CLAIMS

What is claimed is:

1. A dispenser for producing a food or beverage liquid product from a frozen contents in a receptacle, the dispenser comprising:

a chamber configured to hold a receptacle defining an enclosed inner volume containing a frozen liquid contents;

a dilution liquid inlet configured to supply a dilution liquid to the inner volume of the receptacle when held in the chamber;

a perforator configured to perforate the receptacle and form a product outlet from the receptacle for a food or beverage liquid product; and

an agitator configured to impart motion to the receptacle that increases a flow path from the dilution liquid inlet to the product outlet taken by at least a portion of dilution liquid, when supplied, relative to a flow path from the dilution liquid inlet to the product outlet taken by the portion of dilution liquid without the imparted motion; wherein

the chamber has a central axis and the imparted motion causes each of the dilution inlet and the product outlet to change its location about the central axis of the chamber.

2. The dispenser of claim 1, wherein the motion caused by the agitator further increases the thermal transfer rate between the frozen contents and the supplied dilution liquid.

3. The dispenser of claim 1, wherein the motion caused by the agitator further increases the average duration of time the supplied dilution liquid flows in the inner volume of the receptacle during at least a portion of the dispense cycle while the agitator imparts motion.

4. The dispenser of claim 1, wherein the motion imparted by the agitator comprises a rotary motion.

5. The dispenser of claim 1, wherein the inlet configured to supply a dilution liquid to the inner volume of the receptacle is located above the product outlet.

6. The dispenser of claim 1, wherein the dispenser further comprises a computer processor and computer readable memory storing instructions that when executed by the computer processor cause the dispenser to control of at least one of:

a duration of motion imparted to the receptacle by the agitator,

a timing of imparting motion to the receptacle by the agitator

an amount of dilution liquid supplied to the inner volume of the receptacle,

a timing of a supply of dilution liquid to the inner volume of the receptacle,

perforating the receptacle to form a product outlet.

7. The dispenser of claim 1, wherein the agitator comprises at least one of a motor and a solenoid.

8. The dispenser of claim 1, wherein the chamber comprises a stabilizer configured to stabilize the receptacle during imparted motion.

9. The dispenser of claim 1, wherein the chamber has a central axis, and the dispenser further comprises a chamber mount configured to rotate the chamber about the central axis.

10. The dispenser of claim 4, wherein the rotary motion comprises reciprocating motion.