

Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Development
Agricultural Development & Diversification Program (ADD)
Grant Project Final Report

Contract Number: 19064

Grant Project Title: Development of a Low Sugar/Low Carbohydrate Sweetened Dried Cranberry

Amount of Funding Awarded: \$29,000

Name of Principal Contact Person: Cheryl Urban

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Report Submitted on: 6-25-06

Urban Processing LLC applied for the Grant to see if we could produce a sugar-free dried cranberry for Diabetic's and also people wanting less calories from traditional sugar product. We saw a benefit for our cranberries to obtain increased sales with a larger consumer base.

Our first step was to work with a food scientist (FoodScapes LLC) who could research the available sugar replacements to find a fit. We needed to make sure that the mouth appeal and fruit appearance also kept with the same integrity as our sugar infused fruit. We brought in about 13 different replacements and started our formulation. We discovered very quickly that the majority would not allow us to register as a sugar-free, and the ones that did would not replace the needed cell space in the fruit which made an undesirable mouth appeal and appearance. The focus was than narrowed down to three specific replacements that were approved by the Diabetic Association, and started different formulations using these three choices.

We came up with 6 different controls and than started running tests.

Taste testing with a diverse group (women 18-67, men 18-47) twenty people in all people. Of the six samples we were able to narrow it down to two.

We than took these two samples and put them to the next phase of testing, stability in different temperatures, as well as shelf life. One definitely out performed the other. These series of tests were preformed at Medallion Lab and Northland Lab.

The finished product is very palatable and does not leave an after taste (because of the larger molecule structure we did not feel the cool in the mouth). It has now been sent out for final nutritional analysis and FDA labeling approval. We know that we can list as "No Sugar added" but are very sure that we can not list as "Sugar Free". It will still be a product the diabetic's can use with no harm to them as the product is slowly absorbed, so the rise in blood glucose and the insulin response associated with the ingestion of glucose is significantly reduced. We have done the shelf life test on this product and are very pleased with the lack of deterioration with no crystallization. We also found out that it is a non-cariogenic as with other alternatives so this product will not promote tooth decay! We feel we have accomplished everything we set out to do, with the exception of having "Sugar Free" we feel we have a product that can now be offered to the diabetic community.

Future: We are now in talks with the manufacturer of the product to get it into a granular form as they are presently only licensed to produce in a liquid. If we need to make the product cost effective to the consumer we need to get the price in line. They will have license in spring of 2007. We are also signing confidentiality agreements with them so they may come out to our facility to help formulate in a continuous process as we presently do with the sugar. We anticipate having this product available to the public by June of 2007. I have meetings set with my major buyers & distributors for the end of December so we can plan a strategic launch of this very exciting product.

Thank you so much for giving our company this chance to develop a product that has not been offered but very much requested.