

TARGETING THE BIG THREE

MEALTIME BEHAVIORS CAREGIVER MANUAL

SUMMARY

This training offers hands-on instruction for parents, caregivers, and service providers to address the most frequent and problematic areas of daily living for many individuals with autism spectrum disorders and other developmental disabilities. The curriculum is based on the principles of applied behavior analysis (ABA) and focuses on developing the specific techniques and skills shown to be successful in these areas. This program provides training in the management of mealtime behaviors. Caregivers will attend a series of weekly sessions in which they will learn new methods of observing and recording problem behavior, how to implement techniques to change behavior, and how to track progress. Throughout the program, participating parents and caregivers will be expected to collect and submit data related to their experiences in implementing mealtime behavior management techniques. At the conclusion of the program, the trainers will provide follow-up consultation with individual caregivers and staff as needed.



Disclaimer

This curriculum contains guidelines designed to provide a useful “how to” manual to address common mealtime problem behaviors in individuals with ASDs and other developmental disabilities. It is not intended to be a one-size-fits-all training program. This curriculum, while focused on mealtime behavior management, may also deal with health and medically-related issues for the individual for whom you are providing care. Please note that this curriculum is not intended to supplant any in-person behavioral consultation or medical examination that may be necessary to appropriately meet the needs of the individual presenting with problematic mealtime behaviors. Always seek the advice of a professional with any questions you may have *before* using the curriculum.

If you haven't already done so, locate a competent behavior analyst or other behavioral professional trained in these areas for individuals exhibiting severe and chronic food refusal and selectivity (see www.bacb.com for a registry of board certified behavior analysts). OPWDD expressly disclaims any and all responsibility for any liability, loss, or risk, personal or otherwise, which may be incurred as a consequence of the use and application of any of the guidelines included in this curriculum.

The information I receive as a result of this training is for educational purposes only. No information provided is intended to diagnose or cure any disease or condition. All guidelines given should be considered as advice.

Signature

Date



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Session I: Introduction

1. Program Overview

This program has been designed for parents and caregivers of individuals diagnosed with autism spectrum disorders (ASDs) and other developmental disabilities. The goal of this program is to offer caregivers a behavioral curriculum that addresses three targeted problem areas: management of challenging behaviors, mealtime behaviors, and toilet training.

The curriculum is based on the principles of Applied Behavioral Analysis (ABA) and is designed to help caregivers to develop specific techniques and skills to utilize in the management of the three problem areas.

This five-week session will focus on teaching a proven, scientific approach to addressing mealtime behaviors such as lack of self feeding skills, food refusal, accepting a very limited variety of foods, and inappropriate behaviors related to eating. The methods you will learn are based on positive approaches to behavior management. Your diligence in collecting and graphing data related to your training efforts will be critical to successful intervention. Don't be intimidated by this need for data. With the help of the trainer, you will find you can easily collect data, understand what it is telling you about the person you are working with, and most importantly, use it to improve the individual's mealtime behaviors.

If the individual is significantly underweight or has significant health problems, be sure to gain approval from his or her health care provider before undertaking this program.

Program Sessions:

| | |
|---------------------|---|
| Session 1 | <ul style="list-style-type: none"> • Get to know the individuals you care for • An introduction to Applied Behavior Analysis • Setting realistic goals • Identify the target behaviors you want to improve • Collecting and graphing baseline data • Setting realistic goals |
| Session 2 | <ul style="list-style-type: none"> • Discuss baseline data • Learn how to conduct preference assessments so you can later use these preferences (specific foods, toys or favorite activities) to motivate behavioral change • How to work with an individual using a three-step guided compliance model that allows you to offer the right amount of help as a person learns |
| Optional Session 2a | <ul style="list-style-type: none"> • How to identify the function of mealtime behaviors with Analogue Functional Analysis |
| Session 3 | <ul style="list-style-type: none"> • Discuss results of your preference assessments • Mealtime Behavior Intervention Techniques • How to create a personalized mealtime behavior intervention plan • How to collect and graph data as you implement mealtime behavior intervention techniques |
| Session 4 | <ul style="list-style-type: none"> • Discuss results of mealtime behavior intervention plan implementation • Modify the mealtime behavior intervention plan as needed • Create a plan for follow-up consultation as needed |

2. Caregiver Commitment

Each of you is here to learn information and acquire new skills to assist you in providing care for individuals diagnosed with ASDs and other developmental disabilities. Participation in this type of program requires a dedicated commitment to the learning process. You will be required to learn new terms and concepts, to collect and record data about behavior, and to implement the techniques demonstrated in class with the individual for whom you provide care. The program will not work for you if you do not complete the homework. The trainer will help you break down your learning and tasks into manageable sections, so that you will feel successful throughout the training program.

Please take a moment to think about your commitment to the program, your willingness to complete and return required data collection homework assignments, and your ability to attend all training sessions.

3. Description of the Individual

Take some time to think about the individual for whom you provide care. Please record your responses and share with the group during discussions if comfortable.

- Describe the individual's strengths:

- Describe the individual' challenging mealtime behaviors (Be specific):

- Describe your concerns about these behaviors:

- Describe past mealtime behavior management training experiences. Include positive and negative aspects:



- How does the individual communicate (e.g., verbal, uses gestures, uses sign language, etc.)? Please list all communication methods currently in use and/or describe the individual's ability to express him or herself.

4. Introduction to Applied Behavior Analysis (ABA)

Applied Behavior Analysis is a branch of psychology which focuses on the application of the science of behavior. It is commonly referred to as “ABA.” ABA has been studied extensively and is considered by the majority of clinicians and researchers to be the most effective, evidence-based, therapeutic approach for helping individuals with ASDs gain the communicative, social and behavioral skills they need.

ABA provides the format to measure behavior, teach functional skills, and evaluate progress objectively. It breaks behavior down into small parts so that individuals with ASDs can learn and accomplish things easier. ABA provides abundant positive reinforcement for appropriate, desirable behaviors and withholds reinforcement for problematic or undesirable behaviors.

A great deal of material will be covered throughout this program. One of the primary goals of this program is to teach you how to use interventions based on ABA. The trainer will help you learn specific ABA techniques to understand and improve the mealtime behavior of the individual you care for. It will take continued focus and practice to see long-term changes. We encourage you to remain committed to the program. With that commitment, it can and will work for you and the individual for whom you provide care.

The Story Behind Food Refusal and Selectivity

Food refusal and selectivity are common among individuals with autism and other developmental disabilities. It is easy to get overwhelmed when eating problems are severe because they are so closely tied to the individual's health and development. If left untreated, eating problems can lead to serious health problems, including malnutrition, and may subsequently result in failure-to-thrive. When this happens, mealtime problems can easily dominate the family life. The fact that mealtime occurs at least three times a day with at least one meal typically consumed outside the home (e.g., school or workday lunch) adds to the difficulty of managing meal-related behaviors.



This training addresses three areas:

1. Lack of independent self-feeding skills
2. Insufficient food intake due to food selectivity
3. Insufficient food intake due to texture of food

Functional Behavior Assessment (FBA)

A Functional Behavior Assessment, or FBA, is an assessment process used to gather information and identify the reasons for (i.e., the causes or “functions” of) behaviors. FBA includes three types of assessments. In order of increasing complexity, they are indirect, descriptive and analogue. Indirect and descriptive FBA methods involve only observation. They identify patterns and correlations, and do not always lead to an accurate understanding of the reasons for behaviors.

Analogue FBA (also known as Functional Analysis or FA) is used in cases where it is unclear *why* an individual engages in certain undesirable behaviors despite caregiver interview and direct observation. This type of FBA exposes the individual to different situations and records his reaction to determine what is driving his behavior.

To determine the reasons behind food refusal and selectivity, Analogue FA exposes the individual to conditions which vary the presence and absence of social attention and preferred items (toys, games and favorite treats) and escape and avoidance of eating. Recording the individual’s reaction to these different situations will reveal what is causing that person to engage in food refusal behaviors. The results from the analogue FA can then form the basis for a mealtime behavior intervention plan (BIP).

For the majority of individuals, food refusal and selectivity are due to avoidance of non-preferred foods. Many times, however, the refusal behavior has become a way for the individual to get attention and interaction from the caregivers or to get preferred foods instead. In these cases, the reaction of the caregiver and eventual access to preferred foods is actually rewarding the refusal behavior of the person. Giving her attention *and* a preferred food effectively teaches her that if she refuses the peas, for example, she will get lots of attention and possibly something she prefers such as pudding. If this individual also uses inappropriate behaviors such as hitting the caregiver to avoid eating peas, giving her another food that she likes not only rewards her behavior, it is also likely to make the problem worse. The next time the caregiver serves peas, she will resort to hitting because that is what worked for her in the past. She may even exhibit new challenging behaviors if the caregiver doesn’t give in quickly enough.

If you already know the person you care for is refusing food to avoid eating foods she doesn’t like or to enjoy all the attention it gets her, functional analysis isn’t necessary. You will, however, need to address all the functions of (reasons for) the refusal behaviors in your intervention.

Nonetheless, before you conclude that is the case for the individual you care for, it is important to consider that there could be other reasons for the refusal. People will refuse particular foods for a number of reasons. Failure to base mealtime intervention on the correct reason can lead to ineffective and unnecessarily restrictive procedures. To be sure that all the reasons for food refusal have been considered, caregivers must determine why the individual is trying to refuse or avoid eating the foods she is given.

Other factors that may contribute to food refusal behavior

- Medical complications (e.g., tooth ache, acid reflux, GERD, allergies, dysphagia, stomach pains, etc.)
- Food texture, smell or temperature sensitivities
- Oral-motor difficulty (e.g., uncoordinated suck, swallow, or chew mechanisms)
- Sleep, fatigue
- Lack of appetite or feeling hunger
- Posturing and difficulties with sitting upright
- Location and setting (e.g., number of people present, room temperature)

If you have any questions about the list of other factors that can contribute to mealtime behaviors, ask the trainer.

Take some time now to think about the individual you care for and the food refusal/selectivity that concerns you. What do you *think* the reasons are for this refusal? Think about the list of factors above and also about what you do when she refuses food. How do you react? Could this reaction be contributing to the mealtime behaviors?

This reflection is based on your *observations* of the individual. Following Session 2, if you are not sure why the individual you care for is engaging in challenging mealtime behaviors, you will conduct an Analogue FA to determine exactly what is driving the individual's behaviors. If you are certain about what is motivating the individual's mealtime problem behaviors (i.e., to avoid certain foods and/or to get your direct attention), you will not need to conduct an analogue FA.

Discuss your answers to the above question with the trainer to determine if analogue FA is advised for the individual you care for.

5. Identifying and Defining Target Mealtime Behaviors

Before you begin a functional analysis, however, it is important to define the mealtime behaviors that concern you. You need to identify exactly what behavior you wish to change because you will collect data throughout the assessment on each occurrence of this mealtime behavior. Later, you will measure progress based on that “baseline” data.

Review the table below so that you understand the terms used to describe mealtime behaviors. All but refusal behavior is filled in for you. That is because an individual’s refusal behavior can be unique to that individual. How one person responds to foods can be quite different from how another person does. Take some time to write down exactly how the person you care for refuses foods.

| Mealtime Behavior | Description |
|-----------------------|---|
| Accept | The individual opens his mouth so that food (or drink) can be inserted within 5-10 seconds after the spoon (or cup) is presented. |
| Swallow (Mouth Clean) | The individual clears her mouth of all food (or liquid) larger than the size of a pea within 30 seconds of food (or drink) acceptance without expelling (spitting it out). |
| Expel | Any behavior (other than vomiting or salivating) that causes food (or drink) larger than size of a pea, that was in the individual’s mouth, to be seen outside his mouth. |
| Gag/Cough | Making retching or choking sounds, hyper-extending the neck, opening her mouth while tensing her neck muscles, or sticking out her tongue. |
| Pack | Holding (i.e., not swallowing) the food inside the mouth after 30 seconds has passed since acceptance. |
| Refusal Behavior | <p><i>Examples: refusing to sit in chair, crying, saying “no “, moving his head away from spoon, refusing to open his mouth, putting his hands in front of his mouth, throwing food or utensils, walking away from the table...</i></p> <p>-----</p> <p>Describe the individual’s food refusal behaviors here:</p> |



6. Collecting and Displaying Data to Track Progress

Frequent and consistent data collection is important in order to determine the baseline (pre-intervention) level of a target mealtime behavior and whether an intervention is helping to reduce that behavior. Without carefully observing and recording behaviors, caregivers may not be able to tell if an intervention should be continued or stopped. Data collection ensures unbiased decision making. The results of an intervention technique are in the numbers, and the numbers will tell you how the individual is or is not progressing. The Baseline Mealtime Data Sheet (p. 15-16) should be used for recording behavior data. The Mealtime Behavior Graph (p. 17) should be used for graphing data.

Take time to become familiar with the Baseline Mealtime Data Sheet. Note that it provides space for you to list each specific type of food response an individual displays. When you use it, you should be as specific as you can, noting exactly how the person is refusing food. With data collected from the Baseline Mealtime Data Sheet (i.e., sum of the bite for each target behavior), graph the target behavior(s) on the Mealtime Behavior Graph (p. 17).

Privacy and Confidentiality

The confidentiality of your data is important and will be protected. Your baseline data sheet and all other data sheets will be coded in order to summarize the results of this training program. Your name or the names of the individuals you care for will not be disclosed in any way. You will be assigned an alphabet letter code, which will be kept secret and known only to the trainer. The data collected will be coded like this:

Name of DDSO or voluntary agency – Trainer Initials – Participant Code – Age of the individual

Example: Staten Island - HY - A – 17



Mealtime Baseline Data Sheet

(Use a separate data sheet for each meal session.)

Caregiver's Name: _____ Date: __ / __ / ____ Time/Bite Cap: _____

Meal: Breakfast / Lunch / Dinner/Snack

Foods presented: _____

Accept: Taking the entire bite of food within 5-10 seconds of presentation.
 Swallow: Swallowing the bite within 30-seconds after the entire bite was deposited in the mouth
 Pack: Holding (i.e., not swallowing) the food inside the mouth after 30 seconds has passed since acceptance.
 Expel: Any food larger than the size of a pea is seen outside the lips after acceptance.
 Gag: Making retching sounds, hyper-extending the neck, opening the mouth while tensing the neck, or sticking out tongue.
 Cough: Expelling air from the lungs sharply with a noise.
 Refusal: Head turns, throwing, scratching, hitting, and mouth cover, crying, screaming, etc.

| Bite # | P = Preferred Food NP = Non-preferred NF= New Food DK = Don't know | Food | Accept | Swallow | Pack | Expel | Gag or Cough | Refusal |
|--------|---|------|--------|---------|------|-------|--------------|---------|
| 1 | P NP NF DK | | | | | | | |
| 2 | P NP NF DK | | | | | | | |
| 3 | P NP NF DK | | | | | | | |
| 4 | P NP NF DK | | | | | | | |
| 5 | P NP NF DK | | | | | | | |
| 6 | P NP NF DK | | | | | | | |
| 7 | P NP NF DK | | | | | | | |
| 8 | P NP NF DK | | | | | | | |
| 9 | P NP NF DK | | | | | | | |
| 10 | P NP NF DK | | | | | | | |
| 11 | P NP NF DK | | | | | | | |
| 12 | P NP NF DK | | | | | | | |
| 13 | P NP NF DK | | | | | | | |
| 14 | P NP NF DK | | | | | | | |
| 15 | P NP NF DK | | | | | | | |
| 16 | P NP NF DK | | | | | | | |
| 17 | P NP NF DK | | | | | | | |
| 18 | P NP NF DK | | | | | | | |
| 19 | P NP NF DK | | | | | | | |



| | | | | | | | | |
|---------------------|------------|--|--|--|--|--|--|--|
| 20 | P NP NF DK | | | | | | | |
| 21 | P NP NF DK | | | | | | | |
| 22 | P NP NF DK | | | | | | | |
| 23 | P NP NF DK | | | | | | | |
| 24 | P NP NF DK | | | | | | | |
| 25 | P NP NF DK | | | | | | | |
| 26 | P NP NF DK | | | | | | | |
| 27 | P NP NF DK | | | | | | | |
| 28 | P NP NF DK | | | | | | | |
| 29 | P NP NF DK | | | | | | | |
| 30 | P NP NF DK | | | | | | | |
| 31 | P NP NF DK | | | | | | | |
| 32 | P NP NF DK | | | | | | | |
| 33 | P NP NF DK | | | | | | | |
| 34 | P NP NF DK | | | | | | | |
| 35 | P NP NF DK | | | | | | | |
| 36 | P NP NF DK | | | | | | | |
| 37 | P NP NF DK | | | | | | | |
| 38 | P NP NF DK | | | | | | | |
| 39 | P NP NF DK | | | | | | | |
| 40 | P NP NF DK | | | | | | | |
| 41 | P NP NF DK | | | | | | | |
| 42 | P NP NF DK | | | | | | | |
| 43 | P NP NF DK | | | | | | | |
| 44 | P NP NF DK | | | | | | | |
| 45 | P NP NF DK | | | | | | | |
| Sum of bite # 1-45= | | | | | | | | |



7. Setting Realistic Goals

Setting goals allows us to objectively measure progress toward an identified desired outcome. It also allows caregivers and parents to ask themselves, “What behavioral changes would really make the greatest improvements in our lives together?” It allows them to identify what really matters. For instance, it may be more important to establish consistent food acceptance and swallows than to address that person’s texture preference for raw carrots over cooked carrots.

Being realistic at the outset is crucial because it can help parents and caregivers appreciate that they are making positive changes in their lives and the lives of the individual they care for. Making sure the goals of an intervention are *realistic* means that they are achievable. Being realistic keeps the picture positive as it focuses attention on progress, rather than perfection.

What do you hope to achieve as a result of learning how to intervene effectively with problematic mealtime behaviors? (Examples: decrease refusal behaviors from an average of 5 per meal to 2 per meal; increase food variety by adding two new foods at 80% acceptance rate) Be realistic. Record your goals in the table below. Use the list of new foods on the next page to help you identify potential new food goals.

List the mealtime behavioral goals for the individual to whom you provide care:

| Target Mealtime Behavior | Behavioral Goal |
|--------------------------|-----------------|
| 1. | |
| 2. | |
| 3. | |



New Food Goals:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Example Food List:

Dark green vegetables

broccoli
collard greens
dark green leafy
lettuce
kale
mesclun
mustard greens
romaine lettuce
spinach
turnip greens
watercress

Orange vegetables

acorn squash
butternut squash
carrots
hubbard squash
pumpkin
sweet potatoes

Dry beans and peas

black beans
black-eyed peas
garbanzo beans (chickpeas)
kidney beans
lentils
lima beans
navy beans
pinto beans
soy beans
split peas
tofu (soybean curd)
white beans

Starchy vegetables

corn
green peas

lima beans (green)
potatoes

Other vegetables

artichokes
asparagus
bean sprouts
beets
Brussels sprouts
cabbage
cauliflower
celery
cucumbers
eggplant
green beans
green or red peppers
iceberg (head) lettuce
mushrooms
okra
onions
parsnips
tomatoes
tomato juice
vegetable juice
turnips
wax beans
zucchini

Whole grains

brown rice
buckwheat
cracked wheat
oatmeal
popcorn

Breakfast cereals

corn flakes
whole wheat cereal
flakes
muesli
whole grain barley
whole grain cornmeal
whole rye
whole wheat bread
whole wheat crackers
whole wheat pasta
whole wheat sandwich buns and rolls
whole wheat tortillas
wild rice

Refined grains

cornbread
corn tortillas
couscous
crackers
flour tortillas
grits
noodles

spaghetti
macaroni
pitas
pretzels
white bread
white sandwich buns and rolls
white rice

Fruits (and juices)

apples
apricots
avocado
bananas
cherries
oranges
grapefruit
grapes
kiwi fruit
lemons
limes
mangoes
nectarines
oranges
peaches
pears
papaya
pineapple
plums
prunes
raisins
tangerines

Berries

strawberries
blueberries
raspberries

Melons

cantaloupe
honeydew
watermelon

Nuts & seeds

Almonds
cashews
hazelnuts
mixed nuts
peanuts
peanut butter
pecans
pistachios
pumpkin seeds
sesame seeds
sunflower seeds
walnuts

Meat/Protein

beef
chicken

eggs
pork
turkey

Fish/Seafood

bass
flounder
catfish
cod
halibut
mackerel
salmon
shrimp
sole
tilapia
trout
tuna

Dairy

cheese
ice cream
milk
yogurt

Other:



8. Review and Homework:

Notes:

Are you ready for your homework?

Do you have any questions about food refusal and selectivity? Be sure to ask the trainer your questions.

Have you clearly identified target mealtime behaviors and set a realistic goal for each behavior?

Do you feel ready to collect baseline data on the target mealtime behaviors? Bring your concerns to the trainer.

- **Collect baseline data on target mealtime behaviors. Bring your completed Mealtime Baseline Data Sheet and Mealtime Behavior Graph with you to the next class.**

END OF SESSION 1

Session 2:
Preference Assessment

1. Review

Notes:

2. Discuss Baseline Data Collected since Session 1

- a. After becoming aware of the many possible reasons for food refusal in Session 1, did you notice any patterns in the mealtime behaviors of the individual you care for that might explain the reason for the behaviors? If so, what did you notice?

- b. What was your experience collecting baseline data on the mealtime behaviors? Was it easy or difficult? What were your obstacles?

- c. Now that you have some data about the target behaviors, are your stated goals still appropriate? Take a few minutes now to go back and review your mealtime behavior goals. Adjust them if you need to.

3. Preference Assessment

Individuals with autism and other developmental disabilities sometimes are not able to tell you what things they like or dislike. Behavior analysts have developed preference assessments to help identify people’s preferences so that the things they like can be used to motivate or “reinforce” appropriate behaviors. Even if you know some things an individual prefers, it can be helpful to know which things she prefers *most*. Those are the things that will be *most* effective at motivating improved behavior. The three most common types of preference assessments include Single-Item, Paired Choice, and Group-Items. This training will focus solely on Paired Choice Preference Assessment. You will learn how to conduct a Tangible Paired Choice Preference Assessment using both a variety of items (toys, leisure time, favorite activities) and foods (known as an Edible Paired Choice Preference Assessment).

Note that in behavior intervention, it is important that the individual does not have “free access” to the items that are used as reinforcers. For example, if music is a reinforcer and the individual has music available to her all day long, then she will be less likely to work for music, and it will lose its reinforcing (motivating) value. The items that act as reinforcers for the individual’s behavior will also change over time. Because of this, it is important to rotate reinforcers so that the individual does not get tired of one reinforcer.

Key Words

Preference Assessment: A procedure used to help identify an individual’s preference for objects or activities. The things they like can then be used to reinforce appropriate behaviors.

Reinforcer: Something that increases a behavior. Reinforcement (delivering the reinforcer) is the best way to teach good behavior and promote lasting change.

Tangible Paired Choice Preference Assessment

Purpose: To identify and rank order potential reinforcers that will be used to motivate the individual as a caregiver seeks to modify problem behavior(s).

Supplies: preferred items, data sheet, timer

General Procedure

1. Using the table below, list 6 items the individual highly prefers, such as toys, leisure time (e.g., computer game or TV time) or activities (e.g., games, hi-five, social interactions). If none can be identified, conduct a direct observation of the individual for a day to gather information about the things he enjoys doing during free-time. Such items should be highly desirable and easy to supply *and* withhold. Record the items you have identified in the chart below.

List of Preferred Items to Assess

| | |
|--------|--|
| Item 1 | |
| Item 2 | |
| Item 3 | |
| Item 4 | |
| Item 5 | |
| Item 6 | |

To help you keep track during presentations, label the items #1-6 using a sticker or a small Post-it Note.

2. Set aside time to conduct the assessment without distractions or interruptions
3. Provide the individual with a brief sampling of each item
 - a. If the item is *leisure time or activity* (e.g., working on the computer), the individual should be given about 10-15 seconds to engage in the activity.
 - b. If the item is an *object* (e.g., stuffed toy), the individual should be given about 10-15 seconds of access to the object.



4. Of the 6 items, present sets of two items at a time to the individual (the caregiver can hold the two items in his or her hand, or display them on a table, whichever is more convenient). For a leisure time or activity, a photograph (or Picture Exchange Communication System, PECS) may be substituted to represent the leisure time or activity during this presentation.
5. Say the name of each item and then provide the verbal prompt, “pick one.” (example: “ball, puzzle, pick one”)
6. Ask the individual to select one of the two items by touching, looking, pointing, or by picking it up.
7. If the individual selects an item, immediately remove the other item from sight. Block any attempts to touch (or gain access to) both items simultaneously. Record the individual’s choice on the datasheet. If the individual doesn’t make a choice for more than 5-10 seconds, remove the two items and record that the individual did not select an item.
8. Using the Paired Item Presentation Sequence chart on p. 27, continue to present sets of two items until all items have been paired with one another.

Paired Item Presentation Sequence

Because some individuals with ASDs and other developmental disabilities have position selectivity (e.g., always picking the left choice), the following presentation sequence were pre-determined to account for such possibility.

The first item should always be presented on your *left*.

| Trial | Pairing of items Left←→Right | Item Selected by the Individual | | |
|-------|--|---------------------------------|---|-------------|
| 1 | Item 1 & Item 2 | 1 | 2 | No Response |
| 2 | Item 2 & Item 3 | 2 | 3 | No Response |
| 3 | Item 3 & Item 4 | 3 | 4 | No Response |
| 4 | Item 4 & Item 5 | 4 | 5 | No Response |
| 5 | Item 5 & Item 6 | 5 | 6 | No Response |
| 6 | Item 1 & Item 3 | 1 | 3 | No Response |
| 7 | Item 4 & Item 2 | 4 | 2 | No Response |
| 8 | Item 3 & Item 5 | 3 | 5 | No Response |
| 9 | Item 6 & Item 4 | 6 | 4 | No Response |
| 10 | Item 1 & Item 4 | 1 | 4 | No Response |
| 11 | Item 5 & Item 2 | 5 | 2 | No Response |
| 12 | Item 3 & Item 6 | 3 | 6 | No Response |
| 13 | Item 5 & Item 1 | 5 | 1 | No Response |
| 14 | Item 2 & Item 6 | 2 | 6 | No Response |
| 15 | Item 6 & Item 1 | 6 | 1 | No Response |

- Rank order the individual's preferences by: (a) calculating the number of times that the child *selected* an item, and (b) dividing that number by 5, then (c) multiplying that number by 100. Record the results below.

Example: *Item 1 selected 3 times out of 5 opportunities* ($\frac{3}{5} \times 100 = 100\%$)

- ✓ Item 1 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Item 2 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Item 3 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Item 4 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Item 5 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Item 6 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %

10. Items that are selected at least 80% or above are considered possible reinforcers. If the items selected were all *less* than 80%, use the top two most preferred items. Record the results in the space below.

Highly preferred items (selected at 80% or above):

These items are the tangible reinforcers you will want to use during behavioral interventions.

.

Edible Paired-Choice Preference Assessment

Individuals with ASDs and other developmental disabilities sometimes are not able to tell you what kind of foods they like or dislike or which foods they like the most. Behavior analysts have developed an edible preference assessment to help identify foods that can be used in modifying behavior.

Purpose: To identify and rank order potential edible reinforcers that will be used to motivate the individual.

Supplies: data sheet, food and/or beverage, spoons, cups, plates, napkins, bib (if necessary)

General Procedure

1. List 6 edibles the individual consistently consumes or highly prefers.

List of Foods to Assess

| | |
|--------|--|
| Food 1 | |
| Food 2 | |
| Food 3 | |
| Food 4 | |
| Food 5 | |
| Food 6 | |

Label each food item #1-6 using a sticker or a small Post-it Note to help you keep track during the presentation.

2. Set aside time to conduct the assessment without distractions or interruptions.
3. Provide the individual with a *tiny* taste sampling of each food or beverage prior to conducting this assessment.
4. Using the Paired Food Item Presentation Sequence below, present sets of two foods (tiny bite or sip) at a time to the individual (the caregiver can hold the two spoons, or place them on a plate, whichever is more convenient).
 - Say the name of each food and then provide the verbal prompt, "Pick one." (example: "peaches, chicken nugget, Pick one").

Paired Food Item Presentation Sequence

Because some individuals with autism and other developmental disabilities have position selectivity (e.g., always picking the left choice), the following pairs were pre-determined to account for such possibility.

The first item should always be presented on your *left*.

| Trial | Pairing of Foods Left ↔ Right | Food Selected by the Individual | | |
|-------|----------------------------------|---------------------------------|---|-------------|
| 1 | Food 1 & Food 2 | 1 | 2 | No Response |
| 2 | Food 2 & Food 3 | 2 | 3 | No Response |
| 3 | Food 3 & Food 4 | 3 | 4 | No Response |
| 4 | Food 4 & Food 5 | 4 | 5 | No Response |
| 5 | Food 5 & Food 6 | 5 | 6 | No Response |
| 6 | Food 1 & Food 3 | 1 | 3 | No Response |
| 7 | Food 4 & Food 2 | 4 | 2 | No Response |
| 8 | Food 3 & Food 5 | 3 | 5 | No Response |
| 9 | Food 6 & Food 4 | 6 | 4 | No Response |
| 10 | Food 1 & Food 4 | 1 | 4 | No Response |
| 11 | Food 5 & Food 2 | 5 | 2 | No Response |
| 12 | Food 3 & Food 6 | 3 | 6 | No Response |
| 13 | Food 5 & Food 1 | 5 | 1 | No Response |
| 14 | Food 2 & Food 6 | 2 | 6 | No Response |
| 15 | Food 6 & Food 1 | 6 | 1 | No Response |

5. If the individual selects one by pointing or taking the spoon, immediately remove the other food from sight and allow him 30 seconds to take the bite (or drink).
6. Do not provide praise for making a choice.
7. Block any attempts to gain access to both edibles simultaneously.
8. If the individual doesn't make a choice for more than 10 seconds, remove the two foods and record that the individual did not make a choice. Move on to next food presentation.
9. Ignore undesirable behaviors such as spitting out of the food or sip (expelling), refusal behaviors (i.e., head turn, disruption, and mouth covers) or crying.



- 10. Using the Paired Food Item Presentation Sequence chart, continue to present sets of two choices until all choices have been paired with one another.
- 11. On the Paired Food Item Presentation Sequence chart, count the number of times the individual selected the food. Divide that number by 5, then multiply that number by 100 to obtain a percentage. Foods that are selected at least 80% or above are considered possible reinforcers. If the foods selected were all less than 80%, use the top two most preferred foods. Record the results in the space below.

Example: Food 1 selected 2 times out of 5 opportunities $(\frac{2}{5}) \times 100 = 40\%$

- ✓ Food 1 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Food 2 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Food 3 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Food 4 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Food 5 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %
- ✓ Food 6 selected ____ times out of 5 opportunities (____ /5) x 100 = ____ %

Highly Preferred Foods (selected at 80% or above):

These food items are the edible reinforcers you will want to use during behavioral interventions.

Before the next session, your homework will be to use preferred items in paired trials to determine the individual’s preferences following the presentation of items tables on p.27 and p. 30. Be sure to record the results of this assessment in the results tables on p.27 and p. 31 and bring it with you to the next session

4. Three-Step Guided Compliance (Tell-Show-Do)

Although it is much easier for you to do things for the individual (especially when you’re in a hurry), in the long-run, it will only make him more dependent on you. Three-step guided compliance known as Tell-Show-Do is a prompting strategy that teaches the individual what you want him to do by providing a model and physical guidance if he



does not do what you ask him to do. If you use this procedure consistently, you should find that, over time, the individual requires less assistance to complete tasks.

This guided compliance strategy will be useful in implementing the analogue functional analysis that is this week's homework.

General Procedure

- 1) State the individual's name.
- 2) **Tell** her what you want her to do. State the request clearly so that the individual knows exactly what she is supposed to do. Say the request as briefly and as specifically as possible.
 - a. Wait 5-10 seconds for her to carry out the request. Do not repeat the request.
- 3) If the individual complies, praise. State exactly what she did that you liked.
- 4) If the individual does not comply, repeat the request with a demonstration (**Show**)
 - a. Wait 5-10 seconds for her to carry out the request. Do not repeat the request.
- 5) If the individual complies, provide brief praise (e.g., "Nice job!")
- 6) If the individual does not comply, physically guide her (**Do**) in completing the request. Do not provide praise.
- 7) Always use the *minimum* amount of physical contact necessary for the request to be completed.
- 8) Never "give in" or complete the request yourself.

1. TELL me (verbal instruction) → wait 5-10 sec → praise abundantly if compliant.
 If not →

2. SHOW me (model) → wait 5-10 sec → praise briefly if compliant.
 If not →

3. Help me DO it (physical guidance) → no praise

Take some time to role play this guided compliance strategy in class.



5. Review and Homework

Notes:

Are you ready for your homework?

Do you have any questions about Preference Assessments?

Do you feel ready to conduct two types of Preference Assessments with the individual you care for? Bring your concerns to the trainer.

- **Conduct Preference Assessments (Tangible and Edible Paired Choice). Bring your results to the next session.**

END OF SESSION 2

Optional Session 2a:

Analogue Functional Behavior Assessment For Mealtime Behaviors

Many problem behaviors are *learned* and *maintained* by what happens immediately before and after the problem behavior. In most cases, the mealtime refusal behavior is seen as a way to request or communicate a preferred outcome (e.g., access to toys, favorite food, social interaction, or cessation of the meal, an unpleasant activity). Fortunately, because these behaviors are learned, they can be modified by manipulating or changing situations in the environment, especially the events before (e.g., presenting smoother texture) and after the behavior (e.g., reinforcing food acceptance). The goal is to replace the inappropriate “request” with more adaptive (appropriate and effective) behavior.

| Key Terms | |
|--------------------------------------|--|
| Applied Behavior Analysis (ABA) | The scientific study of behavior through measuring and evaluating behavior. ABA uses interventions to improve socially significant behaviors (e.g., school performance, communication skills, social skills, adaptive skills). |
| Functional Behavior Assessment (FBA) | An assessment process used in Applied Behavior Analysis to identify the functions of an individual’s behaviors. |
| Functional Analysis (FA) | Can be part of a Functional Behavior Assessment and is used when the function of a behavior remains unclear through indirect and descriptive behavior assessment. FA involves manipulating certain variables in order to identify the function/reasons for a behavior. |

1. Functional Behavior Assessments (FBA)

A Functional Behavior Assessment, or FBA, is an assessment process used to gather information and identify the reasons (causes or “functions”) for challenging behaviors.

Functional behavior assessment (FBA) for food refusal behavior includes three types of assessments. In order of increasing complexity, they are *indirect*, *descriptive*, and *analogue*. Indirect and descriptive FBA methods involve only observation. They aim to identify patterns and correlations, and do not always lead to an accurate understanding of the reasons for the mealtime problem behaviors. However, when they do identify obvious conditions that are reinforcing (i.e., unintentionally encouraging) the mealtime problem behavior, an intervention plan that involves modifying antecedent events, eliminating any reinforcement or encouragement of the mealtime problem behavior can be devised.

Analogue FBA (also known as Functional Analysis) is used in cases where it is unclear *why* an individual engages in a mealtime problem behavior despite caregiver interview and direct observation in the natural setting. This type of FBA exposes the individual to situations which vary the presence and absence of social attention, preferred leisure materials, and escape from eating. The frequency of mealtime problem behavior is then compared across these various “conditions” to identify the reasons for the problem behavior. The changes in frequency or intensity of the refusal behavior under the different conditions often explain why the behavior is occurring

2. Why do we Care about the Function of a Problem Mealtime Behavior?

Taking the time to understand exactly what is causing or motivating an individual’s mealtime problem behavior allows us to respond to that behavior with an intervention that is meaningful and effective for that individual. In contrast, failure to base behavioral intervention on the specific cause (function) of mealtime problem behavior very often results in an unnecessarily restrictive intervention for individuals with autism and other developmental disabilities.

For example, consider an individual who has learned that hitting a caregiver is an effective way of avoiding or escaping eating peas. Using time-out in this situation would provide the individual with exactly what he wants (avoiding eating peas) and is likely to make the problem worse, not better. The next time the caregiver insists on him eating peas, he will resort to hitting because that is what got him out of that situation consistently and successfully in the past. He may even exhibit new challenging behaviors if the caregiver doesn’t give in quickly enough. This individual may be allowed to avoid peas, and any other nonpreferred food he reacts in this way to. His nutrition may, in turn, suffer, and possibly lead to health concerns. Therefore, finding out what he is gaining by hitting (e.g., avoiding eating peas and attention from the caregiver) via FBA provides information on ways to change the mealtime problem behavior.



3. General FBA Procedures

Functional Behavior Assessment allows us to “test” certain conditions to uncover what is motivating and maintaining the mealtime problem behavior. This training will teach you to test for three standard conditions that might be motivating food refusal:

- Avoidance,
- Access to a Tangible Item or a Preferred Food,
- Access to Social Attention.

The functional assessment process is very structured. Each tested situation or condition is typically 10 minutes in length, but can be shorter or longer (5 minutes, 15 minutes, etc.) depending on the typical mealtime duration and your availability. If the meal lasts 30 minutes, you should conduct 2-3 sessions during one mealtime. Regardless of whatever duration is chosen, it is important that the duration of the testing session remain *consistent* throughout the *entire* functional analysis. Use a timer or a stopwatch for accuracy in time keeping. It is important to follow the steps in the order they are listed and record the behavior of the individuals on the data sheet (p. 41-43).

Typically, each condition is tested at least 3 times (for a total of 9 sessions) with minimal distraction. Each condition you set up will be designed to determine if the behavior is an attempt to achieve a certain desired outcome: attention, to avoid eating something he doesn't like, or to get something he wants. Conducting an FBA is a critical step in learning why a person is behaving the way he is. It will tell you what you need to do to change his mealtime behavior and ultimately improve his life.



Is the mealtime problem behavior an attempt to avoid eating? (Avoidance)

In this condition, you are assessing whether the individual uses refusal behavior (such as hitting the spoon and throwing food) to avoid eating. Use the 3-step prompting procedure (Tell-Show-Do) (p. 31).

Materials: Table, 2 chairs, food and utensils, data sheet, timer

Setting: The individual and caregiver are seated at the dining table with a typical meal.

1. Ask the individual to take a bite of the food as usual.
2. If the individual engages in refusal behaviors:
 - a. Say “Okay, you don’t have to eat,” while removing the food away from the table. Give him a break from eating for 30 seconds.
 - i. During 30-second break period: Ignore and do not look at individual. Continue to score refusal behaviors during the break period.
 - ii. After 30 seconds of break, present a new bite.
3. If the individual accepts the bite:
 - a. Allow 30 seconds to swallow the bite and immediately present the next bite. No praise or reinforcement is provided during functional analysis.
4. A new bite should occur approximately every 30 seconds until 10 minutes is up.



Is the mealtime problem behavior an attempt to get something she wants? (Access to a tangible or a preferred food)

In this condition, you are assessing whether the individual uses refusal behavior (such as hitting or throwing) to get something he wants (access to highly preferred food or objects).

Materials: preferred foods or leisure items from preference assessment and other food items found in a typical meal, table, 2 chairs, utensils, data sheet, timer.

Setting: The individual and caregiver are seated at the dining table.

1. Give the individual a sample bite of the preferred food or 30-seconds of playtime with tangible reinforcers identified through the preference assessment.
2. After the individual consumes the preferred bite of food (or enjoys the 30-seconds of toy play), take the preferred food (or toy) away from the dining table and begin presenting a non-preferred bite of food. Begin taking data:
 - a. If the individual engages in *refusal behaviors* say “Okay, you don’t have to” and remove the non-preferred food. Immediately present the preferred food to the individual or present the preferred toy for 30 seconds. Do not provide social attention nor interact with the individual.
 - i. After the individual takes a bite of the preferred food (or enjoys 30 seconds of toy play), present another bite of non-preferred food.
 - b. If the individual attempts to obtain the preferred food (or preferred toy) *appropriately* (e.g., lightly taps caregiver with hand or requests a tangible (preferred food or item) verbally or with PECS, VOCA, etc.): provide the individual with the food or item he asked for.
 - c. If the individual accepts the *non-preferred* food: Allow 30 seconds to swallow. Immediately present another non-preferred bite of food. No praise or reinforcement is provided during functional analysis.
3. Each time he engages in refusal behavior, give the preferred food (or 30 seconds of toy play) back to him until 10 minutes is up.



**Is the mealtime behavior an attempt to get attention?
(Access to Social Attention)**

In this condition, you are assessing whether the individual uses refusal behavior to gain your attention and interaction while eating.

Materials: Least favored items from the Preference Assessment (i.e., bottom 2 items), table, 2 chairs, utensils, data sheet, timer.

Setting: The individual and caregiver are seated at the dining table.

1. The caregiver should pretend to be busy and occupied (have a magazine or work on filling in the data sheet while helping the individual eat).
2. Ask the individual to take a bite of the non-preferred food. Begin taking data.
 - a. If the individual engages in *refusal behaviors*, provide brief social attention (e.g., “Don’t do that! Take a bite.”).
 - b. If the individual engages in *any other behaviors*, ignore those other behaviors.
 - c. If the individual attempts to obtain attention appropriately (e.g., lightly taps caregiver with hand or requests attention verbally or with PECS, VOCA, etc.), comply with her request (provide the individual with attention or help).
3. After the individual takes a bite of the non-preferred food, allow 30 seconds to swallow and immediately present another non-preferred bite of food. No reinforcement is provided during functional analysis.
4. Each time she engages in refusal behavior, provide brief social attention (e.g., “stop doing that, take a bite”) then present another bite until 10 minutes is up.

Mealtime Functional Behavior Assessment Data Sheet EXAMPLE

(Use a separate data sheet for each condition you test and each session.)

Direction: Use tick marks to the count frequency of mealtime behaviors. Use a separate one for each session or meal.

Date: __ / __ / 2011 Meal: Breakfast / Lunch / Dinner / Snack

Condition: *Attention*

| Bite # | P=Preferred Food NP=Non-preferred NF= New Food DK = Don't know | Food | Accept | Swallow (Mouth Clean) | Pack | Expel | Gag/Cough | Refusal |
|--------|---|-------|--------|-----------------------|------|-------|-----------|---------|
| 1 | <u>P</u> NP NF DK | Peas | √ | √ | | | | |
| 2 | P <u>NP</u> NF DK | Pasta | | | | | √ | |
| 3 | P <u>NP</u> NF DK | Pasta | | | | | √ | |



Mealtime Functional Behavior Assessment Data Sheet

(Use a separate data sheet for each condition you test and each session.)

Caregiver Name: _____

Date: ___ / ___ / 2011

Meal: Breakfast / Lunch / Dinner/Snack

Condition: _____

Foods presented: _____

Accept: Taking the entire bite of food within 5-10 seconds of presentation.
 Swallow: Swallowing the bite within 30-seconds after the entire bolus was deposited in the mouth
 Pack: Holding the bite in the mouth without swallowing after 30 seconds has passed since acceptance.
 Expel: Any food larger than the size of a pea is seen outside the lips after acceptance.
 Gag: Making retching sounds, hyper-extending the neck, opening the mouth while tensing the neck, or sticking out tongue.
 Cough: Expelling air from the lungs sharply with a noise.
 Refusal: Head turns, throwing, scratching, hitting, and mouth cover, crying, screaming.

| Bite # | P = Preferred Food NP = Non- preferred NF= New Food DK = Don't know | Food | Accept | Swallow | Pack | Expel | Gag or Cough | Refusal |
|--------|--|------|--------|---------|------|-------|--------------|---------|
| 1 | P NP NF DK | | | | | | | |
| 2 | P NP NF DK | | | | | | | |
| 3 | P NP NF DK | | | | | | | |
| 4 | P NP NF DK | | | | | | | |
| 5 | P NP NF DK | | | | | | | |
| 6 | P NP NF DK | | | | | | | |
| 7 | P NP NF DK | | | | | | | |
| 8 | P NP NF DK | | | | | | | |
| 9 | P NP NF DK | | | | | | | |
| 10 | P NP NF DK | | | | | | | |
| 11 | P NP NF DK | | | | | | | |
| 12 | P NP NF DK | | | | | | | |
| 13 | P NP NF DK | | | | | | | |
| 14 | P NP NF DK | | | | | | | |
| 15 | P NP NF DK | | | | | | | |
| 16 | P NP NF DK | | | | | | | |
| 17 | P NP NF DK | | | | | | | |
| 18 | P NP NF DK | | | | | | | |



| | | | | | | | | |
|----|---------------------------------------|--|--|--|--|--|--|--|
| 19 | P NP NF DK | | | | | | | |
| 20 | P NP NF DK | | | | | | | |
| 21 | P NP NF DK | | | | | | | |
| 22 | P NP NF DK | | | | | | | |
| 23 | P NP NF DK | | | | | | | |
| 24 | P NP NF DK | | | | | | | |
| 25 | P NP NF DK | | | | | | | |
| 26 | P NP NF DK | | | | | | | |
| 27 | P NP NF DK | | | | | | | |
| 28 | P NP NF DK | | | | | | | |
| 29 | P NP NF DK | | | | | | | |
| 30 | P NP NF DK | | | | | | | |
| 31 | P NP NF DK | | | | | | | |
| 32 | P NP NF DK | | | | | | | |
| 33 | P NP NF DK | | | | | | | |
| 34 | P NP NF DK | | | | | | | |
| 35 | P NP NF DK | | | | | | | |
| 36 | P NP NF DK | | | | | | | |
| 37 | P NP NF DK | | | | | | | |
| 38 | P NP NF DK | | | | | | | |
| 39 | P NP NF DK | | | | | | | |
| 40 | P NP NF DK | | | | | | | |
| | Sum responses to bites # 1-40= | | | | | | | |

Using a new chart for each session, conduct three sessions per condition. You should end up with 9 charts all together (3 charts for each of 3 conditions).

4. Identifying Food Refusal Function (Tallying FBA Results)

The next step is to tally the occurrences of target problem behaviors under each condition. This data will allow you to see how many times food acceptance and food refusals occurred in each of the behavior function conditions (i.e., Avoidance, Tangible, Attention).

Example:

Condition: Attention

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | 40 |
| 2 | 42 |
| 3 | 45 |

Condition: Avoidance

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | |
| 2 | |
| 3 | |
| Total | |

Condition: Tangible

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | |
| 2 | |
| 3 | |
| Total | |

Condition: Attention

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | |
| 2 | |
| 3 | |
| Total | |

Once you have a table for each condition, identify which condition showed the highest number of occurrences of target problem behaviors.

| Condition | Total Number of Target Behaviors (e.g., packing, refusals) |
|-----------------------|--|
| Avoidance | |
| Access to tangible | |
| Avoidance from eating | |

Condition with the Highest Number of the target behaviors: _____

This condition is the primary reason underlying the individual’s mealtime behavior.

5. Review and Homework

Notes:

Are you ready for your homework?

Do you have any questions about Mealtime Functional Behavior Assessment? Be sure to ask the trainer your questions.

Do you feel ready to conduct Functional Behavior Assessment with the individual you care for? Bring your concerns to the trainer.

Do you feel ready to use the Mealtime FBA Data Sheet? Bring your concerns to the trainer.

- **Conduct functional Behavior Assessment of mealtime behaviors and record results using the Mealtime Functional Behavior Assessment Data Sheet. Bring your data to the next session.**

END OF SESSION 2a

Session 3:

Addressing Mealtime Behaviors

1. Review

Notes:

2. Discuss Results of Preference Assessments and FBA (if needed)

- What was your experience completing the preference assessments? Were they easy or difficult to do?

- In completing the preference assessments, what did you learn about the individual you care for? Did it show you any preferences you weren't aware of before?

- For those who participated in optional session 2a, what was your experience conducting analogue FBA? Was it difficult to do? What was hard? What was easier than you thought it would be?

- What did you learn about the underlying function (motivation) of the individual's behavior?

If you have questions about the results of your Preference Assessments or the FBA, ask the trainer now.

Now that you have some information about the individual's preferences and why the individual is behaving the way she is at mealtime, you are ready to take action. Next you will learn a variety of mealtime behavior intervention techniques that can be used to address the individual's identified mealtime behavior functions.

3. Mealtime Behavior Intervention Techniques

Before You Begin

By applying the principles of ABA, you will be able to teach the individual you're caring for to have better mealtime behaviors and increase the amount and variety of food he will eat. A couple important things to remember:



- While behavior intervention is effective, to make a meaningful impact it must be implemented **consistently** at all times by the majority of people who feed and eat with the individual.
- Even more importantly, the behavior intervention should **continue** even if the mealtime problem behavior begins to decrease. Much like the way medication or diet works, hoping for a lasting effect without implementing the changing agent (e.g., behavior treatment, medication, or healthy diet) will only lead to frustration and failure.

With consistency and continued adherence to the behavioral guidelines, you will see gradual change in the individual's mealtime behavior!

Collecting and Graphing Data

When implementing the Mealtime Behavior Intervention Plan it is critical that you record how the individual responds to the interventions. Use the Mealtime Behavior Intervention Data Sheet below. You will use the data you collect to determine if you are making progress, i.e. if you are improving from where you began (your baseline data). Be sure to keep your Data Sheet, a timer, and a pencil with you during your meals with the individual you care for. At first it may seem awkward, but it won't take long for the process of recording her responses to become easy to do. The trainer will help you understand how to tally your results, graph this information, and adjust your mealtime behavior intervention techniques as progress is made.



Mealtime Behavior Intervention Data Sheet

(Use a separate data sheet for each meal session.)

Caregiver Name: _____ Date: __ / __ / __ Time/Bite Cap: _____

Meal: Breakfast / Lunch / Dinner/Snack

Foods presented: _____

Accept: Taking the entire bite of food within 5-10 seconds of presentation.
 Swallow: Swallowing the bite within 30-seconds after the entire bolus was initially deposited in the mouth.
 Pack: Holding the bite in the mouth without swallowing after 30 seconds of acceptance.
 Expel: Any food larger than the size of a pea is seen outside the lips after acceptance.
 Gag: Making retching sounds, hyper-extending the neck, opening the mouth while tensing the neck, or tongue sticking out.
 Cough: Expelling air from the lungs sharply with a noise.
 Refusal: Head turns, throwing, scratching, hitting, and mouth cover, crying, screaming.

| Bite # | P=Preferred Food NP=Non-preferred NF=New Food DK=Don't know | Food | Accept | Swallow (Mouth Clean) | Pack | Expel | Gag/ Cough | Refusal |
|--------|--|------|--------|-----------------------------|------|-------|---------------|---------|
| 1 | P NP NF DK | | | | | | | |
| 2 | P NP NF DK | | | | | | | |
| 3 | P NP NF DK | | | | | | | |
| 4 | P NP NF DK | | | | | | | |
| 5 | P NP NF DK | | | | | | | |
| 6 | P NP NF DK | | | | | | | |
| 7 | P NP NF DK | | | | | | | |
| 8 | P NP NF DK | | | | | | | |
| 9 | P NP NF DK | | | | | | | |
| 10 | P NP NF DK | | | | | | | |
| 11 | P NP NF DK | | | | | | | |
| 12 | P NP NF DK | | | | | | | |
| 13 | P NP NF DK | | | | | | | |
| 14 | P NP NF DK | | | | | | | |
| 15 | P NP NF DK | | | | | | | |
| 16 | P NP NF DK | | | | | | | |
| 17 | P NP NF DK | | | | | | | |
| 18 | P NP NF DK | | | | | | | |
| 19 | P NP NF DK | | | | | | | |



| | | | | | | | | |
|---------------------|------------|--|--|--|--|--|--|--|
| 20 | P NP NF DK | | | | | | | |
| 21 | P NP NF DK | | | | | | | |
| 22 | P NP NF DK | | | | | | | |
| 23 | P NP NF DK | | | | | | | |
| 24 | P NP NF DK | | | | | | | |
| 25 | P NP NF DK | | | | | | | |
| 26 | P NP NF DK | | | | | | | |
| 27 | P NP NF DK | | | | | | | |
| 28 | P NP NF DK | | | | | | | |
| 29 | P NP NF DK | | | | | | | |
| 30 | P NP NF DK | | | | | | | |
| 31 | P NP NF DK | | | | | | | |
| 32 | P NP NF DK | | | | | | | |
| 33 | P NP NF DK | | | | | | | |
| 34 | P NP NF DK | | | | | | | |
| 35 | P NP NF DK | | | | | | | |
| 36 | P NP NF DK | | | | | | | |
| 37 | P NP NF DK | | | | | | | |
| 38 | P NP NF DK | | | | | | | |
| 39 | P NP NF DK | | | | | | | |
| 40 | P NP NF DK | | | | | | | |
| 41 | P NP NF DK | | | | | | | |
| 42 | P NP NF DK | | | | | | | |
| 43 | P NP NF DK | | | | | | | |
| 44 | P NP NF DK | | | | | | | |
| 45 | P NP NF DK | | | | | | | |
| Sum of bite # 1-45= | | | | | | | | |

Some Notes About the Mechanics of Eating

Scheduling Meals and Mealtime Training - It is important that the individual eats on a schedule. Try to schedule each meal about the same time each day. It may also be necessary to minimize distractions during meals (e.g., limit the number of people around). Set aside time specifically to work on mealtime behaviors. Avoid breakfast time if you're usually in a hurry. Begin with one meal, preferably when you are least busy. This is usually the dinner time for many caregivers.

Length of the Meal - Put a time-cap on each meal. Use a timer to end the meal at the set time. For example, set breakfast to last no longer than 20 minutes. When the timer goes off, the meal should end. You may also use a bite-number cap. In this case, when the individual has consumed the required number of bites, the meal should end.

Eating Posture - Make sure the individual is sitting upright (90 degrees or slightly forward) because leaning too far back or too forward can be an uncomfortable position for eating.

Eating Variety - Do not offer foods based on "likes/dislikes". The individual should be introduced to a variety of foods. It is important not to promote food selectivity by eliminating foods that appear to be less preferred by the individual.

Texture - Start with the food texture the individual will typically accept. Chopped fine is a good start if the individual doesn't have difficulty with texture.

- a. If an individual appears to be bothered by food texture, evaluation by a speech pathologist or occupational therapist may be necessary to accurately assess oral-motor difficulties. Discuss these concerns with the individual's health care provider to determine the need for an evaluation.
- b. If an individual has difficulty with thin liquids, consider consulting with the individual's health care provider about having a barium swallow study completed to determine the risk of aspiration (which can lead to inflammation of the lungs and airway). This study is conducted by a speech pathologist in the radiology lab of an outpatient clinic or a hospital.
- c. If an individual is at risk of aspiration, their health care provider may recommend using a food thickener (a powder that thickens drinks and foods without changing their look, smell or taste). These are available in most drugstores.

Bite (bolus) Size - Start with a half level spoonful to a full level spoonful (do not overload the spoon with food).

Food Type - Begin with the foods the individual regularly consumes. Do not introduce new foods or more varieties than typically consumed in the individual's home.



Meal Amount -Begin with the amount of food the individual typically consumes. If the individual usually takes 10 bites of food, begin with requiring 10 bites. If the individual usually doesn't consume more than 3 bites, begin with a 3 bite requirement.

Illness - If the individual gets ill, his eating behaviors will be temporarily affected. If his eating begins to drop off even after his full recovery, consult a physician.

Underweight Individuals - For individuals who are significantly underweight, it is important to consult with their health care provider about strategies such as adding a protein powder to their food or beverages to increase calorie intake.

Playing Tricks to Get Them to Eat - Individuals with autism and other developmental disabilities, just like other people, do not like being tricked. Tricks such as hiding vegetables in pasta sauce or crushing medication in applesauce do sometimes work, but can also backfire. After detecting an "extra something" in familiar foods, the individual may learn to be suspicious of all foods and may further limit her diet. Rather, introduce new foods *gradually*, beginning with a small amount.

Stick With It - It is very important that everyone who feeds the individual (or helps with meals) use the same set of rules. Consistency is the key. If the individual is having a difficult meal, it is important not to change anything in the middle of the meal (e.g., reducing the number of bites required in a meal, changing the food, etc.).

Also, once you give the individual an instruction, follow through.

- a. If you tell the individual to take a bite, follow through with the request. Do not allow the individual to avoid eating when she exhibits food refusal behaviors (i.e., saying 'no', crying, pushing the spoon, and turning his head away) (See p. 64 and p. 68 for procedures addressing escape and avoidance-maintained behavior).
- b. If she refuses a food, do not give her a preferred food instead (even when you're in a hurry and need to finish the meal!).
- c. Once you begin ignoring refusal behaviors, the individual will likely (but temporarily) show an increase in these refusal behaviors for several days/weeks (or even show *new* refusal behaviors) because they have been very effective for her in the past. By ignoring refusal behaviors while showering her with fun (attention and reinforcers) following bite acceptance, you're teaching her what you expect of her during meals.
- d. She'll learn that engaging in refusal behaviors is not a good way to communicate with caregivers and that refusal behaviors will *never* lead to getting what she wants.



Behavioral Techniques

Change the Consequence

If the function of a refusal behavior is to gain your attention, refusal behavior can be reduced by providing no attention and interaction whenever the individual engages in food refusal. This means giving no direct eye contact, not calling the individual's name, no reprimands, no reasoning and lecturing, and no showing that you're upset. Attempts to redirect the behavior (including imitation of airplane spoon landings) may inadvertently increase the refusal behavior. Ignoring refusals may initially increase them (because *that* is how he communicated he didn't want to eat and how he got his way until now). But, ignoring will ultimately decrease the refusal behavior.

If the function of the mealtime problem behavior is to gain access to tangible or edible items, the problem behavior can be reduced by withholding the tangible or edible whenever the individual engages in the mealtime problem behavior. The preferred item should be delivered when the individual engages in the desired mealtime behavior (i.e., for acceptance, swallow, etc.). Withholding the preferred item for mealtime problem behaviors may initially increase those behaviors (because that is how he communicated he wants something else and how he got his way until now.) But, by providing it for desired mealtime behavior (e.g., for food acceptance, swallow), and withholding it for inappropriate behavior, you will ultimately decrease the refusal behavior.

If the function of a refusal behavior is to escape and avoid eating, refusal behavior can be reduced by not providing escape from eating whenever the individual engages in food refusal. This means the individual does not get out of a meal until he engages in the desired mealtime behavior (e.g., food acceptance, swallow). Not allowing escape from eating may initially increase the mealtime problem behavior (because *that* is how he communicated he didn't want to eat and how he got his way until now). But, discontinuing escape from eating upon problem behavior will ultimately decrease it.

Reinforce Good Mealtime Behaviors

Social interactions should be freely given for food acceptance and prompt swallowing. When you reinforce the individual's acceptance and swallowing behavior by providing her with praise and goodies (identified through the preference assessment), you are teaching the individual what you want her to do. This increases the likelihood that she will engage in appropriate mealtime behavior again. When the individual eats and swallows appropriately, tell her exactly what she did right. Instead of just saying "Nice job!" say, "Nice job chewing your food!"

Basic Mealtime Guidelines for Self-Feeders:

1. Present the individual with two highly preferred items (including edibles) from the preference assessment and ask him to pick one (ideally, these items should not be available any other times). Once he makes a choice, put the item aside.



2. State the rules to the individual at the beginning of each meal. Say, “If you take your bite and swallow, you get _____” (the chosen, preferred item).
3. Place a bite of food on the plate as you say, “Take a bite.”
4. If the individual takes the whole bite within 5 seconds, provide an enthusiastic, brief verbal praise by saying, “Good job taking your bite!” Provide him with the preferred item at this time with much attention and interaction for 15 seconds.
5. If the individual does not accept the bite within 5 seconds, remove the food as long as the individual is not engaging in refusal behaviors. Do not provide preferred items or any interaction for 15 seconds.
6. Repeat Steps 3-5 until all food has been consumed or until the mealtime cap is reached. If the individual refuses all bites, the meal will end without food acceptance. Consider using non-removal of the spoon if the individual doesn’t take a bite even after several meal sessions. This intervention is described on p. 65.
7. Ignore all refusal behaviors.

Basic Mealtime Guideline for Non-Self-Feeders

1. Present the individual with two highly preferred items (including edibles) from the preference assessment and ask him to pick one (ideally, these items should not be available any other times). Once he makes a choice, put the item aside.
2. State the rules to the individual at the beginning of each meal. Say, “If you take your bite and swallow, you get _____” (the chosen, preferred item).
3. Place a bite of food on the spoon and present it to his lip (spoon should barely touch the upper lip) as you say, “Take a bite.”
4. If the individual takes the whole bite within 5 seconds, provide an enthusiastic, brief verbal praise by saying, “Good job taking your bite!” Provide him with the preferred item at this time with much attention and interaction for 15 seconds.
5. If the individual does not accept the bite within 5 seconds, remove the food as long as the individual is not engaging in refusal behaviors. Do not provide preferred items or any interaction for 15 seconds.
6. Repeat Steps 3-5 until all food has been consumed or the mealtime cap has been reached. If the individual refuses all bites, the meal will end without acceptance. Consider using non-removal of the spoon if the individual doesn’t take a bite even after several meal sessions. This intervention is described on p. 65.

7. Ignore all refusal behaviors.

Participate in demonstrations of these techniques.

How Often Should I Reinforce?

To determine how frequently the individual should be reinforced, count how many bites the individual will take without exhibiting refusal behaviors. If you do not know, observe the individual for 2-3 meals. If the problem behavior occurs even before the first bite, provide reinforcement, social interaction, and praise to the individual for every bite acceptance. If the problem behavior usually occurs after the 3rd bite, provide reinforcement, social interaction, and praise to the individual at a faster rate (e.g., every 2nd bite that he accepts).

Make Eating More Enjoyable, Except After a Refusal

Another way to decrease refusals is to give more positive attention, social interaction and opportunities to access other preferred items and activities during meals. This approach allows the person to get what she wants (attention and fun interactions) without behaving inappropriately. When implementing this strategy, be careful not to provide these great things *immediately* following the refusal behavior to avoid possible association (i.e., “I must engage in a refusal behavior to get cool things”). Wait at least 10 seconds *after* the individual has calmed down before providing positive interactions and other desirable things.

Again, giving a time-out from eating (such as eating peas) when an individual engages in aggression or redirecting the individual to another activity (e.g., *Okay, stop hitting me. You don't have to eat it. We'll try this later*) will exacerbate the situation if the individual's reason for exhibiting aggression was to communicate that he did not want to eat peas. In this situation, the individual successfully escaped from the unpleasantness of eating peas. Instead, you should ignore the behavior and continue presenting the food until the individual accepts the bite or meal time is ended.

Make Eating Easier

To decrease refusal behaviors that have allowed the individual to escape from eating, make it easier to eat by breaking down the steps required to take the bite. That is, begin with foods that the individual consistently and successfully consumes with minimal refusal and assistance from you (smaller bite size, smoother texture). Then slowly fade your assistance and gradually increase the food variety, bite size, and texture.

Use Momentum

Requesting actions that the individual will easily and readily accomplish is known as a “high probability” request. Using a high probability request sequence increases the likelihood of getting compliance. You can ask the individual to do something relatively easy and fun before asking him to do something less fun that you’re trying to get him to do. That is, ask the individual to take a few bites of preferred food before introducing a bite of a new food. Request 2-3 bites of something he likes, followed by a bite of the new food you are trying to get him to eat.

Provide Choices

If possible, give the person some control over her life by letting her pick from two different non-preferred foods.

Teach Proper Communication

Teaching alternative ways to communicate is another effective method for decreasing refusal behaviors. This method, called Functional Communication Training (FCT), allows the individual to reach the same outcome as she got through her mealtime problem behavior. The mode of functional communication must fit the communication needs and abilities of the individual (e.g., pictures, micro-switches, hand signs), and the functional communication program must be incorporated into all snack and meal times. Over time, the individual learns that functional communication is a much easier and efficient way to get out of eating or to ask for a toy or another food.

Some examples of effective functional communication methods are:

- Verbal (spoken)
- Sign Language
- Gestural (can be unique to the individual as opposed to using specific sign language)
- Picture Exchange Communication System (PECS) (use of picture symbols that represent a variety of objects, places, actions, people, etc. to communicate needs or wants)
- Voice Output Communication Aid (VOCA) (use of computerized speech devices programmed with key words, phrases, requests, people, etc. that the individual can choose and press and the device “speaks” it out loud)



- Other augmentative communication: picture boards, word boards, personalized communication notebooks, and any other means used by a person to enhance their ability to communicate their needs.

Individuals should be taught to use functional communication as an effective means to avoid eating undesired foods only *after* the individual has taken the required number of bites of the undesired food. For example, the individual would be required to consume at least 1 bite of the non-preferred food per meal before asking for a preferred food or toy via functional communication. If the individual is successfully consuming one bite of non-preferred meal across 3 consecutive meals, then the requirement would be 2 bites of non-preferred food before the individual would be allowed to ask for a preferred food or toy via functional communication.

How to teach someone to indicate “All done”, “I’m full” or “I want ____.”

During daily meal times:

1. Decide how many bites will be required before you will allow the individual to have the choice to communicate that either 1) she is full, or 2) she wants something else.
 - a. If the individual does not typically consume more than a few bites, make the FCT an option after the first bite.
 - b. If she consumes an average of 10 bites per meal, then make the FCT available after 9 bites.
2. After the prerequisite number of bites has been taken, lay out the communication instrument close to the individual (PECS, VOCA, etc.).
3. Tell her what it means (e.g., “All done”, “I’m full” or “I want ____”).
4. If she attempts to touch/press/say she is “All done” or “I’m full” (even by accident), immediately provide the desired outcome: make no more demands of her. End the meal there. However, if she indicates “I want ____”, provide the desired outcome (a small bite) until she stops requesting or until she’s had her usual amount of food (use your judgment).
5. Gradually increase the amount of food consumption required to receive the desired outcome (making the FCT an option after 10 bites, then 15 bites, then 20 bites...).
6. Gradually increase the *communication effort* required to obtain the opportunity to request the desired outcome (e.g., slight *touch* to the PECS to actually *handing it over* to the caregiver).



“Pay” Him for Doing Well!

A token board (also referred to as a “meal board” or “bite board”) allows the individual to earn credit for engaging in appropriate mealtime behavior. Tokens are earned on a schedule for food acceptance and swallowing and later exchanged for a variety of back up reinforcers.

Example: An individual can earn a point (e.g. a sticker or a penny) for taking a bite of a non-preferred food. These points can then be exchanged for desired items or activities such as:

5 point = computer game for 5 minutes

3 point = favorite dessert

Token systems may appear inappropriate for an older individual at first glance; it may even come across as developmentally-inappropriate. However, many of us are on this system. This is especially true for people working on commission. If you have a job and get paid for it on a schedule, you are also on a token system. You work to complete a certain task, and you get a token (paycheck) on your token board (bank account). If your work didn't lead to a paycheck, you wouldn't work so hard—or at all! By using a token system, you are giving the individual a chance to *earn* a “paycheck” for doing a good job.

Whatever You Do, Do Not Use Punishment Alone

Punishment is decreasing a behavior by taking something away (money earned, a favorite toy, etc.) or doing something to the individual (spanking, yelling). Many caregivers opt to use this method alone without using reinforcement procedures. While punishment may bring about an immediate change, it is not a long-term solution. Punishment tends to elicit more aggressive behavior and often causes the person doing the punishment (the caregiver) to become associated with the punishment. Moreover, punishment alone does not teach any new behavior. In fact, it may cause the individual to imitate the caregiver's punishing behavior!

Be sure to ask the trainer any questions you have about these intervention techniques.

4. Creating a Personalized Mealtime Behavior Intervention Plan

Now that we have reviewed some mealtime behavior intervention strategies, we will put them together in a personalized mealtime behavior intervention plan (BIP) based on your findings from the mealtime FBA. The BIP will identify the interventions from above that are appropriate to the individual you work with and will combine them with specific procedures intended to address the following mealtime goals (as appropriate):

- Teaching Self-Feeding
- Addressing Escape and Avoidance for Non-Self-Feeding Individuals

- Addressing Escape and Avoidance for Self-Feeding Individuals
- Introducing New Foods
- Introducing New Textures

As you implement the Mealtime BIP, be sure to use the Mealtime Behavior Data Sheet to record your results.

Procedures for Teaching Initial Self-Feeding Skills

Steps involved in Self-Feeding

1. Sit at the table
2. Hold utensil with hand
3. Scoop food
4. Lift food
5. Bring utensil to mouth
6. Open mouth
7. Insert utensil into mouth
8. Place food into mouth
9. Remove utensil from mouth
10. Place spoon back on the plate or repeat 3-9.

Each of these steps represents a milestone in the process of feeding oneself. Looking at the process as this 10-step series allows you, the caregiver, to see progress toward the goal, even if it is small. If the person you work with begins to sit at the table easily and then to hold the utensil, that is 20 percent of the goal of self-feeding! Also, working to accomplish these smaller steps makes it possible for the individual to experience success and hear your praise. Praise and reinforcement for these small successes will help motivate her to continue working on the next steps and eventually to reach the goal of feeding herself. Imagine her pride.

As you implement the steps below, remember to offer abundant praise and reinforcement for each advancement she makes in achieving the ten steps of self-feeding.

1. Prepare supplies ahead of time (food, spoon, napkins, timer, bib, datasheets, etc.).
2. Place a rubber placemat underneath the plate to prevent it from sliding (especially for an individual with arm-hand coordination difficulties).
3. The caregiver should take a seat behind the individual.
4. Tell the individual to take a bite.



5. Begin with full physical prompting: hand-over-hand scoop the food and place the bite into the individual's mouth. Do this about 10 times.
6. After assisting the individual with full physical prompting, fade the prompt: Rather than placing the bite, stop hand-over-hand just before inserting the bite (about 10 inches away, to encourage the individual to insert it himself).
7. If the individual is successful in inserting bites independently, gradually let go of hand-over-hand guidance.
8. Fade the prompting even more if the individual continues to do well. Rather than guiding his hand, move your physical guidance to the wrist until the individual is successful in inserting bites independently (see below for suggestions on further fading).

Suggestions for Physical Guidance Fading

1. Hand-over-hand
2. Wrist
3. Forearm
4. Elbow
5. Upper arm
6. Shoulder
7. Verbal prompt alone

Procedures for Addressing Escape and Avoidance-Maintained Problem Behaviors for *Non-Self-Feeding Individuals*

A Note of Caution: Interventions targeting behaviors motivated by the individual's desire to escape eating can be very intrusive to the non-self-feeding individual and often require much effort from the caregiver to implement. Always seek professional help from a trained behavior analyst for individuals with significant feeding problems.

1. Caregiver should take a seat in front of the individual. Present the individual with two highly preferred items (including edibles) from the preference assessment and ask him to pick one (ideally, these items should not be available any other times). Once he makes a choice, put the item aside.
2. State the rules to the individual at the beginning of each meal. Say, "If you take your bite and swallow, you get _____" (chosen, preferred item).
3. If a meal board is used, tell him "You get to take one token off when you take a bite. When all the tokens are off the board, then we'll be all done!"



4. Place a bite of food on the spoon and present it to his lip (spoon should barely touch the upper lip) as you say, "Take a bite."
5. If the individual takes the whole bite within 5 seconds, provide an enthusiastic, brief verbal praise by saying, "Good job taking your bite!" Provide him with the preferred item at this time with much attention and interaction for 15 seconds.
 - a. If a "meal board" is used, allow the individual to remove a "bite".
 - b. Repeat Steps # 4-5.
6. If the individual has a history of holding food in his mouth, ask for a mouth check by saying "Show me" after the individual has swallowed the bite (or after 30 seconds after acceptance). Provide brief verbal praise for an empty mouth by saying, "Good job swallowing (or eating)!"
 - a. If the individual does not show you his mouth after the first "Show me" prompt, then gently place an index finger to the upper chin simultaneously with the prompt "Show me, ahhh". If the individual still does not show his mouth, then move on to the next bite.
 - b. If the individual frequently packs food in his mouth (or packing is the target mealtime behavior), you may consider using a Nuk™ brush to redistribute food from the cheeks to the tongue. (The Nuk™ is a flexible, nubby brush that can hold a small amount of food, including purees. It is available online for about \$3 -\$6.)
 - c. If the individual shows his mouth, but has not swallowed the bite, wait and prompt for another "show me" after more than 30 seconds. If he still hasn't swallowed the bite, score that bite as a "pack" (for "packing" food in his mouth instead of swallowing) and present the next bite.
7. If the individual does not accept the bite within 5 seconds, continue to hold the spoon to his upper lip until he takes the bite (or until the meal time-cap).
 - a. No attention (eye contact, talking) should be given to the individual if he's not accepting the bite. Do not show that you're disappointed. Do not reason with him, threaten him, or offer/promise something else in addition to the selected item (thereby changing the initial rules set forth at the beginning of the meal).
 - b. If the mealtime cap is reached without the individual taking a single bite, try again at the next meal. Do not give him his favorite food immediately following the meal session. You can provide various less preferred foods freely between meals (but not closer than 60 minutes before the scheduled meal times). If the individual receives preferred foods following no acceptance during a regular meal, the problem behavior will continue.



- c. Note that persons with health problems or who are on certain medications may not be able to wait until the next mealtime for some kind of nourishment.
8. Every few presentations should be a sip of a drink. Place the cup to his lip (cup should touch the lower lip) as you say, "Take a drink." Use a nose cut-out cup for individuals who cannot easily tilt their head back comfortably. A nose cut-out cup fits around the nose while drinking.
9. Tip the cup to allow for "sips". Hold the cup to his lower lip when the individual is not accepting sips or displaying refusal behaviors.
10. If the individual takes the drink within 10 seconds, provide enthusiastic, brief verbal praise by saying, "Good job taking your drink!" Provide him with the preferred item at this time with much attention and interaction for 15 seconds (just like food acceptance).
11. Check for an empty mouth by saying "All gone" when it's apparent that the individual swallowed (or after 15 seconds of acceptance). If he swallowed the sip, provide brief verbal praise by saying, "Good job drinking!" If the individual does not "show" you his empty mouth, place your index finger on mid-chin and ask for "show me". If he still will not show you, move on to the next bite.
12. If at anytime the individual displays refusal behaviors, do not respond or draw attention to these behaviors. Ignore these behaviors in order to decrease them. As best as you can, do not let the individual know when you are frustrated. Providing even a small amount of attention to these behaviors will likely increase refusal behaviors in the long-run.
13. If the individual expels a bite or swallow, scoop up the food and re-present it. If the bite cannot be scooped up (i.e., falls on the floor), a new bite (or sip) of the same food, approximately the same size as the expelled bite, should be re-presented to his upper lip with a verbal prompt "Finish your bite" once every 30 seconds until he accepts.
14. If the individual throws up, quickly clean it up without commenting or drawing attention (i.e., appearing surprised) while making sure the individual is okay. After the clean up, quickly resume the meal from where it was left off before he threw up.
15. If the individual coughs or gags during the bite presentation, do not insert the bite into his mouth. Just hold the spoon to his upper lip until he stops coughing or gagging.



16. If the individual is packing food in his mouth (not swallowing) at the meal time-cap, do not let him out of the meal with the food still in his mouth. That is, he should stay in his chair until he's chewed and swallowed his bite.
17. If the individual is engaging in a problem behavior or crying at the end of the meal, wait until he is quiet for at least 10 seconds before letting him out of the meal.
18. If the individual bites on the spoon or cup, quickly remove it and hold the spoon or cup to his lip (upper lip for the spoon and lower lip for the cup) until his lips are open wide enough to insert the bite or tip the cup.
19. Again, minimal attention should be given to the individual during meals, except for food acceptance and swallowing. However, you can *briefly* attend or interact with the individual if he initiates communication at any other times.

Adding in Jaw Prompting

20. If the individual has not taken a bite for several (2-3) meal sessions, consider adding jaw prompting to Step #7, above:

During the initial bite presentation hold the spoon to the individual's upper lip until he opens his mouth wide enough for the entire spoon to fit into his mouth. If he doesn't take the bite within 5 seconds, continue to hold the spoon to his lip and implement the jaw prompting procedure.

Jaw Prompting Procedure

- Apply gentle pressure to the individual's mandibular junction (cheeks) to encourage the individual to open his mouth
- Use your thumb and index finger
- Always face palm toward yourself, not the individual you are helping to eat

21. Continue with Steps #7-19

Be sure to ask any questions you have about the above procedures for addressing avoidance.



Procedures for Addressing Escape and Avoidance-Maintained Problem Behaviors for *Self-Feeding Individuals*

1. The caregiver should take a seat in front of the individual.
2. Have the individual select a preferred item of her choice (Present the individual with two highly preferred items (including edibles) from the preference assessment and ask her to pick one (these items should not be available any other times). Once she makes a choice, put the item aside.
3. State the rules at the beginning of the meal: “I will put the bite here. If you take your bite all by yourself, you get to ___” or “If you take your drink all by yourself, you’ll get to ___” (e.g., have your toy).
4. Present a 1/2 level spoonful of food on a plate in front of the individual.
5. As you say, “Take a bite”, physically guide the individual’s hand to the spoon, and lift the tip of her *elbow* so that the spoon rises to her mouth (Review “Suggestions for Physical Guidance Fading” on p. 64 for using more or less prompt.). The elbow physical prompt should remain until she accepts the bite.
 - a. If the individual takes the bite, remove the elbow prompt, provide abundant praise (“Good job”), and provide the reinforcer.
 - b. Allow up to 30 seconds to chew and swallow the bite.
6. As soon as the individual stops chewing or at the end of the 30 seconds, check for an empty mouth by saying “All gone” when it’s apparent that the individual swallowed (or after 30 seconds of acceptance). Provide verbal praise for swallowing by saying, “Good job eating!”
7. If the individual does not take the bite after 5 seconds, hand-over-hand guide her to grasp the spoon, and help guide her spoon to her midline (spoon should touch her lips) until she takes the bite or another 30 seconds has passed. If the individual resists the physical guidance procedure for more than 5 seconds, discontinue the procedure and just hold the spoon to her lips.
8. Ignore all refusal behaviors (screaming, crying, and hitting).
9. If individual expels the bite, re-present the bite.
10. Every few presentations should be drinks. Drink should ideally be no more than a sip, presented in front of the individual.



11. As you say, “Susan, take a drink”, physically guide her hand to the cup, and prompt the tip of her right *elbow*. The physical prompt should remain at the elbow until she accepts the drink.
12. If she takes the entire drink within 10 seconds by herself, provide brief verbal praise (“Good job drinking!”), and provide the reinforcer.
13. If she does not take the drink within 10 seconds, help her hold the cup if necessary until she takes the drink. If the individual resists the physical guidance procedure for more than 5 seconds, discontinue the physical prompt procedure and just hold the cup to her lips. Wait 30 seconds.
14. Once she takes the drink, give the individual up to 30 seconds to swallow. Ask for “show me” (e.g., her mouth is open and no liquid is detected), then present the next bite immediately.
15. If she doesn’t take the drink, present the next bite.
16. Minimal attention should be given to the individual, except to give attention and provide access to reinforcers for food acceptance and swallowing. The caregiver can respond to the individual if she initiates communication.

Procedure for Introducing New Foods

Individuals with autism spectrum disorders and other developmental disabilities can often refuse to eat all but a very limited number of food items. A goal for these individuals can be getting them to accept new foods. Use the steps outlined below, in combination with the techniques above for prompting and motivating food acceptance when introducing new foods. For individuals with possible medical risks, consult a health care provider to prevent the risk of dangerous situations such as choking on uncut hotdogs, aspiration, and allergic reactions (peanuts, eggs, etc.)

1. Once the individual is accepting and swallowing a non-preferred food across 3 different meals with minimal refusal behaviors, introduce another non-preferred food (see example below). When presenting a non-preferred food for the *first time*, make the bite as small as possible to minimize the effort required.

Example:

- After 1 bite of a new, non-preferred food, provide a preferred food for the rest of the meal. If successful across 3 meals, move to:
- After 1 bite of a new, non-preferred food, provide 5 bites of a preferred food, repeat. If successful across 3 meals, move to:
- After 1 bite of a new, non-preferred food, provide 3 bites of a preferred food, repeat. If successful across 3 meals, add a new, non-preferred food.

2. If the initial bite is still *very* difficult to accept for the individual (e.g., spoon holding lasts more than 5-10 mins), present equal amounts of non-preferred and preferred foods on the same spoon and slowly reduce the amount of preferred food (and increase non-preferred) for the subsequent bite or meal.
3. If eating these mixed bites is difficult, present him with a preferred food for the first bite of the meal followed by a non-preferred (and continue with the rest of the recommendations)

Example:

- 1 bite of preferred food, 1 bite of a non-preferred food, repeat. If successful across 3 meals, move to:
- 1 bite of preferred food, 3 bites of a non-preferred food, repeat. If successful across 3 meals, move to:
- 1 bite of preferred food, 5 bites of a non-preferred food, repeat. If successful across 3 meals, move to:
- 1 bite of preferred food, 10 bites of a non-preferred food.

Procedure for Introducing New Textures

For many individuals food texture can be the cause of refusal. Use the steps below to slowly introduce new textures so that they become acceptable.

1. Beginning-texture meals should consist of food presented at the texture the individual has been consuming at home (or at the texture recommended by an occupational therapist, usually based on results of a modified barium swallow study).
2. The texture presentations typically follow a sequence:

a. Pureed → Junior → Ground → Chopped Fine → Regular texture



3. If appropriate, use food thickener to gradually increase the texture
4. When the individual is successfully accepting and swallowing the amount of food he usually consumes at the beginning texture, “*probe meals*” should be conducted at varying textures to determine the next texture.



5. For the first probe meal, the caregiver should provide the food prepared in the target texture. Success with any texture is defined as acceptances and swallows above 80% and expulsions and gags (or other refusals) below 20% of the meal,
 - a. If the probe meal met the criteria for success, meals should continue at the probed texture.
 - b. If the probe meal does not meet the success criteria, the caregiver should conduct a second probe meal at the next meal using the next higher texture from the previously successful texture (e.g., if the individual previously ate junior texture successfully, the new probe meal should be at the ground texture.)
 - c. If this second probe was unsuccessful, bites consisting of a combination of two textures should be presented using the following sequence:
 - i. 75% previously successful texture + 25% next texture
 - ii. 50% previously successful texture + 50% next texture
 - iii. 25% previously successful texture + 75% next texture
 - iv. 100% next texture.
 - d. Bites should be presented using the same texture or combination of textures until the individual meets the criteria for success (90% acceptance) at three consecutive meals.

6. Increase texture again when the individual's consumption of food at the current texture level is met. Use a criterion based on the caregiver's judgment or based on 80% acceptance of a texture for 1 week.

Progression of Texture Fading

Use this sequence of texture combinations when working to increase an individual's acceptance of greater food textures.

1. 100% Pureed
 - a. 75% Pureed + 25% Junior
 - b. 50% Pureed + 50% Junior
 - c. 25% Pureed + 75% Junior
2. 100% Junior texture
 - a. 75% Junior + 25% Ground
 - b. 50% Junior + 50% Ground
 - c. 25% Junior + 75% Ground
3. 100% Ground texture



- a. 75% Ground + 25% Chopped fine (diced)
- b. 50% Ground + 50% Chopped fine
- c. 25% Ground + 75% Chopped fine
4. 100% Chopped fine texture
 - a. 75% Chopped fine + 25% Regular
 - b. 50% Chopped fine + 50% Regular
 - c. 25% Chopped fine + 75% Regular
5. 100% Regular

Personalized Mealtime Behavior Intervention Plan EXAMPLE

For: Sally Jones Date: 9/20/10

1. Function(s) of the Target Mealtime Behavior from the FBA:

| Target Mealtime Behavior | Function |
|--------------------------|----------------------------------|
| Refusal of foods | Avoidance of non-preferred foods |
| Throwing spoon/fork | Communicating she is full |
| | |
| | |

1. Mealtime Goals

| Target Mealtime Behavior | Realistic Behavior Goal |
|--|--|
| Food Selectivity | Increase acceptance of four new foods: two vegetables, two starches at 80% |
| Refusal Behavior (Throwing spoon/fork) | Decrease throwing of spoon/fork from 80% to 40% |
| | |

2. Treatment Package (select from suggested Mealtime Behavior Interventions, found on p. 57-62)

| |
|---|
| For Challenging Behavior 1: Refusal of Foods |
|---|

Do's

1. Introduce new foods using the procedures
2. Make eating fun
3. Pay her for doing well, with a token system
4. Implement the Addressing Avoidance Intervention for Self Feeding Individuals



Don'ts (list what's most difficult for you when working with the individual)

1. Don't give attention when she refuses new foods

Personalized Mealtime Behavior Intervention Plan

For: _____ Date: _____

1. Function(s) of the Target Mealtime Behavior from the FBA:

| Target Mealtime Behavior | Function |
|--------------------------|----------|
| | |
| | |
| | |
| | |

2. Mealtime Goals

| Target Mealtime Behavior | Realistic Behavior Goal |
|--------------------------|-------------------------|
| | |
| | |
| | |

3. Treatment Package (select from suggested Mealtime Behavior Interventions, found on p. 57-62)

For Target Behavior 1: _____

Do's

1. _____

2. _____



3.

4.

Don'ts (list what's most difficult for you when working with the individual)

1.

2.

3.

For Target Behavior 2: _____

Do's

1.

2.

3.

4.

5.

Don'ts (list what's most difficult for you when working with the individual)

1.

2.

3.



For Target Behavior 3: _____

Do's

1. _____

2. _____

3. _____

4. _____

5. _____

Don'ts (list what's most difficult for you when working with the individual)

- 1 _____
2. _____
3. _____



5. Review and Homework

Notes:

Are you ready for your homework?

Do you have any questions about any of the Mealtime Behavior Intervention Techniques?

Do you have any questions about implementing the Mealtime Behavior Intervention Plan you developed?

Do you feel ready to implement the Mealtime BIP? If not, what are your concerns? Bring your concerns to the trainer.

- **Implement your Personalized Mealtime Behavior Intervention Plan and Record Results using the Mealtime Behavior Intervention Data Sheet and Mealtime Behavior Graph**

END OF SESSION 3

Session 4:

Review of Mealtime Behavior Intervention Plan Implementation

1. Review

Notes:

2. Discuss Results of Mealtime Behavior Intervention Plan Implementation

It is important to keep careful track of the intervention techniques employed and their results so that this information can be reviewed and used to modify the personalized Mealtime Behavior Intervention Plan for greater effectiveness if needed. Session 4 provides an opportunity to examine your experience with implementing the mealtime behavior management techniques described in Session 3. You should be recording your results on the Mealtime Behavior Intervention Data Sheet and the Mealtime Behavior Graph. Use this time to share your results and consult with the trainer. Use the questions below to help you reflect on your experience.



- What techniques seemed to work best?

- What techniques seemed to be ineffective?

- Are your goals still realistic? If not, how would you restate your goals?

- What part of the mealtime behavior intervention plan was most difficult for you to implement? Why?

- What would improve your ability to implement the intervention techniques?



- Do you think you need to modify the mealtime behavior interventions you are using? If so, discuss with the trainer.

3. Modify Mealtime Behavior Intervention Plan as Needed

Be sure to share your Mealtime Behavior Intervention Data Sheet and Mealtime Behavior Graph with your trainer. Seek feedback from the trainer regarding your results. Ask specific questions. Share any difficulties or successes you had with the trainer and with the class. Your experience could be just what someone else in the class needs to hear.

Based on your recorded results and input from the trainer, make any needed changes to the Mealtime BIP. Write down the new techniques you will try, and eliminate those that weren't effective. Write down any advice the trainer gives you for improving your ability to implement the intervention techniques. Keep good records. They will help you determine how best to improve the mealtime behaviors of the person you care for.

4. Create a Plan for Continued Consultation with the Trainer

Discuss with the trainer your need for future assistance and document a plan for future meetings, phone calls, or demonstrations of techniques. Use the questions below to help determine your ongoing needs.

Do you plan to continue working to implement the BIP for this individual?

If yes, do you think the BIP will need further fine tuning? In what way?

What parts of the BIP are continuing to be a challenge for you?

How could the trainer assist you with overcoming these challenges? (e.g., phone calls, meetings, home visits to demonstrate techniques)

Do you anticipate moving on to use FBA to understand and address additional behaviors once the most challenging mealtime behaviors are reduced?

Please share your answers with the trainer and agree on a plan for follow-up. Document the agreed upon plan below and on the next page. Give one copy to the trainer.

BIP Follow-Up Plan
(Caregiver Copy)

Date: _____ Name of Individual: _____

Trainer/Caregiver Contact Information (please circle):

Name _____

Email _____

Phone _____

Fax _____

Address _____

Date/time/method of next scheduled follow-up with trainer: _____

This is your copy to keep.



BIP Follow-Up Plan
(Trainer Copy)

Date: _____ Name of Individual: _____

Trainer/Caregiver Contact Information (please circle):

Name _____

Email _____

Phone _____

Fax _____

Address _____

Date/time/method of next scheduled follow-up with trainer: _____

Document the agreed upon plan for follow-up below. Give this copy to the trainer.



5. Workshop Evaluation

Please complete the Workshop Evaluation located on the next page. Your trainer will collect it from you.

**This is the end of the training sessions for
Targeting the Big Three: Mealtime Behaviors.**

THANK YOU.

Targeting the Big Three

Caregiver's Program Evaluation

Target behavior (circle one): Challenging behavior, Mealtime behavior, Toilet training

DDSO: _____ Trainer: _____ Today's Date: __ / __ / ____

1. Overall, how satisfied were you with the workshop trainings?

- 1) Very dissatisfied
- 2) Dissatisfied
- 3) Neither satisfied nor dissatisfied
- 4) Satisfied
- 5) Very satisfied

2. In general, how effective was the curriculum for the individual you are working with?

- 1) Ineffective
- 2) Somewhat effective
- 3) Neither effective nor ineffective
- 4) Very effective
- 5) Extremely effective

3. At the end of the program, the individual's target problem behaviors are:

- 1) Worse
- 2) Slightly worse
- 3) About the same
- 4) Improved
- 5) Significantly improved

4. The training was presented in a concise and easy to understand manner.

- 1) Totally disagree
- 2) Somewhat Disagree
- 3) Neither agree or disagree
- 4) Somewhat agree
- 5) Totally agree

5. The amount of work (training) required was at a reasonable level for the challenges I was facing.

- 1) Totally disagree
- 2) Somewhat Disagree
- 3) Neither agree or disagree
- 4) Somewhat agree
- 5) Totally agree

6. Will you continue to follow the guidelines?

- 1) Definitely not
- 2) Probably not
- 3) Not sure-Maybe
- 4) Probably
- 5) Definitely

7. I feel that the methods involved with the trainings were ethically sound.

- 1) Totally disagree
- 2) Somewhat Disagree
- 3) Neither agree or disagree
- 4) Somewhat agree
- 5) Totally agree

8. The trainer was flexible and open to suggestions or concerns

- 1) Totally disagree
- 2) Somewhat Disagree
- 3) Neither agree or disagree
- 4) Somewhat agree
- 5) Totally agree

9. The trainer was knowledgeable, thoroughly trained and easy to work with

- 1) Totally disagree
- 2) Somewhat Disagree
- 3) Neither agree or disagree
- 4) Somewhat agree
- 5) Totally agree

10. Please provide suggestions you might have that would assist us in making our training program more effective:

Forms

Mealtime Baseline Data Sheet
 (Use a separate data sheet for each meal session.)

Caregiver's Name: _____ Date: __ / __ / ____ Time/Bite Cap: _____
 Meal: Breakfast / Lunch / Dinner/Snack
 Foods presented: _____

Accept: Taking the entire bite of food within 5-10 seconds of presentation.
 Expel: Any food larger than the size of a pea is seen outside the lips after acceptance.
 Swallow: Swallowing the bite within 30-seconds after the entire bite was deposited in the mouth
 Pack: Holding (i.e., not swallowing) the food inside the mouth after 30 seconds has passed since acceptance.
 Refusal: Head turns, throwing, scratching, hitting, and mouth cover, crying, screaming, etc.
 Gag: Making retching sounds, hyper-extending the neck, opening the mouth while tensing the neck, or sticking out tongue.
 Cough: Expelling air from the lungs sharply with a noise.

| Bite # | P = Preferred Food NP = Non-preferred NF= New Food DK = Don't know | Food | Accept | Swallow | Pack | Expel | Gag or Cough | Refusal |
|--------|---|------|--------|---------|------|-------|--------------|---------|
| 1 | P NP NF DK | | | | | | | |
| 2 | P NP NF DK | | | | | | | |
| 3 | P NP NF DK | | | | | | | |
| 4 | P NP NF DK | | | | | | | |
| 5 | P NP NF DK | | | | | | | |
| 6 | P NP NF DK | | | | | | | |
| 7 | P NP NF DK | | | | | | | |
| 8 | P NP NF DK | | | | | | | |
| 9 | P NP NF DK | | | | | | | |
| 10 | P NP NF DK | | | | | | | |
| 11 | P NP NF DK | | | | | | | |
| 12 | P NP NF DK | | | | | | | |
| 13 | P NP NF DK | | | | | | | |
| 14 | P NP NF DK | | | | | | | |
| 15 | P NP NF DK | | | | | | | |
| 16 | P NP NF DK | | | | | | | |
| 17 | P NP NF DK | | | | | | | |
| 18 | P NP NF DK | | | | | | | |
| 19 | P NP NF DK | | | | | | | |

| | | | | | | | | |
|----------------------|------------|--|--|--|--|--|--|--|
| 20 | P NP NF DK | | | | | | | |
| 21 | P NP NF DK | | | | | | | |
| 22 | P NP NF DK | | | | | | | |
| 23 | P NP NF DK | | | | | | | |
| 24 | P NP NF DK | | | | | | | |
| 25 | P NP NF DK | | | | | | | |
| 26 | P NP NF DK | | | | | | | |
| 27 | P NP NF DK | | | | | | | |
| 28 | P NP NF DK | | | | | | | |
| 29 | P NP NF DK | | | | | | | |
| 30 | P NP NF DK | | | | | | | |
| 31 | P NP NF DK | | | | | | | |
| 32 | P NP NF DK | | | | | | | |
| 33 | P NP NF DK | | | | | | | |
| 34 | P NP NF DK | | | | | | | |
| 35 | P NP NF DK | | | | | | | |
| 36 | P NP NF DK | | | | | | | |
| 37 | P NP NF DK | | | | | | | |
| 38 | P NP NF DK | | | | | | | |
| 39 | P NP NF DK | | | | | | | |
| 40 | P NP NF DK | | | | | | | |
| 41 | P NP NF DK | | | | | | | |
| 42 | P NP NF DK | | | | | | | |
| 43 | P NP NF DK | | | | | | | |
| 44 | P NP NF DK | | | | | | | |
| 45 | P NP NF DK | | | | | | | |
| Sum of bite # 1-45 = | | | | | | | | |

Mealtime Functional Behavior Assessment Data Sheet
 (Use a separate data sheet for each condition you test and each session.)

Caregiver Name: _____

Date: ___ / ___ / 2011

Meal: Breakfast / Lunch / Dinner/Snack

Condition: _____

Foods presented: _____

Accept: Taking the entire bite of food within 5-10 seconds of presentation.
 Swallow: Swallowing the bite within 30-seconds after the entire bolus was deposited in the mouth
 Pack: Holding the bite in the mouth without swallowing after 30 seconds has passed since acceptance.
 Expel: Any food larger than the size of a pea is seen outside the lips after acceptance.
 Gag: Making retching sounds, hyper-extending the neck, opening the mouth while tensing the neck, or sticking out tongue.
 Cough: Expelling air from the lungs sharply with a noise.
 Refusal: Head turns, throwing, scratching, hitting, and mouth cover, crying, screaming.

| Bite # | P = Preferred Food NP = Non- preferred NF= New Food DK = Don't know | Food | Accept | Swallow | Pack | Expel | Gag or Cough | Refusal |
|--------|--|------|--------|---------|------|-------|--------------|---------|
| 1 | P NP NF DK | | | | | | | |
| 2 | P NP NF DK | | | | | | | |
| 3 | P NP NF DK | | | | | | | |
| 4 | P NP NF DK | | | | | | | |
| 5 | P NP NF DK | | | | | | | |
| 6 | P NP NF DK | | | | | | | |
| 7 | P NP NF DK | | | | | | | |
| 8 | P NP NF DK | | | | | | | |
| 9 | P NP NF DK | | | | | | | |
| 10 | P NP NF DK | | | | | | | |
| 11 | P NP NF DK | | | | | | | |
| 12 | P NP NF DK | | | | | | | |
| 13 | P NP NF DK | | | | | | | |
| 14 | P NP NF DK | | | | | | | |
| 15 | P NP NF DK | | | | | | | |
| 16 | P NP NF DK | | | | | | | |
| 17 | P NP NF DK | | | | | | | |
| 18 | P NP NF DK | | | | | | | |

| | | | | | | | | |
|----|---------------------------------------|--|--|--|--|--|--|--|
| 19 | P NP NF DK | | | | | | | |
| 20 | P NP NF DK | | | | | | | |
| 21 | P NP NF DK | | | | | | | |
| 22 | P NP NF DK | | | | | | | |
| 23 | P NP NF DK | | | | | | | |
| 24 | P NP NF DK | | | | | | | |
| 25 | P NP NF DK | | | | | | | |
| 26 | P NP NF DK | | | | | | | |
| 27 | P NP NF DK | | | | | | | |
| 28 | P NP NF DK | | | | | | | |
| 29 | P NP NF DK | | | | | | | |
| 30 | P NP NF DK | | | | | | | |
| 31 | P NP NF DK | | | | | | | |
| 32 | P NP NF DK | | | | | | | |
| 33 | P NP NF DK | | | | | | | |
| 34 | P NP NF DK | | | | | | | |
| 35 | P NP NF DK | | | | | | | |
| 36 | P NP NF DK | | | | | | | |
| 37 | P NP NF DK | | | | | | | |
| 38 | P NP NF DK | | | | | | | |
| 39 | P NP NF DK | | | | | | | |
| 40 | P NP NF DK | | | | | | | |
| | Sum responses to bites # 1-40= | | | | | | | |

Forms for Tallying FBA Results

Condition: Avoidance

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | |
| 2 | |
| 3 | |
| Total | |

Condition: Tangible

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | |
| 2 | |
| 3 | |
| Total | |

Condition: Attention

| Session | Total # Target Behaviors |
|---------|--------------------------|
| 1 | |
| 2 | |
| 3 | |
| Total | |

Once you have a table for each condition, identify which condition showed the highest number of occurrences of target problem behaviors.

| Condition | Total Number of Target Behaviors (e.g., packing, refusals) |
|-----------------------|--|
| Access to attention | |
| Access to tangible | |
| Avoidance from eating | |

Condition with the Highest Number of the target behaviors: _____

Mealtime Behavior Intervention Data Sheet

Caregiver Name: _____ Date: __ / __ / ____ Meal: Breakfast / Lunch / Dinner / Snack

Condition: **Intervention**

Accept: Taking the entire bite of food within 5-10 seconds of presentation
 Expel: Any food larger than the size of a pea is seen outside the lips after acceptance
 Swallow: Swallowing the bite within 30-seconds after the entire bolus was initially deposited in the mouth
 Pack: Holding the bite in the mouth without swallowing after 30 seconds of acceptance
 Refusal: Head turns, throwing, scratching, hitting, and mouth cover, crying, screaming
 Gag: Making retching sounds, hyper-extending the neck, opening the mouth while tensing the neck, or tongue sticking out
 Cough: Expelling air from the lungs sharply with a noise

| Bite # | P=Preferred Food NP=Non-preferred NF=New Food DK=Don't know | Food | Accept | Swallow | Pack | Expel | Gag/ Cough | Refusal |
|--------|--|------|--------|---------|------|-------|---------------|---------|
| 1 | P NP NF DK | | | | | | | |
| 2 | P NP NF DK | | | | | | | |
| 3 | P NP NF DK | | | | | | | |
| 4 | P NP NF DK | | | | | | | |
| 5 | P NP NF DK | | | | | | | |
| 6 | P NP NF DK | | | | | | | |
| 7 | P NP NF DK | | | | | | | |
| 8 | P NP NF DK | | | | | | | |
| 9 | P NP NF DK | | | | | | | |
| 10 | P NP NF DK | | | | | | | |
| 11 | P NP NF DK | | | | | | | |
| 12 | P NP NF DK | | | | | | | |
| 13 | P NP NF DK | | | | | | | |
| 14 | P NP NF DK | | | | | | | |
| 15 | P NP NF DK | | | | | | | |
| 16 | P NP NF DK | | | | | | | |
| 17 | P NP NF DK | | | | | | | |
| 18 | P NP NF DK | | | | | | | |
| 19 | P NP NF DK | | | | | | | |
| 20 | P NP NF DK | | | | | | | |
| 21 | P NP NF DK | | | | | | | |

| | | | | | | | | |
|---------------------|------------|--|--|--|--|--|--|--|
| 22 | P NP NF DK | | | | | | | |
| 23 | P NP NF DK | | | | | | | |
| 24 | P NP NF DK | | | | | | | |
| 25 | P NP NF DK | | | | | | | |
| 26 | P NP NF DK | | | | | | | |
| 27 | P NP NF DK | | | | | | | |
| 28 | P NP NF DK | | | | | | | |
| 29 | P NP NF DK | | | | | | | |
| 30 | P NP NF DK | | | | | | | |
| 31 | P NP NF DK | | | | | | | |
| 32 | P NP NF DK | | | | | | | |
| 33 | P NP NF DK | | | | | | | |
| 34 | P NP NF DK | | | | | | | |
| 35 | P NP NF DK | | | | | | | |
| 36 | P NP NF DK | | | | | | | |
| 37 | P NP NF DK | | | | | | | |
| 38 | P NP NF DK | | | | | | | |
| 39 | P NP NF DK | | | | | | | |
| 40 | P NP NF DK | | | | | | | |
| 41 | P NP NF DK | | | | | | | |
| 42 | P NP NF DK | | | | | | | |
| 43 | P NP NF DK | | | | | | | |
| 44 | P NP NF DK | | | | | | | |
| 45 | P NP NF DK | | | | | | | |
| Sum of bite # 1-45= | | | | | | | | |



Personalized Mealtime Behavior Intervention Plan

For: _____

Date: _____

1. Function(s) of the Target Mealtime Behavior from the FBA:

| Target Mealtime Behavior | Function |
|--------------------------|----------|
| | |
| | |
| | |
| | |

2. Mealtime Goals

| Target Mealtime Behavior | Realistic Behavior Goal |
|--------------------------|-------------------------|
| | |
| | |
| | |

3. Treatment Package (select from suggested Mealtime Behavior Interventions, found on p. 57-62)

For Target Behavior 1: _____

Do's

1. _____

2. _____



3. _____

4. _____

Don'ts (list what's most difficult for you when working with the individual)

1. _____

2. _____

3. _____

For Target Behavior 2: _____

Do's

1. _____

2. _____

3. _____

4. _____

5. _____

Don'ts (list what's most difficult for you when working with the individual)

1. _____

2. _____

3. _____



For Target Behavior 3: _____

Do's

1. _____

2. _____

3. _____

4. _____

5. _____

Don'ts (list what's most difficult for you when working with the individual)

- 1 _____
- 2 _____
- 3 _____



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