

# Galleri Micro-Farm

## User Guide



**We're here to help you craft your food story.**



We hope that you enjoy becoming acquainted with the Guided Growing app and your new Micro-Farm. This User Guide will be a helpful resource for getting to know the ins and outs of both, but please don't hesitate to reach out with questions or feedback.

**877.589.2885 | [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com)**

Or visit our [Help Center](#) for tips, tricks & troubleshooting.

This User Guide is intended to provide general information regarding the Micro Farm System and to provide additional education and instruction on its use. For specific information on questions of warranties, pricing, service terms and legal issues, refer to the Service Contract and associated Order Form.

Version 7.24.2023

## **Safety Reminders**

Safety first! Please keep the following in mind when using your Micro-Farm:

- 1. Authorized personnel only.** Allow only trained, authorized personnel to have farm access. This will help ensure food safety protocols are followed. Do not allow children to access the farm without supervision.



- 2. Do not move the farm.** Moving your farm could damage it and present a safety risk, so contact Babylon if you ever need to move your farm – even if only a few inches.
- 3. Keep farm locked.** Both the doors of the growing area and the bottom reservoir should remain locked when not in use by authorized personnel to avoid tampering by unauthorized individuals.
- 4. Follow food safety regulations.** Wear gloves when handling crops, wash produce before serving, and follow all local food safety regulations and guidelines.
- 5. Use caution when handling nutrient and pH balancing solutions.** Avoid contact with skin and eyes. Rinse skin and eyes with cold water immediately if exposed to any of the solutions. Seek medical help if solutions are swallowed.
- 6. Use a ladder when accessing upper zones of the farm.** Be sure to keep one hand on the farm at all times to avoid falling or slipping.
- 7. Do not tamper with electrical components.** Only Babylon-authorized technicians should service these components.

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# Micro-Farm Specifications & Features

## Features

### Fully Redesigned

Stunning new design features tinted glass panels, innovative easy-clean tray design, no-waste GrowServe™ system, and an optional built-in water cooling system.

### Automated Growing

Proprietary technology ensures plants receive the optimal amount of light, water and nutrients.

### Remotely Managed

Sensors and cameras continuously relay data about the farm, allowing Babylon to monitor performance and make adjustments from afar.

### Seed Variety

Choose from 40+ varieties of leafy greens, herbs, microgreens and flowers.

### App Alerts

Babylon's Guided Growing app alerts you when crops are ready for transplant or harvest.

### Personalized Support

Dedicated account manager, online Help Center, and how-to videos to ensure you have the help you need, when you need it.

### Dimensions

67" w x 29.75" d x 79.75" h  
1.71 m x 0.76 m x 2.03 m

### Gross Dimensions

48" w x 96" d x 85" h  
*on oversized pallet for shipping*

### Weight

400 lbs (182 kg) per unit  
650 lbs (295 kg) w/water & plants



### Door Outswing

59" (1.5m) outswing

### Power Consumption

13 kwh/day

### Weekly Harvest\*

- 3-6 lbs (1.2-2.7 kg) of greens per zone
- 1.5 lbs (0.68 kg) of herbs






*\* Based on 2 zone/week schedule*



There are five zones in your Micro-Farm. Zone 5 is dedicated to germinating seed packs and growing microgreens only.

Each of the five zones in your Micro-Farm contains four **GrowServe** trays that can be removed from the farm for transplanting, harvesting, and cleaning. Each GrowServe tray contains 14 plant sites. This means your Micro-Farm can grow up to 224 plants in addition to microgreens and germination in Zone 5.

# Micro-Farm Components

<b>GrowServe Tray</b>		Fill with nutrient-rich water at intervals throughout the day; hold Grow Lids and Germination/Microgreen Inserts
<b>Grow Lid</b>		Grow Lids sit in GrowServe trays in Zones 1-4.  Each grow lid contains 14 plant sites and holds seedlings after germination until the final harvest.
<b>Seed Pack Germination Insert</b>		Sits in the GrowServe tray; holds seed packs and prevents algae growth by blocking light from hitting the GrowServe tray
<b>Microgreen Insert</b>		Sits in the GrowServe tray; holds microgreen growth material and prevents algae growth by blocking light from hitting GrowServe tray
<b>Humidity Dome</b>		Clear cover placed over newly planted seed packs on microgreen and germination inserts for the first week following planting; increases germination rates

# Guided Growing Service

Babylon provides an all-inclusive Guided Growing Service that makes it simple to grow your own fresh produce on-site.

## Guided Growing Features

### Guided Growing App

BabylonIQ does all the thinking for you — it tells you when to plant, transplant, clean, and harvest.

### BabylonIQ - Remotely Managed Guided Growing

BabylonIQ FleetView technology includes sensors and cameras that continuously relay data about the farm and crops, allowing Babylon to monitor performance and make adjustments from afar.

### Growing & Cleaning Supplies

The Babylon Team will send you seeds, nutrient solutions, and cleaning materials on an as-need basis to keep you stocked with the materials needed for growing.

### Personalized Support

Dedicated account manager, online Help Center, and how-to videos to ensure you have the help you need, when you need it.

## Growing & Cleaning Materials

Here are the growing and cleaning materials we send on an as-need basis:

- Seeded plant packs
- Plant Nutrients & Solutions - Solutions A & B, pH balancer
- **Water only** spray bottle for planting seeds
- Harvesting Scissors
- Farm cleaning supplies

**Plant Packs.** Seeded plant packs arrive as you need them, arriving before the Guided Growing App tells you it's time to plant.



**Plant Nutrients.** Babylon's proprietary blends of nutrient solutions will arrive in two containers marked Solution A and Solution B. Your Nutrients will be housed in the lower compartment of your farm immediately next to the reservoir. Replace these bottles when low, and request more replacement bottles immediately through the **Nutrients** page of the Guided Growing app, accessible from the **Maintenance** menu. You should always have a replacement set of nutrients on hand, stored in your Farm Maintenance Kit.

**pH Balancing Solution.** You will also receive a concentrated pH adjustment solution that helps keep the water in your farm at an ideal pH. Your pH solution will be located in the same area as your nutrients. Avoid exposure with skin and eyes and tap to request more in the app when you replace a depleted bottle with a full one. Like the nutrients, you should always have an extra nutrient bottle on hand.

**Water Only Spray Bottle.** You'll need this to spray the seeds and top of the growth media when you plant new packs and microgreens. Be sure to only add fresh drinking water to the spray bottle – not water from the reservoir.

**Harvesting Scissors.** Keep these detachable, food safe scissors clean and ready for harvest time.

**Farm Cleaning Supplies.** We'll send you supplies to keep your farm clean on an as-need basis, including scrub brushes and food safe sanitizer spray.

Need more supplies? Just let your Babylon account manager know & we'll ship you more right away.

# Setting Up Your Guided Growing App Account

## Step 1

**Download the app.** Head to the App or Google Play Store and search for "Babylon Guided Growing."



Babylon Guided Growing

Food & Drink

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## Step 2

**Make an account.** Be sure to use a valid email address.

## Step 3

**Link your farm.** Once you are logged into your new account, the screen will prompt you to scan a QR code to link your Farm. Scan the QR code in your Quick Start Guide to successfully link your app account to your farm.

For tips on how to get started growing in your farm, check out the Micro-Farm Quick Start Guide enclosed in the welcome packet within your Babylon Box.

# How To Plant

Check out our tutorial video on how to plant your new seeds on the [Learn tab of the app](#) or by scanning the QR code below:



As always, it's important to wear disposable gloves when working in the farm and wash your hands beforehand.

This process will take less than five minutes.

## Here's how to plant:

1	<b>Get your plant pack.</b> Babylon will send these to you on a regular basis.
2	<b>Gear up.</b> Put on a pair of disposable gloves and grab your sanitized pair of scissors.
3	<b>Open the pack.</b> Carefully cut open the pack and slide out the tray containing the growth medium. Make sure the pack is right side up, with the seed holes and label facing you, so the seeds don't fall out.
4	<b>Place the pack and crop tag in the farm.</b> Carefully place the pack in a GrowServe tray in Zone 5, then insert the crop tag in the slot in front of the tray.
5	<b>Spray the seeds heavily with water.</b> Use your Water Only spray bottle to <b>heavily</b> mist the seeds and top of the growth medium. The wetter the seeds and top of the growth medium, the better. Just be careful not to spray too hard—you don't want the seeds to come out of the growth medium.
6	<b>Cover the plant pack with a humidity dome.</b> Place a clear plastic humidity dome on top of the GrowServe tray to cover the newly planted seeds. You'll remove the humidity dome after about a week, when the seeds have begun to sprout.
7	<b>Scan the crop into the app.</b> Open the Guided Growing app on your phone. From the home screen, tap <b>Scan Tag</b> , then scan the QR on the crop tag as prompted and select <b>Zone 5</b> .  That's it! The app will tell you when it's time to transplant your seedlings.

**GROWER TIP:** Note that if you don't **Plant** the crop through the app when you physically place the new seeds in your farm, the app will not tell you when to transplant, harvest, or clean. Scanning crops into the app is how you receive more seeds.

## How To Plant Microgreens

Check out our tutorial video on how to plant microgreens on the **Learn tab of the app** or by scanning the QR code below:



As always, it's important to wear disposable gloves when working in the farm and wash your hands beforehand.

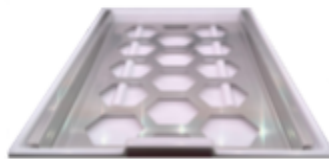
This process will take less than 5 minutes.

**Here's how to plant microgreens:**

**1 Get the growth medium and seeds.**

**2 Gear up.** Wash up and put on a pair of disposable gloves.

**3 Place the microgreen insert in a tray in the germination zone.** The insert supports the growth medium to the proper level so the seeds don't wash away. It looks like this:



Once in the farm, ensure the insert is sitting flat in the tray.

**4 Place growth medium in the farm.** Place one sheet of the growth medium on top of the microgreen insert. Make sure it's sitting flat on the insert.

5	<b>Spread the seeds over the growth medium.</b> Gently open the seed baggie and sprinkle the seeds evenly over the growth medium. Note that some microgreens require different seed densities, so you may receive more seeds for some varieties and fewer for others. Just be sure to spread the seeds out as evenly as you can.
6	<b>Place the QR code in front of the tray.</b> Remove the QR tag from the seed baggie and place it in the slot in front of the GrowServe tray.
7	<b>Spray the seeds heavily with water.</b> Use your water only spray bottle to heavily mist the seeds and top of the growth medium. Really drench the seeds and growth medium —the wetter the seeds and top of the growth medium, the better the seeds will germinate. Just be careful not to spray too hard – you don’t want the seeds to get swept away!
8	<b>Place the humidity dome on top of the tray.</b> Place the humidity dome over top of the newly planted seeds. Remove it after about a week, when the seeds have just begun to sprout.
9	<b>Scan into the app.</b> Open the Guided Growing app on your phone. From the home screen, tap <b>Scan Tag</b> , then scan the QR on the crop tag as prompted and select <b>Zone 5</b> .

Planting is complete! The app will tell you when it’s time to harvest your microgreens.

## How To Transplant

Check out our tutorial video on how to transplant on the **Learn tab of the app** or by scanning the QR code below:



As always, it’s important to wear disposable gloves when working in the farm and wash your hands beforehand.

This process will take 10-15 minutes.

**Here’s how to transplant:**

1	<b>Remove the GrowServe trays from the farm (optional).</b> Remove the GrowServe trays from the farm for transplanting. Or, if it’s easier for you, leave the trays in place inside the farm. It
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	<p>can be simpler to leave the trays in the farm if transplanting to a lower zone because it's easy to reach.</p> <p>If removing the trays, you'll first want to drain any water within before removing them from the farm. Slowly lift up the front part of the tray and let the water drain out the back. Once drained, remove each tray from the zone and place it on a sanitized table or cart.</p>
3	<b>Remove the pack of seedlings from the bottom zone.</b> Gently remove the pack of germinated seedlings from Zone five.
4	<b>Transplant the seedlings.</b> Gently remove each seedling and place it in its own grow site in the tray. Dispose of the black tray that held the seedlings.
5	<b>Carefully return the trays to the farm.</b> If you removed the GrowServe trays from the farm in step 2, slowly return them to their zone in the farm. Be very careful to place the trays back in gently to avoid water spilling out of the zone.
6	<b>Place the crop tag in the farm.</b> Place the crop tag in the slot on the left hand side of the zone, behind the zone label.
7	<b>Tap Transplant in the app.</b> Now transplant in the Guided Growing app so you're alerted later when it's time to harvest. Head to the homepage and tap on the crop you're transplanting, then tap the <b>Transplant</b> button.
8	<p><b>Clean the germination tray.</b> Clean and sanitize the GrowServe tray in Zone 5 where the seeds germinated:</p> <ul style="list-style-type: none"> <li>• Remove the GrowServe tray from the germination zone.</li> <li>• Run the tray, lid, and metal germination insert through a dishwasher, or clean by hand: <ul style="list-style-type: none"> <li>○ Loosen debris with a scrub brush</li> <li>○ Rinse debris</li> <li>○ Scrub the tray, lid, and metal insert with dish soap</li> <li>○ Rinse away soap</li> <li>○ Spray with food-safe sanitizer</li> <li>○ Allow a sanitizer contact time of five minutes</li> </ul> </li> </ul>
9	<b>Clean the zone if needed.</b> Inspect the zone before returning the tray to the farm. If there's a lot of algae in the zone, you may need to pause Autofarmer and wait 15 minutes for the trays to drain before wiping down and sanitizing the zone.
10	<b>Return the germination tray to the farm.</b> Return the tray gently to avoid water splashing from the zone.

Transplanting is complete! The app will let you know when it's time to harvest your crops.

# How To Harvest & Clean

Check out our tutorial video on how to harvest and clean on the **Learn tab of the app** or by scanning the QR code below:



Be sure to prevent water on the roots or in the trays from dripping on the edible portions of the plant. As always, it's important to wear disposable gloves when working in the farm and wash your hands beforehand.

This process will take 20-30 minutes.

## Here's how to Harvest:

- 1 Pause Autofarmer.** Head to the homepage of the Guided Growing app and tap **Pause Autofarmer** in the icon header. This will allow the trays to drain so you can wipe down the zone after harvesting.
- 2 Gear up.** Wash your hands thoroughly, put on a pair of food safe disposable gloves, and grab a sanitized pair of harvesting scissors.
- 3 Remove trays to a sanitized surface.** Remove all four trays from the zone and place them on a sanitized table or cart. Before removing, tilt the trays to the back of the farm to drain the water within. This will help avoid dripping when you remove the trays.
- 4 Harvest!** Each crop has a harvest window during which Babylon recommends harvesting. The app will let you know when each crop's harvest window begins and ends.  
  
Over this window, you can harvest the entire zone all at once, or you can complete multiple partial harvests. Just be sure to fully harvest the crop at the end of the window when the app says it's time for the final harvest.  
  
Here's how to harvest each type of crop:  
  
For **leafy greens**, cut directly at the base of the plant. Harvest the entire plant and discard the growth medium.  
  
For **herbs**, find a cluster of leaves about a third of the way down the plant. Directly above the cluster of leaves, cut the stem at a 45-degree angle. Come back to harvest again each week until it's time to complete the crop's final harvest. Herbs like basil get pretty tall, so keep them pruned and don't let them outgrow their space in the farm.

For **flowers**, simply snip off at the stem. You'll want to prune the leaves as well by trimming about a third of the way down the plant, cutting directly above clusters of leaves on the plant. Keeping flower plants pruned encourages more flowers to grow and keeps the zone looking tidy.

To harvest **microgreens**, snip at the base and dispose of the growth medium. If you harvest only a portion of the sheet, be sure to cut away the harvested growth medium before returning the rest of the microgreens to the farm.

- 5 **Harvest the crop in the Guided Growing App.** In the app, open the **Home** page, tap on the crop, then tap the **Harvest** button. You'll be offered an opportunity to share feedback. Please do!

Since herbs and flowers can be harvested multiple times over their harvest window, there's no need to tap **Harvest** until you remove the crop from the farm entirely.

- 6 **Clean the GrowServe Trays.** This step is important, as it prevents buildup of algae in trays. Algae buildup can impact farm performance, plus it doesn't look great.

1. **Remove algae & debris.** Take the tray and lid to a sink. Discard the growth medium, composting if available.
2. **Run the tray, lid, and metal insert through a dishwasher, or clean and sanitize by hand.** If cleaning by hand, take the tray and lid to a sink. Scrub away debris with a scrub brush, rinse, then spray liberally with the food safe sanitizer. Using dish soap when scrubbing can help remove debris on trays. If you use dish soap for this step, be sure to rinse thoroughly with water to remove all soap residue. Once rinsed, spray with the food safe sanitizer.

Repeat these steps for the remaining trays in the zone.

- 7 **Clean the zone.** Return to the farm and clean the zone, the area that houses the GrowServe trays.

- Remove the metal drain filter at the back of the zone. It may take some force to pop it out of position – first lift the back of the insert, then pop out the piece by lifting from the front.
- Using a disposable microfiber cloth, wipe away algae debris in the zone.
- Spray the zone with the food safe sanitizer.



	<ul style="list-style-type: none"> <li>Take the metal drain filter to a sink. Scrub away debris with the brush, then rinse. Apply a small amount of dish soap and scrub. Rinse away the soap debris and spray with the food-safe sanitizer. Allow a sanitizer contact time of five minutes.</li> <li>Return the metal drain filter to the zone.</li> </ul>
8	<b>Carefully return the GrowServe trays to the farm.</b> Carefully return your cleaned and sanitized GrowServe trays to the farm.
9	<b>Resume Autofarmer.</b> Open the homepage of the app and tap the <b>Resume Autofarmer</b> button.
	<b>GROWER TIP:</b> Following planting notifications in the Guided Growing app will help ensure you always have a pack ready for transplant when you harvest a zone.

Harvesting is complete! The zone is ready for more crops.

### Further Detail on Harvesting

The Guided Growing App will let you know when it's time to begin harvesting. Each crop has a harvest window during which Babylon recommends harvesting your crops.

You can harvest the entire zone all at once, or you can complete multiple partial harvests over the window. Just be sure to fully harvest the crop at the end of the harvest window when the app says it's time for the final harvest.

### Harvest Windows

Leafy greens have a harvest window of two weeks, while herbs and flowers can be harvested multiple times over the course of several weeks. Microgreens have a smaller harvest window since they have a much shorter growth cycle.

Once your crops have reached the end of their recommended lifespan you will need to harvest all remaining plants and clear the growing tier.

Read on for information on how to harvest each type of crop.

### Harvesting Lettuce

Lettuce is harvested only once in order to maximize efficiency in the Micro-Farm and to ensure a higher-quality product. We recommend harvesting over a maximum two-week window (or all at once), taking the plants that you need to use daily and disposing of the growth medium. Don't forget to sanitize the zone. (see *photograph opposite*)

### Harvesting Herbs & Flowers

Herbs and flowers take longer to mature, but once fully grown they allow multiple harvest cycles over an extended period of time. With a pair of scissors, harvest the herbs and flowers. Cut the stem at a 45-degree angle, about an inch above a forked branch and the stem. Depending on where you cut, the plants will take 7-14 days to grow back. When pruning, make sure to only take the top third of the plant; if you remove too much, the plant may not be able to produce more. Be sure to prune the plants, especially flowers, so that they don't get too large and grow into the lights and tier above.

### Harvesting Microgreens

Harvest microgreens by snipping at the base of the plant. To reduce the risk of contamination, always remove growth medium from harvested plants from the system. In other words, never harvest half a sheet of microgreens and place the whole sheet back in the farm; be sure to cut away and dispose of the growth medium from the harvested microgreens.

### Disposal of Growth Media

Both growth media – in the seed packs and for the microgreens – are compostable. For more information about the growth media, scan the QR codes below:

**Growfoam** (seed pack medium)



**Hollandbio Jute Mats** (microgreen medium)



# How to Deep Clean Your Micro-Farm

(Complete Every 8 Weeks)

Check out our tutorial video on how to complete the deep clean on the *Learn* tab of the app or by scanning the QR code below:

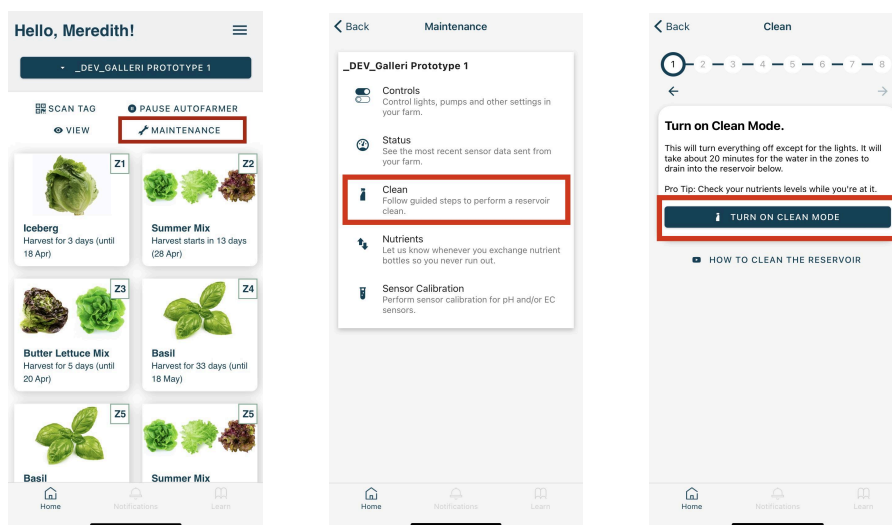


As always, it's important to wear disposable gloves when working in the farm and wash your hands beforehand.


This process will take about an hour.

Here's how to complete the Deep Clean:

- 1 Turn on Clean Mode.** Open up the Guided Growing app and tap **Maintenance**, then **Clean**. Toggle on Clean Mode as prompted. It will take about 20 minutes for the water in the zones to drain into the reservoir below. While waiting, proceed to Step 2.



- 2 Clean the glass doors and sides of the farm.** While the trays are draining, wipe down the glass on the inside and outside of the farm with a disposable microfiber cloth.

	Do not use glass cleaner; instead, use a 50/50 mix of white distilled vinegar and water to clean the glass. Apply only a small amount of the mixture to the cloth to buff out any marks on the glass. Take care to clean the glass on the outside of the farm, as well as inside where the produce is growing.
3	<b>Clean the downspouts at the back of each zone.</b> Remove nutrient and plant debris from the downspouts using a disposable microfiber cloth. Then apply sanitizer to a clean cloth and wipe down the downspout tubing at the back of each zone.
4	<p><b>Wipe down and sanitize Zone 5.</b> Once the water has drained into the reservoir, you'll want to clean and sanitize the bottom zone (Zone 5) of your farm:</p> <ul style="list-style-type: none"> <li>• Remove the GrowServe trays to a sanitized surface. It's ok if there are packs germinating within the trays.</li> <li>• Remove the metal drain filter at the back of the zone. It may take some force to pop out of position – first lift the back part of the insert, then pop out the piece by lifting from the front.</li> <li>• With a disposable microfiber cloth, wipe away algae and debris in the zone.</li> <li>• Spray the zone thoroughly with the food-safe sanitizer. Allow a sanitizer contact time of five minutes.</li> <li>• In a sink, remove debris from the metal drain filter with the scrub brush, rinse, and spray it with sanitizer. Then return it to the back of the zone.</li> <li>• Return the GrowServe trays to the zone.</li> </ul>
5	<b>Slide out the reservoir.</b> Now back to the reservoir. Unlock the bottom panel of the farm. Using the handles, slide out the reservoir drawer. Pull slowly to avoid sloshing.
6	<p><b>Hook up the hose.</b> Attach the hose to the farm and secure the other end in a sink or drain.</p>  <p><b>Important!</b> Be sure the hose and hose coupling have the push-to-connect components, as shown in the photo above. Connecting the hose without these components could cause a leak.</p>

7	<p><b>Toggle on the Drain Pump.</b> In the app, toggle on the <b>Drain Pump</b> as prompted to begin pumping water out of the reservoir.</p>
8	<p><b>Toggle off the Drain Pump.</b> As soon as the water has drained, toggle off the Drain Pump. Turn off the pump as soon as the water has drained to avoid damaging the pump.</p>
9	<p><b>Remove and store the hose.</b> Now remove and store the hose. Take care to keep both ends of the hose pointed upward until you can drain any remaining water before storing.</p> <p>Be sure to remove via the push connect – don't unscrew the push connect from the hose. Unscrewing the hose from the push connect or removing the push connect connector altogether could cause a leak when your farm begins to irrigate later on.</p>
10	<p><b>Use the absorbent sponge to soak up remaining water in the reservoir.</b> There will be a small amount of water left in the pump recess at the bottom of the reservoir. Soak up the remaining water with the sponge, wringing it out in a bucket.</p> <p>Dispose of the sponge after use. Reusing the sponge in the farm is not recommended.</p>
11	<p><b>Scrub &amp; remove debris from the reservoir.</b> Use the scrub brush to loosen algae and debris, then use a disposable microfiber cloth to remove it from the reservoir. Be sure to clean all components within the reservoir, including the pumps and tubing, drainage mouth, and sensor bracket:</p> <div> </div> <div> </div> <div> </div> <p><i>Pictured above: pumps and tubing, sensor bracket lifted upward for cleaning, drainage mouth.</i></p> <p>Be careful not to jostle the components when cleaning, and take care not to allow water to drip onto the leak detectors located in the nutrient bottle compartment. If you do, don't worry, just dry it up and give us a call so we can keep your farm running as it should.</p>
12	<p><b>Sanitize the reservoir.</b> Once all debris has been removed, spray all surfaces of the reservoir with the food-safe sanitizer. Don't forget to apply sanitizer to the pumps, tubing, sensor bracket, and drainage mouth as pictured in Step 11. Allow a sanitizer contact time of five minutes.</p>
13	<p><b>Check the nutrient bottles.</b> Now's a good time to check to make sure the nutrient bottles in your farm are full. If empty, replace with a bottle you have on hand and tap <b>Exchange</b> in the app.</p>

14	<b>Slide the reservoir back underneath.</b> Gently slide the reservoir back underneath the frame of the farm and lock the drawer.
15	<b>Tap Fill &amp; Dose.</b> In the app, tap Fill & Dose. Your farm will begin to fill back up with water and nutrients. This process can take up to a few hours – do not take the farm out of Fill & Dose mode until complete. The farm will automatically put itself back in Autofarmer mode once complete.

The Deep Clean is complete!

# How to Complete the Peroxide Flush

We recommend performing a peroxide flush once every six months to clean the surfaces in your farm that you can't reach, like the inside the downspout tubing and pumps.

It's best to complete the flush when your farm is due for a reservoir clean, as it includes draining and sanitizing the reservoir.

Follow the steps below, and let your Babylon account manager know if you have any questions.

This process takes about four hours.

## How to perform a peroxide flush in your Micro-Farm

1. **Turn on Clean Mode.** From the home page of the Guided Growing app, tap **Maintenance**, then **Clean**. Turn on **Clean Mode** as prompted. If there's water in the trays, it will take about 20 minutes for all the water to drain back into the reservoir.
2. **Remove the GrowServe trays and drainage filters from the Micro-Farm.** While the water is draining into the reservoir, put on a pair of disposable gloves. Remove all sixteen GrowServe trays with crops and humidity domes from the farm and place on a sanitized surface. Clean and sanitize the metal drain filters at the back of each zone, then set aside to dry.
3. **Clean Zones 1-5.** Once the water has drained into the reservoir, use the scrub brush to loosen debris in each zone. Be sure to scrub on and around the downspouts as well as the drainage mouth at the bottom of each tray. Use a disposable microfiber cloth to wipe away the debris, then spray all surfaces with the food-safe sanitizer. Allow a sanitizer contact time of five minutes.
4. **Return the metal drain filters to each zone.** The drain filters should be cleaned and sanitized from earlier.
5. **Clean the glass doors/sides of the farm.** Proceed to Step 2 in the **Clean** page of the app. As prompted, lightly spray a 50/50 mixture of water and distilled white vinegar on a disposable microfiber cloth and buff out the marks on the glass. The sides and back of the farm inside the growing area will be easier to access with the trays and crops removed.
6. **Slide out the reservoir and connect the hose.** Skip ahead to Step 5 in the **Clean** page. Slide out the reservoir and connect the hose as prompted.

7. **Pump out most of the water in the reservoir.** Proceed to Step 6 in the app. As prompted, turn on the **Drain Pump**. When there is about an inch of water left in the reservoir, toggle off the **Drain Pump**.
8. **Add soap to the reservoir and scrub.** Add a small amount (about a teaspoon) of mild detergent/dish soap to the reservoir. Using a scrub brush, scrub all surfaces and components (including pumps, etc.) in the reservoir. Be careful not to jostle the pumps, sensors, etc. in the reservoir.
9. **Pump out the soapy water.** Back in the app (Step 6), toggle on the Drain Pump again to pump out the soapy water.
10. **Rinse and pump out the remaining soap.** Using a cup or pitcher, pour water down the sides of the reservoir to rinse away the soap residue, then pump it out with the **Drain Pump** in the app (Step 6). Remove any remaining soap residue in the bottom of the reservoir with an absorbent sponge.
11. **Contact your account manager to add 20 gallons of water back into your farm's reservoir.** Do not use Fill & Dose for this step – you do not want to fill the reservoir all the way up, nor add nutrients for this step. This could take 30 minutes to an hour – your account manager will notify you when there is enough water in the reservoir to proceed to the next step.
12. **Add 48 ounces of 3% food grade hydrogen peroxide to the reservoir.** Using gloves and eye protection, carefully measure and pour 48 ounces of 3% food grade hydrogen peroxide to the reservoir. We recommend [this](#) hydrogen peroxide solution, but any 3% solution will work. Pour the peroxide in the reservoir carefully to avoid splashing.
13. **Exit the Clean page to turn on the Irrigation Pump.** From the Controls page in the app, turn on the Irrigation Pump to begin circulating the peroxide and water throughout the farm.
14. **Set a timer for 1 hour.** Allow the irrigation pumps to run the peroxide solution throughout the system for at least an hour.
15. **Toggle off the irrigation pump.** Head to the **Controls** page of the app to turn off the irrigation pump.
16. **Wait 20-30 minutes** for all the water in the trays to drain into the reservoir.



17. **Pump the peroxide solution out of the reservoir.** Once all the water has drained back into the reservoir, head back to Step 6 in the **Clean** page to toggle on the **Drain Pump** once more. Toggle off the drain pump once the water has drained.
18. **Tap Fill & Dose.** Proceed to Step 11 in the app. As prompted, toggle on **Fill & Dose**. Your reservoir will begin to fill back up with water and nutrients. This process can take up to two hours – the farm will automatically go back into Autofarmer mode when the fill and dose is complete.
19. **Return the clean GrowServe trays, lids, germination inserts, and humidity domes to the farm.**
20. **Close and lock the doors to the growing area.** Be sure to lock the reservoir drawer as well.

The peroxide flush is complete!

# Troubleshooting

It is important to routinely check the status of your Micro-Farm and the plants within it.

Our Help Center's troubleshooting section can be a helpful resource as well. Visit at <https://resources.babylonmicrofarms.com/troubleshooting> or by scanning the QR code below:



Here are some common FAQs:

- **Why isn't there any water in my farm's trays?**
  - Your farm irrigates at intervals throughout the day, so there won't always be water in the trays. That said, contact your account manager if your plants look wilted.
- **What do I do if my farm is leaking?**
  - Immediately hit the red Emergency Stop button located in the bottom reservoir area of your farm, or unplug the farm.
  - Find the origin of the leak and call your customer service representative.
- **Why is my farm offline?**
  - Your Micro-Farm may occasionally lose connection from the cellular router and need to be reset. You'll know your farm is offline if a "Farm offline" banner is displayed at the top of your home screen in the Guided Growing app.
  - To reset your farm, simply unplug it from the outlet in the wall behind the farm, wait 10 seconds, then plug the farm back in. If the farm has not come back online in five minutes, contact your account manager.
- **Why is my app unresponsive or displaying an error message?**
  - First, close and reopen your app and check to make you have the most updated version of the app downloaded on your phone.
  - If your app continues to have the issue, email us at [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com).
- **Why aren't all my seeds germinating?**
  - Germination rates should be about 95%, meaning all but a few seeds should sprout. If you're seeing lower germination rates, email us at [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com) with details and a photo.
- **Why do my plants look small and/or stunted?**

- If your plants look unusually small or you notice yellowing/browning on the leaves, email us at [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com) with details and a photo.

**If you notice any of the following contact your customer service representative:**

- Insects or pests in the farm, evidence of pests in the farm
- Excessive noise coming from the farm
- Moisture buildup / high humidity in the farm
- Mold anywhere in the farm

**877.589.2885 | [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com)**

## Safety and Warnings

### Authorized Access & Personnel Only

Keep the Micro-Farm doors and bottom panel closed at all times when not attending to the farm. We recommend locking the doors and bottom panel to prevent unauthorized access. Only allow trained Babylon personnel (Babylon employees, approved farm service technicians) to access the electrical components of the Micro-Farm to avoid the risk of shock.



### Children & Unauthorized Personnel

Babylon Micro-Farms are not toys and should only be operated by trained adults. Closely supervise children and other unauthorized personnel near the farm.

### Pets

Do not allow pets near or in the farm. The nutrient-rich water in the reservoir and trays may be damaging to their health if consumed.

### Nutrients and pH Solutions

The two (2) nutrient solutions and one (1) pH solution liquids delivered in three separate, sealed jugs should be handled with care. You may wish to wear gloves and eye protection when handling nutrients and pH solutions. Do not drink the pH or nutrient solutions and rinse skin and eyes with cold water

immediately if exposed to any of the solutions. SDS sheets for these materials can be found in the back portion of your User Manual.

### **Growth Medium**

The SDS sheet for the growth medium can be found in the back of this user guide.

### **Disposal of Reservoir Liquids**

The water reservoir at the bottom of the Micro-Farm contains nutrient-rich water that should only be disposed of in a sewer with waste water management and treatment. Do not dispose of reservoir liquids in open water such as ponds, rivers, or streams; this can lead to eutrophication of waterways.

### **LED Lights**

The LED grow lights are bright, so avoid looking directly into them. The lights can become very warm or even hot to the touch and may cause burns.

### **Avoid Micro-Farm Tipping**

Your Micro-Farm will be levelled on its four feet when installed. Ensure that the Micro-Farm remains level throughout its time at your facility. The Micro-Farm can be secured to a wall or ceiling for extra tip-over protection. Do not climb, stand, or hang on or from the different levels of the Micro-Farm. The shelves are not designed to hold a person's weight. Instead, use the provided step ladder for accessing upper farm tiers. Leaning on or hanging from the Micro-Farm or any of its shelves could cause it to break or tip over, causing serious injury or death.

### **Use of Permitted Materials Only**

Babylon Micro-Farms are carefully designed and tested for the specific seeds, crops, growth medium, nutrient components, and pH balancer. Use of any other materials not provided by Babylon is prohibited and could cause farm contamination, unsafe produce, and/or hazards to those working around the farm and eating the produce grown within. Babylon is not responsible for any damage to the Micro-Farm or other property; any damage to the growing produce; or any injury to persons which result from the use of unauthorized materials, supplies, seeds, or plantings.

# Food Safety Information & Resources

## Introduction

Babylon is committed to providing an industry-leading, food-safe growing experience. Both the Micro-Farm and Guided Growing app have been designed to minimize points of food safety risk and make it simple to safely grow your own food on-site.

Babylon has also created a number of resources to make it simple for your team to follow industry-leading food safety practices with your Micro-Farm, including: how-to videos for each step of the process, a Micro-Farm user guide, a help center with answers to commonly asked questions, and a dedicated support team.

The subsequent sections contain information to further equip your team with the resources to safely grow your own food on-site and incorporate your Micro-Farm in your current food safety plan.

The information in this section is meant to be a guide to help you safely operate your Micro-Farm, but is not a comprehensive resource. Keep in mind food safety regulations vary by region, and your locale or your business segment may have additional regulations.

Generally, it's important to complete cleaning procedures as directed by Babylon, allow only authorized individuals access to your farm, and follow food safety practices such as thorough hand washing and wearing gloves when handling produce.

## Babylon & Food Safety

Babylon is committed to upholding high food safety standards in our facility, as well as supporting our clients in doing so.

### **Steps Babylon takes to promote food safety**

- Constructing Micro-Farms with fully glass sides and door locks to prevent accidental contamination or tampering of produce.

- Including locks on lower panel/reservoir area and growing area of Micro-Farm to prevent tampering with crops and important farm components
- Using food-safe materials for food contact surfaces in the Micro-Farm. Farm trays are made of FDA food-safe plastic.
- Implementing a strict no pesticide, no herbicide policy.
- Sourcing seeds from large accredited seed suppliers and storing at Babylon HQ in a temperature and humidity controlled environment prior to shipping.
- Seed lot tracking.
- Providing quality nutrient and pH balancing solutions from a trusted third party supplier. Babylon's nutrient solutions are custom manufactured by a third party and kept in a temperature controlled environment.
- Acquiring growth media from trusted third parties who perform regular bacteria/pathogen screening
- Implementing food safe best practices when handling, seeding, and packing seed packs and microgreens, including: providing safe, clean, and dry storage for growth media and seeds; wearing sterile gloves when handling seeds and seed packs; regularly cleaning seeding areas
- Implementing tray design that minimizes the chance of agricultural water dripping onto edible parts of the plant.
- Restricting access to the Guided Growing App and control of the farm to verified operators only.

#### **How Babylon helps YOU ensure food safety:**

- Providing training and detailed cleaning guidelines to help implement and maintain a safe growing area
- Providing food-safe, peroxide-based sanitizing spray for farm cleaning
- Providing Guiding Growing app features to promote compliance with suggested cleaning schedules
- Creating industry-leading recommended cleaning procedures:
  - Cleaning trays after each pack is transplanted and fully harvested
  - Deep Clean of reservoir and growing area every eight weeks
  - Peroxide flush of farm at least every six months for cleaning irrigation surfaces that cannot easily be reached with the SaniDate RTU, such as downspout tubing, pumps, irrigation lines and other system components.

# Incorporating your Micro-Farm into your food safety plan

Babylon recommends including your Micro-Farm and farming practices in your HACCP plan or other food safety plan. The following sections contain information and resources to help you do so.

## **Product Description**

A Babylon Micro-Farm is a modular vertical hydroponic growing unit that allows its users to grow leafy greens, herbs, microgreens and edible flowers indoors year round. Users need only to plant, transplant, harvest and clean their units. Nutrient management and crop growth actions are all handled remotely by Babylon. The farm is connected to a cold, potable water source and automatically adds water to the system each day.

Babylon sells the growing units to customers and provides all consumables needed to grow. This includes pre packaged seed packs with corresponding QR crop tags, growth media, nutrient & pH balancing solutions, and cleaning & harvesting tools. Babylon handles seeds and growth media using best safety practices and implements safety protocols to prevent contamination. Some of these safety practices include providing safe, clean, and dry storage for growth media and seeds; wearing sterile gloves when handling seeds and seed packs; regularly cleaning seeding areas; and lot tracking seeds for traceability.

Farm operators (customers) are responsible for the day-to-day maintenance of their Micro-Farm. This includes planting, transplanting, and harvesting crops on time as specified by the Guided Growing app, as well as cleaning.

## **Biological, Physical & Chemical Hazards**

This section contains information about the types of hazards to be aware of and to be included in your new or preexisting HACCP plan.

Implementing safe food handling practices on site and into your HACCP plan can help reduce risk associated with physical, biological, and chemical hazards associated with growing and harvesting your own produce on-site.

## **Biological Hazards**

Biological hazards include bacteria and viruses that contaminate food and cause illness. These pathogens include salmonella and E. coli, and can be transmitted by people, animals, or water.

Adhering to Babylon's recommended cleaning guidelines minimizes the risk of biological hazards. Some of these hazards include:

- Transfer of microbes from operator to crop because of improper handling (human to plant)
- Growth of/contamination by microbes due to improper handling/transport of material
- Growth of/contamination by pests from improper produce storage
- Growth of microbes resulting from dirty farm or improper cleaning
- Growth of microbes due to lack of cleaning and proliferation of algae/biofilms
- Growth of pest insects because of proliferation of algae/biofilms
- Growth of microbes resulting from lack of water change & cleaning (resulting from lack of reservoir and tray cleaning)
- Growth of microbes resulting from crop death
- Contamination from microbes because of poor post-harvest produce storage
- Exposure to pathogens from water supply\*

*\* Babylon often tests source water at the time of install. This is only to test for a common suite of minerals and nutrients related to plant growth, not pathogens.*

### **Chemical hazards**

Chemical hazards include cleaning chemicals, pesticides, oil, medications, and fuel products. Ensuring the Micro-Farm's water source is free of these contaminants is an important first step in mitigating chemical hazards. Furthermore, using only the food-safe, peroxide-based cleaning agents recommended and supplied by Babylon will help mitigate risk of chemical exposure.

Some of these chemical hazards include:

- Water source contamination (exposure to toxins or heavy metals from water supply)
- Dripping or transfer of agricultural water / improper handling and produce washing
- Contamination by use of non-approved chemicals in the Micro-Farm
- Presence of /storage of leftover cleaning chemicals, nutrient solutions, and sensor calibration solutions

### **Physical Hazards**

Physical hazards include non-food objects that could cause illness if consumed, such as metal, glass, wood, and hard plastic fragments.

Physical hazard risk can be mitigated by keeping both the doors to the growing area and the reservoir drawer closed and locked. Micro-Farm should be in an area free of debris from construction, so take appropriate steps to deactivate and cover a Micro-Farm during construction, or move out of the construction zone.

Some of these physical hazards include:

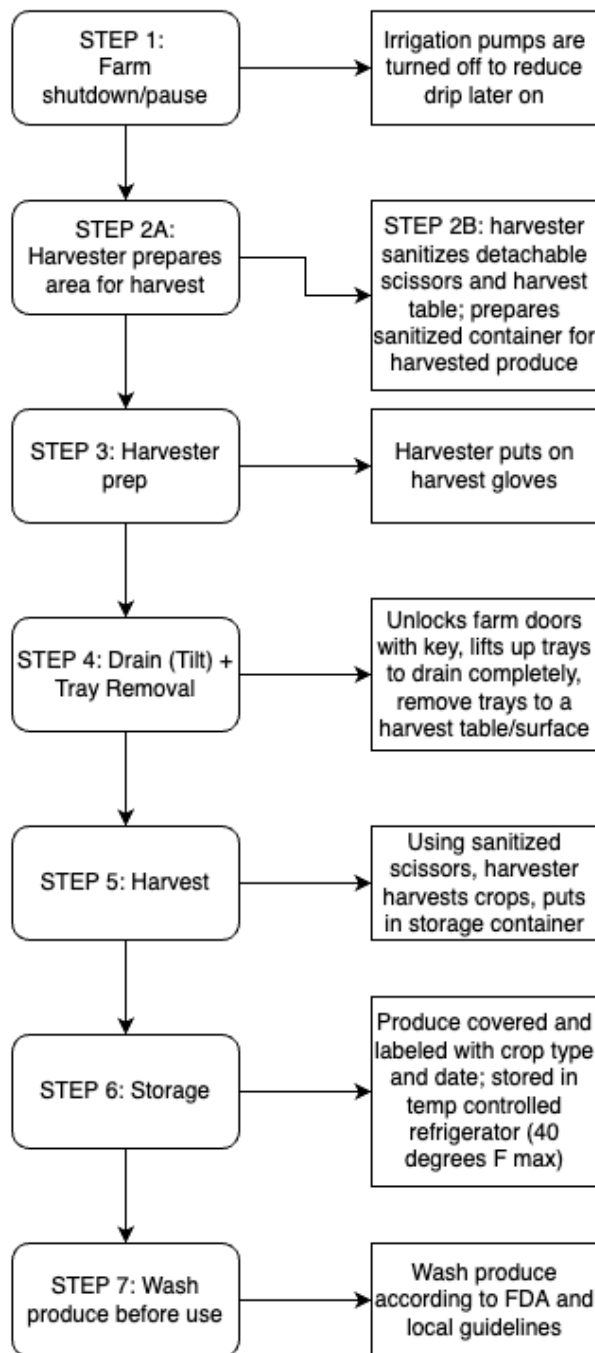


- Exposure to foreign bodies or solids from water supply
- Contamination from physical environment where farm is situated

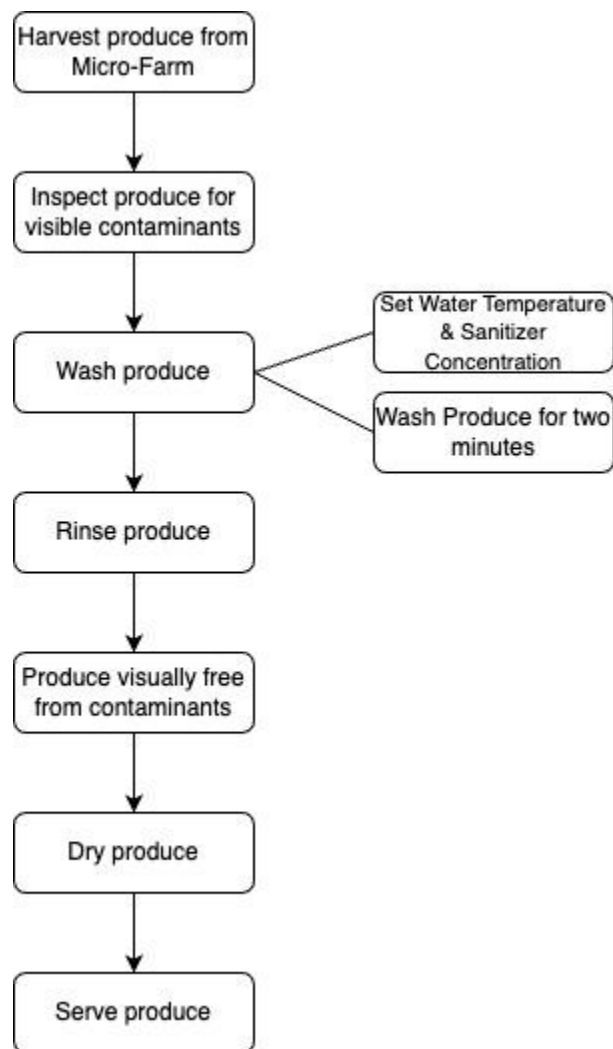
### **Process Diagrams**

The subsequent figures may be a helpful reference when creating diagrams for your food safety plan.

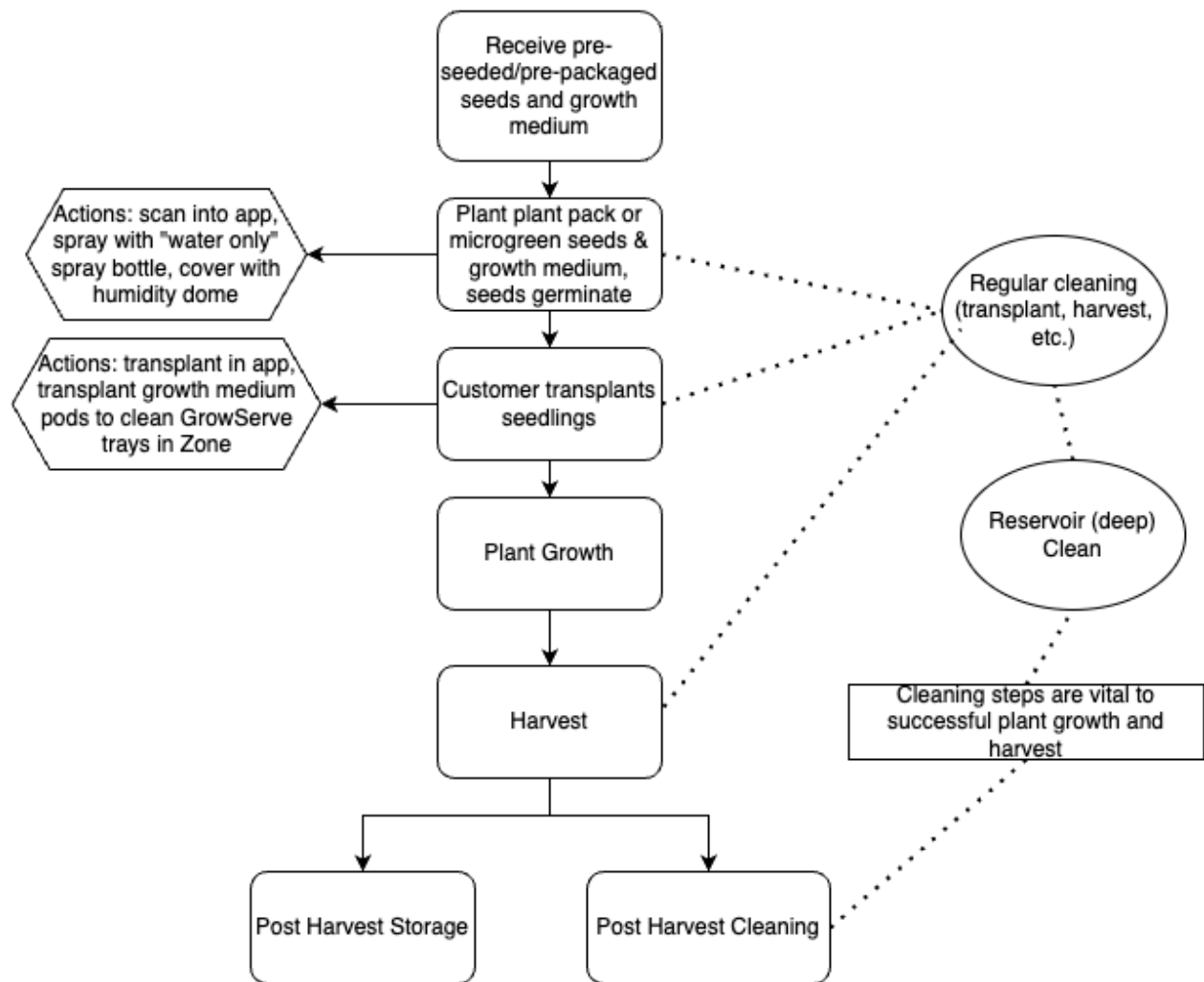
#### **Figure 1: Post Harvest Flow Diagram**



**Figure 2: Produce Washing/Handling Process Diagram**



**Figure 3: Diagram of Process – Plant Growth & Cleaning**



**Safety practices to include in your food safety plan**

There are several steps you can take to minimize risk from the biological, chemical, and physical hazards discussed above, including:

- Following cleaning and sanitizing procedures as recommended by Babylon (see section below for more detail on cleaning protocols)
- Restricting farm access to trained, authorized individuals.
- Ensuring the Micro-Farm is installed in an environment free of hazards (Ex. ensuring the site has clean air and no debris from construction, etc.)
- Preventing irrigation water from dripping on roots and in the trays from dripping on edible portions of the plant during harvesting.
- Filling Water Only spray bottle for spritzing seeds with clean, potable water only.
- Storing all seed packs, growth material, and farm supplies in a clean, dry area. Take special care to store seed packs and growth material away from hazards, as these will be placed inside the water within the system.
- Implementing a food-safe pest management service further helps to reduce risk of biological hazards.
- Following good food hygiene practices (abstaining from farm operation if you are feeling unwell, covering cuts with bandages, etc.)
- Testing the Micro-Farm's water source to ensure potability and absence of chemicals, bacteria, etc.
- Prohibiting pets and other animals in or around the farm.
- Closing and locking reservoir drawer and doors to growing area when the farm is not in use
- Maintaining ambient temperature between 67°F and 76°F in area where Micro-Farm is located.
- Maintaining relative humidity between 30% and 60% in area where Micro-Farm is located
- Contacting Babylon at [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com) if you encounter any unusual hazard issues in your farm, such as the occurrence of pests in the Micro-Farm or contamination of water supply.

Expanding your HACCP or other food safety plan to include Micro-Farm operations can be a further step in minimizing hazard risk. See subsequent section on **Biological, chemical & physical hazards** for more information on how to include your Micro-Farm in your HACCP or other food safety plan.

### **Further detail on cleaning protocols**

Cleaning and sanitizing your Micro-Farm in accordance with Babylon guidelines is important to minimizing food safety risk. Cleaning guidelines are outlined in the Micro-Farm User Guide & how-to videos accessible through the Guided Growing app.

The following practices, as outlined in Babylon support materials, are essential to maintaining a safe growing environment in your Micro-Farm:

- **Clean & sanitize GrowServe trays and tray components immediately following each transplant step.** This includes the germination tray, germination insert or tray, and humidity dome.
- **Clean & sanitize GrowServe trays, tray components, and the entire zone immediately following each final harvest.** All crops should be removed from the zone.
- **Deep clean the growing area and reservoir at least every eight weeks.** In addition to draining, sanitizing, and refilling the reservoir, the Deep Clean includes cleaning the food contact surfaces in the growing area: glass sides and doors, downspout tubing, drainage basins at the back of each zone, and the air column (specific to V6 model).
- **Complete a Peroxide flush of the Micro-Farm at least once every six months.** The peroxide flush should be performed every six months to clean the surfaces in your farm that you can't reach, like inside the downspout tubing and irrigation pumps. This procedure should also be performed in the case of any suspected contamination events.
- **Remove expired or dead plant material from the Micro-Farm.** Be sure to remove any dead crop material in the case of a crop failure. Crops should always be transplanted and harvested in accordance with Guided Growing app recommendations (i.e. transplant and harvest window notifications) and should not be left in the farm past the final harvest date. Do not plant ungerminated plant pods into the growing trays in Zones 1-4.
- **Follow CDC guidelines and all other local regulations for produce washing.** Babylon continues to advocate to follow CDC guidelines which recommends washing produce prior to consumption. See <https://www.cdc.gov/foodsafety/communication/steps-healthy-fruits-veggies.html> for more information.

## Farming inputs

Babylon sources Micro-Farming inputs from trusted third parties and implements several safety protocols on-site at Babylon's headquarters to ensure farming inputs are safe for Babylon clients.

The following sections include further detail on Micro-Farming inputs.

## Seeds

Babylon sources seeds from accredited third party companies only, primarily [Johnny's Selected Seeds](#) headquartered in Maine, U.S.A. A few varieties are occasionally sourced from other companies.

All Babylon-sourced seeds are GMO-free, and seed lots are traceable upon request. Visit [babylonmicrofarms.com/JohnnysSeedsQualityInfo](https://babylonmicrofarms.com/JohnnysSeedsQualityInfo) for more information.

## Growth Medium

Babylon supplies two primary types of growth medium:

1. **GrowFoam for seed packs.** [GrowFoam](#) is an inert, hydroponic growth medium made of biodegradable biopolymers. It is commercially compostable and tested regularly for the presence of E. coli and listeria and is checked for total colony count. For more information on Growfoam's safety and cleanliness measures, visit [babylonmicrofarms.com/GrowfoamCleanlinessMeasures](https://babylonmicrofarms.com/GrowfoamCleanlinessMeasures).
2. **Hollandbio jute mats for microgreens.** HollandBio jute mats are composed of 100% natural fibers and are fully compostable. The supplier tests regularly for Mold, Yeast, E. coli, Salmonella, Listeria, and other bacteria. For more information, visit <https://hollandbioproducts.com/>.
3. **Grodan rockwool.** Rockwool is an inert growth medium composed of molten basaltic rock. Babylon supplies rockwool as a microgreen growth medium for some customers. For more information, visit <https://www.grodan101.com/product-overview/grodan-cress-plate/>.

To view safety data sheets for Babylon's cleaning agents and growth media, visit [babylonmicrofarms.com/SDS](https://babylonmicrofarms.com/SDS).

## Cleaning Agents

Regular cleaning with approved cleaning agents is essential to Micro-Farm performance and ensuring a food safe environment in the system.

The following agents are recommended for use in the Micro-Farm:

1. **SaniDate RTU.** SaniDate RTU is the recommended sanitizer for cleaning food contact surfaces in the Micro-Farm, including:
  - GrowServe trays and zones underneath following each final crop harvest
  - Downspouts and basin areas at the back of each zone following each final harvest
  - Drain filters at the back of each zone following each final harvest
  - The reservoir area during the Deep Clean every eight weeks
  - Net cups after each harvest (V6 model only)

SaniDate RTU is a ready-to-use, peroxide-based sanitizer that does not require rinsing after application.

2. **3% Food Grade Hydrogen Peroxide.** Babylon recommends [Essential Oxygen's 3% Food Grade Hydrogen Peroxide Solution](#) for use during the semi-annual Peroxide flush. The food grade peroxide is added to fresh water in the reservoir after draining and cleaning the system, then is flushed throughout to clean downspout tubing, pump interiors, and other equipment that cannot be accessed easily with SaniDate RTU.

## Crop Types & Growth Times

Babylon supports the growth of microgreens, leafy greens, herbs, and flowers. Each crop type has a specific growth time and harvest window, which is the interval of time Babylon recommends harvesting each crop.

It is important to follow the transplant and final harvest dates as listed in the Guided Growing app for best results. The following sections below contain more information on each crop type Babylon supports.

### Leafy greens

Babylon offers a number of leafy greens and leafy green mixes. Leafy greens include leaf lettuce varieties such as romaine, as well as heartier varieties like kale and mustard greens.

All leafy greens have a recommended total grow time of **six weeks**. The harvest window for leafy greens is seven days and begins a week before the final harvest/removal date. This means Babylon recommends harvesting leafy greens five to six weeks following planting the seed pack.

#### *Leafy greens vs. baby or petite greens*

Baby or petite greens are leafy greens that are harvested ~3-4 weeks after germination. They are distinct from both microgreens and adult greens. Petite greens are harvested before they reach maturity and tend to be more tender than their adult leafy green counterparts. Babylon does not currently support production of baby greens in the Micro-Farm at this time.

### Herbs

Babylon offers a variety of herbs and herb mixes. Herbs are slower-growing, stay in the farm longer than leafy greens, and have an extended harvest window of several weeks. Herbs are ready for their first harvest at week 5 or 6, and have a total growth time of 11-12 weeks, depending on the variety.

Babylon customers are advised to complete multiple harvests throughout the harvest window, on a weekly or bi-weekly cadence. For this reason, Babylon refers to herbs as “cut-and-come-again” crops.



All herbs and growth medium should be completely removed from the farm by the final harvest date, and trays should be removed and cleaned before receiving the next round of crops.

Harvesting regularly during the herb harvest window helps increase the total yield of the crop and provides the customer with a consistent supply. Additionally, regular harvesting prevents herbs from overcrowding the zone; crop overcrowding can lead to poor circulation in the system and light deficiency.

## **Flowers**

Babylon currently offers a few varieties of flowers to grow in the Micro-Farm. Like herbs, flowers have an extended growth time and harvest window and are in the farm for a total of 18 weeks. The plants do not usually produce flowers for the first harvest until week 10.

Also like herbs, flowers are a “cut-and-come-again” crop, meaning they should be harvested regularly throughout the harvest window. Regular pruning of the leaves on each plant during the harvest window is also key; regular pruning promotes flower production and prevents the plants from overcrowding the zone.

## **Microgreens**

Microgreens are young, nutrient-dense shoots known for their high nutrient content and culinary versatility. They are the first leaves to appear from germinating seeds and are harvested 12-14 days after planting as recommended by Babylon.

Microgreens are grown in the bottom zone of the Micro-Farm on a single 10inx20in sheet of growth medium. They are not transplanted like all other crops in the farm. Microgreens are harvested by snipping the stems at least two centimeters above the growth medium.

### *Microgreens vs. Sprouts*

Microgreens are often conflated with, but are distinct from, sprouts for a number of reasons. Babylon does not support sprout cultivation in the Micro-Farm.

Sprouts are grown in a moist, often dark environment for seven days or less. As such, they are more prone to microbial contamination and pose a higher food safety risk. The roots of sprouts are usually left intact as an *edible* portion of the plant, further increasing the risk of potential microbial contamination from agricultural irrigation on the roots.

Microgreens are distinct from sprouts for a few reasons. They are grown in a lit, well-ventilated area and are harvested *without* their roots. They are also harvested later than sprouts, 12-14 days after planting as recommended by Babylon. This means microgreens have a much lower food safety risk than sprouts. Like other types of crops like leafy greens, the greatest food safety risk is from improper handling and/or washing of the produce following harvest.

**Due to the increased food safety risk, Babylon does not support or condone sprout production in the Micro-Farm.**



Cutting microgreens at least two centimeters above the root zone is recommended to further avoid contamination by agricultural irrigation water in the root area.

The differences between microgreens & sprouts are further explained below:

Microgreens	Sprouts
Harvested 12-14 days after planting	Harvested within 7 days of planting
Roots <b>not</b> included in the edible portion of the plant	Roots included in the edible portion of the plant
The first leaves produced during germination	Harvested before first leaves appear
Grown in a lit, well-ventilated germination area	Grown in a moist, dark area
Less susceptible to microbial contamination	Highly susceptible to microbial contamination
Photosynthesize (use energy from light)	Do not undergo photosynthesis (no not need light)
Low food safety risk	High food safety risk

The Food Safety Modernization Act (FSMA) specifically outlines the key difference between sprouts and microgreens. FSMA defines sprouts as “usually harvested when the cotyledons (or seed leaves) are still un- or under-developed and true leaves have not begun to emerge”, while “microgreens reach a later stage of growth, typically associated with the emergence of ‘true’ leaves” (page 74497, Comment 363.)

Because Babylon does *not* support the growth of sprouts and recommends harvesting microgreens *without* their roots, microgreens grown in Babylon farms are not subject to special produce handling instructions as outlined in [Subpart M of 21 CFR Part 112](#).

Questions about food safety on-site or at Babylon? Contact us at [support@babylonmicrofarms.com](mailto:support@babylonmicrofarms.com).