A multi-chamber container for a beverage is described. The container includes a center chamber that contains a first beverage constituent, and at least one resealable opening for dispensing the beverage. Also included is at least one peripheral compartment that contains at least one second beverage constituent, where the peripheral compartment is physically adjacent to the center chamber, and where the peripheral compartment and center chamber are separated by at least one initial seal. The at least one second beverage constituent is at least partially dissolved into the first beverage constituent upon an at least temporarily breaking of the at least one initial seal by a force that is applied by a consumer of the beverage. Also described is a method for mixing beverage components in the aforementioned multi-chamber container.
USER SELECTABLE FLAVORED DRINK
CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of priority to U.S. Patent Application No. 61/209,365, filed on Mar. 4, 2009, the entire disclosure of which is incorporated by reference herein as if set forth herein in its entirety.

FIELD OF THE INVENTION

[0002] The invention relates to fitness and flavored drinks available from vending machines and, more particularly, to a user selectable multi-flavored drink.

BACKGROUND OF THE INVENTION

[0003] A vending machine provides various snacks, beverages, and other products to consumers. The idea is to vend products without need of a cashier. After paying, a product may become available, for example, by: the machine releasing it, so that it falls in an open compartment accessible to the purchaser, or a machine-pour into a container, or placed into a container by the customer, such as by unlocking of a door, drawer, turning of a knob, etc. Sometimes the product is not just released, but also prepared; this may be the case, for example, with vended coffee, french fries, or a ticket that is printed after paying.

[0004] A full line vending company may set up several types of vending machines that sell a wide range of products. The types of products include candy, cookies, chips, fresh fruit, milk, cold food, coffee, bottles and/or cans of soda, and even frozen products like ice cream. These products can be sold from various types of vending machines that include coffee, snack, cold food, 20-oz. bottle machines, and glass-front bottle machines.

[0005] With the increase in healthy vending and specialized vending, as well as the safety features on many vending machines, these machines have become increasingly unwieldy and/or the number of selections in the machines has become very limited. In particular, when a flavored beverage is purchased, the drinks are pre-mixed. For example, vitamin-water takes up a great deal of space in a vending machine, but still presents limited options to a consumer. And, with an offering of approximately fifteen flavors of water by some manufacturers/sellers, it is not uncommon for an entire machine to be devoted solely to vitamin water. Thus, a need exists for a way to reduce the number of necessary shelved items while maintaining the number of selections in an overall product choice.

[0006] Further, there is doubt as to whether the added vitamins actually stay stable after the bottles spend an extended amount of time on the shelves before customers drink them. Some believe that the added vitamins might break down under the many dramatic temperatures changes experienced during transported from warehouses to stores. Thus, a further need exists to protect the vitamins added, such as by maintaining the vitamins separately until the last minute before consumption.

BRIEF SUMMARY OF THE INVENTION

[0007] A multi-chamber container for a beverage is described. The container includes a center chamber that contains a first beverage constituent, and at least one resealable opening for dispensing the beverage. Also included is at least one peripheral compartment that contains at least one second beverage constituent, where the peripheral compartment is physically adjacent to the center chamber, and where the peripheral compartment and center chamber are separated by at least one initial seal. The at least one second beverage constituent is at least partially dissolved into the first beverage constituent upon an at least temporarily breaking of the at least one initial seal by a force that is applied by a consumer of the beverage. Also described is a method for mixing beverage components in the aforementioned multi-chamber container.

BRIEF DESCRIPTION OF THE FIGURES

[0008] Understanding of the present invention will be facilitated by consideration of the following detailed description of the preferred embodiments of the present invention taken in conjunction with the accompanying drawings, in which like numerals refer to like parts, and wherein:

[0009] FIG. 1 is a cross section of a bottle according to an aspect of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0010] It is to be understood that the figures and descriptions of the present invention have been simplified to illustrate elements that are relevant for a clear understanding of the present invention, while eliminating, for the purpose of clarity, many other elements found in prepackaged foods and drinks. Those of ordinary skill in the art may recognize that other elements and/or steps are desirable and/or required in implementing the present invention. However, because such elements and steps are well known in the art, and because they do not facilitate a better understanding of the present invention, a discussion of such elements and steps is not provided herein. The disclosure herein is directed to all such variations and modifications to such elements and methods known to those skilled in the art.

[0011] According to an aspect of the present invention there is integrated into a container, such as a bottle, (n) number of chambers, which chambers preferably contain one or more of a flavor, nutrients, or other individual substituent parts (hereinafter “constituents”) of food stuffs, liquids, and most particularly beverages. Once a drink is purchased or otherwise obtained, a user may, for example, depress, crack or otherwise execute an opening of a seal from the external side of the chamber/of the bottle—which opening of a seal releases the constituent from, for example, 1-N of the chambers into the container. The user may then shake, mix, stir, or otherwise act to create a custom drink. Any number of chambers may be suitably provided that may be readily fit within, and externally accessible from the container, such as 8 chambers. 8 chambers may provide, for example, up to 40,320 possible combinations.

[0012] According to an aspect of the present invention, certain ingredients or constituents that are undesirable for a segment of the populations, such as artificial sweeteners for people who are pregnant, certain stimulants for professional athletes, for example, may thus be provided for use by some users, but may be selectively left unopened by other users within a chamber, which other users may be provided with more suitable constituents for selection instead.

[0013] Referring now to FIG. 1, there is shown a cut away of a container according to an aspect of the present invention.
As may be seen in FIG. 1, a set of compartments 10 may surround a center chamber 15 of the bottle 5. Set of compartments 10 may include any number of compartments. The exemplary embodiment shown in the picture includes eight compartments included in set of compartments 10. The eight compartments shown include compartment A 20, B 22, C 24, D 26, E 28, F 30, G 32, and H 34. Each of these individual compartments may have a methodology for breaking the compartment to thereby incorporate at least a portion of the contents of the compartment as constituents with the contents of the center chamber 15. These compartments may all be of substantially the same size and shape, or, such as to accommodate the quantities of constituents in the compartments to be added in, compartments may have two or more discrete sizes and shapes.

[0014] Container 5 may be made in the shape of a standard bottle, for example. Container 5 may be made from plastics, recycled plastics, aluminum, or other material, as would be evident to those possessing an ordinary skill in the pertinent arts, and may preferably be formed of a deformable substance that may allow pressure to be exerted against the compartments from a user-applied force external to the container. Container 5 may be sealed with a screw on cap (not shown), removable tab, flip top, or other mechanism to seal the contents of center chamber 15, and/or of the compartments, inside. Container 5 may also have incorporated therein protection from light sources, such as by darkening or opaquing the bottle material, and may also be designed to reduce the effects on the contents of temperature change, such as that which may be experienced during shipping.

[0015] Set of compartments 10 may be made from a material similar to that of container 5. Compartments 10 may also share a common wall with center chamber 15, or be immersed within center chamber 15. Compartments 10 also may be accessible when the seal with a screw cap is opened. Compartments 10 may alternatively be formed of materials that are different from that of container 5, including formation of one or more substances that may dissolve over time in the presence of the elements in the center chamber, and/or of one or more substances that may dissolve in the presence of other elements, once released, such as those elements in other compartments.

[0016] Center chamber 15 may be a self-supporting compartment and share no common walls with compartments 10. Compartments 10 may also be sealed such that no direct access to compartments 10 may be achieved through normal operation. Set of compartments 10, like many bottles found in the art, may be made from materials which reduce or limit the environmental factors that the contents of the compartments may be placed under. This includes limiting the amount of light entering the compartments and may also include incorporating materials to minimize the effects temperatures may have on the contents.

[0017] The compartments 10 may include the individual components of a flavored beverage, for example. These compartments may be labeled or color coded so that the user may be able to identify the particulars of the compartment contents.

[0018] In an exemplary embodiment, as is known to those possessing a skill in the pertinent arts, vitamin water is generally composed of water, nutrients, flavor, and cocktails, for example. Other ingredients that may be either combined within a compartment or placed separately in a compartment include distilled water, crystalline fructose, citric acid, electrolytes, natural flavors and vitamins, including but not limited to, vitamin C, vitamin B3, vitamin B4, vitamin B5, vitamin B6, vitamin B12 and vitamin E, for example. Constituents may take the form of a solid, liquid or gas for combination with the ingredients of the center chamber.

[0019] In such a configuration, according to the present invention, the center chamber may be filled with the water necessary for the vitamin water; certain nutrients or cocktails may be included in one of the compartments. For example, salt, taurine, magnesium and potassium may be included in one or more compartments, either individually or in solution, such that upon activation this compartment would combine with the water in the center chamber to produce the desired flavored beverage using the constituents in the selected compartment(s). Similarly, the various compartments may include sweeteners, such as one compartment including high fructose corn syrup and/or sugar, a second compartment including Equal® and a third compartment including Sweet and Low®. Alternatively, the various sweeteners may include only one per bottle, such as wherein the myriad of different shelves in a vending machine are organized to provide sweetener and/or flavor options by selection of the product.

[0020] Once the center chamber and the surrounding compartments are filled with the requisite constituents, a mechanism to control the combination with that found in the center chamber in preparation for consumption may be provided. This selection mechanism may take the form of a key relationship, such that turning a mechanical item on the outside of the container may selectively open one of the compartments, thereby combining the constituents therein with the center chamber ingredients. Additionally and alternatively, each compartment itself may have an individual key toggle. Further, the mechanism may be designed like that of a glow stick, in that selective pressure or depressing adjacent a compartment, may crack the compartment, thereby allowing the constituents to combine in the center chamber. Alternatively, the mechanism used may be a plunger type mechanism, such as with buttons near the cap to activate a plunger for each compartment. Conceptually similar to the select an ink color pen, this method may selectively activate one of the compartments for combination with the center chamber.

[0021] Once the constituents are activated to be mixed with the ingredients of the center chamber, it may be necessary to shake, or stir a stirrer within or without the container, or provide other force to the product in order to facilitate appropriate mixing of all desired ingredients. The duration and amount of such external force may be proportional to the type of activation mechanism chosen and how easily the selected constituents are able to exit the activate compartments. Also, the force may be relative to the type of constituents that are included within the compartments, such as when less force is necessary if all the constituents are in a liquid form, as opposed to the incorporation of granular sugar, which is likely to require more shaking of the bottle to facilitate mixing.

[0022] Those of ordinary skill in the art may recognize that many modifications and variations of the present invention may be implemented without departing from the spirit or scope of the invention. Thus, it is intended that the present invention covers the modifications and variations of this invention provided they come with in the scope of the appended claims and their equivalents.
1. A multi-chamber container for a beverage, comprising: a first chamber that contains a first beverage constituent, and comprising at least one resealable opening for dispensing the beverage; and at least one secondary chamber that contains at least one second beverage constituent, wherein the secondary chamber is physically adjacent to the first chamber, and wherein the secondary chamber and first chamber are separated by at least one initial seal; wherein the at least one second beverage constituent is at least partially dissolved into the first beverage constituent upon an at least temporarily breaking of the at least one initial seal by a force applied by a consumer of the beverage.

2. The multi-chamber container of claim 1, wherein the at least one opening for dispensing the beverage is resealable more than one time.

3. The multi-chamber container of claim 2, wherein the resealable opening includes at least one selected from the group consisting of a screw-on cap, a tab and a flip-top.

4. The multi-chamber container of claim 1, wherein selected ones of the at least one secondary chambers are composed of different materials.

5. The multi-chamber container of claim 4, wherein a composition of each of the at least one secondary chambers is in accordance with a composition of the at least one second beverage constituent.

6. The multi-chamber container of claim 1, wherein the force is applied solely to an exterior of the multi-chamber container.

7. The multi-chamber container of claim 6, wherein the initial seal is at least partially cracked by the force.

8. The multi-chamber container of claim 6, wherein the force comprises a depression.

9. The multi-chamber container of claim 1, further comprising a plunger mechanism that is activated by the force applied by the consumer of the beverage.

10. The multi-chamber container of claim 6, wherein the force comprises a turnable key mechanism.

11. The multi-chamber container of claim 10, further comprising a key toggle.

12. The multi-chamber container of claim 1, wherein a mixing of the first and second beverage constituents is metered.

13. The multi-chamber container of claim 12, wherein the metering is according to consumer preference.

14. A method for admixing a plurality of components of a beverage within a multi-chamber container, comprising: adding at least a portion of a first beverage component contained within at least one secondary chamber of the multi-chamber container to a second beverage component contained within a primary chamber of the multi-chamber container by at least temporarily breaking at least one sealed barrier separating the at least one secondary chamber and the primary chamber; and admixing the first beverage component and second beverage component prior to consumption by a user.

15. The method of claim 14, wherein the at least temporarily breaking at least one sealed barrier includes applying a force to the multi-chamber container.

16. The method of claim 15, wherein the applying a force comprises depressing an exterior of the multi-chamber container.

17. The method of claim 14, wherein the admixing comprises dissolving the first beverage component in the second beverage component.

18. The method of claim 15, wherein the at least temporarily breaking comprises activating a plunging mechanism.

19. The method of claim 15, wherein the applying a force comprises turning a key.

20. The method of claim 19, wherein the turning the key further comprises toggling the key.

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