CLAIMS

1. A cartilage product comprising a partially-digested ~~cartilage~~collagen matrix, wherein the partially-digested ~~cartilage~~collagen matrix comprises a plurality of channels and wherein the partially-digested ~~cartilage~~collagen matrix comprises viable native cells.

2. The cartilage product of Claim 1, wherein the cartilage product comprises a fragmented collagen matrix relative to unmodified articular cartilage, preferably wherein the fragmented collagen matrix comprises glycine-terminated collagen fragments.

3. The cartilage product of Claim 1, wherein the partially digested cartilage is enzyme digested-preferably wherein said enzyme is a proteinase, more preferably wherein said proteinase is collagenase or collagenase II .

4. The cartilage product of any of Claims 1 through Claim 3, wherein the diameter of the channels is selected from: about 0.2 mm to about 2 mm, about 0.5 mm to about 1 .5 mm, about 0.8 mm to about 1 .2 mm, or about 1 mm.

5. The cartilage product of any of Claims 1-4, wherein the cartilage has a channel density of about 20 to about 60 pores per cm^2.

6. The cartilage product of Claim 1 or Claim 2, wherein the viable cells are chondrocytes.

7. The cartilage product of any of the preceding Claims, wherein the cartilage comprises hyaline cartilage, optionally, wherein the hyaline cartilage is selected from: articular cartilage, condoyle cartilage, femur condoyle cartilage, and tibial plateau cartilage.

8. The cartilage product of Claims 1-7, wherein the cartilage product is devoid of a subchondral bone layer, optionally wherein the cartilage product is devoid of a calcified cartilage layer.

9. The cartilage product of any of the preceding Claims, wherein the cartilage has a thickness of less than about 3 mm, preferably wherein the cartilage has a thickness of about 0.5mm to about 2 mm or about 1 mm to about 1.5 mm.

10. The cartilage product of Claim 9, wherein the pores extend through the majority of said thickness, optionally wherein the pores extend through the entire thickness of the cartilage.

11. The cartilage product of any of the preceding Claims, wherein the cartilage product is cryopreserved.

12. The cartilage product of any of the preceding Claims, wherein the cartilage product comprises chondrogenic factors, optionally, wherein the chondrogenic factors comprise one or more of: TGF-βI , TGF- β2, TGF-P3, BMP-2, BMP-7 bFGF, IGF-1 .

13. The cartilage product of Claim 12, wherein the cartilage product comprises one or more of:

a. TGF-βI in an amount of at least about 11 pg/cm^2, optionally, about 11 to about 628 pg/cm^2;

b. TGF- 3 in an amount of at least about 4 pg/cm^2, optionally, about 4 to about 112 pg/cm^2;

c. BMP-7 in an amount of at least about 3 pg/cm^2, optionally, about 3 to about 23 pg/cm^2;

d. bFGF in an amount of at least about 169 pg/cm^2, optionally, about 169 to about 365 pg/cm^2; and

e. IGF-1 in an amount of at least about 111 pg/cm^2, optionally, about 111 to about 779 pg/cm^2.

14. The cartilage product of Claim 12, wherein, when cultured in growth media, the cartilage product releases one or more of:

a. TGF-β1 in an amount of at least about 2617 pg/cm^2, optionally, about 2617 to about 17818 pg/cm^2;

b. TGF- 2 in an amount of at least about 133 pg/cm^2, optionally, about 133 to about 623 pg/cm^2;

c. IGF-1 in an amount of at least about 14 pg/cm^2, optionally, about 14 to about 2842 pg/cm^2.

15. The cartilage product of any of the preceding Claims, wherein the cartilage product comprises collagen type II, hyaluronan, and aggrecan.

16. The cartilage product of any of the preceding Claims, wherein the cartilage product has been subjected to a freeze-thaw cycle and does not produce a substantial amount of TNF-a after incubation in media containing 1 μg/mL bacterial LPS for 20-24 hours.

17. The cartilage product of any of the preceding claims, wherein the collagen matrix comprises viable chondrocytes in an amount of at least any of: about 500 cells/mm^2, about 600 cells/mm^2, about 700 cells/mm^2, about 800 cells/mm^2, about 1200 cells/mm^2, and about 1500 cells/mm^2, optionally wherein the viable chondrocytes are native to the collagen matrix.

18. The cartilage product of any of the proceeding claims, wherein the collagen matrix comprises one or more layers selected from: a tangential layer, a transitional layer, and a radial layer.

19. The cartilage product of Claim 18, wherein the collagen matrix comprises a tangential layer comprising at least any of: about 100 cells/mm^2 and about 200 cells/mm^2.

20. The cartilage product of Claim 18, wherein the collagen matrix comprises a transitional layer comprising at least any of: about 100 cells/mm^2, about 200 cells/mm^2, and about 400 cells/mm^2.

21. The cartilage product of Claim 18, wherein the collagen matrix comprises a radial layer comprising at least any of: about 100 cells/mm^2 and about 200 cells/mm^2.

~~22. A cartilage product comprising a collagen matrix, wherein the collagen matrix contains viable cells native to the collagen matrix and wherein the collagen matrix is minced.~~

~~23~~ 22. The cartilage product of claim 1, wherein the plurality of channels are cylindrical.