

Salt Water Taffy and Nougat Production

Taffy and nougat confections have been around for as long as most of us can remember and conjure up memories of our childhood. Some may remember hand pulling a special recipe of Grandma's, which probably contained molasses, and wrapping it by hand in wax paper. Others recall the State Fair with the trailer producing vanilla taffy right in front of your eyes. Others have memories of resort areas, such as Florida, Gatlinburg, Mackinaw Island, Estes Park, Colorado, the Boardwalk in New Jersey or some other faraway place that the family passed through or ended up on one of those notorious family vacations. The fact is that taffy, especially salt water taffy, has been around for a long time and most if not all of you have at least tasted a variation of this confection.

We will be taking a look at ingredients used to produce taffy and nougat, the varying processes that

can and are used throughout the industry, aeration methods and whipping agents and some problem areas and ways to avoid them.

BASIC INGREDIENTS

Let's begin with the basic ingredients for taffy. They include corn syrup, granulated sugar, whipping agents, fats and table salt. (For those of you who have had the opportunity to see, and even more importantly taken a whiff of the Great Salt Lake, I would like to take this chance to assure you that my company does not use this water mass as our source of salt in the formula.)

A general formula for taffy would be somewhat similar to the following:

Corn syrup	60-63%
Sugar	28-32%
Whipping agent	0.5-1.0%
Fat	4-8%
Salt	0.1-0.5%

In most cases, 42 DE corn syrup is preferred. Some may recommend low DE syrup (36) but for this particular product we will want as tender a piece as possible without becoming too sticky; therefore, I would recommend the use of 42. Since one of the problems, which we will be discussing later, is stickiness, it would be anti-productive to increase the dextrose equivalent of this product. Actually, this ingredient has more to do with making taffy the correct consistency than any of the others. The finished product should have considerable "stretch" characteristics. In fact, the old timers at our facility say "It's not

taffy unless it will stretch a minimum of 18 inches." On the other hand, if the product has too severe cold flow characteristics, it will leak out of the wrap and cause problems for the retailer and the consumer. If the product has insufficient corn syrup, however, it will become short and the eating quality drops significantly.

Sugar

The higher the sugar content, the higher the degree of grain. Therefore in a chewy, stretchy taffy, there will be less sugar than in a grained nougat type confection.

Regular granulated sugar, usually fine, is completely satisfactory for this product family. It provides body and sweetness to the candy and is essential to the product. It also reduces the overall DE and helps, as it does in almost all other confections, in reducing inversion and the problems associated with it.

Fats

Hardened fats are used to reduce stickiness, add shear when cutting and to act as a lubricant so that the candy will release from the wrapping paper when the consumer opens it.

In most cases soy and coconut oils can be interchanged in the above formula for taffy. Many companies have produced in the past a label which indicates the use of either/or. This, however, is becoming more difficult, if not impossible, with the introduction of nutritional labeling and so we are as an industry, going to one or the other of these fats. They both produce an end product which is satisfactory and the difference to most consumers is indistinguishable. To the discreet palate, however, the difference may be more obvious. Soy fats tend to leave a more distinct film on the roof of the mouth than the coconut oils.

Melting point is an issue with this ingredient. Generally a 92 degree fat will be sufficient and provides the results expected. During hot summer months, a higher melting



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