

Type 1 diabetes

Aims

- Introduction
- Diagnosis
- Case study
- Interactive exercises
- Questions

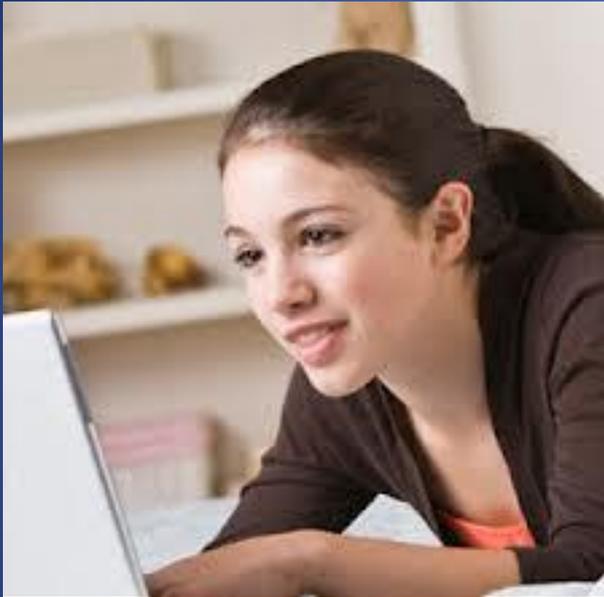
Type 1 diabetes in your practice:

- Current estimate of children with type 1 diabetes in the UK is one per 700-1000.
- Total population of 25000 under 25s with type 1 diabetes
- PCTs can expect 100 and 150 children with diabetes in their area.
- In a practice of 11,000 there would be 11-15 patients.

Do we diagnosis it or do we miss it?

http://m.youtube.com/watch?v=tYlQTyIh_0M

Case study



- Libby
- 17 years old
- Studying for her A levels
- Enjoys sport and going out with her friends
- Type 1 diabetic for 4 years
- On MDI regime:
Levermir
Novorapid with food

Your challenge is to get Libby
through her weekend.....

Libby's weekend:



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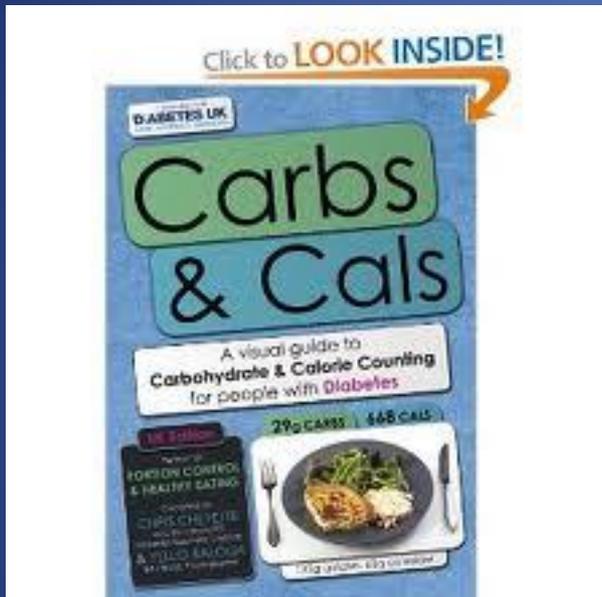




A whirlwind weekend and she is fed up and
wants advice from her GP

Group work and feedback

Counting Carbohydrates



Injection sites



Sports

Anaerobic exercise

During exercise with short bursts of activity blood glucose may rise

Aerobic exercise

During prolonged exercise blood sugar may fall.

www.runsweet.com

Hypoglycaemia

Four is the floor

Treatment:

15-20g short acting carbohydrate (eg 5 jelly babies, 3 glucose tablets)

Retest after 15 mins, if still below 4 repeat the treatment.

Some people may need 10g of a longer acting carbohydrate

Stress

- Stress activates the fight or flight response
- Body releases adrenaline and glucocorticoid
- These hormones oppose the action of insulin and therefore raise blood glucose levels
- Difficult to control as insulin correction may not therefore work until relaxed and then a post low may occur

Alcohol

- Main risk associated with diabetes and alcohol is hypoglycaemia
- Hypoglycaemia may be confused for drunken behaviour
- Eat a long acting carbohydrate before bed
- The affects of the alcohol may be felt well into the next day

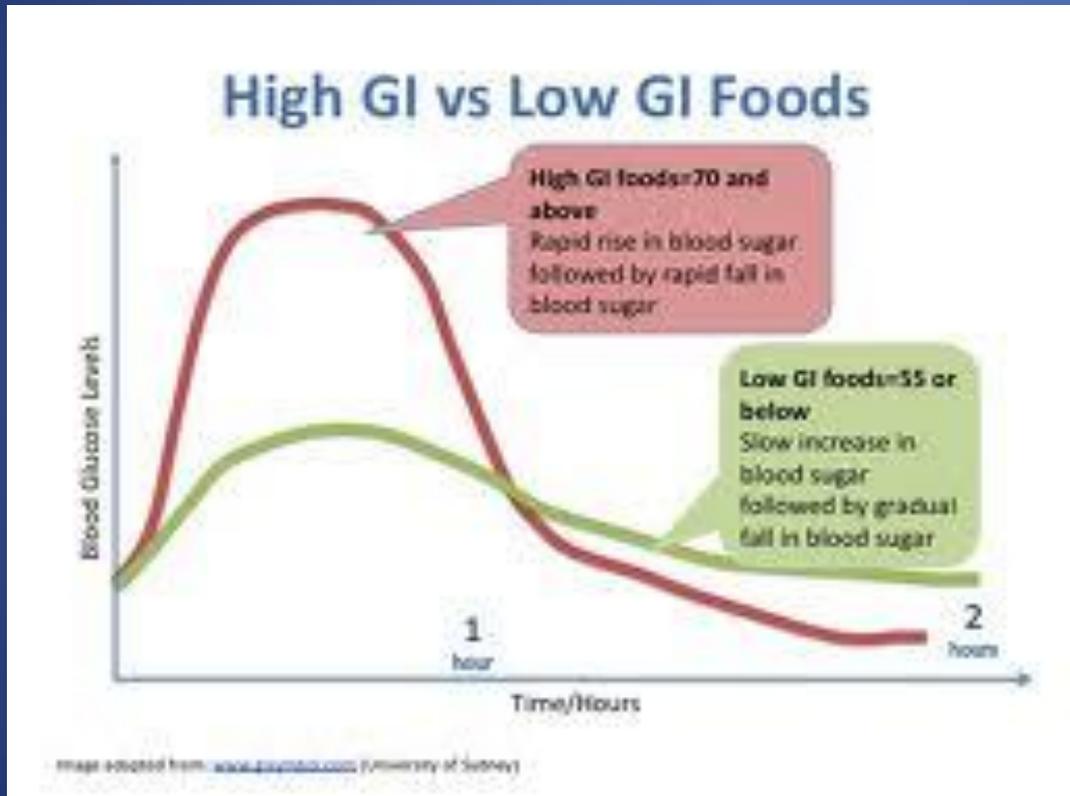
Parents

http://m.youtube.com/watch?v=nFJ1_3qzZxQ&feature=related

DVLA RULES

- Must inform DVLA
- Will be issued a 3 year driving licence
- Must also inform DVLA if have any diabetic complications or more than one episode of severe hypoglycaemia in 12 months (requiring help of another person)
- Do not resume driving for 45 minutes after blood glucose has returned to normal
- Stop every 2 hours to check BM.

LOW AND HIGH GI FOOD



Low GI:

Wholegrain bread
Apples
Orange
Chick peas

High GI:

White bread
Donuts
White rice
Watermelon
Coco pops

Menstrual cycle

- Women may experience fluctuations in blood sugar control through the menstrual cycle.
- Many women find their blood sugar is high 3-4 days before, during or after their period.
- Advise women to test regularly at this time to find their individual pattern and adjust insulin doses accordingly

Contraception and pregnancy

- All contraception apart from the copper coil is UK MEC 2 as it may affect blood sugars due to hormonal changes

Pre – conception care:

- Avoid unplanned pregnancy
- HbA1c below 6.1% throughout
- 5mg folic acid
- Fasting BM between 4 – 5.9 and 1 hr postprandial below 7.8
- Diabetic retinopathy screening at booking and 28 weeks
- Consultant led care with increased scans and apps.

DAFNE

Dose Adjustment For Normal Eating

- Structured patient education program
- Match insulin dose to chosen food
- 38 hours of structured group education
- Positive feedback – empowerment/living without fear/free from a fixed routine

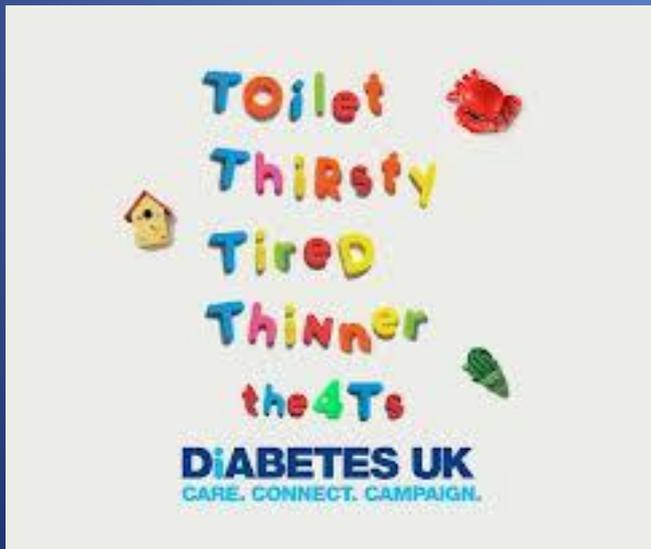
Insulin



DIABETES UK
CARE. CONNECT. CAMPAIGN.

Diabetes UK care events:

<http://m.youtube.com/watch?v=b8FG-4thBxo>



Research

Two exciting projects in Cambridge:

- Project to generate first artificial pancreas prototype
- Project to use the artificial pancreas to control blood glucose in pregnancy.
- In Bristol and Birmingham studies investigating the immune system and why it attacks the pancreas

Summary

<http://m.youtube.com/watch?v=BDATgiMwRNA>

Any questions?

<http://m.youtube.com/watch?v=E6Ft8Yo7xEQ>