

**Parents as Play Partners:
Developing Young Brains, Healthy
Bodies, and Family Bonds**



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SONG

Hello My Friend
Our Special Time (CD) Choosy Kids 2014

♪ **Today's Ride:** ♪

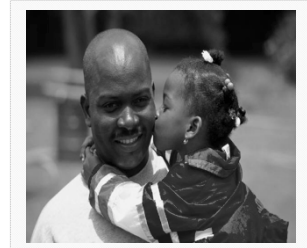


Importance of Movement
Moving to Learn
Building Brains
Building Bonds
Your Ideas

Today's Themes

Informing and Engaging Adult Play Partners

Music +
Fun +
Play =
Bonding



Today's Themes



**In the name of progress,
we have designed
modern environments
that will kill us!**

Francine Kaufman, MD
Author of *Diabesity*

Children's Fitness Levels Are Low and Obesity Rates High Because of Adult Decision Making

Our Children Inherit More Than Our Genes

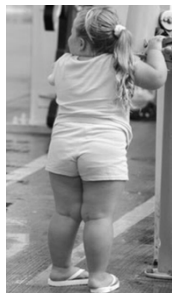


They Inherit Our Lifestyles....

Unhealthy Weight Is...

A biological response to the environment

A biological response to our policies and practices



Solutions: Healthy and Ready To Learn

- To reverse current trends, we must identify the policy and environmental changes that lead to increased physical activity and better nutrition.
- We also must support the advocacy that will result in widespread adoption of those policies.

Robert Wood Johnson Foundation

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Shake Your Boom Boom!
Smart Moves 3 (CD), Angela Russ, 2006

Infants (Pre-crawlers)

Infants are receivers,
built to learn from us, (faces first)

Babies (crawlers)

Babies are mobile explorers, learning to control bodies against gravity

Toddlers (walkers)

Toddlers are skill builders and experimenters, always using their bodies to learn more

Parenting is Key

Parents Are The First and Most Influential Teacher

Parents and Grandparents: Valued Play Partners

Music Moves Me, and Teaches Me

“The body is viewed as the source of musical thinking; therefore, movement is constantly used as a tool for teaching and encouraged as a means of self-expression on the part of the children.”

Gordon, E.E. *A Music Learning Theory for Newborn and Young Children*. Chicago: G.I.A. Publications, 1997

Application: Music is a universal teaching tool and the body is the first responder! Moving to music introduces the rhythm of language at a very young age.

Music Moves Me, and Teaches Me

Tiny, almost immeasurable features in a piece of music have the power to elicit deeply personal and specific patterns of thought and emotion in human listeners.

Yudkin, D.A., & Trope, Y., *Music Changes the Way You Think: Different music encourages different frames of mind*, *Scientific American*, Jun 24, 2014.

Application: Music changes mood and can be used effectively to encourage physical activity and creative expression

Stuck Song Syndrome for Early Learning and Parent Messaging

Simple themes get stuck, and often it's the chorus
Song needs to be less than 3 minutes to really be sticky

Helps to be over-learned or repetitiously played

Beaman, C.P. & Williams, T.I., *Earworms ('stuck song syndrome'): Towards a natural history of intrusive thoughts*. *British Journal of Psychology*, 2010, 637-653

Application: If children's music contains health messages and adults can't get that song out of their heads, health messaging is working!

Stuck Song Syndrome for Early Learning and Parent Messaging

Involuntary music imagery (INMI)

INMI = a song that involuntarily pops in your head and won't leave!

Total number of times listened was a predictor of INMI

Beaty, R.E. et al, Music to the Inner Ear: Exploring individual differences in musical imagery, Consciousness and Cognition, 22, 2013, 1163-1173

Application: Children and adults experience stuck song syndrome (INMI) more profoundly if the music is played repetitiously

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Baby, Just Me and You
Our Special Time (CD) Choosy Kids 2014

“Influential Others” for Young Children


Family
 Child Care/Preschool
 Health Care Providers (Doctors and Dentists)
 Church
 Children’s Characters

Consistent Health Messaging
Motivation Modification
Continuity Across Influential Others

Characters Influence Children

The President’s Task Force Report on Childhood Obesity (2010) recommends using children’s characters to promote healthy options, rather than attracting children to unhealthy food and beverages.


Children preferred the taste of foods and selected foods for snacks more often when a character appeared on the packaging.



- Kotler, et al *Journal of Health Communication* (2012)
- Roberto, et al *Pediatrics* (2010)
- Lanigan, J.D. *Child: Care, Health and Development* (2010)

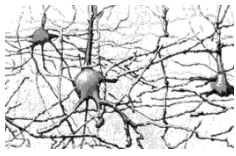
Health Needs A Hero!

Choose Healthy Options Often and Start Young



A Child has a Mind/Body

- The brain and the body = a coordinated unit.
- The brain supports all motor function.
- Brain and muscles work together.
- We can’t separate knowing from doing



***“Physical activity is like Miracle
Gro for the brain!”***

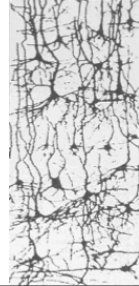
John Ratey, Harvard Psychiatrist



**My Body
Builds My Brain**

Primary brain builders

- Movement
- Physical activity
- Consistent, repeated, and multi-sensory learning experiences.



**SENSORY
EXPERIENCES**

**FOR INFANTS
(pre-crawlers)**

VISUAL

AUDITORY

TACTILE

VESTIBULAR

VISUAL

PREFER PEOPLE

BOLD PATTERNS

SLOW MOVING OBJECTS

12 INCHES FROM INFANT'S EYES

CHANGE VISUAL ORIENTATION

AUDITORY

RECOGNIZES SOUNDS

DISCRIMINATES SOUNDS

SOUNDS THEY CAN MAKE

TALKING, READING, SINGING,
HUMMING

TACTILE

SECURITY & TRUST

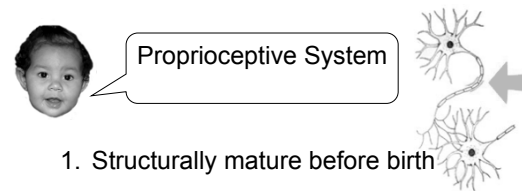
BODY AWARENESS

STIMULATING OR SOOTHING

PROPRIOCEPTORS

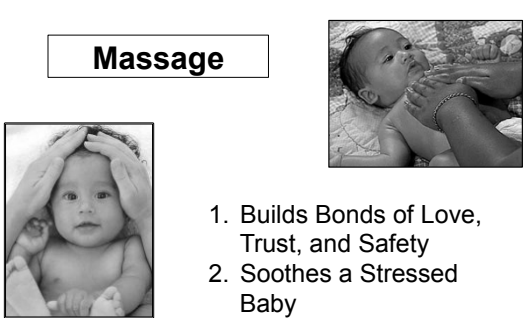


Proprioceptive System



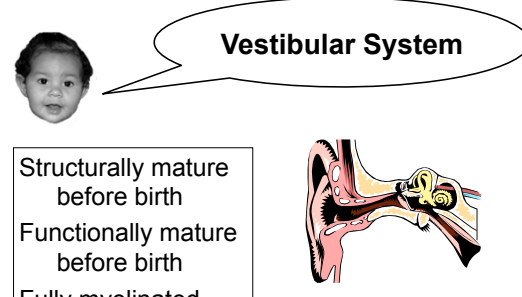
1. Structurally mature before birth
2. Functionally mature before birth
3. Fully myelinated

Massage



1. Builds Bonds of Love, Trust, and Safety
2. Soothes a Stressed Baby

Vestibular System



Structurally mature before birth
Functionally mature before birth
Fully myelinated

VESTIBULAR

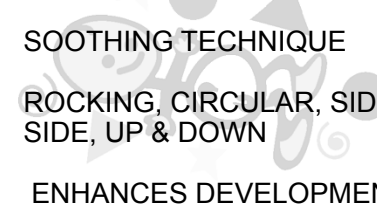
MOTION STIMULATION

SOOTHING TECHNIQUE

ROCKING, CIRCULAR, SIDE TO SIDE, UP & DOWN

ENHANCES DEVELOPMENT

VESTIBULAR APPARATUS

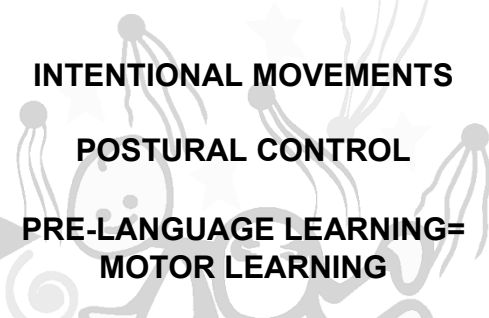


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Baby Bounce With Me,
Our Special Time (CD) Choosy Kids, 2014



**“CONTROL”
EXPERIENCES**
For Mobile Infants

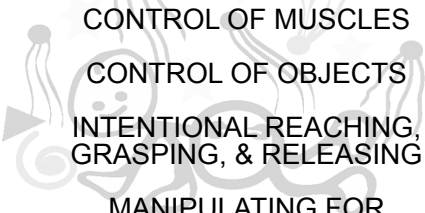


INTENTIONAL MOVEMENTS
POSTURAL CONTROL
**PRE-LANGUAGE LEARNING=
MOTOR LEARNING**


Sign Language




Mobile Infants
“Gaining Control” Experiences
Manipulation
Spaces
Obstacles



MANIPULATION
CONTROL OF MUSCLES
CONTROL OF OBJECTS
INTENTIONAL REACHING,
GRASPING, & RELEASING
MANIPULATING FOR
EXPLORATION



SPACES
CONTROL OF BODY
CONTROLLED
LOCOMOTION
BOUNDARIES

OBSTACLES

BODY CONTROL AGAINST GRAVITY


POSTURAL ADJUSTMENTS

STABILITY & LOCOMOTION

DECISION MAKING

Song

Circle Game,
Teach Touch & Hug Your Toddler (CD),
 Kimbo Educational, 2000



EXPLORATORY EXPERIENCES FOR TODDLERS

TODDLERS

PLAY WITH OBJECTS

EXPLORE and EXPERIMENT

SEEK INDEPENDENCE

ACQUIRE LANGUAGE



TODDLER EXPLORATORY EXPERIENCES

BALL HANDLING
 BALANCE
 MANIPULATION
 SPACES

OBSTACLES
 WHEELED TOYS
 PRETENSE
 RHYTHM

BALL HANDLING

VARY SIZES, SHAPES, TEXTURES

ADAPTATIONS & ADJUSTMENTS

NO SKILL EXPECTATIONS

BALANCE

POSTURAL CONTROL
VARY WIDTHS, HEIGHTS, ANGLES
STEPPING UP, TURNING CORNERS,
CHANGING DIRECTIONS,
WALKING ON INCLINE OR DECLINE

MANIPULATION

FINE MOTOR ABILITY
OBJECT EXPLORATION
STRINGING, STACKING,
POUNDING, TWISTING, TURNING,
FILL & EMPTY, TEXTURES,
BASIC PUZZLES

SPACE

SELF SPACE
THROUGH SPACES
SPACE RELATIONSHIPS
SPATIAL ORGANIZATION

OBSTACLES

PLAY STRUCTURES
CLIMBING
SHIFTING BODY WEIGHT
GRIPPING
MOTOR PLANNING
MULTIPLE SOLUTIONS
LANGUAGE DEVELOPMENT

WHEELED TOYS

PUSH, PULL, RIDE
ENHANCE STABILITY
ENCOURAGE COORDINATED
MOVEMENTS
SOCIALIZATION

PRETENSE

PRETEND PLAY
IMITATING
SOCIAL ROLES
IMAGINATION
LANGUAGE
DEVELOPMENT

RHYTHM

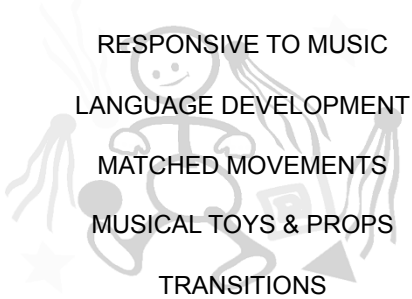
RESPONSIVE TO MUSIC

LANGUAGE DEVELOPMENT

MATCHED MOVEMENTS

MUSICAL TOYS & PROPS

TRANSITIONS



We Have Learned:

- **Motor characteristics and needs of infants, babies, and toddlers**
- **Two primary sensory systems that build neural networks early in life**
- **Brain / body communication**
- **Play partners build relationships and brains**
- **Movement strategies, pre-language communication**
- **Play props for daily routines**

What Will You Do When You Go Back?

(Discussion)

What Do You Need?

(Discussion)



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