



TECHNICAL APPLICATION
INFORMATION



**“Fruity Sweets”
Recipes for Natural
Confectionery Products**

INTRODUCTION

Sweets are not only popular with children but grown-ups, too, indulge in these titbits of the confectionery industry. Next to the classical chocolate bar, the shops offer products which are different with their refreshingly fruity taste. Here mainly jelly fruits like jelly bananas or pineapple pieces belong to. Gummy products like gummy bears or wine gums are also members of this family of sweets.

The recipe of these products is mainly based on sugar, glucose syrup, water and a gelling agent. The products get their fruity characteristic by adding flavour and colour, so that they imitate the real fruit.

The fruity characteristic of such a product is also achieved by adding fruit pulp instead of flavour and colour, furthermore the natural origin of the jelly product is more pronounced. In contrast to the above-mentioned recipe, these natural sweets can easily refrain from using flavour and colour.

Comparable products are already very popular products in our supermarkets; here the Pâtes de Fruits in France are worth mentioning.

These products have a natural character compared to jelly fruits which has to be viewed very positive in the course of the public discussion on natural products. Moreover this will add nutritional value to these products.

The application technical service of Herbstreith & Fox KG developed recipes for these innovative products. These are recipes for jelly and gum articles with a high fruit content as well as a typical recipe for Pâtes de Fruits.

The sweets contain up to 25% of fruit, consisting of fruit pulp and Herbasweet.

For these products pectin is especially suitable as gelling agent, the low pH-value is within an optimal working range for pectin. Furthermore pectin supports the development of the fruity flavour, an additional dosage of flavour is therefore not necessary.

The multi-purpose sweetener Herbasweet as ingredient in the recipe gives the product the sugar spectrum of apples which makes the addition of sugar in the end product as low as possible.

Herbasweet is a fruit extract which is obtained during the production of apple pectin; it can be used widely as a natural sweetening agent in food. Depending on the usage and the type of pectin, products will be obtained which develop a more jelly or gum character.

All products have a typical fruit fibrous consistency which will give the products their natural character.

Parents, who wish to make sure that their children have a healthy diet, as well as health-conscious grown-ups should be delighted to have sweets which have not been produced by addition of colour and flavour and thus do not

have many E-numbers in the list of ingredients. In the annex, examples of some recipes are listed which may serve as a basis for a modern and healthy food product.

Herbstreith & Fox KG	Recipe
<i>Jelly fruits with Cactus Juice</i>	
Product Pectin Classic AS 501	
13g Pectin (= 1.3%) 300g Cactus Juice 500g Sugar 220g Glucose syrup 80% TSS, approx. 42 DE 4g tri-Sodium citrate x 2 H ₂ O approx. 16ml Citric acid solution 50% to adjust pH-value	Input: approx. 1053g Output: approx. 1000g TSS: approx. 78% pH-value: approx. 3.3

Herbstreith & Fox KG	Recipe
<i>Jelly fruits in Alcohol</i>	
Product Pectin Classic AS 502	
15g Pectin (= 1.5%) 300g Pear Pulp 540g Sugar 250g Glucose syrup 80% TSS, approx. 42 DE 50ml Williams Christ Pear approx. 13ml Citric acid solution 50% to adjust pH-value	Input: approx. 1170g Output: approx. 1000g TSS: approx. 78% pH-value: approx. 3.2

Herbstreith & Fox KG	Recipe
<i>Gummi Bears (Pectin/Gelatine)</i>	
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Product Pectin Classic AS 501	
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5g Pectin (= 0.5%) 200g Fruit Pulp 55g Fruit juice concentrate, 65% TSS 400g Sugar 350g Glucose syrup 80% TSS, approx. 42 DE 50g Gelatine, 240 Bloom 50g Water I 120g Water II 4g tri-Sodium citrate x 2 H ₂ O approx. 25ml Citric acid Solution 50% to adjust pH-value	Input: approx. 1230g Output: approx. 100 g TSS: approx. 80% pH-value: approx. 3.3

Herbstreith & Fox KG	Recipe
<i>Gummi Bears with Fruit</i>	
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Product Pectin Classic AS 507	
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25g Pectin (= 2.5%) 150g Fruit Pulp 355g Sugar 475g Glucose syrup 80% TSS, approx. 80 DE 50g Water 2g tri-Sodium citrate x 2 H ₂ O 15ml Citric acid Solution 50% to adjust pH-value	Input: approx. 1070g Output: approx. 1000g TSS: approx. 78% pH-value: approx. 3.3 - 3.4

Herbstreith & Fox KG	Recipe
<i>Gummi Bears with Fruit</i>	
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Product Pectin Classic AS 507	
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25g Pectin (= 2.5%) 150g Fruit Pulp 355g Sugar 530g Herbasweet AS 01 (approx. 72% TSS) 2g tri-Sodium citrate x 2 H ₂ O 15ml Citric acid solution 50% to adjust pH-value	Input: approx. 1080g Output: approx. 1000g TSS: approx. 78% pH-value: approx. 3.3 - 3.4

Herbstreith & Fox KG	Recipe
<i>Gummi Bears with Herbasweet</i>	
Product Pectin Classic AS 507	
25g Pectin (= 2.5%) 370g Sugar 530g Herbasweet AS 01 200g Water Colour, Flavour 2g tri-Sodium citrate x 2 H ₂ O approx. 15ml Citric acid solution 50% to adjust pH-value	Input: approx. 1140g Output: approx. 1000g TSS: approx. 78% pH-value: approx. 3.3 - 3.4

Herbstreith & Fox KG	Recipe
<i>Pâtes de Fruits</i>	
Product Pectin Classic AS 511	
15g Pectin (= 1.5%) 250g Strawberry Pulp 500g Sugar 530g Herbasweet AS 01 300g Glucose syrup 80% TSS, approx. 40 DE Colour, flavour as required 7.5ml Citric acid solution 50% to adjust pH-value	Input: approx. 1060g Output: approx. 1000g TSS: approx. 78% pH-value: approx. 3.3 - 3.5