Claims

1. A resealable spout for accessing and removing the fresh sterile water within an unopened coconut having a layer of coconut meat on the inside surface of the coconut shell, comprising:
a grommet member being positioned on the exterior shell of the coconut around a coconut aperture that has been tooled into the coconut shell so as to pass through the coconut shell while preserving the sterility of the coconut water within the coconut, the grommet member having a valve bore aligned with the coconut aperture, and a collar positioned around the coconut aperture to substantially engage the coconut aperture exterior periphery;
the grommet member further including structure that engages with the coconut such that the sterility of the coconut water within the coconut shell is preserved; and
a plunger member that is used to provide access to the coconut water through the grommet member bore, said plunger member comprising an elongated shaft portion for insertion into and sliding within the grommet member valve bore, and, at its distal end, a piercing section for piercing through the layer of coconut meat inside of the coconut shell, said shaft portion having a length sufficient to enable the piercing portion to pass completely through the layer of coconut meat,
wherein said plunger member is coupled with the coconut and its applied grommet member during shipping and storage, wherein the apertured coconut is sealed to protect the coconut water within said coconut from contamination.

2. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 1, wherein the coconut aperture extends through the coconut shell and partly through the layer of coconut meat inside the shell.

3. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 1, wherein said grommet member has an elongated portion that extends inwardly from said grommet collar, and wherein said structure comprises said elongated portion of the grommet member having a length which terminates close to the inside surface of the coconut shell.

4. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 1, wherein said structure comprises a portion of said plunger member inserted partly through the layer of coconut meat inside of the coconut.

5. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 1, wherein said structure comprises a membrane spanning said grommet member valve bore and said piercing member is extendable to pierce said membrane.

6. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 3, wherein said grommet member comprises: a valve plug having a valve plug bore positioned within the tooled coconut aperture, and having a valve plug collar and spaced apart valve plug flange having an external wall extending therebetween; and a plunger sleeve having a plunger sleeve bore that forms said grommet member valve bore, and wherein said plunger sleeve further provides a plunger sleeve collar and spaced apart plunger sleeve flange having an external wall extending therebetween, where said plunger sleeve collar engages the valve plug collar when positioned within said valve plug bore.

7. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 3, wherein said coupling of the plunger member and the coconut with its applied grommet member comprises said plunger member being tethered to said grommet member.

8. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 3, wherein said coupling of the plunger member and the coconut with its applied grommet member comprises said plunger member being inserted into said grommet member valve bore.

9. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 3, wherein said structure comprises a portion of said plunger member inserted partly through the layer of coconut meat inside of the coconut.

10. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 3, wherein said structure comprises a membrane spanning said grommet member valve bore and said piercing member is extendable to pierce said membrane.

11. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 4, wherein said structure comprises a membrane spanning said grommet member valve bore and said piercing member is extendable to pierce said membrane.

12. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 5, wherein said grommet member comprises: a valve plug having a valve plug bore positioned within the tooled coconut aperture, and having a valve plug collar and spaced apart valve plug flange having an external wall extending therebetween; and a plunger sleeve having a plunger sleeve bore that forms said grommet member valve bore, and wherein said plunger sleeve further provides a plunger sleeve collar and spaced apart plunger sleeve flange having an external wall extending therebetween, where said plunger sleeve collar substantially engages the valve plug collar when positioned within said valve plug bore.

13. The resealable spout for accessing and removing the fresh sterile water within an unopened coconut as recited in claim 5, wherein said coupling of the plunger member and the coconut with its applied grommet member comprises said plunger member being tethered to said grommet member.

14. A method for providing a coconut, having a seed-case, a layer of coconut meat inside of the seed-case, and an internal cavity containing sterile coconut water, in a condition that is ready for a consumer to access and remove the sterile water within the coconut, the method comprising: forming an aperture that extends through the seed-case while maintaining the sterility of the coconut water; affixing to the coconut, so as to surround the aperture, a grommet member that has a central passageway aligned with the aperture, the grommet member structure engaging with the coconut aperture periphery so as to cooperate with the coconut in a manner to preserve the sterility of the coconut water; and coupling, with the coconut, a plunger member that is used to provide access to the coconut water through the grommet member central passageway.

15. The method of claim 14, wherein the aperture extends through the coconut shell and partly through the layer of coconut meat inside the shell.

16. A consumer-ready coconut product, based on a coconut having a seed-case, a layer of coconut meat inside of the seed-case, and an internal cavity containing sterile coconut water, the product being in a condition that is ready for a consumer to access and remove the sterile water within the coconut, the product comprising: the coconut having a formed aperture that extends through the seed-case while maintaining the sterility of the coconut water; a grommet member affixed to the coconut, so as to surround the aperture, the grommet member having a central passageway aligned with the aperture, the grommet member not extending through the layer of coconut meat, thereby maintaining the sterility of the coconut water; and a plunger member that is coupled with the coconut.

17. The product of claim 16, wherein the aperture extends through the coconut shell and partly through the layer of coconut meat inside the shell.

18. The product of claim 16, wherein the plunger member includes: a plunger member advancing structure located at a first end of the plunger member; and an elongated lance member, coupled to the plunger member, the lance member is slidable within the grommet member and has a length that is sufficient to penetrate through the layer of coconut meat and into the internal cavity containing the sterile water, when it is inserted through the aperture and the plunger member is advanced in the direction of the grommet member, wherein the apertured coconut with coupled plunger member is sealed to protect the coconut water within the coconut from contamination during shipping and storage.

19. The method as claimed in claim 14, wherein the plunger member comprises a collar located at a first end of the plunger member; and an elongated lance member that is slidable within the grommet member and has a length that is sufficient to penetrate through the layer of coconut meat and into the internal cavity containing the sterile water, when inserted through the aperture.

20. The method as recited in claim 14, wherein the step of coupling the plunger member comprises inserting the plunger member through the collar member by an amount so that the end of the plunger member only partially penetrates the meat of the coconut.

21. The method as recited in claim 14, wherein the step of coupling the plunger member comprises tethering the plunger member to the grommet member.

22. The method as recited in claim 14, wherein the grommet member comprises a valve plug collar and spaced apart valve plug flange connected by an external wall extending therebetween.

23. The method as recited in claim 22, where said valve plug collar when positioned within the coconut aperture substantially engages the coconut aperture exterior periphery.

24. The method as recited in claim 14, wherein said coconut is huskless.

25. The method as recited in claim 23, where said valve plug flange engages the coconut aperture interior periphery thereby preventing lateral movement of said valve seat within said coconut aperture.

26. A method for providing a self-contained, consumer-ready product from a coconut that has a seed-case, a layer of coconut meat inside of the seed-case, and an internal cavity containing sterile coconut water, in a condition that is ready for a consumer to access and remove the sterile water within the coconut, the method comprising:

(a) forming an aperture that extends through the seed-case of the coconut but does not extend through the layer of coconut meat, thereby maintaining the sterility of the coconut water;
(b) forming a coconut pre-product in a first location, by affixing to the apertured coconut a closure member that is adapted to close the aperture and to be easily removed by a consumer, in a second location different from the first location, without using any tool, the closure member likewise not extending through the layer of coconut meat, thereby maintaining the sterility of the coconut water; and

(c) providing a self-contained, consumer-ready coconut product, by associating, with the coconut pre-product of paragraph (b) a pre-selected plunger member that includes an elongated lance member that is (1) configured to slide within the aperture after the consumer has removed the closure member in the second location and (2) has a length that is sufficient to penetrate through the layer of coconut meat and into the internal cavity containing the sterile water, when inserted through the aperture and pushed in the direction of the coconut center by the consumer.

27. A method as recited in claim 26, wherein the closure member comprises a removable plug member that closes the aperture.

28. A method as recited in claim 27, wherein the plug member cooperates with a grommet member that surrounds the aperture.

29. A method as recited in claim 27, wherein the closure member comprises a single piece.

30. A method as recited in claim 27, wherein the closure member comprises a plurality of pieces.

31. A method as recited in claim 27, wherein the closure member comprises a cap fitting on the grommet member.

32. A method as recited in claim 26, wherein the closure member comprises a plug member that contains a frangible membrane that is removable by perforation with the plunger member.

33. A method as recited in claim 27, wherein the distal end of the elongated lance member of the plunger member comprises a sharp edge, and the plunger member comprises a hollow center recess for receiving severed coconut meat.

34. A method as recited in claim 28, wherein the grommet member comprises a generally flat flange member that sits essentially flush with the coconut shell when the grommet member is affixed to the coconut.

35. A method as recited in claim 26, further comprising:
(d) placing the consumer-ready product of paragraph (c) into commerce to be distributed to consumers.

36. A self-contained, consumer-ready coconut product from a coconut that has a seed-case, a layer of coconut meat inside of the seed-case, and an internal cavity containing sterile coconut water, in a condition that is ready for a consumer to access and remove the sterile water within the coconut, the coconut product produced by the method as defined by claim 26.