CLAIMS

1. A personal portable fluid dispensing apparatus, comprising:

(a) a vessel component for retaining fluid;

(b) a dispenser component in communication with the vessel, the dispenser comprising:

(i) multiple wedge-shaped receptacles configured to retain two or more wedge-shaped packets that contain ingestible materials that can be selectively added to the vessel, in which the ingestible materials include at least two different material types;

(ii) a striker configured to contact a packet in a wedge-shaped receptacle; in which the apparatus has a height of about 20.3 cm to 38.1 cm (8 to 15 inches) and a cross-sectional dimension of about 6.4 cm to 12.7 cm (2.5 to 5 inches); and

(c) a mixer component mounted as a separate component within the vessel, and

in which the mixer is configured to be activated in response to motion of the apparatus;

in which the apparatus comprises a handle or lever, and the handle or lever is rotated downward to dispense the ingestible materials into the vessel.

2. An apparatus according to Claim 1, further comprising: a base component attached below to the vessel.

3. An apparatus according to Claim 1, in which the dispenser contains three receptacles configured to retain wedge-shaped packets.

4. An apparatus according to Claim 1, in which the mixer is configured to be activated in response to the ingestible materials being dispensed into the vessel.

5. An apparatus according to Claim 1, in which the mixer is configured to be automatically activated in response to sensing movement of the apparatus.

6. An apparatus according to Claim 10, in which the mixer is configured to be activated in response to a detected motion of the apparatus.

7. An apparatus according to Claim 1, in which one or more operation parameters of the apparatus can be manipulated manually or remotely.

8. An apparatus according to Claim 7 in which one or more operation parameters include temperature of fluid within the vessel, addition of one or more ingestible materials to the vessel, outputs to a user of the apparatus, exposure of contents to ultraviolet light for sterilization, backlighting of contents with variable colour and/or brightness, addition of a secondary fluid, blending of the fluid and the ingestible materials, or scanning packets of ingestible materials via an RFID chip or QR code scanning.

9. An apparatus according to Claim 1, in which the base component and vessel component are releasably affixed, in which the base component and vessel component are releasably engaged by threaded attachment, and in which the apparatus comprises a battery component and a processor.

10. An apparatus according to Claim 1, in which the apparatus and an associated application assess one or more of: use parameters, user stored demographics, stored user preferences, user location, motion impact to the apparatus, orientation, pressure, and direction of the apparatus, accelerometer reading, strain gauge reading, thermistor reading and optimal hydration based on body weight, exercise, and/or ambient temperature.

11. An apparatus according to Claim 7, in which the use parameters include:

levels of fluid contained in the apparatus;

amount of ingestible materials contained in the apparatus;

type of ingestible materials contained in the apparatus;

temperature of fluid contained in the apparatus;

power supply levels of the apparatus;

location of available proximate fluid supplies;

record of user consumption and type of fluid and ingestible materials; and

schedule of user consumption of fluid and ingestible materials.

12. An apparatus according to Claim 1, in which the apparatus comprises a handle or lever rotably coupled to the vessel component, in which the handle or lever is mechanically connected to the striker and is rotated downward to dispense the ingestible materials into the vessel component by piercing a lidding material that seals the ingestible materials, in which the handle or lever is rotated in an opposite direction to blend the ingestible materials and the fluid contained in the vessel component.

13. A personal portable fluid dispensing apparatus, comprising:

(a) a vessel component for retaining fluid;

(b) a dispenser component in communication with the vessel, the dispenser comprising:

(i) one or more receptacles configured to retain one or more packets that contain ingestible materials that can be selectively added to the vessel;

(ii) a striker configured to contact a packet in a receptacle;

in which the apparatus has a height of about 20.3 cm to 38.1 cm (8 to 15 inches) and a cross-sectional dimension of about 6.4 cm to 12.7 cm (2.5 to 5 inches); and

(c) a mixer mounted as a separate component within the vessel, and in which the mixer is configured to be activated in response to motion of the apparatus.

14. An apparatus according to Claim 13, further comprising: a base attached below to the vessel.

15. An apparatus according to Claim 13, in which the mixer is configured to be activated in response to a detected motion of the apparatus.

16. A personal portable fluid dispensing apparatus, comprising:

(a) a vessel component for retaining fluid;

(b) a mixer that is configured to be automatically activated in response to sensing movement of the apparatus and mounted as a separate component to the vessel;

(c) a lever rotatably and mechanically coupled to the vessel,

in which the apparatus has a height of 15.2 cm to 63.5 cm (6 to 25 inches) and a cross-sectional dimension of about 6.4 cm to 12.7 cm (2.5 to 5 inches).

17. An apparatus according to Claim 16, further comprising a dispenser in communication with the vessel, the dispenser comprising one or more receptacles configured to retain one or more packets that contain ingestible materials that can be selectively added to the vessel component.

18. An apparatus according to Claim 16, further comprising a base attached below to the vessel component.

19. An apparatus according to Claim 17, further comprising: a striker configured to pierce through the one or more packets, in which the lever is mechanically connected to the striker to activate the striker.

20. An apparatus according to Claim 1, in which the apparatus comprises a controller and a sensor unit, and the mixer is configured to be activated via the controller and sensor unit in response to motion of the apparatus.