Practical Bedikas Tola’im:
General Guidelines for Providing Insect Free Vegetables to Our Families
PRACTICAL BEDIKAS TOLA’IM
PART 1
Why is it so important?
Why is it so hard?
WHY IS BEDIKAS TOLA’IM IMPORTANT TO US?

1. We give the hashgachah on the fresh fruits and vegetables served in our homes.

2. It is reason enough to have been taken out of *Mitzrayim*.
Why Is Bedikas Tola’im Important To Us

For I am the Eternal Master of all

the One Who raises you up from the Land of Egypt
to be for you the Ruler/Guide of all
and you will be holy
for I am holy

It was taught in the House of R’ Yishmael

Had I not brought Israel out of Egypt
for any reason other than
they do not make themselves impure through creeping things
as do the other nations
it would have been sufficient cause for them to be redeemed
and it (abstaining from them) is an elevation for them
this is why the expression “brings up” is used
Why is Bedikas Tola’im Hard For Us?

- Convinced our produce was clean
- Grown unfamiliar with:
  - what infests our produce
  - what the infestation looks like
  - how to find it
  - how to effectively and efficiently remove it.
CONVINCED OUR PRODUCE WAS CLEAN

The Food Defect Action Levels

The food defect action levels contained in this list are set on the basis of no hazard to health. Any products that might be harmful to consumers are acted against, on the basis of their hazard to health, whether or not they exceed the action levels. In addition, poor manufacturing practices by a manufacturer will result in regulatory action, whether the product is above or below the defect level.

The action levels are set because it is not now possible, and never has been possible, to grow in open fields, harvest, and process crops that are totally free of natural defects. The alternative to establishing natural defect levels in some foods would be to insist on increased utilization of chemical substances to control insects, weeds, and other natural contaminants. The alternative is not satisfactory because of the very real danger of exposing consumers to potential hazards from residues of these chemicals, as opposed to the aesthetically unpleasant, but harmless natural and unavoidable defects.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>DEFECT</th>
<th>ACTION LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPARAGUS, CANNED OR FROZEN</td>
<td>Insect 5th</td>
<td>10% by count of spears or pieces are infested with 6 or more attached asparagus beetle eggs and/or sacs.</td>
</tr>
<tr>
<td></td>
<td>Insects</td>
<td>Asparagus contains an average of 49 or more thrips per 100 grams or If insects (whole or equivalent) of any size average 5 or more per 100 grams or If insects (whole or equivalent) of 1 mm or longer have an average aggregate length of 7 mm or longer per 100 grams of asparagus.</td>
</tr>
<tr>
<td>BROCCOLI, FROZEN</td>
<td>Insects and mites</td>
<td>Average of 60 aphids, thrips, and/or mites per 100 grams</td>
</tr>
<tr>
<td>BRUSSEL SPROUTS, FROZEN</td>
<td>Insects</td>
<td>Average of more than 30 aphids and/or thrips per 100 grams</td>
</tr>
<tr>
<td>SPINACH, CANNED OR FROZEN</td>
<td>Insects and mites</td>
<td>Average of 50 aphids, thrips, and/or mites per 100 grams or 2 or more 3 mm larva and/or larval fragments of spinach worm (caterpillars) whose aggregate length exceeds 12 mm are present in 24 pounds or Leaf miners of any size average 5 per 100 grams or leaf miners 3 mm or longer average 4 per 100 grams</td>
</tr>
</tbody>
</table>

3. The official United States Department of Agriculture standard for frozen and canned vegetables allows tens of insects in 100 grams of vegetable: 40 insects in 100 grams of asparagus, 60 insects in 100 grams of broccoli, 30 insects in 100 grams of Brussels sprouts, and 50 insects in 100 grams of spinach, or 8 leaf miners (which are found inside the tissue of the leaf) in 100 grams of spinach.
TONIGHT’S GOALS

What We Won’t Do

- Discuss the *halachic* NEED to check
- Discuss the apparent inflation in the bug market
- Discuss checking dry foods, fish, and meat
- Discuss old methods of ridding our food of bugs (e.g. salt, vinegar)

What We Will Do

- Discuss HOW to check
- Assume that the science and our data are correct
- Discuss inspection of some fruits and vegetables commonly used in our homes
- Outline methods proven to be superior in their ability to loosen and remove unwanted infestation from our food and which have the approval and encouragement of both the OU *poskim* and other world renown experts in this field.
PRACTICAL BEDIKAS TOLA’IM PART 2

Four Steps to Insect-Free Produce

ד’ חלקי שלחן ערוך
FOUR STEPS TO INSECT-FREE PRODUCE

ד' חלקי שלחון עלוד

1. Purchase Clean, Fresh-looking, In-Season Produce
   - Long-term storage allows time for bugs to appear, hatch, and/or grow
   - Old-looking produce may be evidence of infestation
2. Wash and Agitate
   - Typically in a soap-water solution
   - Chemically and physically loosens grip of insects
3. Rinse; under a strong stream or shower of water. Removes the bugs which were
   - loosened by the soap and
   - detached by the agitation
4. Inspect; leaf-by-leaf or filtration inspection
Detailed Instructions for Preparing Vegetables
BOSTON LETTUCE, GREEN/RED LEAF, CHINESE CABBAGE (BOK CHOY), ICEBERG, ROMAINE, KALE
**Boston Lettuce, Green/Red Leaf, Chinese Cabbage (Bok Choy), Iceberg, Romaine, Kale**

1. Remove wrapper leaves when present,
2. Core
3. Separate leaves.
WASH

- Fill a container (e.g. sink, basin, bowl, etc.) – large enough to hold desired produce with room move freely – with
- cold or lukewarm water
Boston Lettuce, Green/Red Leaf, Chinese Cabbage (Bok Choy), Iceberg, Romaine, Kale

Add (soap based) Vegetable Wash

- Only a small amount is needed to:
  - create slimy feel
  - a few bubbles
- Mix well to produce a uniform solution
**Boston Lettuce, Green/Red Leaf, Chinese Cabbage (Bok Choy), Iceberg, Romaine, Kale**

- Place leaves into soap-water solution.
- **WASH:**
  - 3 minutes
  - Agitate
  - Rub all surfaces (open all folds.)
BOSTON LETTUCE, GREEN/RED LEAF, CHINESE CABBAGE (BOK CHOY), ICEBERG, ROMAINE, KALE


**Boston Lettuce, Green/Red Leaf, Chinese Cabbage (Bok Choy), Iceberg, Romaine, Kale**

**Rinse**

- Remove leaves
- Shake excess water off
- Rinse each one on both sides under heavy *stream* of water, making certain to open all folds. This removes the bugs which were
  - loosened by the soap and
  - detached by the agitation
Boston Lettuce, Green/Red Leaf, Chinese Cabbage (Bok Choy), Iceberg, Romaine, Kale
**Boston Lettuce, Green/Red Leaf, Chinese Cabbage (Bok Choy), Iceberg, Romaine, Kale**

**Inspect**
- One at a time
- On light box
- Check both sides for presence of **any** opaque, symmetrical items **as well as** for worms (e.g. leaf miners) **IN** the flesh of the leaf
ARUGULA, BABY SPINACH, CILANTRO, DILL, MESCLUN, MINT, PARSLEY, ROSEMARY, THYME

With items such as cilantro, dill, parsley, rosemary, and thyme it is best to make a dry check for infestation before washing. This is best done by banging the leaves several times onto a light box or white cloth.

When possible, it is best to remove the leaves from the stem, as bugs can/do get stuck in the small crevice where the leaves attach to the stem.

NOTE: Because it is very difficult to inspect these very small leaves, it would be advisable to repeat the above process one or two times before checking on light box.
ARUGULA, BABY SPINACH, CILANTRO, DILL, MESCLUN, MINT, PARSLEY, ROSEMARY, THYME

WASH / AGITATE

- Into an appropriately sized container (sink, basin, bowl etc.) of cold/lukewarm water, add dishwashing liquid (or proven, soap-based vegetable wash) until water achieves slimy feel and produces some bubbles.
- Place product into soap-water solution.

WASH

- 3 minutes
- Agitate
- Make certain the many small leaves are not sticking together.
ARUGULA, BABY SPINACH, CILANTRO, DILL, MESCLUN, MINT, PARSLEY, ROSEMARY, THYME

RINSE

- **small** amounts at a time
- held loosely in your hands or in a colander
ARUGULA, BABY SPINACH, CILANTRO, DILL, MESCLUN, MINT, PARSLEY, ROSEMARY, THYME

RINSE

- **small** amounts at a time
- held loosely in your hands or in a colander
ARUGULA, BABY SPINACH, CILANTRO, DILL, MESCLUN, MINT, PARSLEY, ROSEMARY, THYME

INSPECT –

○ Both Sides

○ Using Strong back-lighting
  • Sunlight
  • Lightbox

○ Look for opaque, symmetrical objects which have the color, shape, and size of expected infestation
  • If one or two insects are found, rewash the herbs.
  • If any insects are found after repeating the washing and rinsing process twice, the entire bunch should be discarded.
ARUGULA, BABY SPINACH, CILANTRO, DILL, MESCLUN, MINT, PARSLEY, ROSEMARY, THYME

FOR SOUPS –
- Wash well
- Place in Cheese Cloth

FOR SAUCES
- Wash well
- Puree
Strawberries
STRAWBERRIES

Before preparing and washing strawberries, visually check them for infestation. For those found to have any degree of infestation, follow the additional step #4 below.
1. Remove the green leafy portion of the strawberries being careful to not cut so close to the top revealing a hole to the inside of the fruit.
If a hole is revealed, the strawberry should be cut in half before further washing.
STRAWBERRIES

2. **WASH**: Place the strawberries in a bowl (basin or pan) of cold/lukewarm water with enough dishwashing liquid (or proven, soap-based vegetable wash) to give water a slimy feel and to produce some bubbles, for approximately 3 minutes, occasionally agitating and rubbing each strawberry.
3. **RINSE**: Remove the strawberries, one at a time, and rinse the entire surface of each berry with a **spray/shower** of water of significant pressure using a basting/vegetable brush or sponge to go over the entire surface of each berry.
STRAWBERRIES

4. FOR THOSE BERRIES FOUND TO HAVE INSECTS PRIOR TO THIS PROCESS: Place the strawberries in a bucket, bowl, or basin of plain water and let soak for 3 minutes. Remove to dry and check the water for evidence of infestation. It is best to filter the water through a fine (230 mesh) filter. If no mesh is available, place the water in a clear bowl on top of the light box and check. The wider the bowl the better as it is very difficult to check water of significant depth. If inspection shows no infestation, the product may be used. If infestation is found, rewash, rinse, and inspect until clean.
LEEMS AND SCALLIONS
LEEKS AND SCALLIONS

1. Check upper portion for evidence of leaf miners (i.e. worms found IN the flesh of the leaf). They burrow through the leaf, leaving behind winding trails.
LEEEKS AND SCALLIONS

2. Cut off and discard the root, together with about 1/4 inch of the scallion or leak itself.
Leeks and Scallions

3. Slit each scallion or leek from where the leaves join the stalk down towards the root section.
Leeks and Scallions

4. Check between the layers and the section just above where the leaves join the bulb for thrips.
Leeks and Scallions
Leeks and Scallions

5. Wash the leaves under a powerful stream of water. Some suggest slitting each leaf from top to bottom before washing.
Broccoli
Broccoli

1. Separate and remove broccoli florets from the stem. (The smaller the pieces the more surface area is exposed and the easier it is for infestation to be seen and removed. It is recommended to cut each floret vertically as well.)
BROCCOLI

2. Parboil
   • no more that 1 minute
   • softens the florets and stems making inspection easier and
   • makes bugs more easily detected

3. Remove with “spider” or large slotted spoon and submerge in cold water immediately after parboiling
4. **Rinse thoroughly**

- under a heavy *spray/shower* of water, allowing the water to enter the spaces between the small stems of each floret,
- from top to bottom, and from bottom to top.
- for larger quantities, this can be accomplished by placing a layer of florets in a flat perforated bin and washing the entire contents with a heavy *spray/shower* of water turning/flipping the florets to allow the water to effectively reach all surfaces and flush infestation out.
5. Inspect each piece between the little stems of the florets. If there is no sign of infestation, the broccoli may be used. If one or two insects are found repeat rinse and inspect again until product is found clean of infestation. Should a total of three insects be found, either in a particular section or spread among different sections of the same broccoli head, the entire head should be discarded.
NOTE: When processing more than one head of cauliflower, it is important to segregate each head since, if a section of a cauliflower head shows signs of infestation the entire head must be discarded, if more than one head is processed at a time, it will be impossible to know from which head the infested section came, and all the produce will have to be discarded.
1. Core and separate cauliflower florets from the stem.

(The smaller the pieces the more surface area is exposed and the easier it is for infestation to be seen and removed. It is recommended to cut each floret vertically as well.)
CAULIFLOWER

2. Examine the cauliflower pieces, paying careful attention to the under side of the floret.

3. Wash thoroughly.

NOTE: Heads of cauliflower that are found to be infested are difficult to clean and should not be used.
1. Separate the stalks from the head.
2. Remove the entire leafy section, and trim the bottom, of each stalk. (If the leaves are desired, they may be prepared like cilantro, dill, and parsley above, or washed and placed in a "cheese" cloth for use in soups, etc.)
3. Check both sides of each stalk (and leaves if using) for any evidence of leaf miners. Cut off from the stalks any furrows or trails and discard any leaves in which leaf minor furrows are seen.
4. Thoroughly wash each stalk under a strong stream of water or soak the stalks in a sink, bowl basin, etc.
Mushrooms

- Shitake and Button – May be used after a thorough washing
- Oyster – Should be taken apart in several places
  - Inspect base for small red worms
  - Thoroughly examine all inner sections
Mushrooms - Portobello

- Portobello
  - Remove Stem from cap
  - Examine detached stem for any sign of worms
  - Scoop out and discard entire fan-like under-part of mushroom
  - Wash Thoroughly
MUSHROOMS - PORTOBELLO
**Asparagus**

Infestation in (green) asparagus may be found in two places:
ASPARAGUS

- In the tips
- Under the many scales found on the length of the stem/stalk
- and
ASPARAGUS

- Remove the tip
- Peel off the scales with a peeler
- Rinse the spear well while rubbing

NOTE: White asparagus is not infested.
What Must I See and How Do I Look at It?

Bug are prohibited by the Torah ONLY if “visible” to the unaided eye.

Visible means:
- DETECTABLE, NOT Identifiable
- To the Trained and Experienced eye

Magnification may still needed to:
- Identify the bug to decide if produce is kosher
- Get our eyes trained to detect and rely less on magnification
### What am I looking at?

<table>
<thead>
<tr>
<th>Bugs</th>
<th>Other Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opaque</td>
<td>Transparent/Translucent</td>
</tr>
<tr>
<td>Specific, clear shape (long, oval, or round)</td>
<td>No specific shape</td>
</tr>
<tr>
<td>Symmetrical</td>
<td>Asymmetrical</td>
</tr>
<tr>
<td>Range of size from .25 mm to 8 mm, but most between 1 – 2 mm</td>
<td>Come in any size</td>
</tr>
<tr>
<td>Stay whole in water</td>
<td>Dirt crumbles or dissolves in water</td>
</tr>
</tbody>
</table>
WHAT EXACTLY ARE WE LOOKING FOR?

- Aphids
- Leaf Miners
- Mites
- Thrips
APHIDS

- Oval (Round/Oval)
- Generally GREEN and WINGLESS
- Some BROWN and WINGED in the late Summer and Fall (yellow/brown, grey, and black as well)
- Reproduce very rapidly
- Range in size from $\frac{1}{2} - 2$ mm ($\frac{1}{50} - \frac{1}{12}$ in)
- Molt - shedded skin looks like white piece of dirt
LEAF MINERS

- Long, Thin, and Narrow
- White, Yellow, Yellow/Brown
- Found between the layers of leaves and stalks and cannot be removed through washing
- Generally seen as a dark line
- Range in size from 1 – 3 mm (1/25 – 1/8 in)
Leaf Miners
Mites

- Round / Oval Shape
- Reddish Brown (white in dry food)
- Found in strawberries, lettuce, celery, parsley, dill, spinach, scallions and other leafy vegetables
- Range in size from .25 - .50 mm
mites
Mites
MITES
THRIPs

- Long and Narrow; resembles a thin line
- Range in Color; clear, white, pale yellow, brown, reddish brown, and dark brown (may also take on color of host fruit)
- Can be wingless or winged depending on stage of development
- Range in size from $\frac{1}{2}$ - 2 mm (1/50 – 1/12 in)
THRIPS

- On Fennel

- On Strawberries

- On Raspberries
THRIPS BETWEEN LAYERS OF SCALLION
PRACTICAL BEDIKAS TOLA’IM
PART 4
A Peak Into Bedikas Tola’im in OU Certified Food Services
Filtration Inspections – Used by all OU Certified Food Services
Filtration Inspections – Used by all OU Certified Food Services
Filtration Inspections – Used by all OU Certified Food Services

AFTER the regular WASH and RINSE Cycles:

- Soak
  - Cold or Lukewarm Water
  - NO Soap or Vegetable Wash
  - Agitate

- Filter “Soak Water” through mesh (200 or greater) and inspect on top of light box.
Filtration Inspections – Used by all OU Certified Food Services
Filtration Inspections – Used by all OU Certified Food Services
Carefully Inspect the Mesh on the Light Box
Carefully inspect the mesh on the Light Box
Carefully Inspect the Mesh on the Light Box
Carefully Inspect the Mesh on the Light Box
IF YOU DON’T KEEP AN EYE ON THEM, SOME MAY GET AWAY
ON FRISSEE
PRACTICAL BEDIKAS TOLA’IM
PART 5
Some Helpful Information and Closing Comments
THE VEGETABLE “NO-FLY” LIST

- Beets
- Broccoli STEMS (wash)
- Carrots
- Cucumbers
- Dried Spices (unless improperly stored)
- Eggplants
- Kohlrabi
- Melons
- Okra
- Parsley Roots
- Parsnips
- Potatoes
- Pumpkins
- Radishes
- Sprouts (beans, alfalfa, mung)
- Squash (all varieties)
- Tomatoes
- Turnips
- Yams
- Yuca
- Zucchinis
NOT RECOMMENDED

- **Artichokes** (hearts, if ALL leaves have been removed and bottom/choke completely cleaned, may be used. Bottoms may be used.)
- **Asparagus** (Top and scales must be removed. White asparagus is presumed clean, but wash first.)
- **Blackberries**
- **Brussels Sprouts**
- **Curley Leaf Parsley**
- **Edible Flowers** (Purple Orchids should be washed like all garnishing.)
- **Raspberries**
A NOTE ABOUT PRE-WASHED VEGETABLES WITHOUT A KNOWN RELIABLE HASHGACHAH

- Cabbage, Cole Slaw, Iceberg Lettuce
  - Less prone to infestation, but levels vary greatly based on season and other environmental factors
  - Should be checked as you would any such item

- Open Leaf (e.g. Romaine, Boston, etc.)
  - More prone to infestation
  - Insect-free claims are not always accurate
  - OU recommends these bags be checked in their entirety

- Spinach
  - Often found to be infested
  - Inspection of each leaf required
PRACTICAL BEDIKAS TOLA’IM

In Conclusion
THE FIFTH

- Good (normal) Eyesight
- Good Lighting
- Time
- Patience
- Yiras Shomayim

best interest. As far as our Jewish people are concerned, our fathers and mothers have for centuries used lettuce for Morror on the Seder Night as well as parsley for Karpas, and in those days they were no less infested with vermin than they are today. So we have no right to make new Issurim and to forbid the eating of any vegetables per se to the general public. What is mandatory, however, is a thorough inspection for which one needs normal eyesight, good lighting, leisure, patience and, most of all, Yiras Shomayim.

What "troebening" and salting are to meat, searching for insects is to fruits and vegetables. These laws are to remind us that we are not animals who consume their fodder as they find it, but we are humans created in the image of G-d who receive their food from the Hands of a Loving Father Who provides for His children.

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The Torah forbids us to eat any and all animals meaning insects, worms, and all other creeping animals. The law is very strict. The ingestion of a tiny creature is akin to eating a piece of forbidden meat and even much more severe. This refers to all animals, dead or alive, as long as they are visible to the naked eye.

Since fruits and vegetables are very often infested with insects, it becomes mandatory by Torah law to make a thorough examination of all suspicious items before eating them. Recently, some young Talmidei Chachomim produced a video showing highlighting the problem of increased insect infestation of food in the United States. This audio-visual presentation has aroused the consciousness of thousands of Torah-true Jews and Jewses who were not aware of the acute seriousness of the problem.

On the other hand, according to medical science, uncooked green leafy vegetables are essential components of man's diet. Their presence is a source of vitamins (vitamin in cooking), minerals, iron and fiber. They are low in calories which is crucial to the avoidance of arteriosclerosis of the heart and liver, and for the diabetic and the obese. Thus the avoidance of these food substances would not be in the interest of the health of our people, and medically speaking, people should be encouraged — especially mothers of young children, adolescents, young adults and the elderly — to continue serving what is in their best interest. As far as our Jewish people are concerned, our fathers and mothers have for centuries used lettuce for Morror on the Seder Night as well as parsley for Karpas, and in those days they were no less infested with vermin than they are today. So we have no right to make new Issurim and to forbid the eating of any vegetables per se to the general public. What is mandatory, however, is a thorough inspection for which one needs normal eyesight, good lighting, leisure, patience and, most of all, Yiras Shomayim.

Mothers of olden days had a lot of time on their hands. They did not have to rush through the preparation of a meal for their families. Since our living habits have changed radically, we seem to have neither the time nor the inclination to spend hours in the kitchen preparing a meal. Everything has to be done quickly and therein lies the crux of the problem. When I am in a hurry, I cannot trust myself any more when it comes to avoiding any severe prohibitions of the Torah. Maybe I have overlooked a little tiny insect which is no larger than a decimal point, but nevertheless visible to the naked eye without a magnifying glass. As we have said, only good, normal eyesight is needed and a good source of light, either sunlight or electric light. But mainly there is a need for patience and this is a commodity which is not easily available to many of us.

The following vegetables may be used without any inspection: alluва sprouts, bean sprouts, beets, carrots, corn kernels, corn on the cob, cucumbers, eggplants, leeks, celery, kohlrabi, mushrooms, parsnips, potatoes and frozen peas, peppers, potatoes, pumpkins, radishes, squashes, sweet potatoes, tomatoes, turnips, zucchini — American grown. Note: Any vegetable that we mention that do not require inspection, applies to U.S. grown — because they are treated with pesticides. Should a situation change in the U.S. — as in the case of vegetables purchased from a health food store or from a farmer's market or stand, where pesticides may be reduced or completely eliminated — even these may require inspection.

No vegetable that comes into the kitchen should be of inferior quality. They must all be fresh and crisp and show no signs of wilting.

Iceberg lettuce, cabbage and endives: Remove all loose leaves. Separate all leaves, put them in lukewarm water. It is preferable to use a vinegar solution or salt solution. After a few minutes, pour out the water and inspect each leaf on both sides by holding it up to the light. (As to cabbage, unless you cook, preserve or refrigerate the cabbage immediately after inspection, it may develop insects.)

Roman lettuce, Boston lettuce, chicory, escarole and kale are especially suspect to contain insects, and if not inspected very, very thoroughly are prohibited in all cases. By the way, if one cuts away the leafy portions of romaine lettuce one may use the stalk after washing them thoroughly under running water.

Dill and parsley may be prepared in the following manner: Soak them in salt water or vinegar for a few
Thank You

בצלחת

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