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(54) Title: PEELED INFUSED DRIED BUOYANT CRANBERRIES AND METHOD FOR MAKING SAME

(57) Abstract: Disclosed is a peeled whole dried infused buoyant cranberry. Further a process for preparing the cranberry is disclosed. The process includes sizing individually quick frozen cranberries by collecting those that pass through a mesh screen with (16) millimeter openings and that are retained on a mesh screen with openings of 9 millimeters. The sized cranberries are then peeled and infused in an infusion solution having a Brix of from (40) to (80) at a temperature of from 29 to 44° C ± 5° C until the cranberries have a Brix of at least about (40). The cranberries are removed from the infusion solution and dried at a temperature of from 73 to 85° C until they have a water activity level of from 0.25 to 0.6 and a buoyancy of at least 30%. The final dried infused cranberry preferably has a Brix of 76 to (84).



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**PEELED INFUSED DRIED BUOYANT CRANBERRIES AND METHOD FOR
MAKING SAME**

RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional application No. 60/706,074, filed August 5, 2005.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

[0002] NONE

TECHNICAL FIELD

[0003] This invention relates generally to formation of infused dried whole fruit and, more particularly, to a method for formation of a dried buoyant infused whole cranberry.

BACKGROUND OF THE INVENTION

[0004] North American cranberries (*Vaccinium macrocarpon*) are a fruit that have recently been found to have a number of health benefits such as helping to preventing urinary tract infections. Thus, consumers have been encouraged to include more cranberries, either in the fruit form or in the juice form, in their diet. However, cranberries are one of the most acidic fruits and as such are very unpalatable unless they are sweetened. Cranberries have an outer skin with a thin waxy film, which makes the cranberry impermeable for exchange of sugar solutions. Thus, in the past cranberries have been infused either in the sliced or cut form, for example U.S. Patent 5,320,861. It has been difficult to develop a satisfactory process for infusing whole uncut cranberries. The patent of Kato et al., U.S. patent 6,387,438, describes a method of preparing a sweetened softened cooked cranberry piece having a skin from punctured cranberries. In the described process the cranberries are frozen, punctured, placed in an infusion solution having a Brix of from 45 to 65 at a fruit to syrup ratio of 1:1, and heated to temperatures up to boiling for a period of time sufficient to ensure that the sarcocarp, the interior fruit portion, of the cranberry is softened and sweetened while maintaining the outer skin layer intact with no ruptures other than from the puncture process. These cooked skin containing cranberries were not dried; instead they were cooled and packaged after the cooking step. In practical terms the resulting product would likely have to be either frozen or canned to be stable. The process of Kato et al. produces a fruit suitable for pie-filling, but unsuitable for many other food forms including ready to eat cereals. The Kato

et al. patent does not disclose any method for making the resulting product shelf stable in the environment of, for example, a ready to eat cereal or granola-type bar. The cranberries disclosed in Kato et al. are not dried, are not buoyant, and are not suitable for use in ready to eat cereals and other desirable food products. The product of Kato et al. will find use only in sauces and fresh pie fillings.

[0005] It is desirable to develop a method for producing plump whole cranberries that are dried so they will be shelf stable and buoyant so that they will float in liquids such as the milk in a bowl of ready to eat cereal.

SUMMARY OF THE INVENTION

[0006] In general terms, this invention provides a peeled, whole, infused, buoyant and dried cranberry. The present invention also comprises a method of preparing such a cranberry comprising the steps of: preferably sizing individually quick frozen cranberries; peeling the sized cranberries; infusing the sized peeled cranberries in an infusion solution having a Brix of from 40 to 80 at a temperature of from 29 to 44° C \pm 5° C until the cranberries have a Brix of at least 40; removing the infused cranberries from the infusion solution and drying them at a temperature of from 73 to 85° C until they have a water activity level of from 0.25 to 0.6, a final Brix of 76 to 84 and a buoyancy of at least 30%, more preferably at least 50% and most preferably at least 60%.

[0007] These and other features and advantages of this invention will become more apparent to those skilled in the art from the detailed description of a preferred embodiment. The drawings that accompany the detailed description are described below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Figure 1 is a schematic flow chart of a process according to the present invention;

[0009] Figure 2 is a photograph of infused dried whole cranberries prepared according to the present invention;

[00010] Figure 3 is a photograph of infused dried whole cranberries prepared according to the present invention;

[00011] Figure 4 is a photograph of infused dried whole cranberries prepared according to the present invention; and

[00012] Figure 5 is a photograph of whole cranberries shown in Figure 4 after infusion and prior to the drying step.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

[00013] Figure 1 is a schematic flow chart of a process according to the present invention. In step 10 individually quick frozen (IQF) whole cranberries are preferably sized and color sorted. It is preferable that the cranberries are color sorted to remove those that are not red as expected by consumers. The IQF cranberries are kept at a temperature of from -15 to 0° C during the sorting and sizing process so that they remain frozen. The IQF cranberries are preferably sized by retaining all those that pass through a mesh screen with 16 millimeter openings and that are retained on a screen with openings of 9 millimeters. The sized whole cranberries are kept frozen and then peeled at a temperature of from -15 to 0° C during the peeling process in step 12. In the peeling step the goal is to dry peel whole frozen cranberries without damaging them or mashing them. The preferred peeler is an abrasive surface peeler such as are available from Kusel Equipment Company, Watertown, WI, USA. These peelers do not require water instead they rely on abrasive surfaces to rapidly peel products such as frozen whole cranberries. Either a batch peeler or a continuous peeler can be used. The exposure time in the batch peeler is from 90 to 120 seconds at a speed of approximately 60 Hz. These setting provide the best batch peeling with minimal damage to the whole cranberries. In the present specification and claims the term whole cranberry means a cranberry that is intact other than its skin. It does not mean pieces of a cranberry or fractions of a cranberry. The whole cranberries prepared according to the present invention include every part of the cranberry except for the skin.

[00014] The peeled IQF sized cranberries are then infused at step 14. The still frozen cranberries are placed into infusion solution at a weight ratio of 1:2 to 1:5 of cranberries to infusion solution. The infusion solution is preferably preheated to a temperature of from 29 to 44° C \pm 5° C. Adding the frozen cranberries temporarily decreases the infusion solution temperature, however the infusion solution is recirculated through a heat exchanger and kept

at a temperature of from 29 to 44° C \pm 5° C during the infusion. Preferably the infusion solution has a Brix of from 40 to 80, more preferably from 65 to 77 Brix. Given the ratio of infusion solution to cranberries this enables one to achieve a preferred infused cranberry Brix of at least about 40, more preferably at least 45, most preferably at least 50 Brix. The infusion solution can comprise one or more of any of the known natural or artificial sweeteners. By way of example only, the natural sweeteners include: honey, fructose, sucrose, glucose, maltose, dextrose, corn syrup, high fructose corn syrup, sugar, xylose, ribulose, mannose, galactose, invert sugar, corn syrup solids, fruit juice concentrate, D-tagatose, sorbitol, mannitol, xylitol, galactitol, maltitol, isomalt, maltodextrins, lycasin, and mixtures thereof. Useful artificial sweeteners include by way of example: aspartame, saccharine, sucralose and mixtures thereof. The infusion can also be carried out using fruit juice solutions known in the art such as cranberry infusion solution, pineapple juice, peach juice and other juice solutions. These fruit juice solutions are often treated with added sweeteners to bring their Brix to the desired level of 40 to 80 Brix for the infusion solution as detailed above. Other additives that can be included are glycerin, soluble fiber sources such as inulin and insoluble fiber sources. Glycerin aids in maintaining dried fruit softness over storage especially with ready to eat cereals. Other additives to the infusion solution can include vitamins, minerals, anti-oxidants and preservatives as known in the art. In an embodiment, the infusion is carried out with a solution of 42 to 55% fructose high fructose corn syrup and glycerin. To maintain softer dried fruit texture when mixed with ready to eat cereals during storage, the infusion solution preferably contains 15 to 35% by weight glycerin based on the fruit weight. Such a solution provides a finished dried product with a glycerin level of from about 5 to 15% glycerin, more preferably from 10 to 15% glycerin. To enhance the fruit firmness one can also add calcium, calcium salts, potassium, potassium salts, or mixtures thereof at a level of up to 0.5% based on the weight of the fruit. To enhance and maintain the red color of the cranberries it is preferable to include ascorbic acid in the infusion solution. Preferably, the ascorbic acid is present in an amount of from 0.5 to 2.5% by weight, more preferably at 1.5% by weight based on the weight of the cranberries. As discussed above, and shown at step 16, the infusion is continued until the cranberries have a Brix of at least about 40, more preferably 45, most preferably at least 50. The infusion can either be done in a batch infusion tank with

recirculation of the infusion solution or in a continuous process. Both processes are known in the art. In the continuous process it is possible to use stepped infusion wherein one increases the Brix of the infusion solution during infusion so as to prevent osmotic shock to the fruit cell walls. The desired fruit Brix end point is the same for either infusion process. Using peeled sized cranberries this may require from 1 to 12 hours depending on the temperature of the infusion solution.

[00015] The infused cranberries are then removed from the infusion solution, which may be reused if desired, in step 18. It is not necessary to wash the infused cranberries, however if desired they can be washed. An additional optional step 20 is to apply oil to the cranberries prior to drying them. This can be helpful in handling and packaging of the final product. The oil can be applied in the form of a misting spray preferably at a level of from 0.5 to 5.0% by weight, more preferably 1 to 3%, and most preferably at a level of 0.75 to 1% by weight based on the weight of the fruit. Any edible oil can be used such as vegetable oils, marine oils that are high in polyunsaturated fatty acids and other edible oils. The marine oil can be sourced from marine organisms such as fish or it can be produced by algal organisms. It can be helpful to use a stable vegetable oil such as, by way of example, mid or high oleic sunflower oil, olive oil, mid or high oleic canola oil, low linolenic soybean oil, coconut oil, partially hydrogenated oils, corn oil, palm oil, palm kernel oil, or mixtures thereof.

[00016] In step 22 the infused cranberries are dried. The drying parameters are important for maintaining the plump whole shape of the cranberries and to prevent wrinkling of the cranberry as it dries. Preferably the cranberries are dried at a temperature of from 73 to 85° C to a water activity (Aw) level of from 0.25 to 0.60 and a moisture level of from 8 to 15% and more preferably to from 10 to 13% by weight. The drying is preferably via forced air and may include a plurality of stages wherein the cranberries are first dried at a first temperature within the range given above for a first period of time and then mixed and dried at a different temperature within the range for a second period of time. Generally the total drying time is from 3 to 10 hours. Other drying methods can be used such as microwave hot air drying, vacuum drying, or freeze drying. Generally the dried infused whole cranberries have a bulk density of from 0.4 to 0.6 grams per cubic centimeter. Most importantly, over 30% of the cranberries are buoyant in liquids such as milk. More preferably over 50% of the

cranberries are buoyant. This has not previously been achievable. A typical fresh picked cranberry will float in water, however typical cranberry pieces that have been infused and dried will sink. The buoyancy of the product prepared according to the present invention was a completely unexpected result of the process and opens new possibilities especially in the ready to eat cereal market.

[00017] In step 24 the dried cranberries can optionally be sprayed with oil as described for step 20, which is also optional. Then the cranberries are packaged in step 26. The resultant product can be readily incorporated into ready to eat cereals and given its low A_w it is shelf stable for long periods of time.

[00018] In a first example, shown in Table 1 below, IQF whole cranberries were sized by passing them through a mesh screen with 16 millimeter openings and keeping those that are retained on a screen with openings of 9 millimeters. The sized whole cranberries are kept frozen and a portion was peeled at a temperature of from -15 to 0° C. The batch peeler was run for 120 seconds at 60 Hz. Then 453.6 grams of the unpeeled and 453.6 grams of the peeled cranberries were each mixed with an infusion solution containing 1360.8 grams of 55% fructose high fructose corn syrup (HFCS) and 6.8 grams of ascorbic acid, 1.5% by weight based on the weight of the fruit. A third sample of 453.6 grams of peeled cranberries was mixed with an infusion solution containing 1360.4 grams of 42% fructose high fructose corn syrup (HFCS) and 145.2 grams of glycerin, 32% by weight based on the weight of the fruit. The unpeeled and peeled samples were infused at a temperature of 37.8° C. The unpeeled sample was infused for 11 hours, the peeled sample with ascorbic acid was infused for 6 hours, and the peeled sample with glycerin was infused for 6 hours and 45 minutes. As can be seen from the data in Table 1 the unpeeled cranberries had a very low Brix after infusion of only 15.1, whereas the peeled cranberries infused with HFCS and ascorbic acid had a Brix of 44.8. The sample infused with HFCS and glycerin had a Brix of 49.6. Thus, peeling the cranberries allows for a much faster infusion and infusion to a much higher Brix versus unpeeled cranberries. Then each sample was dried at 73.9 to 82.2 °C for a period of time of from 6 to approximately 4 hours to a water activity of from 0.34 to 0.53. The final Brix of the unpeeled cranberries was 62.4 while that of two peeled cranberry samples was from 80.8 to 82.4. The peeled cranberry samples each had a much higher bulk density than

that of the unpeeled and their taste and quality was also much better. Most surprising was the buoyancy. The peeled cranberries prepared as per the present invention were from 50 to over 80% buoyant meaning at least 5 or more than 8 out of 10 floated on milk or water, whereas none of the unpeeled cranberries were buoyant. This result was unexpected and unanticipated.

TABLE 1

I. Fruit Initial Data	Unpeeled	Peeled, ascorbic acid	Peeled, glycerin
Size/Form	Whole IQF	Whole IQF	Whole IQF
Initial Fruit Brix	8.5	8.5	7.0
Fruit weight (gm)	453.6	453.6	453.6
II. Infusion Data			
Weight of HFCS (gm)	1360.8	1360.8	1306.4
Ascorbic acid (gm)	6.8	6.8	0
Glycerin (gm)	0	0	145.2
Infusion Temp. °C	37.8	37.8	37.8
Infusion Time (hr)	11	6	6.8
Infused fruit Brix	15.1	44.8	49.6
III. Dried Data			
Drying Temp. °C	73.9	73.9	82.2
Drying Time (hr)	6	4	3.8
% Moisture	8.6	13	10.1
Aw	0.349	0.53	0.452
Dried Fruit Brix	62.4	80.8	82.4
Bulk Density (gm/cm ³)	0.188	0.403	0.529

Quality/Texture	Very tart/hard	Good/soft	Good/soft
Buoyancy %	0	>80	50

[00019] In a second experiment, the present protocol was followed using IQF sized cranberries that were either peeled or not and then cut in half prior to infusion. The purpose was to determine if the infusion/drying process was sufficient to produce buoyant cranberry pieces or if it was necessary to begin with whole cranberries as per the protocol. The halved cranberries were infused with HFCS as above having a Brix of 77 and 1.5% by weight ascorbic acid based on the fruit weight in a fruit to infusion solution weight ratio of 1:3. The infusion temperature was maintained at from 37.8 to 48.9° C for 6 hours. The infused fruit, both peeled and unpeeled, had a post infusion Brix of 40. The infused cranberry halves were dried at 73.9° C for 2.5 hours to a Aw level of 0.464 for the unpeeled halved cranberries and to 0.458 for the peeled halved cranberries. Surprisingly, the buoyancy of both types of pieces was zero meaning neither products were buoyant. Thus, it seems necessary to use whole peeled cranberries to develop a buoyant final product.

[00020] In a third experiment the process of Kato et al. was followed for the infusion step to determine if it results in buoyant products. Whole IQF cranberries were sized and peeled as described above in example 1. They were then mixed with HFCS having a Brix of 65 as specified in Kato et al. at a weight ratio of 1:1 fruit to infusion syrup. The initial infusion syrup temperature was 48.9° C. The infusion solution and cranberries were heated to 65° C over 10 - 15 minutes and then to near boiling at 90.5° C. Then the solution and cranberries were cooled to 29.4° C. Total infusion time was 30 minutes. The infused cranberries had a Brix of 36.8 and were dried at 73.9° C for 7 hours and 20 minutes to a Aw level of 0.391 and a final Brix of 67.2. The dried cranberries were hard and leathery with an acidic taste and hard texture. Very few of the total dried cranberries were buoyant. It is theorized that the high infusion temperatures disclosed in Kato et al. are responsible for the lack of buoyancy in the final product. Thus, applying the Kato et al. process to peeled cranberries, which are not disclosed in Kato et al., does not result in buoyant products.

[00021] In a fourth experiment the effect of drying temperature on the final product was tested. A batch of IQF cranberries was sized, peeled, and infused. The infusion solution

was 55% fructose high fructose corn syrup with 1.5% ascorbic acid based on the weight of the cranberries. The cranberry to infusion weight ratio was 1:3 and the infusion temperature was from 37.8 to 43.3° C. The infusion was run for 5 hours. After the infusion the infused cranberries had a Brix of 54.4, they were sprayed with 2% oil, split into three portions and then one was dried at 73.9° C, a second at 79.4° C, and the third at 85.0° C. The first sample dried at 73.9° C was dried for 3 hours and 20 minutes. Its final Aw was 0.431, 13.6% moisture, and 79.2 Brix. The buoyancy was 70 % and the diameter of the dried cranberries was 9.5 ± 1.27 millimeters. The second sample of cranberries was dried at 79.4° C and were dried for 3.5 hours. Its final Aw was 0.392, 10.70% moisture, and 80.4 Brix. The buoyancy was 80% and the diameter of the dried cranberries was 9.8 ± 0.75 millimeters. The third sample of cranberries were dried at 85.0° C and were dried for 2.5 hours. Its final Aw was 0.406, 11.20% moisture, and 79.2 Brix. The buoyancy was 70% and the diameter of the dried cranberries was 8.75 ± 0.81 millimeters. Thus, a drying temperature of around 79.4 °C seems to result in a cranberry that is larger and more buoyant compared to a lower temperature of 73.9 °C and a higher temperature of 85.0 °C.

[00022] In a fifth experiment whole IQF cranberries were sized and peeled for 120 seconds at 60 Hz and a temperature of from -15 to 0° C. The cranberries were then infused with the high fructose corn syrup solution described above for 5.5 hours. The infused cranberries were then sprayed with sunflower oil and dried at 85.0° C for 2.5 hours. A photograph of the product is shown in Figure 2 wherein cranberries are shown at 40. As shown in Figure 2, the cranberries 40 are not broken or in pieces instead they are whole cranberries. The cranberries are plump and almost all of them are spherical in shape. The final product had a Brix of 82.8, Aw of 0.406, 12.67% moisture and a buoyancy of 60%.

[00023] In a sixth experiment whole IQF cranberries were sized and peeled for 120 seconds at 60 Hz and a temperature of from -15 to 0° C. The cranberries were then infused with the high fructose corn syrup solution described above for 5.5 hours. The infused cranberries were then sprayed with sunflower oil and dried at 79.4° C for 4 hours. A photograph of the product is shown in Figure 3 wherein cranberries are shown at 44. Using a lower drying temperature resulted in plump whole cranberries that had a higher buoyancy and

wherein even more appear to be spherical. The final product had a Brix of 82.4, Aw of 0.297, 10.84% moisture and a buoyancy of 70%.

[00024] In a seventh experiment whole IQF cranberries were sized and peeled for 120 seconds at 60 Hz and a temperature of from -15 to 0° C. The cranberries were then infused with the high fructose corn syrup solution described above for 5.5 hours. The infused cranberries were then sprayed with sunflower oil and dried at 73.9° C for 4 hours. A photograph of the product is shown in Figure 4 wherein cranberries are shown at 48. This even lower drying temperature produced an increase in the buoyancy, and increase in plumpness and spherical shape of the final product. The final product had a Brix of 82.0, Aw of 0.49, 12.32% moisture and a buoyancy of 80%. Figure 5 is a picture of cranberries 48, shown in Figure 4, as they appeared after the infusion step and prior to the drying step. The infused cranberries are very plump and full with desirable spherical shape to them.

[00025] The peeled whole dried infused and buoyant cranberries of the present invention are expected to find many uses in consumer products ranging from ready to eat cereals to trail mixes, granola and nutrition bars and as a stand alone snacking product. It has also been found that once the cranberries have been dried and prepared as per the present invention the cranberries can be diced or cut and they still remain buoyant unlike cranberries that are diced initially and then processed per the invention. Thus, cranberries processed per the present invention can be used even if cranberry pieces are desired that are stable and buoyant.

[00026] The foregoing invention has been described in accordance with the relevant legal standards, thus the description is exemplary rather than limiting in nature. Variations and modifications to the disclosed embodiment may become apparent to those skilled in the art and do come within the scope of the invention. Accordingly, the scope of legal protection afforded this invention can only be determined by studying the following claims.

We claim:

1. A method of preparing a whole, buoyant, dried cranberry comprising the steps of:
 - a) peeling frozen whole cranberries;
 - b) providing an infusion solution having a Brix of from 40 to 80 at a temperature of from 29 to 44° C \pm 5° C and infusing the peeled cranberries in the infusion solution until the cranberries have a Brix of at least 40;
 - c) removing the infused cranberries from the infusion solution and drying the infused cranberries until they have a water activity level of from 0.25 to 0.6 and a buoyancy of at least 30%.
2. The method as recited in claim 1 further comprising prior to step a) the step of sizing frozen cranberries by keeping cranberries that pass through mesh screen with openings of 16 millimeters and are retained on a mesh screen having openings of 9 millimeters.
3. The method as recited in claim 2 wherein the step of sizing the cranberries is carried out at a temperature of from -15 to 0 °C.
4. The method as recited in claim 1 wherein step a) is carried out at a temperature of from -15 to 0 °C.
5. The method as recited in claim 1 wherein step a) is carried out in a batch dry peeler for from 90 to 120 seconds at approximately 60 Hz.
6. The method as recited in claim 1 wherein step b) further comprises providing an infusion solution containing from 15 to 35% by weight based on the weight of the cranberries of glycerin.

7. The method as recited in claim 1 wherein step b) further comprises providing an infusion solution containing from 0.5 to 2.5% by weight based on the weight of the cranberries of ascorbic acid.

8. The method as recited in claim 1 wherein step b) comprises providing an infusion solution having a Brix of from 65 to 77.

9. The method as recited in claim 1 wherein step b) comprises providing an infusion solution comprising at least one of a natural sweetener, an artificial sweetener, a fruit juice, or mixtures thereof.

10. The method as recited in claim 1 wherein the infusion of step b) is carried out for a period of time of from 1 to 12 hours.

11. The method as recited in claim 1 wherein in step b) the infusion solution is provided in a weight ratio of cranberries to infusion solution of from 1:2 to 1:5.

12. The method as recited in claim 1 wherein step b) is continued until the cranberries have a Brix of atleast 45.

13. The method as recited in claim 1 wherein step b) is continued until the cranberries have a Brix of atleast 50.

14. The method as recited in claim 1 wherein step b) is carried out in a continuous infusion process and the infusion solution is a stepped infusion solution of atleast two infusion solutions each having a different Brix from each other.

15. The method as recited in claim 1 further comprising after step b) and before step c) the step of washing the infusion solution off of the infused cranberries.

16. The method as recited in claim 1 further comprising after step b) and before the drying in step c) the step of applying an edible oil to the infused cranberries at a level of from 0.5 to 5% by weight based on the weight of the cranberries.

17. The method as recited in claim 16 wherein the edible oil is applied at a level of from 1 to 3% by weight.

18. The method as recited in claim 16 comprising applying a vegetable oil, a marine oil, or a mixture thereof to said cranberries.

19. The method as recited in claim 1 wherein step c) comprises drying the cranberries at a temperature of from 73 to 85 °C.

20. The method as recited in claim 1 wherein step c) comprises drying the cranberries to a moisture level of from 8 to 15% by weight based on the total weight.

21. The method as recited in claim 20 wherein step c) comprises drying the cranberries to a moisture level of from 10 to 13% by weight based on the total weight.

22. The method as recited in claim 1 wherein step c) comprises drying the cranberries for a period of time of from 3 to 10 hours.

23. The method as recited in claim 1 wherein step c) comprises drying the cranberries with one of forced air, microwave hot air, vacuum drying, freeze drying, or a combination thereof.

24. The method as recited in claim 1 wherein step c) comprises drying the cranberries to a bulk density of from 0.4 to 0.6 grams per cubic centimeter.

25. The method as recited in claim 1 wherein step c) comprises drying the cranberries to a final Brix of from 76 to 84.

26. The method as recited in claim 1 wherein step c) comprises drying the cranberries to a final buoyancy of atleast 50%.

27. The method as recited in claim 1 wherein step c) comprises drying the cranberries to a final buoyancy of atleast 60%.

28. The method as recited in claim 1 further comprising after step c) the step of applying an edible oil to the cranberries in an amount of from 0.5 to 5% by weight based on the weight of the cranberries.

29. The method as recited in claim 28 comprising applying a vegetable oil, a marine oil, or a mixture thereof to said cranberries.

30. The method as recited in claim 1 further comprising combining the cranberries obtained after step c) with a ready to eat cereal, into a granola-type bar, or into a trail mixture.

31. The method as recited in claim 1 further comprising after step c) the step of dividing the cranberries into a plurality of pieces.

32. The method as recited in claim 31 further comprising combining the cranberry pieces obtained after dividing the cranberries into a plurality of pieces with a ready to eat cereal, into a granola-type bar, or into a trail mixture.

33. A peeled, infused, dried buoyant cranberry.

34. A cranberry as recited in claim 33 wherein said cranberry has a water activity level of from 0.25 to 0.6.

35. A cranberry as recited in claim 33 wherein said cranberry comprises ascorbic acid.

36. A cranberry as recited in claim 33 wherein said cranberry comprises from 5 to 15% by weight glycerin based in the total weight.

37. A cranberry as recited in claim 33 wherein said cranberry has a Brix of from 76 to 84.

38. A cranberry as recited in claim 33 wherein said cranberry comprises from 0.5 to 5% by weight based on the total weight of an applied edible oil.

39. A cranberry as recited in claim 38 wherein said oil comprises a vegetable oil, a marine oil, or a mixture thereof.

40. A cranberry as recited in claim 33 wherein said cranberry has a moisture level of from 8 to 15% by weight based on the total weight.

41. A cranberry as recited in claim 33 wherein said cranberry has a moisture level of from 10 to 13% by weight based on the total weight.

42. A cranberry as recited in claim 33 wherein said cranberry has a bulk density of from 0.4 to 0.6 grams per cubic centimeter.

43. A cranberry as recited in claim 33 in admixture with a ready to eat cereal.

44. A cranberry as recited in claim 33 incorporated into a granola-type bar or a trail mix.

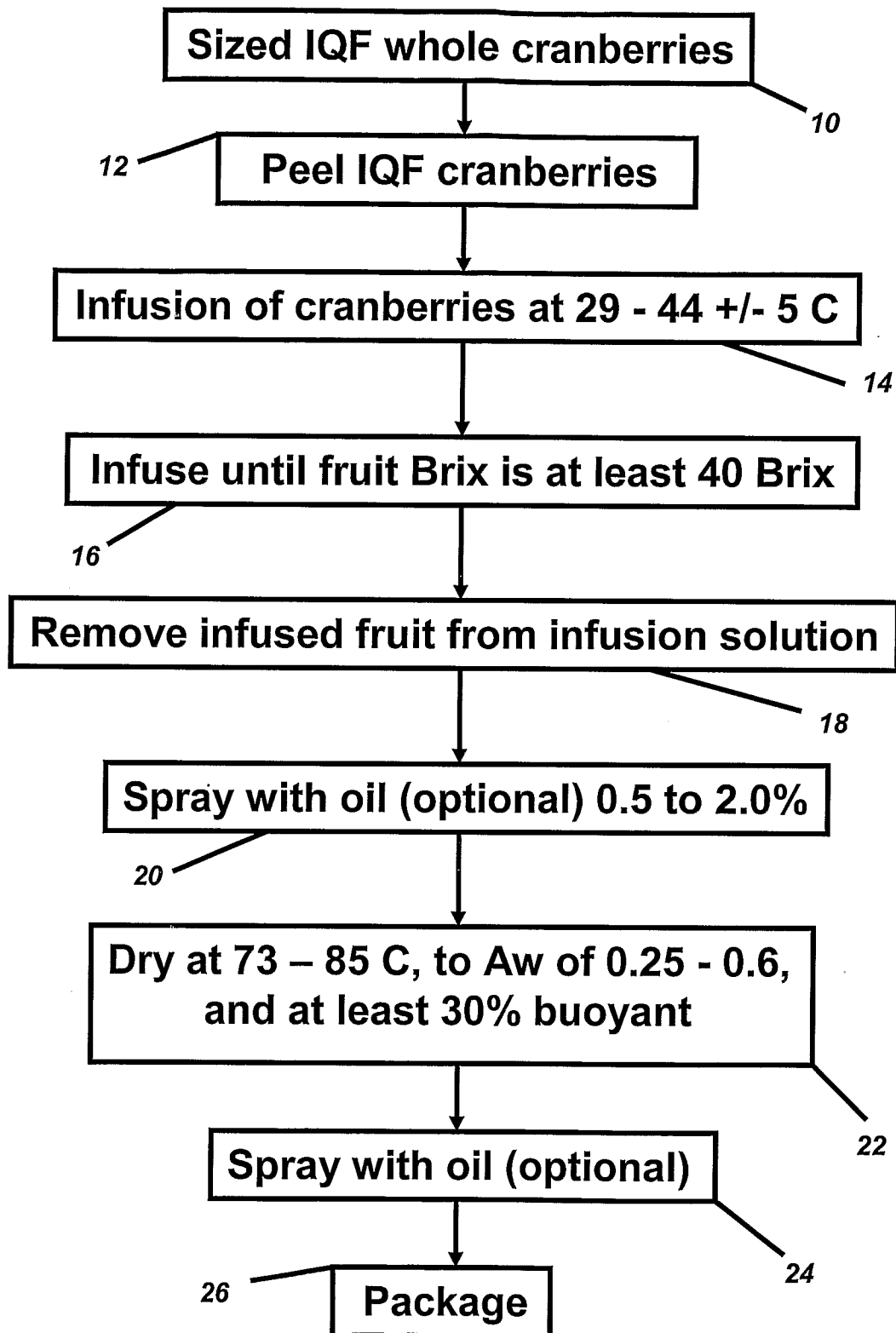
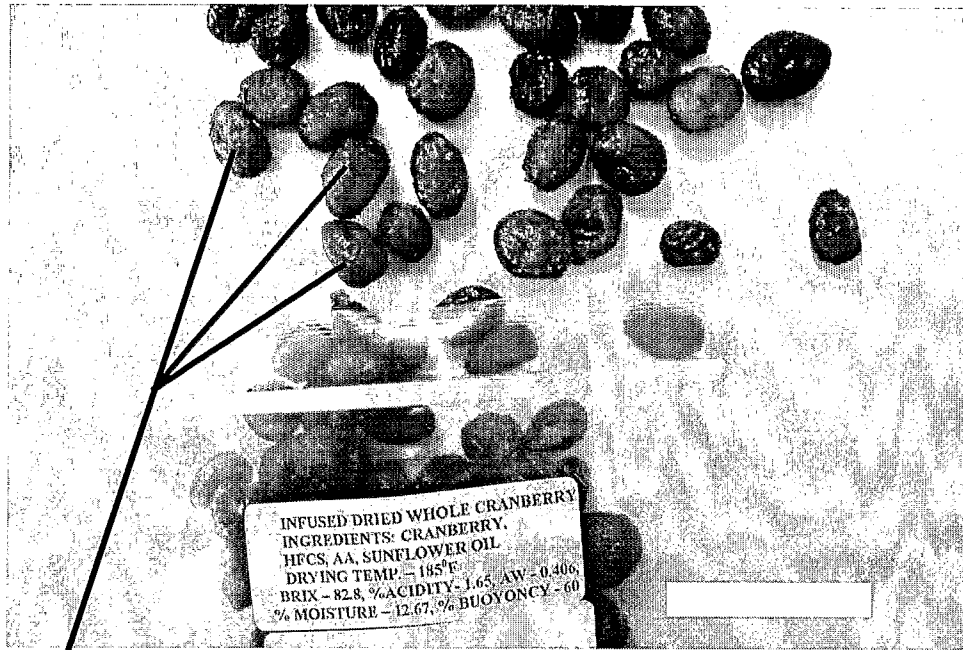
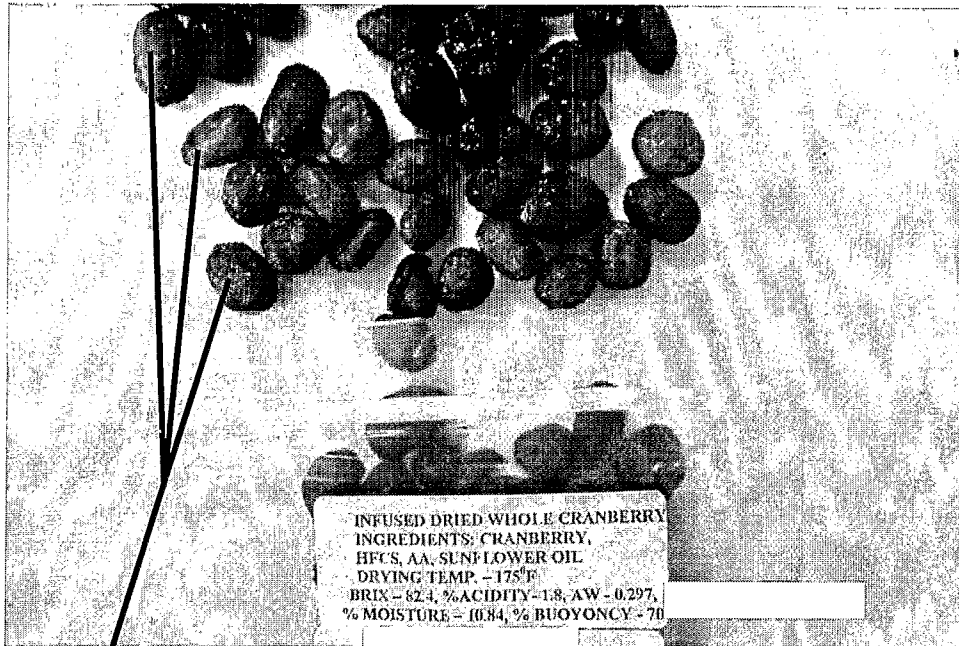


FIG 1



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FIG 2



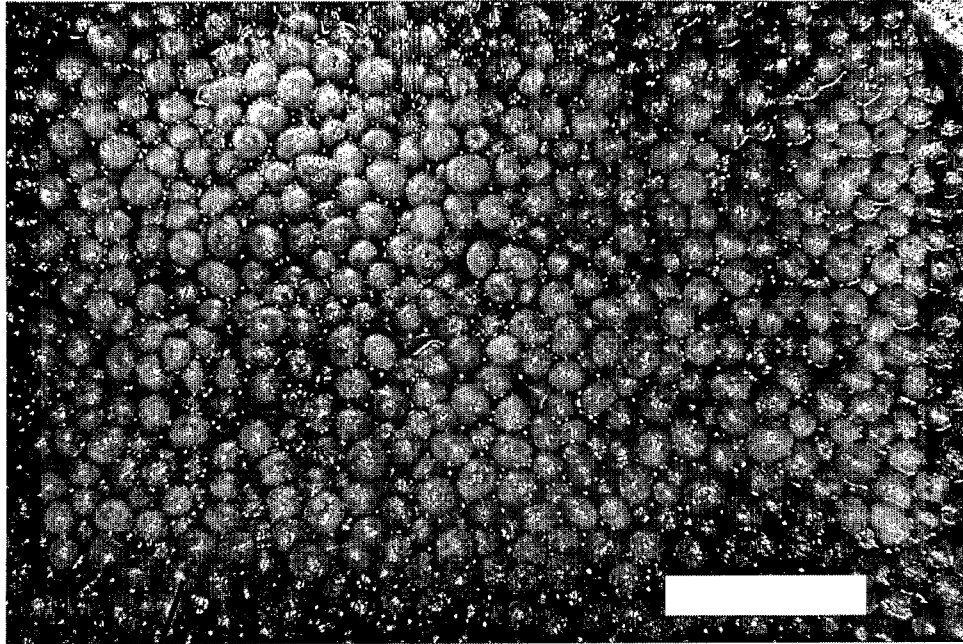
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FIG 3



FIG 4

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FIG 5