CLAIMS

1. Bran granulates having an average area diameter D[4, 3] of from 200 to 1500 µm, a porosity of from 35% to 55%, a mean wall thickness of from 9 to 20 µm, the mean wall thickness being the average thickness of pores of granulates as measured using x-ray tomography, and having a viscosity ratio Visco10min / Visco2min ≤ 1, said granulates comprising at least 50% by weight of bran, preferably at least 80% by weight of bran, and wherein the bran is cereal bran or pseudo-cereal bran, and wherein the granulates consist of 100% dry matter by weight of bran.

2. The granulates according to claim 1, wherein the granulates have:

- an average area diameter D[4, 3] of from 300 to 1000 µm, preferably from 400 to 900 µm,
- a porosity of from 36% to 39%, or from 41% to 49%, preferably 41% to 46%, or from 51% to 55%,
- a mean wall thickness of from 9 to 15 µm, preferably from 9 to 13 µm, more preferably from 9 to 11 µm.

3. The granulates according to any one of claims 1 to 2, wherein the bran is cereal bran or pseudo-cereal bran selected from wheat bran, corn bran, oat bran, sorghum bran, millet bran, barley bran, or mixtures thereof.

4. The granulates according to any one of claims 1 to 3, which are obtainable by a cooking-extrusion process, preferably a double cooking-extrusion process, most preferably a process that does not comprise a milling step downstream of the cutting step.

5. A dry food composition which comprises bran granulates according to any one of claims 1 to 4, wherein the dry food composition is an infant cereal product, an adult cereal product, a dehydrated sauce, a dehydrated soup, a dehydrated dish, a reconstitutable beverage, or a dehydrated pet food.

6. A dry food composition according to claim 5, wherein said granulates are used as an agent for improving shelf-life of said food product.

7. The use of the bran granulates according to any one of claims 1 to 6, as an agent for improving shelf-life of a dry food product.

8. The use according to claim 7, wherein said dry food product is a packaged dry food product, and wherein the packaging material does not comprise plastic, preferably wherein the packaging material is paper.

9. The use according to claim 7 or 8, wherein said bran granulates are used as an antioxidant agent.

10. The use according to any one of claims 7 to 9, wherein said bran granulates are used to protect said dry food from moisture uptake.

11. A process for manufacturing bran granulates according to any one of claims 1 to 4, which comprises:

(a) mixing a bran material with water in an extruder to form a dough comprising 100% by weight of bran material;

(b) cooking the dough in the extruder at a temperature comprised from 110°C to 160°C and at a water content comprised between 20% and 40% by weight of the dough;

(c) extruding the dough through an extrusion die (2);

(d) cutting the dough into granulates directly at the outlet of the extrusion die (2), at a turbine cutting speed Vtur of between 20 m/s and 120 m/s and at an extrudate length Lpr of between 0.05 mm and 0.5 mm with a rotationally-driven granulating turbine (5), to obtain a first granulated product; and

(e) drying the granulated product to a water content below 8%.

12. The process according to claim 11, wherein steps (b), (c) and (d) are repeated to the first granulated product before drying, to obtain a second granulated product, and the second granulated product is dried to a water content below 8%.

13. The process according to claim 11 or 12, wherein the bran dough comprises at least 80% by weight of bran material, preferably wherein the dough consists of bran material and water