



# So what should we recommend to people with diabetes about lifestyle? Updated ADA/EASD advice

Pam Brown summarises the latest lifestyle advice from the 2022 update of the ADA/EASD Consensus Report.

## Weight loss of 5–15% as an important goal<sup>1</sup>

- 5–10% provides metabolic improvement.
- 10–15% has disease-modifying effect and can lead to type 2 diabetes remission.
- Medications and/or metabolic surgery are effective additions to lifestyle and can improve glycaemia, remission and weight loss.

## In the Look AHEAD study,<sup>2</sup> intensive lifestyle intervention improved:

- Diabetes control and complications.
- Depression.
- Physical function.
- Health-related quality of life.
- Sleep apnoea.
- Incontinence.
- Brain structure.
- Measurements of multimorbidity, geriatric syndromes/frailty and disability-free life-years.
- >10% weight loss may be required for benefits in terms of cardiovascular disease, mortality and complications such as NASH.

## 24-hour physical behaviours recommended for type 2 diabetes

### Sleep

- Over 50% people with type 2 diabetes have obstructive sleep apnoea; increase severity associated with worsening glucose levels.
- U-shaped curve of sleep and health outcomes: 6–8 hours optimal for HbA<sub>1c</sub> – improves insulin sensitivity and reduces energy intake.<sup>7</sup>
- Irregular sleep associated with poorer glycaemic control; catch-up weekend sleep does not reverse impact of insufficient sleep.<sup>8</sup>
- “Night owls”/evening chronotypes may be more prone to inactivity and poorer control than “early birds”/morning chronotypes.

### Aerobic exercise (“Sweating”)

- Regular aerobic exercise can decrease HbA<sub>1c</sub> by 7 mmol/mol (0.6%) and improves cardiorespiratory fitness significantly; optimise with ≥45 minutes per session and especially post-prandial.<sup>9</sup>
- Encourage ≥150 minutes moderate to vigorous or ≥75 min vigorous, over ≥3 days per week; 30 min moderate/vigorous per week has metabolic benefit.

[Click here to read Pam Brown's broader analysis of the changes to the guidance](#)

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## Nutrition

- No single ratio of carbohydrates, proteins and fat that is optimal for everyone with type 2 diabetes. Aim for a net energy deficit that can be sustained for weight loss.
- Encourage individually selected eating patterns that include foods with health benefits, while minimising foods known to be harmful.
- Network meta-analysis compared nine dietary approaches and demonstrated HbA<sub>1c</sub> reductions of 5.1–9.0 mmol/mol with all approaches compared to control diets.<sup>3</sup>
- Greater glycaemic benefits with Mediterranean diet and low-carbohydrate diet (<26% energy from carbs), but low-carb benefits only demonstrated up to 6 months.<sup>4</sup>
- Systematic review of trials >6 months:<sup>5</sup> compared to a low-fat diet, a Mediterranean diet showed greater reductions in weight and HbA<sub>1c</sub> levels, delayed requirements for diabetes medication and provided benefits for cardiovascular health. Similar benefits seen with vegan and vegetarian diets.
- 12-month study of intermittent fasting (5:2 diet) and continuous energy restriction (1200–1500 kcal diet) demonstrated similar glycaemic effects, and at 24 months both groups achieved 3.9 kg weight loss.<sup>6</sup>

### Stepping

- Additional 500 steps per day associated with 2–9% decreased risk cardiovascular disease morbidity and all-cause mortality.<sup>10</sup>
- 5–6 min brisk-intensity walk daily equates to/associated with around 4 years' greater life expectancy.

### Strengthening

- Resistance exercise improves insulin sensitivity and glucose levels.
- Encourage 2–3 resistance, balance, flexibility sessions per week.
- Physical function/frailty/sarcopenia can deteriorate faster in those with type 2 diabetes.

### Sitting/breaking up prolonged sitting

- Limit sitting.
- Break up with walking or simple resistance exercise every 30 minutes.

### References

1. Lingvay I et al (2021) *Lancet* **399**: 394–405
2. Wing RR; Look AHEAD research group (2021) *Obesity (Silver Spring)* **29**: 1246–58
3. Schwingshackl L et al (2018) *Eur J Epidemiol* **33**: 157–70
4. Snorgaard O et al (2017) *BMJ Open Diabetes Res Care* **5**: e000354
5. Martínez-González MA et al (2019) *Circ Res* **124**: 779–98
6. Carter S et al (2019) *Diabetes Res Clin Pract* **151**: 11–9
7. Lee SWH et al (2017) *Sleep Med Rev* **31**: 91–101
8. Delevatti RS et al (2019) *Sports Med Open* **5**: 22
9. Depner CM et al (2019) *Curr Biol* **29**: 957–67
10. Saint-Maurice PF et al (2020) *JAMA* **323**: 1151–60