A method for storing food items within a refrigerator appliance is provided. The method includes placing a plurality of food items within a chilled chamber of the refrigerator appliance and establishing an identity of each food item of the plurality of food items. The method also includes determining a preferred storage condition of the chilled chamber based upon the identities of the plurality of food items and adjusting a current storage condition of the chilled chamber to about the preferred storage condition. Operating the chilled chamber of the refrigerator appliance at the preferred storage condition can improve a useful life of food items within the chilled chamber.
Start

410
Place a plurality of food items within a chilled chamber of a refrigerator appliance.

420
Establish an identity of each food item of the plurality of food items.

430
Determine a preferred storage condition of the chilled chamber based upon the identities of the plurality of food items.

440
Adjust a current storage condition of the chilled chamber to about the preferred storage condition

Finish

FIG. 4
500

Start

510

Place a plurality of food items within a storage volume of a drawer.

520

Establish an identity of each food item of the plurality of food items.

530

Determine a preferred storage condition of the storage volume of the drawer based upon the identities of the plurality of food items.

540

Adjust at least one of a temperature of the storage volume, a humidity of the storage volume, a frequency or an intensity of light within the storage volume, or a composition of gas within the storage volume.

Finish

FIG. 5
METHOD FOR STORING FOOD ITEMS WITHIN A REFRIGERATOR APPLIANCE

FIELD OF THE INVENTION

[0001] The present subject matter relates generally to refrigerator appliances.

BACKGROUND OF THE INVENTION

[0002] Refrigerator appliances generally include a cabinet that defines a chilled chamber for receipt of food items for storage. Refrigerator appliances can also include various combinations of drawers, shelves, and bins positioned within the chilled chamber to assist with storing food items therein. Drawers within the chilled chamber can be designed to facilitate storage of certain food articles. Thus, certain drawers can be designed for storing fruits or vegetables, and other drawers can be designed for storing dairy products, such as cheese.

[0003] Food items have a limited useful life and can spoil within the chilled chamber. Such waste can be expensive and inconvenient. Thus, certain refrigerator appliances include features for improving the useful life of food items within the refrigerator appliance’s chilled chamber. For example, certain drawers can be sealed or can include an airflow controller that a user can manually adjust to regulate the humidity within the drawer. However, manually adjusting such airflow controllers can be inconvenient and imprecise. Alternatively, certain refrigerator appliances include dual-evaporators for more precisely controlling a temperature within the chilled chamber. Certain other refrigerator appliances include a discharge system for adjusting a gas content of the refrigerator appliance’s drawer. Other refrigerator appliances include LEDs where a wavelength of light from the LEDs is adjustable. Such systems are designed to improve the useful life of food items within their respective refrigerator appliances but generally offer limited effectiveness. In particular, such systems are generally limited to a particular type of food item and offer limited improvement for other types of food items.

[0004] Accordingly, a method for storing food items within a chilled chamber of the refrigerator appliance such that a useful life of food items is increased would be useful. In particular, a method for storing mixed loads of food items within a chilled chamber of the refrigerator appliance such that a useful life of such food items is increased would be useful.

BRIEF DESCRIPTION OF THE INVENTION

[0005] The present subject matter provides a method for storing food items within a refrigerator appliance. The method includes placing a plurality of food items within a chilled chamber of the refrigerator appliance and establishing an identity of each food item of the plurality of food items. The method also includes determining a preferred storage condition of the chilled chamber based upon the identities of the plurality of food items and adjusting a current storage condition of the chilled chamber to about the preferred storage condition. Operating the chilled chamber of the refrigerator appliance at the preferred storage condition can improve a useful life of food items within the chilled chamber. Additional aspects and advantages of the invention will be set forth in part in the following description, or may be apparent from the description, or may be learned through practice of the invention.

[0006] In a first exemplary embodiment, a method for storing food items within a refrigerator appliance having a chilled chamber is provided. The method includes placing a plurality of food items within the chilled chamber of the refrigerator appliance, establishing an identity of each food item of the plurality of food items, determining a preferred storage condition of the chilled chamber of the refrigerator appliance based upon the identities of the plurality of food items, and adjusting a current storage condition of the chilled chamber of the refrigerator appliance to about the preferred storage condition.

[0007] In a second exemplary embodiment, a refrigerator appliance is provided. The refrigerator appliance includes a cabinet that defines a chilled chamber and a drawer positioned within the chilled chamber of the cabinet. The drawer defines a storage volume configured for receipt of food items for storage. A compressor is positioned within the cabinet. An evaporator is positioned within the chilled chamber of the cabinet adjacent the drawer. The compressor is in fluid communication with the evaporator in order to supply the evaporator with refrigerant. A controller is in communication with the compressor. The controller is configured for establishing an identity of each food item within the storage volume of the drawer, determining a preferred storage condition of the storage volume of the drawer based upon the identities of food items within the storage volume of the drawer, and adjusting operation of the compressor in order to increase or decrease a supply of refrigerant to the evaporator and to assist with changing a current storage condition of the storage volume of the drawer to about the preferred storage condition.

[0008] In a third exemplary embodiment, a method for storing food items within a refrigerator appliance having a drawer disposed within a chilled chamber of the refrigerator appliance is provided. The drawer defines a storage volume. The method includes placing a plurality of food items within the storage volume of the drawer, establishing an identity of each food item of the plurality of food items, and determining a preferred storage condition of the storage volume of the drawer based upon the identities of the plurality of food items. The method also includes and adjusting at least one of a temperature of the storage volume, a humidity of the storage volume, a wavelength or an intensity of light within the storage volume, or a composition of gas within the storage volume in order to shift the storage volume of the drawer from a current storage condition to about the preferred storage condition.

[0009] These and other features, aspects and advantages of the present invention will become better understood with reference to the following description and appended claims. The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate embodiments of the invention and, together with the description, serve to explain the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] A full and enabling disclosure of the present invention, including the best mode thereof, directed to one of ordinary skill in the art, is set forth in the specification, which makes reference to the appended figures, in which:

[0011] FIG. 1 provides a perspective view of a refrigerator appliance according to an exemplary embodiment of the present subject matter.
FIG. 2 provides a perspective view of the refrigerator appliance of FIG. 1 with doors of the refrigerator appliance shown in an open position.

FIG. 3 provides a schematic view of the refrigerator appliance of FIG. 1.

FIG. 4 illustrates a method for storing food items within a refrigerator appliance according to an exemplary embodiment of the present subject matter.

FIG. 5 illustrates a method for storing food items within a drawer of a refrigerator appliance according to an exemplary embodiment of the present subject matter.

DETAILED DESCRIPTION

Reference now will be made in detail to embodiments of the invention, one or more examples of which are illustrated in the drawings. Each example is provided by way of explanation of the invention, not limitation of the invention. In fact, it will be apparent to those skilled in the art that various modifications and variations can be made in the present invention without departing from the scope or spirit of the invention. For instance, features illustrated or described as part of one embodiment can be used with another embodiment to yield a still further embodiment. Thus, it is intended that the present invention covers such modifications and variations as come within the scope of the appended claims and their equivalents.

FIG. 1 provides a front, elevation view of a refrigerator appliance 100 according to an exemplary embodiment of the present subject matter with refrigerator doors 128 of refrigerator appliance 100 shown in a closed position. FIG. 2 provides a front view of refrigerator appliance 100 with refrigerator doors 128 shown in an open position to reveal a fresh food chamber 122 of refrigerator appliance 100.

Refrigerator appliance 100 includes a cabinet or housing 120 that extends between a top 101 and a bottom 102 along a vertical direction V. Housing 120 defines chilled chambers for receipt of food items for storage. In particular, housing 120 defines fresh food chamber 122 positioned at or adjacent top 101 of housing 120 and a freezer chamber 124 arranged at or adjacent bottom 102 of housing 120. As such, with refrigerator appliance 100 is generally referred to as a bottom mount refrigerator. It is recognized, however, that the benefits of the present disclosure apply to other types and styles of refrigerator appliances such as, e.g., a top mount refrigerator appliance or a side-by-side style refrigerator appliance. Consequently, the description set forth herein is for illustrative purposes only and is not intended to be limited in any aspect to any particular refrigerator chamber configuration.

Refrigerator doors 128 are rotatably hinged to an edge of housing 120 for selectively accessing fresh food chamber 122. In addition, a freezer door 130 is arranged below refrigerator doors 128 for selectively accessing freezer chamber 124. Freezer door 130 is coupled to a freezer drawer (not shown) slidably mounted within freezer chamber 124.

Turning now to FIG. 2, various storage components are mounted within fresh food chamber 122 to facilitate storage of food items therein as will be understood by those skilled in the art. In particular, the storage components include bins 140, drawers 142, and shelves 144 that are mounted within fresh food chamber 122. Bins 140, drawers 142, and shelves 144 are configured for receipt of food items (e.g., beverages and/or solid food items) and may assist with organizing such food items. As an example, drawers 142 can receive fresh food items (e.g., vegetables, fruits, and/or cheeses) with a storage volume 143 defined by each drawer 142. As discussed in greater detail below, refrigerator appliance 100 also includes features for increasing a useful life of food items within fresh food chamber 122, e.g., within storage volume 143 of drawers 142.

Within refrigeration system 168, gaseous refrigerant flows into compressor 170, which operates to increase the pressure of the refrigerant. This compression of the refrigerant raises its temperature, which is lowered by passing the gaseous refrigerant through condenser 172. Within condenser 172, heat exchange with ambient air takes place so as to cool the refrigerant and cause the refrigerant to condense to a liquid state.

Expansion device (e.g., a valve, capillary tube, or other restriction device) 174 receives liquid refrigerant from condenser 172. From expansion device 174, the liquid refrigerant enters evaporator 176. Upon exiting expansion device 174 and entering evaporator 176, the liquid refrigerant drops in pressure and vaporizes. Due to the pressure drop and phase change of the refrigerant, evaporator 176 is cool relative to fresh food and freezer chambers 122 and 124 of refrigerator appliance 100. As such, cooled air is produced and refrigerates fresh food and freezer chambers 122 and 124 of refrigerator appliance 100. Thus, evaporator 176 is a type of heat exchanger which transfers heat from air passing over evaporator 176 to refrigerant flowing through evaporator 176.

Refrigerator appliance 100 also includes a light source 162. Light source 162 is configured for directing light into fresh food chamber 122 and/or storage volume 143 of drawers 142. Light source 162 may be any suitable light emitting device. For example, light source 162 can include light emitting diodes, incandescent bulbs, fluorescent bulbs, and/or combinations thereof. Light source 162 may be positioned at any suitable location within refrigerator appliance 100, e.g., within fresh food chamber 122 and/or storage volume 143 of drawers 142. Light from light source 162 can assist with increasing the useful life of food items within fresh food chamber 122, e.g., within storage volume 143 of drawers 142, as discussed in greater detail below.

Refrigerator appliance 100 further includes a gas source 164. Gas source 164 is configured for directing a flow of gas into fresh food chamber 122 and/or storage volume 143 of drawers 142. Gas source 164 may direct any suitable gas into fresh food chamber 122 and/or storage volume 143 of drawers 142. For example, gas source 164 can include canisters containing nitrogen gas, oxygen gas, carbon dioxide gas, ozone gas, argon gas, or combinations thereof. Gas source 164 may be positioned at any suitable location within refrigerator appliance 100, e.g., within cabinet 120. The flow of gas from gas source 164 into fresh food chamber 122 and/or
storage volume 143 of drawers 142 can assist with increasing the useful life of food items within fresh food chamber 122, e.g., within storage volume 143 of drawers 142, as discussed in greater detail below.

Refrigerator appliance 100 also includes a humidity regulator 166. Humidity regulator 166 is configured for regulating and adjusting an amount of water vapor within fresh food chamber 122 and/or storage volume 143 of drawers 142. Humidity regulator 166 can adjust a humidity of fresh food chamber 122 and/or storage volume 143 of drawers 142 by regulating a flow of air between a volume of relatively high humidity air and a volume of relatively low humidity air. Thus, humidity regulator 166 can include a valve positioned between such volumes and selectively adjustable to adjust a flow of air between the volumes. As an example, fresh food chamber 122 can have a relatively low humidity relative to storage volume 143 of drawers 142, e.g., due to water vapor condensing on evaporator 176 during operation of refrigeration system 168. Thus, humidity regulator 166 can adjust the humidity within storage volume 143 of drawers 142 by selectively adjusting a flow of air between fresh food chamber 122 and storage volume 143 of drawers 142. Controlling the humidity within fresh food chamber 122 and/or storage volume 143 of drawers 142 can assist with increasing the useful life of food items within fresh food chamber 122, e.g., within storage volume 143 of drawers 142, as discussed in greater detail below.

Refrigerator appliance 100 further includes user inputs 152 and a controller 150. Operation of the refrigerator appliance 100 is regulated by controller 150 that is operatively coupled to user inputs 152. In one exemplary embodiment, the user interface panel 136 may represent a general purpose I/O (“GPIO”) device or functional block. In another exemplary embodiment, the user interface 136 may include input components, such as one or more of a variety of electrical, mechanical or electro-mechanical input devices including rotary dials, push buttons, and touch pads. The user interface 136 may be in communication with controller 150 via one or more signal lines or shared communication busses. User inputs 152 provide selections for user manipulation of the operation of refrigerator appliance 100. In response to user manipulation of the user inputs 152, controller 150 operates various components of the refrigerator appliance 100.

For example, controller 150 is operatively coupled or in communication with compressor 170, light source 162, gas source 164, humidity regulator 166, such that controller 150 can operate such components.

Controller 150 is also in communication with a thermal sensor 180, e.g., a thermocouple or thermistor. Thermal sensor 180 may be positioned in one of fresh food chamber 122 and/or freezer chamber 124. Controller 150 may receive a signal from thermal sensor 180 that corresponds to a temperature of fresh food chamber 122 and/or freezer chamber 124.

Controller 150 is also in communication with a camera 190. Camera 190 may be any type of device suitable for capturing an image. As an example, camera 190 may be a video camera or a digital camera with an electronic image sensor, e.g., a charge coupled device (CCD) or a CMOS sensor. Camera 190 is in communication with controller 150 such that controller 150 may receive a signal from camera 190 corresponding to the image captured by camera 190.

Camera 190 may be positioned at any suitable location on or within refrigerator appliance 100. For example, refrigerator appliance 100 may be positioned on refrigerator doors 128 and directed towards fresh food chamber 122 such that camera 190 captures pictures of fresh food chamber 122. In particular, camera 190 may be directed towards any particular one of or combination of bins 140, drawers 142, and shelves 144. Thus, camera 190 can capture pictures of one of bins 140, all of bins 140, one of drawers 142, all of drawers 142, one of shelves 144, all of shelves 144, or any suitable combination thereof. A plurality of cameras may be required to capture a picture of the entire fresh food chamber 122.

Refrigerator appliance 100 also includes a scanner 195 for reading identifiers, such as bar codes, QR codes, and/or RFID tags, mounted to food items. Controller 150 is in communication with scanner 195 and is configured for receipt of a signal from scanner 195. The signal from scanner 195 corresponds to an identity of a food item, e.g., within fresh food chamber 122 and/or storage volume 143 of drawers 142. Thus, scanner 195 can assist controller 150 with identifying food items within fresh food chamber 122 and/or storage volume 143 of drawers 142.

Controller 150 includes memory and one or more processing devices such as microprocessors, CPUs or the like, such as general or special purpose microprocessors operable to execute programming instructions or micro-control code associated with operation of refrigerator appliance 100. The memory can represent random access memory such as DRAM, or read only memory such as ROM or FLASH. The processor executes programming instructions stored in the memory. The memory can be a separate component from the processor or can be included onboard within the processor. Alternatively, controller 150 may be constructed without using a microprocessor, e.g., using a combination of discrete analog and/or digital logic circuitry (such as switches, amplifiers, integrators, comparators, flip-flops, AND gates, and the like) to perform control functionality instead of relying upon software.

Controller 150 may be positioned in a variety of locations throughout refrigerator appliance 100. Input/output (“I/O”) signals may be routed between controller 150 and various operational components of refrigerator appliance 100. The components of refrigeration system 168 may be in communication with controller 150 via one or more signal lines or shared communication busses.

FIG. 4 illustrates a method 400 for storing food items within a refrigerator appliance according to an exemplary embodiment of the present subject matter. Refrigerator appliance 100, e.g., controller 150, (FIG. 3) may be configured or programmed to implement method 400. As discussed in greater detail below, utilizing method 400 can assist with increasing the useful life of food items within fresh food chamber 122, e.g., within storage volume 143 of drawers 142.

At step 410, a user can place a plurality of food items within a chilled chamber, e.g., fresh food chamber 122 or freezer chamber 124 of refrigerator appliance 100. As an example, the user can load an orange and a head of lettuce within fresh food chamber 122.

At step 420, controller 150 establishes an identity of each food item of the plurality of food items loaded into the chilled chamber. To identify each food item at step 420, controller 150 can receive an image from camera 190 and analyze the image in order to establish an identity of each food item. For example, the image from camera 190 can show an orange and a head of lettuce within fresh food chamber 122. Alternatively, the user can utilize user input 152 to manu-
ally input an identity for each food item. For example, controller 150 can receive a signal from user input 150 or scanner 195 corresponding to an identity of a food item within fresh food chamber 122. For example, the user can utilize user input 152 to signal controller 150 that an orange and a head of lettuce are positioned within fresh food chamber 122.

[0037] At step 430, controller 150 determines a preferred storage condition of the chilled chamber based upon the identities of the plurality of food items established at step 420. The preferred storage condition can be selected at step 430 in order to increase a storage life of the food items within the chilled chamber of the refrigerator appliance relative to the current storage condition. For example, a head of lettuce can have an optimum storage condition of about thirty-two degrees Fahrenheit and about ninety-eight percent relative humidity. Conversely, oranges can have an optimum storage condition of about thirty-five degrees Fahrenheit and about ninety percent to about ninety-five percent relative humidity. In particular, oranges can be damaged if stored at about thirty-two degrees Fahrenheit. Thus, an orange and a head of lettuce can be positioned within fresh food chamber 122, controller 150 can determine a preferred storage condition for fresh food chamber 122 of greater than about thirty-two degrees Fahrenheit and greater than about ninety-five percent relative humidity for the orange and the head of lettuce within fresh food chamber 122.

[0038] At step 440, controller 150 adjusts a current storage condition of the chilled chamber to about the preferred storage condition. In particular, controller 150 can modify ambient conditions of the chilled chamber at step 440 in order to adjust the current storage condition of the chilled chamber to about the preferred storage condition. In order to adjust the current storage condition of the chilled chamber to about the preferred storage condition, controller 150 can alter a temperature of the chilled chamber of the refrigerator appliance, modifying a humidity of the chilled chamber of the refrigerator appliance, changing a wavelength or an intensity of light within the chilled chamber of the refrigerator appliance, and/or varying a composition of ambient gas within the chilled chamber of the refrigerator appliance.

[0039] As an example, to alter the temperature of fresh food chamber 122, controller 150 can activate or deactivate refrigeration system 168 of refrigerator appliance 100. In particular, controller 150 can adjust operation of compressor 170 in order to increase or decrease a supply of refrigerant to evaporator 176 and adjust the temperature of fresh food chamber 122. In such a manner, controller 150 can assist with changing the current storage condition of fresh food chamber 122 to about the preferred storage condition.

[0040] To modify the humidity of fresh food chamber 122, controller 150 can actuate humidity regulator 166. Similarly, to change the wavelength and/or the intensity of light within fresh food chamber 122, controller 150 can adjust light source 162. Further, to vary a composition of ambient gas within fresh food chamber 122, controller 150 can increase or decrease a flow of gas from gas source 164 to fresh food chamber 122.

[0041] By adjusting the current storage condition of the chilled chamber to about the preferred storage condition at step 440, method 400 can assist with improving the useful life of food items within fresh food chamber 122, e.g., within storage volume 143 of drawers 142. For example, when fresh food chamber 122 contains food items with various optimum storage conditions, method 400 can adjust the current storage condition of fresh food chamber 122 to about the preferred storage condition in order to maximize the useful life of such food items despite their different identities and potentially dissimilar optimum storage conditions.

[0042] FIG. 5 illustrates a method 500 for storing food items within a drawer of a refrigerator appliance according to an exemplary embodiment of the present subject matter. Refrigerator appliance 100, c.g., controller 150, FIG. 5 may be configured or programmed to implement method 500. As discussed in greater detail below, utilizing method 500 can assist with increasing the useful life of food items within storage volume 143 of drawers 142.

[0043] At step 510, a plurality of food items is placed within storage volume 143 of drawers 142. As an example, a user can load food items into storage volume 143 of drawers 142 at step 510. At step 520, controller 150 establishes an identity of each food item of the plurality of food items from step 510. Like with method 400 (FIG. 4) described above, controller 150 can utilize camera 190 or receive signals from user input 152 or scanner 195 at step 520 in order to establish the identity of each food item from step 510.

[0044] At step 530, controller 150 determines a preferred storage condition of storage volume 143 of drawers 142 based upon the identities of the plurality of food items within storage volume 143 of drawers 142 established at step 520. The preferred storage condition can be determined at step 530 in order to increase a storage life of the food items within storage volume 143 of drawers 142 relative to the current storage condition. As an example, garlic can have an optimum storage condition of about thirty-two degrees Fahrenheit and about sixty-five percent relative humidity. Conversely, onions can have an optimum storage condition of about thirty-five degrees Fahrenheit and about seventy-five percent relative humidity. Thus, controller 150 can determine a preferred storage condition of storage volume 143 of drawers 142 having garlic and onions stored therein such that the temperature is greater than about thirty-two degrees Fahrenheit and the humidity is greater than about sixty-five percent relative humidity.

[0045] At step 540, controller 150 adjusts at least one (e.g., at least two, three, or all) of a temperature of storage volume 143, a humidity of storage volume 143, a wavelength or an intensity of light within storage volume 143, or a composition of gas within storage volume 143 in order to shift storage volume 143 of drawer 142 from a current storage condition to about the preferred storage condition.

[0046] At step 540, controller 150 can activate or deactivate refrigeration system 168 in order to adjust the temperature of storage volume 143. Controller 150 can also alter light source 162 in order to adjust the wavelength or the intensity of light within storage volume 143 at step 540. Further, controller 150 can increase or decrease a flow of gas from gas source 164 in order to adjust the composition of gas within storage volume 143 at step 540. In addition, controller 150 can adjust the humidity within storage volume 143 by utilizing humidity regulator 166 at step 540.

[0047] By adjusting the current storage condition of storage volume 143 to about the preferred storage condition at step 540, method 500 can assist with improving the useful life of food items within storage volume 143 of drawers 142. For example, when storage volume 143 contains food items with various optimum storage conditions, method 500 can adjust the current storage condition of storage volume 143 to about the preferred storage condition in order to maximize the use-
ful life of such food items despite their different identifies and potentially dissimilar optimum storage conditions.

[0048] This written description uses examples to disclose the invention, including the best mode, and also to enable any person skilled in the art to practice the invention, including making and using any devices or systems and performing any incorporated methods. The patentable scope of the invention is defined by the claims, and may include other examples that occur to those skilled in the art. Such other examples are intended to be within the scope of the claims if they include structural elements that do not differ from the literal language of the claims, or if they include equivalent structural elements with insubstantial differences from the literal languages of the claims.

What is claimed is:

1. A method for storing food items within a refrigerator appliance having a chilled chamber, comprising:
   - placing a plurality of food items within the chilled chamber of the refrigerator appliance;
   - establishing an identity of each food item of the plurality of food items;
   - determining a preferred storage condition of the chilled chamber of the refrigerator appliance based upon the identities of the plurality of food items; and
   - adjusting a current storage condition of the chilled chamber of the refrigerator appliance to about the preferred storage condition.

2. The method of claim 1, wherein said step of adjusting comprises modifying ambient conditions of the chilled chamber of the refrigerator appliance.

3. The method of claim 1, wherein said step of adjusting comprises at least one of:
   - altering a temperature of the chilled chamber of the refrigerator appliance;
   - modifying a humidity of the chilled chamber of the refrigerator appliance;
   - changing a wavelength or an intensity of light within the chilled chamber of the refrigerator appliance; and
   - varying a composition of ambient gas within the chilled chamber of the refrigerator appliance.

4. The method of claim 3, wherein said step of altering comprises activating or deactivating a refrigeration system of the refrigerator appliance.

5. The method of claim 3, wherein said step of changing comprises adjusting a light source positioned within the chilled chamber of the refrigerator appliance.

6. The method of claim 3, wherein said step of varying comprises increasing or decreasing a flow of gas from a gas source of the refrigerator appliance.

7. The method of claim 1, wherein the preferred storage condition is selected in said step of determining in order to increase a storage life of the food items within the chilled chamber of the refrigerator appliance relative to the current storage condition.

8. A refrigerator appliance, comprising:
   - a cabinet that defines a chilled chamber;
   - a drawer positioned within the chilled chamber of said cabinet, said drawer defining a storage volume configured for receipt of food items for storage;
   - a compressor positioned within said cabinet; and
   - an evaporator positioned within the chilled chamber of said cabinet, said compressor being in fluid communication with said evaporator in order to supply said evaporator with refrigerant; and

9. The refrigerator appliance of claim 8, further comprising a controller in communication with said compressor, said controller configured for establishing an identity of each food item within the storage volume of said drawer;
   - determining a preferred storage condition of the storage volume of said drawer based upon the identities of food items within the storage volume of said drawer; and
   - adjusting operation of said compressor in order to increase or decrease a supply of refrigerant to said evaporator and to assist with changing a current storage condition of the storage volume of said drawer to about the preferred storage condition.

10. The refrigerator appliance of claim 8, further comprising a humidity regulator mounted to said drawer and configured for selectively adjusting a flow of air between the storage volume of said drawer and the chilled chamber of said cabinet, wherein said controller is in communication with said humidity regulator and configured for adjusting said humidity regulator in order to change a humidity of the storage volume of said drawer and to assist with changing the current storage condition of the storage volume of said drawer to about the preferred storage condition.

11. The refrigerator appliance of claim 8, further comprising a light source mounted within the chilled chamber of said cabinet, said light source configured for directing light into the storage volume of said drawer, said controller in communication with said light source and configured for activating said light source in order to change a wavelength or an intensity of light emitted by said light source into the storage volume of said drawer and to assist with changing the current storage condition of the storage volume of said drawer to about the preferred storage condition.

12. The refrigerator appliance of claim 8, further comprising a camera mounted to said cabinet and directed towards the storage volume of said drawer, said controller being in communication with said camera and configured for receiving an image from said camera, the image from said camera assisting said controller with identifying food items within the storage volume of said drawer during said step of establishing.

13. The refrigerator appliance of claim 8, further comprising a user input mounted to said cabinet, said controller being in communication with said user input and configured for receipt of a signal from said user input, the signal from said user input corresponding to an identity of a food item within the storage volume of said drawer and assisting said controller with identifying each food item within the storage volume of said drawer during said step of establishing.

14. The refrigerator appliance of claim 8, further comprising a scanner for reading identifiers mounted to food items, said controller being in communication with said scanner and configured for receipt of a signal from said scanner, the signal
from said scanner corresponding to an identity of a food item within the storage volume of said drawer and assisting said controller with identifying each food item within the storage volume of said drawer during said step of establishing.

15. The refrigerator appliance of claim 8, wherein the preferred storage condition is selected in said step determining in order to increase a storage life of food items within the storage volume of said drawer relative to the current storage condition.

16. A method for storing food items within a refrigerator appliance having a drawer disposed within a chilled chamber of the refrigerator appliance, the drawer defining a storage volume, the method comprising:
   placing a plurality of food items within the storage volume of the drawer;
   establishing an identity of each food item of the plurality of food items;
   determining a preferred storage condition of the storage volume of the drawer based upon the identities of the plurality of food items; and
   adjusting at least one of a temperature of the storage volume, a humidity of the storage volume, a wavelength or an intensity of light within the storage volume, or a composition of gas within the storage volume in order to shift the storage volume of the drawer from a current storage condition to about the preferred storage condition.

17. The method of claim 15, wherein said step adjusting comprises activating or deactivating a refrigeration system of the refrigerator appliance in order to adjust the temperature of the storage volume.

18. The method of claim 15, wherein said step adjusting comprises altering a light source positioned within and directing light into the storage volume of the drawer in order to adjust the wavelength or an intensity of light within the storage volume.

19. The method of claim 15, wherein said step adjusting comprises increasing or decreasing a flow of gas from a gas source of the refrigerator appliance in order to adjust the composition of gas within the storage volume.

20. The method of claim 15, wherein the preferred storage condition is selected in said step of determining in order to increase a storage life of the food items within the storage volume of the drawer relative to the current storage condition.