FIG. 17 is a diagram showing a structure of a decompression chamber in the apparatus for preparing the instant steamed rice according to an embodiment of the inventive concept.

[Mode of the Inventive concept]

Provided is an apparatus for preparing an instant steamed rice and an instant steamed rice, the apparatus includes a supply module for supplying rice, other ingredients, and containers to the apparatus for preparing the instant steamed rice; a cooking module having a predetermined space therein so that a predetermined palette passes therethrough and maintaining a predetermined pressure and temperature environment to perform cooking of the rice and other ingredients, and a transfer module for transferring the palette in the cooking module,

wherein the supply module includes: the palette having a predetermined size to which the container may be inserted; a container supply device for inserting one or more standardized containers to the palette; and a constant amount supply device for supplying rice and ingredients to the container that is inserted in the palette,

wherein the cooking module includes: a primary water supply chamber for supplying water to the rice and the ingredients in the container that is inserted in the palette; a compression chamber disposed behind the primary water supply chamber and formed of a sealed steam chamber of high pressure to provide the container with high pressure environment and to perform as a pressure ballast by blocking an external atmospheric environment and post cooking environment from each other; a sterilization chamber disposed behind the compression chamber and spraying steam to the rice and ingredients in the container under high pressure and high temperature environment to cook the rice and the other ingredients and to eliminate bacteria remaining in the rice or the other ingredients; a secondary water supply chamber disposed behind the sterillzation chamber and supplying water of high temperature to the rice and the other ingredients in the container so as to prevent propagation of the bacteria, and performing as a pressure ballast by blocking a pressurized environment in the sterillzation chamber and the post cooking environment from each other; a rice cooking chamber disposed behind the secondary water supply chamber and maintaining the high pressure environment to perform cooking of the rice and the other ingredients in the container; and a decompression chamber disposed behind the rice cooking chamber, having a

FIG. 17 is a diagram showing a structure of a decompression chamber in the apparatus for preparing the instant steamed rice according to an embodiment of the inventive concept.

FIG. 18 is a diagram showing the step that palette enter the compression chamber 220 from outside.

FIG. 19 is a diagram showing the step that pressure in the compression chamber is adjusted.

FIG. 20 is a diagram showing the step that moving the palette from the compression chamber to the sterilization chamber.

FIG. 21 is a diagram showing the step that adjusting pressure of the secondary water supply chamber.

FIG. 22 is a diagram showing the step that moving the palette 10 from the sterilization chamber 230 to the secondary water supply chamber.

FIG. 23 is a diagram showing the step that adjusting pressure of the secondary water supply chamber.

FIG. 24 is a diagram showing the step that transferring the palette from the secondary water supply chamber to the rice cooking chamber.

FIG. 25 is a diagram showing the step that adjusting the pressure of the decompression chamber.

FIG. 26 is a diagram showing the step that moving the palette from the rice cooking chamber to the decompression chamber.

FIG. 27 is a diagram showing the step that discharging the palette 10 from the decompression chamber.

[Mode of the Inventive concept]

Provided is an apparatus for preparing an instant steamed rice and an instant steamed rice, the apparatus includes a supply module for supplying rice, other ingredients, and containers to the apparatus for preparing the instant steamed rice; a cooking module having a predetermined space therein so that a predetermined palette passes therethrough and maintaining a predetermined pressure and temperature environment to perform cooking of the rice and other ingredients, and a transfer module for transferring the palette in the cooking module,

wherein the supply module includes: the palette having a predetermined size to which the container may be inserted; a container supply device for inserting one or more standardized containers to the palette; and a constant amount supply device for supplying rice and ingredients to the container that is inserted in the palette,

wherein the cooking module includes: a primary water supply chamber for supplying water to the rice and the ingredients in the container that is inserted in the palette; a compression chamber disposed behind the primary water supply chamber and formed of a sealed steam chamber of high pressure to provide the container with high pressure environment and to perform as a pressure ballast by blocking an external atmospheric environment and post cooking environment from each other; a sterilization chamber disposed behind the compression chamber and spraying steam to the rice and ingredients in the container under high pressure and high temperature environment to cook the rice and the other ingredients and to eliminate bacteria remaining in the rice or the other ingredients; a secondary water supply chamber disposed behind the sterillzation chamber and supplying water of high temperature to the rice and the other ingredients in the container so as to prevent propagation of the bacteria, and performing as a pressure ballast by blocking a pressurized environment in the sterillzation chamber and the post cooking environment from each other; a rice cooking chamber disposed behind the secondary water supply chamber and maintaining the high pressure environment to perform cooking of the rice and the other ingredients in the container; and a decompression chamber disposed behind the rice cooking chamber, having a