

Caramel 102

Although the basics of making caramel haven't changed significantly over the years, there will always be changes in consumer demand, equipment, ingredients, processing, regulations and knowledge.

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This author's Caramel 101 topic was presented at the 2009 AACT National Technical Seminar. While many of the basics of caramel remain the same, there a few updated variations in this category that are worth reviewing. For comparison purposes, this paper follows the same format used in Caramel 101.

TYPES OF CARAMEL

Sea Salt Caramel

In addition to the caramels previously discussed in Caramel 101, there are several other variations that have recently gained popularity. One of the most popular currently is sea salt caramel. The interplay between sweetness and saltiness with these caramels appeals to consumers. For some manufacturers, creating sea salt caramels is as simple as replacing their current salt with a sea salt. However, the most common variation is to enrobe the caramels in chocolate (usually milk) then sprinkle the sea salt on top.

Not all sea salts taste the same and have the same hardness. Harder salts, such as kosher, pink Himalayan or black Hawaiian, provide a crunch factor and will be more resistant to dissolving in the presence of high humidity. Another factor to consider is the granular size of the salt used. A good size starting point is one to two mm. For caramels that are not enrobed, a harder sea salt should be used to preserve crunchy texture. The salt should be added as late in the process, and at as cool a temperature, as possible with minimal mixing. Sea salt usage rate is typically in the range of one half to one percent.

Non-dairy/Vegan/Kosher Parve Caramel

Vegan products have become increasingly more popular. An added bonus in making these caramel variations is that, often, they can be considered kosher parve if produced under the supervision of a rabbinical service.

While many conventional sweeteners for caramel can be used for this variation, honey is not acceptable. Sugar and all other ingredients should be certified for vegan diets, as some sugars are decolorized with bone char making them unacceptable to use.

Fats can be replaced in the same formula amount as standard caramels with a vegetable fat that has a melting point similar to milk fat. A 76 percent coconut oil or fractionated palm oil will help to provide a proper mouthfeel to non-dairy caramels.

For obvious reasons, dairy milk cannot be used in this caramel variation. Coconut milk or cream, soy milk, oat milk or rice milk, along with various plant proteins, are often used as a replacement. Manufacturers should know the composition of these products and balance them as much as possible to the target formula. Fat and protein levels of these replacements are often different and may not be as effective (i.e., the standup quality from a vegetable protein may not be as good as that from dairy). Additional protein, gums, higher melting point fats or higher cooking temperatures may be needed to obtain the proper texture.

When using another source for milk replacement, there may be flavors other than dairy that become noticable in the caramel, which may influence the protein used. A flavor ➤



Randy Hofberger founded R&D Candy Consulting in 2008. He has more than 40 years of experience in the confectionery industry. Previously, he worked at Nestlé Confections in quality assurance and technical applications.