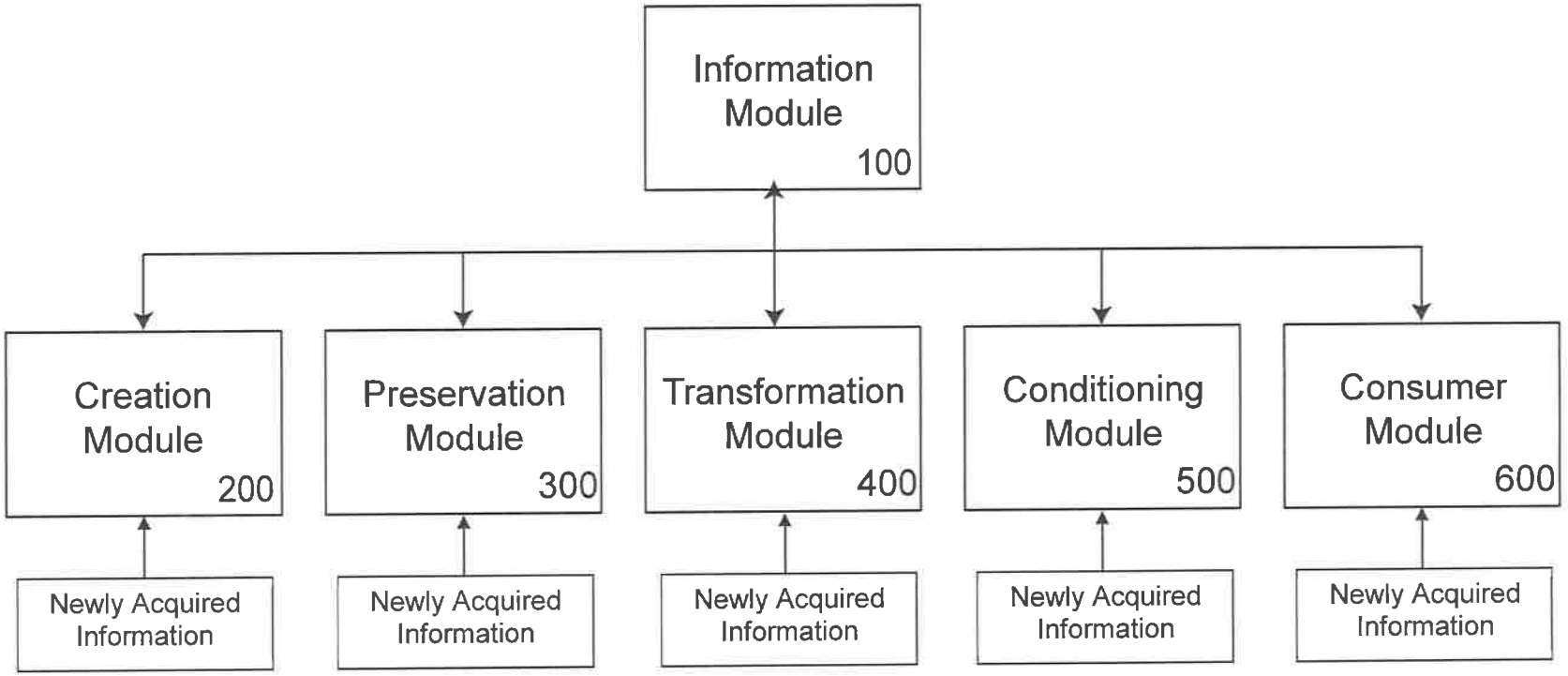


Nutritional Substance Supply System 10

Figure 1

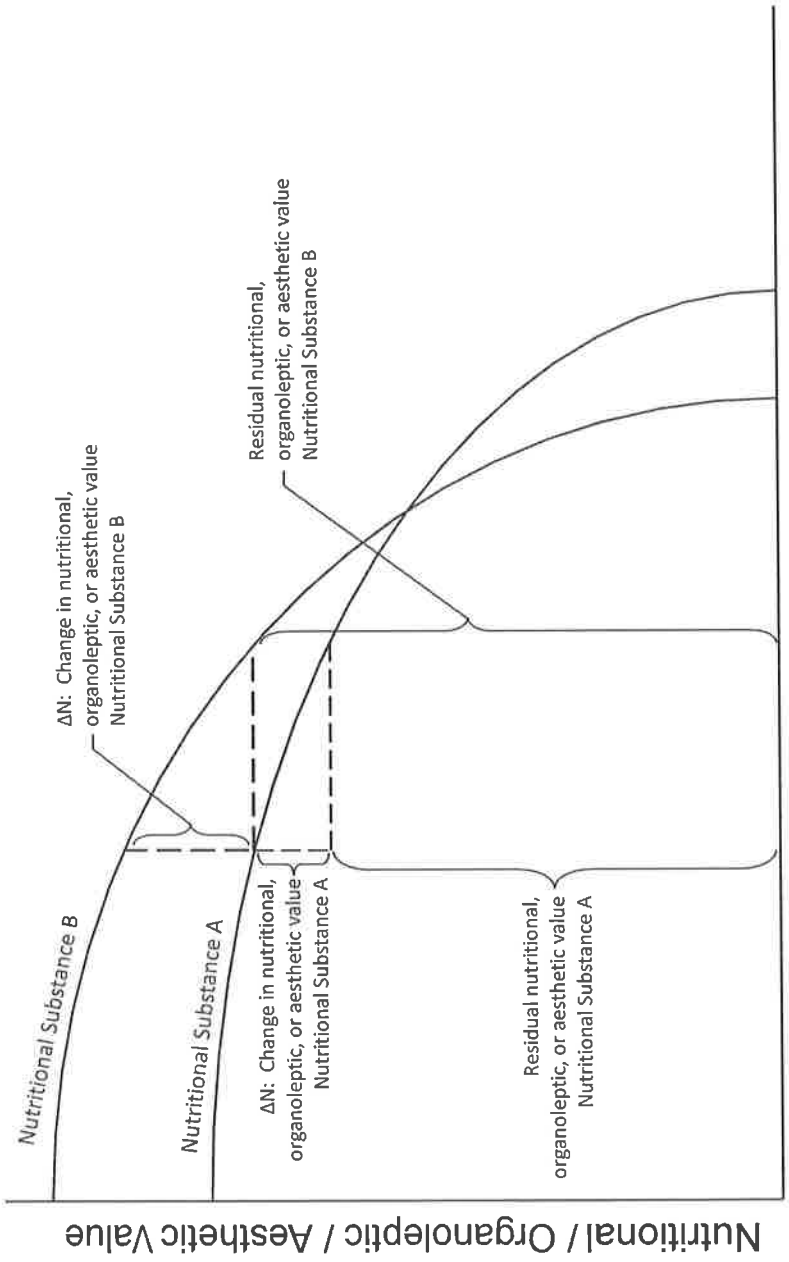
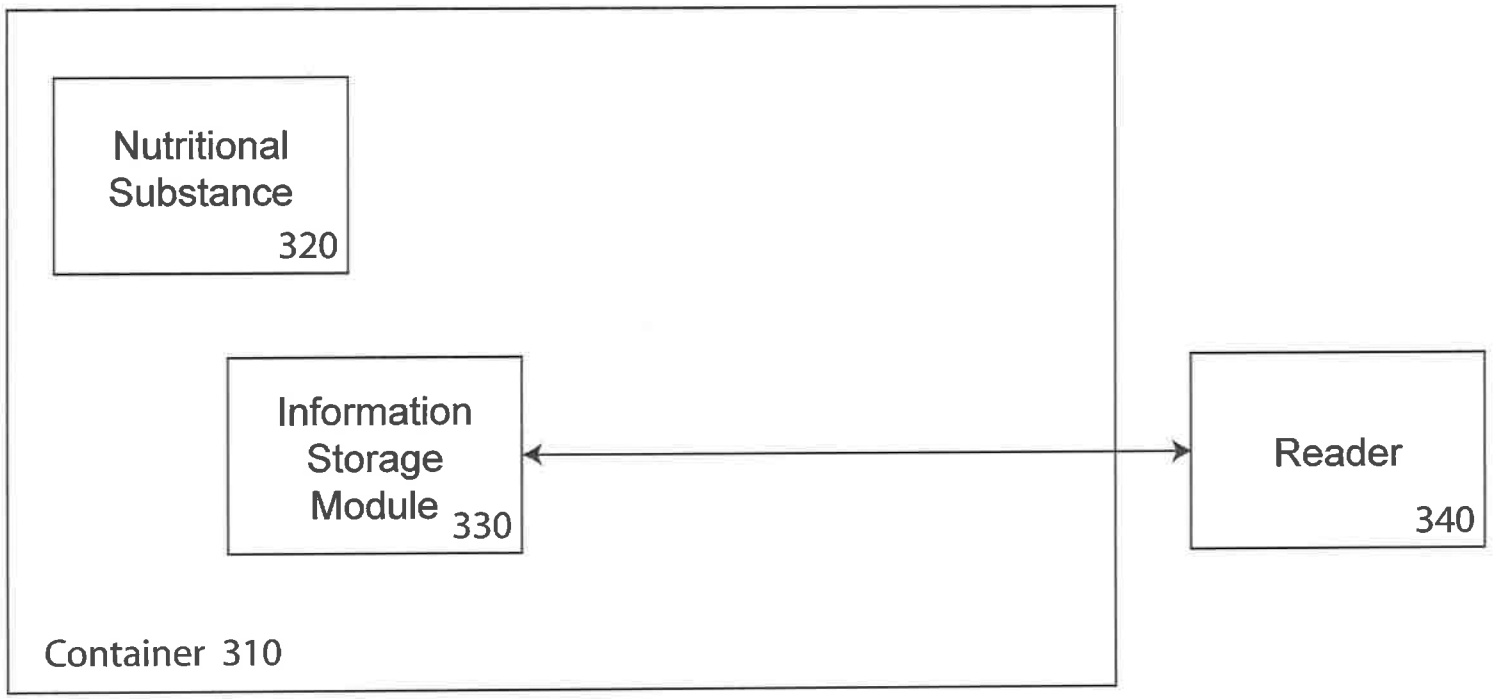

Nutritional / Organoleptic / Aesthetic Value
Change in Condition such as Time / Temperature / Exposure
Nutritional Substance B
Nutritional Substance A
ΔN: Change in nutritional, organoleptic, or aesthetic value Nutritional Substance B
ΔN: Change in nutritional, organoleptic, or aesthetic value Nutritional Substance A
Residual nutritional, organoleptic, or aesthetic value Nutritional Substance B
Residual nutritional, organoleptic, or aesthetic value Nutritional Substance A

Figure 2



Preservation Module 300

Figure 3

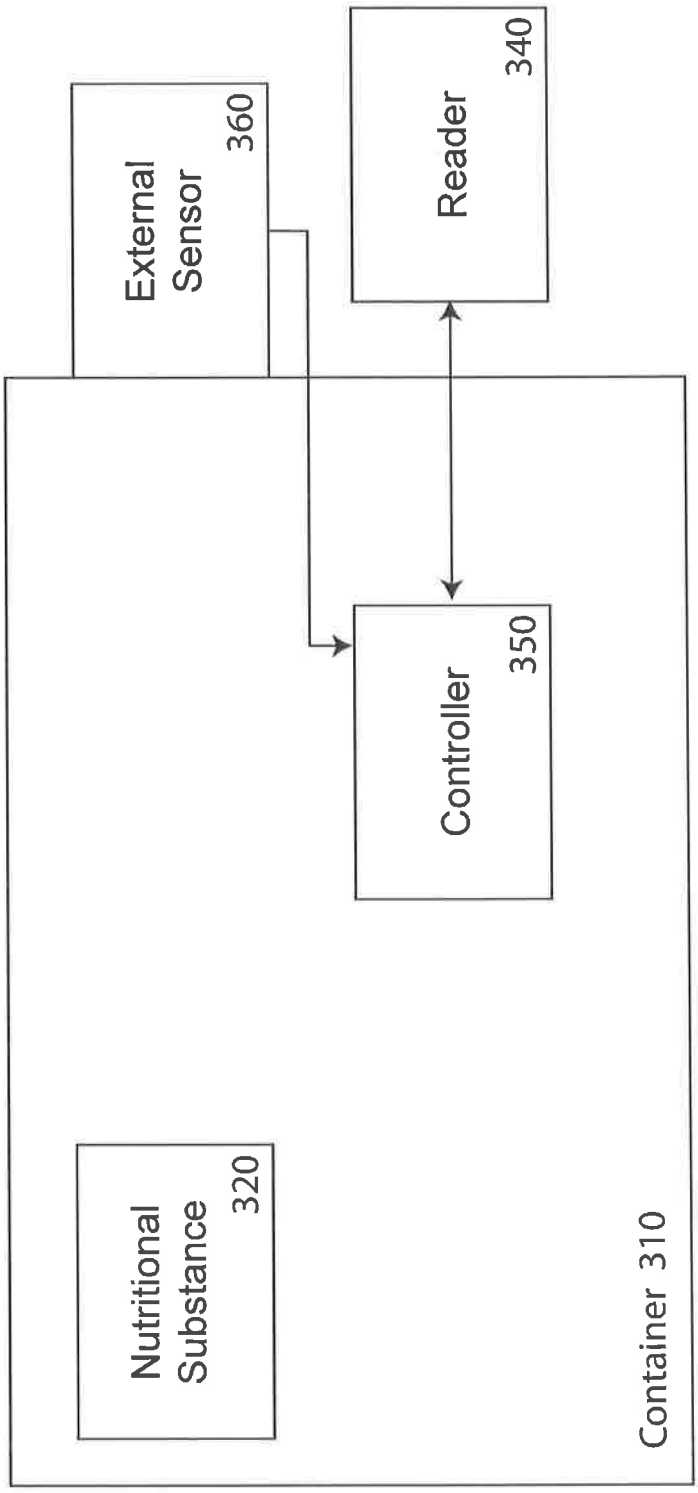
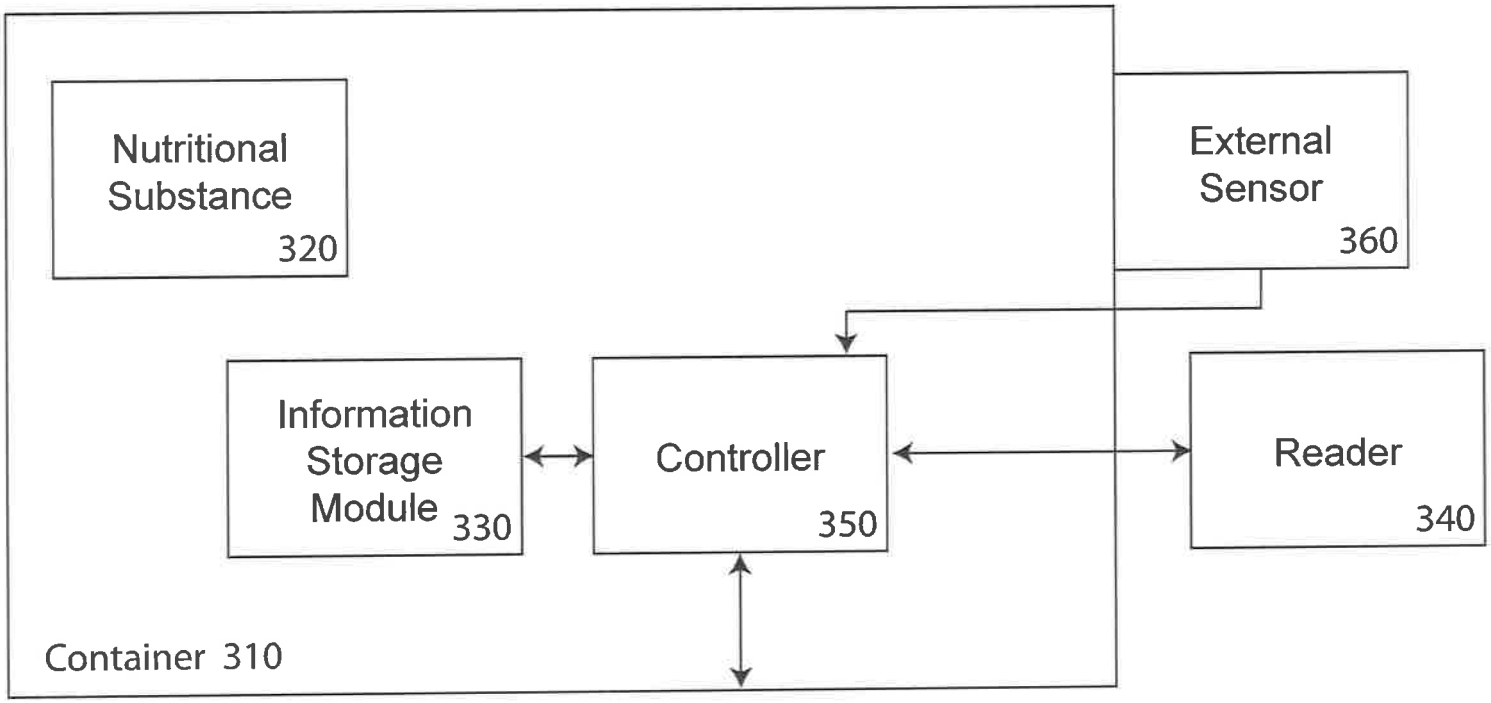
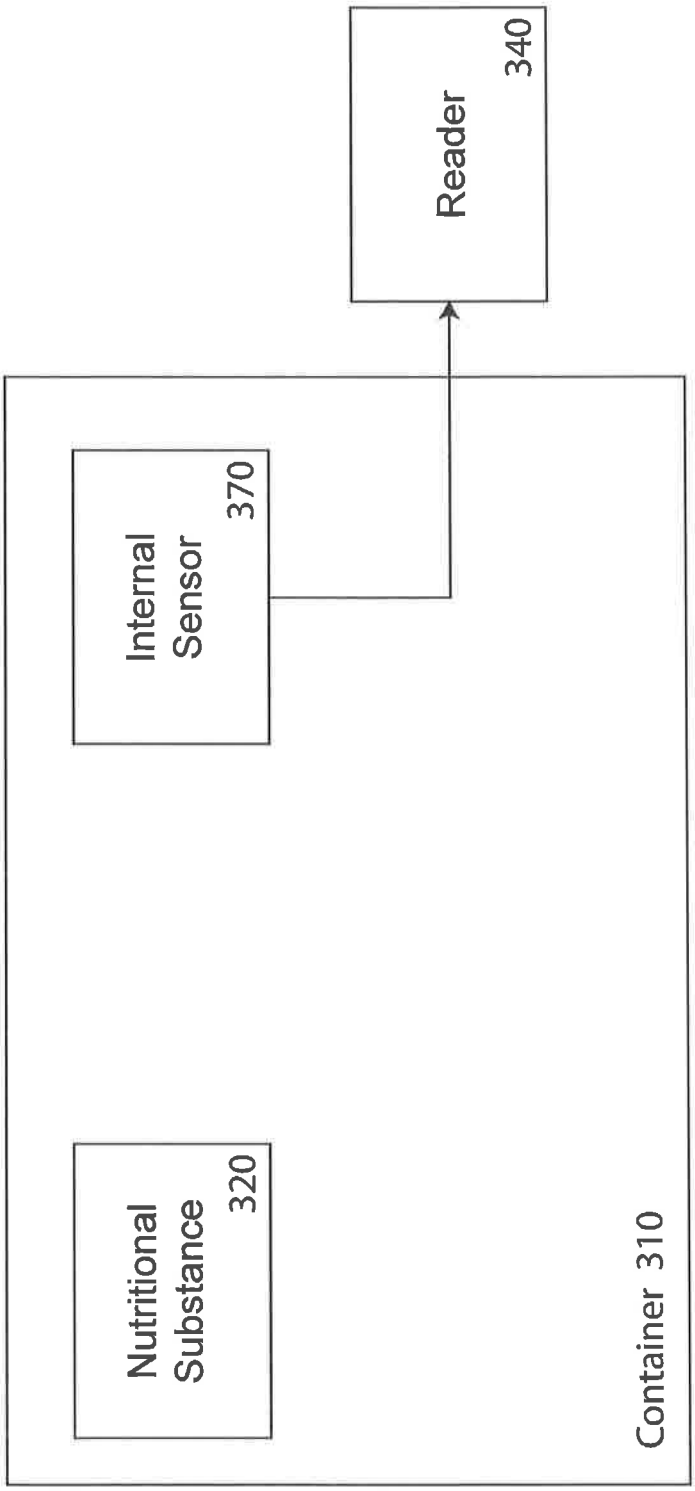

External Sensor
360
Reader
340
Controller
350
Nutritional Substance
320
Container 310
Preservation Module 300

Figure 4



Preservation Module 300

Figure 5



Preservation Module 300

Figure 6

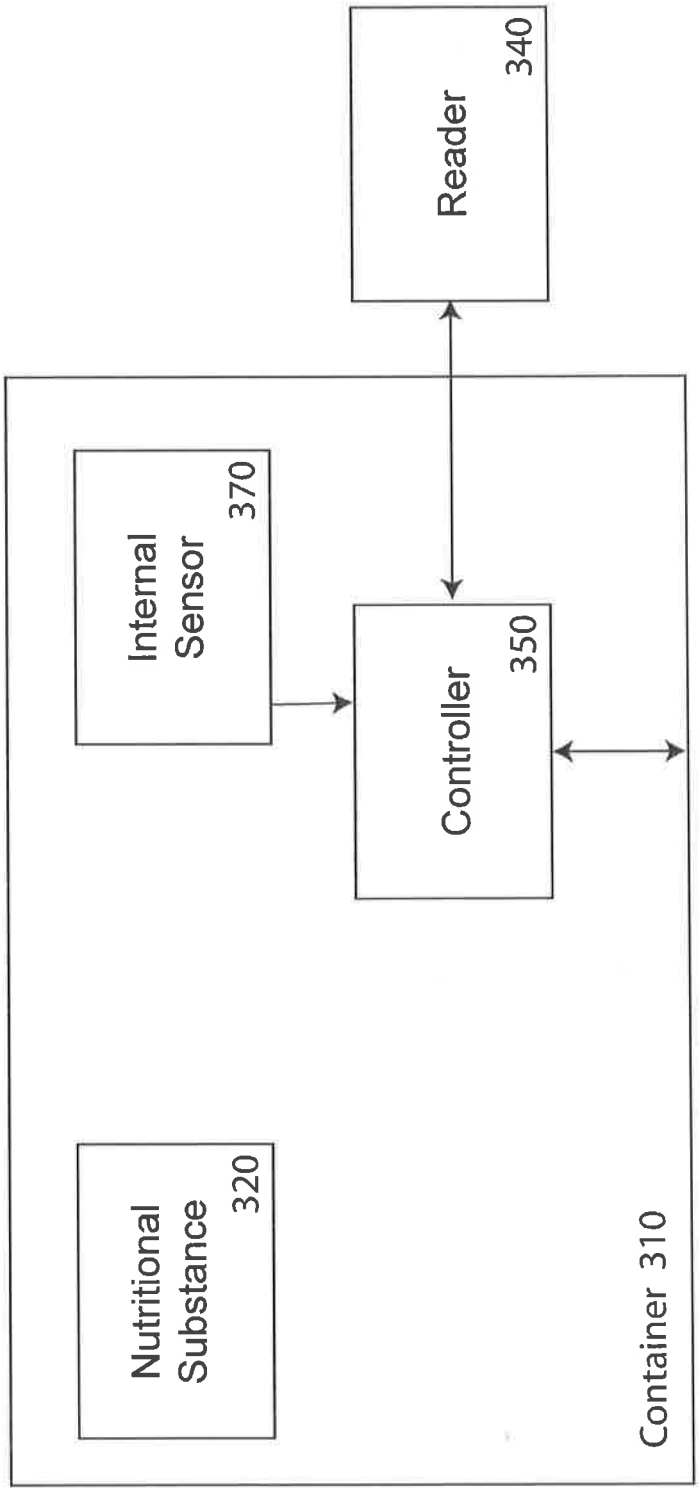
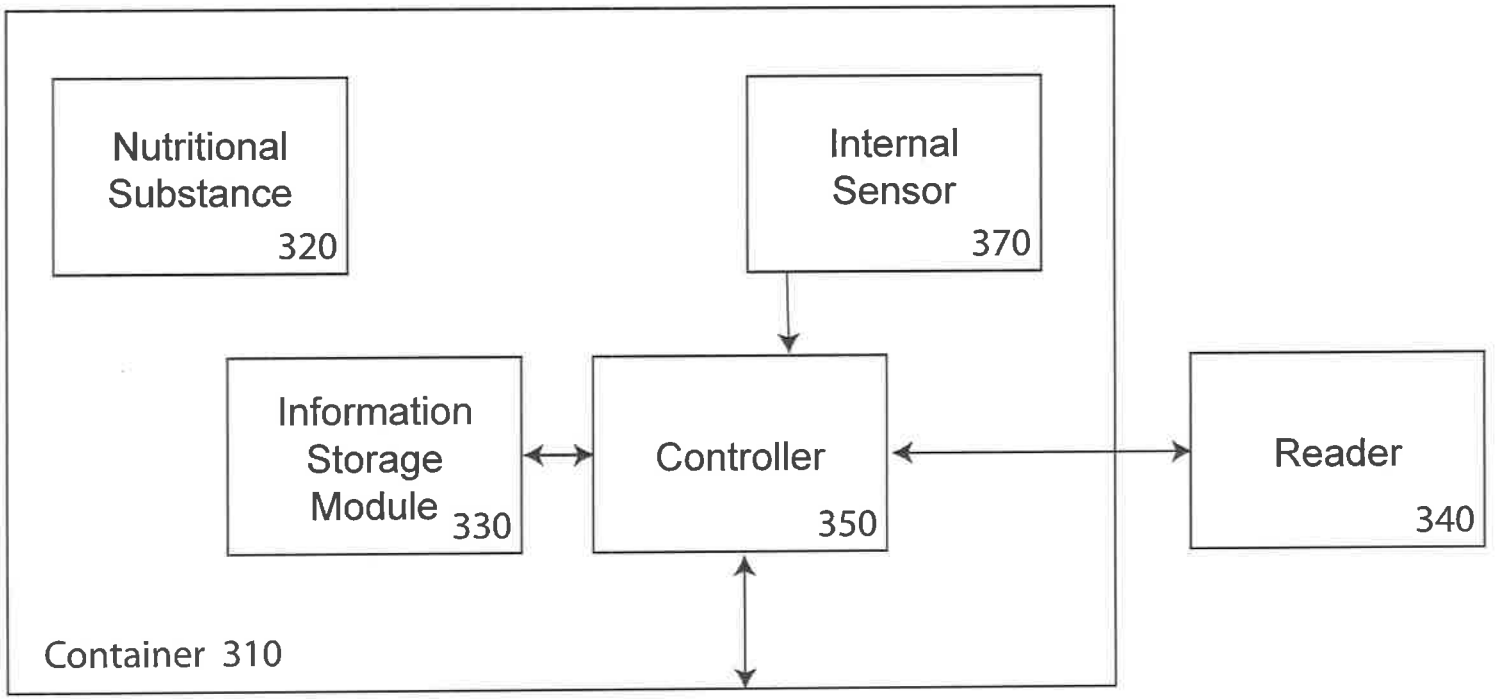

Reader
340
Internal
Sensor
370
Controller
350
Nutritional
Substance
320
Container 310
Preservation Module 300

Figure 7



Preservation Module 300

Figure 8

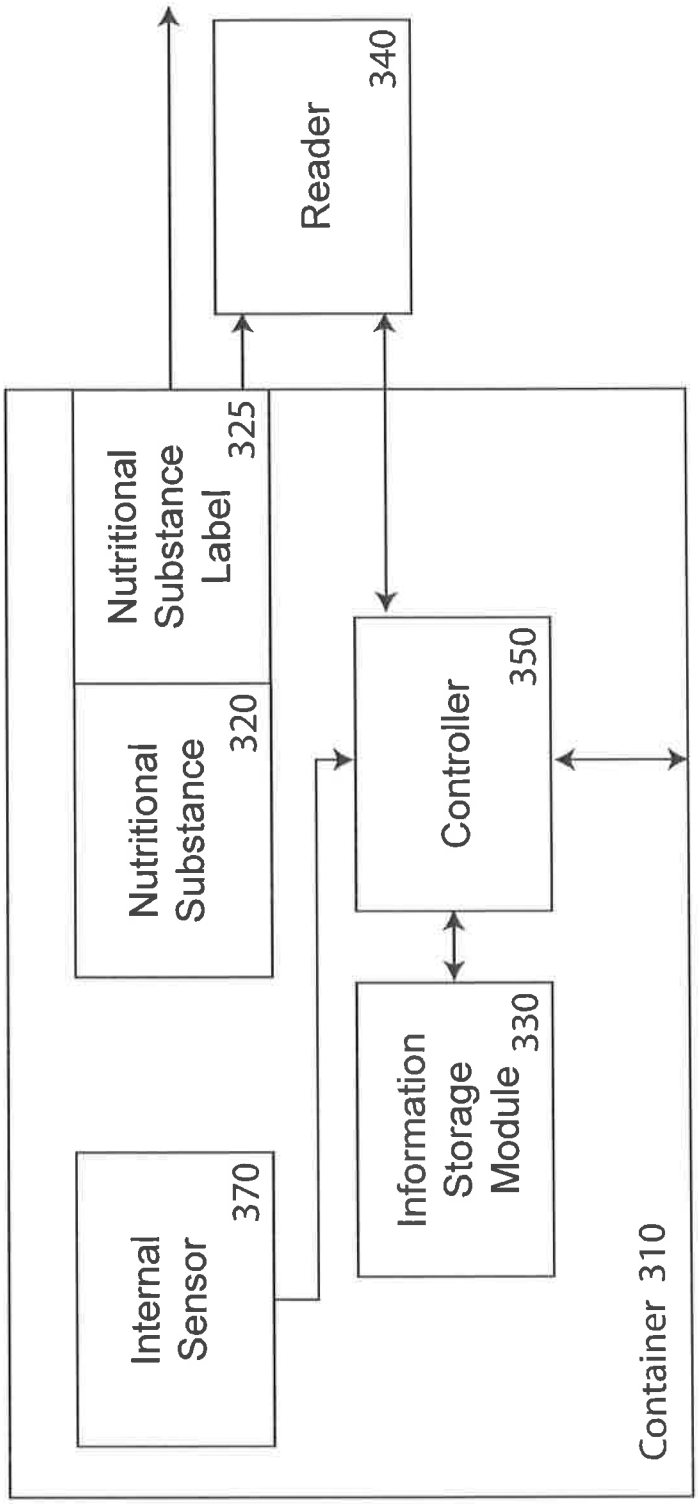
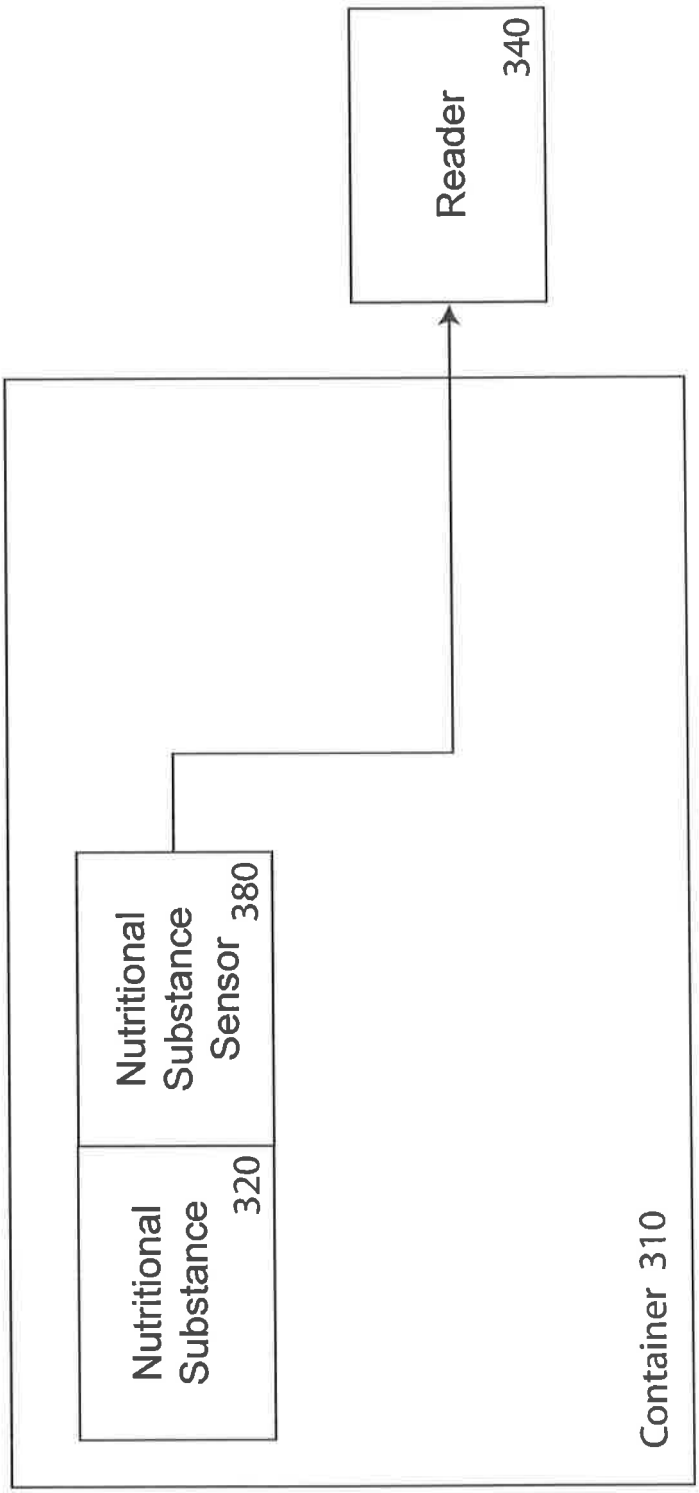
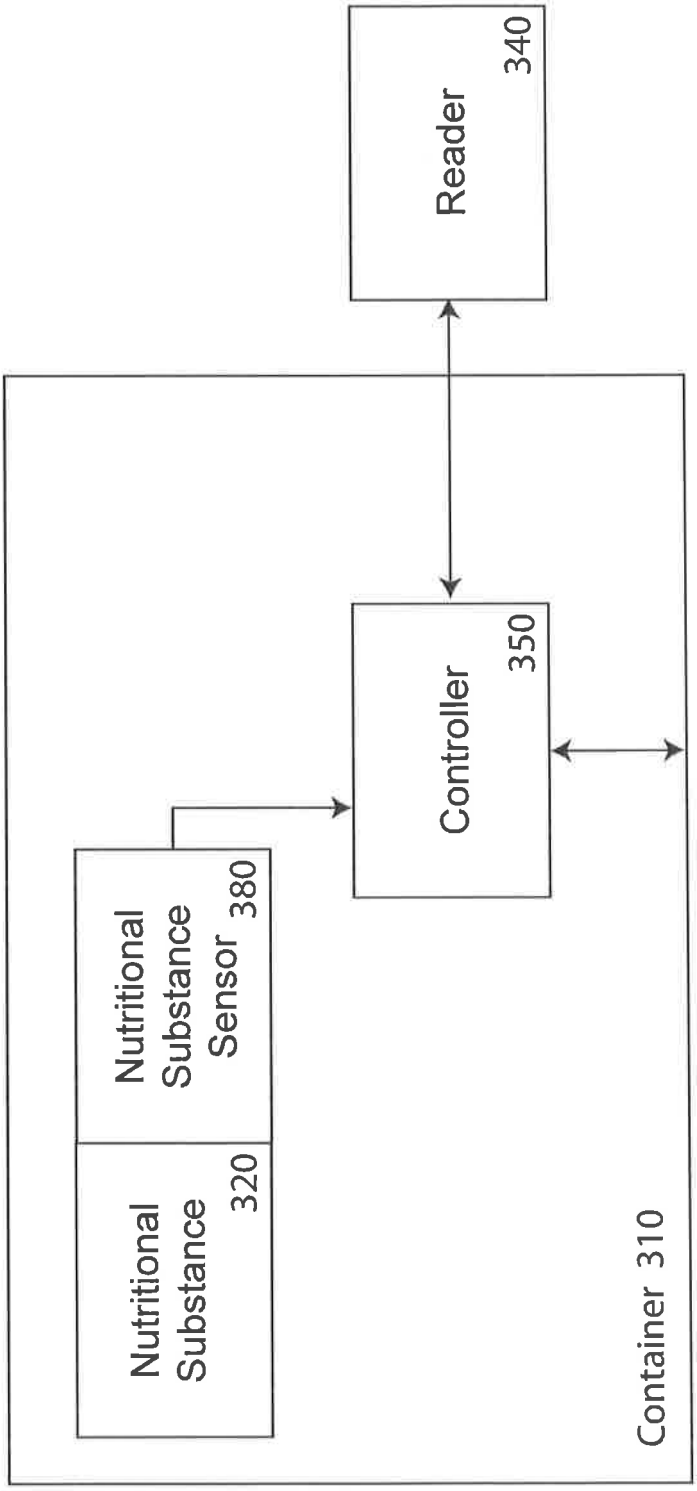

Reader
340
Nutritional Substance Label
325
Nutritional Substance
320
Controller
350
Information Storage Module
330
Internal Sensor
370
Container 310
Preservation Module 300

Figure 9



Preservation Module 300

Figure 10



Preservation Module 300

Figure 11

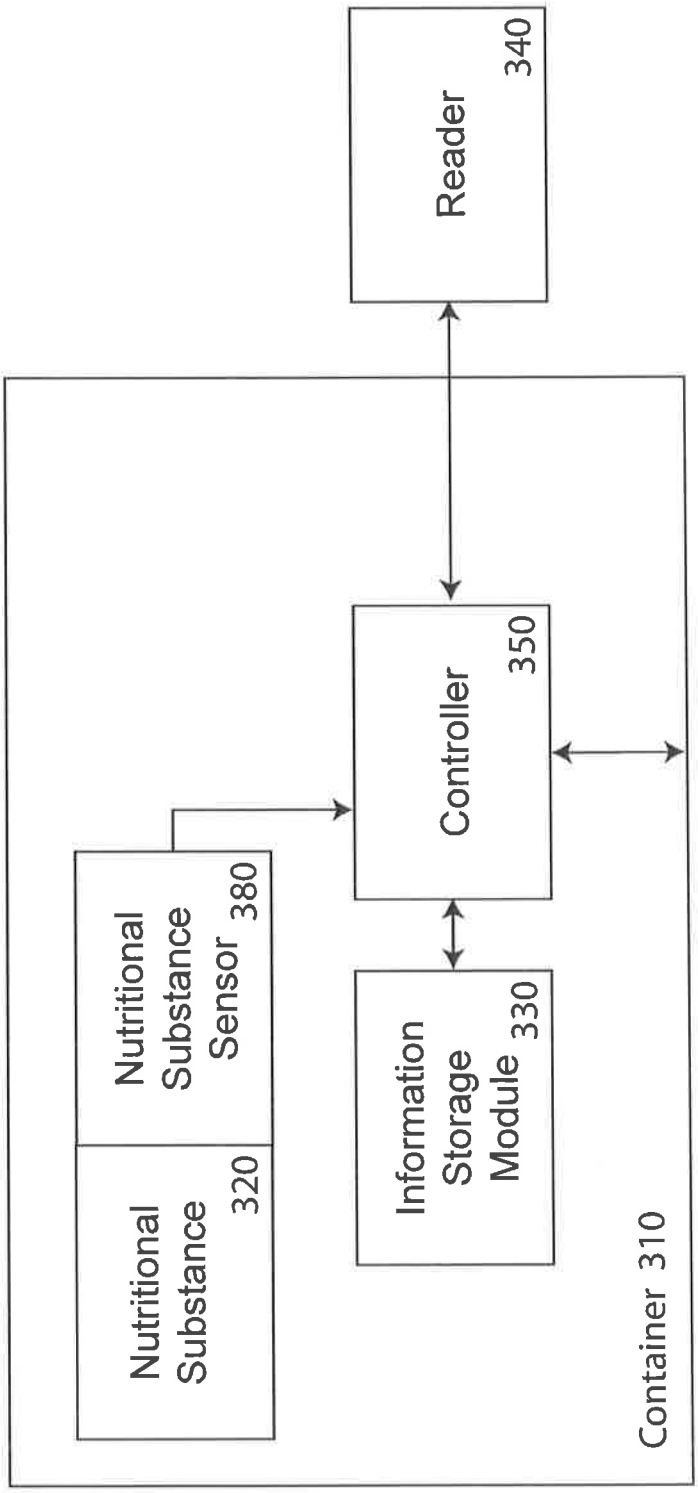
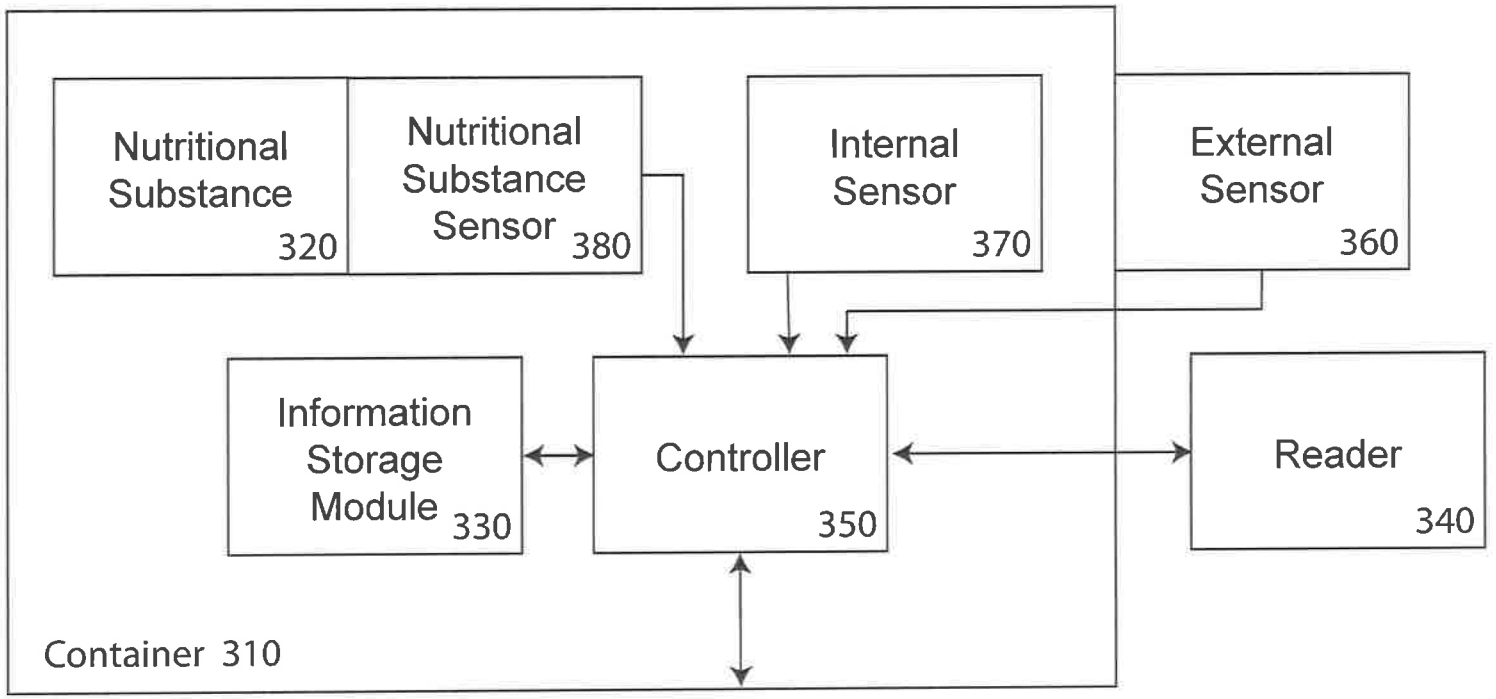

Reader
340
Controller
350
Nutritional Substance Sensor
380
Nutritional Substance
320
Information Storage Module
330
Container 310
Preservation Module 300

Figure 12



Preservation Module 300

Figure 13

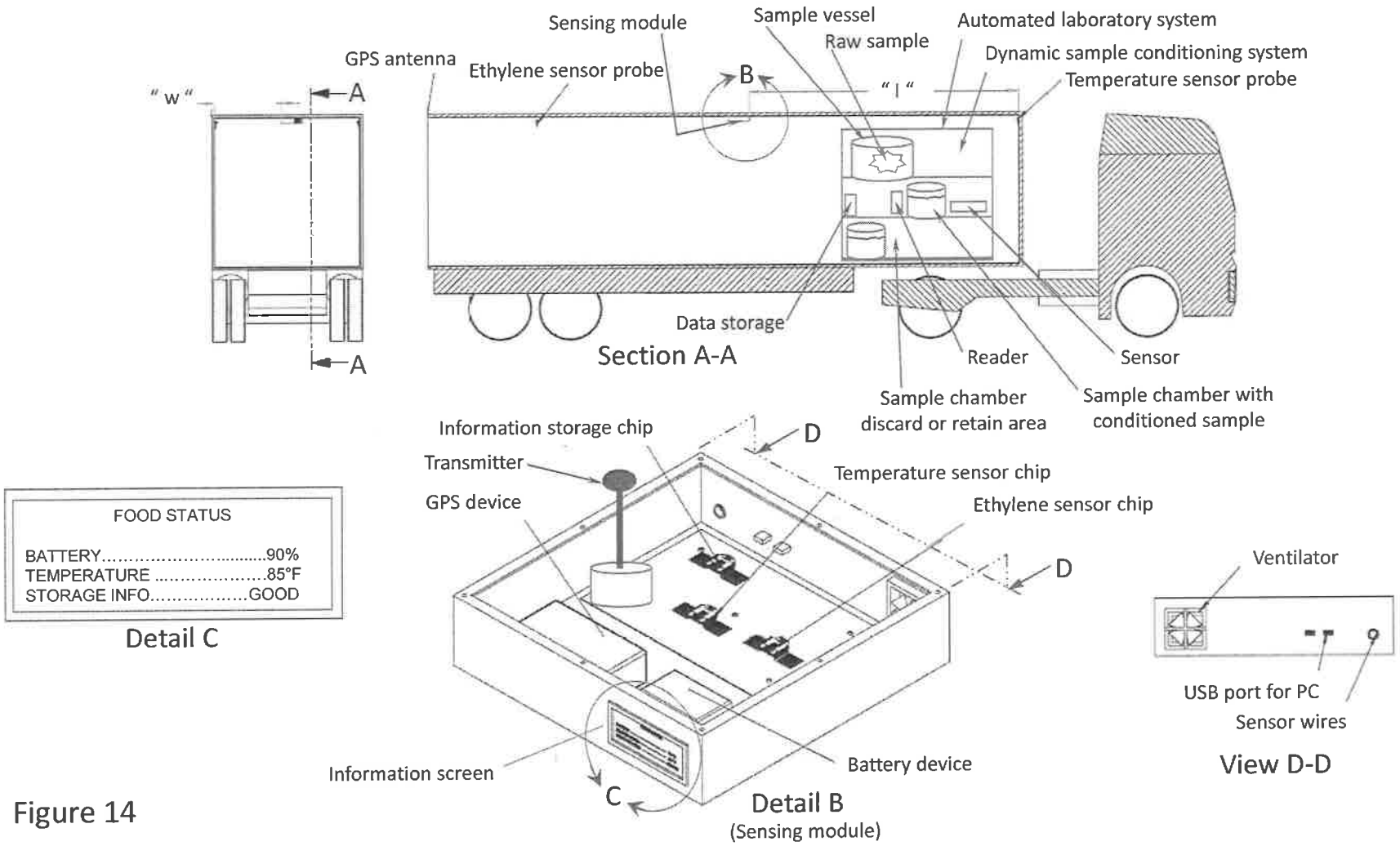
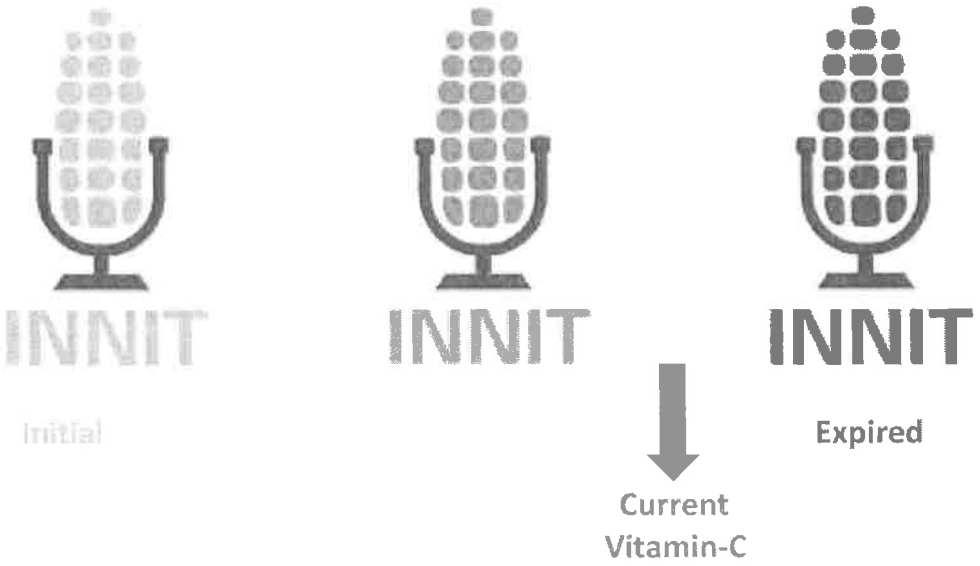
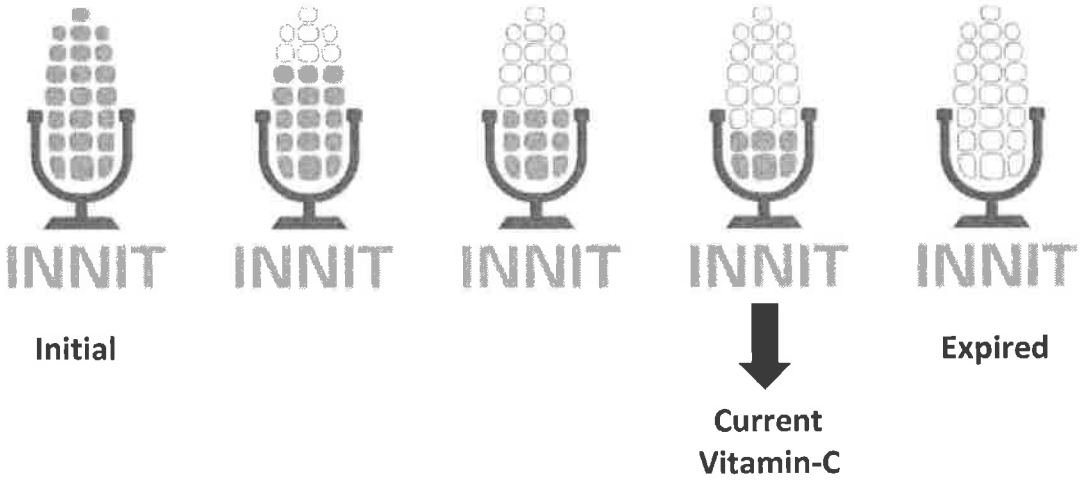

" w "
A
A
GPS antenna
Sensing module
Ethylene sensor probe
Sample vessel
Raw sample
B
" l "
Automated laboratory system
Dynamic sample conditioning system
Temperature sensor probe
Data storage
Reader
Sensor
Section A-A
Sample chamber
discard or retain area
Sample chamber with
conditioned sample
FOOD STATUS
BATTERY.....90%
TEMPERATURE .....85°F
STORAGE INFO.....GOOD
Detail C
Information storage chip
Transmitter
GPS device
D
Temperature sensor chip
Ethylene sensor chip
D
Information screen
C
Battery device
Detail B
(Sensing module)
Ventilator
USB port for PC
Sensor wires
View D-D

Figure 14



ΔN Meter (represented through color change)

Figure 15a



ΔN Meter (represented through percentage change)

Figure 15b