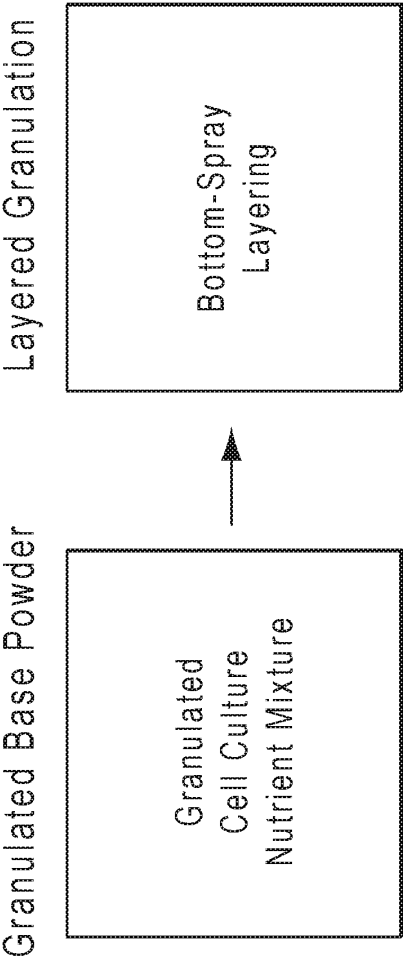
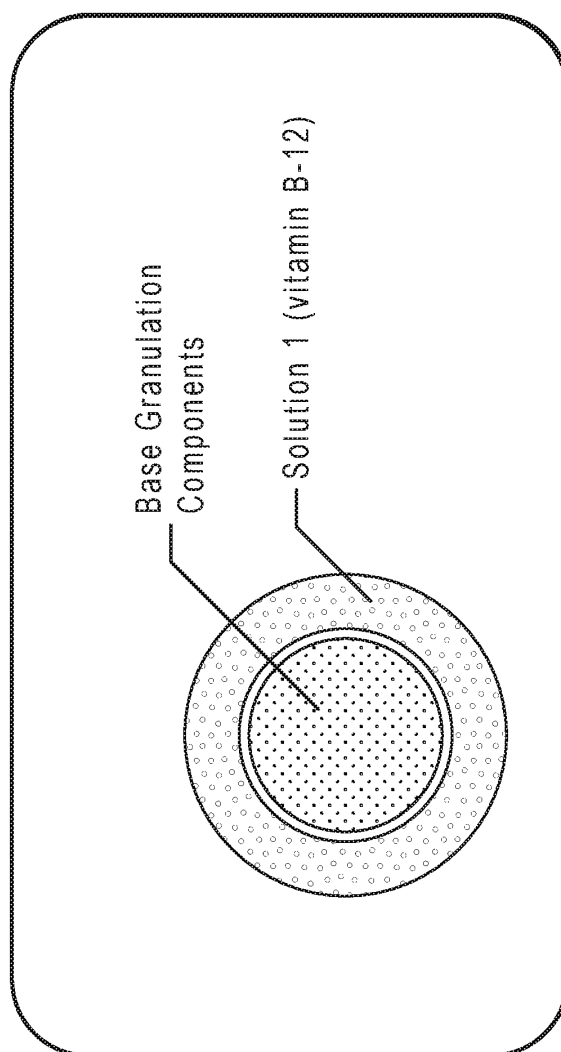


Figure 1: Exemplary Process 1 for Making Culture Media Layered Granule Formulations



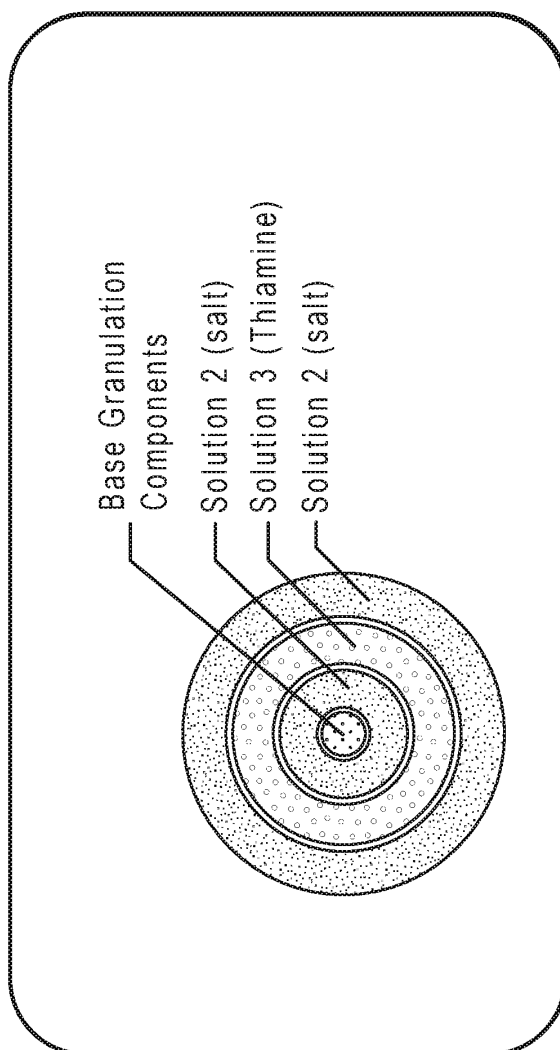
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Figure 1a: Layered Granule Prototype-A
(Single Layer, Single Ingredient)



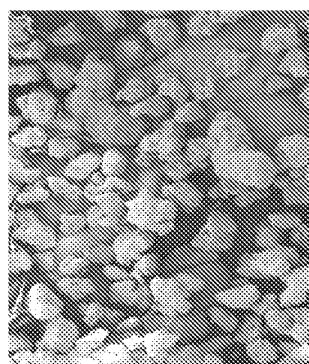
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Figure 1b: Layered Granule Prototype-B
(Multi-Layered, Single Ingredient in each layer)

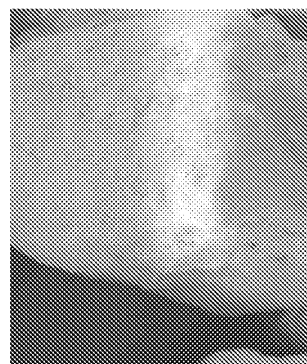


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Figure 2a: SEM images of Layered Granules Prototype-A
(Single-Layer, Single Ingredient)



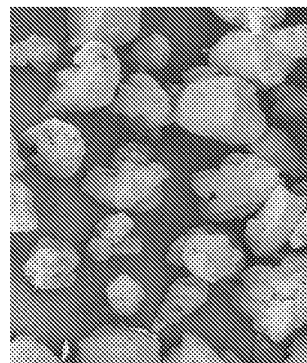
3.0kV X60 200μm



3.0kV X500 50μm



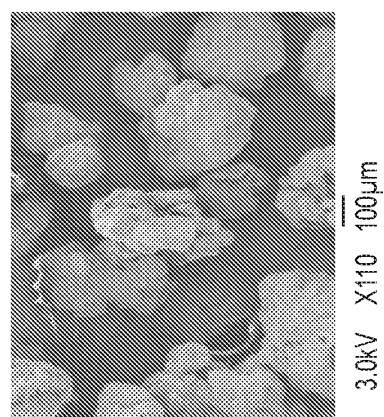
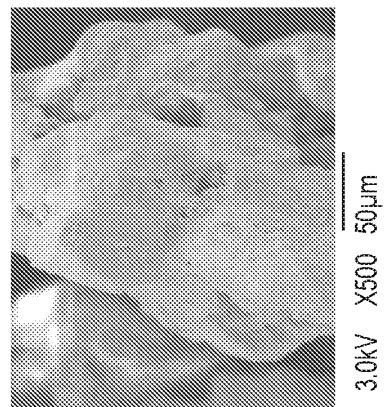
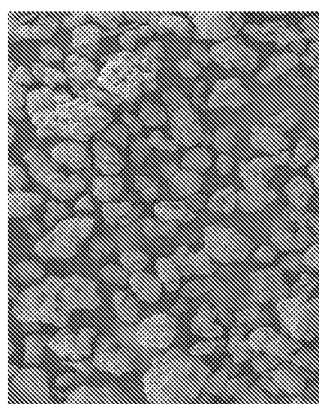
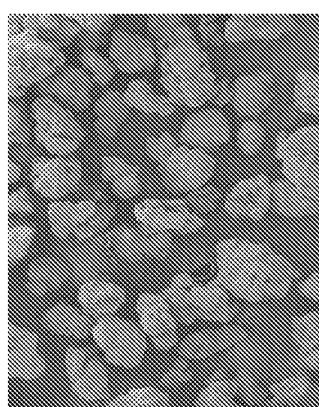
3.0kV X30 500μm



3.0kV X110 100μm

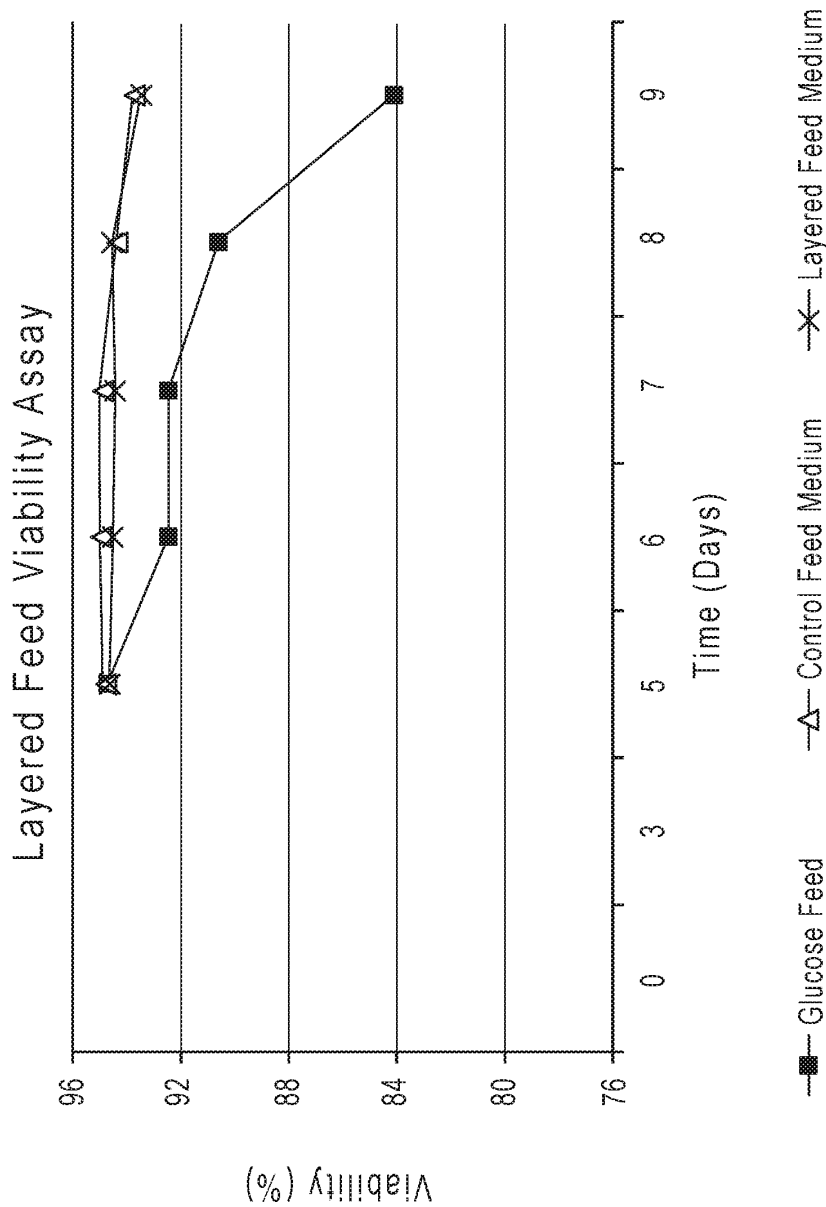
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Figure 2b: SEM images of Layered Granules Prototype-B
(Multi-Layered, Single Ingredient)



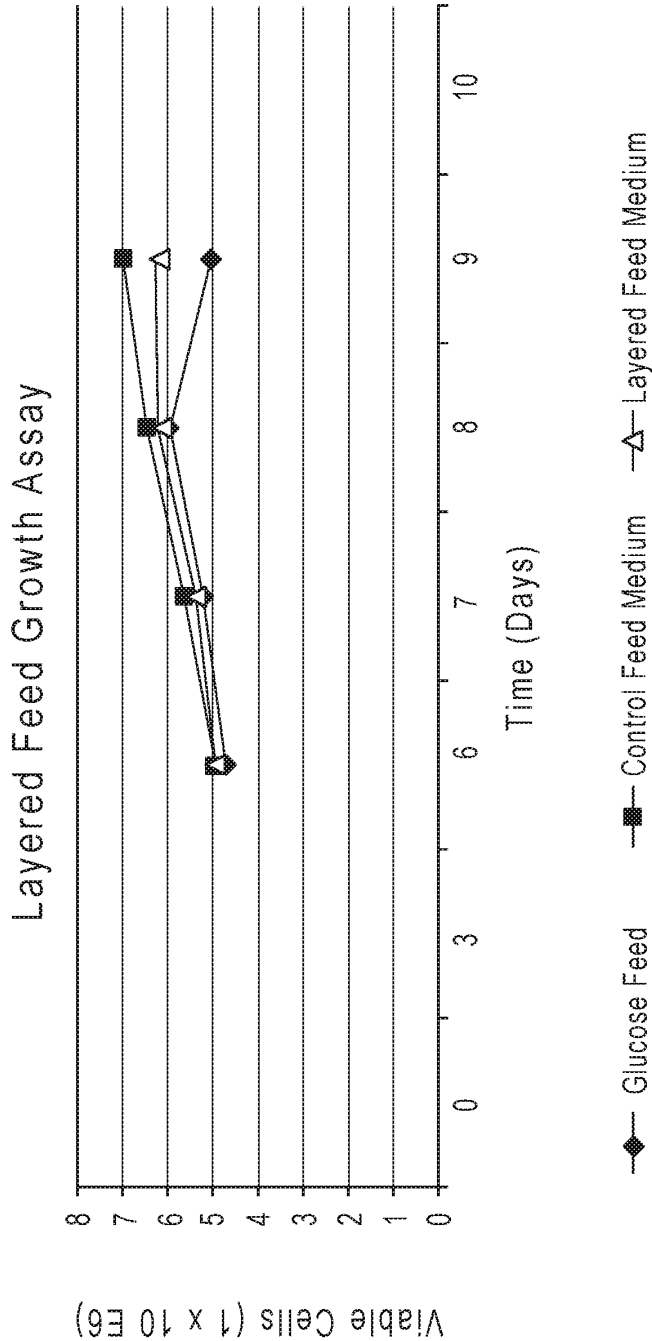
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Figure 3a: Prototype A Layered Feed Cell Viability Assay



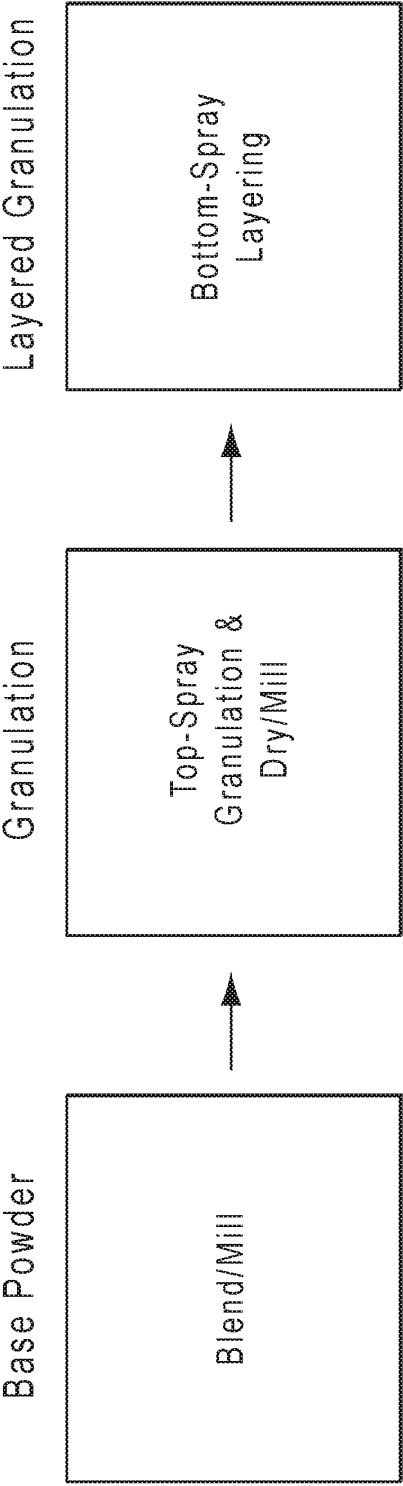
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Figure 3b: Prototype A Layered Feed Cell Growth Assay



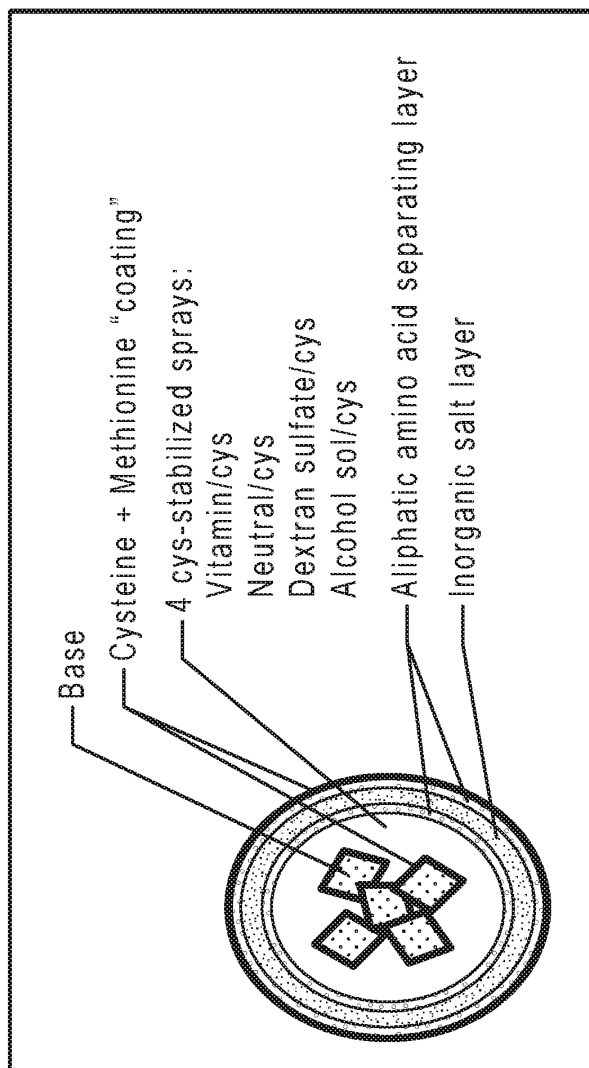
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Figure 4: Exemplary Process 2 for Production of Layered Media/
Feed Granules for Cell Culture



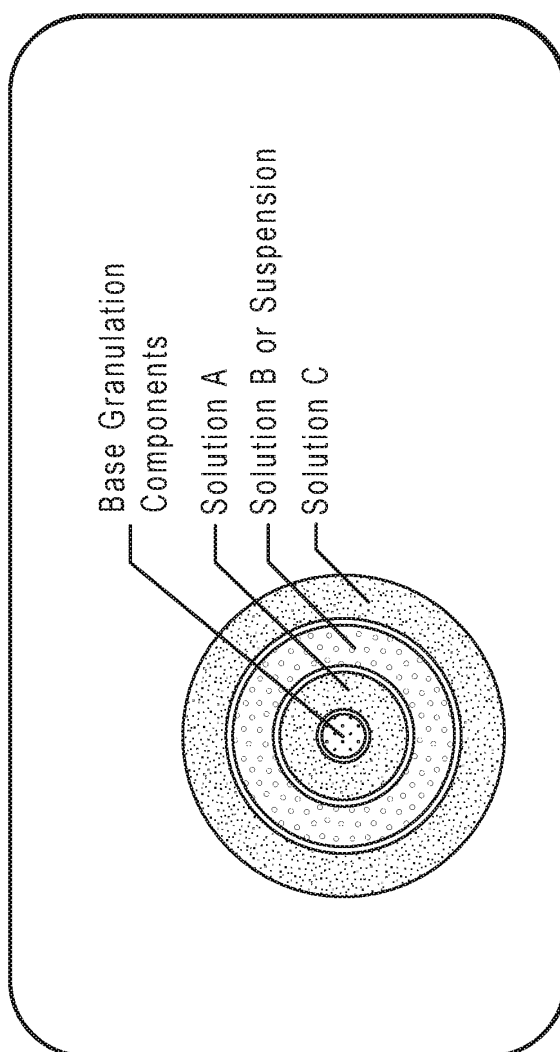
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Figure 5a: Cell Culture Media Layered Granules-Formulation 1



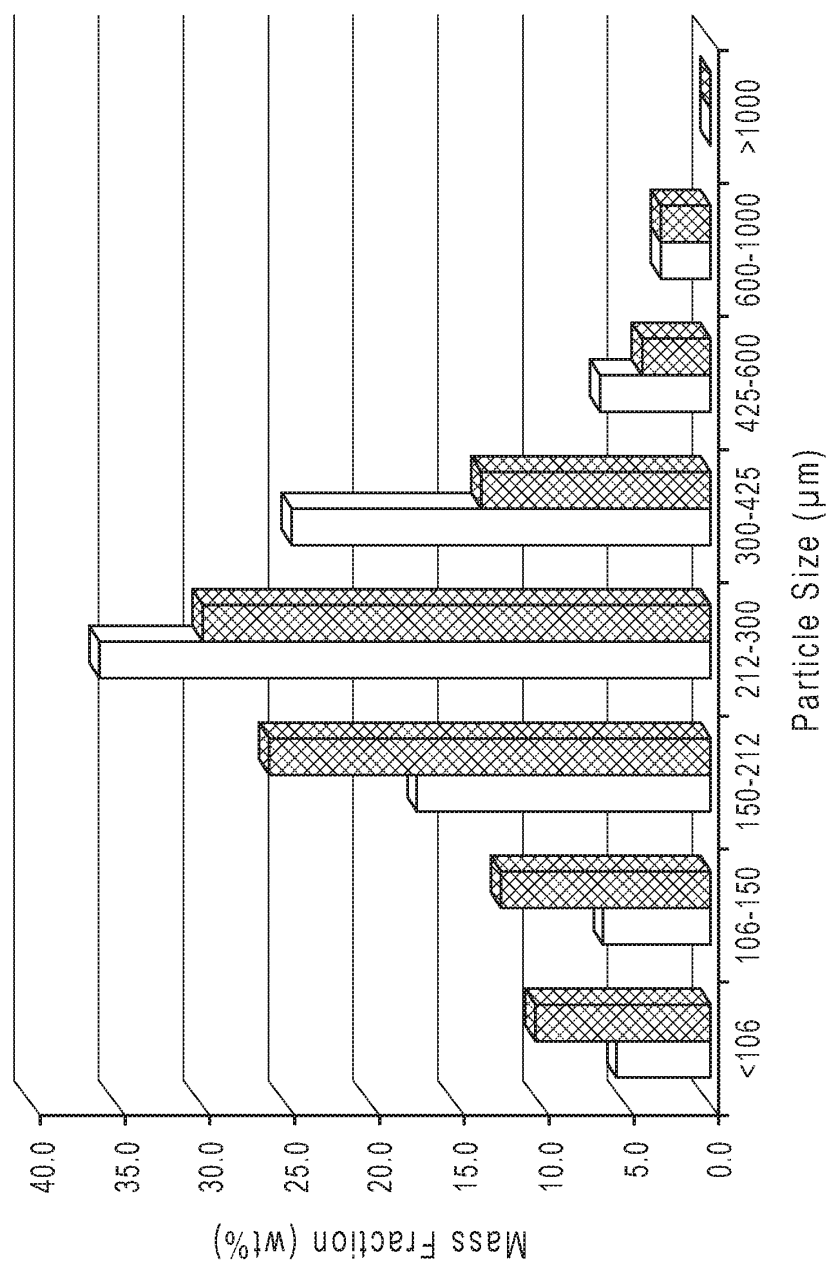
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Figure 5b: Cell Culture Media Layered Granules - Formulation 2



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Figure 6a: Formulation 1 Particle Size Analysis



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Figure 6b: Formulation 2 Particle Size Analysis

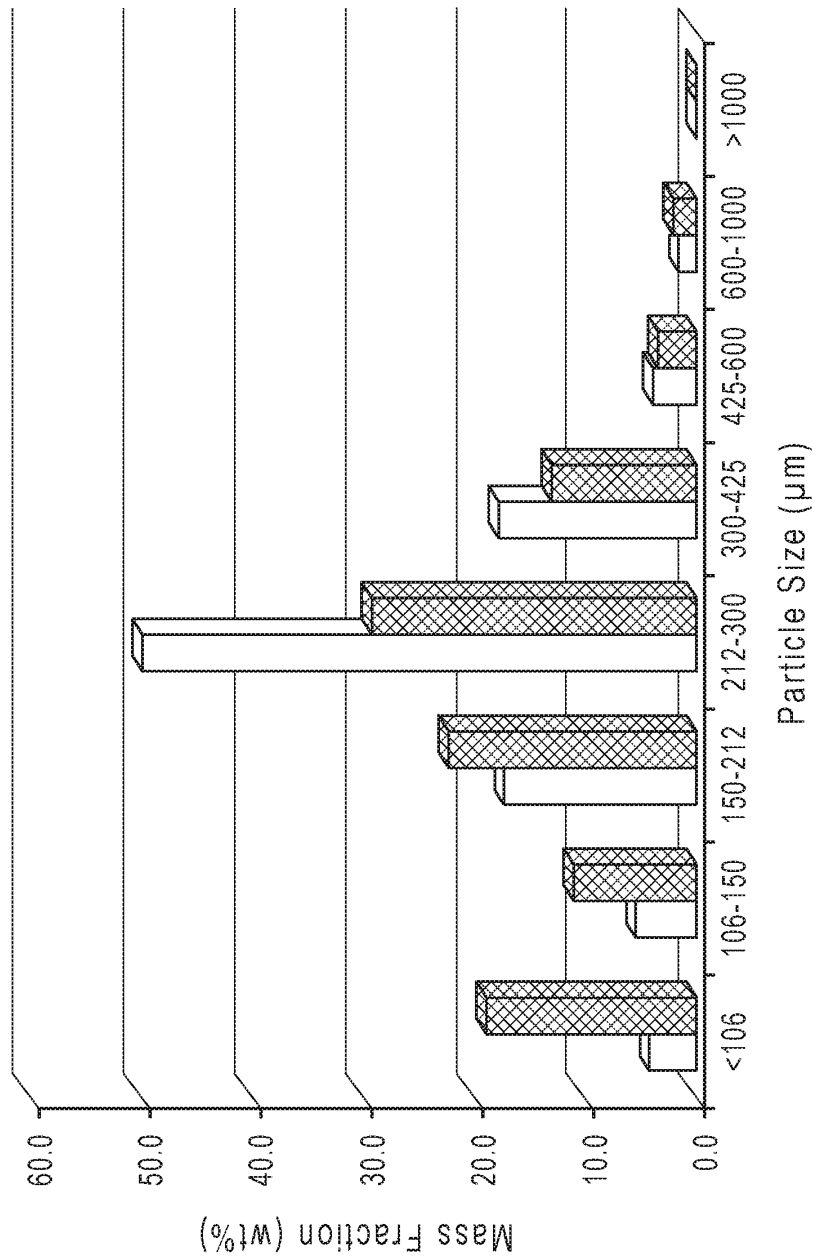


Figure 7a: Formulation 1 Cumulative Particle Size Analysis

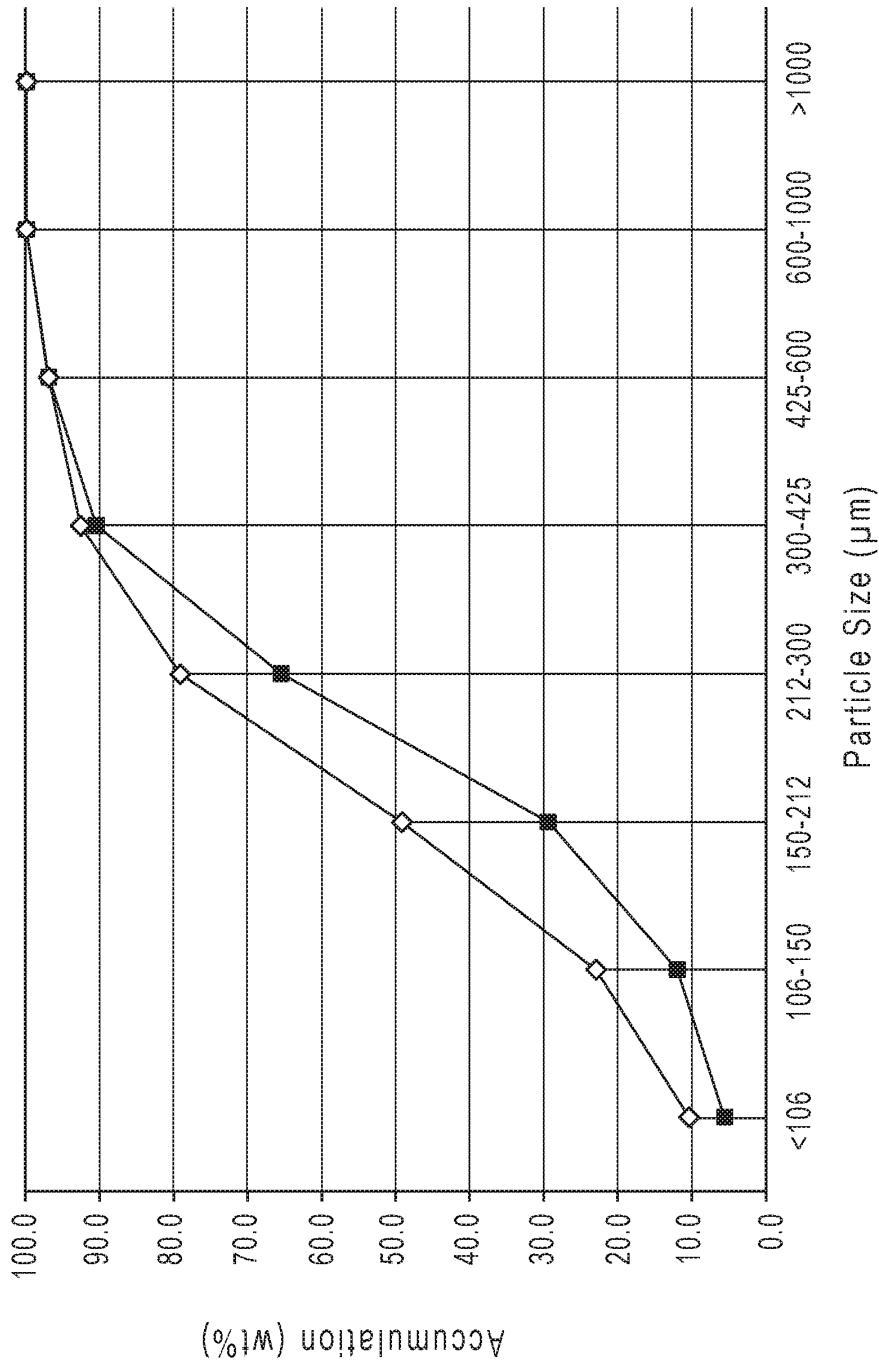
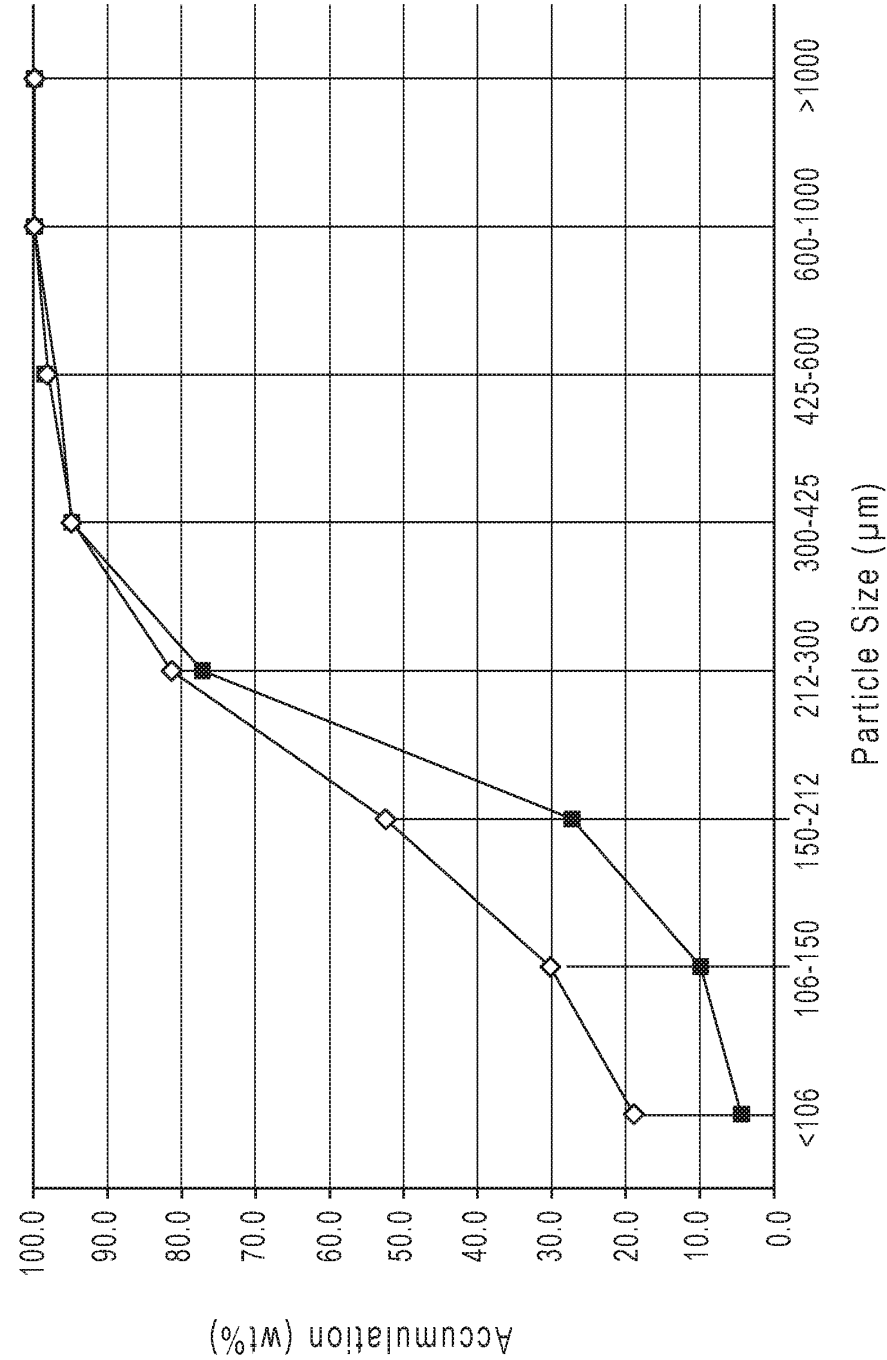
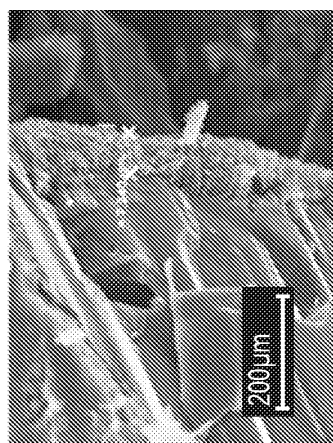


Figure 7b: Formulation 2 Cumulative Particle Size Analysis

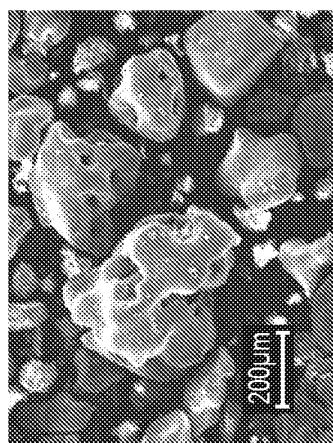


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Figure 8a: Formulation 1 SEM



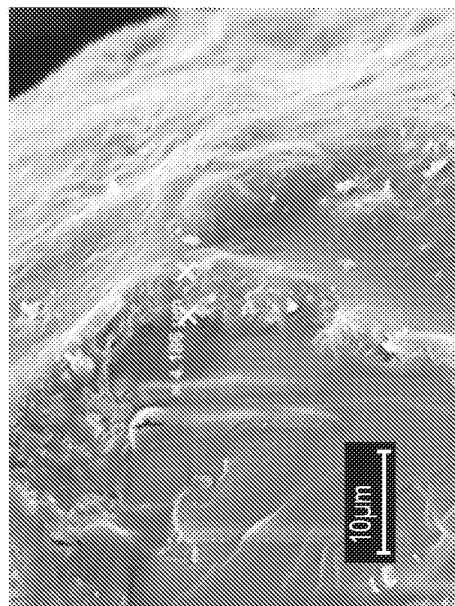
1500X SEM



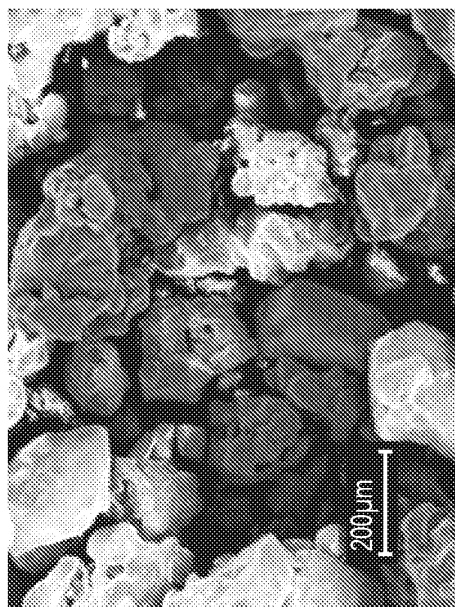
100X SEM

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Figure 8b: Formulation 2 SEM



1500X



100X

Figure 9a: Granulated Base Powders Particle Size Analysis

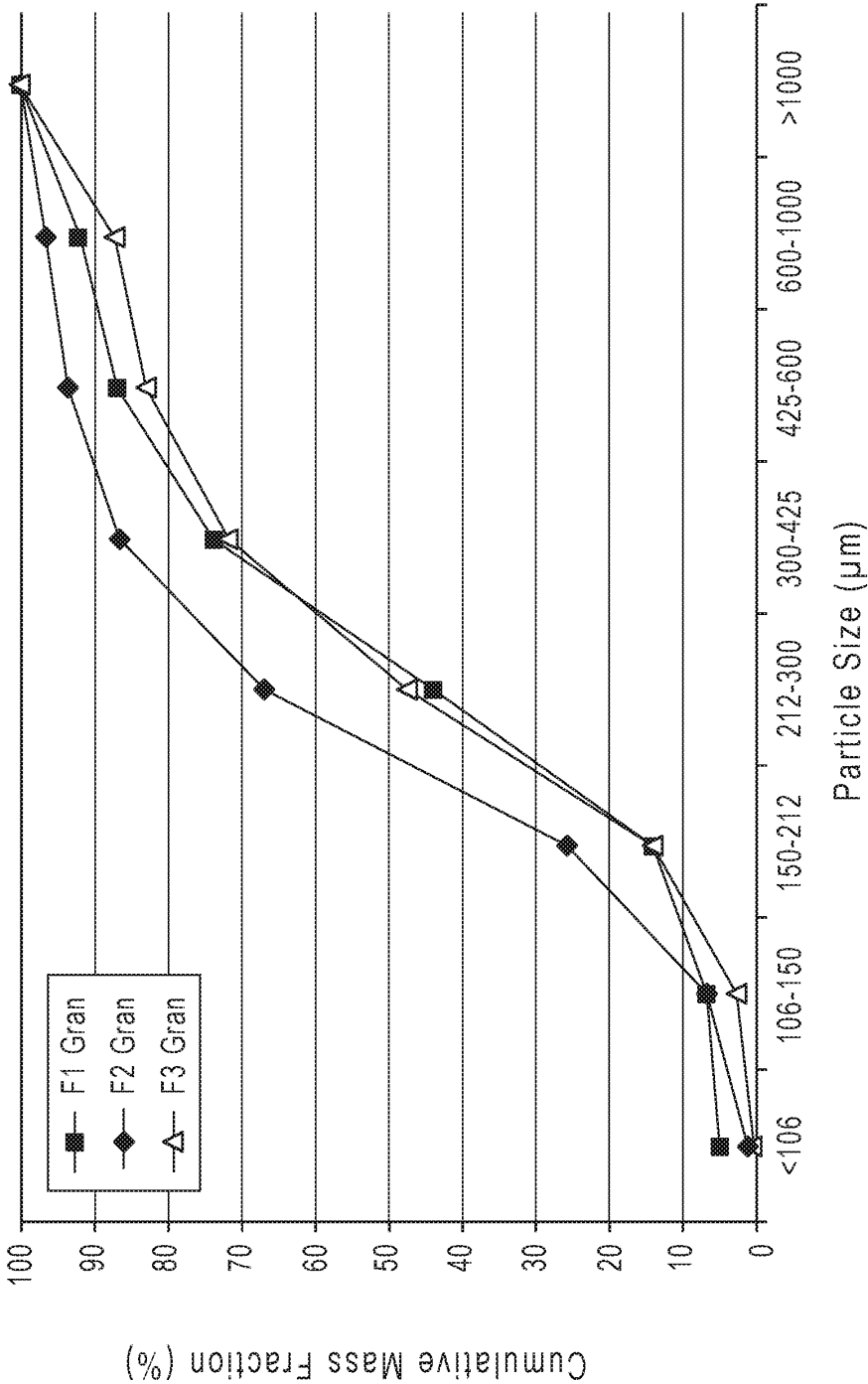


Figure 9b: Granulated Base Powders Particle Size Analysis Bar Graph

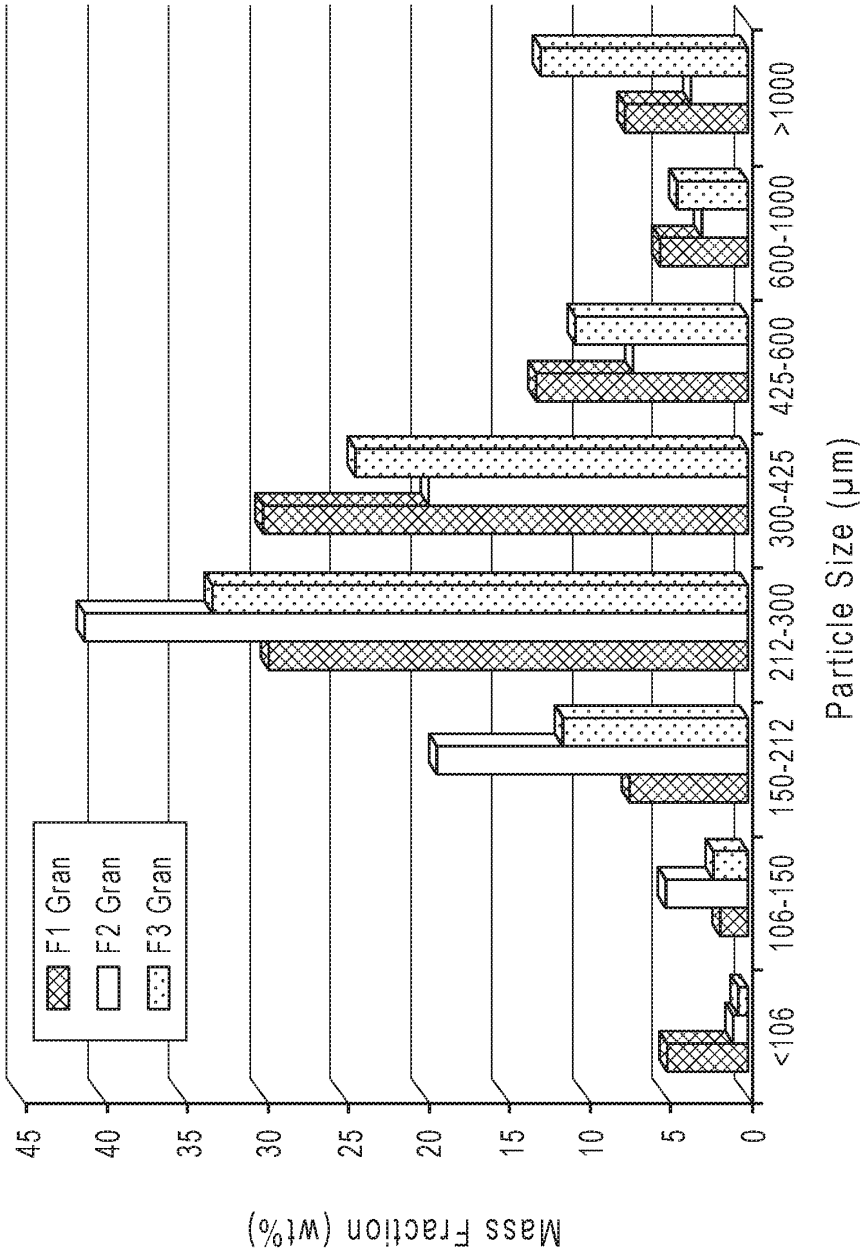


Figure 10a: Milled Granulated Base Powders Particle Size Analysis

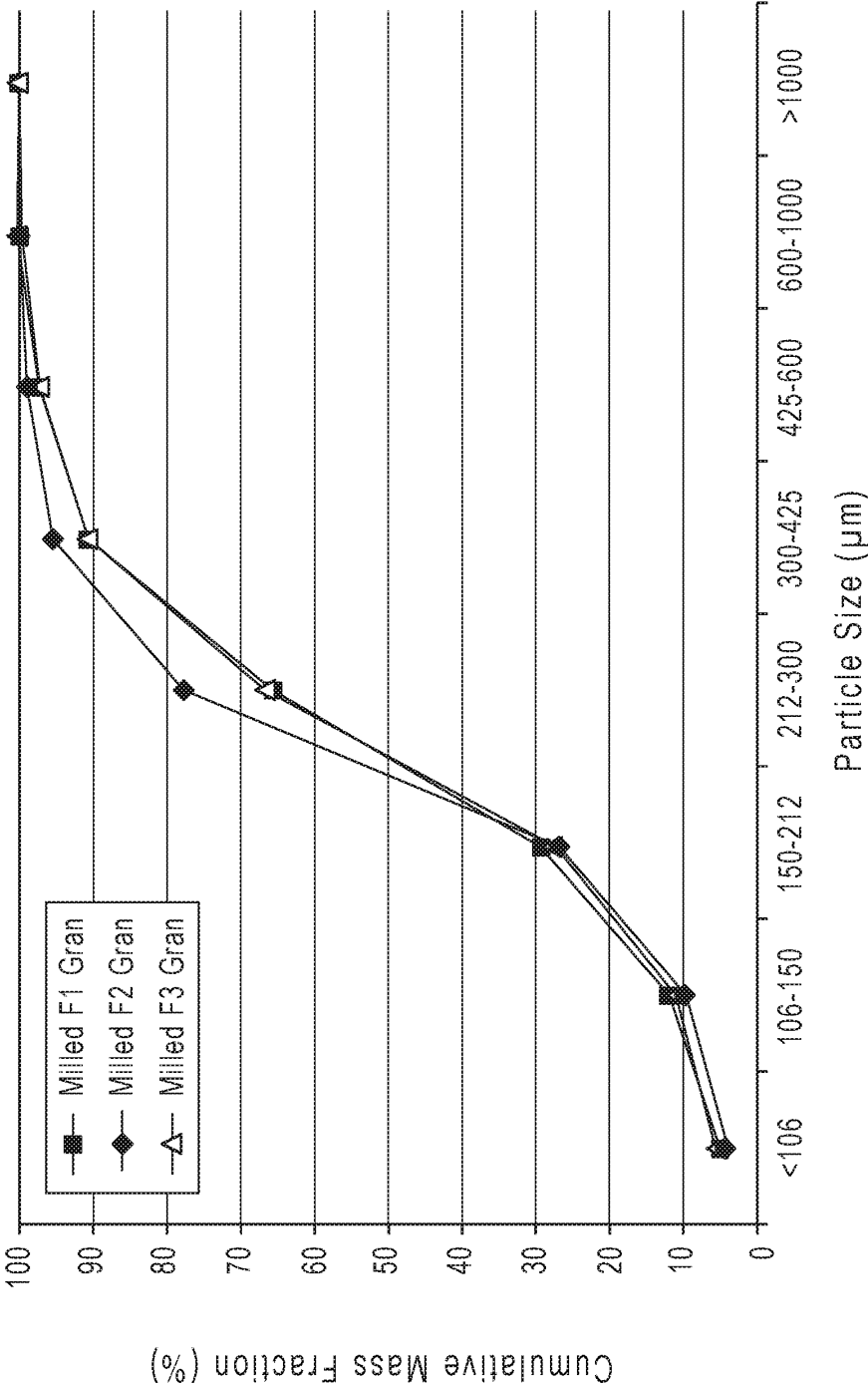


Figure 10b: Milled Granulated Base Powders Particle Size Analysis Bar Graph

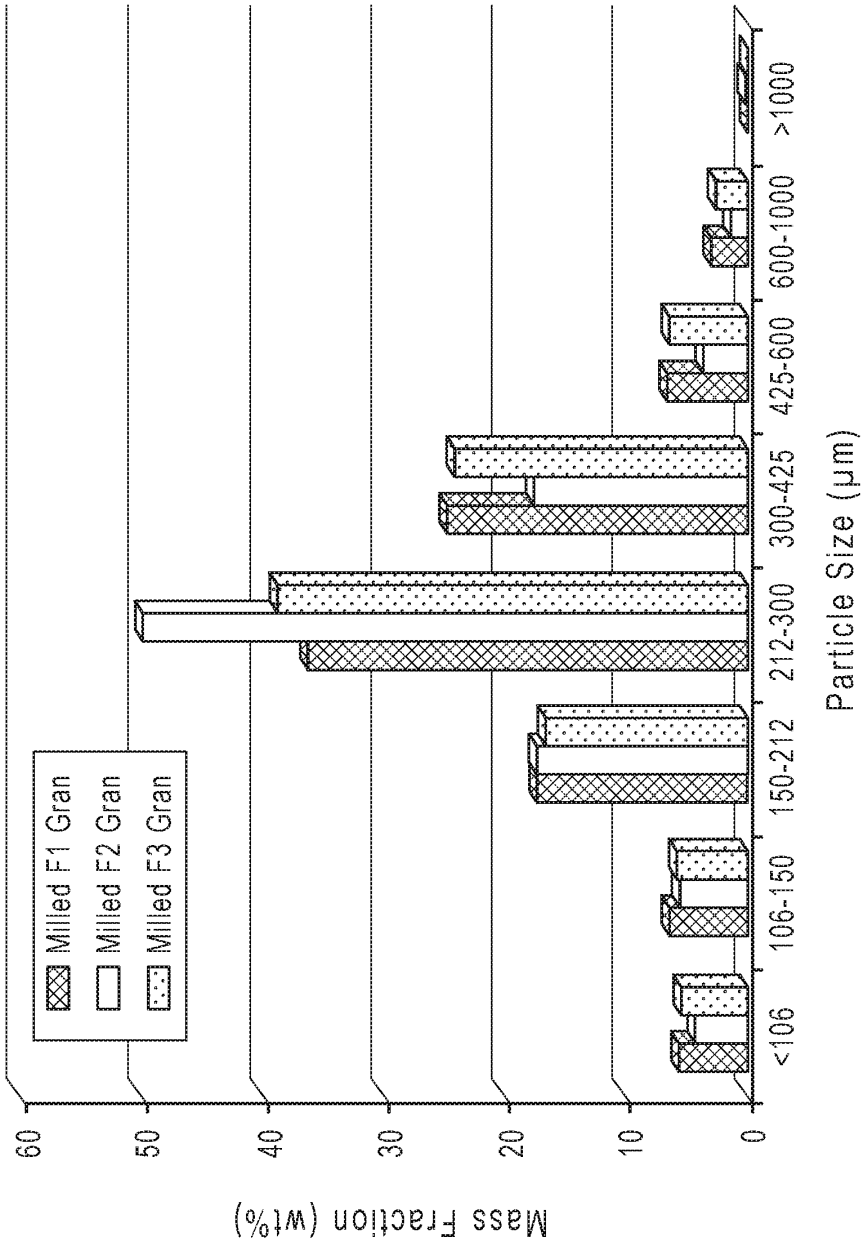


Figure 11: Radiation Induced Nutrient Degradation in Layered Granulations

