A device for safe handling of food comprises a dispenser assembly having an animal-shaped configuration. The dispenser assembly is provided with a plurality of antimicrobial wipes and at least a portion of the dispenser assembly is adapted to be located in a food handling area. The plurality of antimicrobial wipes of the dispenser assembly both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the dispenser assembly by using at least one of the plurality of wipes that is retrieved from the dispenser assembly. The animal-shaped configuration of the dispenser assembly is at least one of a chicken, a turkey, a pig, a cow, a lamb and a fish. A safety message is coupled to a portion of the dispenser assembly, thereby inviting a person to practice hygiene after handling the animal food product.
DEVICES FOR SAFE HANDLING OF FOOD AND METHODS THEREFOR

FIELD OF THE INVENTION

[0001] This invention relates generally to devices for safe handling of food and, more specifically, to devices for safe handling of food comprising a dispenser assembly having an animal-shaped configuration, which are adapted to be located in a food handling area and methods which both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the dispenser assembly.

BACKGROUND OF THE INVENTION

[0002] It is common practice for food shoppers to both select and to handle animal food products such as chicken, beef and fish directly from a display case in a supermarket. Often the packages of these animal food products are not tightly sealed, so that blood and other animal fluids may coat the outside of the packages. Both blood and these animal fluids are often a source of bacteria that create unhygienic conditions for food shoppers. During the shopping experience the food shoppers’ hands often touch other food products which are also contaminated by these and other bacteria.

[0003] According to the National Digestive Diseases Information Clearinghouse, harmful bacteria are the most common causes of food borne illnesses. Harmful bacteria include Campylobacter jejuni (from raw and undercooked meat and poultry), L. monocytogenes, Salmonella, Shigella, Staphylococcus aureus, C. jejuni (from raw (unpasteurized) milk and dairy products, such as soft cheeses), Salmonella enteritidis (from raw or undercooked eggs), Vibrio vulnificus, Vibrio parahaemolyticus (from raw or undercooked shellfish) and C. botulinum (from improperly canned goods, and smoked or salted fish). Contamination can occur during growing, harvesting, processing, storing, shipping, distribution or final preparation of food products, such as in a person’s kitchen.

[0004] It is well-known that the conditions necessary for prevention of rapid bacterial growth are maintaining food outside the “safe temperature zones”, i.e. greater than 140°F. and less than 40°F., as well as keeping the environment surrounding food free of moisture, which are both conditions necessary for bacterial growth and replication. When food is cooked and left out for more than 2 hours at room temperature, bacteria can multiply quickly. Most bacteria grow undetected because they do not produce an “off” odor or change the color or texture of the food. Freezing food slows or stops bacterial growth but does not destroy the bacteria. The microbes can become reactivated when the food is thawed. Refrigeration may slow the growth of some bacteria, but thorough cooking is needed to destroy the bacteria.

[0005] In most cases of food borne illness, symptoms resemble intestinal flu and may last a few hours or even several days. Symptoms can range from mild to serious and include abdominal cramps, nausea, vomiting, diarrhea, fever and dehydration.

[0006] A number of patents (one example being Bloch et al., U.S. Pat. No. 5,509,593) disclose the use of sanitary tissue dispensers, but none of these patents are directed to use of sanitary tissue dispensers in a food handling area, such as a supermarket display. Most consumers do not recognize that contamination occurs during handling of animal food product packages (meat and/or fish) such as found in the display cases of most supermarkets. The inventor of this application discloses improved devices and methods for safe handling of food products which encourage a consumer to practice good hygiene.

SUMMARY OF THE INVENTION

[0007] It is an object of the present invention to provide improved devices for safe handling of food.

[0008] It is a further object of the present invention to provide improved devices for safe handling of food which include a dispenser assembly provided with a plurality of antimicrobial wipes.

[0009] It is a still further object of the present invention to provide improved devices for safe handling of food which are impregnated with antimicrobials so that consumers may wipe their hands on the improved devices.

[0010] It is a further object of the present invention to provide improved devices for safe handling of food comprising a housing having an animal-shaped configuration including a dispenser, which are adapted to be located in a food handling area so that a consumer is encouraged to practice good hygiene when handling an animal food product.

[0011] It is a yet further object of the present invention to provide methods for using devices for safe handling of food comprising a housing having an animal-shaped configuration which are adapted to be located in a food handling area and which both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the housing.

[0012] It is a still further object of the present invention to provide methods for using devices for safe handling of food comprising a housing having an animal-shaped configuration including a dispenser, which are adapted to be located in a food handling area and which both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the housing.

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] In accordance with one embodiment of the present invention, a device for safe handling of food is disclosed. The device comprises in combination a dispenser assembly having an animal-shaped configuration provided with a plurality of antimicrobial wipes and at least a portion of the dispenser assembly having the animal-shaped configuration adapted to be located in a food handling area. The plurality of antimicrobial wipes of the dispenser assembly both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the dispenser assembly by using at least one of the plurality of wipes that is retrieved from the dispenser assembly. The animal-shaped configuration of the dispenser assembly is at least one of a chicken, a turkey, a pig, a cow, a lamb and a fish. A safety message is coupled to a portion
of the dispenser assembly, thereby inviting a person to practice hygiene after handling the animal food product.

In accordance with a second embodiment of the present invention, a device for safe handling of food comprises in combination a dispenser assembly including a housing having an animal-shaped configuration and a dispenser provided with a plurality of antimicrobial wipes. At least a portion of the housing having the animal-shaped configuration is adapted to be located in a food handling area. The plurality of antimicrobial wipes of the dispenser both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the housing by using at least one of the plurality of wipes that is retrieved from the dispenser. At least a portion of the housing is impregnated with an antimicrobial, thereby improving hygienic handling of the animal food product when the portion of the housing is touched by a person retrieving at least one of the plurality of wipes from the dispenser.

In accordance with a third embodiment of the present invention, a method of practicing hygiene while using a device for safe handling of food is disclosed. The method comprises the steps of providing a dispenser assembly having an animal-shaped configuration having a plurality of antimicrobial wipes, providing at least a portion of the dispenser assembly having the animal-shaped configuration is adapted to be located in a food handling area, and retrieving at least one of the plurality of wipes from the dispenser assembly, the plurality of antimicrobial wipes of the dispenser assembly both facilitating and permitting hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the dispenser assembly. Further steps of the method include providing a safety message coupled to a portion of the dispenser assembly, thereby inviting a person to practice hygiene after handling the animal food product, adapting a portion of the dispenser assembly for access to an interior portion of the dispenser assembly to permit restocking of the plurality of antimicrobial wipes, adapting a portion of the dispenser assembly for access to an interior portion of the dispenser assembly to permit retrieving of at least one of the plurality of antimicrobial wipes, opening an upper portion of the dispenser assembly, and retrieving at least one of the plurality of wipes from the dispenser assembly after handling the animal food product of the type represented by the animal-shaped configuration of the dispenser assembly.

The foregoing and other objects, features, and advantages of the invention will be apparent from the following, more detailed description of the preferred embodiments of the invention, as illustrated in the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view showing one embodiment of a device for safe handling of food comprising a dispenser assembly having a chicken-shaped configuration including at least one of a plurality of antimicrobial wipes, with a safety message coupled to a portion of the dispenser assembly and with a portion of the dispenser assembly coupled to a portion of a surface in a food handling area in accord with the invention.

FIG. 2 is a sectional view through 2-2 of a portion of the device of FIG. 1 showing a dispenser substantially inside an upper portion of an inner portion of a housing having the chicken-shaped configuration, with the upper portion of the housing coupled to a lower portion of the housing and with the dispenser including at least one of the plurality of wipes that is retrieved from the dispenser.

FIG. 3 is a perspective view showing another embodiment of a device for safe handling of food comprising a dispenser assembly having a pig-shaped configuration including at least one of a plurality of antimicrobial wipes and with a portion of the dispenser assembly adapted for coupling to a portion of a surface in a food handling area.

FIG. 4 is a perspective view showing yet another embodiment of a device for safe handling of food comprising a dispenser assembly having a cow-shaped configuration including at least one of a plurality of antimicrobial wipes.

FIG. 5 is a perspective view showing yet another embodiment of the device for safe handling of food of FIG. 1, including a housing having the chicken-shaped configuration with an upper portion of the housing in a closed position and with the upper portion of the housing in an alternate open position, and a dispenser located inside an inner portion of a lower portion of the housing, the dispenser including at least one of a plurality of antimicrobial wipes, with the safety message coupled to a portion of the housing and with a portion of the housing adapted for coupling to a portion of a surface in a food handling area (not shown) to permit retrieval of at least one of the plurality of antimicrobial wipes from the dispenser by opening the upper portion of the housing.

FIG. 6 is a perspective view showing yet another embodiment of a device for safe handling of food comprising a dispenser assembly having a lamb-shaped configuration.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

According to FIG. 1, one embodiment of a device 100 for safe handling of food comprises a dispenser assembly 10 having an animal-shaped configuration (the animal-shaped configuration shown in FIG. 1 is a chicken). The dispenser assembly 10 is provided with a plurality of antimicrobial wipes 12. At least a portion of the dispenser assembly 10 having the animal-shaped configuration is adapted to be located in a food handling area 18. The dispenser assembly 10 further comprises a connector 16 having a first end and a second end. The first end of the connector 16 is coupled to a portion of the dispenser assembly 10 and the second end of the connector 16 is coupled to a portion of the food handling area 18. The plurality of wipes 12 of the dispenser assembly 10 both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the dispenser assembly 10 by using at least one of the plurality of wipes 12 that is retrieved from the dispenser assembly 10. At least a portion of the dispenser assembly 10 may be impregnated with an antimicrobial thereby improving hygienic handling of the animal food product when the portion of the dispenser assembly 10 is touched. While the animal-shaped configuration of the dispenser assembly 10 is shown as a chicken in FIG. 1, it is understood that the animal-shaped configuration may be at least one of a chicken, a turkey, a pig (see FIG. 3), a cow
(see FIG. 4), a lamb (see FIG. 5), a fish and the like. In certain food handling areas the dispenser assembly may be a combination of several of the above described animal-shaped configurations.

Still referring to FIG. 1, the dispenser assembly having the animal-shaped configuration may comprise a plastic impregnated with an antimicrobial and the plastic is preferably a thermoplastic or a moldable plastic which may be thermoset or cured by means of an energy source such as by e-beam radiation, UV and the like. The dispenser assembly may be impregnated with at least one antimicrobial selected from the group consisting of quaternary ammonium halides, cationic bisbiguanides, chlorinated phenolic derivatives, complexes of iodine with polyvinyl pyrrolidone, ethanol and propyl alcohol solutions in water, and triclosans. Similarly, each one of the plurality of wipes may be impregnated with at least one antimicrobial selected from the group consisting of quaternary ammonium halides, cationic bisbiguanides, chlorinated phenolic derivatives, complexes of iodine with polyvinyl pyrrolidone, ethanol and propyl alcohol solutions in water, and triclosans.

Again referring to FIG. 1, a safety message may be coupled to a portion of the dispenser assembly having the animal-shaped configuration thereby inviting a person to practice hygiene after handling the animal product. The dispenser assembly comprises an upper portion having the configuration of a chicken head in FIG. 1 and a lower portion having the configuration of a chicken body in FIG. 1. The dispenser assembly further comprises a dispenser and a dispenser assembly may be adapted for access to an interior portion of the dispenser assembly to permit restocking of the plurality of antimicrobial wipes which are stored in the dispenser 14, see FIG. 2. The dispenser assembly may also be adapted for access to an interior portion of the dispenser assembly to permit retrieving of at least one of the plurality of wipes (see FIG. 5) from the dispenser. Alternatively, at least one of the plurality of wipes may be accessed from a beak of the chicken-shaped configuration (see FIGS. 1 and 2) of the dispenser assembly or a mouth of the pig-shaped configuration of the dispenser assembly (see FIG. 3) or a mouth of a cow-shaped configuration of the dispenser assembly (see FIG. 4). It is understood that at least one of the plurality of wipes may be accessed from another portion of the animal-shaped configuration of the dispenser assembly.

A portion of the dispenser assembly may further comprise a removable container for receiving each one of the plurality of wipes which are disposed after use by a person.

FIG. 2 is a sectional view of a portion of the embodiment showing the device for safe handling of food of FIG. 1. The device comprises a housing having an animal-shaped configuration (the animal-shaped configuration is shown as a chicken in FIG. 2) and the housing has an upper portion and a lower portion and includes the dispenser provided with the plurality of antimicrobial wipes. At least a portion of the housing having the animal-shaped configuration is adapted to be located in the food handling area. The plurality of wipes of the dispenser both facilitate and permit hygienic handling of an animal food product of the type represented by the animal-shaped configuration of the housing by using at least one of the plurality of wipes that is retrieved from the dispenser. The dispenser is adjacent to an interior portion of the upper portion of the housing and the dispenser is also adjacent to the lower portion of the housing. The dispenser may further comprise a hollow tube having an air-tight opening, and each one of the plurality of wipes may be retrieved from the air-tight opening of the hollow tube.

FIG. 3 is a perspective view showing another embodiment of a device for safe handling of food comprising a dispenser assembly having a pig-shaped configuration including at least one of a plurality of antimicrobial wipes and with a portion of the dispenser assembly adapted for coupling to a portion of a food handling area, similarly to the chicken-shaped configuration of FIGS. 1 and 2. One end of a connector is coupled to a portion of the dispenser assembly having the pig-shaped configuration, while a second end of the connector may be coupled to a portion of a food handling area (not shown). FIG. 4 is a perspective view showing yet another embodiment of a device for safe handling of food comprising a dispenser assembly having a cow-shaped configuration including at least one of a plurality of antimicrobial wipes, while FIG. 6 is a perspective view showing still another embodiment of a device for safe handling of food comprising a dispenser assembly having a lamb-shaped configuration. It is understood that in all respects each of the embodiments of a device 200, 300 and 400 for safe handling of food may have similar features to the embodiment of the device for safe-handling of foods as described above.

FIG. 5 is a perspective view showing yet another embodiment of the device for safe handling of food. An upper portion of the housing having a chicken-shaped configuration is shown in a closed position (see FIG. 5) and the upper portion of the housing is alternatively shown in an open position (see FIG. 5), with a dispenser located inside an inner portion of a lower portion of the housing. The dispenser includes at least one of a plurality of antimicrobial wipes, with the safety message coupled to a portion of the housing. One end of the connector is coupled to a portion of the housing and an opposite end of the connector is adapted for coupling the opposite end of the connector to a portion of a surface in a food handling area. The housing permits retrieval of at least one of the plurality of antimicrobial wipes from the dispenser by opening the upper portion of the housing after handling an animal food product of the type represented by the housing (a chicken in the case of FIG. 5).

A method of practicing hygiene while using any one of the embodiments of the device for safe handling of food comprises the steps of adapting a portion of the dispenser assembly to an interior portion of the dispenser assembly (or the housing) for access to an interior portion of the dispenser assembly (or the housing) to permit restocking of the plurality of antimicrobial wipes and adapting a portion of the dispenser assembly (or the housing) to permit retrieving of at least one of the plurality of antimicrobial wipes. Furthermore, the method comprises the steps of opening an upper portion of the dispenser assembly (or the housing) having the animal-shaped
configuration and retrieving at least one of the plurality of wipes 12 from the dispenser assembly 10 (or the housing 30) after handling the animal food product of the type represented by the animal-shaped configuration of the dispenser assembly 10 (or the housing 30).

[0031] While the disclosure has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that the foregoing and other changes in form and details may be made therein without departing from the spirit and scope of the disclosure. For example, the dispenser assembly having the animal-shaped configuration may be substantially solid with a dispenser forming an integral part of the dispenser assembly or alternatively, as described above the dispenser assembly may comprise a substantially hollow housing having the animal-shaped configuration including the dispenser supported in an interior portion of the housing. The dispenser may also be located on an exterior portion of the housing having the animal-shaped configuration.

What is claimed is:

1. A device for safe handling of food, comprising in combination: a dispenser assembly having an animal-shaped configuration provided with a plurality of antimicrobial wipes, at least a portion of said dispenser assembly having said animal-shaped configuration adapted to be located in a food handling area, said plurality of antimicrobial wipes of said dispenser assembly both facilitating and permitting hygienic handling of an animal food product of the type represented by said animal-shaped configuration of said dispenser assembly by using at least one of said plurality of wipes that is retrieved from said dispenser assembly.

2. The device according to claim 1 further comprising at least a portion of said dispenser assembly having said animal-shaped configuration impregnated with an antimicrobial thereby improving hygienic handling of said animal food product when said portion of said dispenser assembly is touched.

3. The device according to claim 1 wherein said animal-shaped configuration of said dispenser assembly is at least one of a chicken, a turkey, a pig, a cow, a lamb, and a fish.

4. The device according to claim 2 wherein said animal-shaped configuration of said dispenser assembly impregnated with said antimicrobial is at least one of a chicken, a turkey, a pig, a cow, a lamb, and a fish.

5. The device according to claim 1 wherein at least one of said plurality of wipes is impregnated with an antimicrobial selected from the group consisting of quaternary ammonium halides, cationic bisguanidines, chlorinated phenolic derivatives, complexes of iodine with polyvinyl pyrrolidone, ethanol and propyl alcohol solutions in water, and triclosans.

6. The device according to claim 2 wherein a portion of said dispenser assembly having said animal-shaped configuration is impregnated with an antimicrobial selected from the group consisting of quaternary ammonium halides, cationic bisguanidines, chlorinated phenolic derivatives, complexes of iodine with polyvinyl pyrrolidone, ethanol and propyl alcohol solutions in water, and triclosans.

7. The device according to claim 6 wherein said dispenser assembly having said animal-shaped configuration comprises a plastic impregnated with said antimicrobial.

8. The device according to claim 1 further comprising a safety message coupled to a portion of said dispenser assembly having said animal-shaped configuration thereby inviting a person to practice hygiene after handling said animal food product.

9. The device according to claim 1 further comprising a portion of said dispenser assembly having said animal-shaped configuration adapted for access to an interior portion of said dispenser assembly to permit restocking of said plurality of antimicrobial wipes.

10. The device according to claim 1 further comprising a portion of said dispenser assembly having said animal-shaped configuration adapted for access to an interior portion of said dispenser assembly to permit retrieving of at least one of said plurality of antimicrobial wipes.

11. A device for safe handling of food, comprising in combination: a dispenser assembly including a housing having an animal-shaped configuration and a dispenser provided with a plurality of antimicrobial wipes, at least a portion of said housing having said animal-shaped configuration adapted to be located in a food handling area, said plurality of antimicrobial wipes of said dispenser both facilitating and permitting hygienic handling of an animal food product of the type represented by said animal-shaped configuration of said housing by using at least one of said plurality of wipes that is retrieved from said dispenser.

12. The device according to claim 11 further comprising at least a portion of said housing having said animal-shaped configuration impregnated with an antimicrobial thereby improving hygienic handling of said animal food product when said portion of said housing is touched by a person retrieving at least one of said plurality of wipes from said dispenser.

13. The device according to claim 11 wherein said animal-shaped configuration of said housing is at least one of a chicken, a turkey, a pig, a cow, a lamb, and a fish.

14. The device according to claim 12 wherein said animal-shaped configuration of said housing impregnated with said antimicrobial is at least one of a chicken, a turkey, a pig, a cow, a lamb, and a fish.

15. A method of practicing hygiene while using a device for safe handling of food comprising the steps of:

- providing a dispenser assembly having an animal-shaped configuration having a plurality of antimicrobial wipes;

- providing at least a portion of said dispenser assembly having said animal-shaped configuration adapted to be located in a food handling area; and

- retrieving at least one of said plurality of wipes from said dispenser assembly both facilitating and permitting hygienic handling of an animal food product of the type represented by said animal-shaped configuration of said dispenser assembly.

16. The method according to claim 15 further comprising the steps of:

- providing at least a portion of said dispenser assembly having said animal-shaped configuration impregnated with an antimicrobial thereby improving hygienic handling of said animal food product;
touching said portion of said dispenser assembly; and retrieving at least one of said plurality of wipes from said dispenser assembly.

17. The method according to claim 16 further comprising the steps of:

providing a safety message coupled to a portion of said dispenser assembly having said animal-shaped configuration thereby inviting a person to practice hygiene after handling said animal food product;

adapting a portion of said dispenser assembly for access to an interior portion of said dispenser assembly to permit restocking of said plurality of antimicrobial wipes; and

18. The method according to claim 17 further comprising the steps of:

opening an upper portion of said dispenser assembly having said animal-shaped configuration; and retrieving at least one of said plurality of wipes from said dispenser assembly after handling said animal food product of the type represented by said animal-shaped configuration of said dispenser assembly.

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