a multidimensional concept that emphasizes caregiver sensitivity to children's hunger and satiety cues, warm reciprocal interaction, non-coercive and supportive feeding approaches, support for child autonomy and self-regulation, cultural adaptation within family feeding practices, and orientation towards positive mealtime experiences. The concept integrates nutritional, emotional, behavioural, and sociocultural dimensions in child feeding practices.

The findings of this concept analysis demonstrate that *responsive feeding* plays an important role in promoting healthy eating behaviors, supporting child growth and development, strengthening caregiver–child relationships, and contributing to stunting prevention in early childhood. The implementation of culturally sensitive responsive feeding also supports more effective and acceptable nursing interventions within family and community settings.

In nursing practice, understanding the defining attributes, antecedents, consequences, and empirical referents of culturally based *responsive feeding* provides a stronger conceptual foundation for assessment, education, and intervention.

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REFERENCES

Aboud, F. E., Moore, A. C., & Akhter, S. (2008). Effectiveness of a community-based responsive feeding programmed in rural Bangladesh: A cluster randomized field trial. *Maternal & Child Nutrition*. Doi: 10.1111/j.1740-8709.2008.00146.x

Athavale, P., Hoeft, K., Dalal, R. M., Bondre, A., Mukherjee, P., & Sokal-Gutierrez, K. (2020). A qualitative assessment of barriers and facilitators to implementing recommended infant nutrition practices in Mumbai, India. *Journal of Health, Population and Nutrition, 39*, Article 24. https://doi.org/10.1186/s41043-020-00215-

Affleck, W., & Pelto, G. (2012). Caregivers' responses to an intervention to improve young child feeding behaviors in rural Bangladesh: A mixed method study of the facilitators and barriers to change. *Social Science & Medicine, 75*(4), 651–658. https://doi.org/10.1016/j.socscimed.2012.03.030

Behbehani, F**.,** et al. (2025). *Parent-reported feeding practices associated with children's observed willingness to try new foods: Implications for responsive feeding assessment. Maternal & Child Nutrition***.** Advance online publication. https://doi.org/10.1111/mcn.13760

Black, M. M., & Aboud, F. E. (2011). Responsive feeding is embedded in a theoretical framework of responsive parenting. *The Journal of Nutrition, 141*(3), 490–494. https://doi.org/10.3945/jn.110.129973

Black, M. M., Tofail, F., Hodges, E. A., Bann, C. M., Hamadani, J. D., Aktar, S., & Lutter, C. K. (2022). Rethinking responsive feeding: Insights from Bangladesh. *Nutrients, 14*(15), 3156. https://doi.org/10.3390/nu14153156

Bentley, M. E., Wasser, H. M., & Creed-Kanashiro, H. M. (2011). *Responsive feeding and child undernutrition in low- and middle-income countries*. *Journal of Nutrition*, 141(3), 502–507. https://doi.org/10.3945/jn.110.130005

Cheney, A. M., Ramirez, A., Vázquez, E., Tovar, A., Mujuru, P., Ortiz, G., Zimmer, A., & Carrillo, D. (2025). *Adapting an evidence-based infant feeding and nutrition program to promote healthy growth and development in Latinx families of low income*. *Journal of Nutrition Education and Behavior, 57*(7), 572–587. https://doi.org/10.1016/j.jneb.2025.02.00

Disantis, K. I., Hodges, E. A., Johnson, S. L., & Fisher, J. O. (2011). *The role of responsive feeding in overweight during infancy and toddlerhood: A systematic review*. *Journal of Nutrition*, 141(3), 508–516. https://doi.org/10.3945/jn.110.130047

Flax, V. L., Bentley, M. E., Chasela, C. S., Kayira, D., Hudgens, M. G., Knight, R. J., & Jamieson, D. J. (2013). *Responsive feeding and child interest in food vary when rural Malawian children are fed lipid-based nutrient supplements*. *Maternal & Child Nutrition***, 9**(3), 344–357. https://doi.org/10.1111/mcn.12003

Julianti, E., Elni, E., Azmy, R. A., & Zamziri, Z. (2025). Mothers' experiences in implementing responsive feeding for stunted toddlers: A qualitative phenomenological study. *Journal of Applied Nursing and Health, 7*(3), 418–431. https://doi.org/10.55018/janh.v7i3.387

Jawad, M., Renzaho, A. M. N., & Gallegos, D. (2024). *Responsive feeding practices among Arabic- and Mongolian-speaking migrant mothers in Australia: A qualitative study*. *Maternal & Child Nutrition***, 20**(1), e13663. https://doi.org/10.1111/mcn.13663

Killion, K. E**.,** et al. (2024). *Responsive feeding practices to promote healthy diets in early childhood: Limitations of caregiver self-report. Nutrients*, 16(4), 550. https://doi.org/10.3390/nu16040550

Liu, Y., Yu, G., Li, Z., Kong, Y., Yang, R., Yin, C., & Sun, X. (2023). A responsive feeding questionnaire based on self-determination theory for caregivers of Chinese toddlers. *Journal of Nutrition Education and Behavior, 55*(8), 722–731. https://doi.org/10.1016/j.jneb.2023.02.011

Marshall, S., et al. (2021). *Navigating infant feeding supports after migration:* Perspectives of Arabic and Chinese mothers and health professionals in Australia. *Woman and bird*, 34 (4), e346-e356. https://pubmed.ncbi.nlm.nih.gov/36853761/

Meiyenti, S., Effendi, N., Djafri, D., & Devianto, D. (2025). Cultural barriers in stunting prevention policy implementation: An ethnographic study in West Sumatra, Indonesia. *Cogent Social Sciences*. https://doi.org/10.1080/23311886.2025.2586379

Nurturing Care for Early Childhood Development**.** (2023). *Nurturing young children through responsive feeding* (Thematic Brief). Nurturing Care for Early Childhood Development. https://nurturing-care.org/wp-content/uploads/2023/05/NRF.pdf

Perez-Escamilla, R., Jimenez, E. Y., & Dewey, K. G. (2021). *Responsive feeding recommendations: Harmonizing integration into dietary guidelines for infants and young children*. *Current Developments in Nutrition, 5*(6), nzab076. https://doi.org/10.1093/cdn/nzab076

Pelto, G. H., Levitt, E., & Thairu, L. (2016). *Improving feeding practices: Current patterns, common constraints, and the design of interventions*. *Food and Nutrition Bulletin***,** 37(3_suppl), S27–S58. https://doi.org/10.1177/0379572116655321

Prabowo, B., Wardani, R., Dian, A., & Suwarto, S. (2025). Determinants of family empowerment and complementary feeding quality: Evidence from a transcultural care framework. *Healthcare, 13*(17), 2237. https://doi.org/10.3390/healthcare13172237

Pook, J., Blake, C. E., Bentley, M. E., & Flax, V. L. (2023). *Feeding frontlines: A descriptive qualitative study exploring the experiences and perceptions of caregivers feeding typically developing children*. *Maternal & Child Nutrition*, **19**(3), e13529. https://doi.org/10.1111/mcn.13529

Robert, R. C., et al. (2021). Responsive feeding is associated with minimum dietary diversity in rural areas of Peru, Nicaragua, and Indonesia. *Current Developments in Nutrition, 5*(Supplement_2), 430–431. https://doi.org/10.1093/cdn/nzab029_062

Rodgers, B. L. (1989). *Concept analysis: An evolutionary view*. Research in Nursing & Health. https://pubmed.ncbi.nlm.nih.gov/2661622/

Schwendler, T. R., Rowel, D., Abdulloeva, S., Jayawickrama, H., de Silva, C., Romano, O., Senarath, U., & Kodish, S. R. (2023). A comparison of observed feeding practices of infants and young children aged 6–23 months to national responsive feeding recommendations in Sri Lanka. *Maternal & Child Nutrition, 19*(3), e13522. https://doi.org/10.1111/mcn.13522

Suminar, R., Fatimah, S., & Karim, F. (2024). The culture of complementary feeding practice among stunting in toddlers aged under 24 months. *Interdisciplinary International Journal of Conservation and Culture, 2*(1), 21–30. https://doi.org/10.25157/iijcc.v2i1.3875

UNICEF (2020) – *Improving Young Children's Diets during the Complementary Feeding Period* (Complementary Feeding Guidance / Programming Guidance) https://www.unicef.org/media/93981/file/Complementary-Feeding-Guidance-2020.pdf

Vazir, S., Engle, P., Balakrishna, N., Griffiths, P. L., Johnson, S. L., Creed-Kanashiro, H., Fernandez Rao, S., Shroff, M. R., & Bentley, M. E. (2012). *Cluster-randomized trial on complementary and responsive feeding education to caregivers found improved dietary intake, growth, and development among infants and young children in rural India*. *Maternal & Child Nutrition*, **8**(1), 99–117. https://doi.org/10.1111/j.1740-8709.2011.00348

Young, S. L., Miller, J. D., Frongillo, E. A., & Ruel, M. T. (2021*). Responsive feeding practices are associated with dietary diversity among children in low- and middle-income countries*. *Maternal & Child Nutrition*, **17**(2), e13112. https://doi.org/10.1111/mcn.13112

World Health Organization, & United Nations Children's Fund (UNICEF). (2021). *Infant and young child feeding counselling: An integrated course* (2nd ed.). World Health Organization. https://www.who.int/publications/i/item/9789240032828

Walker, L. O., & Avant, K. C. (2014). Strategies for theory construction in nursing (5th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall

——— (2019). *Strategies for Theory Construction in Nursing*.

World Health Organization. (2023). *Infant and young child feeding*. https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding

Whitfield, K. C., Ventura, A. K., & Birch, L. L. (2019). *Exploration of responsive feeding during breastfeeding versus bottle feeding of human milk: A within-subject pilot study*. *Journal of Human Lactation*, **35**(2), 347–356. https://doi.org/10.1177/0890334419830992

Wiastuti, S. M., & Susanto, T. (2025). Framework for specific and sensitive of cultural interventions for management stunting children: A viewpoint. *Journal of Research & Health, 15*(6), 533–536. https://doi.org/10.32598/JRH.15.6.2647.1