**CLAIMS**

1. A method for improving the nutritional value of mannan-containing cake comprising the steps of
   (i) Providing a mannan-containing half press cake with an oil content from 8% to 16% (w/w%),
   (ii) forming an aqueous slurry comprising the mannan-containing cake of step (i),
   (iii) contacting the slurry of step (ii) with one or more enzymes to produce a soluble hydrolysate,
   (iv) contacting the soluble hydrolyzate of step (iii) with a fermenting organism
   (v) and thereby obtaining a mannan-containing cake with improved nutritional value,
   wherein the mannan-containing cake of step (i) is selected from the group consisting of palm kernel cake, palm kernel meal, coffee waste, guar meal, and copra cake, wherein the mannan-containing cake with improved nutritional value is half press upgraded palm kernel cake (PKC++).

2. The method according to claim 1, wherein the mannan-containing cake with improved nutritional value has a mannose content from 2% to 30%, such as from 2% to 20%, such as from 2% to 18%, such as from 2% to 16%, such as from 2% to 14%, such as from 2% to 12%, such as from 2% to 10%, such as from 2% to 8%, such as from 3% to 7%, such as from 4% to 7% w/w% in a 90 w/w% dry matter composition.

3. The method according to any of claims 1 to 2, wherein the mannan-containing cake with improved nutritional value has a content of non-starch polysaccharide from 2% to 40%, such as from 2% to 30%, such as from 2% to 28%, such as from 2% to 24%, such as from 2% to 22%, such as from 2% to 20%, such as from 5% to 20%, such as from 10% to 20% and such as from 15% to 20% w/w% in a composition with 90 w/w% dry matter.

4. The method according to any of claims 1 to 3, wherein the mannan-containing cake with improved nutritional value has an acid detergent fiber bound nitrogen (ADF-N) selected from the group consisting of from 5% to 50%, such as from 5% to 35%, such as 5% to 30%, such as 5% to 25% w/w% in a composition with 90 w/w% dry matter.

5. The method according to any of claims 1 to 4, wherein the mannan-containing cake with improved nutritional value has a crude fat content of from 8% to 16%, such as from 8% to