7. The system according to Claim 6, wherein the instructions are programmed to cause the processor to analyze the refracted and/or reflected beams to determine a concentration of the food product.

8. The system according to any one of Claims 1-7, wherein the instructions are programmed to cause the processor to detect a change from a low particle concentration of the food product to a high particle concentration of the food product.

9. The system according to any one of Claims 1-8, further comprising:
a computer having a computer processor; and
a computer-readable medium accessible to the computer and containing a software program therein that is programmed to cause the computer processor to detect a change from a low particle concentration of the food product to a high particle concentration of the food product when the food product flows through the flow path.

10. The system according to any one of Claims 1-9, further comprising additional flow paths connecting other devices in the aseptic manufacturing system, wherein the other devices are selected from the group consisting of tanks, valves, exchangers, and combinations thereof.

11. The system according to any one of Claims 1-10, wherein the instructions are programmed to cause initiating flow of the food product through the conduit.

12. A method for detecting a water/food product interface, in an aseptic manufacturing system, the method comprising:
providing a food manufacturing system comprising
at least one heat exchanger,
at least one food product tank,
tubing connecting at least the food product tank to the heat exchanger;
a computer having a computer processor, and