

OBTAINING LOW CALORIES DESSERT - JELLY TYPE

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Abstract

We tried to find a way to allow overweight people to eat sweets without guilty feelings. Also we searched for pleasant mouth feeling, very good looking appearance and high acceptability. We found that there is possibility to obtain very low calorie jelly type desserts. These products satisfies craving for sweets because they can be as sweet as someone might expect. No calorie sweetener allows us to keep the same low caloric value no matter how sweet is the outcome product. Some of them because of theirs cooling, refreshing and Icy-hot effects are very good alternatives on summer’s hottest day. Beside of these, some of our products have the therapeutical properties of essential oils. All the samples were sensorial evaluated. We also calculate the caloric value.

Keywords: *low calories, dessert, jelly, cooling and refreshing food*

Introduction

Our preference for sweets is thought to be a basic survival adaptation. Sweet foods are an important part of birthdays, holidays and family traditions. For most of us, however, indulging in sweets must be done with care. More than half of developed country’s adults are overweight or obese (Krutosikova, 1992).

Obesity substantially increases the chance of developing chronic diseases and conditions like high blood pressure, type 2 diabetes, heart disease, stroke and some cancers.

When we think about diet and health, there is no magic formula to lose weight and keep it off. If you want to lose weight, you must eat fewer calories than your body burns (O’Brien Nabors, 1991). To

maintain weight, you need to eat the same number of calories as your body burns. The bottom line is simple. Calories do count and regular physical activity is crucial to maintaining healthy weight or for promoting weight loss (Marie, 1991).

Understanding these facts help us realize that low-calorie or no calorie sweeteners and foods and beverages made with them can play a beneficial role in healthful eating. They can provide sweetness while helping us to tow the line on calories.

Experimental

As could be seen in Table 1, six types of jelly were developed. As sweetener we used a product made from sodium cyclamate and saccharin with no caloric value. Gelatin was used as gelling agent. The taste and the aroma were given by natural oils for eucalypt and mint and lemon and orange type. Cocoa and coffee types were aromatized and colored by using cocoa and coffee. For the sour sensation in orange and lemon jelly we used citric acid.

Because there was no color in eucalypt and mint and lemon and orange type we found that the best way to confer an attractive appearance is to incorporate some piece of product in the jelly. So some very chip slices of unpeeled lemon or orange were the center piece of the surrounding jelly. In the mint jelly we used the mint leafs for the same reasons.

Table 1. Jellies' constituents

TYPE	Gelling agent	Sweetener	Color	Taste and Flavor
Eucalypt	Gelatin	Sodium cyclamate and saccharin with no caloric value	No color and translucent – mimics ice	Eucalypt essential oil
Mint			No color with leaves of mint	Mint essential oil
Cocoa			Brown from cocoa	cocoa
Lemon			No color with chip slices of unpeeled lemon	Lemon essential oil and citric acid
Orange			No color with chip slices of unpeeled orange	Orange essential oil and citric acid
Coffee			Brown from coffee	Soluble coffee

We thought that the eucalypt jelly could remain translucent and with no color because of its cooling, refreshing and icy-hot effects. In the hottest summer day all of these will suggest the cooling sensations of the ice.

Results and Discussions

The sensorial evaluation was performed by 100 students. The hedonic scale was between 1 and 10.

Table 2. – Sensorial and nutritional evaluation of the jellies*

FEATURES	Appearance	Consistency	Smell	Taste	Acceptance	Caloric value (kcal/100g)
TYPE						
Eucalypt	9.87	9.82	9.42	9.64	9.26	12.6
Mint	9.91	9.95	9.54	9.39	9.44	13.1
Cocoa	8.93	8.91	9.03	7.73	8.04	16.8
Lemon	9.97	9.91	8.95	9.49	9.45	14.2
Orange	9.67	9.86	8.98	9.38	9.76	14.8
Coffee	8.62	8.73	8.36	7.94	7.99	16.3

* - average value

The caloric value of all the samples is below 20 kcal/100 grams which means a very low caloric value indeed. Gelatin is the main component of the jelly with caloric value.

The type of jelly with the best appearance were evaluated those with pieces of fruit and leaves inside.

Despite all the jelly type have the same quantity of gelatin as gelling agent the consistency of the samples was not equal perceived. There is the possibility that added cocoa and coffee modifies the consistency of the jelly.

Those evaluators which do not usually consume coffee found this type of jelly slightly unpleasant. Almost the same behavior was observed regarding cocoa type of jelly.

As we expected the most common types of jelly were highly accepted.

Those types of jelly which are made from essential oils have a very pleasant specific aftertaste. The most powerful aftertaste is for the mint and eucalypt types of jelly.

Those types of jelly also confer very cooling, refreshing and icy-hot effects which recommend them as product for summer consumption.

Conclusions

There are possibilities to develop low calories sweet product which allow us to satisfy our craving for sweets and also to keep under control the management of the weight. These products are very close to those which are made with traditionally sweeteners. Practically the consumer couldn't make the difference between our low calories jelly and the traditionally one.

References

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