## Sugars reduction in puddings

Public Health England's (PHE) 'Report on progress towards the 5\%', identified a wide range in the sugars content of puddings on the market in 2017. Manufacturer and retailer products ranged from $0.1 \mathrm{~g}-94 \mathrm{~g}$ sugars per 100 g . The average sugars content for retailers and manufacturers, weighted by sales (sales weighted average - SWA) was 17.6 g per 100 g . PHE has asked that this is reduced to 15.1 g by 2020.

PHE have also asked that single serve puddings contain no more than 450 kcal , with a SWA of 220 kcal . The maximum target for this category reflects the higher calorie content for puddings in the out of home sector. The SWA calories in single serve products is currently 181 kcal for retailers and manufacturers (August 2017).

PHE defines single serve puddings as individually wrapped puddings, including puddings in multipacks (e.g. two pack sticky toffee puddings). All puddings below 35 g or above 200 g are excluded.

## Sponge puddings

The primary role of sugars in sponge puddings is to add sweetness and 'baked' type flavours, help with browning, improve texture, add volume (via leavening) to the sponge batter and help control the water activity required to achieve the desired shelf life. Sugars are also a key ingredient in the sauces used with the sponge where it not only adds sweetness but also helps control the water activity, as low water activity prevents microbial growth (increasing shelf life).

Small sugars reductions in both components (i.e. sponge and sauce) can be achieved by rebalancing the recipe by increasing other ingredients such as starch, flour, fat and glycerol. It is worth noting that this may lead to an increase in total calories.

Larger reductions would require recipe redevelopment and the addition of bulking agents such as maltodextrin, and humectants such as glycerol will be required. In addition to these ingredients a fibre such as inulin could also be added. Currently additive sweeteners are not permitted in 'fine bakery wares', which includes sponge cakes and puddings. Sweeteners are however permitted, under specific conditions, in certain sweet sauces for decorative, coating and/or filling purposes in accordance with additives legislation (Regulation (EU) No 1333/2008).

## Aerated desserts

The primary role of sugars in aerated desserts is to add sweetness. It also functions to balance flavours and mouthfeel.

Small reductions in sugars can be successfully implemented by slight increases in starch or hydrocolloids; sometimes the impact on the overall flavour may be negligible, but in cases where it requires rebalancing this can be achieved by strengthening the characterising
flavour and/or use of flavour modulators which may be a most cost-effective solution depending on the application.

In accordance with additives legislation (Regulation (EU) No 1333/2008), sweeteners are permitted, under specific conditions, in only desserts that are energy-reduced or with no added sugars.

## Custard

The primary role of sugars in custard is to add sweetness. It also functions to enhance the texture and mouthfeel and mask undesirable flavours such as starch.

Reductions in sugars can be achieved by increases in starch, however it may be necessary to strengthen the flavour and/or add new flavours to mask the undesirable flavour notes.

It should be noted that a large proportion of custard consumption is as a pour-over where the host food is itself quite sweet. This gives scope in these applications (including foodservice) to reduce added sugar by a greater quantity than in stand-alone desserts without the same requirement for sweetness replacement.

## Rice pudding

The primary role of sugars in rice pudding is to add sweetness. It also functions to mask undesirable flavours such as starch and to improve mouthfeel.

Reductions in sugars can be achieved but may require the addition of sweetness modulators, flavours and/or a sweetener such as sucralose. Additives legislation (Regulation (EU) No 1333/2008) regulates the use of sweeteners and they are permitted, under specific conditions, in only desserts that are energy-reduced or with no added sugars.

It should be noted that total removal of added sugars could lead to a starchy mouthfeel.

