

diabetes and obesity: Optimizing patient education

Practice aid for diabetes education

For more information, visit www.touchendocrinologyime.org

What is type 2 diabetes?

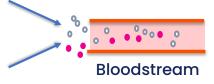


...or your cells can't effectively use insulin ('insulin resistance')¹



Food converted to glucose (sugar)¹







Incretin hormones (GLP-1 and GIP) are released in the body after eating and cause an increase in insulin levels. In type 2 diabetes, the effect of incretin hormones is reduced, resulting in low insulin levels²

Body tissues become resistant to insulin, so glucose is unable to leave the blood and enter tissues effectively, resulting in high blood sugar levels¹

In type 2 diabetes, the level of glucose in the blood becomes too high¹

- Insulin
- O Glucose

How is obesity linked to the development of type 2 diabetes?

Accumulation of fat in the organs is linked to insulin resistance and type 2 diabetes³



Cardiovascular disease



Why is weight loss important for people with type 2 diabetes and obesity?

Losing weight has health benefits and can help your type 2 diabetes







Improves blood sugar control⁴

Reduces complications and cardiovascular risk⁴

Maintains quality of life⁵

Are there diabetes medications that can help with weight loss?

Diabetes medications that can help with weight loss⁶

SGLT2 inhibitors⁶

- Canagliflozin
- Dapagliflozin
- Empagliflozin
- Ertugliflozin

How they work^{1,6}

- ✓ Help the kidneys to reduce the amount of sugar in the blood^{1,4}
- Excess sugar is removed from the body in the urine^{1,4}

GLP-1 RAs⁶

- Dulaglutide
- Exenatide
- Liraglutide
- Lixisenatide
- Semaglutide

How they work⁶

- •
- ✓ Help to release insulin
- Slow down emptying of the stomach, helping you to feel full soon after eating





For more information, visit www.touchendocrinologyime.org



Learn more at: www.diabeteseducator.org

What else can I do to help manage my type 2 diabetes and obesity?

Lifestyle and diet changes⁷



Adopt healthy eating patterns

Focus on vegetables, whole grains and fruits



Get active

Do something you enjoy



Keep track of goals and progress

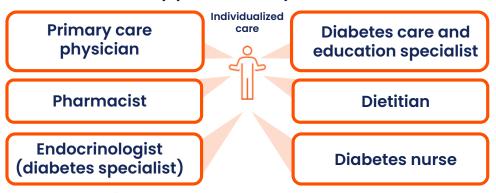
Tracking apps on your smartphone can help



Don't do it alone

Get peer support, both online and in person

Education and support from your healthcare team^{8,9}





To find out how a DCES can help you, visit diabeteseducator.org/DCEShelp

Abbeviations & References

DCES, Diabetes care and education specialist; GLP-1, glucagon-like peptide-1; GLP-1 RA, GLP-1 receptor agonist; GIP, glucose-dependent insulinotropic polypeptide; SGLT2, sodium-glucose cotransporter-2.

The guidance provided by this practice aid is not intended to directly influence patient care. Clinicians should always evaluate their patients' conditions and potential contraindications, and review any relevant manufacturer product information or recommendations of other authorities prior to consideration of procedures, medications, or other courses of diagnosis or therapy included here.

Our practice aid coverage does not constitute implied endorsement of any product(s) or use(s). touchENDOCRINOLOGY® cannot guarantee the accuracy, adequacy or completeness of any information, and cannot be held responsible for any errors or omissions.

- Type 2 diabetes. Available at: www.mayoclinic.org/diseases-conditions/type-2-diabetes/symptoms-causes/ syc-20351193 (accessed 14 March 2022).
- 2. Boer GA, Holst JJ. *Biology (Basel)*. 2020;9:473.
- 3. Hydes T, et al. Front Nutr. 2021;16;8:640557.
- 4. Wing RR, et al. *Diabetes Care*. 2011;34:1481–6.
- 5. Katsogiannos P, et al. Diabetol Metab Syndr. 2020;12:90.
- 6. Davies M, et al. Diabetologia. 2018;61:2461-98.
- 7. Weight loss and diabetes tip sheet. Available at: www.diabeteseducator.org/docs/default-source/practice/educator-tools/Obesity/weight-loss-and-diabetes-tip-sheet.pdf (accessed 14 March 2022).
- 8. Foster D, et al. Diabetes Spectr. 2017;30:244-9.
- 9. How a Diabetes Care and Education Specialist Can Help You. Available at: https://www.diabeteseducator.org/living-with-diabetes/how-a-diabetes-educator-can-help-you (accessed 14 March 2022).



Practice aid for diabetes education