

Collaborative Management of Dysphagia in the School Setting

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Disclosure Statement

(as required by ASHA)

“I have no financial interest in any commercial entity whose products or services are described, reviewed, evaluated or compared in the presentation.”

Learner Outcomes

Participants will be able to...

- Discuss how to organize a collaborative protocol for managing swallowing disorders in schools
- Describe how to organize a parent outreach program and communicate with medical professionals regarding their patients with swallowing disorders
- Describe different management options for students with swallowing disorders in the schools

Question: “Why do we need dysphagia management protocols in our schools?”

- Pre-term infant mortality rates are on the decline, because...
- Increasing numbers of pre-term infants are now surviving due to advances in medical technology
- Pre-term births/Low Birth Weight is the leading cause of neurological disabilities such as CP, intellectual disabilities, and delayed development
- Therefore, we are seeing increasing numbers of student with dysphagia in the schools

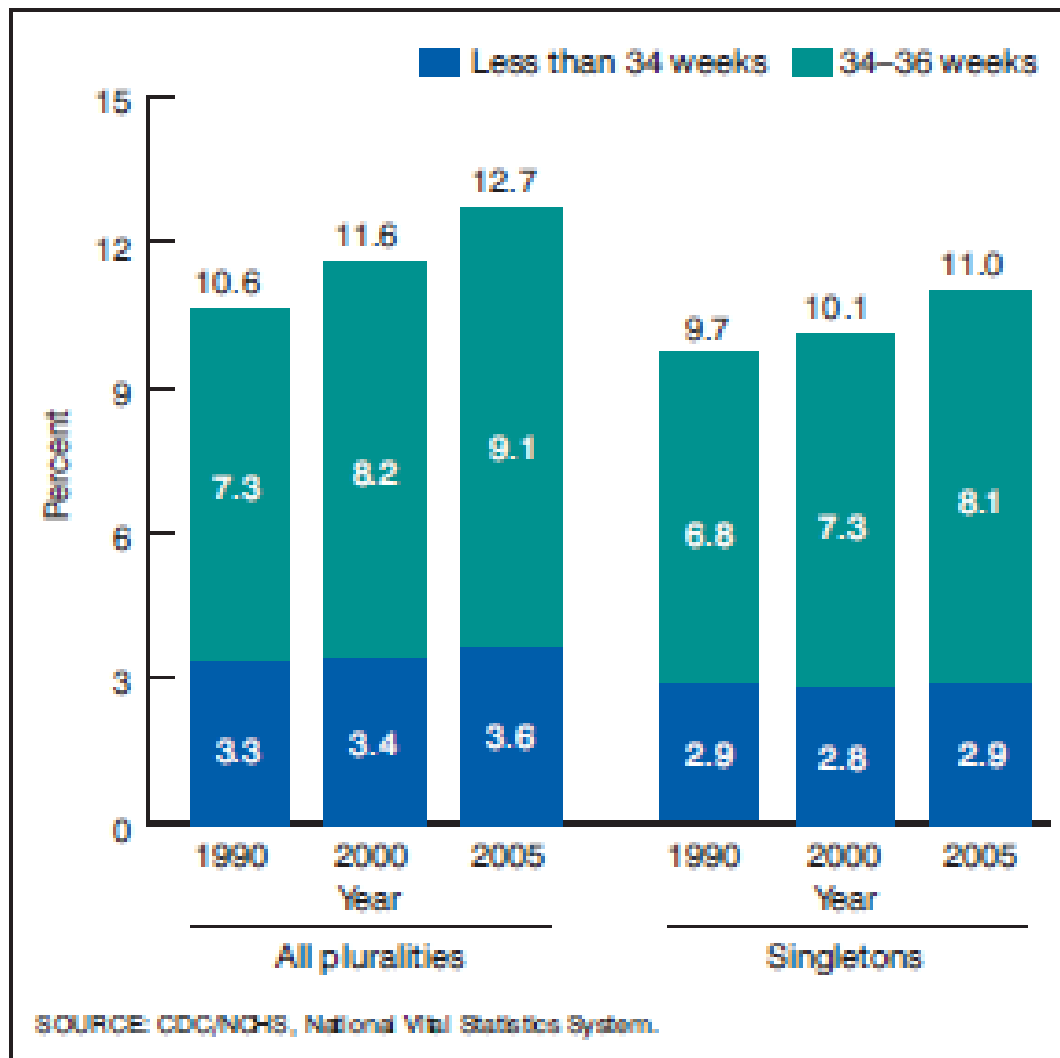
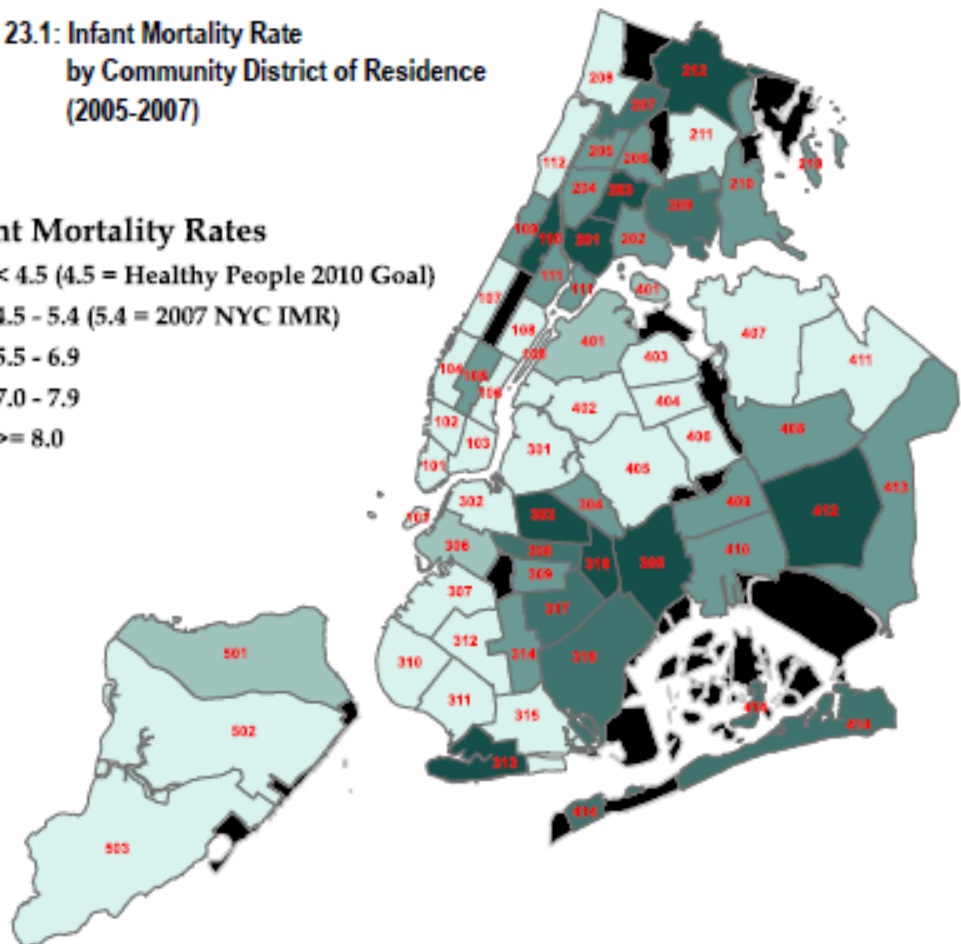
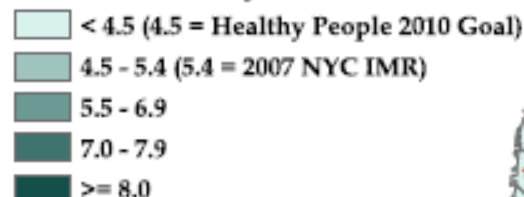


Figure 1. Preterm birth rates for all births and for singletons only: United States, 1990, 2000, and 2005

Figure 23.1: Infant Mortality Rate by Community District of Residence (2005-2007)

Infant Mortality Rates



BROOKLYN		1999-2001	2002-2004	2005-2007
Community District of Residence		IMR	IMR	IMR
301	Greenpoint/Williamsburg	3.8	3.2	4.2
302	Fort Greene/Brooklyn Heights	6.7	8.1	4.5
303	Bedford Stuyvesant	9.8	9.7	9.7
304	Bushwick	6.3	7.9	6.2
305	East NY/Stapleton City	7.1	9.0	9.6
306	Red Hook/Gowanus	4.3	5.8	4.9
307	Sunset Park/Windsor Terrace	4.5	6.5	2.2
308	Crown Heights	10.7	9.4	7.9
309	S Crown Heights/Prospect	7.8	6.8	6.9
310	Dyker Heights/Bay Ridge	3.8	4.9	4.0
311	Bensonhurst	4.1	3.6	3.3
312	Borough Park	3.1	3.7	3.5
313	Coney Island	6.0	8.4	8.0
314	Flatbush/Midwood	7.6	6.6	6.1
315	Sheepshead Bay	3.5	3.9	3.9
316	Brownsville	13.4	10.1	8.9
317	East Flatbush	10.7	10.0	7.4
318	Flatbush/Canarsie	8.6	7.3	7.3

QUEENS		1999-2001	2002-2004	2005-2007
Community District of Residence		IMR	IMR	IMR
401	Astoria	5.6	5.4	4.8
402	Sunnyside/Woodside	2.8	2.2	3.8
403	Jackson Heights/N Corona	5.5	3.9	4.5
404	Elmhurst/Corona	5.7	5.3	3.6
405	Glendale/Ridgewood	4.6	3.2	3.1
406	Riego Park/Forest Hills	2.5	3.9	3.1
407	Cleanview/Flushing	4.4	2.2	3.9
408	Jamaica Estates/Fresh Meadows	4.2	5.2	5.8
409	Kew Gardens/Richmond Hill	5.6	5.1	6.4
410	Ozone Park/Howard Beach	5.1	5.5	5.5
411	Bayside/Douglaston	4.2	1.9	3.8
412	Jamaica/Hollis	8.9	8.1	8.5
413	Queens Village	8.5	9.8	6.9
414	Rockaway/Broad Channel	11.5	8.6	7.1

MANHATTAN		1999-2001	2002-2004	2005-2007
Community District of Residence		IMR	IMR	IMR
101	Financial District	3.7	0.6	3.1
102	Greenwich Village	3.6	3.3	2.2
103	Lower East Side	3.6	5.4	2.4
104	Clinton/Chelsea	4.8	3.9	0.8
105	Midtown	6.4	5.0	6.1
106	Murray Hill	2.2	2.1	3.7
107	Upper West Side	3.1	2.6	3.9
108	Upper East Side	3.7	2.4	2.6
109	Manhattanville/Hamilton Heights	6.4	6.6	6.1
110	Central Harlem	13.2	6.1	9.0
111	East Harlem	9.5	7.2	5.7
112	Washington Heights/Inwood	4.8	5.5	3.9

BRONX		1999-2001	2002-2004	2005-2007
Community District of Residence		IMR	IMR	IMR
201	Mott Haven/Melrose	7.0	6.5	8.7
202	Hunts Point/Longwood	6.8	4.9	5.9
203	Morrisania/Crotona	7.5	9.3	8.7
204	Highbridge/Concourse	7.0	8.0	5.6
205	Fordham/University Heights	7.3	6.2	5.9
206	Belmont/East Tremont	7.8	8.2	5.9
207	Norwood/Bedford Park	6.1	5.2	7.3
208	Riverdale/Kingsbridge	5.9	7.4	3.2
209	Soundview/Parkchester	6.6	8.7	7.0
210	Throgs Neck/Coop City	3.6	7.4	6.4
211	Laconia/Pelham	5.4	7.1	3.1
212	Williamsbridge/Baychester	6.9	9.5	8.2

STATEN ISLAND		1999-2001	2002-2004	2005-2007
Community District of Residence		IMR	IMR	IMR
501	Howland Hook/Rosebank	7.4	6.0	5.0
502	Willowbrook	7.2	4.3	4.2
503	Tottenville/Oakwood Beach	4.2	4.2	3.1

[Click for Excel tables](#)

Technical Notes:
 - Infant mortality rate (IMR) is expressed as the number of infant deaths under one year of age per 1,000 live births.
 - Due to small numbers, IMR by Community District is presented in three-year averages.
 Source: Bureau of Vital Statistics data compiled by Bureau of Maternal, Infant and Reproductive Health, New York City Department of Health and Mental Hygiene, February, 2009.

PS 256 @ 253Q

The Stars of the Show

The Stars of the Show

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Dysphagia-Related Difficulties

- At our school, we have many students with dysphagia that also regularly demonstrate avoidable related illnesses/difficulties:
 - Failure to thrive
 - Aspiration pneumonia
 - Hospitalization due to not gaining enough weight or growing at the recommended rate
 - Bottle rot
 - Sleeping during school hours

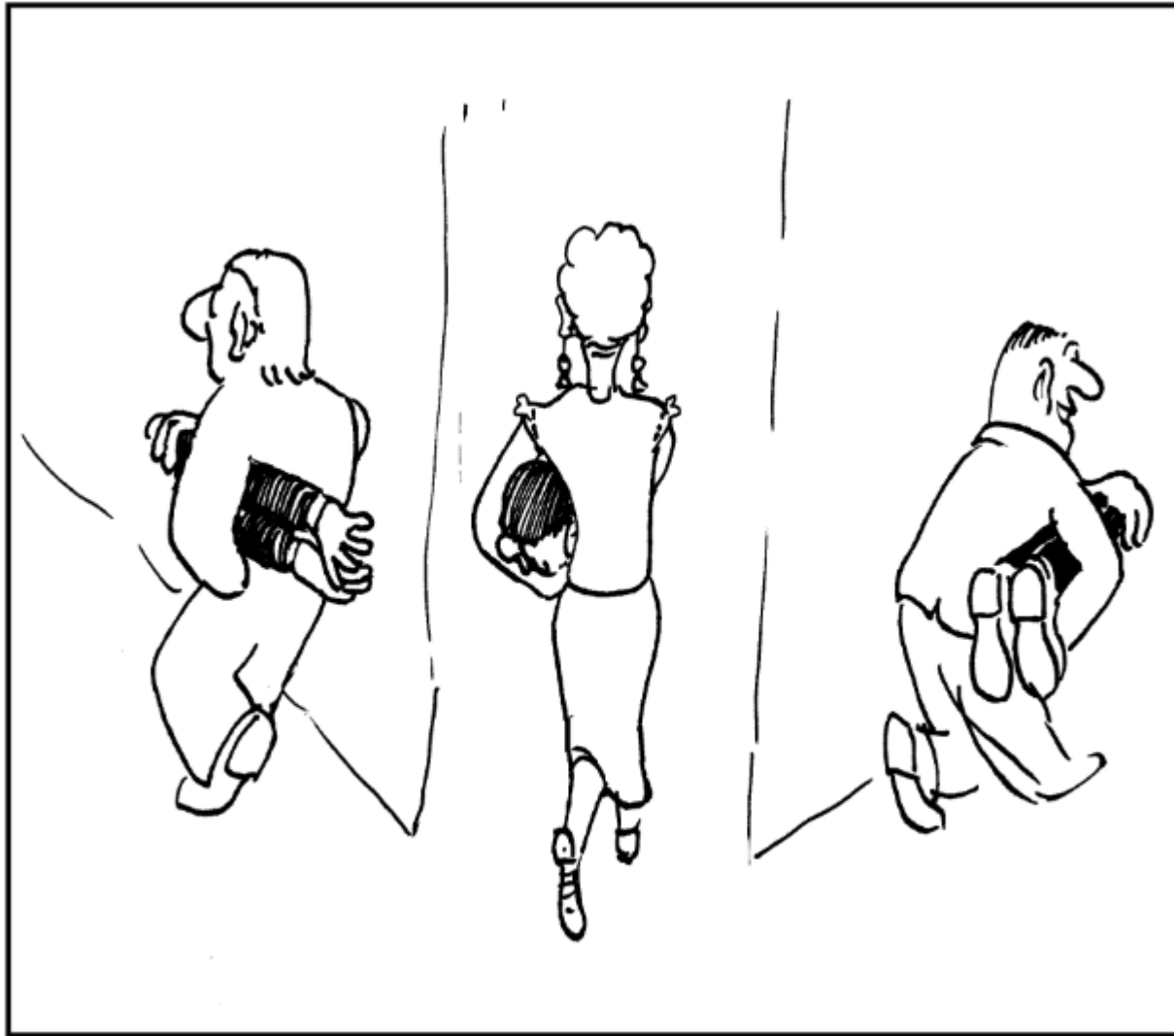
Contributing Factors: Parent Level

“The majority of our parents do not have the knowledge, support, skills, equipment, funds, organizational skills, strength or appropriate instruction in order to adequately create and maintain a healthy mealtime program for their child in the home setting.”

Contributing Factors: School Level

- Lack of communication between:
 - Parents and staff members
 - School staff and the child's medical doctors
 - Staff members regarding feeding of each individual child

Beginning Model



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SEVERELY DYSFUNCTIONAL TEAM

The Need

- To create a single stream, collaborative protocol for the identification, treatment, and maintenance of dysphagia

End Model

- Create, implement, and maintain appropriate mealtime program for all students in the school setting through a collaborative model with staff, parents and medical professionals
- Parents have the tools that they need in order to maintain a mealtime program at home
- Record progress to verify that goals are met

ALL TOGETHER NOW...

- Speech Therapists
- Occupational Therapists
- Physical Therapists
- Classroom Teachers
- Paraprofessionals
- Nurses
- Administration

ALL TOGETHER NOW...

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The First Step: Laying the Foundation

- Question:
 - What are the precursors to creating and implementing a protocol?
- Answer:
 - Information and Money

Information

- **Professional Development**
- Swallowing and Feeding Disorders In The Schools — Nutritional Management Associates
 - Comprehensive Clinical Assessment
 - www.nutritionalmanagement.org
- Feeding Therapy for Students With Multiple Disabilities: A Team Approach — New York City Department of Education Citywide Speech Services (CSS)
- Parent Outreach Techniques — CSS

Money

- **Target Grant:**
 - Food Processor and other related equipment for the home setting
 - Adapted utensils for the school setting
- Existing funds from CSS and School
- Translation Services



The Second Step:

Recruit Building Administration

- Explain why the current model of treatment needs to change
- Potentially life threatening
- Both moving eating skills ahead, and maintaining health are educationally relevant as per New York State Health Standards
- Facilitate medical care/interventions

The Second Step: Recruit Building Administration

- Administration actively participates in delivery and maintenance of program
- Assists in recruitment of school staff
- Allots time for:
 - team dysphagia meetings
 - accompany parents and students to MBS during school hours
 - parent training
 - Professional Development attendance
 - Keep record of make-up sessions
- Approves related forms and flyers

The Third Step:

Organizing the Program at the School Level

- Weekly Interdisciplinary Evaluations, and subsequent implementation of findings, for all students in need.
- Each week a different student is identified.
- Evaluation forms are completed by each discipline:
 - Nurse, Classroom Teacher, Speech Therapist, Occupational Therapist, Physical Therapist

The Third Step: School Level, Continued

- Each discipline has one week to perform and complete the evaluation
- All staff meets to discuss findings of individual evaluations, and creates an individualized plan for that student
- Staff implements plan the next week
- Staff reports findings the next week at the meeting for the next student

The Third Step: Organizing The Program At The School Level

Weekly Interdisciplinary
Evaluation Meetings

Collaborative Dysphagia Meeting

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The Third Step:

The School Level, Continued

- Establish Speech Therapist as Dysphagia Coordinator
- Meet with Kitchen Staff to determine a puree texture suited for our students
- Communicate with Nurses regarding monthly weights, communication with parents and physicians
- Train Paraprofessionals...

Paraprofessionals
are trained to use
different and
specific feeding
techniques,
utensils, and
positioning for
each individual
student

FEEDING TRAINING SESSIONS FOR PARAPROFESSIONALS

	DAPHNE	DESHAE	ROYAL	CHRISTIAN	DAMION
MARTA					
MERIN					
JENNIFER					
MS. H					
DENISE					
IGNA					
DANIELLE					
MONIQUE					
KATHY					
ELISA					

After Staff Is Trained, Feeding Schedule Is Created and Implemented

Breakfast

Student	Monday	Tuesday	Wednesday	Thursday	Friday
Deshea	Merin	Merin	Yvonne	Naomi	Merin
Christian	Naomi	Elisa	Merin	Marta	Marta
Royalpreet	Yvonne	Iris	Elisa	Iris	Iris
Jerry	Liz	Meir	Danielle	Meir	Liz
Jessica H.	Marta	Marta	Marta	Merin	Naomi
(1 adult) Crystal					
↓ Rosyln	Ms. Hall	Ms. Hall	Ms. Hall	Ms. Hall	Ms. Hall
↓ Tyquan					
Tatiana/Jessica S.	Danielle	Danielle	Meir	Danielle	Danielle
(2 adults) Guervens					
↓ Sandra	Monique &	Monique &	Monique &	Monique &	Monique &
↓ Matthew	Meir	Naomi	Naomi	Liz	Meir
Sadrak (1 adult)	Elisa	Carol	Anna	Carol	Anna
Michael/Damion (1 adult)	Denise	Liz	Liz	Denise	Denise
Frank (1 adult)	Carol	Naomi	Carol	Elisa	Carol
Brandon/Kiki (1 adult)	Anna	Denise	Denise	Anna	Elisa

If Frank is not present, staff assigned will assist with Sadrak.

A food journal is kept for individual students when necessary

FOOD JOURNAL OF DESHAE 5/20/08 – 6/4/08

Date	Breakfast	Calories	Snack	Calories	Lunch	Calories	Daily Total
5/20/08	Donut, yogurt, chocolate milk, syrup	300	Boost pudding	240	Chicken and rice, boost pudding	300	1040
5/21/08	Banana bread puree, chocolate milk	300	1 cup chocolate ice cream	200	1/2 can oatmeal	120	620
5/22/08	Corn muffin, pancake, apple juice puree, chocolate milk	300	1 boost pudding	240	Fish sticks and vegetables	250	790
5/23/08	Cinnamon muffin, apple juice, and milk puree, 1/2 can pediasure	400			Chocolate pudding, chocolate milk	200	600
5/27/08	1 1/3 omelet, donut, blueberry muffin, bagel, apple juice puree	300	1 boost pudding	240	1/2 can pediasure	120	660
5/28/08	Canadian Turkey bacon, sausage roll, buttered biscuit puree, 1/4 can pediasure	350			1/2 can pediasure, chicken breast, mayo puree, broccoli butter puree	300	650
5/29/08	Blueberry muffin, yogurt, apple juice puree, 1/2 can pediasure	350			Chicken puree, carrot puree, chocolate milk	350	700
5/30/08	French toast, yogurt, juice blend, 1/2 cup chocolate milk	300			French toast, yogurt, juice blend, chocolate milk	300	600
6/2/08	Blueberry muffin, donut, yogurt, juice blend, 1/2 cup chocolate milk	300			Chicken and vegetables	300	600
6/3/08	Donut, yogurt and juice puree, chocolate milk	350	1 Vanilla boost pudding	240	1/2 can pediasure Pureed chicken and carrots	200	990
6/4/08	Pureed turkey bacon, banana bread, cheese omelet, juice and 1/2 can pediasure	425	1 boost pudding	240	Pureed chicken and carrots	200	865

GROWTH CHART 2007-2008

Month	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
Weight	30	31	31	31	34	31	32	32	29	32
Height	36"					42"				43"

The Fourth Step: Bring Each Set of Parents Into the Team

- Identify the students appropriate for the program
- Send home introductory information about the program to the parents

Parent/Guardian Introduction Letter to the Program

Date: _____

Dear Parents/Guardians:

(Name of School) _____ is implementing a Collaborative Eating Improvement Team for the _____ school year. The purpose of this team is to work collaboratively with school staff and parent/guardians in order to improve the eating skills of students in need in our program. The team will work to assist students in achieving their nutritional, health and eating goals by providing interventions that target a child's specific area(s) of difficulty. Parents/guardians will be required to attend regularly scheduled, monthly school meetings with staff in order to best integrate newly acquired eating skills, supports and strategies in the home setting. We believe your son/daughter will benefit from receiving the additional support offered through this project. We look forward to providing you and your child with individualized attention that will result in improved eating skills, and better health for life.

Please acknowledge receipt of this letter and acceptance into this program by signing below and returning it to school as soon as possible. Additionally, please sign and return both the Photo and Internet Release Forms. If you have any questions or concerns, please contact _____ at _____.

Sincerely,

Principal

Assistant Principal

Speech/Language Pathologist

Student Name: _____

Parent/Guardian Signature: _____

Date: _____

Parent/Guardian permission for Speech Language Pathologist to contact student's physicians

Dear Parents/Guardians:

At times it may be necessary for the Speech/Language Pathologist to contact your child's doctor. Please sign the consent below to give us permission.

Doctor's Name: _____

Doctor's Phone Number: _____

I (parent/guardian), _____ give permission for
(Speech/Language Pathologist) _____ at
(School Name) _____ to contact my child's doctor.

Name of Child: _____

Parent/Guardian Signature

Date

If you have any questions or concerns, please contact _____
at _____.

Sincerely,

Speech and Language Pathologist

Medical release for test results

Medical Release

Patient Name: _____

Date: _____

I, (Parent/Guardian) _____ give permission to send the
(Name of Test) _____ Test Results Report conducted for
(Student name) _____ to the Speech Department at
(School name) _____ . Please fax the report to the attention of
_____ at (fax number) _____.

Thank you,

(Signature of Parent/Guardian)

Other Suggested Forms

- Permission to Photograph or Record Students
- Caregiver Mealtime Interview Form

The Fourth Step: Bring Parents to School

School Heading

* ATTENTION *** ATTENTION *** ATTENTION *

TO: ALL PARENTS OF STUDENTS ON PUREE DIETS

*GET A **FREE** KITCHEN AID FOOD PROCESSOR!!!

*GET A **FREE** ADAPTED FEEDING SPOON!!!

*GET A **FREE** ADAPTED FEEDING CUP!!!

*GET A **FREE** LUNCH FOR YOURSELF!!!

AT OUR PUREE MAKING AND FEEDING WORKSHOP

*BRING YOUR FAVORITE DISH...LEARN HOW TO
EASILY MAKE IT INTO PUREE!!!

LEARN THE LATEST TECHNIQUES FOR **QUICK**,
SAFE, AND **NEAT** FEEDINGS.

WHEN:

WHERE: YOUR CHILD'S SCHOOL
ADDRESS
PHONE

RSVP: CALL **NOW** TO RESERVE YOUR SPOT!!!

ASK FOR _____ IN SPEECH AT _____.

School Heading

*** ATENCION *** ATENCION *** ATENCION ***

TO: A TODOS LOS PADRES CONESTUDIANTES DE
COMIDA DE PURE

*OBTENGA **GRATIS** UN PROCESADOR DE COMIDA!!!

*OBTENGA **GRATIS** UNA CUCHARA ADAPTADORA!!!

*OBTENGA **GRATIS** U VASO ADAPTADOR!!!

*OBTENGA UN LUNCH **GRATIS** PARA USTED!!!

A NUESTRO DEMONSTACION DE COMIDA DE PURE

*PUEDE TRAER SU PLATO FAVORITO Y LE
ENSENAREMOS COMO PUEDE HACERLO PURE!!!

*APRENDA LA TENNICA MAS **RAPIDA**, **SEGURA**,
Y **ORGANIZADA** DE ETACION!!!

CUANDO: OCTUBRE 29, 11:30AM

WHERE: EN LA ESCUELA DE TU HIJO/HIJA
ADDRESS
PHONE

RSVP: LLAME AHORA PARA RESERVAR SU ESPACIO!!!
PREGUENTE POR _____, THERAPISTA DEL
ABLA _____.

The Fourth Step: Bring Each Set of Parents Into the Team

- Conduct a thorough interview to determine home feeding routine
- Assist in creating a sensible schedule
- Generalize school mealtime program:
 - Teach positioning for feeding
 - Teach feeding/cup drinking techniques
 - Create a mealtime log when necessary
- Create a network of parents with similar concerns/experiences

The Fourth Step, Continued

- Teach puree making
- Have parents bring in left over dinners
- Home specific recipe books

Parents Learn to Make Puree

[Video Clip Here]

Step Five: Program Maintenance

- Monthly Monitoring / Data Collection Notebooks
- Are the students and staff doing what they should?
- Are the mealtime goals still appropriate?

MEALTIME PROFILE

STUDENT: _____ SCHOOL YEAR: _____

LEVEL OF INDEPENDENCE FOR FEEDING:

FOOD RESTRICTIONS/CONSISTENCIES ALLOWED:

ALERTS: _____

UTENSILS: _____

MEALTIME GOALS:

COMMUNICATION MODE/AAC:

COMMUNICATION GOALS:

BEHAVIOR/SOCIAL NEEDS:

Step Five:

Program Maintenance, Continued

- Re-training of paraprofessionals
- Inventory of adaptive utensils
- Mandatory bi-annual MBS
- Communication with parents via notebook, e-mail, telephone
- Communication with physicians as needed

Case Study: Christian

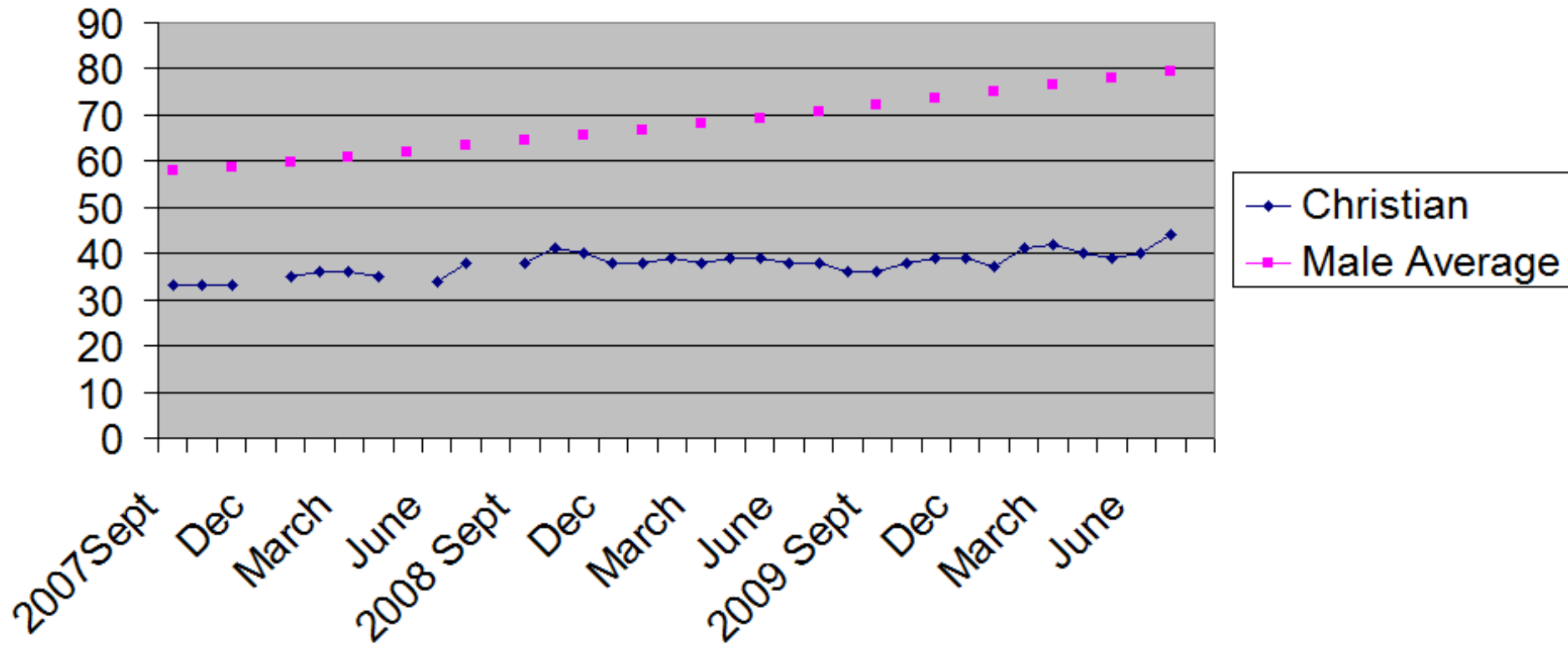
Severe Dysphagia: Failure to Thrive

Goal: Maintenance of Health

- CP, non-verbal, non-ambulatory, 9 years old
- History of hospitalization for aspiration pneumonia
- Two year old MBS Study recommended puree and thin liquids only
- Respiratory dysfunction, laborious oral feedings, and high tone burned calories
- Became lethargic, and refused oral feedings
- Maintained a weight of 39 pounds for 1 1/2 years
- Nurses recommended G-tube



Christian Weight Gain Age 7yrs-10yrs



Christian's Mealtime Program

AT SCHOOL

- Oral intake of puree and thin liquids
- Drinks from cup with open mouth posture
- Learned to swipe bolus from spoon with lips, subsequently lost skill
- Soft solids were never recommended

AT HOME

- Three bottles daily reclined in Mom's arms
- Top of bottle nipple was completely cut off
- Anterior spillage from oral cavity during feedings
- Given thin liquids and soft solids at meals

Christian's Mealtimes Programs

[Video Clip Here]

How Mom Joined The Program, and What Followed

- The Final Straw
- Accompanied Mom to MBS:
 - Aspiration of thin liquids
 - Near choking on soft solids
- Mom's objection to puree and G-Tube
- Efforts to keep Christian off a G-Tube
- A heart to heart: Christian's a big boy
 - Getting off the bottle
- Creating a mealtime schedule
- Learning puree and feeding techniques

Christian's Resolution

- Mom continued to feed thin liquids and soft solids
- Christian became weaker, and refused to eat
- School reported caloric intake to physician daily
- Mom continued to go from physician to physician each time a G-tube was suggested
- NYC DOE medical meeting
- School reported Mom to Child Protective Services
- A new physician placed an emergency NG tube
- A G-tube soon followed
- Christian gained weight

Case Study: Royal

Moderate Dysphagia: Oral Phase

Goal: Progress Skills Along the Continuum



- CP, non-verbal, non-ambulatory
- Eight years old
- Six Month Communicative/
Cognitive age level
- Often sleeps during school hours

Royal's Mealtime Program

AT SCHOOL

- Receives oral feedings of puree and thin liquids
- Oriented to bolus with pursed lips as if it were a bottle
- Recently began to open his mouth to receive puree from a spoon
- Recently began to drink from a cup
- Often not hungry at breakfast

AT HOME

- Feed and sleep on demand
- Bottle fed
- No seating for mealtime
- Could not get wheelchair into home
- Held for most of the day
- Slept in crib in parents room
- Parents are not English speakers

Royal's Resolution

- Parents were supplied with a schedule, adapted utensils, feeding techniques, food processor for puree
- Interdisciplinary team implemented new seating and utensils

Royal's Resolution

[Video Clip Here]

Case Study: Halimat

Mild-Mod Dysphagia: Dental Malocclusion

Goal: Independence



- Diagnosis of CP
- High cognitive level
- Uses a Springboard for communication
- Self feeds
- Stable home environment
- Thumb sucker
- Dental malocclusion

Halimat

[Video Clip Here]

Halimat's Resolution

- Contacted Cleft Palate Foundation
- Referred to free monthly Craniofacial evaluations
- Halimat will be receiving a crib by the orthodontic team
- The team will work with Medicaid for payment and ongoing treatment

Craniofacial Evaluation



Case Study: Guervens

Mild Dysphagia: Puree → soft solids, self-feeding

Goal: Independence

- Diagnosis of Downs Syndrome
- At home, parents spoon feed puree only
- At school, self feeds, drinks from a cup, has soft solids
- Clearance for all textures fed at school as per MBS Study



Guervens

[Video Clip Here]

Parents: Positive Results

- Received free equipment and instruction
- Have maintained a safe feeding program in the home environment
- Feel more in-control/powerful
- Have a better understanding of their child's medical condition
- Have a network of people to reach out to for help
- Reported feeling closer to their children



Parents: Negative Results

- Parents saw school team as “bullies”
- Parents viewed coming to school as a bother
- Parents did not want to accept the realities of their children’s condition
- Lashing out by parents aimed at staff
- Parents are not always truthful with staff/physicians
- Some parents did not follow up with school and/or medical recommendations

School: Results

- Better communication with...
 - School Staff
 - Parents
 - Students
 - Outside Medical Staff
- As a result, able to provide better treatment to students with dysphagia related issues

Students: Results

■ Medication

- Not reliable as parents will often administer without notifying the school

■ Weight

- Not reliable as the recording of height of students with CP is often inaccurate



■ Absences

- Not reliable due to factors other than dysphagia related issues

Students: Results

- Ten students were referred for, and accompanied to, MBS Studies
 - Two graduated to less restrictive consistencies
 - Eight were found to be consuming consistencies that were being aspirated
 - The school worked with all of those parents and school staff to create safe mealtime programs for the students
 - All students with cooperating parents are now eating safely

Students: Results

- *“As a direct result of the communication of the school Collaborative Feeding Team with the parents and outside medical staff, three students who were failure to thrive were identified, and prescribed much needed feeding tubes. As a result, they are gaining weight, and out of imminent danger.”*

Students: Results

- Eight students have either become self feeders, or are well on their way
- Five students have gone from eating puree only to soft solids
- One student has graduated from eating puree only, to a diet that includes almost all solids
- Two students will have dental malocclusions repaired

Feel Free To Contact Me With
Any Comments or Questions!!

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