

# Breakfast in the Classroom

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## Planning for Integrated Pest Management

### Brief Overview of Breakfast in the Classroom (BIC)

BIC is a successful school-based food serving program provided to students to ensure they are functioning optimally to learn by feeding them first thing in the morning, typically in the classroom. There are typically three different methods to provide food “after the bell” during instructional time:

1. *Breakfast in the Classroom*: Food service staff (sometimes assisted by students) deliver breakfast to each classroom in a cart or warming bag. Students retrieve their meal to eat at their desks or another approved space in the classroom.
2. *Grab and Go to the Classroom*: Students pick up breakfast in the cafeteria or from a breakfast cart in a central location and bring it to class to eat.
3. *Second Chance Breakfast*: Students eat breakfast during a break in the morning, often after first or second period, usually via Grab and Go to the Classroom.

### How BIC Programs Can Exacerbate Pest Problems in the Classroom

One aspect of the program is that it significantly increases the amount and types of food eaten in the classroom. Previously food served in classrooms was limited to snacks, special events, and celebrations.

The presence and types of the food and drinks in the classroom as well as the timing of generating waste and conditions to be cleaned at the start of the day generates pest issues related to classroom cleanliness and waste management. Typically, classrooms are cleaned at the end of the school day after the students have left. The soiling of the classroom and generation of food waste and food contaminated waste first thing in the morning provides a source of food for pests throughout the day. Even if the bulk waste is removed immediately after breakfast, any crumbs and liquids that remain are not cleaned up until the end of the school day.

### How Integrated Pest Management (IPM) Strategies Can Address Pest Issues

IPM begins with understanding what pests need to survive and thrive. Pests seek three things, food, water, and shelter. The eating and storage of food and drink in addition to any presence of

microwaves and refrigerators in the classroom is extremely conducive to providing ideal conditions of food, heat, and shelter.

Primary pests like ants, flies, cockroaches, and mice will be drawn to crumbs under the microwave, food ground into the rug, juice residue on desks and in sinks, or spills on the floor. It takes very little food for pests to thrive and reproduce in the hidden spaces of a classroom.

Some common pests, such as certain flies, can carry disease organisms and spread food-borne illnesses, including salmonella. Protein by-products from pests such as body parts, urine, and feces are known allergens and triggers of asthma.

## IPM Strategies in the Classroom

The following information is designed to assist the identification of potential pest issues and possible IPM strategies and tools to prevent and address any pest issues related to BIC.

### General Pesticide Safety

Please remember that some state laws only allow certain non-toxic pesticides to be used in schools by a licensed pesticide applicator. In general, staff should not bring in or use any types of pesticide products.

The following information is about prevention, not treatment. If you have a pest problem, contact your senior custodian and submit a pest sighting report.

### BIC IPM Training Needs

Prevention begins with understanding the problems and potential solutions:

Sector	Role	Training Content
<b>Facility Manager/Custodial Supervisor</b>	<ul style="list-style-type: none"><li>• Oversee cleaning operations</li><li>• Waste management</li><li>• IPM Program</li></ul>	<ul style="list-style-type: none"><li>• IPM</li><li>• Options for waste management for pest prevention</li><li>• IPM guidelines to assist with pest prevention</li></ul>
<b>Custodians</b>	<ul style="list-style-type: none"><li>• Classroom cleaning</li><li>• Waste management</li><li>• Pest prevention and reporting</li></ul>	<ul style="list-style-type: none"><li>• BIC Cleaning as part of IPM</li><li>• Waste management</li></ul>

<b>Food Service Directors and Managers</b>	<ul style="list-style-type: none"> <li>• Food, drink and packaging selection</li> <li>• Resources for BIC supplies and equipment</li> <li>• Food delivery</li> </ul>	<ul style="list-style-type: none"> <li>• BIC related pest issues and IPM</li> <li>• Food, drink and packaging selection to minimize pest issues</li> </ul>
<b>Staff and Teachers Involved in Serving Food</b>	<ul style="list-style-type: none"> <li>• Food distribution and storage</li> <li>• Classroom waste management</li> </ul>	<ul style="list-style-type: none"> <li>• IPM issues and prevention in the classroom—making the room cleaning, cleaning up after breakfast, waste management, food storage, etc.</li> </ul>

### District Policy – Types of Food and Drink

There is some discretion on the part of food service within BIC guidelines to consider criteria on selection of the types, forms, and packaging of foods and drinks served:

- Packaging
  - Consider packaging that is easy to open to prevent food from being spilled.
  - Consider the use of the packaging as a place mat and then as a wrap to contain the waste for transport and disposal in the trash. An example of what has worked in many schools are food wraps and “grab n go” bags. Please consider the environmental impacts of any packaging used (e.g., foil is limited resource, requires extensive resources to manufacture, and generates pollution).
- Food – consider the following criteria:
  - Forms that have minimal crumbs and stickiness
  - How perishable the food is and how well it will store
  - Fruit that will not attract fruit flies
- Drinks
  - Types of drinks – consider:
    - not sticky
    - residue that will not attract pests
  - Type of containers – consider how:
    - to prevent spills
    - to enable students to easily open themselves to prevent spills
    - easily drink containers can be emptied and/or rinsed if needed and/or recycled
  - Disposal of drinks and drink containers:
    - Drain drinks into one of the following:
      - sink – splash issues creating residue that attracts pests, or
      - bucket – must be emptied immediately (this has been a technique piloted in school cafeterias to recover and recycle milk containers)

- Not to drain – need to consider:
  - trash bag leak issues and contamination of trash barrels
  - weight of trash to help determine the type and weight/strength of bag needed to collect trash

## Food Storage

Schools get reimbursed based on amount of full servings provided, thus, there is an incentive to ensure teachers take and distribute as much food and drink in full servings as possible. Issues to be addressed in protocols:

- Where and how to store extra food:
  - Protocols should provide a time limit for storing food, the types of food that can be stored, the types of containers that can be used and the location of food storage.
  - Schools should specifically prohibit the storage of food in desks, closets, etc.
  - Schools should provide sealed pest proof tubs. These can be hard containers with snap-tight or screw-top lids.
    - Boxes and plastic or foil bags are no barrier to a hungry mouse or insect.
    - Must ensure expense is accounted for and possibly covered by food service BIC funding.
  - Schools may consider finding spaces outside of the classroom to store extra food. This extra storage would require someone to be assigned to monitor distribution, expiration dates, and pest management issues.
- Share bin
  - Create guidelines on use of extra food (e.g., distributing to children at the end of the day or for other occasions or intervals).
  - Create a schedule for cleaning out and possibly distributing stores of old food. Some schools make packages of food for students to take home.

## Reduce Harborage (places for pests to live and hide)

- Consider removing the refrigerator or microwave from your classroom. If these appliances are kept, they should be checked and cleaned on a regular basis.
- Move stored materials off the floor (e.g., onto shelves, or tables) to enable custodians to clean where food debris and pests can accumulate.
- Reduce clutter to eliminate hiding spaces and make it easier to clean.
- Consider eliminating upholstered furniture. Food crumbs collect under couch cushions and in chairs, attracting cockroaches, ants, and mice.

## Waste Management for BIC Trash and Recycling Collection

- Types of collection containers:
  - Open or covered in classroom and/or for hallway. Covered trash bins are ideal for trash that is not removed immediately after eating. Consider selecting the

- lids that are self-closing, whether they can withstand constant use by students, and if they prevent pests from entering.
  - Single or double bagged (for liquids if they are not dumped out before disposal).
  - Consider bins on wheels for easy transport.
- Procedure for collecting – options for location of collection containers and schedules:
  - Put trash in hallway for special pick-up after breakfast:
    - Ensure that it is lined. Consider whether it needs a lid depending on when it will be picked up and whether there is an existing pest problem.
    - Determine who will pick-up the food (e.g., food service staff or custodians).
    - Consider how will it impact their workload and how to account for the extra time.
  - Collect as routine trash pick-up at the end of the day:
    - This does not require putting the receptacle in the hallway.
    - This would require the implementation of pest prevention strategies to ensure this does not create or exacerbate pest problems. Two key strategies to prevent attracting pests and preventing odors:
      - A lined, covered trash can. It is ideal to use a lid that can seal.
      - Emptying liquids and food and rinsing recycling containers.

## Classroom Clean-Up

Level of classroom daily clean-up is increased due to BIC:

- Additional tasks to possibly add to the daily cleaning routine:
  - cleanup of the sink and backsplash
  - emptying the drink containers
  - rinsing the recyclable items
  - mopping spills
  - rinsing the trash and recycling receptacles more often if contaminated with food
- Determine who will do which of the additional cleaning tasks – custodian, students and/or teachers. Whomever is tasked with additional tasks must be allocated time and provided with appropriate supplies:
  - Teachers can oversee student clean-up of the classroom immediately after BIC.
    - They will need supplies.
    - This effort must not compete with instructional time.
  - Custodians can assist with trash management in conjunction with teacher collection within the classroom.
    - In addition, they must also be notified immediately if there is a spill or other condition requiring immediate attention.
    - Classroom cleaning will still be conducted after the classrooms are empty.
  - You can enlist students to help with cleanup.

- Students must be supplied with nontoxic cleaning supplies (non-toxic, anti-microbial wipes or paper towels) and instructed on protocols.
  - Each student can clean up his or her own desk after eating breakfast or assigned student helpers or paraprofessionals can assist with cleanup.
  - Students must either clean up or report spills immediately.
- Cleaning Tools – Vacuums:
  - Small hand vacuums have been considered for individual classrooms if food is served that generates crumbs, but battery replacement is an important consideration. Thus, specifying food that doesn't generate crumbs is the best solution.
  - Custodians can efficiently clean with backpack vacuums with HEPA filtration. Challenges include food ground into the floor and/or carpet when left to cleaning at the end of the school day.
- Consider having students use paper towels as a plate and wet wipes to clean. Issues to be addressed:
  - Wipes must not be anti-microbial.
  - Must ensure expense is accounted for and possibly covered by food service BIC funding.
  - Must account for the increase in quantities and types of trash.

### Implementation and Follow-Up

- Conduct an annual survey for the following sectors: food service, custodians and teachers.
- Discuss issues at teacher and food service staff meetings – pre, mid-way during school year and at end of the school year.

### Resources (other than IPM)

The following resources assist with the logistical aspects other than pest management of BIC programs:

- Breakfast in the Classroom – <https://breakfastintheclassroom.org/>
- WSU, Urban.IP@wsu.edu, [schoolipm.wsu.edu](http://schoolipm.wsu.edu), Food in the Classroom
- Colorado State University, College of Agricultural Science IPM Center
- Partners for Breakfast in the Classroom – <https://breakfastintheclassroom.org/grants/>
- No Kid Hungry – <http://bestpractices.nokidhungry.org/programs/school-breakfast/implement-breakfast-after-the-bell>