

# Hypoglycaemia & Exercise

## Information for Health Professionals

Exercise is really important for everyone whether they have diabetes or not. It is essential for physical fitness and is a good way of maintaining a healthy weight. For young people with diabetes, regular exercise helps insulin work more effectively and may even help reduce the amount of insulin that is required.

Many young people exercise as a way to help them lose weight and do not want to be eating large amounts of carbohydrate to maintain their blood glucose levels (BGL's). In this situation, reducing the insulin dose that is working at the time of the exercise, will reduce the risk of 'hypo's' and reduce the need to eat. However it is still important for them to have some 'hypo' food available at the time when they are exercising.

### Tips for young people to help prevent 'hypo's' when exercising

- Ensure the young person has quick-acting carbohydrate (CHO) drinks such as fruit juice, cordial or ordinary soft drink available when exercising
- It is a good idea to encourage young people to check their BGL **before** and **after** exercise so they will get to know how much their BGL is likely to change with different types of exercise.
- When performance is really important or if the exercise is prolonged, it is also a good idea for them to check their BGL **during** exercise eg. at half time
- Either extra CHO should be taken **before** exercise or a **reduction** in insulin dose. Even if the insulin dose has been reduced, if the exercise is prolonged e.g. marathon, iron man competition, some extra CHO **during** the exercise may be needed.
- It is a good idea to encourage young people to take a blood glucose level (BGL) **before bed** on days when they have done lots of extra exercise. Exercise can continue to lower the BGL hours after the exercise has stopped. A reduction of the night time insulin may also be needed to prevent a 'hypo' during the night.
- If the exercise is being done at a time when the young person is usually resting (e.g. a school dance in the evening) either **less** insulin or **extra** carbohydrate is needed.
- For endurance sports like marathons or triathlons, sports drinks can be useful (providing they contain sufficient glucose).

## Education Requirements:

Topic	Content
<b><i>Hypoglycaemia and Exercise</i></b>	<ul style="list-style-type: none"><li>- discuss effects of exercise on blood glucose levels (BGL's)</li><li>- discuss actions for managing diabetes before, during and after exercise</li><li>- discuss strategies to minimise the impact of exercise on BGL's and prevent hypoglycaemia</li><li>- discuss strategies of minimising the impact of hypoglycaemia on weight control</li></ul>

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For more detailed information on exercise & hypoglycaemia visit the Queensland Government Diabetes Care Advance Website: Module 5: Hypoglycaemia  
[www.workingwonders.com.au/rchsubsites/diabetes26042005/html/m\\_05..htm](http://www.workingwonders.com.au/rchsubsites/diabetes26042005/html/m_05..htm)

## References

1. Ambler, G., Barron, V., May, C., Westman, E., (1998) *Caring for Diabetes in Children and Adolescents*. A Parent's Manual. National Capital Printing, Australia
2. Stillman, J., Lang, E., Grieve, C., (2003) *Paediatric and Adolescent Diabetes Education Manual*, For Health Professionals. Queensland Health, Queensland Government Publication. Module 5