Introduction

Talk With Me Baby: A Framework for Understanding

All About Language Nutrition
   11  Lesson 1: The Science Behind Language Nutrition
   19  Lesson 2: Becoming a Talk With Me Baby Coach
   25  Lesson 3: Language Nutrition for All Families
   38  Curriculum Summary

Additional Resources

Acknowledgements

Appendix A

References
Dear Colleagues,

As the leadership team for Talk With Me Baby (TWMB), we are pleased to present this continuing education program for nurses on language nutrition, which is defined as the use of language, beginning at birth, that is sufficiently rich in engagement, quality, quantity and context that it nourishes the child socially, neurologically and linguistically. Language nutrition is critical for a child’s brain development. Extensive research has documented the importance of early language exposure to foster literacy, as well as health and economic outcomes. When parents gain insight into how their actions and behaviors affect their child’s life, parents take an active role to positively influence their child’s outcomes. The newborn baby’s brain is designed to communicate with the world around it and every interaction the baby has with his or her parents, caregivers and teachers stimulates the language ability stored in each baby’s brain circuitry.

As a nurse, you are a member of one of the most trusted professions in the United States and play an integral role in helping families and their new babies become acquainted and begin their lives together. You show parents how to swaddle the newest member of the family and demonstrate safe sleep practices. You also are the ones that demonstrate how to diaper and feed their baby. That is why nurses are the cornerstone of the TWMB model and we invite nurses to become TWMB coaches.

When language experiences are frequent during the first three years of life, language and vocabulary develop in a more robust way, providing a strong foundation for literacy when the child enters school. Through this curriculum, you and your colleagues can help families learn skills in promoting increased language nutrition in their child’s life and setting their child on a path to language, literacy and academic success.

TWMB is a partnership among Marcus Autism Center at Children’s Healthcare of Atlanta, Emory University Nell Hodgson Woodruff School of Nursing, Atlanta Speech School and Get Georgia Reading Campaign for Grade Level Reading, the Georgia Department of Public Health and the Georgia Department of Education. The TWMB partnership has designed this continuing education unit to provide vital information on the science behind language nutrition, cultivate the skills you will need to model and effectively communicate language nutrition messages and practices to families, and support parents as their child’s first and best teacher.

Thank you for all that you do to promote infant and child development. By partnering with our families, we can change the trajectory of these children’s lives.

Sincerely,

Talk With Me Baby
Leadership Team
LEADERSHIP TEAM

Jennifer L. Stapel-Wax, Psy.D
Director,
Infant and Toddler Clinical Research Operations Marcus Autism Center
Associate Professor,
Emory University School of Medicine

Ashley E. Darcy Mahoney, PhD, NNP-BC
Assistant Professor,
Emory University School of Nursing

Brenda Fitzgerald, M.D.
Commissioner,
Georgia Department of Public Health

Kenny Moore, Ph.D.
Director,
Division of State Schools
Georgia Department of Education

Arianne Weldon, MPH
Director,
Get Georgia Reading—Campaign for Grade Level Reading

Comer Yates, J.D.
Executive Director,
Atlanta Speech School
Talk With Me Baby (TWMB) is one of four nationally-recognized initiatives designed to increase language nutrition, including the Thirty Million Word Initiative, Providence Talks and Too Small to Fail: Talking is Teaching campaign. Furthermore, President Barack Obama announced that language acquisition is a top priority of the Obama administration’s Early Learning Initiative. TWMB is the first strategy to use nurses and the healthcare workforce in bridging the word gap.

The continuing education program for Talk With Me Baby: A Curriculum For Nurses is designed to (1) inform obstetric, neonatal and pediatric nurses (including nurse practitioners and midwives) of the importance of language for a child’s health and educational outcomes, and (2) to invite nurses to become TWMB coaches to help families increase the amount of language used in their interactions with their babies.

TWMB is designed to build families’ capacity to talk with their babies early and often so that babies can learn to use language to reach their full potential in school and in life. The curriculum includes three distinct lessons:

1. **Information and evidence on language acquisition and nutrition, and explanations of the types of interactions you will learn as a TWMB coach.**

2. **Introduction to becoming a conversational partner with babies and language elements and strategies that can be employed when engaging with infants.**

3. **Strategies to transfer capacity to families to build their skills as conversational partners.**

While the curriculum is designed for nurses, all healthcare professionals have the opportunity to use this curriculum and deliver the messages about language nutrition to families. For more information, contact the TWMB team at info@talkwithmebaby.org.
Continuing Education

To receive continuing education (CE) credits, nurses must complete 1) the online pre-test, 2) the content within the three lessons, 3) an online post-test and 4) program evaluation. Nurses must complete the online post-test and program evaluation and achieve a score of 80 percent, or 20 of the 25 questions, to receive CE credit.

- **Pre-test:** The pre-test is designed to measure baseline knowledge about early language exposure and help identify content areas that require additional focus. The pre-test can be found at the beginning of this manual as a reference; however, completion of the online version of this test is required to receive continuing education credits.

- **Educational training:** To receive the full continuing education credit, nurses must complete all three lessons included in this curriculum manual.

- **Post-test:** The post-test is designed to evaluate the achievement of learning objectives listed above and can be found at the end of this manual for reference. To earn CE credit, nurses must complete the post-test online and achieve a passing score of 80%.

- **Program evaluation:** The program evaluation is intended to help refine the CE program. Completion of this evaluation form is required for CE credit. The program evaluation form can be found at the end of the manual, but should be completed online.

The online pre- and post-test and program evaluation can be found at talkwithmebaby.org/nurses.

This continuing nursing education activity has been approved by the Georgia Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation. The Talk With Me Baby CE program provides one (1) contact hour of continuing education credit for this web-based training. Continuing education (CE) credit for the training will be granted until October 31, 2016. For any questions about the CE program, email info@talkwithmebaby.org.

Learning Objectives

Upon completion of this continuing education unit, nurses, as TWMB coaches, will:

1. Build families’ capacity to practice language nutrition with their babies
2. Help families recognize the critical role they play in their baby’s development and future school achievement
3. Engage babies in direct conversation in every encounter, to model language nutrition practices to all families
4. Engage families in language nutrition practices from a strength-based perspective and in culturally competent ways
5. Emphasize the importance of talking to their babies in the home language to dual language families.
The children of Georgia—and the nation—are in the grips of an epidemic of illiteracy. In Georgia alone, only 34 percent of fourth graders are proficient readers. Ending this epidemic is the number 1 education priority of Georgia Governor Nathan Deal, the Georgia Chamber of Commerce and dozens of other public and private organizations throughout the state. This collaborative effort has united foundations, nonprofit partners, business leaders, government agencies and communities to secure a strong foundation for all children, so they may succeed in school, graduate from high school and be equipped with the skills to achieve their dreams, regardless of where their dreams take them. These leaders have set the expectation that, by the year 2020, every child from birth to age eight will be on a path to read proficiently by the end of third grade—an important predictor of whether a child will ultimately graduate from high school.

In Georgia alone, ONLY 34 PERCENT of fourth graders are proficient readers.

The 2020 commitment to Georgia’s children can only be met by recognizing that young children's language and literacy development begins well before their arrival in kindergarten and depends on the verbal interactions that caregivers and families have with their children. This early exposure to language and communication prepares a child’s brain for reading proficiency and, ultimately, for success in school and in life. Research indicates that many families do not engage in such robust language transactions with their child—for a variety of reasons. Families may not know the importance of talking with their baby to enhance brain development, or their own lack of education may hinder their efforts. When a generation has been deprived of a quality education, families are at critical risk for being caught in a cycle of poverty and educational disparity.

Brenda Fitzgerald, M.D., Commissioner of the Georgia Department of Public Health and State Health Officer, has identified the lack of access to language among Georgia’s young children as a public health imperative. Research points to significant associations between formal educational attainment and individual health outcomes and risks such as mortality, smoking, drug abuse, accidents and development of chronic disease. The vast majority of these reports conclude that the higher the level of education attained, the more likely individuals are to be healthier and live longer and that “education has an enduring, consistent and growing effect on health.”

High school graduation and health are inextricably linked, even when taking other socioeconomic factors into account.

High school graduates have a higher probability of practicing health-promoting behaviors such as exercise, medical treatments adherence, annual checkups and recommended screenings.

High school graduates report incomes 75-100 percent higher than those who do not graduate.

Individuals who do not complete high school are significantly more likely than high school graduates to be incarcerated, become teen parents, be involved in violence as either an aggressor or a victim, be unemployed and be recipients of Medicaid and benefits through the Temporary Assistance to Needy Families (TANF) program.
*Talk With Me Baby (TWMB)* is an innovative, universally designed campaign to increase early exposure to language. Initially, *TWMB* leverages two touchpoints in Georgia’s communities that support families with young children—the staff of our Women, Infants and Children (WIC) nutrition program and the nurses who play a vital role in the lives of women and infants. In addition, *TWMB* will encompass public action tools, resources and accountability measures across a variety of organizations and groups to increase the quality and quantity of language exchanges between children and the significant adults in their lives.

**Alphabetical Glossary of Terms**

**Conversational Partner:** A person who participates in a conversation. In the context of *TWMB*, this involves an adult engaged with a baby in a language enriching, conversational relationship. This relationship consists of “serve-and-return” language transactions that include facial expressions, eye contact and the use of parentese (see below), all while providing a variety of developmental language skills. While typically initiated by the adult, often, babies are the first to engage a partner.

**Educational Interactions:** Key instructional opportunities the *TWMB* coach shares with families and caregivers, intended to increase understanding of their role and build their confidence in practicing language nutrition. As shown in [Figure 1](#), the *TWMB* coach engages in educational interactions to transfer capacity of language nutrition to a baby’s family by sharing knowledge, strategies and skills with families and caregivers.

**Figure 1:** Nurses engage in *educational interactions* with the baby’s family. The nurse models *language transactions* with the baby by talking with the baby directly, and facilitates similar language transactions between the baby and family.
**Home Language:** The language that is most commonly spoken by the members of the family for their everyday interactions at home.

**Language Transactions:** The conversations that take place directly between a baby and adult (nurse or parent) as shown in *Figure 1*. The transactional nature of the conversation indicates that both parties are equally engaged in a shared communicative moment, even if the baby is too young to verbally respond.

**Language Nutrition:** As defined by Arianne Weldon, MPH, Director of the Get Georgia Reading Campaign, language nutrition is the use of language that is sufficiently rich in engagement, quality, quantity and context that it nourishes the child neurologically, socially, and linguistically.

**Parentese:** Parentese, or child-directed speech, is a unique approach that adults often use when talking with infants. It typically uses actual words and sentences, and is meaningful—as opposed to baby talk, which simply mimics sounds made by babies. It is characterized by features, such as:

- Short, simple and complete sentences, often repeated multiple times, with well-formed, elongated consonants and vowels.
- Melodic tone and higher pitch, which serves to get the baby’s attention. Certain words are stressed and intonation is varied by increasing pitch, intensity and/or length (e.g., “How are YOUUUU?”).
- Use of exaggerated gestures and facial expressions.

**Serve and Return:** Refers to the reciprocal or transactional nature of language that occurs between a caregiver and a baby. When the caregiver speaks, the baby will begin to respond with a signal that he or she is engaged in the language interaction. In the newborn, a signal may be difficult to observe; however, a gaze, a smile or a giggle soon will be evident and the serve and return of communication will begin.

**Social Communication:** The interactions that occur through eye contact, facial expressions, smiles, and gestures while babies’ receptive and expressive language skills develop. Social communication can be utilized in conjunction with verbal communication with an adult, and both babies and adults can initiate it.
This page was intentionally left blank to ensure new sections begin on a right-handed page.
Lesson 1: The Science Behind Language Nutrition

🌟 Early childhood represents a critical period for brain development that establishes the foundation for all later learning

Lesson 2: Becoming a Talk With Me Baby Coach

🌟 A proficient language nutrition nurse-coach is the cornerstone of the Talk With Me Baby model

Lesson 3: Language Nutrition for All Families

🌟 Talk With Me Baby is dynamic and developed in real time by a consistent following of defined steps
Key Points

- During the first three years of life, the brain undergoes its most dramatic development. When this early development is not nurtured, the brain's architecture is adversely affected and young children begin to fall behind.\textsuperscript{34, 35}

- Early language exposure is the single strongest predictor of third grade reading proficiency.\textsuperscript{13, 19, 36} Third grade marks a time when students shift from learning to read to reading to learn.\textsuperscript{7} Reading proficiently by the end of third grade is an important indicator of later academic achievement, likelihood to graduate high school and positive healthy and economic outcomes.\textsuperscript{7} The most effective action families can take to optimize outcomes for their child is to talk with their baby.

- Language nutrition is the use of language that is sufficiently rich in engagement, quality, quantity and context that it nourishes the child neurologically, socially and linguistically.

- Nurses can play a transformative role in children’s developmental/language outcomes by building parents’ capacity and supporting families in their efforts to engage with their babies in meaningful and rich language interactions, even before birth.

- By empowering families to talk with their babies and to recognize how critical their interactions are in their baby’s development, nurses can help increase the chances of positive outcomes for all children, thus reducing educational disparities and increasing young children’s school readiness.
This page was intentionally left blank to ensure new sections begin on a right-handed page.
**Early Language Exposure and Brain Development**

Early childhood represents a critical period for brain development that establishes the foundation for all later learning.\(^{34,35}\)

**Figure 2:** Synaptic formation in the developing brain. Synaptic formation for high cognitive functioning, language, and visual and auditory sensing is most robust from birth to five years. Growth in synapses responsible for language/speech and higher cognitive function peak around 6 months and 1 year, respectively.


- Children’s brains grow rapidly and form more neural connections before birth and in the first three years of life than at any other time period in their lives. Neural connections formed during this time provide the foundation for all later learning.\(^{35}\) (Figure 2)

- The early years make early childhood a “period of great vulnerability, but also a period of great opportunity.” While the brain is able to change throughout life, this capacity decreases after early childhood, as illustrated in Figure 2.\(^{34}\)

- Even if a healthy language/literacy-rich environment is present later on in life, the foundational circuitry will never be as strong as it had the potential to be.\(^{34}\)

- Without consistent and persistent exposure to language between birth to age three, babies may experience diminished potential to develop a robust vocabulary, critical thinking skills, abstract thought and a strong foundation for literacy.
Relationships: The Foundation of Language, Literacy and Learning

The quality of the relationships that young children form with the adults in their lives affects all aspects of a child’s development (intellectual, social, emotional, physical) and lays the foundation for critical developmental outcomes, including healthy mental development, conflict resolution, self-confidence, self-regulation and motivation to learn. A major ingredient in this developmental process is the serve and return relationship between infants and their parents and other caregivers. With **serve and return:**

- There is a back and forth communication exchange between adults and babies. While adults can use language, babies initially communicate socially, through eye contact, facial expressions, crying, or laughing until they can eventually also babble and use words. The adult or baby responds to the initiation of the conversation through verbal or non-verbal communication. Both adults and babies can initiate a conversation. Being aware of how each person is communicating and responding to each other’s communication enables the caregiver and the child to share in social engagement and communication.

- Neural connections are built and strengthened to support the development of communication and social skills. In the absence of such responses—or if the responses are unreliable, inappropriate or insufficient—the brain’s architecture does not form as expected, leading to possible disparities in learning and behavior.

It is through their repeated, responsive, language-rich interactions with their babies that caregivers have a lasting impact on their baby’s brain development. This early exposure to language-rich interactions forms the basis of **language nutrition.**

Effects of Early Language Exposure on Vocabulary and Literacy

Language is our most common means of interacting with others and enables us to share thoughts and ideas through a variety of communication methods. Language is the vehicle by which families transmit culture from generation to generation. Culture and language are intimately intertwined, and language contains embedded cultural concepts that influence the way children learn about their world.

Language is at the core of everything a child does and learns in school.

- Early exposure to language sets the foundation for cognitive ability, literacy, school readiness and, ultimately, educational achievement. It is both the quality and quantity of words a baby hears that brings richness to the child’s vocabulary and has a profound impact on his school performance, IQ and life trajectory.

- Communication takes many forms, including sounds, signs, gestures, facial expressions, eye contact and words.

- Babies’ brains serve as one-of-a-kind word processors that analyze words spoken by family members and caregivers and store information for use later. The brain “word processor” records information such as the beats and sounds within words, how strings of words fit together, how word sequence and intonation affect meaning and how words can be categorized by meaning. These language skills form the foundation and internal dictionary, or lexicon, that makes learning to read possible.
“Conversational duets” (i.e. repeated serve and return interactions between caregivers and young children) are the most critical component of the language environment. Toddlers who engage in more ‘conversational duets’ with their caretakers fare better in language measures down the road, regardless of their families’ income level.

A child’s vocabulary at the age of three is a key predictor of school readiness at kindergarten and third grade reading comprehension, which is a powerful predictor of subsequent academic success.

Why Third Grade Reading Matters

Third grade marks a time when children shift from “learning to read” to “reading to learn.” Children who learn to read in the early grades typically strengthen their basic reading skills by third grade, making it possible not only to read for academic development, but also for pleasure. Reading proficiently by the end of third grade is an important indicator of future outcomes, from academic to economic. In Georgia, only 34 percent of fourth grade students scored at the proficient level or above, and the state’s low-income students fared worse at only 21 percent.

Based on third grade reading level ability, one can predict with high accuracy which children will not graduate from high school. Third graders who cannot read at grade level are four times more likely to drop out of school before high school graduation. The effects are significantly stronger for children in poverty whose families may have experienced generational and systemic lack of access to education.

The 30 Million Word Gap

Not every child experiences rich language environments, resulting in potentially devastating consequences:

Children from impoverished environments may experience pronounced disparities in cognition, academic performance, IQ and school readiness early on that persist throughout the child’s lifetime. This inequality may be attributable to a large disparity in children’s early-language environments.

Children from low-income families hear approximately 600 words every hour, whereas children from higher-income families hear 2,000 words an hour. Throughout the course of three years, this accumulates into a 30 million word gap between low income children and children from higher-income families. This 30 million word gap contributes to the stark disparities in academic performance and is influenced by a generational lack of access to education and language nutrition.

Figure 3: Vocabulary disparities across socioeconomic groups.

Differences in early language environments lead to dramatic differences in vocabularies of 18 month-old children, which increase significantly between 18 months and 24 months.\textsuperscript{48,58} The differences in vocabulary are represented in Figure 3.

Children who have heard fewer words since birth, are likely to know fewer words and have a less diverse vocabulary by age three.\textsuperscript{16-18}

Children who are ill-prepared to start school are often unable to catch up, which leads to a widening achievement gap, as depicted in Figure 3.\textsuperscript{59} Educational researcher Gloria Landson-Billings suggests that the achievement gap leads to an “educational debt” (analogous to the concept of a “national debt”), at the core of which is a generational lack of access to quality education.\textsuperscript{60} This “educational debt” becomes a cyclical process as seen in Figure 4 below that brings socioeconomic co-morbidities such as illiteracy, under- or unemployment, health and behavioral issues and poverty.\textsuperscript{60}

Beyond socioeconomic status and poverty, factors that contribute to children not reading at grade level and/or exhibiting lower levels of academic achievement include developmental disabilities, Deaf or hard of hearing, sensory impairments, prematurity, mental health/parental depression issues, domestic violence or abuse/neglect, and parents with low education.\textsuperscript{7,57,61-64} Lesson 3 provides strategies to address these factors.

---

\textbf{Figure 4: Cycle of Lack of Access to Language and Literacy}

- Poorer performance academically through high school, leading to dropping out.
- Nutrition at birth.
- Inadequate ability to learn new information from text by third grade.
- Lack of language exposure creates a vocabulary gap by age three.
- Inadequate language foundation for kindergarten.
The relationship between socioeconomic status and the word gap may be mediated by parents’ knowledge of child development. Knowledge about child development and how to support it seems to predict the frequency and quality of a parent’s communication with her child more than income or level of parent education. Therefore, efforts must be made to bridge the 30 million word gap, narrow the achievement gap and foster educational success for all children, regardless of the family’s socioeconomic status. *TWMB* aims to help build that bridge.

**Language Nutrition is Effective in Any Language**

More and more children in Georgia come from homes where a language other than English is spoken. The term “dual language learner” (DLL) is used to refer to children who are developing in their home language (see page 9 for a definition) and in English, and highlights their linguistic capacity in more than one language. Dual language learners:

- Are the most rapidly growing population in Georgia schools—growing at a rate that is twice as fast as the general school population.\(^65,66\)
- Comprise close to 20 percent of Georgia’s 0-8 year-olds.\(^67\)
- Represent a significant diversity in cultures and languages, with more than 80 percent of Georgia DLLs speaking Spanish at home.\(^67\)

Just as Georgia’s demographics are changing, the research landscape is changing, as well. These changes compel educators, policy-makers and clinicians to rethink many existing beliefs about how children develop when exposed to more than one language and how best to support their learning and language development. Recent findings include:

- Infants have the innate capacity to acquire two languages and can easily separate the sounds of each language.\(^68\)
- There is no scientific evidence indicating that learning two languages during the early childhood years overwhelms, confuses or significantly delays a child’s acquisition of English.\(^69\)
- Young bilingual children achieve critical milestones, like babbling and onset of first words, within the same timeframe as typically developing monolingual children.\(^70\)
- Home language provides a foundation for learning English—many skills developed in the first language transfers to the second.\(^69,71,72\)
- An extensive body of research highlights the many benefits that speaking more than one language has in many areas of development, including cognitive.\(^71,73-75\)
Language nutrition is about rich exchanges between caregivers and babies. These exchanges are richest when they happen in the language the child first hears and the language the parent or caregiver is most comfortable speaking—for many Georgia families, this is not English.

Many families of DLLs mistakenly believe that speaking only English to their children will facilitate and/or accelerate the acquisition of English. TWMB coaches should make every effort to dispel concerns parents might have, promote the parents’ use of their home language(s) and highlight the benefits of bilingualism.

If only limited English is used, parents or caregivers might use simple phrases and commands (e.g., “You want the milk” or “You stop”) or grammatically incorrect phrases (“we no go to the store”). In these cases, the amount of language the child hears is significantly reduced, and the vocabulary severely restricted.

By reinforcing the primacy of the home language, children will be exposed to more complex ideas, abstract thoughts and expanded vocabulary—crucial for children to develop important cognitive and language skills.

Encourage families to help their children maintain the home language while they learn English at the same time. Having daily conversations, singing, telling stories, rhyming and reading to children in the home language are all language nutrition practices and lay the foundation for later learning English.

**Language Nutrition: A Practice of Every Family**

All families have the potential to practice language nutrition effectively, regardless of their linguistic, educational, cultural background or socioeconomic status. Many families face challenges to engaging with their children, including a lack of understanding of how their own parenting behaviors impact their child’s life, and may significantly underestimate their own value as agents of change for positive future outcomes for their children. Be aware that:

Even deeply held beliefs and strongly rooted behaviors can change. Research shows that when families believe they have more control over their child’s outcomes, the quality of their interactions with their children increases.

Small-scale studies have suggested that educating families about the importance of early language exposure results in an increase in how much parents talk with their child.

When families are supported in using evidenced-based strategies, they gain the knowledge, competence, confidence and satisfaction needed to improve their child’s outcomes, and they envision themselves as critical players in the effort to build their child’s language proficiency.
**A Call to Action for Nurses**

**Nurses, nurse practitioners** and **midwives** can incorporate language nutrition practices into everyday tasks from prenatal care to early childhood checkups. These natural points of contact allow nurses to support parents and babies at regular intervals that correspond to developmental milestones (see Appendix A), such as: **Prenatal visit, birth and hospital stay (24-48 hours), 2-week, 1-month, 2-month, 4-month, 6-month, 9-month and 12-month wellness visits.** See Figure 5.

---

<table>
<thead>
<tr>
<th><strong>Prenatal OB/GYN Nurses</strong></th>
<th><strong>Prenatal Maternity Nurses</strong></th>
<th><strong>Postnatal Pediatric Nurses, first 7 well baby checkups in first year</strong></th>
<th><strong>Life-Long Collective Nursing Impact</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents talk with baby in utero throughout third trimester</td>
<td>Parents welcome baby with language of their heart</td>
<td>Parents deliver rich language nutrition daily to child</td>
<td>Confident and engaged parents raise strong readers</td>
</tr>
</tbody>
</table>

*Figure 5: How Nurses Can Impact Language Nutrition Across Perinatal and Pediatric Continuum*

The mission of a **TWMB** coach is to empower families to take an active part in building their baby’s brain to support language acquisition and, later, school readiness. There is no better way to do this than to make every baby a conversational partner. By doing so, coaches will:

- **Inspire:** Through talking with families about language nutrition, coaches equip them with the knowledge and skills to practice language nutrition themselves. One’s words and messages have the potential to empower families to develop habits that are crucial in shaping the educational outcomes of children.

- **Lead:** Coaches have many opportunities to lead by example, modeling to families how to interact with their baby and reiterating messages on how to encourage and support the baby’s development during these critical first years.

- **Advocate:** By being advocates for children having opportunities to learn and understand the meaning and uses of new words, coaches can help create a better future for all children.
Lesson Summary

Upon completion of this continuing education unit, nurses, as TWMB coaches, will:

- A 30 million word gap exists between children who are born into professional homes and those who receive welfare—a gap that is influenced by a generational lack of access to education and language nutrition.

- Reading is a language skill—without language nutrition, reading is likely to be limited. Children who lack language nutrition in the early years have difficulty learning to read and are more likely to drop out of school. Health and high school graduation are inextricably linked.

- Language nutrition is effective in any language and can be achieved through reciprocal communicative interactions or through serve and return interactions. Multilingual families and families of children who are Deaf or hard of hearing should provide language nutrition in their home language.

- The generational cycles of lack of access to language can be broken when nurses partner with parents to show them both the how and why of practicing language nutrition with their babies.
Becoming a Talk with Me Baby Coach

Key Points

The Talk With Me Baby coach:

• Promotes awareness about the importance of talking to babies and empowers families to practice language nutrition by helping them build the skills they need to do so.

• Engages every baby as a conversational partner and transfers that capacity to families.

• Uses the “I do. We do. You do.” strategy to help families build skills around talking with the baby. A nurse models the behavior, the adult practices the behavior with the nurse and then the adult attempts the behavior on his or her own.

• Demonstrates how to use simple language elements such as narration, serve and return and greetings to increase language nutrition given to babies.
The Role of the Talk With Me Baby Coach

The nurse-coach is the cornerstone of the TWMB model and this lesson contains the practical strategies to become a proficient language nutrition nurse-coach. TWMB coaches serve as a role model for language nutrition and engage every baby encountered as a conversational partner. This is the critical first step in transferring that capacity to parents and families, because the early language interactions parents have with their infants have the potential to shape a child’s life. This potential is irrespective of the parents’ income, education or socioeconomic status.

The role of the nurse as a TWMB coach is two-fold:

1. Help families realize the important role they play in building their baby’s brain, language and school readiness, and the unique qualifications they have as their baby’s first and best teacher.

2. Empower families to practice language nutrition by building their skills and coaching them to use these with their baby.

Coaching is a “collaborative relationship between a coach and a willing individual.” The goal of the TWMB coach is to establish this relationship with expectant/new parents and family members who are caregivers or play a significant role in the baby’s life; to guide them in creating reciprocal language experiences with their baby. Those interactions with the family of a young child are critical and will determine how families receive messaging and coaching. Tone and approach will affect the family’s feelings about being respected as individuals, a member of a family and as part of a community. In short, the parents’ experience of these interactions can determine whether the concept of language nutrition is embraced or rejected.

Great coaches are so unshakably convinced that we have great things in us— their vision of what is possible for us is so clear and powerful that they wind up convincing us too.

—Lou Tice

Talk With Me Baby 19
Guiding Principles for Working with Families

The TWMB coaching model is based on a set of beliefs or principles that define interactions with families. Central to these beliefs is to approach families from a strength-based perspective, where families are empowered to take an active role in their child’s future and to continue to play that role in meaningful and sustainable ways throughout their child’s life. Specifically, nurses should uphold these principles.[]^84

- **Families are active participants and equal partners in the relationship**—Work collaboratively
- **Families have skills and strengths to build on**—Identify and build on strengths
- **Families have hopes, wishes, and dreams for their children**—Draw on these personal resources of motivation and hope
- **Families have beliefs, attitudes, and experiences**—Respect them
- **Families are different**—Be flexible and capable of individualizing the message
- **Families are multicultural and multilingual**—Recognize, honor, and respect this diversity
- **Families live in communities**—Identify these important sources of support and connect with them

The TWMB Coaching Model: “I do. We do. You do.”

In the TWMB model, which is based on the coaching model developed by the Atlanta Speech School, the baby is the central focus of all interactions with parents. Being baby-centered means talking directly with the baby throughout all activities, such as examinations, patient education or even changing his or her diaper. Direct questions and comments to the baby whenever possible—realizing and expecting that parents will supply the answers. By directing the conversation to the baby, it emphasizes the importance of engaging the baby, knowing full well that the baby cannot answer yet. The baby becomes everyone’s conversational partner—especially that of the nurse.

Nurses model language transactions and engage in educational interactions through the “I Do. We Do. You Do.” coaching model (also known as the Return Demonstration Model), illustrated in Figure 6 by following these steps.[]^85

- Coach initially demonstrates the skill.
- Coach and caregiver practice the skill together.
- Parent or caregiver attempts the skill on his or her own, while the coach observes and provides feedback and encouragement.

The model is similar to a standard coaching model used in both educational and nursing settings. The nurse first uses his/her skills and strategies to provide language nutrition to the baby and models the behavior to the family. Then the nurse asks the family or caregiver to try it together. Finally, the nurse asks the caregiver to try it by himself or herself using an action-oriented opportunity.
**I do: Make Every Baby a Conversational Partner**

As a TWMB coach, model good language nutrition with the baby and share information on why language nutrition is important for healthy brain development with the family.

Whether as a nurse in a hospital, clinic or outpatient office, there are many opportunities to engage babies as conversational partners through the use of language transactions. **Language transactions** and **educational interactions** are two essential components of the TWMB coaching model and are defined in the glossary on page 6. **As a coach, the nurse engages in language transactions by directly talking with the baby, using the serve and return method described earlier.** Talking with a baby is very different than talking to a baby in that the baby’s conversational partner acknowledges the baby’s verbal and nonverbal social communication through eye contact, facial expressions, and vocalizations.

While talking with babies is critical to the child’s language development, it also should be enjoyable for everyone, including the baby. Even when the baby is too young to provide any overt response to language transactions, note how the baby is engaged. Even newborns may be capable of some kind of acknowledgement of verbal overture.86, 87 If a baby is not responsive to attempts to interact, this could indicate a developmental concern that should result in a referral to the family’s primary care provider.

**Figure 6: I do. We do. You do. Coaching Model.** A nurse will first model talking with the baby (I do), and will then encourage the parent to join in talking with the baby (We do). After talking with the baby together, the nurse will encourage the parent to talk with the baby on his or her own, while providing feedback (You do).
The Language Element Chart (Table 1) below includes language elements that can be used to integrate language nutrition into interactions with infants, exploring a variety of the elements to increase overall expertise, regardless of setting. Model these to families at each encounter so that they have the opportunity to see these elements in action.

**We do.**

Deliver a direct message about why language nutrition is important and invite them to begin providing language nutrition as part of their daily care of the baby. Invite the caregivers to try it by saying, “Let’s do this together” for practice. Provide specific strategies, referencing the language elements listed in the table below. If the family seems reluctant, one effective strategy is “I start, you finish” where the coach provides the beginning prompt, then asks the caregiver to finish the sentence.

**You do.**

As a TWMB coach, challenge the family to try to implement one of the strategies you have demonstrated or practiced, using an action-oriented task. Say “Now you can try while you (get her dressed, change her diaper, etc.). How about you narrate each step to your baby?” Provide reinforcement for any and all efforts by giving positive feedback on specific actions.

**Table 1: Language Element Chart**

<table>
<thead>
<tr>
<th>language element</th>
<th>description of transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greetings and Introductions</td>
<td>Greet babies every time, even if they have just been born or are being weighed for the first time. Look them in the eye and say whatever comes to mind, such as “welcome,” “good morning,” “hello.” Nurses should introduce themselves to the baby, using the baby’s name throughout the conversation, if known.</td>
</tr>
<tr>
<td>Narrate Your Actions or the Baby’s Emotions</td>
<td>Tell the baby the steps being completed as part of the hospital encounter or clinic visit, such as “I’m going to need to give you a shot now, little one. It might hurt a bit, but I promise it will be over in a second. It will keep you from getting sick.”</td>
</tr>
</tbody>
</table>
| Question, Wait (Pause), Give Me an Answer | Direct some questions one would typically ask of the parent to the baby. Ask the baby questions and pause to allow time for the baby to respond, either vocally or through social communication. Pausing will help the baby learn how to have a conversation. Almost every parent/caregiver will answer the question and will be pleased that there is interest in their child. The response to...
the question will also help the baby to learn language and how to interact with others.

If there is not an answer forthcoming, consider asking “What do you think, Dad?” At times, the answer will have to be provided by the nurse, as demonstrated in the *TWMB* Happy Birthday and Well-baby Check-up videos.”

| **Soothing** | Make a quiet “shhing” sound close to the baby’s ear when the baby is crying and you are holding baby at your shoulder. His or her ear will be very close to your mouth so be extra quiet. Also, try humming or singing in soft, quiet tones. Auditory soothing is helpful because you are asking the baby to attend to an auditory stimulus that can have a calming effect. |
| **Solicitations** | Use vocal inflection, smiles, giggles, tickling routines, etc. to solicit smiles, coos, facial expressions from the baby. |
| **Directed Attention** | Verbally direct the baby’s attention to a reflection in the mirror, toys, pets or siblings without expectation of a response. Response will follow as the child ages. |
| **Serve and Return** | *Serve and return* describes the dynamics of the language transactions that occur between caregivers and their babies, or, in this case, you and every baby. The adult talks, asks questions and provides the answer, then continues the conversation. Serve and return is the back-and-forth interaction between baby and adult, where one partner initiates, the other responds. Either the adult or baby can initiate the communication, which does not always require verbal interactions, but can also include gestures, facial expressions and other non-verbal interactions. Initially, such as with a newborn, the response may come from a look in the baby’s eyes.

Although it may feel as if you are having a conversation with yourself, the more you can create a serve and return volley, the more language advances. Note the serve and return in the Happy Birthday, Baby video. |
| **Use Parentese or Child-Directed Speech (CDS)** | Use parentese or child-directed speech when engaging with the baby. Parentese is characterized by a number of factors outlined in the glossary on page 7. |
**Feedback Loop**

The feedback loop is for families and caregivers that may need a little encouragement or for reinforcement of additional strategies.

- Return to the “We Do” step and try again with additional strategies.
- Tell the families directly what the risks are if they do not provide language nutrition.
- Work on one strategy at a time and use the “I start, you finish” approach.
- Provide positive and specific feedback. Feedback is especially effective if personalized.

All encounters between a TWMB coach and a baby and parent include both language transactions and educational interactions. When coaching families with limited English proficiency, a key message is that language transactions with their babies should take place in the home language—the language the parents are most comfortable speaking.

The interactions between caregivers and the family of a young child are critical and will determine how families receive messaging and coaching. TWMB coaches should always honor the culture and beliefs of the families in their care; however, some cultures may find talking with their baby more difficult than others. It will be important to gently guide these families to better understand that the benefits of their talking with their baby are critical to the baby’s brain development, ability to interact and relate with others, and future academic success. Tone and approach are critical, and if at first the family seems reluctant, continue to provide them with information to support language nutrition at every encounter and model how to make the baby a conversational partner.

**Lesson Summary**

- The baby should be the focus of language transactions, as talking with the baby models good language nutrition practices. This will make it easier in conveying key instructional messages to families via educational interactions.
- The TWMB coach first must model becoming adept at being conversational partners with babies—the “I do” part of the TWMB “I do. We do. You do.” coaching model.
- Model language nutrition through reciprocal serve-and-return language interactions with the baby, instead of focusing all conversation with just the caregivers.
- There are a number of language elements that coaches can use to build their expertise in talking with babies.
Key Points

• Language nutrition can be easily adapted into cultural and linguistic practices.

• Linguistically diverse families should use home language (or the language they feel most comfortable speaking) when talking with their babies to ensure rich language exchanges.

• Many factors may influence the willingness and ability of families to accept messages of language nutrition or incorporate these practices into their daily caregiving routines.  

• Some factors that may present challenges include impaired parent-infant attachment as a result of depression, infant hospitalization, previous pregnancy or child loss, or unwanted pregnancy, and environmental factors, including socioeconomic status, marital status, personal beliefs, level of education and amount of time spent at home with the child.

• Coaching is provided to all families, taking into account individual, family or environmental considerations, and using strategies that will facilitate the acceptance and effectiveness of language nutrition messages.

• When communicating language nutrition to families, keep messages simple and assess often for understanding.
**TWMB Coaching in Action: How it All Comes Together**

*Talk With Me Baby (TWMB)* is dynamic and is developed in real time by the coach. There is no script that provides exact language for each encounter with parents or with babies; however, the steps in each coaching encounter should be followed consistently. Coaching for all families is individualized to meet the following two objectives:

1. **TEACH Why:** Families understand the importance of talking with their babies to help them develop language. Families who understand this will be more likely to practice language nutrition.

2. **MODEL How:** Families learn language nutrition strategies focused on increasing the quantity and quality of language use, to increase their capabilities to engage in and incorporate this into their everyday parenting practices.

Coaching should include both the **WHY** and the **HOW** for delivering language nutrition.

**General Coaching Strategies**

While each family’s circumstances are different, there are some general approaches that may facilitate families’ acceptance of language nutrition messages and coaching:

- **Motivational Interviewing**

  Motivational interviewing is an empathetic counseling method used by psychologists to engage patients to take a more active role in change and self-actualization. It assesses the current level of readiness to change and the patient, with the help of the caregiver, identifies gaps between current behavior and expressed aspirations and finds steps to begin the change process. Within the context of being a *TWMB* coach:

  - Ask parents what their hopes and dreams are for their baby. Many parents will say that they hope their child will grow up healthy and will be successful. Ask families to describe health and success for their children, and how they could envision better language capacity enabling those dreams.

  - Assess what the parents believe they can do and any barriers or resistance they may have to delivering language nutrition. Ask what they think is feasible for them.

  - Develop a plan. Identify some immediate next steps that they can implement when they leave. In the outpatient setting, where the client may be returning for a follow-up, consider using a “prescription pad” with the goals written down that they can report on at their next visit.
Teach-back method. Studies show that patients will immediately forget anywhere from 40-80 percent of medical information they receive and of the information that is retained, more than half of it is incorrect. The teach-back method is a common approach where patients will repeat the information they’ve just received in their own words. Within the TWMB context, after coaching the parents on language nutrition, ask the parents or caregivers to explain how they might integrate language nutrition into their interactions with their baby, or what their goals are to continue to nurture brain development through language.

Resources and family support. Some parents may need mental health counseling for struggles that they may be facing that may influence how they interact with their child. Other parents may benefit from a support group or being connected to communities or cultural groups that relate to particular challenges they may be facing. Families may need referrals to specialists, such as speech-language pathologists or developmental psychologists. Having these resources readily available and coordinating with them to promote language development as part of their services will be important in supporting families.

Promote skin-to-skin contact: Skin-to-skin contact immediately after birth has been demonstrated to promote parent-infant attachment and parent psychological well-being. This intimate contact between parent and infant also provides an excellent opportunity to begin delivering language nutrition. Remind the parent that the baby is soothed by the sound of the parent’s voice.

Encourage parents to share the importance of talking with their baby with other parents and caregivers with whom their child will interact, reinforcing the use of the home language, if applicable.

Emphasize that all parents can do this regardless of their income, educational level or previous experience with infants. Most parents know how to talk and their words have the power to shape their baby’s development.
**TIPS for Families**

Embedded in the coaching model is **TIPS FOR FAMILIES**, a strategy you can use when coaching parents and caregivers as their baby’s conversational partner. **TIPS** stands for:

- **T**alk with your baby as if your baby can talk back
  - Talk about everything
  - Ask your baby questions
  - Answer for your baby
  - Respond to your baby’s movements and sounds as though they are intentional and communicative

- **I**t will grow your baby’s brain
  - Feed your baby words
  - Be a “sportscaster.” Narrate what you do all day long

- **P**ractice
  - Talk with your baby all the time!
  - Talk with your baby everywhere you go!

- **S**ing read and tell stories
  - Sing songs
  - Read books to your baby
  - Tell your baby stories

**Tailoring Messages and Coaching**

Nurses know the importance of tailoring the delivery of care and education to meet the needs of individual patients in a holistic manner. Apply this approach as a **TWMB** coach:

- Take stock of the parents’ strengths and the areas where growth is needed. Reinforce and encourage positive behaviors families already engage in.

- Pay close attention to parents’ motivation and abilities. You can begin to gauge attitudes and capabilities as you introduce initial messages and engage in first demonstrations.

- Through your observations, you may surmise that developing motivation, rather than capacity, may be the primary goal of your coaching efforts. Using motivational interviewing, you can partner with the family to identify changes they can feel comfortable implementing.
Reinforce messages related to the importance of the connection between early language transactions and later literacy success. Help families understand that these outcomes develop over time and that the new behaviors they engage in may take some practice. As each behavior builds on the previous behavior, the changes will become easier.

Reinforce or encourage cultural traditions and practices passed down through games, songs, stories, faith services, family rituals and ordinary talk that encourage rich language learning.

Capitalize on all forms of literacy, including storytelling and book reading. Even if the caregivers have minimal literacy, pointing out images and talking about what they see contributes to the baby’s growth and development. Everyone can be a conversational partner, regardless of literacy level.

**Coaching Culturally and Linguistically Diverse Families**

Culture shapes all our experiences, and there can be profound differences across cultures in the way parents raise their children. The cultural lens influences how people think, interact and view others. *TWMB* coaches can be most effective when they are culturally sensitive, broaden their views and suspend judgment when working with families who may have a different perspective than their own.

One of the areas in which cultural variation is most evident is the way in which parents talk with their children. Some cultures view the adult-child interaction as one-way: The parent talks, the child listens. **The primary focus of TWMB is to increase the quality and quantity of language that families direct to babies and not to judge the nature of the parent-child relationship.**

- Acknowledge those differences and encourage families to adopt a more “conversational” style with their babies, to foster reciprocity in the communication.
- Remember that all parents have aspirations for their children.
- Show families the transactional power that sharing a story, narrating the events of the day, or singing a song in their home language will have on getting their child on a clear path towards a successful future.
Respect and sensitivity for diverse cultural values and beliefs in our coaching will lead to higher success and effectiveness. Keep in mind these considerations when working with culturally diverse families:

- **Importance of relationships**—Many cultures place the highest value on human relationships and interpersonal relations. This takes precedence over task efficiency.

- **Communication styles**—In many cultures, communication is indirect. Some cultures will be very reluctant to contradict, criticize, disappoint or cause unease. The listener may be silent or hesitant to respond when reluctant to do something that is not fully understood. Sometimes head nodding can actually mean “no.”

- **Perceptions of professionals**—Different cultures have unique perceptions of professionals’ roles. Professionals, particularly teachers and healers (health care professionals) are often held in high esteem, and families are likely to view messages delivered from them as important and meaningful.

- **Family constellations**—Some cultures place particular emphasis on the family and have extended and actively involved kinship networks. In the Latino culture, family not only is an interdependent group but a core value that ensures that each member is nurtured and supported by a strong network. Extended family members, friends, daycare workers, church leaders and teachers can all have tremendous impact on a baby’s language development.

**Figure 7:** Important messages to convey to culturally and linguistically diverse families. *TWMB* coaches should emphasize the benefits of bilingualism and of the home language.
Maximizing Communication with Families with Limited English Proficiency

Linguistically diverse families may be frustrated by communication in English and that, in turn, may affect how they receive messages. Whenever possible, use a certified interpreter to promote successful communication. Other members of the care team and staff should participate in reinforcing language nutrition messages. Here are some ideas to help facilitate communication with all families, including those who have limited English proficiency.\textsuperscript{98,99}

- **Learn and use greetings in home language:** Greeting a family in their home language is a friendly way to connect, and shows families that their needs are considered important.

- **Keep it simple:** Keep word choices and sentences short and simple. Be patient and give the listener time to process what is being said. Basic words such as *good, give, take, more, less* are better choices than *positive, administer, increase, decrease,* and other big words.

- **Give and seek feedback:** Even when using simpler words and shorter sentences, there is no guarantee there has been communication until the receiver acknowledges it with feedback. Head nodding does not count as feedback, and may reflect the desire to keep harmony in the conversation. Allow a longer response time as families decipher what is being said.

- **Not understanding vs. misunderstanding:** When there’s a lack of understanding, a person may ask for information to be repeated or the person may appear confused. But when people misunderstand, they may be less likely to indicate this.

- **Speak slowly and clearly—not loudly:** Speaking louder does not make words more understandable! Articulate words in shorter phrases rather than speaking louder.

- **Support the message with gestures:** Use gestures, facial expressions, pointing and demonstrations to help families understand the information.

- **Repeat and rephrase if necessary:** Repeat key phrases and summarize key points. If repetition is not successful, rephrase the message, perhaps in simpler terms, using fewer words.

- **Avoid acronyms, idioms, abbreviations and jargon:** Always take the time to say things completely and avoid terms that can create confusion. Be careful with common expressions and idioms as they can inhibit communication.

Additional Situations That May Have an Impact on Language Nutrition

*TWMB*’s purpose is for every child to read proficiently by the end of third grade. As a result, *Table 2* outlines strategies for transferring information and language nutrition capacity to families whose life experiences or challenges make this transfer particularly vital.
**Table 2: Strategies for Addressing Challenges to Language Acquisition**

<table>
<thead>
<tr>
<th>challenge</th>
<th>strategy or approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caregiver Depression</strong></td>
<td>Depressed caregivers may have a difficult time talking to their babies for multiple reasons. Psychological well-being of caregivers affects the quality of the caregiver-infant bond. They also may have a more difficult time interacting with others and performing daily activities, which affects how often and how much they talk with their baby. Studies have demonstrated that caregivers who are depressed provide less child-directed speech and social communication to their babies.</td>
</tr>
<tr>
<td></td>
<td>Encourage caregivers who are struggling with depression to seek professional support for the benefit of their baby as well as themselves. Encourage caregivers to inform other family members about the importance of talking with the baby, so that they do not feel alone in this responsibility.</td>
</tr>
<tr>
<td><strong>Previous Loss/Miscarriage/Abortion</strong></td>
<td>Parents affected by previous loss may experience high levels of psychological distress, including anxiety, grief, guilt, and depression and may have feelings of fear and ambivalence towards the new baby. Parents who have experienced a loss of a child or pregnancy may fear a subsequent loss and thus may be resistant to talking with their baby as a self-protective mechanism.</td>
</tr>
<tr>
<td></td>
<td>Provide resources for parents who may benefit from counseling or from a support group. Empathize with the parents while stressing that one of the best things that they can do for this child right now is to talk with him or her.</td>
</tr>
</tbody>
</table>

*continued*
<table>
<thead>
<tr>
<th>challenge</th>
<th>strategy or approach</th>
</tr>
</thead>
</table>
| **Medically Fragile Infants, Infant Hospitalization or Prematurity**  
Hospitalization of a child interferes with normal parental-infant interaction, reducing the ability and time parents are able to spend with their baby. Hospitalization of a child has been found to be associated with poor psychological functioning, greater stress, anxiety, and depression, in both mothers and fathers.\(^{92,104}\)  
Research shows that talking with a baby in the neonatal intensive care unit can mediate neurodevelopmental outcomes.\(^{105}\) Although it may be more difficult to talk with babies who are sedated, attached to machines or in an incubator, model language exchanges for parents. Help caregivers understand that their baby can still hear them and that their language is critical for their baby’s long-term development. |  

| **Infants with Genetic or Chromosomal Disorders**  
Many disorders of genetic or chromosomal origin can negatively influence language development. Infants with developmental disorders can demonstrate more subtle behavioral cues than can be more difficult for a caregiver to read.\(^{106}\) This can lead to reduced engagement from the caregiver, which can result in fewer interactions for a child who needs more responsive attention to make developmental gains.\(^{106}\)  
Provide families with resources on their child’s specific genetic or chromosomal disorder. When educated on their child’s expected trajectory, caregivers can learn to observe their child carefully for early signs of delays and can provide an environment rich in opportunities for communication and interaction.\(^{107}\) |  

| **Infants with Language or Social Communication Delays**  
Infants with language or social communication delays can demonstrate a lack of reciprocal engagement and joint attention with caregivers. These delays and differences may interfere with language exchanges and language learning.\(^{108}\)  
Encourage caregivers to consult with a speech-language pathologist if they express concerns about their baby’s language or social development. |  

continued
<table>
<thead>
<tr>
<th>challenge</th>
<th>strategy or approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infants with Visual Impairment</strong></td>
<td>Infants with visual impairments may have a more difficult time learning language due to the challenges to have or establish eye contact. It may be more difficult to have serve-and-return interactions with infants with visual impairments due to these challenges. Provide resources for caregivers about raising a child with visual impairments. Encourage caregivers to use touch to help orient their baby and provide them with sensory information. Encourage caregivers to continue to look at their baby when they talk and to pay attention to the ways that their baby communicates.</td>
</tr>
<tr>
<td><strong>Unintended Pregnancy</strong></td>
<td>If the baby is from an unplanned pregnancy, parent-infant attachment may be impaired. Evidence suggests that “intention” of a pregnancy mediates the amount of attention and time that mothers give a young child. A relationship between unintended pregnancy and poor infant attachment also has been documented in fathers. Support caregivers as they welcome the new baby into their lives, and suggest talking with their baby as a way to help bond with the child.</td>
</tr>
<tr>
<td><strong>Single Parents</strong></td>
<td>Babies in two-parent households hear words from two parents while babies of single parents routinely will hear words from one parent. Furthermore, single parents are likely to experience higher levels of stress than parents that have a partner to help care for the baby. Thus, the quality of parent-infant interactions may be greater in two-parent households. Assess what they believe they are able to do in regards to talking and interacting with their baby. Encourage them to teach other people who may interact with the baby about the importance of language.</td>
</tr>
</tbody>
</table>

*continued*
### Challenge | Strategy or Approach
--- | ---
**Low-Income Caregivers**  
Families living in poverty often lack the money to buy books or access libraries. Fewer than half (48 percent) of young children in the United States are read to daily. Minorities and low-income children are less likely to be read to every day than their non-minority and higher income peers. Research suggests that low income caregivers experience higher levels of stress and depression compared to higher income caregivers.  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasize that books and toys are not needed to talk with their baby and that they can tell stories to their children without books.</td>
<td></td>
</tr>
<tr>
<td>Be sensitive to their individual circumstances and help them identify ways and times in the day they can talk to their baby.</td>
<td></td>
</tr>
</tbody>
</table>

**Caregivers with Limited Educational Level**  
These caregivers may have a more difficult time conceptualizing the importance of talking with their babies and may have lower verbal abilities with more limited vocabularies.  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Take time to make sure these families understand the information given. Parents may introduce more words to their baby through different daily activities, such as telling stories to their child or using pictures from a book to tell a story.</td>
<td></td>
</tr>
</tbody>
</table>

**Teen Parents**  
Teen parents are likely to be single and had unintended pregnancies and are still undergoing their own neuro-development. Adolescent parents often have low levels of educational attainment, are socioeconomically disadvantaged and are at higher risk of postpartum depression.  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Help them understand their role as a caregiver in their child’s development and focus on empowering them on what they can do to make a difference.</td>
<td></td>
</tr>
</tbody>
</table>

*continued*
<table>
<thead>
<tr>
<th>challenge</th>
<th>strategy or approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working Parents</strong>&lt;br&gt;Many families struggle to balance the busy demands on their lives. With more recent pulls toward social media and other screen activities, parents often face challenges finding time to talk and engage with their children in everyday life conversations. Babies of working parents may be in childcare or with a babysitter most of the day, which poses additional challenges in the time they are able to talk with their babies.</td>
<td>Assess what parents feel they do have time for, whether it is singing a song on the ride to the childcare center or while preparing dinner. Encourage parents to educate childcare providers about language nutrition and to hold them accountable for talking with their babies.</td>
</tr>
<tr>
<td><strong>Parent and/or Baby Is Deaf or Hard of Hearing, or Speech Impaired</strong>&lt;br&gt;Parents who are Deaf or hard of hearing or who have speech disorders may be concerned that they will not be able to communicate with their baby. Likewise, if the baby is Deaf or hard of hearing, or has a motor speech disorder that interferes with sucking, swallowing and, ultimately, speech, parents may not see the value in communicating with their child and have reduced self-efficacy.117 Studies show that early auditory and visual stimulation are crucial for all children’s cognitive development and education, and is especially true for those children who are Deaf or hard of hearing.118,119 Parents should be coached to anticipate that their child’s hearing will be screened in the birthing hospital. During their stay, they should inquire about the screening as well as the results.</td>
<td>Parents who have speech disorders or are Deaf or hard of hearing themselves can facilitate their child’s development. Parents who use American Sign Language (ASL) should be encouraged to use ASL in their language transactions with the child. Parents of Deaf children must know the importance of using language with their child. When a child is diagnosed as Deaf or hard of hearing, encourage parents to communicate with the child in their home language while also providing language nutrition through ongoing interaction and non-verbal communication, regardless of language modality the family embraces. See section below for more information on hearing screens.</td>
</tr>
</tbody>
</table>
About Hearing Screenings

As part of any post-delivery educational interactions with families, it is important to verify whether the infant has received a hearing screening. All infants should receive a hearing screening prior to hospital discharge. Note:

- Infants who do not pass the hearing screen should be rescreened before one month of age. Pediatric nurses should confirm the outcomes of the newborn hearing screen.

- Families may need referrals to an audiologist. For those children who have been referred after two screenings for a full audiological exam, parents must understand the importance of the exam being completed as soon as possible and no later than three months after birth to support early intervention.

- All infants with confirmed hearing loss should receive interventions no later than six months of age.

- Early interventionists can help parents understand language and social communication development to communicate with their baby, helping them to build confidence and competencies in promoting their baby’s development.

If the child did not pass the hearing screen, the nurse can ask if a follow-up appointment has been scheduled, emphasizing the importance of keeping this appointment and providing early amplification if a hearing loss is confirmed. The nurse should reinforce the need for language nutrition specifically for children with hearing loss. Parents of children with speech disorders will need more instruction and encouragement as these children may not be as responsive.

Here are some messages to share with families:

- Early detection of hearing loss and intervention can help the baby develop language more easily and prevent developmental delays than if they are diagnosed later in their first year.

- Hearing sounds helps a baby learn to talk, and ultimately, how to read; however, in the case of hearing loss or deafness, parents should provide language nutrition through ongoing interaction and non-verbal communication supporting auditory verbal language transactions or American Sign Language transactions.
Coaching should include both the WHY and the HOW for delivering language nutrition, as it is an invitation to parents to partner in their baby’s brain development by addressing their aspirations for their child.

Coaching should not be directive, but instead encourage parents to participate in finding solutions to integrate language nutrition into parent-child interactions. Strategies such as motivational interviewing, teach-back and others are great ways to meet parents where they are.

Dual language learning is an opportunity for even greater language enrichment in children; therefore, the home language should be encouraged as it can foster greater language acquisition in both languages as the child gets older.

Certain circumstances, such as prematurity or co-morbidities, can have an impact on the baby’s brain development and the parents’ readiness to begin introducing language nutrition. Be aware of strategies to help families find ways to increase language nutrition.

Parents who are Deaf or hard of hearing, or parents of children who are Deaf and hard of hearing, may not be as aware of their child’s inability to access language; however, delays in exposure to language elements (even non-verbal serve and return) can create unnecessary delays in the child’s language development.
Resources and References

- Additional Resources
- Acknowledgements
- Appendix A: Language Development Milestones
- References
The first three years of life are critical for brain and language development.\textsuperscript{34, 35} Thus, early experiences are crucial in shaping the social, learning, and health outcomes of children.\textsuperscript{34, 35} Experiences with early language exposure are vital for healthy brain development and long-term educational achievement.\textsuperscript{10, 13, 16-19, 35, 43, 50, 121} Research demonstrates that the single strongest predictor of a child’s academic success is not socioeconomic status, level of parental education, income, or ethnicity, but rather the quality and quantity of words spoken to the baby in the first three years of life.\textsuperscript{19} Unfortunately, there are large inequalities in children’s early language environments, as children in low-income families hear 30 million words less than their peers from middle-income families.\textsuperscript{19} This 30 million word gap contributes to the stark educational achievement gap in our nation. In 2013, only 21 percent of fourth-grade children from low-income families in Georgia could read at or above grade reading level.\textsuperscript{2}

Many parents are not aware of the importance of talking with their baby. They have dreams and hopes for their child, but often lack the knowledge and skills necessary to engage in the necessary daily actions, even before their baby’s birth, to make these dreams come true and to give their child access to the promise of a healthy and opportunity-filled future. \textit{TWMB} is a public action strategy aimed at increasing early language exposure by building awareness of the primacy of language through nurses.

As \textit{TWMB} coaches, nurses have the ability to inspire, lead, advocate, and empower families to take an active role in shaping their child’s future. Through your coaching of parents, babies will be ensured to have an engaged conversational partner who will describe, narrate, interpret, expand, affirm, and rejoice, using words. \textit{TWMB} is about shaping the trajectory of children’s lives – it is about a shared vision of seeing all children reach their full potential as responsible and productive members of their communities, and of parents and families as proud and confident co-creators of this successful outcome. Parents must connect that engaging in ongoing conversations with their babies makes the difference not only for immediate benefits, but also, for long-term outcomes, not yet apparent, such as school readiness and school achievement. You can be the catalyst that helps them make that connection. \textit{Talk With Me Baby} has the potential to help close the nation’s educational achievement gap, leverage dramatic results for children’s language and literacy success, break the cycle of poverty, and holds promise for children of future generations.
The following organizations are instrumental in the efforts to increase the quality of early language environments to promote educational and literacy outcomes of children. These resources provide additional public and professional education materials about early childhood literacy and early language exposure.

**Association for Library Services to Children**  
*Born to Read*  
50 East Huron Street  
Chicago, IL 60611  
800-545-2433  
[ala.org/alsc/issuesadv/borntoloweread](ala.org/alsc/issuesadv/borntoloweread)

**Clinton Foundation**  
*Too Small to Fail: Talking is Teaching*  
1271 Avenue of the Americas,  
42nd floor  
New York, NY 10020  
212-348-8882  
[toosmall.org](toosmall.org)

**Cambridge Public Health Department**  
*Let’s Talk...It Makes A Difference*  
119 Windsor Street  
Cambridge, MA 02139  
617-665-3812  

**Children’s Learning Initiative**  
7000 Fannin,  
Suite 2300  
Houston, TX 77030  
713-500-3709  
[childrenslearninginstitute.org](childrenslearninginstitute.org)

**Georgia Department of Public Health/Georgia Pathways to Language and Literacy**  
*100 Babies Birth to Literacy Project*  
404-657-2700  
[dph.georgia.gov](dph.georgia.gov)  
[georgialiteracy.org](georgialiteracy.org)

**Get Georgia Reading Campaign**  
235 Peachtree Street North Tower Suite 1600  
Atlanta, GA 30303  
404-527-7394  
[getgeorgiareading.org](getgeorgiareading.org)

**National Center for Infants, Toddlers, and Families**  
*Zero to Three*  
1255 23rd Street NW  
Suite 350  
Washington, DC 20037  
202-638-1144  
[zerotothree.org](zerotothree.org)

**Clinton Foundation**  
*Too Small to Fail: Talking is Teaching*  
1271 Avenue of the Americas,  
42nd floor  
New York, NY 10020  
212-348-8882  
[toosmall.org](toosmall.org)

**Georgia Department of Public Health/Georgia Pathways to Language and Literacy**  
*100 Babies Birth to Literacy Project*  
404-657-2700  
[dph.georgia.gov](dph.georgia.gov)  
[georgialiteracy.org](georgialiteracy.org)

**Get Georgia Reading Campaign**  
235 Peachtree Street North Tower Suite 1600  
Atlanta, GA 30303  
404-527-7394  
[getgeorgiareading.org](getgeorgiareading.org)

**National Center for Infants, Toddlers, and Families**  
*Zero to Three*  
1255 23rd Street NW  
Suite 350  
Washington, DC 20037  
202-638-1144  
[zerotothree.org](zerotothree.org)
ACKNOWLEDGEMENTS

The United Way of Greater Atlanta has provided a three-year sponsorship for this continuing education program. The United Way of Greater Atlanta is invested in more than 200 local programs throughout the 13-county metro Atlanta region that focus on engaging the community in sustainable change, including the promotion of early childhood learning.

The United Way of Greater Atlanta is committed to harnessing collective impact by leveraging the strengths of individuals and organizations across communities to address the communities’ needs in synergy.

In an effort to maximize the collective impact of the community while developing the continuing education program, *Talk With Me Baby* has partnered with organizations throughout the Atlanta community that serve minority and underserved populations.

Furthermore, many researchers, public health workers, governmental leaders, educators, nurses and organizations collaborated with *Talk With Me Baby* to develop this curriculum. The authors thank:

**Annie E. Casey Foundation**  
477 Windsor Street SW  
Atlanta, GA 30312  
404-222-3660  
aecf.org

**Atlanta Speech School**  
3160 Northside Parkway NW  
Atlanta, GA 30327  
404-233-5332  
atlantaspeechschool.org

**Campaign for Grade Level Reading**  
*Get Georgia Reading*  
gradelevelreading.net

**Children’s Healthcare of Atlanta**  
1405 Clifton Road NE  
Atlanta, GA 30322  
404-785-6000  
choa.org

**Georgia Coalition for English Learners**  
nvegalahr@atspsch.org

**Georgia Department of Education**  
*Division of State Schools*  
205 Jesse Hill Jr. Drive SE  
Suite 1758  
Atlanta, GA 30334  
404-463-1445  
gadoe.org

**Georgia Department of Public Health**  
2 Peachtree St NW  
15th floor  
Atlanta, GA 30303  
404-657-2700  
dph.georgia.gov

**Georgia Pathways to Language and Literacy**  
georgialiteracy.org

**Emory University School of Nursing**  
1520 Clifton Road NE  
Atlanta, GA 30322  
404-727-7980  
nursing.emory.edu

**Emory University School of Medicine**  
1648 Pierce Drive NE  
Atlanta, GA 30322  
404-727-5640  
med.emory.edu

**Marcus Autism Center**  
1920 Briarcliff Rd  
Atlanta, GA 30329  
404-785-7600  
marcus.org
Language Developmental Milestones

Talk With Me Baby is based on research that not only informs knowledge regarding how infants develop language but also how children learn to read. This research provides predictable and sequential milestones that allow parents and nurses to monitor whether babies are receiving appropriate input and meeting language expectations. Assessing the achievement of developmental milestones will help you to evaluate the adequacy of the language environment at home as well as difficulties the child may be experiencing in taking advantage of the language environment. The American Speech and Hearing Association and the National Institute of Deafness and Other Communication Disorders provide the guidelines in the following chart:122,123

<table>
<thead>
<tr>
<th>Birth – 3 Months</th>
<th>Birth – 3 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reacts to loud sounds</td>
<td>Coos and makes pleasure sounds</td>
</tr>
<tr>
<td>Calms down or smiles when spoken to</td>
<td>Cries differently for different needs</td>
</tr>
<tr>
<td>Recognizes your voice and calms down if crying</td>
<td>Smiles in response to familiar faces</td>
</tr>
<tr>
<td>Stops or starts sucking in response to sound during feeding</td>
<td>Can briefly calm self (may bring hands to mouth and suck on hands)</td>
</tr>
<tr>
<td></td>
<td>Begins to follow and recognize familiar objects and people at a distance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 Months–6 Months</th>
<th>4 Months–6 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follows sounds with his or her eyes</td>
<td>Babbles in a speech-like way and uses many different sounds, including p, b, m, and vowels.</td>
</tr>
<tr>
<td>Responds by looking towards caregiver when name is called</td>
<td>Enjoys taking vocal turns with caregiver</td>
</tr>
<tr>
<td>Knows familiar faces and begins to know if someone is a stranger</td>
<td>Vocalizes excitement and displeasure</td>
</tr>
<tr>
<td>Responds to changes in tone of your voice</td>
<td>Laughs</td>
</tr>
<tr>
<td>Notices toys that make sounds</td>
<td>Makes gurgling sounds when alone or playing</td>
</tr>
<tr>
<td>Pays attention to music</td>
<td>Shows curiosity about objects and surroundings and tries to get things or people that are out of reach</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7 Months–1 Year</th>
<th>7 Months–1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoys games like peek-a-boo and pat-a-cake</td>
<td>Babbles using long and short groups of sounds such as “mama upup bibibibi”</td>
</tr>
<tr>
<td>Turns and looks in direction of sounds</td>
<td>Uses simple gestures, such as waving, holding arms to be picked up, or pointing to get attention</td>
</tr>
<tr>
<td>Listens to and acts on language when spoken to</td>
<td>Copies sounds and gestures of others Uses one or two words (hi, dog, dada, mama) around first birthday, although sounds may not be clear</td>
</tr>
<tr>
<td>Understands words for common items like “cup”, “shoe”, “book”, or “juice”, and the word “no”</td>
<td></td>
</tr>
<tr>
<td>Begins to respond to requests and simple directions (e.g. “Come here” or “Want more?”)</td>
<td></td>
</tr>
<tr>
<td>Demonstrates separation anxiety</td>
<td></td>
</tr>
</tbody>
</table>

Infant Language Developmental Milestones. For each age range, infants exhibiting normal language development should be able to meet the corresponding milestones.
REFERENCES


TALKWITHMEBABY.ORG

Marcus Autism Center
1920 Briarcliff Road NE
Atlanta, Georgia 30329
404–785–7600