

Latest news: NICE CGM update; what is the best diet for T2D; dapagliflozin T1D licence withdrawal; and JBDS VR111 audit

Stay abreast of the latest news that could impact diabetes nursing.

Draft NICE guidance greatly expands access to flash and continuous glucose monitoring

NICE has released new draft guidance for consultation on the use of glucose monitoring technology. The proposed advice recommends that all adults with type 1 diabetes should routinely be offered a choice of flash or continuous glucose monitoring (CGM), whilst all children with the condition should be offered CGM in the first instance and, if CGM is not suitable, flash as an alternative.

The advice will also offer flash monitoring to people with type 2 diabetes if they are on multiple daily insulin injections and have recurrent or severe hypoglycaemia, impaired hypoglycaemia awareness or where they would otherwise be advised to check capillary glucose levels at least eight times a day. Real-time CGM could be offered to this group if it is available for the same or lower acquisition cost.

Current NICE guidance makes flash and CGM available only when people with type 1 diabetes meet certain criteria, and so the proposed changes pave the way for a wide expansion in access to the technologies.

Commenting on the draft guidance, the charity Diabetes UK said: "We're thrilled to see NICE listen to us, and others, who have been calling for them to recommend wider flash and CGM use. We'll be responding to the consultation on this draft guideline and welcome this big step forward. We sincerely hope that, when the final guidelines are published, local leaders within healthcare systems will do all they can to make them a reality."

Stakeholders are invited to comment on the draft guidance. The consultation closes on 22 December 2021.

The draft advice is available at the following links:

- [Type 1 diabetes in adults](#)
- [Type 2 diabetes in adults](#)
- [Type 1 and type 2 diabetes in children and young people](#)

Dapagliflozin type 1 diabetes licence withdrawn by manufacturer

The SGLT2 inhibitor dapagliflozin should no longer be used for the treatment of people with type 1 diabetes as an adjunct to insulin, following the decision of the manufacturer, AstraZeneca, to withdraw its indication for this purpose. The withdrawal is not due to any safety concern for dapagliflozin in any indication, including type 1 diabetes.

Diabetic ketoacidosis (DKA) is a known side effect of dapagliflozin. In type 1 diabetes studies with dapagliflozin, DKA was reported with common frequency (occurring in at least 1 per 100 patients). Use of dapagliflozin in this population required specific additional risk minimisation measures for DKA, such as a patient alert card and a healthcare professional guide. As a result of the indication removal, these additional measures will no longer be available.

Discontinuation of dapagliflozin in people with type 1 diabetes must be made by or in consultation with a physician specialised in diabetes care, and should be conducted as soon as clinically practical.

After stopping dapagliflozin treatment, frequent blood glucose monitoring is recommended and the insulin dose should be increased carefully to minimise the risk of hypoglycaemia. Healthcare professionals should continue to report adverse events associated with the agent.

The MHRA direct healthcare professional communication is [available here](#).

Very-low-energy meal-replacement diets superior for weight loss and type 2 diabetes remission

An "umbrella review", equivalent to a meta-analysis of published meta-analyses, has shown that diets which focus on reducing calories, such as low-calorie meal-replacement diets, rather than reducing intake of certain nutrients or food groups such as carbohydrates, give people with type 2 diabetes the best chance of losing weight and going into remission.

The study, led by Mike Lean of the University of Glasgow, identified 19 meta-analyses of weight loss diets and found that the greatest weight loss occurred with very-low-energy diets (400–500 kcal/day) conducted over a period of 8–12 weeks, which achieved an average of 6.6 kg more weight loss than low-energy diets (1000–1500 kcal). Over longer-term follow-up (3–12 months), formula meal-replacement diets achieved 2.4 kg more weight loss than conventional diets.

Low-carbohydrate diets were found to be equal to higher-carb/low-fat diets in terms of weight loss, whilst high-protein, Mediterranean-style, high-monounsaturated-fat, vegetarian and low-glycaemic-index diets

all achieved minimal or no difference from control diets. The authors thus conclude that very-low-energy diets are superior to diets that involve restricting specific macronutrient groups, likely because they promote a greater calorie deficit.

Remission

As there were so few meta-analyses of the effects of diets on type 2 diabetes remission, the authors conducted a separate meta-analysis of randomised and non-randomised trials. Higher-quality studies, according to GRADE (Grading of Recommendations, Assessment, Development and Evaluations) criteria, suggested that low-energy, total-diet-replacement methods achieved remission in 54% of participants. Other meal-replacement and Mediterranean diets achieved remission in 11% and 15% of participants, respectively, although the quality of the studies was moderate or low. Very-low-carbohydrate/ketogenic and food-based very-low-energy diets achieved remission in 20% and 22% of participants, respectively; however, the quality of these studies was rated very low.

The highest remission rates, occurring in up to 75% of participants, were in those with diabetes of less than 2 years' duration.

In contrast, remission rates of around 20% were observed in those with longer-duration diabetes (8 years and over); however, many of these studies were at high risk of bias as they did not have a control group.

Risks versus benefits

The authors also detailed some of the risks associated with the various diet types. These included hypotension in people who lose weight rapidly whilst also taking diuretic or antihypertensive drugs, and hypoglycaemia in those taking glucose-lowering drugs. Restrictive diets and meal-replacement diets that are not nutritionally complete could result in vitamin and mineral deficiencies. Notably, thiamine deficiency (increasing the risk of heart failure and neurological problems) and reduced intake of folate, iron and magnesium have been observed with ketogenic diets. These diets also increase the risk of ketoacidosis, particularly in people who are taking SGLT2 inhibitors.

Finally, replacing high-carbohydrate foods with red or processed meat can increase sodium and trans/saturated fat intake, thus elevating LDL-cholesterol. High protein intake has also been associated with kidney disease in several

observational studies, while extreme fat avoidance increases the risk of gallstones.

[Click here](#) to read the study in full.

JBDS-IP seeks feedback on VRIII use in the hospital setting

The Joint British Diabetes Societies for Inpatient Care (JBDS-IP) have launched new audit on the use of variable-rate intravenous insulin infusions (VRIIs). Healthcare professionals including diabetes specialist nurses are being asked to complete a questionnaire on how they used VRIIs on people with diabetes who were admitted to hospital.

The JBDS-IP will use the feedback to update its VRII guideline, which dates back to October 2014 and aims to guide non-specialist teams in the appropriate and safe use of a VRII.

The audit is open until Friday 24 December 2021. Note that patients in whom VRII was started due to diabetic ketoacidosis, hyperosmolar hyperglycaemic state or COVID-19 infection should not be included.

[Click here](#) to complete the audit. ■

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