and, as a result, it may be difficult to prevent the development of the necrotic core. The cell necrosis issue is especially pertinent for larger and thicker scaffolds – i.e. those required for cultured meat production.

SUMMARY

[0006] The present disclosure generally relates to methods for producing seeded 3D biomaterial scaffolds. In particular, the present disclosure relates to improved methods for producing seeded 3D biomaterial scaffolds that may be used to produce cultured meat products therefrom.

[0007] One aspect of the present disclosure relates to a method of preparing a seeded biomaterial scaffold, the method comprising: combining a biomaterial scaffold and a plurality of cells to provide a mixture; and applying a pressure to the mixture to thereby cause the plurality of cells to homogeneously distributed throughout the scaffold, thereby forming the seeded biomaterial scaffold.

[0008] Another aspect of the present disclosure relates to a seeded biomaterial scaffold produced by the methods described herein.

[0009] Yet another aspect of the present disclosure relates to use of the seeded biomaterial scaffold described herein for the production of a cultured meat product. Another aspect of the present disclosure relates to use of the seeded biomaterial scaffold described herein for the production of a vegan meat product.

[0010] Other examples and features of the methods of the present disclosure will become apparent to those ordinarily skilled in the art upon review of the following description of specific examples.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] These and other features of the present disclosure will become more apparent in the following detailed description in which reference is made to the appended drawings. The appended drawings illustrate one or more embodiments of the present disclosure by way of example only and are not to be construed as limiting the scope of the present disclosure.