CLAIMS

What is claimed is:

1. A processed adipose tissue comprising:
an extracellular matrix derived from human adipose tissue; and
a plurality of adipocyte cells having an intact adipocyte composition of at least 10%.

2. The processed adipose tissue of claim 1, wherein the intact adipocyte composition is at least 30%.

3. The processed adipose tissue of claim 1, wherein the intact adipocyte composition is between 30% and 70%.

4. The processed adipose tissue of claim 1, wherein the intact adipocyte composition is between 30% and 55%.

5. The processed adipose tissue of claim 1, wherein the intact adipocyte composition is between 45% and 70%.

6. The processed adipose tissue of claim 1, wherein the extracellular matrix includes a plurality of structural proteins including at least one of collagen, glycoproteins, and proteoglycans retained from the human adipose tissue.

7. The processed adipose tissue of claim 1, wherein the processed adipose tissue is decellularized with a reduced amount of allogeneic components, cellular components, and free lipids.

8. The processed adipose tissue of claim 1 configured for implantation or injection into a patient.

9. The processed adipose tissue of claim 1 configured for passing through an opening between 1 mm and 4.5 mm.

10. A method of processing adipose tissue comprising:
freezing and thawing a human adipose tissue;
separating the human adipose tissue into pieces by mechanical grinding;

serial rinsing the human adipose tissue with a non-ionic surfactant, a crystalloid solution and sterile water; and

dispensing the human adipose tissue into packaging using a loading tool.

11. The method of claim 10, further comprising:

loading the human adipose tissue into a chamber of a container of the loading tool, the chamber having a proximal opening and a distal opening;

actuating a lever to slide a piston distally through the chamber flush along a wall of the chamber to dispense the human adipose tissue into the container, wherein the lever is stabilized with a hinged connection to a stand.

12. The method of claim 11, wherein the proximal opening is at least partially surrounded by a first threaded surface, and the distal opening is at least partially surrounded by a second threaded surface.

13. The method of claim 11, further comprising connecting an adapter having a sealable port to at least one of the proximal opening and the distal opening.

14. The method of claim 11, removing gasses from the human adipose tissue with a sealable port in the piston.

15. The method of claim 10 further comprising debriding the human adipose tissue to remove extraneous or bruised tissue.

16. The method of claim 10 further comprising dispensing the human adipose tissue into centrifuge tubes and centrifuging the human adipose tissue to rinse the human adipose tissue with the non-ionic surfactant.

17. The method of claim 10 further comprising dispensing the human adipose tissue into a sealable container and gently shaking the sealable container to rinse the human adipose tissue with the non-ionic surfactant.

18. The method of claim 10 further comprising rinsing the human adipose tissue in a non-ionic surfactant a second time.

19. The method of claim 10, further comprising rinsing the human adipose tissue in a crystalloid saline solution a second time.

20. The method of claim 10, further comprising rinsing the human adipose tissue in sterile water a second time.

21. The method of claim 10, further comprising drying the human adipose tissue with a drying sieve in a centrifuge tube.

22. The method of claim 10, further comprising decanting the human adipose tissue after each rinse and removing decanted liquid and cellular components.

23. The method of claim 10, wherein the container is a syringe or a cannula.

24. The method of claim 10, further comprising packing the container in a sterile pouch.

25. A media loading tool comprising:
a container having a chamber with a proximal opening and a distal opening;
a piston configured to slide distally and flush along a wall of the chamber;
a lever configured to actuate the piston; and
a stand having a hinged connection to the lever and being configured to stabilize the piston below the lever.

26. The media loading tool of claim 25, wherein the proximal opening is at least partially surrounded by a first threaded surface, and the distal end opening is at least partially surrounded by a second threaded surface.

27. The media loading tool of claim 25, further comprising an adapter having a sealable portion, wherein the adapter is configured to connect to the distal opening of the container.

28. The media loading tool of claim 25, wherein the piston has a sealable port.