Making Choices:
Should I Start Insulin?

This decision aid is for you, if...

- You have type 2 diabetes
- Your blood sugar is not well controlled
- Your doctor has advised you to start insulin
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![This booklet belongs to:](#)
What are your concerns?

People with type 2 diabetes who are advised to start insulin may have many concerns.

Here are some of the concerns you may have:

1. **I am afraid of injections and pain.**
   The new insulin pen causes little pain.

2. **I am afraid of my sugar getting too low (‘hypos’).**
   ‘Hypos’ can be avoided with regular meals.

3. **I am afraid of gaining weight.**
   You may control your weight by proper diet and exercise.

4. **I don’t know much about insulin.**
   This guide will explain to you about insulin (page 4 & 5).

5. **I am not confident in handling insulin on my own.**
   This guide and your doctor/nurse will teach you how to handle insulin (page 5).

6. **I am afraid of being addicted to insulin.**
   Insulin is not addictive.

7. **Insulin may damage my kidneys.**
   This is a misconception. High blood sugar level damages the kidneys, not insulin.
What are your concerns?

8. Starting insulin means that my diabetes is very serious.
Insulin is started to control your diabetes and prevent it from getting serious.

9. I am confused. Different people tell me different things.
This guide provides information to clear your doubts.

10. I don’t think my diabetes is that serious to need insulin.
You need insulin because your diabetes is not well controlled despite taking tablets.

11. I am worried that insulin treatment is too expensive.
The cost of insulin treatment varies. Your doctor will advise you accordingly.

12. I am worried that insulin is not halal.
All insulin in Malaysia is halal.

13. Will I feel better with insulin?
Yes, your diabetes symptoms will improve.

The following sections of this booklet will help to address some of these concerns. You may also want to clarify these concerns with your doctor or nurse before making a decision.
What is insulin?

- Insulin is a hormone produced by the body and it helps to remove sugar from the blood and store it in muscle and fat.

- In diabetes, the blood sugar level is high because the body does not:
  - produce enough insulin
  - respond to insulin properly.

When your blood sugar is high...

You may experience thirst, tiredness, pass urine more often, lose weight, have blurred vision and frequent skin and urine infections.

In the long term, if the blood sugar is not well controlled, you may get complications such as blindness, heart attack, stroke, kidney failure, nerve damage and losing your toes or legs. These complications will affect your quality of life.

Why do you need insulin treatment?

- Your blood sugar level remains high despite taking tablets and following healthy diet and exercise. This is because your pancreas is not producing enough insulin. This may happen 5 to 10 years after diagnosis.

- Diabetes tablets work by increasing the amount of insulin in the body. However, the tablets are not working for you because there is not enough insulin in your body. Therefore, you need insulin injection.
About insulin therapy

How do you start insulin?

- Insulin is given by injection using an ‘insulin pen’.
- For most people, one insulin injection at night is all that is needed.
- You can set the insulin dose you require by turning a dial on the insulin pen.
- The insulin is injected into the skin of your abdomen or the outer part of your thigh.
- You will continue to take your tablets, control your diet and exercise regularly as before.
- You can travel with the insulin pen without needing special storage.

Side effects of insulin

- Insulin may cause ‘hypos’. This happens when you skip meals, are not eating enough or exercise too hard. You may feel dizzy, sweaty, cold, confused, shaky and weak.
- If this happens, you need to take something sweet such as sweets and sugary drinks. You can avoid ‘hypos’ by eating on time. If it happens often, inform your doctor and he will adjust the insulin dosage.
- Sometimes you may gain weight with insulin. You can avoid this by cutting down your food intake especially carbohydrates and fats.
- Insulin pens have fine needles. Most people experience very little pain with the injections.
Knowing your blood sugar

What is good blood sugar control?

- You can know your blood sugar control by checking your:
  - blood sugar level
  - HbA1c level (*HbA1c tells you the blood sugar control in the past three months*)

Your latest HbA1c level is: __________%
Knowing your blood sugar

**Meter and strips**

- At the start of insulin treatment, you will need to check your blood sugar level 1 to 2 times a day.
- Normally you will need to check in the morning before you eat (fasting).
- The device to check your blood sugar level is called a glucometer.
- Each test strip costs RM1 - RM2.
What are your choices?

You have been advised to start insulin because your diabetes is not well controlled despite taking tablets regularly.

While considering insulin, you may decide to:

- Do nothing
- Follow stricter diet and exercise programme
- Start insulin injection
- Add another type of diabetes tablet
  * This is not applicable to you if you are already taking 3 or 4 types (maximum number) of diabetes tablets.
- Start another type of injection (non-insulin)
- Use alternative treatment (e.g. supplements, herbs and traditional medicine)

If you decide to take alternative treatment, write down the name of the treatment:

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________
Advantages and disadvantages

**OPTION A: Do nothing**

**ADVANTAGE:**
- You will avoid possible side effects of insulin or other diabetes medications.

**DISADVANTAGE:**
- Your blood sugar will remain high.
- There is a high risk that you may develop diabetes complications (such as heart, kidney and eye problems) or your diabetes complications may worsen.
- Your diabetes symptoms will remain the same or get worse.

**OPTION B: Follow stricter diet and exercise programme**

**ADVANTAGE:**
- You will avoid the side effects of insulin.
- Your blood sugar level may become lower.
- It may prevent or slow down the progression of your diabetes complications.
- Your diabetes symptoms may improve.

**DISADVANTAGE:**
- You have to make more changes to your lifestyle and follow the diabetes advice more closely.
- Your blood sugar may remain the same or become higher.

**OPTION C: Start insulin injection**

**ADVANTAGE:**
- Insulin is the most effective option to lower your blood sugar level.
- Insulin is the most effective option to prevent or slow down the progression of your diabetes complications.
- Your diabetes symptoms will improve.

**DISADVANTAGE:**
- Insulin may cause pain, hypos and weight gain.
of the treatment options

**OPTION D: Add another type of diabetes tablet**

**+ ADVANTAGE:**
- Your blood sugar may become lower. Adding another type of tablet may prevent or slow down the progression of your diabetes complications (such as heart, kidney and eye problem).
- Your diabetes symptoms may improve.
- You will avoid the side effects of insulin such as pain, hypos and weight gain.

**- DISADVANTAGE:**
- You have to take extra tablets everyday.
- You may experience the side effects of the new diabetes tablets.
- Your blood sugar level may not improve.
- You may have to pay for the new diabetes tablets.

**OPTION E: Add another type of injection (non-insulin)**

**+ ADVANTAGE:**
- Your blood sugar will become lower.
- It may prevent or slow down the progression of your diabetes complications.
- Your diabetes symptoms may improve.

**- DISADVANTAGE:**
- It causes pain and hypos (less than insulin). However, there is no weight gain.
- You may have to pay for the injection.

**OPTION F: Use alternative treatment**

- There is a lack of evidence of the benefits and harms of alternative treatment.
Knowing the facts

Now you have gone through the facts, please answer the following questions to find out how much you understand about the treatment options.

Please tick the appropriate boxes.

1. Which treatment option may improve the blood sugar level the most?
   - Do nothing
   - Follow stricter diet and exercise programme
   - Start insulin injection
   - Add another type of diabetes tablet
   - Add another type of injection (non-insulin)
   - Use alternative treatment

2. Which treatment option is the most effective in lowering diabetes complications?
   - Do nothing
   - Follow stricter diet and exercise programme
   - Start insulin injection
   - Add another type of diabetes tablet
   - Add another type of injection (non-insulin)
   - Use alternative treatment

3. Which treatment option may cause the most ‘hypos’ (low blood sugar)?
   - Do nothing
   - Follow stricter diet and exercise programme
   - Start insulin injection
   - Add another type of diabetes tablet
   - Add another type of injection (non-insulin)
   - Use alternative treatment

4. Which treatment option may cause the most weight gain?
   - Do nothing
   - Follow stricter diet and exercise programme
   - Start insulin injection
   - Add another type of diabetes tablet
   - Add another type of injection (non-insulin)
   - Use alternative treatment
Knowing what is important to you

Besides knowing the facts, people who are considering insulin therapy need to think about what is important to them before making a decision.

Please tick what is important to you. You can choose more than one.

I am concerned:

- about being addicted to insulin
- whether insulin is halal
- whether I really need insulin at this stage
- that my diabetes might get worse after starting insulin
- about the cost of insulin treatment
- how other people will think of me using insulin
- that my family may not agree with me starting insulin
**Do you need more support?**

Please tick the appropriate boxes.

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<tr>
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<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>Do you know enough about the advantages and disadvantages of each option to make a choice?</td>
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<tr>
<td>Are you clear about which advantages and disadvantages are most important to you?</td>
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<td>Do you have enough support and advice from your doctor or nurse to make a choice?</td>
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<td>Do you have enough support from your family to make a choice?</td>
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What is your decision?

Are you ready to make a decision about starting insulin?
☐ No, I am not ready
☐ Yes, I am ready

If you are ready to make a decision, which choice do you prefer?
☐ Do nothing
☐ Follow stricter diet and exercise programme
☐ Start insulin injection
☐ Add another type of diabetes tablet
☐ Add another type of injection (non-insulin)
☐ Use alternative therapy

If you are not ready, you can come back later and discuss with your doctor or nurse about your decision.

Use the space below to write down questions for your doctor/nurse.

________________________________________________________________________
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Contact details:

Lee Yew Kong
Department of Primary Care Medicine
Faculty of Medicine
University of Malaya
50603 Kuala Lumpur
Tel: 03-7949 2306
Fax: 03-7957 7941
Email: leeyk@um.edu.my